OFFICE OF TELECOMMUNICATIONS POLICY
EXECUTIVE OFFICE OF THE PRESIDENT

Memorandum for Mr. Whitehead:

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Recommen ks the papers should s these and all d without expla esn't matter what y f copies, and N it his attention.

Various OTP files compiled
Memorandum post - OTP
Susan

B. Eagle

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B. Eagle

OFFICE OF TELECOMMUNICATIONS POLICY
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20504

MEMORANDUM September 22, 1971

TO: Tom

FROM: Bruce

RE: Regulatory Reform

One way to solve the problems of bad regulation by the FCC and the other regulatory agencies is to transform them into intermittent commissions. Thus, the FCC would retain all of its present powers, but it would only be allowed to exist for, say, six months every third year. In the intermediate periods, they would have no power or staff. This would force them to deal with basic policy issues rather than meddlesome intervention in day-to-day operating matters.

B.

Explore variations on this theme with Nina or Hank - low time urgency.

5-622

OFFICE OF TELECOMMUNICATIONS POLICY
WASHINGTON

~~XXXXX~~
6/26/72

TO: Tom

FROM: Bruce

OTP initiatives?

(Nino can't stop laughing long enough to discuss it.)

Maybe our General Counsel's office should meet intermittently.

T

OFFICE OF TELECOMMUNICATIONS POLICY
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20504

NOTICE

Communications policy can be made in emergency situations without formal review processes by following the Rule of The Three Ds!"

Decentralize

Deregulate

and

Disintegrate

Valid policy statements can be made provided that at least two of the three D's are included. Statements involving all three D's will be heavily rewarded. A fourth D, available for use in very difficult cases, is

Duck.

OFFICE OF TELECOMMUNICATIONS POLICY
WASHINGTON

TO: Tom

FROM: Bruce

You might want to leave this behind the next time you go on vacation.

How about the political side? Dennis

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF TELECOMMUNICATIONS POLICY
WASHINGTON, D.C. 20504

Date: November 5, 1970

Subject: Deregulation of Radio

To: Mr. Whitehead

We keep talking about doing away with federal regulation of programming when cable comes in. Maybe the way to start is to deregulate AM and FM as an "experiment."

Program:

1. Starting in 197x, there will be no further regulation of AM and FM radio stations in any market which has at least four such stations plus at least one TV station and one daily newspaper.

2. Deregulation means no licensing, no fairness doctrine and no other regulation <u>except</u> (a) that which is required by law (e.g., equal time) and (b) technical standards to prevent interference.

3. Present stations would be vested in their present owners at existing powers and frequencies. New assignments within existing allocations to highest bidders.

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Bruce d/

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After we get some of our pressing agenda squared away, let's explore this -- but we need more options & probably a very clever rationale for why our better regulation would be in the public interest. I basically like the idea. T

Log No. 4-88

OFFICE OF TELECOMMUNICATIONS POLICY

INFORMATION MEMORANDUM

SUBJECT: Anticompetitive Marketing Practices

TO: Tom

FROM: Bruce B.

BRIEF SUMMARY:

This memorandum is addressed to the question: What can be done to remedy the problem of anticompetitive practices by the Bell System in response to competitive entry. It suggests that spin-off may be the only effective and equitable way of dealing with these practices, although spin-off is perhaps not feasible politically.

WHY IT IS WORTHWHILE TO READ:

This question is really very important, and deserves your attention; Burch usually takes us to task for being too glib about the realities of enforcing competition, and I suspect that this is one of the things he has in mind.

Bruce —
You have my attention.
What do you plan to do with it?

T —

cc Hank

GPO 931-271

OFFICE OF TELECOMMUNICATIONS POLICY
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20504

August 7, 1972

To: Hank Goldberg

From: Bruce Owen

Subject: Arcata Petition

The Arcata Petition raises a problem with which we have not heretofore addressed. In encouraging increased competition with Bell in a number of areas, we have recognized the need to prevent predatory pricing and related cross-subsidization of competitive services by monopoly services. This issue has arisen in connection with interconnection and foreign attachments, specialized carriers, domestic satellites, international communication, and land mobile communications. There are more or less difficult solutions to the problem of cross-subsidization, of which the most plausible is the imposition of a general discipline on all prices, including those for the monopoly services, through marginal cost-related or compensatory variable cost rules.

But in all of these discussions, we have not taken seriously another set of "unfair" competitive practices on the part of the Bell System. Bell's power to undertake these practices derives from their residual monopoly services (which are still required to complete communication links, parts of which are competitively supplied) or from Bell's size, "long purse," and prestige. Examples of this sort of behavior appear in the Arcata Petition and were recently brought to our attention as part of Motorola's concerns in the mobile area. There is no need to list here the sorts of practices, other than predatory pricing, which Bell can undertake to discourage competition. They derive, however, either from access to information not normally available to competitors or from access to relatively large capital supplies (the "long purse"). None of the traditional remedies for cross-subsidization, such as separate accounting or even separate subsidiaries, are effective barriers to these practices.

It is an open question whether these practices, if undertaken and allowed to continue unchecked, would make effective competition impossible. While it clearly is in Bell's short-term interest to engage in such practices, in the long-term, it may be good strategy not to

make full use of them if to do so would remove all appearance of competition as well as its substance. In any event, such practices clearly reduce the effectiveness of competition in providing a market discipline for communication services in the United States, and this is contrary to our stated policies.

It is much less obvious what answer there can be to such practices. Assuming they exist as a tacit policy of the Bell System, it is clear that case-by-case treatment of offenses will be an ineffective tool. Broad policy sanctions on such behavior already exist in law and, if the various allegations are true, are clearly ineffective.

There appear to be only two options available with which to deal with this problem. One solution is simply to bar Bell completely from engaging in the competitive sector. The advantages of this step in dealing with the problem at hand are obvious. Equally obvious are the potential disadvantages, both to the public and to AT&T stockholders.

The second solution, while less drastic, may be equally impractical. This approach would require that AT&T form separate corporations in each competitive area and then spin off these enterprises. (Spin-off here means that equity stock in the new companies is distributed to AT&T stockholders.) This step has the advantage of transferring to the competitive sector whatever technical know-how and innovative spirit exists at AT&T, while fully protecting the interests of AT&T stockholders, since by definition, no losses of scale economies will occur.

The second approach has many advantages, but this does not mean that AT&T management will not vigorously oppose it, or that the pragmatic details of specifying the terms and conditions of the spin-off are easily settled. On the contrary, such a policy proposal would meet with monumental objections and barriers. Nevertheless, it seems apparent that we cannot responsibly continue to treat this problem glibly, or to expect the FCC to "somehow" deal with it in an effective way. If there are no better alternatives, we must begin to suggest this sort of solution.

There must be a third alternative

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There must be a third alternative

FROM THE DESK OF

BOB LA BLANC

Tom –

I was clean out some old files & found this!

B

White House – Misc.

attached to Memow letter to CTN

July 2001

Leibman, Williams, Bennett, Baird and Minow

ONE FIRST NATIONAL PLAZA · SUITE 3200 · CHICAGO, ILLINOIS 60670 · 312-329-7700

CABLE ADDRESS "CROLEX CHICAGO"

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RUSSELL O. BENNETT
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GALE A. CHRISTOPHER
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LAURENS G. HASTINGS
JOHN H. ROCKWELL
DAVID P. LIST
A. BRUCE SCHIMBERG
GEORGE J. McLAUGHLIN, JR.
THOMAS H. MORSCH
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ROBERT E. MASON
NEIL FLANAGIN
R. QUINCY WHITE, JR.
DONALD A. MACKAY

D. B. WILLIAMS (1945-1969)

THOMAS H. BALDIKOSKI
JAMES L. MAROVITZ
WILLIAM L. KELLEY
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OF COUNSEL G. KENNETH CROWELL J. ARTHUR FRIEDLUND JOHN R. GOLDEN

WASHINGTON OFFICE. 1156 FIFTEENTH STREET, N. W. · WASHINGTON, D. C. 20005 202 833-8606

March 26, 1970

Dr. Clay Whitehead
The White House
Washington, D.C.

Dear Dr. Whitehead:

It was a pleasure to speak to you on the phone yesterday, and I simply want to confirm our desire to have you come to the Data Communications Seminar at Airlie House April 22 and 23. You can let us know at your earliest convenience, and we will welcome you even at the last minute. We have two hundred people coming from all over the country who are vitally interested in the issues, and we know you can make an important contribution to advancing their understanding of the problems and opportunities and the need to protect the public interest.

Cordially,

Newton N. Minow

NNM/h

bc: Mr. Robert LaBlanc
Mr. Morris I. Offit
Mr. J. Ira Harris

What would Jody have filed this under?

Jody says maybe in Files of the docs to review?

SECRET

Why the Secretary of Defense Needs a Systems Analysis Office or its Equivalent

MEMORANDUM

The question of what to do with the Systems Analysis office is really a surrogate for the more fundamental and more blunt question of whether the Secretary of Defense should participate in the substance of force planning policy and whether he needs a personal staff capable of independent analysis available to him in discharging that responsibility. The issue is only superficially one of personalities or of methodology.

It is very hard to get a balanced view of the Systems Analysis office and its function in the Department. The Services and Congress have clear reasons of power, influence, and prestige for wanting to downgrade or eliminate the office; the partisans of systems analysis tend to be overly zealous about the capabilities of "rational" analysis; and foreign policy experts have too little knowledge of force level and budget decision problems.

Much myth and emotion have grown up around the Systems Analysis office, and it is therefore important to distinguish the function from the personalities: The "whiz kids" became the focus for much of the criticism that was (or should have been) really aimed at Secretary McNamara for his assertion of personal responsibility over the policy aspects (priorities) of force planning and for the particular choices

Copy ?

The attached paper is a brief for continuation of the function of Systems Analysis office as a major tool for serving the interests of the Secretary and the President. Although it does take an advocacy position, it is a balanced look at a very tough problem.

Ask me

Ask Jody

Susan,
What happened to this?
Tom
2/21/08

SECRET

Lost in Chapters

early before he did research,
~~based on~~ taken fr.
interview w/ him — date —

Drafts

9/29/06

Doug

worth

Office of Telecommunications Policy

I went to White House the first day of the Nixon Administration. I knew I was going. I think the way most Presidential transitions work is that people are identified by the incoming President who are going to be on his staff and who are going to handle things; those people start interacting with people from the agencies, in congress, and in industry well before the President is sworn in. I got the official invitation to join the White House staff from Bob Ellsberg who had been selected by Nixon to be one of his top aides. Bob asked me to join the staff and I naively asked him, "As what?" and I remember Bob looking at me incredulously and saying, "does it matter?" To which after a moment of reflection, I said, "No."

elaborate

The question of what I'd be doing turned out to be an interesting one. Because I'd been on the Nixon economic and budget transition team, I thought I was going to the White House to work on budget policy matters. There was an early meeting of the new White House staff which took place just before Jan. 20, and one of the first orders of business was parceling out who was responsible for which agencies. It sorted out fairly quickly: Ehrlichman wanted the domestic agencies; Kissinger wanted state and defense; and Ellsworth was given all of the non-cabinet agencies, which he then turned around and parceled out to me and John Rose, being his two assistants. Guring that discussion there was the question of who would do NASA, atomic energy, FCC, Federal Power Commission, and apparently no one had a good answer except Bob Haldeman. He said, "Hell, Whitehead went to MIT, he understands all that technology shit, give it to him."

C

d other

With that remark, I was suddenly the White House person for NASA, atomic energy, FCC, Federal Power Commission, National Science Foundation ~~and~~ the CIA. Since I had a lot of clearances from my work at RAND it was pretty easy for me to move into the national security parts of all that. I had the CIA reporting to me for about a week until Henry Kissinger realized he wanted it to report to him, which he should've realized at the outset. There I was basically being a Ph.D. economic policy wonk labeled by Haldeman as knowing about all this technology shit, so ~~I made contact with~~ the various agency heads and industry people started figuring out that I had some responsibilities. Washington is a small town so word gets around and pretty quickly I was being besieged by Hill staffers, industry people, all of that.

slot

Several of the important issues were communications. The Johnson administration had not wanted to deal with communications. The commonly accepted rationale for that was that Lyndon and Lady Bird had their television stations down in Texas and didn't want to get their administration involved in anything that would give the appearance that they were playing favorites with their own television properties so they just stayed away from it. That was probably not a bad idea for them personally, but it resulted in a number of issues in the FCC and industry being bottled up because no one dealt with them. The FCC Chairman was Rosel Hyde. Rosel was widely viewed as a very nice man. He was a Republican. ~~He was a Mormon.~~ But he pretty much didn't do anything.

B

Quickly I found myself dealing with a lot of people from these various agencies and the Hill and the industries that were represented. For example, in NASA, the big issue was what does the country do after the Apollo moon landings. So NASA had its schemes for building a shuttle, building a space station, going to Mars, and there were all sorts of contractors that had ideas about how to implement those schemes, so they came in and found me. The whole communications industry found me, from AT&T to Motorola to the broadcast networks and so forth. So I was quickly taken up with meetings with lots of people.

Some of the communications in the communications sector included public broadcasting. Congress had passed an Act in 1967 setting up the Corporation for Public Broadcasting, which grew out of the Killian report, which was funded by and run out of the Carnegie Endowment. There was this vision for a major public television network that would rival the three commercial networks and be a counterbalance to the commercialism of those networks, all paid for by the federal government with huge budget implications. The questions for the new administration were fundamental questions about publicly funded broadcasting.[1] Should the federal government be involved in broadcasting? If so, in what areas, and under what organizational structure in and outside government? To what extent should a national organization decide system policy independent of government accountability? Were there alternatives to federal funding? Why couldn't public broadcasting function in the marketplace? If we supported it, how much money were we going to put in the budget?

There was also the subject of communications satellites. The Communications Satellite Act of 1962 created Comsat and established international satellite communications as a monopoly of Intelsat. This was sort of John Kennedy's gift to the world - America's space technology. And it more or less worked. Intelsat and Comsat had gotten underway under interim agreements in 1962 / 1963 and there was a large international conference of a hundred and some countries negotiating the final agreements for the Intelsat system in Madrid in 1971. The Chairman of the U.S. delegation was Leonard Marks. There was the question of what the new administration's position was on that? Who was going to oversee that? Would we replace Marks as ambassador? The answers were that I'd oversee the program, and, yes, we'd replace Marks. We replaced him with Bill Scranton.

There was also the question of the use of satellites for communication within the United States. The presumption in 1962 was that satellites were only useful for communications across oceans so they were inherently international. The idea of satellite use for short distances within the country really didn't occur to anyone, but as the technology developed, it became more and more feasible to think of using satellites within the states. The three television networks for example, were very unhappy with the charges AT&T was levying on them for their microwave connections for their networks. And it was clear that if they could use satellite communications, they could connect all of their stations together for a fraction of the cost that AT&T was charging

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[1] John Macy Jr., To Irrigate a Wasteland, University of California Press, Berkeley, 1974 at 95.

them.

Some of the communications carriers, like AT&T, RCA, Western Union, wanted to put up satellite systems for communications within the United States which would have competed with AT&T. Comsat argued that they'd compete with Intelsat, not that Intelsat was useful for communications within the U.S.. Comsat was arguing strongly that the 1962 Communications Act had given them a monopoly over all communications, but others said no, it just gave them the monopoly for international, and that issue was unresolved.

Motorola had developed a cellular phone technology and wanted permission to use certain frequencies for cellular telephone service. The FCC wasn't acting on that. AT&T was vehemently opposed that this would fragment the telephone business and result in poor service and no doubt cause measles and mumps among a large fraction of the population.

There were people who wanted to build microwave systems for private and shared use - the pipeline companies, the railroads. MCI had in fact built a system between Chicago and St Louis and were trying to get the FCC to let them interconnect that microwave system to the phone network so that the microwave could be shared among corporate users. Sam Wyly was trying to get permission to build his digital microwave system for connecting computer communications centers. Cable television was trying to grow - cable operators had figured out that they could use microwave links to import television stations from outside markets and that would give them additional programming that they could then use to attract additional customers. The broadcast industry was vehemently opposed to that because it would fragment the local audience, potentially leading to a reduction in advertising revenues. Hollywood was vehemently opposed to it because they said that they hadn't sold their rights under the copyright statute for that purpose so that the importation of a distant signal and putting it on a cable system was a new public performance under the copyright laws that the cable operator didn't have a right to do. Some broadcasters like WGN in Chicago recognized that if their station was imported into a number of distant markets on cable that would greatly increase their viewership and they could sell their advertising for more, so it wasn't a monolithic broadcast position.

There were a number of other cats and dogs of communications issues. The issue of how much of an interest in a television show a network could retain was a big issue because the Hollywood people were doing the financing and there was a question of who would get what part of the profits from a television series. That became known under the rubric of financial interest in syndication rules – FinSyn – which was a hot issue between Hollywood and the networks. They were both trying to use the FCC to set rules for that. There was the prime time access rule which required networks to reduce their weekly programming by 4.5 hours so the local stations could get programming from other sources, which is why we have programs like Wheel of Fortune, The Price is Right, and Jeopardy. There were issues of children's programming: how many hours of time must the networks devote to children's programming? What was a bona fide children's program? There were fairness doctrine issues; rights of politicians to get time. Some of these things had just been bubbling along. A lot of them had been bottled up because there

was no leadership from the administration and Rosel Hyde wasn't providing any leadership at the FCC.

Those were some of the communications issues that I immediately faced at OTP. In addition to that we had questions like, do we build a space station? Do we build a space shuttle? What are the Russians going to do? Can we build more atomic energy nuclear power plants?

The two areas that interested me most and that I spent most of my time on were NASA and FCC in part because ~~those~~ were the two areas that had the biggest set of issues, biggest in terms of impact on the country – biggest political impact. And, in the case of NASA, the biggest budget impact. They were both pretty high profile ~~issues~~. So, partly because they were interesting and partly because I had so many people knocking on my door about them. . . .

One of the early pivotal moments was when Rosel Hyde asked for a private meeting. He came over to my office and said, ~~you know, this~~ domestic satellite issue has really had ~~us~~ wrapped in circles. We've had a really difficult time because we just don't know how to deal with it. We have all these powerful companies – ABC, NBC, CBS, AT&T – that want to put up satellites and we've just had a really hard time figuring out how to do it. However, he said, I've come up with an idea that I think works. We don't think we ought to give it to Comsat because we have all these other companies that want to get involved, too. Here's the idea, we have 8 applicants as I recall - about half of them are communications carriers and the other half are users, television networks. We create a monopoly corporation for domestic satellite operations that's owned equally by the 8 current applicants. They each own an equal share in the company and each have a seat on the board of directors. They decide what's going to be built and how the rates are going to be charged. So everyone's involved, everyone's an owner, and everybody's happy. But if for some reason they can't work things out themselves, then the FCC would cast the deciding vote on the Board of Directors.

I remember thinking to myself, as my father would say, ~~Jesus H. Christ~~: This creates another monopoly. It's a monopoly that, by definition, the competing interests of the competing communications companies and the users – there's no way that those people will reach agreement on much of anything. So we've got a communications monopoly that is in effect largely run by the FCC through heaven knows what kind of mechanism. So the Congress will get involved, it's going to be politicized, and the likelihood of it doing much of anything is remote. And furthermore, if we're going to have competition, it was clear to me from the outset that we needed competition in the communications business – we needed competition between the networks and between AT&T. And I said, still thinking to myself, if we can't create a competitive regulatory environment in a brand new technology like satellites, then we'll never have competition.

So I said, thank you very much, Rosel, please don't do anything. I'll get back to you. I had succeeded in putting that plan on hold, but even though I was still wet behind the ears, I knew I had to have something to replace Rosel's suggestions. And I knew it ought to be a

competitive regime. So I created a task force of people from various agencies, Justice, what was then the Office of Telecommunications and Management, Commerce, council of economic advisors, Chaired by Paul McCracken, who urged me on, as did the antitrust people in Justice. I also included some outside consultants, in part people I thought would be useful and in part people I thought should be involved politically. And we set out to develop a policy for domestic communications satellites that would create from the get-go a competitive, relatively unregulated industry structure. And we did it, and we communicated that to the FCC.[2] By that time Rosel Hyde had been replaced as chairman by Dean Burch. This plan was communicated in a letter to Dean Burch that became the first of many Dear Dean letters, suggesting to the FCC what the White House thought would be good policy directions for them to go in.

One of the other hot issues was public broadcasting. There was this Carnegie Commission Report that had been chaired by the President of MIT, my alma mater. I had gotten my Ph.D. from MIT in 1967 and two years later, I was in the White House meeting with the President of MIT explaining to him why we were not going to support his grand scheme for public television. The reason goes back to my presumption that what we needed to do in communications was get the government role reduced so that in television and telecom we needed to substitute competition for highly detailed regulation - not that we should completely eliminate regulation, but that the regulation in television and telecommunications had gotten too complex, too detailed, too politicized, so we needed to change that.

So just as I had kind of closed my eyelids and rolled my eyes when Rosel came in with his suggestion for communications satellites, I had the same reaction when Mack Bundy and Jim Killian came in to talk about public television because what they were proposing was in essence a federally funded fourth television network. They thought this was wonderful that it would provide all kinds of high quality programming that would do wonders for children, schools, education, culture, etc. that would provide counterbalance to the crass commercialism of three television networks and give the country the type of programming it wasn't getting, but deserved. My view was that they were setting up a government-funded television network that would have the White House and Congress constantly telling them what they should and shouldn't put on, manipulating the budget to reflect whatever political strains of the moment thought was good programming or bad programming, and it would create a political nightmare. I also felt strongly that the idea of just adding one network to the monopoly of three networks, particularly with one of them funded by the federal government, wasn't a big change from three networks in terms of allowing the country to reduce the monopoly power in television and to reduce the need for

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[2] In January 1971, OTP issued an AEROSAT policy statement saying that communications satellites should be privately, not governmentally, owned and, according to Whitehead, with the White House domestic open skies policy that satellite systems should be built in response to competitive private market rather than governmental direction. "Open Shores" to "open skies": Sources and Directions of US Satellite Policy in Economics and Policy Problems in Satellite Communications edited by Joseph N. Pelton and Marcellus S. Snow at 173-74.

government regulation. I felt that the only long-term answer to the monopoly position of the three television networks was to get more channels into the home, and that the only way to get more channels into the home since you couldn't add more stations because there weren't any more frequencies to add more stations, was through cable tv and to use satellites to bypass the AT&T microwave to get the programming out to the cable systems. So to me, creating a huge government funded network was a step in the wrong direction in terms of long term competition strategy and in terms of sound public policy in terms of how this would inevitably be politicized.

That takes us back to satellites being a key element in getting competition into the telecommunications business. I thought that if we could successfully get a competitive model for the new technology of satellites, we could use that policy to create a competitive model for these specialized common carriers like MCI and Datran and we could begin to carve out a largely unregulated sector of telecommunications services. Then, by using satellites to carry television programs like HBO to cable systems, which had the capacity to, at that time, carry something like 15 - 30 channels, there was a possibility of having 15 - 30 television networks, and then in time maybe having 50 - 60 television networks, maybe 100. So satellites became very important to the vision of replacing the monopoly with a range of new providers, new services that didn't need to be regulated as tightly and could innovate free of the kind of type of government regulation that we historically had on AT&T and the three television networks.

That policy became the guiding principle of OTP. For the remainder of the time I was at the White House and at OTP, that was the concept we were pushing. All the issues and battles we took on were guided by that basic framework of replacing the monopoly structure with a more deregulated, more innovative one.

Several other stories stand out from that time. They're both about AT&T. The chief ATT lobbyist in town was Ed Crossland. Ed was a regulatory lawyer form North Carolina. He was smooth as glass. He had that smooth North Carolina way of talking – a gentleman's gentleman - bright at hell, sharp as hell. He was probably more influential on Washington communications policy things than any FCC commissioner. He knew how to work the Hill. He knew how to work the FCC. When my role became clear, Ed cultivated me like I was his newest and most important girlfriend. He was all over me. Anyway, Ed was influential.

Ed called me one day at the office and wanted to talk to me. I told my secretary Eva to tell him that I'm in a meeting and will call him as soon as I get out. Eva comes back and says he really wants to talk to you now. I said, a little bit annoyed, Tell him I'll be through with this shortly and I will get back to him as soon as I get out of the meeting. I swear that 15 minutes later, my White House line rang, and I always answered that line. At that time it was a dedicated line in the White House, and people in the White House just called each other directly on that. The custom was that if someone called you and you were in your office they expected you to pick up, and if you called someone and they were in their office, they expected you to pick up – there was no switching.

So I picked it up and it was Howard Baker, who was at that time the minority leader in the senate. He said, Tom, what's going on? I said, what do you mean Howard? He said, are you about to do something about AT&T? I said no, Howard, why do you ask? I'm down here in Nashville giving a speech and Joe Smith, whoever it was, who's the Chairman of the First National Bank of Tennessee came over and got me off the podium and said that it's urgent that I call you. I said, well, Howard, I don't know anything about it. And he said, well, Joe Smith is on the board of the Tennessee phone company, and he said he got a call from AT&T headquarters saying that you're about to do something to AT&T. And if you are, then maybe we ought to talk about it. I said, Howard, I'm not about to do anything. And he said, well, okay, I'll tell him that. I said, thank you.

Within fifteen minutes, Ed Crossland, on the Hill had gotten to the Office of the Minority Leader. Where is he? Well, he was in Nashville giving a speech. Who did Ed's people know in Nashville? Well, Joe Smith who's chairman of the First National Bank of Tennessee. Ed got him over to wherever that speech was and got him to get Howard to call Tom and make sure that Tom doesn't do something.

It just made me realize that if Ed could do that there, he could get to any congressman, any senator in any state of the union - there were phone companies in every state, and all the important people in those states were on the boards of the phone companies. It was a real lesson to me in the power of the political organization that those people had. So, I finished my meeting and I called Ed back and said, Hi, Ed, calling you back, and I never mentioned anything about it, but it really made me think.

Another important event took place later. I was trying to accommodate things like Datran, MCI, and the competitive thing for satellites and cell phones and try to create a sector in telecom that would be basically not heavily regulated, and would be competitive and would flourish apart from the strictures of the kind of regulation you had to put on the monopoly of AT&T. Through this time DOJ was trying to persuade me that we had to have an antitrust case to break up AT&T. They were never quite satisfied by the consent decree of the 1950s. They wanted to break up AT&T by splitting off Bell Labs and Western Electric as the manufacturing arm with the idea that the equipment business could be competitive and the telephone company would be a monopoly. I thought that if they thought AT&T violated the antitrust laws, they could damn well file an antitrust case. But from a public policy point of view, I thought antitrust was a very sledgehammer approach to restructuring the industry, and I didn't support it.

One day, which was probably early 1974, my White House line rings again. This time I was in the office by myself and it was George Schultz, who was then Secretary of the Treasury. We were on a first-name basis but it wasn't every day that the Secretary of the Treasury called. He said, Hi, Tom. And I said, Hi George, and we had some small talk. And he said, Tom are you about to do something about AT&T. I said, no, George. And he said, you're not going to do anything? And I said, well, George, we don't have anything scheduled. Nothing's planned immediately. AT&T figures into a lot of the things we're working on, but we don't have any

immediate plans. And he said, well, you're not going to be doing anything in the next couple of weeks? And I said, no. Look, George, if that makes you comfortable, I'll just agree not to do anything with AT&T for the next two weeks. And George said, oh, that's great, that's just fine, if you could do that, thank you very much I appreciate it.. And I said, George, if you don't mind my asking, why do you care? He said, this is very confidential, but we're about to put out a major offering of U.S. treasury bonds. The interest rate we pay follows the AT&T rate, so if you were to do something that adversely impacted AT&T, it would drive AT&T bonds down, which would drive up the interest rate, and that would mean we'd have to pay a higher interest rate on the umptyum million dollars we're about to borrow, which would cost the treasury a lot of money. I said, it seems to me George that it ought to work the other way around, the treasury rate should drive AT&T's. George told me, It doesn't work that way. This year, AT&T counted for a third of the new corporate debt in the U.S. Being so big, our interest rate follows their interest rate. So I said, don't worry about it, George, I won't do anything.

I remember hanging up the phone and I remember looking out the window and saying to myself something like, ~~Jesus H. Christ~~, here you've got an industry – meaning telecommunications – that's the fastest growing industry in the U.S., that's hugely capital intensive, and you've got one company that already accounts for a third of the total corporate borrowings in the U.S. - this is just not sustainable, it just won't work.

So, not immediately, I called Bruce Owen who has my chief economist and had been in favor of breaking up AT&T. He persuaded me that if you were to break up AT&T you should do it the way it was finally done, by splitting off long distance from the local. So Bruce and I talked, and I called Don at the Department of Justice and said okay, I'm on board with an antitrust suit if one of your remedies is this horizontal divestiture rather than just splitting off manufacturing. If you agree to that, then, I'll support you on the policy front. And that was that.

Having agreed to that, we decided that the best thing would be for me to go on the public record putting the administration on the record that there was no policy impediment to a break up of AT&T. It was important that I and the White House not be involved in urging Justice to file a suit because the question of whether AT&T did or did not violate the antitrust laws was a legal question and I didn't have anything to say about that one way or the other, and Justice couldn't be seen to be yielding to political pressure to bring a suit where it may not be warranted. The fact of the matter was that they wanted to do it, and I guess behind the scenes I was saying that I would support them.

So the question became how do I support them? That was done through the device of hearings held in the Senate. Senator ~~James Eastland~~ of Mississippi, Chairman of the Judiciary Committee, was holding hearings on competition and it provided a natural forum for me to address competition in the communications business. So I and my staff carefully prepared testimony.

There were two big issues. One was, from an overall telecommunications policy point of

view, would the break up of AT&T damage the country's telecommunications system or its ability to compete in world markets? The second question was, would the break up of AT&T be detrimental to national security because communications are so important to our defense capability? Going back to the Eisenhower administration, the first issue had been kind of muddled and I don't think any administration took a clear line about whether the breakup of AT&T would be positive, negative, or zero in regards to domestic telecommunications policy. The national security issue was much more problematic and, indeed, there's pretty strong evidence that the Defense Department was responsible for dropping the first antitrust case against AT&T, five years after it had initiated in 1949. So through this testimony, I stated very clearly that competition was the preferred regulatory tool in the U.S. historically, and it could apply in telecommunications as well as any other industry. Monopoly in the telephone business was not a necessary structure in the nation's telecommunications industry.

I was careful not to say specifically whether the break up of AT&T would be a good or bad thing, but it was pretty clear what I was saying. I also said that, from the national security view, the AT&T monopoly wasn't necessary. That carried the weight of the White House, which trumped the Defense Department.

The success of that testimony was driven home to me because after I finished testifying and I was walking out of the hearing room, Ed Crossland was in the back of the room. I went over there and said, hello Ed, and, he said, through gritted teeth, in his southern accent, Tom, that was the most irresponsible testimony I've ever heard in my entire life in this town or anywhere else that I have worked. And at that point his assistant pulled him along and said, come on, Ed, let's go, Ed. And I said, gee, Ed, I'm sorry you feel that way. And that was it. But I might as well have said, if Justice wants to break up AT&T, there's no national security or policy impediment to that, which is what I said without saying it.

Some weeks later, Henry Goldberg and I went over to Justice and met with Bill Saxby, who was then the attorney general and we talked about it and he said he wanted to hear it from me personally and to be sure that what I said meant what he thought it meant. I said, yes, it means what you think it does, and if you file, I'll say very clearly that, while we don't take a position as to the legal merits of case, we see no impediment to the remedies that you're seeking. I emphasized that one of the remedies that we wanted was the horizontal divestiture, and he agreed that they would include that as one of the remedies that they would seek.

As we were leaving, we sort of shook hands on it and Bill said, neither one of us is going to tell the President about this, right? And I said, right. Some weeks later, Justice filed the antitrust case that ultimately led to the break up of AT&T along the lines that Bruce Owen had suggested.[3] Neither Saxby nor I told the President; it just happened.

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[3]By late 1973, Tom Kauper, assistant attorney general, had authorized a secret DOJ Antitrust division investigation of AT&T that was distinct from (and unknown to) the Department's official investigation launched in 1973 and headed by Phil Verveer. Keith

Later in '74 the public broadcasting thing came to a head. I had successfully (not singlehandedly) developed then defended the administration's position that the Corporation for Public Broadcasting should not receive anywhere near the budget that they wanted. That developed pretty quickly into a partisan issue with the Democrats thinking that it was great to have lots of money for CPB because they controlled the Congress. We thought for policy reasons it shouldn't. The rest of the White House thought it shouldn't for political reasons, believing correctly that the public broadcasting crowd was critical of Nixon administration. We had successfully created PBS as a local station counterweight to the Washington-based CPB, and that created a sort of check and balance on how CPB spent its money.

One of the big issues remaining in 1974 was so-called long-range financing. I mentioned earlier that I felt that if you have a federally funded network, politicians would try to influence particular programs and that was borne out in a number of instances. One of the proposals developed to counterbalance that was the idea of long-term financing - that is to say that Congress would pass five year financing so that the congressmen and senators wouldn't be tempted year by year to cut a program or fire a producer. In other words, it would insulate public broadcasting from the political process somewhat. The CPB crowd thought that even five years was wrong, and they wanted a tax on viewers kind of like what the BBC has. We kept trying to tell them that, in the U.S., you don't get public money without some kind of checks and balances, and in this case, the question before us was what are the right checks and balances given the character of this undertaking?

So we had proposed five-year financing and that called the Democrats' bluff. They immediately said that five years was too long. Ultimately, I worked out this deal with the public broadcasting crowd that if they would put in place and accept the PBS structure with the local stations having a significant say about how the money was spent and what programs were going to be carried on the network so that it wasn't all decided by CPB, then I would support long term financing. I had cleared that deal through the budget bureau and through the White House. Having proposed five-year funding and having the Democrats renege on that, the compromise was two-year funding.

I recall that Congress passed a one-year budget extension, and I recommended that Nixon veto it, and he did, the rationale being that this is not long range financing. It was interpreted in the press as a veto of any funding, but that's not what it was. Nonetheless, we made our point to the Democrats that were controlling the Hill at that point, and we reached a compromise of two-year funding and the bill was passed providing for that.

Clearwaters conducted the secret investigation and held clandestine meetings at the White House, getting files from OTP that it had accumulated on AT&T.

Nixon was in throes of Watergate at the moment, so I wrote memo to the President explaining how things had played out, what the compromise was, how it had been developed and accepted by all parties, and suggesting that he should sign the bill. My memo came back with a handwritten note by Al Haig, Chief of Staff, saying the President does not agree with your request. I went ballistic. I had worked on this damn public broadcasting thing for five years and had been the frontman for the administration on a battle that was very partisan and very bitter politically. I had been accused of all kinds of ugly things – being anti-public television, being anti-children – and I thought that I had worked out the best deal I possibly could for everyone involved. Nixon knew – the whole damn White House knew – what I was doing, and the strategy we had been employing. We'd gotten the PBS thing in place, and it was a good compromise. It was working, it was the best that could possibly be done, and I really felt like I had been cut off and hung out to dry. My whole credibility was gone because I told everyone in public broadcasting, I told people on the Hill, I told all the press what we were doing and all of a sudden Nixon was saying no.

So Brian Lamb, Henry, and I talked about it. I knew that appealing it back to the President would go absolutely nowhere because the President was essentially dysfunctional. Brian Lamb said, well, this could all be on the front page of *The New York Times* tomorrow, and I said, that's a good idea, and so the next morning, there was a story on the front page of *The New York Times*. At the press conference that morning, people were saying to the press secretary, Ron Ziegler, what is this, Ron? It says here in *The New York Times* that the President doesn't support Whitehead. Ron lied through his teeth and said, no, no, no, the President never disapproved of Mr. Whitehead's memorandum, that's totally a false story. The President supports what Mr. Whitehead's done. So I fairly quickly arranged for some hearings on the Hill, and I went up and testified for the Administration supporting the two-year funding package, and the next day I submitted my resignation. I wrote the letter resigning effective some time in September, but we didn't release it for some weeks. When it finally was released, if you open one of the papers to the back page, you'll see a little bitty headline saying "Whitehead resigns." And the front page in huge letters says "Nixon resigns."

I had no idea Nixon was going to resign. I had announced my resignation on Friday, and I was going to spend a year as a fellow at the Harvard Kennedy School. Margaret and I had rented our house, Margaret had driven to Kansas City, all of our bags and clothes had been shipped, we were going to spend two weeks camping in the Rockies, and I don't know why I was still there Monday, but Monday I stayed with my sister. For some reason, I had gotten rid of all my suits and ties, and was planning to catch a plane Tuesday morning when at about 10:00 at night I got a call from Phil Bukin, Gerald Ford's personal attorney. Bukin told me, Tom I just got a call from Gerry and he's going to be President in less than 72 hours. At that point, the message had gone from Haig to Ford, who called Bukin, who called me. The people who knew were Nixon, Haig, Ford, presumably Mrs. Ford, Phil Bukin, probably Bunny Bukin, and me, so I was number 6 or 7 to know that Nixon was resigning.

That was essentially the end of my telecom stuff because then I kicked into gear the

transition team for Ford that I had been working on clandestinely with four others. For the next two months, I was working in the Ford administration putting into play the various contingency plans that we'd developed for him earlier.

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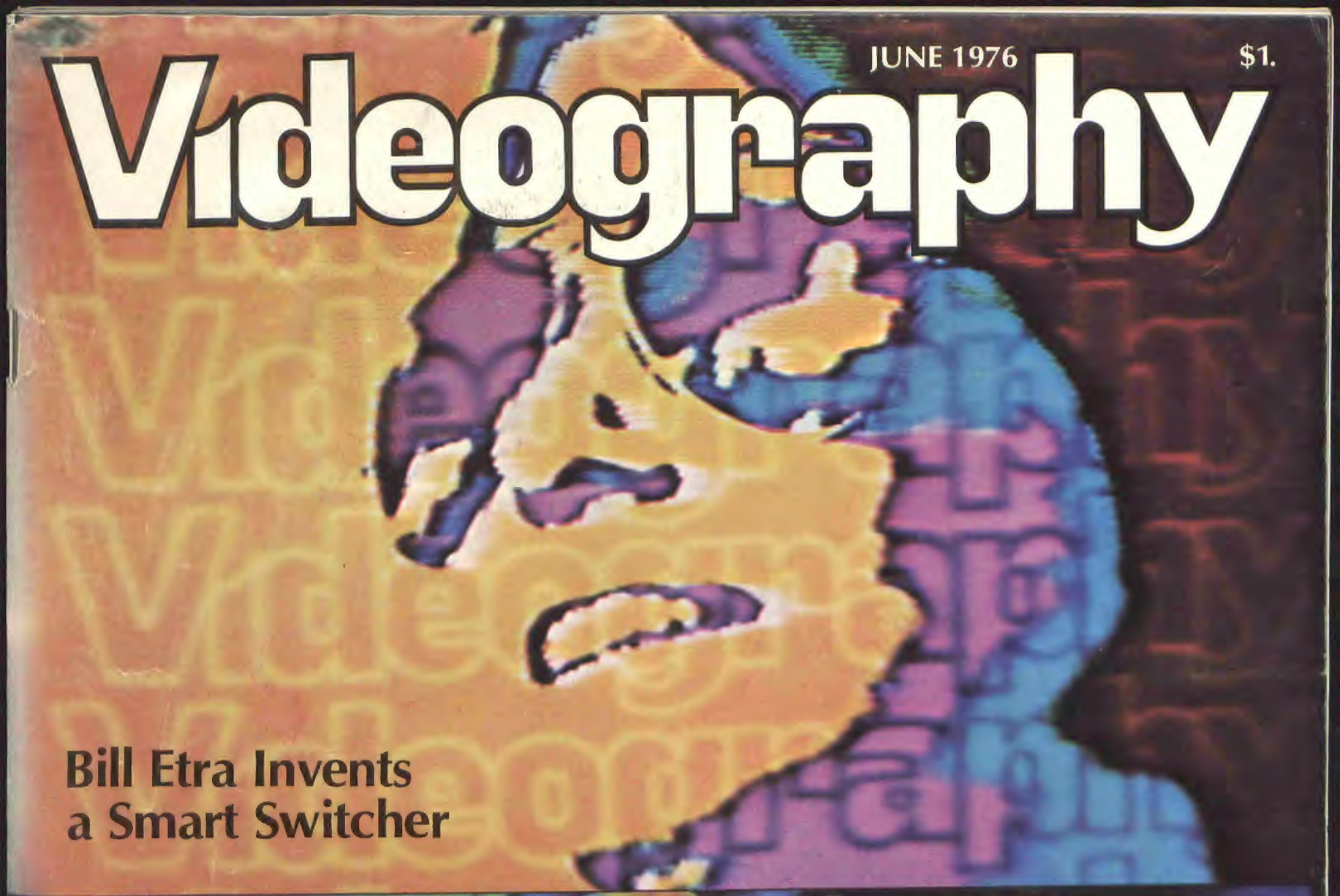

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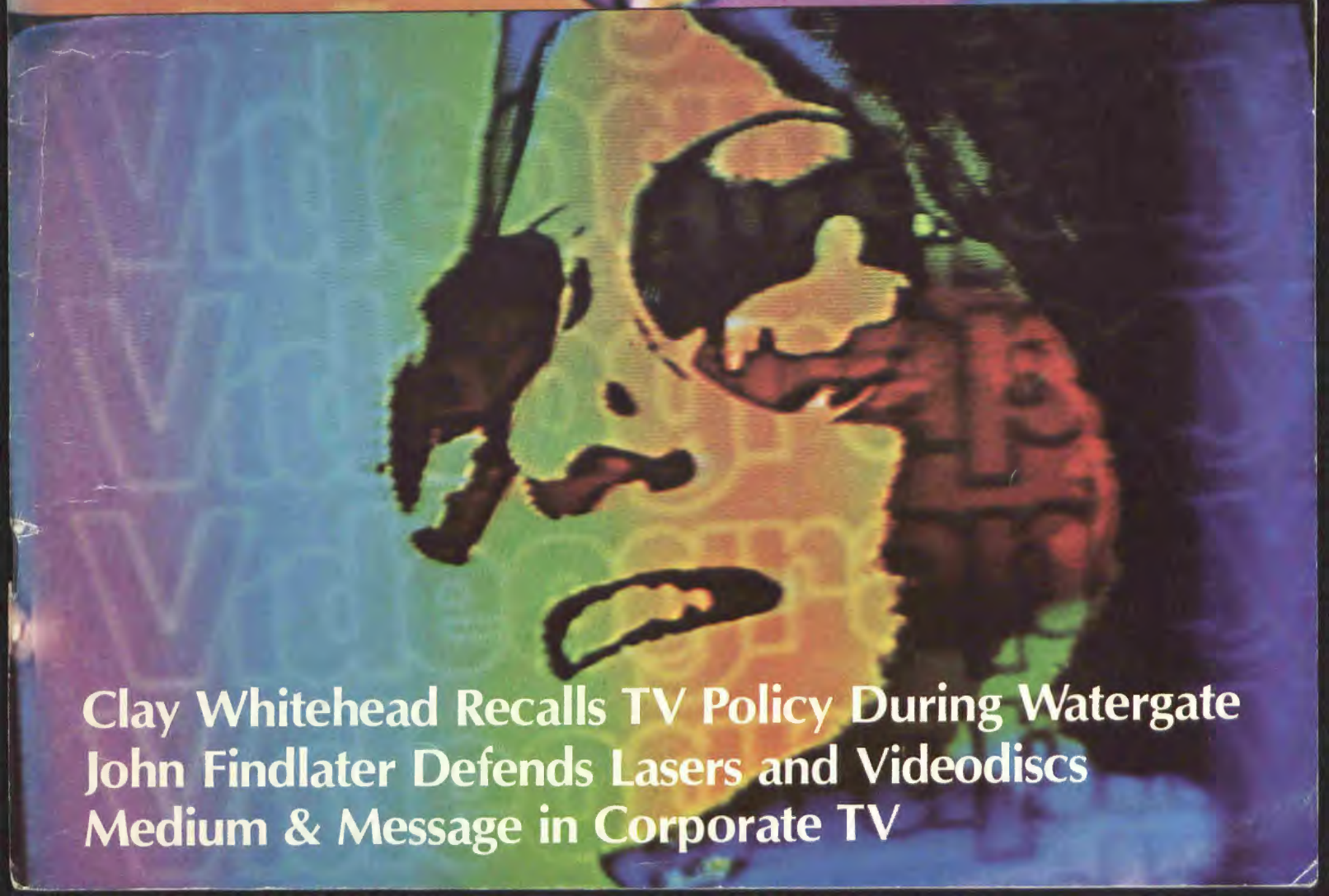

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COVER: Bill Etra used his new switcher/colorizer (see page 28) to create this month's cover. Etra used a still image of a face to cut key for the colorizer, with the Videography logo inserted separately into each layer.

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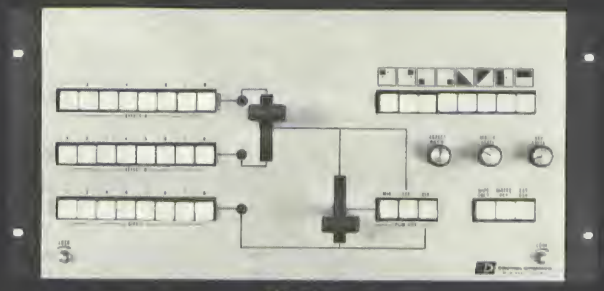
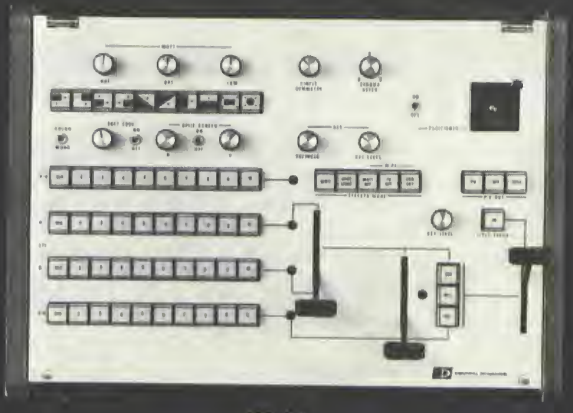


VS-10



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Pay Cable dominates NCTA

Election year pressures halt easing of CATV regulations

Pay-tv talk and speculation carried the National Cable Television Association through its 25th annual convention as cablecasters gathered in Dallas, April 4-7. An upbeat yet realistic mood prevailed as they heard statistics confirming that pay-tv, if not their industry's salvation, should at least provide a cable with enough extra revenue to keep it economically healthy.

Ironically, just one day after the delegates left Dallas, it became widely known that the Ford Administration has decided not to recommend legislation that would have removed many of the restrictions placed on catv's activities and growth. Although the President has long called for increased private-sector competition through the easing of government regulation of several industries—including cable tv— election-year politics and lobbying by broadcasters apparently succeeded in torpedoing cable deregulation yet another time.

White House press secretary Ron Nessen singled out the story—which first appeared as a small item in *Television Digest,* then hit the front page of *The New York Times*—for special criticism, calling it misleading. Nonetheless, he admitted that the Ford Administration will not push for cable deregulation until more research on its effects is completed.

So cable television will continue to fight its opponents in the present regulatory jungle, relying on pay-cable as its most potent weapon. As a concept, pay-cable—whereby catv operators offer subscribers an extra channel of uninterrupted first-run movies and other programs at an added cost—has caught on in a big way. The numbers speak for themselves: total pay-tv subscribers have grown from 16,000 three years ago to half-a-million at the end of 1975 and are expected to reach 1.2 million by the end of this year.

Satellite earth station outside Dallas convention site

Home Box Office, whose announcement last year that it would distribute pay-tv programming to cable systems nationwide by satellite started the present pay-cable momentum, still leads the way. Andrew Heiskell, chairman of HBO parent Time, Inc., underscored his company's long-term commitment to pay tv by appearing at NCTA and calling for cable tv's deregulation. And even while the convention was in session, HBO president Gerald Levin announced the addition of several new affiliated cable systems. HBO now has nearly 400,000 subscribers spread over more than 150 systems and expects to be transmitting signals by satellite to 75 earth stations across the country by year's end, in addition to feeding its affiliates in the Northeastern states by terrestrial microwave. With such a head start, it's hard to imagine any other pay-tv supplier—even one with financial resources similar to Time, Inc.'s—catching up.

Yet, two of the most important announcements to emerge at NCTA augured potential threats for HBO: Optical Systems' accord with Western Union to supply pay programs via the Westar satellite to its Channel 100 affiliates, and Warner Cable's decision to supply movies to some of its urban systems on a stand-alone basis, i.e., without going through intermediary suppliers such as HBO (see following stories).

FCC Chairman Richard Wiley with actor Dennis Weaver

Other NCTA events: in his keynote address CBS reporter Mike Wallace accused Manhattan Cable, to which he is a subscriber, of not showing enough hard-hitting public-affairs programs to its sophisticated audiences; Columbia Pictures president Alan Hirshfield said the pay-cable industry should eventually offer motion pictures on a pay-per-view basis; Robert Weisberg, whose Telemation Program Services supplies movies for pay-cable use, said that not enough movies are available from the Hollywood distributors, forcing cable systems to play repeats that can lead to customer requests for disconnects; and Columbia Pictures vp Alan Adler implied that the only way for cable to overcome the dearth of film product is to grow to the point of being able to subsidize made-for-pay-cable productions.

Over 110 exhibitors rented space at Dallas Convention Center and total registration topped 4,300, up by nearly 1,000 from last year's meeting in New Orleans. Yet convention-hall attendence appeared sparce, with several exhibitors complaining about the lack of traffic.

NCTA had its own booth to display specialized program services for cable systems, including local origination, access, political cablecasting, data transmission, educational programs and two-way services. Next year's NCTA will be held in Chicago. P.C.

Optical Systems, Western Union in pay-tv accord

Using the NCTA convention as its forum, Optical Systems (Burlingame, Cal.), parent of the Channel 100 pay-cable network, announced an agreement with Western Union to transmit its pay-tv programs via the Western Union Westar satellite. According to its president Alan Greenstadt, OS will lease two Westar channels, with one offering G-rated movies, the other PG and R films.

Optical, currently operating via terrestrial microwave in seven states and 28 markets, has 75,000 pay-cable subscribers who receive movies on leased cable-tv channels. OS plans to continue developing its microwave services alongside its new satellite transmissions.

Unlike Home Box Office, which splits investment and revenues with its cable affiliates, Optical often makes the total investment, remitting a percentage of the pay-cable revenues to the cable operator. It also offers arrangements whereby the cable operator purchases the hardware, with Optical handling the pay-cable billing.

Optical Systems' move is significant on three counts: it will become the only pay-cable supplier other than HBO to use a satellite for nationwide coverage; it will sign a hefty contract with Western Union for satellite time; and it will use two channels for different types of programming. Of the latter fact, Greenstadt says that attempting to provide every type of program on a single channel (as is the case with HBO) causes customers to disconnect because they feel they are paying for programs they don't watch. Offering them an option, he maintains, will keep them better satisfied. Of course, that will require a lot of programming.

Although Optical Systems and its parent, Pioneer Systems—which lost money last year on sales of $5 million—don't have the financial clout of HBO and Time, Inc., they have secured enough outside financing to sign a long-term contract with Western Union. (The details won't be disclosed until OS files a tariff with the FCC later this year.) HBO's rapid expansion since it signed a contract with RCA for time on the Globcom satelite was apparently proof enough for OS's financial backers that pay tv via satellite is a viable concept.

Warner Cable goes pay-tv in Ohio

Warner Cable has inaugurated its own pay-tv service on its cable systems in Akron and Canton, Ohio. The pay service, which has over 10,000 initial customers out of 44,000 cable subscribers, is Warner's first in an urban area. Each participating subscriber will be charged an extra $6.95 per month for the additional programs.

Shirking the intermediary services of suppliers such as Home Box Office and Telemation Program Services, Warner Cable contracted directly with film distributors for 96 features—many of them from its sister company, Warner Bros. It will introduce the movies at the rate of eight per month. Titles include *Earthquake, French Connection II, Murder on the Orient Express* and *Front Page*. Feeding the programs into the cable systems will be a specially modified RCA TR-600 quad recorder that operates at half speed (7½ ips).

Warner Cable, the second largest multiple system operator after Teleprompter, has 143 cable systems in 30 states and a total of 560,000 subscribers. The company posted its first profitable year in 1975 with an income of $2 million, as opposed to a deficit of $7.3 million in 1974. Revenues were at $38 million, up 24% from the year before. According to Gustave Hauser, its president, Warner Cable may extend the pay-cable service to its systems in suburban Boston.

Late figures

In the first quarter of 1976 **Warner Cable Corp.** reported pretax income of $1.032 million, up 14-fold from the same period last year and setting a new record, on operating revenues that climbed from $9,043,000 to $12,133,000.

Inside Warner Cable's broadcast center in Akron

Cable people

David Kinley has resigned as chief of the FCC's **Cable Television Bureau**, replaced by **James Hobson.**

Among the personnel changes coinciding with the **NCTA** convention: **Burt Harris**, president of Harris Cable Corp. and Harris Broadcasting Corp. (Los Angeles), installed as NCTA chairman for

Burt Harris

1976-77; **Gustave Hauser**, chairman of Warner Cable (New York City), elected director of the NCTA board; other new NCTA board members include American Television and Communications Corp. regional manager **James Doolittle**, Richwood TV Cable Co. (Richwood, W. Va.) president **Carl Gainer**, Viacon Cable TV (Dayton, Oh.) president **Don Shuler**, and Karnack Corp. (Austin, Tex.) president and LBJ son-in-law **Patrick Nugent; Susan Kelly** joins NCTA as public affairs coordinator; and **Thomas Wheeler** named NCTA executive vp and director of government relations.

John Auld, until recently president of Philips Broadcast Equipment Corp., has joined **Warner Cable** as vp . . . **E.D. DeCesare**, formerly with Encyclopedia Britannica, Inc., has joined **Teleprompter** as director of marketing . . . **Lee Tenebruso** has left Teleprompter to become pr services director at **Optical Systems.**

Cable briefs

NCTA and the **Motion Picture Association of America** have reached a general agreement on copyright liability for cable systems. Cablecasters will incur liability only for retransmission of nonnetwork programs from distant signals, with the fee expressed as a percentage of the system's basic subscriber revenues. A revenue adjustment will apply to small systems . . . The **U.S. Court of Appeals** in the District of Columbia has ordered the **FCC** to prepare a list of all persons who made presentations while the Commission was drafting catv regulations.

New head at OTP

As we go to press it is reported that Chicago lawyer Thomas J. Houser will be nominated by President Ford as director of the White House Office of Telecommunications Policy, a post that has not had a permanent occupant since Clay T. Whitehead, the first director, resigned in 1974. John Eger, who has been OTP acting director for 20 months, reportedly will return to private law practice.

Houser, a specialist in regulatory law, is active in Illinois Republican politics and has managed campaigns in that state for Senator Charles Percy and former President Richard Nixon. He must be confirmed by the Senate.

Since Whitehead resigned amid policy disputes and Watergate turmoil, the OTP has been a stepchild among executive agencies. While preparing the fiscal 1976 budget, Office of Management and Budget director Roy Ash even wanted to move OTP out of the White House altogether. Perhaps Houser's appointment signals renewed top-level interest in OTP as a policy-making body. In an interview elsewhere in this issue, Clay Whitehead discusses his turbulent days at the agency.

Firm services earth station users

Transcommunications Corp. (Greenwich, Conn.), a satellite communications consulting and services firm, has spawned Satellite Network Services, a subsidiary to provide a national marketing and sales organization to cable companies using earth stations for the reception of pay-tv signals. The purpose would be to generate revenue-producing signal traffic over and above what they originally intended. Because all such earth stations have excess satellite channel capacity, SNS believes they can be used to serve the "huge latent industrial market for video and nonvideo channels in addition to entertainment programming."

SNS's president is Edward Saxe, former president of CBS Television Services. Affiliates signed up so far include Robert Rosencrans's UA-Columbia Cablevision systems in Florida; Charles Dolan's Cablevision system in Oyster Bay, N.Y.; and William Grove's Frontier Broadcasting in Wyoming.

Robert Button, president of Transcommunications, is on the record as being concerned that the 150-earth-station network expected to proliferate among Public Broadcasting Service affiliates (**Videography,** May 1976) will give PBS ultimate control over the multiple uses of earth stations, a function many communications entrepreneurs would like to keep in private hands.

Late news

The Educational Foundation of **American Women in Radio and Television** (New York City) is sponsoring a project to bring special tv programming on videocassettes to hospitalized children . . . **Windsor Total Video** (New York City) has begun publishing an inhouse newsletter, the Video Gazette. Founding editor is Susan Fein. Windsor's facilities are being used by church-affiliated **United Methodist Communications** to produce the first of a series of six half-hour programs on death and dying to be made available to ministers and therapists on ¾-inch videocassettes and on 16mm film.

Two of Europe's leading video newsletters, *Screen Digest* and *CTV Report,* have merged to form *Screen Digest With CTV Report*. Editorial chairman of the new publication is Screen Digest's **John Chittock**, publication chairman is EBAV (UK) Ltd.'s **Nils Treving**, editor is Screen Digest's **David Fisher**, and CTV Report's **Richard Wittington** is manager of the newly created publications division of EBAV (UK) Ltd. The new publication will appear the first Thursday of each month.

For the second time **KLM** has decided to use video to promote travel packages to its agents worldwide.

News briefs

Media Concepts (Philadelphia), described as a company to provide video services for business communications and employee information, has been formed by **Ed Harding**, formerly of SmithKline Corp.'s tv operations . . . **Visible Communications, Inc.** (New York City) is holding free executive communications workshops each month to discuss videotape, film and slide packages for business and industry . . . **WIDL Video** (Chicago) has published an expanded directory of community video activities.

In Japan, **Sony** has introduced a 30-inch Trinitron tv set. Scheduled for marketing there in the fall, it is the largest direct-view (nonprojector) set available . . . According to **RCA**, there are now more tv sets in the world (364 million) than telephones (360 million) or motor vehicles (300 million).

Videography Calendar

June 8-11—London
International Audio Visual Aids Annual Convention. INTERNAVEX, 172-202 Great Portland St., London W1N 6NH, England

July 20-21—New York
Public Relations Society of America Employee Communications Seminar. New York University School of Business and Management, Room 1517, 310 Madison Ave., New York, N.Y. 10017

August 8-14—Philadelphia
International Scientific Film Association Festival, ASFA, 3624 Market St., Philadelphia, Pa. 19104

September 24-29—Cannes, France
Vidcom Conference and Exposition, VIDCOM, 30 Rockefeller Plaza, Suite 4535, New York, N.Y. 10020

September 28-October 3—Los Angeles
Society of Motion Picture and Television Engineers Conference. SMPTE, 862 Scarsdale Ave., Scarsdale, N.Y. 10583

October 8-9—Chicago
4th Annual Seminar on Videotape and Film. MSUF, P.O. Box 11376, Chicago, Ill. 60611

October 13-16—Anaheim, Cal.
Western Society for Telecommunications Annual Meeting. Bob Sherwood, 1673 N. Dillon, Los Angeles, Cal. 90026.

October 24-27—Chicago
National Association of Educational Broadcasters Annual Convention. NAEB, 1346 Conn. Ave. NW, Washington, D.C. 20036

October 24-29—New York
Society of Motion Picture and Television Engineers Technical Conference, SMPTE, 862 Scarsdale Ave., Scarsdale, N.Y. 10583

October 26-28—New York
Video Expo 76. Knowledge Industry Publications, 2 Corporate Park, White Plains, N.Y. 10604

November 7-8—Hempstead, N.Y.
Society of Broadcast Engineers 3rd Annual New York Convention

November 29-December 1—Washington, D.C.
AV Pictorial & TV Training Aids Expo. Frank Masters, 202/695-4357

Consumer notes: Harvey Sound opens video showroom

Harvey Sound, one of New York City's largest audio and hi fi dealers, has opened a showroom devoted exclusively to video products for the consumer—and they're not selling tv sets. Offered to private purchasers are Sony and JVC ¾-inch videocassette recorders and players as well as half-inch portapaks; the Sony Betamax half-inch videocassette home recorder system, both in console and stand-alone versions; the Sony video projection system; the Advent Videobeam seven-foot projection system; and assorted lenses, electronic games, video security systems, accessories and videotape.

The biggest crowd-drawer: a console Betamax in the East 44th Street store window playing videocassettes of the latest Ali-Foreman fight. Sales are reported brisk: "The Advents are selling at a rate of close to one a day," says a Harvey spokesman.

Harvey Video is one of the more than 100 video and audiovisual dealers nationwide making **Videography** available to its customers by participating in a dealership sales program. Three hundred copies were on hand for opening day. Meanwhile another magazine —*New York* in the April 15th issue—underscored the burgeoning interest in consumer video with a 22-page section on the "communications explosion in the home," profiling the way affluent individuals have set up media rooms incorporating videocassette players, large-screen tv sets and pay-cable reception—and end up going out less often.

More briefs

Recent sales announced by **RCA**: 11 TK-76 ENG cameras to Metromedia stations; a mobile teleproduction unit to the University of Jindi Shapur (Iran); $1 million of ENG equipment to Nationwide Communications, Inc.; $800,000 in studio equipment to the Outlet Co.; and $850,000 in broadcast gear to WECA-TV, the first UHF station in Tallahassee, Fla. . . **Ampex Corp.** will deliver $1 million in studio hardware to oil-rich Bahrein . . . **International Video Corp.** will supply Trans World Communications, a Las Vegas, Nev., video duplicating facility, with $510,000 in equipment, including three IVC 9000 recorders.

Recently formed as a nonprofit organization, the **Public Interest Satellite Association** will represent noncommercial groups before the FCC when they try to get space on a satellite. Founders are **Bert Cowlan**, a communications consultant, and **Andrew Horowitz**, founder of the Network Project . . . The **PBS** 13-part historical series *The Adams Chronicles*, produced by New York's WNET-TV, is being offered for credit by more than 300 colleges.

Teleprompter Corp. (New York City), the largest cable system operator, has attained over 1,100,000 subscribers, 100,000 of whom also receive pay-cable . . . The **National Cable Radio Network** (Washington D.C.), a supplier of audio services to catv stations, has gone beyond simple background music and now offers "personality announcers," major-label records and visual effects, all packaged on seven-hour reels of audiotape. There are provisions for insertion of local commercials.

Adult films with ads on public access

Blue Night at the Movies, consisting of adult movies plus original programming packaged by Efrom Allen Enterprises (New York City), can be seen on Manhattan Cable's channel M. Originally scheduled to appear on channel J, the new commercial public access channel set up as an outlet for original local programming (**Videography**, May 1976), EAE had to move the access show to M when it was determined that a significant segment of the programming would consist of nonoriginal films. Showtime is Saturday night at 1 a.m. Sponsors include *Genesis* magazine.

BOOK REVIEW

Profiles in Video: Who's Using Television and How, by John H. Barwick and Stewart Kranz. Knowledge Industries Publications, Inc., White Plains, New York. 1975. 181 pp.

By presenting a series of short descriptions of various video operations throughout the country, *Profiles in Video* is designed to give an overview of how video has come to be used outside the world of broadcasting. The book reports on video networks in business and industry, government, health care, as well as in the educational, cultural and religious sectors. Fifty-seven companies and institutions are covered in all.

The profiles are divided into categories, each of which is preceded by an introduction that gives a broad look at the general progress of video in that specific field. These introductions discuss history, growth patterns, the most common applications and programming, while the individual reports cover the above topics for each organization, plus outlining the cost of the system, personnel involved and type of system in use. Eli Lilly & Co., Lord & Taylor, the Los Angeles Police Department, Duke University Medical Center, New Trier Township Television and the Diocesan Television Center are a few of the organizations whose video operations come under scrutiny in the book.

While *Profiles* is fairly dry, straightforward, fact-book kind of reading, it offers those who are interested a wealth of information about the growth of the video industry.

People

National Training Systems (Los Angeles) has appointed **Dana Parker**, formerly of Communico, as marketing director . . . **Nat Myers**, a consultant to electronics and communications business, has joined **Goldmark Communications** (Stamford, Conn.) in the newly created post of vp. Also at Goldmark, **Bonnie Kraig** has been promoted to corporate secretary.

RCA has appointed **Brian Heidtke** staff vp-domestic broadcast operations . . . The **Council on International Nontheatrical Events** (Washington, D.C.) has elected **Carl Lenz**, president of Modern Talking Pictures, as its president.

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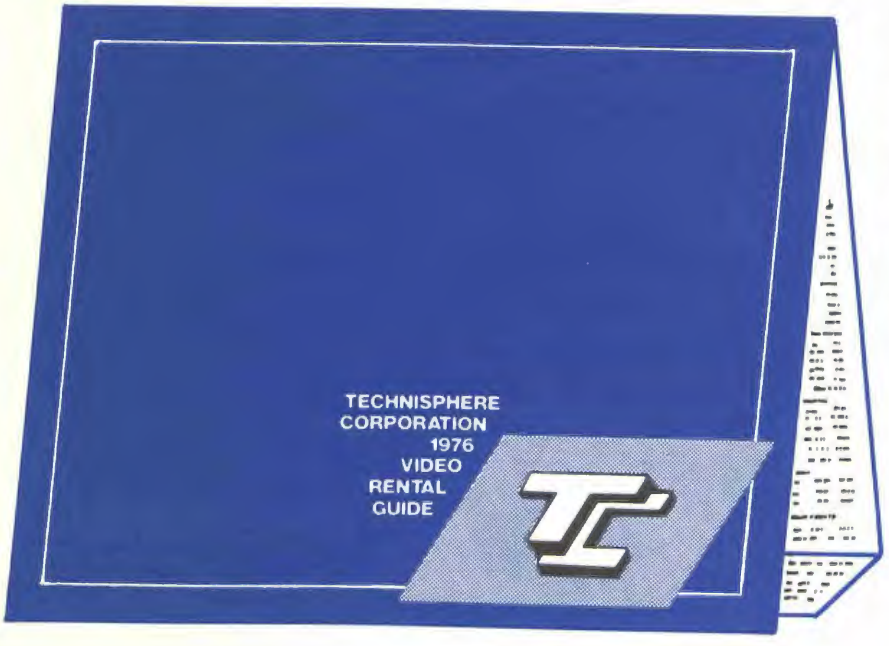

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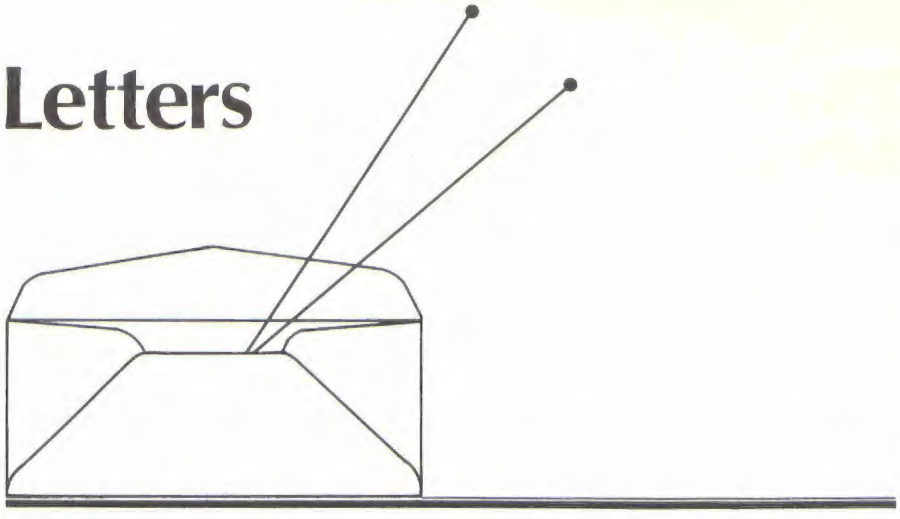
Letters

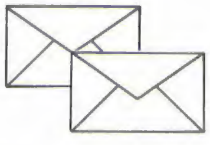


Just a line to say welcome to the communications field. I saw your initial issue in Chicago at the NAB convention, and I must say it was a spectacular entry. The make-up, color, excellent stories and diversity of coverage was a beautiful mix of the industry as it is today and what it will be in the future. A real bravo for you and your staff. I wish you all the best in the future.
Phil Dean, President
Phil Dean Associates, Inc.

Let me congratulate you and the staff for producing Videography. I believe that this magazine is an important new source of information for those of us involved in television. Best wishes for continued success.
L. David Alinsky
Production/Facilities Engineer
Massachusetts Dep't. of Education

Let me offer my sincere congratulations to you and the Videography staff on the exceptionally well done premiere issue. It certainly is crammed full of useful information. The combination of succinct feature articles, regular columns, hardware/software reviews, and a four-page "News & Comment" insert make it one dynamite package. Please keep the quality of future issues up with the premiere, because you've obviously got a good thing going.
Richard D. Murray
Director of Conferences
Institute for Graphic Communication, Inc.

Wow!!! If this first issue is a promise of things to come, Videography has a fantastic future . . .
Gary Arlen
The American Film Institute
J.F.K. Center for the Performing Arts.



Congratulations on your new publication! I just received the first issue, and wish you every success . . .
C.E. Miller
Dep't. of Electrical Engineering
Massachusettes Institue
of Technology

Congratulations on the first issue of Videography. When the copy crossed my desk, I thought, "Oh no, not another video tape magazine!" But I measure my periodical reading in this field by my "tear-outs" — those articles definitive enough to clip, save, and even use for my classes at Pace University. Your score with the first issue: Zafian's article, Schubin's column, Turner's column, and the microcam round-up, all clipped. Not bad — and thanks. Good luck, and onward!
Lincoln Diamant, President
Spots Alive, Inc.

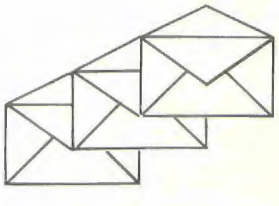
The first issue of Videography arrived today — congratulations! It's very attractive and arranged quite efficiently. We look forward to seeing future issues . . .
Karin Ades
The Public Television Library

Congratulations on the first issue of Videography. The range of articles and the clarity of the writing provide a service to those interested in this quicksilver field. There is much specialized information being printed about television and video, but your magazine has established itself as a major source of information on a variety of phases of the field — technology, marketing, history, the personalities who influence developments, systems, and, not last, the arts.

We are, of course, deeply gratified to see an article on video art in your first issue, and flattered that the article should treat the WNET-TV Lab and The Rockefeller Foundation so well. Victor Ancona is quite right when he says that dabbling with materials doesn't necessarily produce art. On the other hand, there are a growing number of video artists whose work has considerable power and ability to communicate equal to that of contemporary artists working in other fields . . .

Again, the great value of Videography to the general public and to the specialist — as I see it— is in the balanced view you take to the spectrum of television and video. It's good to have you around!
Howard Klein, Director
The Rockefeller Foundation

My congratulations on the excellent first issue of Videography. The contents and format are first rate. There is a need in our industry for publication wholly focused on the video art, and I hope that Videography will assume that role.
George K. Gould, President
Teletronics International, Inc.



. . . and thank you to the rest of you who wrote and called to comment on the premiere issue of Videography. We really appreciate the feedback! If you have a comment on the magazine, or a question for us or one of our contributors, write to The Editor, Videography, 750 Third Avenue, New York NY 10017. We look forward to hearing from you.

The First Home Video Center.

Harvey, with over 48 years of experience in the home entertainment business, firmly believes that Video's time has finally come. That's why we've opened a special store completely devoted to Video.

Now you can experience the full impact of big screen showings, formerly the exclusive domain of film. You can record programs unattended, and watch one program while you are recording another.

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If you already own a Trinitron (or other TV) you can still build a library of Betamax programs by buying the Sony SL-7200 Betamax Videocassette Recorder. It does virtually everything the LV 1901 does, but substitutes your own TV.

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The Harvey Video Center will give you "hands-on" demonstrations of portable Video. That will be all the selling you'll need.

Sony and JVC Videocassette Recorders and Players

The development of the 3/4" U-Matic videocassette has already revolutionized the communications industry. The Harvey Video Center is proud to offer equipment manufactured by two pioneers of the videocassette medium, Sony and JVC.

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Videocassette recorders have already found their way into many a home. Harvey has a great collection of the most exciting video programming, which we use to demonstrate our equipment. You'll want to start a video library, too.

In the meantime, come watch some of ours.

JVC and Sony Video Cameras

The selection of cameras available to Video users has become so extensive that the appropriate choice is assured for virtually every recording situation.

The new Harvey Video Center features high quality cameras from Sony and JVC that range from the most basic CCTV Security system to cameras that are capable of delivering an incredibly clear, crisp color picture.

Sony and Scotch Videotape and Videocassettes

Both Scotch and Sony have developed improved binder systems for their videocassettes that provides a long-term stop-motion capability.

These new formulations also make for a less abrasive tape, significantly extending the life of your recorder's heads.

The new Harvey Video Center stocks videocassettes in several lengths (ranging from 10 minutes to 1 hour) and many other tape formats, to offer you the most efficient use of videotape.

Television will never be the same.

You need never again think of television as a passive medium. Take hold of the Video controls, learn about the limitless applications of video, compare Video's affordability to any other medium. Its all at the new Harvey Video Center.

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Production Alternatives

Super 8 or 3-camera video?

by Judy Anderson

Judy Anderson is internal broadcasting consultant at Metropolitan Life.

This is an industrial television quiz. See if you can match the items in column one (typical events covered by *Update*, Metropolitan's weekly employee television news program) with those in column two (typical equipment used to originate the program). Keep in mind that you are looking for combinations that will give you the best possible production values at the lowest possible costs. You also have no equipment of your own and, thus, are not tied down to any one system.

Events

A. President speaks to employees at special annual event

B. Tulsa office competes in local raft race on Arkansas River

C. Ground-breaking ceremonies for major new facility held in Pennsylvania

D. Company's "little theater" group puts on bicentennial revue with singing, dancing and skits

E. President of Company and Mayor of City hold public news conference at City Hall on problems of City. You find out two hours ahead of time

F. Company's Athletic Association holds semi-annual golf outing at suburban country club

Equipment

1. Super 8 film camera
2. 16mm silent film camera
3. 16mm single system sound film camera
4. one-inch color video with 1, 2 or 3 cameras

The point of this quiz is that at Metropolitan we feel there is no single best piece of origination equipment for all situations. We do have what we call our standard system: shoot on 16mm single system sound film, transfer to tape, edit on tape and display on ¾-inch videocassette. We use this method because it offers the best compromise between high-quality color and maximum mobility at the most reasonable price.

Still, there are a number of reasons for not locking ourselves into this or any other single technique. At one end of a continuum, a one-shot event like the president talking to a group of employees demands maximum reliability and quality. Thus, a multiple camera videotape technique is called for. At the other end of the continuum, a sunny day on the golf course can be captured best with a small Super 8 film camera. Not only would we look foolish trying to follow golfers around the course with a big camera and recording unit, but the expense would not be justified by the event.

Decisions to deviate from the standard film technique are not always so clear cut and are made only after a number of questions have been answered. For example:

1. How important is the event as current information? If it is extremely important and we must be certain of getting it clean, tape might be best.
2. How fast must we get it on the air? Tape still is quickest. Super 8 is super slow.
3. How important is the event for documentation (historical) purposes? Even Super 8 can fill a gap here.
4. What logistical (time, travel, power, lighting, space, personnel) requirements must be met? Tape is simply not practical in small spaces with little power for lights.
5. Are sound and lights necessary? On a bright day outside, when no sound is required, Super 8 is perfect.
6. Is any other coverage of the event expected? Is someone else filming or taping and can we buy footage from them?
7. If it is a public event at which news media will be present, will there be problems of protocol?
8. What catastrophe will result if the film gets lost at the processor's? What practical and political problems might we have if it is necessary to reshoot?
9. Is instant feedback necessary or desirable? If so, tape is the answer.
10. To whom will the finished program be shown? Lets face it, the more sophisticated the audience, the slicker the show should look.
11. What is the "life" of the show? Is it useful only once, as current news, or will it be shown again and again. The more use, the more certain you will want to be to begin with top quality production techniques.

In conclusion, we believe that television is an area in which we must stay as flexible as possible by experimenting with different techniques, testing the limits of technology, adapting to the continuing revolution in audio-visual equipment and, above all, matching the technique to the event to best tell the story.

(Answers: A—4; B—2; C—3; D—4; E—1; F—1)

for Corporate TV

Grade B movies or high drama?

by Terese Kreuzer

Terese Kreuzer is audiovisual production manager at Citibank.

According to the widely espoused canon of what is right and proper in corporate television, a good communicator should be willing and able to dish out everything from a video memo to a Cecil B. DeMille extravaganza. I think this philosophy has resulted in a widespread misuse of the medium.

Of course, television can be used legitimately for role-playing and simple communications, but this does not require a writer, a producer or even, since the advent of the portapak, a technician. My quarrel is with those who try to use television to motivate as well as to train and inform—thus, incidentally involving a writer and producer—but who, at the same time, say that "cheap and dirty" production methods are "good enough."

The standard argument in these cases is that in corporate television, content is often more important than style. I reply that in my context, style affects content. For example, a scrawled, handwritten signature indicates that the writer was in a hurry, whereas the same combination of letters carefully printed would convey another message. Therefore, even something done with total disregard for style, at least on a conscious level, makes a subliminal statement, either positive or negative.

Although the practice of television is a craft, television is an art form; like other art forms, there are certain elements of human experience that it embodies and expresses better than others. It is dramatic, emotional and theatrical. It is a sensual medium, using elements of painting, dance, drama, music, photography and literature to produce its own unique effects. It does not appeal directly to the analytical mind.

Sometimes, for the sake of expediency and repeatability, television is used to record lectures and speeches; however in these cases, unless the speaker is unusually dynamic, most people feel a tension between the subject matter and the medium, and describe the result disparagingly as "a talking head." As producers, we then feel compelled to restore some element of theatricality by inserting graphics. If the visuals simply repeat what has already been said without adding another dimension to it, the net effect is likely to be comparable to that produced when our Victorian ancestors put pantaloons on table legs. In other words, the first, and perhaps the only rule in 20th century art is that nothing must be extraneous.

I am beginning to think that many of the speeches and lectures that we have nervously doctored and prettied up for television should have been recorded on audio tape and then distributed with those few printed visuals—usually either charts or graphs—that were absolutely essential to the message. As a rule, (except when internal political considerations prevail), we should save television for what it does best, use it only for that, and, when we do, pull out all the stops. That would be cost-effective, and artistically satisfying.

We should use television, for example, when we want our audience to feel something as a direct result of our programs, or when the events and personalities recorded are of an inherently theatrical nature. Theatre is enhanced by color, music, sound effects, tight verbal construction, dramatic climaxes and resolutions, pacing, movement, contrasts and skillful transitions. Most of these elements are necessary to produce exciting television. However, this kind of television programming is costly and time-consuming to orchestrate.

I think that many of us have known this all along but haven't wanted to admit it. Perhaps we couldn't. After all, our first job was to prove to our respective corporate bosses that television—any kind of television—was a good idea and could be useful. This thesis had to be demonstrated on a limited budget. But now that corporate television is out of its infancy, I think that we can demonstrate that television can be even more useful than it has been in the past by being used selectively, and with the highest production standards that we can bring to it.

Using videocassettes in VA Spinal Cord Injury Program to teach adaptive living techniques

Visiting professor Donald Zavala, M.D., of the University of Iowa lectures to the Medical College of Wisconsin. Videocassettes will go the medical library.

Associate chief of nursing for education Marian Grasse reviews video player operating instructions with aide Marci Crivello

Improving Health Care Through Television

A group of Midwest hospitals discovers video's cost effectiveness

George Spuda, the VA center's chief of medical illustration, directs a program for videotaping from a remote studio

Nursing instructor Sandra Schultz demonstrates use of videocassette equipment to students

"Long before videocassette equipment was available, we were waiting for it," said George Spuda, Chief of Audiovisual Services at Wood Veterans Hospital in Milwaukee, Wisconsin.

"If you think in terms of a $250,000 investment in video equipment running from eight in the morning until 4:00 in the afternoon, you're forgetting the other 16 hours in the day," he explained. "Hospitals operate 24 hours a day; people on the evening and all-night shifts have just as critical a need to improve their skills as the daytime staff.

"We needed a tool that could be utilized by any hospital employee—physicians and nurses, orderlies and maintenance crews—for training, education and advancement of skills. The videocassette serves these demanding requirements. Individuals or groups can use the equipment whenever they have the time or need. The key, of course, is its simplicity of operation. You don't have to be an M.D. to select a videocassette, place it in the player, turn on a tv set and press the play button," Spuda added.

The 1,300 bed, 10-story hospital, located on 100 acres of land in the heart of Milwaukee, is also the heart of a network—the Milwaukee Regional Medical Instructional Television Station, Inc.—which now encompasses 10 hospitals. Dr. A. Stephen Close, George Spuda and the network engineer, John Lafferty, were the prime movers behind establishment of the network for production and distribution of inter-hospital programs.

Wood Hospital began to use video for physician training in 1967, relying exclusively on the reel-to-reel quadruplex format which allows high quality color. According to Spuda, doctors prefer color for medical material and would have rejected monochrome videotape in favor of ordinary chart and blackboard presentations in color.

In order to expand their capabilities to color, Spuda had to convince the Veterans Administation that color was essential to the success of the educational effort and that Wood's resources could be shared with other federal hospitals to benefit a far greater number of people.

Dr. Close and Spuda approached every hospital in Milwaukee County, and asking each one whether it would help set up an organization to support faculty, equipment and expertise, if the VA provided the funds for network equipment. Many of the hospitals agreed, and a nonprofit corporation was formed. Two representatives from each institution served as a tv council, suggesting programming to fill in-service and continuing educational needs.

The initial programming was limited to playing videotape programs received from other sources and recording multidiscipline physicians' conferences held at Wood. These were taped on reel-to-reel equipment and required a high initial investment. It was necessary, in the early days of video, to hire personnel to operate the equipment.

The advent of videocassettes greatly simplified the hardware used by the hospital video network. When Sony introduced the ¾-inch U-matic format, Wood became one of its earliest medical users. Most of the hospitals in the network quickly followed, choosing videocassettes over reel-to-reel videotape.

True to the adage that hardware spawns software, Wood's easy-to-operate videocassette equipment precipitated a virtual explosion in programming. Everyone in the hospital, from boiler maintenance men to brain surgeons, was soon viewing programs stored on videocassettes. "When the patient is on the operating table, or after infection has spread, it's too late to begin education and training," Spuda pointed out. "The videocassette is truly the most singular advancement in delivering current, inexpensive audiovisual displays in continuing education for health care professionals.

"For example, if a department has a high employee turnover rate, we prepare a series of programs for supervisors and instructors to aid in explaining the employees' role in the hospital, as well as improve patient care. Upon purchasing a new piece of equipment, such as a respirator, we make a videocassette program of the salesman demonstrating its use. All employees responsible for using the device can view the program, on demand, as often as they choose. As a result, new machines and methods are accepted and optimized in a shorter time period."

The hospital does all its own production work, either in their studio—actually a medical conference room—or by wheeling the color camera to any one of nine locations in the hospital. The studio at Wood is also utilized for program production by other Veterans Administration Hospitals. Duke University and the VA Hospital in Durham, North Carolina, used the facilities to produce 16 half-hour programs on advanced radiologic technology techniques that will be duplicated for distribution to all 170 VA hospitals.

"Another notable success," according to Spuda, "was a six-part series titled Hospital Infection Control, one of over 200 programs produced on videocassettes. It begins with the legal aspects of what happens when a patient develops an infection while in the hospital, and continues through all the means of detecting and controlling infection. We've received requests from hospitals all over the world, including one in Helsinki, Finland, for copies of this series."

Recently the hospital telecast a "Live" program on self-defense for women in cooperation with the Milwaukee Sheriff's Department. The response to the program necessitated duplicating the two-hour presentation onto the videocassette format for permanent use in the libraries of all hospitals in the network.

Wood has produced programs designed to help patients suffering from spinal-cord injury in their daily living techniques, while single-concept programs in anesthesiology and inhalation therapy are in production. The Veterans Administration has standardized distribution to 170 hospitals in the U-matic format.

"The use of videocassettes enables us to act quickly," Spuda concluded. "We can originate a program today, and it will be in the mail to Iron Mountain, Michigan, in less than a week—then on to Madison, Wisconsin, and other hospitals. We have immediately enlarged the audience to include hospitals remote from big cities and universities. When you analyze the cost of producing videocassette programs and compare it with the number of people viewing them in a short period, it's easy to see why the smaller, more convenient format has made such inroads in this hospital video network."

Lasers Find a Home in Videodiscs

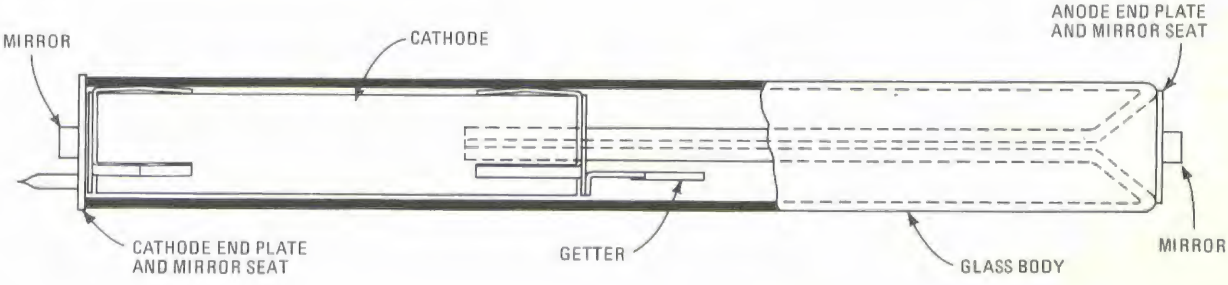
Born of the space age, lasers have now penetrated the industrial marketplace and are about to find consumer applications

by John Findlater

John Findlater is president of MCA Disco-Vision

From the inception of MCA's videodisc R&D effort, the project has been the subject of widespread curiosity and interest. This curiosity has intensified since the MCA system combined with the N.V. Philips videodisc system to form the Philips-MCA Disco-Vision VLP system. An area of particular interest has been Disco-Vision's use of a nonphysical-contact laser light-beam pickup instead of the

Top photo: Spectra-Physics' 084 plasma tube, similar to laser tube used by MCA Disco-Vision's player



Bottom: Diagram of Spectra-Physics' concentric He-Ne laser

traditional needle or stylus riding in a groove. This technological advance marks the most significant difference between Disco-Vision and the mechanical or capacitance videodisc systems.

The laser (the word is an acronym for Light Amplification by Stimulated Emission of Radiation) has been around since 1960, when scientists first succeeded in producing these beams of single-frequency light waves; beams that could be delivered to distant points with much less diffusion and loss of intensity than the ordinary light beams that consist of helter-skelter waves of white light.

There is nothing exotic about lasers. They are simply highly efficient sources of monochromatic light with a long life and high reliability. Originally, the laser was thought of as a solution looking for a problem. Virtually all early uses were in small laboratory-instrument markets, limited primarily to uses in interferometry, holography and spectroscopy.

Although the laser was first considered merely a scientific curiosity, its development in the last few years has multiplied its use in many fields. The objective was to get laser technology out of the sophisticated laboratory application phase and into some home and commercial uses, and that has now been accomplished. One of the laser's newest applications is as the read-out element of optical videodisc players, which are scheduled for mass marketing in the near future. The low-power lasers used in such players are similar to those now being used in supermarket automatic checkout equipment, in facsimile readers in high-resolution imaging equipment and printers and elsewhere in industry. And new uses for the laser are continually being developed.

The Disco-Vision system employs an optical method of recording and playback, that is, it uses optically encoded patterns on the disc. The laser is used for this purpose because of its superior noise characteristics, high brightness, longevity and low noise at MHz frequencies and—perhaps the primary advantage—its ability to focus on an extremely small-diameter spot. It can be focused into a narrow, intense beam that allows for high signal-to-noise ratio in the detector signal. A laser produces a very intense, narrow, coherent beam of light. (Coherent means that the microscopic waves that carry the light energy are all moving in step.) Any other light-beam source is, among other disadvantages, too "scatterable," weak and short-lived for the disc's needs.

Needle-in-the-groove mechanical or pressure-type videodisc systems employ a pickup stylus (instead of a laser) of the type used to record and play back LP audio records. With the mechanical system there is a contact—pressure—between disc and stylus, which will cause them to wear out in time. With the laser, which conveys all its information on a beam of light, there is no need for mechanical or pressure contact between the surface of the disc and the pickup device. It's as though one were using a flashlight focused on the disc to play back the images and sound. This means no disc wear, no stylus wear, no stylus replacement and a virtually unlimited disc life.

The use of the laser also makes videodiscs easier to handle. In mechanical and capacitance videodisc systems, the biggest threat to quality is the person who mishandles the disc or drops it. Optical systems, with their light-beam read-out, don't have this problem because a coat of hard clear plastic can be placed on the disc's surface. The laser shines through this protective coating and bounces back. Handling the disc's playing surface will not cause any picture degradation because dust, dirt, scratches and fingerprints are out of the focal plane of the opticals. The light-beam read-out simply ignores any surface detritus that may accumulate. As a result, optical videodisc systems are non-degradable systems.

The optical system with its laser also provides random-access functions. These include freeze-frame, slow and fast motion, fast-forward and reverse at any selected rate, frame crawl (frame-by-frame stepping), fast automatic frame index identification and accessing by frame number, fast manual visual-search frame accessing, and instant replay. All of these features are integral to the optical videodisc system. Mechanical and capacitance videodisc systems do not have them and, by the nature of their technology, cannot have them.

MCA gave the first public demonstration of an optical videodisc system using a laser light beam and playing a replicated disc in 1972. The laser and disc in the MCA Disco-Vision system interact in the following manner: the 12-inch plastic disc rotates at a rate of 1,800 rpm (1,500 rpm for the PAL system version) on a carefully balanced turntable with accurately controlled velocity. This is in excess of 50 times the speed of an LP audio record. A laser is mounted in the scanning arm—cantilevered or swing arm traveling bar—located either above or below the disc in the videodisc player. The laser applies a light beam to the disc surface and light reflected from the disc is directed to a transducer. The transducer generates electrical impulses that are then translated into the sound and picture resulting in the picture seen on the tv set tube. The sound and picture are transmitted through the antennae leads to the tv set which, in turn, translate both onto the tv screen, similar to any regular over-the-air tv program.

There are two basic kinds of lasers—solid-state or semi-conductor lasers, and gas-type lasers. MCA uses a gas laser of the helium-neon variety.

The two dissimilar videodisc systems scheduled to be introduced in the U.S. next year differ principally in the way they pick up the coded video information on the disc's surface. For this purpose one of them uses a laser beam, applying a technology that until recently was confined to laboratories. It is known as the optical videodisc system because a light beam is all that comes into contact with the spinning disc. The player will be manufactured by MCA Disco-Vision, a partnership formed by the entertainment conglomerate MCA, Inc. of Los Angeles and the electronics giant N.V. Philips of Holland.

MCA Disco-Vision will be competing with another videodisc system to be introduced by RCA at about the same time. RCA will use a capacitance pickup system, which means that the information on the disc's surface is read by a stylus-like device that rides in its grooves, sensing variations in the proximity of microscopic metal-coated etchings. Although both systems will provide customers with instant color television programs, they are incompatible: an RCA disc cannot be played on the Philips-MCA player, and vice versa. Industry analysts agree that the American market can support only one videodisc system. The one that runs second is doomed. The corporate battle that looms is reminiscent of the rivalry between RCA and CBS over color television standards in the 1950s (RCA prevailed).

In this article MCA Disco-Vision president John Findlater discusses the optical videodisc system's use of laser technology. RCA declined an invitation to outline the features of its capacitance system, although it recently reconfirmed plans to market its players about a year from now.

It is now practical to mass produce low-power lasers of this type with an operating life that exceeds the useful life of most electronic products, allowing the laser to be used as a component, rather than a subsystem that requires expert maintenance.

A useful life was originally estimated at approximately 9,000 hours for the MCA laser. Today laser manufacturers project lifetimes more than twice that long. For example the Spectra-Physics company, a large manufacturer of lasers, guarantees a laser shelf-life of at least ten years for its glass-sealed lasers. Coherent Radiation, another laser company, says its helium-neon laser tube has a life expectancy of 20,000 hours.

On pricing, as far back as two years ago, MCA had written commitments from a laser manufacturer at $20 per laser on a volume basis. Today laser manufacturers say that, in volume, low-power lasers will be available to videodisc player manufacturers in the range of $10 to $15.

These low prices are attributable to the fact that lasers are now being used in volume by several companies including 3M, Xerox, IBM, National Cash Register and Sperry Rand's Univac division. The commercial applications generated by high-volume laser production range from the laser's use in IBM's Model 3800 EDP printer, to the previously mentioned supermarket laser-scan checkout-counter equipment, to 3M's use of lasers in its computer output microfilm printers.

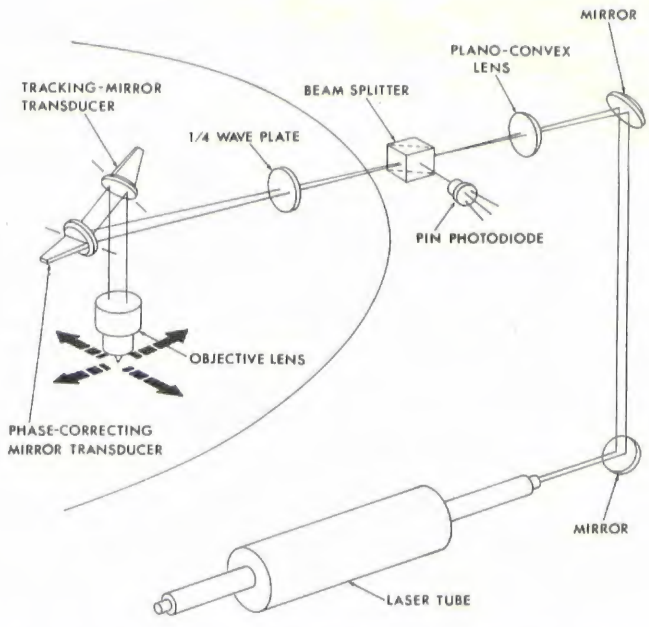


Diagram of the path traveled by the laser beam in the Philips-MCA videodisc player

Laser assemblies are now being made by some 150 laser manufacturers, although MCA's dealings have been primarily with Spectra-Physics, Hughes Electron Dynamics and Coherent Radiation.

Lasers developed specifically for mass production as a general-purpose component are now available. This fact was recently illustrated by a second-source order placed with Spectra-Physics by N.V. Philips' Gloeilampenfabrieken, which has its own laser production capacity. Philips will use the Spectra-Physics lasers in the manufacture of the Philips-MCA videodisc player in the U.S., scheduled for user test introduction in late 1976.

Looking further ahead less expensive solid-state lasers loom on the horizon as a replacement candidate for the helium-neon laser. They should become a reality within the next five years, at which time their use should result in a considerable reduction in laser prices.

Up to now, videodisc systems have resisted replacing helium-neon gas lasers with the solid-state, or semiconductor-type laser because of the hard-to-solve drawback that light beams generated by the semiconductor laser tend to spread widely and are difficult to focus in a narrow beam with the use of a lens. However, the Electrotechnical Laboratory of the Agency of Industrial Science & Technology announced recently that they have been conducting experiments with solid-state lasers that could be classified as technological breakthroughs, solving, among other things, the problem of solid-state laser light-beam scatter by taking advantage of the self-coupling effect of the semiconductor laser, thus making it an improved, viable replacement for the helium-neon laser. The laboratory reports that, in addition to cost-reduction, these new developments will make optical videodisc systems

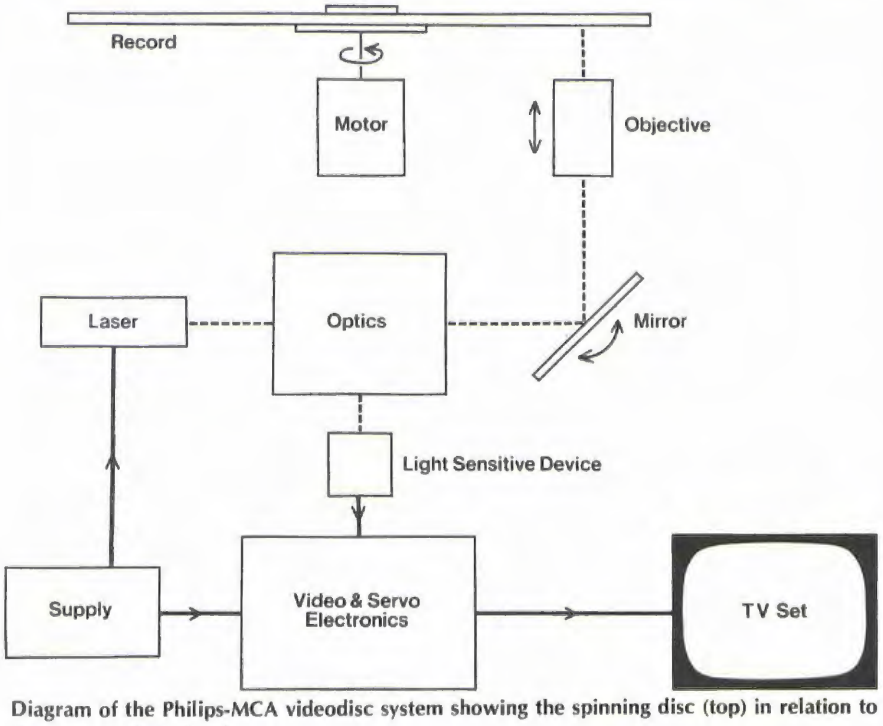


Diagram of the Philips-MCA videodisc system showing the spinning disc (top) in relation to the optics and electronics

more compact and more easily controllable. The laboratory also states that, as a part of these new concepts, the solid-state laser can be used both as a beam splitter—or radiation source—as well as a photodetector.

In replying to charges that videodisc lasers embody a vaguely dangerous space-age technology, it should be made clear that there is nothing Buck Rogersish about a low-power laser. That no harm can come to the user of the laser in the Philips-MCA videodisc player is proven by the fact that such lasers are already in wide use in many products today. That is because the laser's power level is 100,000 times less than that of an ordinary 100-watt household light bulb.

Yet such scare tactics and futuristic scenarios often crop up during the introduction periods of many new electronic products. The development of the microwave oven is one of the more recent examples of this hand-wringing syndrome. Those still using traditional oven-manufacturing processes (those having vested interests in older technologies always seem the most vocal) were predicting all kinds of dire consequences for households cooking with microwaves. None came true. Microwave ovens were an idea whose time had come, testified to by the fact that some $270 million was spent for about 900,000 home microwave ovens in the U.S. last year, with the current sales curve rising precipitously.

About MCA's use of the laser: according to an announcement from the Labor Department's Job Safety and Health Division a few years ago, there were some 100,000 lasers then in use. About the same time Dr. Arthur Vassiliadis of the American National Standards Institute's committee on lasers announced that there were about 50,000 lasers of the one milliwatt power level then in use daily in this country, of which 30,000 were then used in colleges and school classrooms. It would probably be safe to assume that today there are hundreds of thousands of lasers in common, everyday use in this country alone.

Moreover, the Food and Drug Administration has established standards for four classes of lasers, depending on their power. The fact is the FDA is not concerned with small units such as MCA uses and as are used in schoolrooms today. Lasers are now run-of-the-mill, off-the-shelf components. They have been available to hobbyists for quite a while. Anyone, including a teenager, can buy them from electronic component mail-order houses.

Furthermore, notwithstanding that the laser's power is a negligible 1/1,000 of a watt, out of an abundance of caution MCA has enclosed its laser in a light-tight box accompanied by a protective interlock. If anyone tries to break into the unit, the player automatically becomes nonfunctional and completely inert. This is much like the interlock on the back of a tv set: try to take that back off and everything disconnects.

Another hoary, recurrent fable relates to the laser's shelf-life. There are those today who base their laser comments in this as well as other areas on outmoded or outdated data or concepts that relate to old-style lasers. This bit of misinformation is the assertion that the laser has a short shelf-life. It can be classified as errata because it is based on early lasers whose shelf-lives were substantially less because they were put together with epoxy glue that allowed some diffusion or leakage through those glued joints. But today, helium-neon lasers are glass-sealed units and do not suffer from this limitation. Both Spectra-Physics and Coherent Radiation guarantee the shelf-life of their lasers.

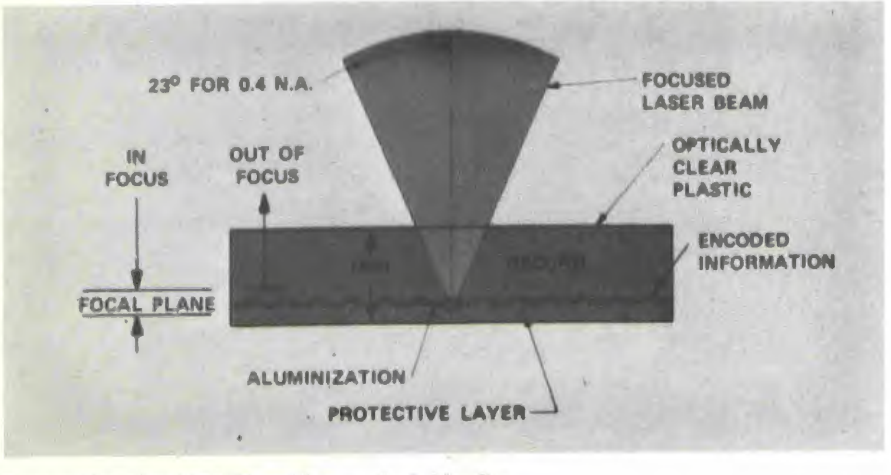
Turning again to the laser's uses, we find it already becoming a high-volume component for applications that include pollution-monitors, copiers, optical memories, communications, facsimile, and gun-sight target-designation. In a dozen years, the laser's thin beam of light has become a commonplace tool for boring holes through diamonds, spot-welding exotic metals and slicing fabrics. Lasers are used in nearly all fields of technology, including medicine and biology, chemistry, measurements and instrumentations, manufacturing and weapons systems. And laser recording techniques have been made practical in a system whereby a light modulator permits a single laser-beam to carry 20 television programs simultaneously.

Lasers are also used in the construction industry for alignment and surveying systems. The visible red beam of a low-power helium-neon laser is employed as a long, perfectly straight "string" to set ceiling and floor levels and to established grade angles for sewer-pipe installations, bulldozing operations and so forth. These uses all take advantage of the unique characteristics of laser light to perform tasks that were at one time considered impossible.

Laser lights are used routinely in medicine to repair torn retinas, to remove cataracts and to remove benign and malignant growths. They are also being used for cutting steel, and were used in Viet Nam to pinpoint bombing targets with a spot of light so that "smart bombs" equipped with infra-red sensors could seek them out.

Because manufacturers are now turning out laser units in large quantities a volume laser market base already will be established when optical videodisc makers begin to place large orders. Conversely, laser manufacturers are not going to have to depend on videodisc players as their only customers.

With the emergence of lasers as a commonly accepted working tool and with the dissemination of the facts relating to that use, myths about its application in videodisc systems are rapidly diminishing. There's no question that the laser is an idea whose time has come. MCA made a decision several years ago to use lasers in its videodisc system. If all goes according to plan, the videodisc will introduce the laser as a new communications medium in the entertainment, commercial and educational marketplace.



Cross section of an MCA Disco-Vision optical videodisc

Public Access: Boon or Burden to the Cable Operator?

A look at San Jose, California's channel 2B; its growth and the problems it faces

by Lee Mercer

Lee Mercer is a production supervisor with Reel Life Films, a San Jose, California, firm doing documentary and outreach presentations for social service and community oriented organizations.

In 1972, when Gill Industries, the cable franchise for 60,000 San Jose, California homes, gave the go-ahead for an FCC-regulated public access channel, it probably did so with some reluctance. After all, what do these noncommercial stations offer as a return on capital spent on equipment and salaries? A community home-movie? Inept amateur programming? A bunch of long-hairs tripping out on video feedback? Probably potentially all of these. But Channel 2B, now called the Community Media Center, has, in its first three years in operation, broken through these early expectations and gone on to become an advanced public access model.

With one salaried director, Father Barry Verdi, an Episcopalian minister and avid video enthusiast, 2B has grown from two small rooms in Gill's service lot offices to a 13,000 square foot media center with two fully equipped studios, studio control and master control rooms, sound studio, graphics, video repair, video editing, set construction, two conference rooms and an auditorium area for fund raisers.

From a few hours per night of live programs and portapak tapes, it has expanded to over 70 programs each week going out live and on half-inch, ¾-inch cassette and one-inch formats in English, Spanish, Portuguese and Chinese. Community groups from Black gospel choirs to belly dancers and from political activists to parapsychologists have charged the programming with a sampling of the cultural spectrum of the San Jose area.

The heaviest programmers on 2B are church groups who use the airwaves for ministry outreach as well as an occasional show on comparative religion. A group of young Chicanos does presentations that focus on issues of importance to Chicanos while DJ programs aimed at young people broadcast radio shows over tv.

Little outreach is needed to fill 2B's on-the-air hours. People usually come to the station with ideas which are eventually broadcast if the individual or groups can put together a crew. And often there is a waiting list of those desiring air time.

Producing, directing, scripting, camera and studio control are all done by individuals furnished by the group or person doing the show. Four weekend seminars on directing, producing and camera work, and four off-the-cable program run-throughs are the prerequisites for any new program's crew. Gaps in personnel are filled by 2B's numerous volunteers who are versed in everything from carpentry to video repair. The majority of these people are either college and high school students who have been exposed to video in school or gadgetry people who enjoy this type of work. When all of these individuals are mobilized for projects of common interest, such as fund raising, a potential work force of over one hundred persons is available.

Despite channel 2B's reliance on nonprofessional personnel, an acceptable and often creative level of technical expertise has become the

Taping PM

rule instead of the exception. Ongoing feedback and critiques from viewers, other programs and the station regulars provide an on-the-job education for the technicians and are reflected in continually improving quality in format and technique.

But what is this costing Gill Industries, and how are they benefitting from 2B's existence? Seeding the program with studio space, Father Verdi's salary, four Panasonic cameras, several vtr's, three Panasonic and Viscount SEGs and miscellaneous system components, Gill is finding that their outlay is evolving from negligible (in relation to the costs of outfitting and maintaining a first rate local origination or broadcast studio) to virtually nothing.

Channel 2B, as an independent nonprofit entity, is beginning its fourth year in operation almost entirely financed by the participants themselves. Charging sponsors of participating programs membership dues, combined with grants from area business and civic groups, covers primary operational expenses, which include rent, utilities and maintenance. Studio lighting, sets, video equipment above and beyond that supplied by Gill, as well as construction materials, furniture and office equipment all have been supplied by tax-deductible donations.

However, lest it seem that all is roses and glory for a low-budget public access station, it should be noted that with just the bare essentials covered by dues and grants, the station is existing marginally at best. Were it not for volunteer repair technicians, major maintenance problems would knock them off the cable. Without the forty to sixty hours a week put in by many of the volunteers, the shows would not have the coordination and supervision needed to continue programming. And without a stronger reserve of funds from grants or other sources, the center's existence is literally in question from one month to the next.

If the gains Gill Industries has received from this venture are less tangible than money in hand, they are no less real or gratifying. Such programs as San Jose city council meetings, women's groups' programs and popular music and concert tapes all can boast of high viewership. And phone calls from a telethon that ends at midnight will often continue until 4 a.m. It is not uncommon for a 2B program to actually hold a majority of the viewers on the system. In an area heavily populated with Spanish-speaking individuals, 2B offers more Spanish language programming than any other station on the air.

But, in a larger sense, Gill can view its gains in the opportunity it has to encourage constructive community involvement and cross-cultural communication in an era more commonly characterized by crime, despair and dissension. And when more cable operators recognize the fact that those hundreds of people singing, dancing, discussing, filming and producing at a public access station could instead be out contributing to the economic and social conditions that mean that fewer people can afford the luxury of cable in the first place, they may hopefully look to programs like the Community Media Center to wisely invest their time and energies. And we will all share in the returns.

2B's master control room

Bottom left: The cast and crew of PM, and over-the-cable magazine that interviews local politicians and figures of widespread interest

Local community groups are among the most frequent users of 2B

CONVERSATION WITH CLAY WHITEHEAD

The Director of the White House Office of Telecommunications Policy during the Nixon years remembers the pressures of Watergate politics and prognosticates the future of television

During the early days of August, 1974, against the background of print and electronic media thundering the news of the latest Watergate tape disclosures and President Nixon's impending resignation, Clay T. Whitehead stepped down as director of the White House Office of Telecommunications Policy. He thus ended four turbulent years of service in that post—years that had gradually led to a direct confrontation with the chief executive who once nominated him. Many observers found it significant that a president obsessed with all the

news media and especially television should conduct one of his most visible internal battles with the office responsible for overall Administration policy toward those same industries.

Mr. Whitehead was confirmed by the Senate as the first director of the OTP in July, 1970. During the following months and years he led efforts to define national policy toward communications in broad terms. In the area of cable television he chaired a Cabinet committee to develop legislative proposals. These were put forth after 2½ years of study, yet met with silence from the Nixon Administration. But the deepest rift between the OTP and the Administration's inner circle occurred in the area of funding for public television—with the two sides eventually taking diametrically opposed positions before the public.

On cable, the OTP favored a comprehensive approach toward the future of the entire industry: regulation, ownership, franchising, federal and local jurisdiction. The White House was more inclined to tackle specific issues such as pay-cable and long-distance-signal rules. During the Ford Administration the entire debate became academic when it was moved away from direct White House jurisdiction and placed under the aegis of the Domestic Council. There the matter was to be decided as part of regulatory reform efforts, not national communications policy. But just this past April it became known that the Domestic Council will take no action in the foreseeable future to recommend deregulation of cable tv.

A native of Kansas, Clay T. Whitehead was born on November 13, 1938. His credentials include a B.S. in electrical engineering, a Ph.D. in management from MIT, and two years in the U.S. Army, where he attained the rank of captain. In the early 1960s he was a consultant to the Rand Corporation on studies of defense, arms control and the space program. He later joined Rand full time to help plan and organize a policy research program for various areas of national policy, and was also a consultant to the Federal Bureau of the Budget.

Following the 1968 election, Mr. Whitehead served as a member of president-elect Nixon's task force on budget policies. Before his appointment to the OTP in 1970 he was special assistant to the President in the areas of communications, liaison with regulatory agencies, the space program and other organizational matters. From May to August, 1974, he helped organize the planning for the Ford Presidency and was the executive secretary of President Ford's transition team.

For the past 20 months Mr. Whitehead has been a postdoctoral fellow of the MIT Center for International Studies and a fellow of the Harvard Institute of Politics. He is at work on a book about the electronic media and communications policy. The book's tentative title: *The Future of Television.*

Videography: What have you been doing since you left the Office of Telecommunications Policy?

Whitehead: You could say I've been on an academic sabbatical, the main purpose of which is to give me a chance to think through some of the things I've worked on in the communications field, to be away from the pressure cooker of Washington politics and to write a book.

Videography: Do you have any plans to work again on a regular basis?

Whitehead: Yes, all good things must end. I view this past year and a half as a temporary way-station enabling me to reflect on and rethink all of communications policy. It's been a breathing spell to think about what I want to do afterwards. I expect that by the time this issue of **Videography** comes out I will have made a decision.

Videography: What was it like working at OTP before and during Watergate?

Whitehead: It was frustrating both before and during. It was frustrating in a relatively healthy way before Watergate because OTP was a new agency where we were really defining what would be our role, what were the important issues that we should be involved in, what kinds of positions should we take, what kind of function should we perform. For example, should we be the ivory tower thinking about what communications should be like in the year 2000? Should we be second-guessing every pro-

posed FCC rule coming out on a detailed subject? How much attention should we devote to narrow tactical matters, how much to broader economic and social aspects of communications? Striking a balance, in other words. It was frustrating, but it was healthy.

Videography: And when Watergate came?

Whitehead: When Watergate came—and I mean almost from the day of the Watergate break-in—things began to turn frustrating in an unpleasant and unhealthy way. There was great pressure on me from within the Administration to do some things I didn't feel comfortable doing. And there was considerable feeling at the senior White House staff level that OTP should be abolished because it was standing in their way of doing their political thing.

One of the purposes of having an OTP, by the way, is that having a director answerable to the President as well as having to be confirmed by the Senate makes that director a very public figure, answerable to pressures from the world outside the presidency. While I think that the director of the OTP ought to be responsible to the President, he also ought to be answerable to Congress and to the press. That's one of the great virtues of having a separate office for communications.

In my case, from mid-1972 on, I was beginning to have more problems with the President than I was having with any other part of government or with the outside world. And it got worse and worse because the Watergate climate made it impossible to do things if you were in any way identified with the Nixon Administration.

Videography: Did you feel paralyzed?

Whitehead: It was a paralysis from within the White House and a suspicion from without that everything that was done was part of a conspiracy. It just wasn't a time to get much work done, and it got progressively worse. By July of 1974 things got so bad between me and the White House—President Nixon, to be exact—that stories were erupting on the front page of *The New York Times* about our dispute on the issue of funding for public television. When things get so bad that you're fighting your battles with the President on the front page, well, you just shouldn't be in the Administration any more.

Videography: What was the specific issue?

Whitehead: There were really several issues involved. One issue centered around the public television community. Like any other organization, their main concern was getting as much money for as a long a period as possible. Public television's pitch to the public was that, because its general social value is beyond question, it ought to have large sums of money without being answerable to anyone. Thus it demanded that it be funded by Congress for five years at a stretch.

Then there was our concern at OTP about what kind of long-range funding bill could we responsibly propose. In making such a proposal you have to get beneath the surface of some of the good programming that public television did. You have to start asking some hard questions like: Who are they answerable to? Everybody has to be answerable to someone in society, particularly when public funds are involved. So as we saw it, from a practical point of view, public television should either be centralized and tightly overseen by the Congress and to some extent by whatever administration occupies the White House, or it could be decentralized and kept under control by an internal system of checks and balances. In the latter case the local public stations would have a significant role in deciding what kind of programs they would like to have. In other words, there would be a healthy balance between centralized national programming done by the Corporation for Public Broadcasting and paid for by the government, and the programming of the constituent parts of public television.

It was that kind of structure that we felt we could justify to the Congress, which would then approve a five-year funding bill. The philosophy was that, with an appropriately decentralized structure for public television, Congress would fund it every five years. Each five years the funding levels would be reviewed. Of course, that would give CPB a tremendous amount of insulation from the Congress and from the White House.

Now, CPB wanted to be in control of all public television and didn't want the local stations to have much control over the programming. The affiliates, on the other hand, wanted their own programming schedules. To complicate matters, within the Nixon Administration there was deep suspicion of public television—not altogether unfounded, since many of the people in public television were of a different political pursuasion from the people in the Administration—a suspicion that public television was out to do them in, and they wondered why they should support it at all.

It was a kind of three-way circus. By the time that I had my final falling out with Mr. Nixon the public television community had largely come around to our point of view that, with some measure of decentralization, the whole system would be stronger, more resilient, and would have more independence from the whims of Congressional committee chairmen.

Videography: So they decentralized?

Whitehead: They began to make some changes and set up the Public Broadcasting Service as an independent association of local stations rather than just an adjunct to CPB. So we began to have a reasonable structure for the system. They came around and, in essence, said: "Hey, this looks pretty much like what you said we ought to be and maybe now we can come to some kind of agreement about funding."

Without agreeing that everything they were doing was perfect, I had to conclude that it was basically a sensible structure and that the objections we had about five-year funding were largely taken care of. And indeed, five-year funding did make sense for public policy, so I felt that I had to go ahead with my part of the bargain and get behind that five-year funding bill, which I did . . .

Videography: What was the White House's response?

Whitehead: . . . only to find that the White House pulled the rug out from under me. The Administration would not support five-year funding. I thought that was just outrageous. I had not been fighting public television just to drag it down at all costs. I could not in good conscience stay in the Administration if it kept that position. That's what the last fight with Mr. Nixon was about.

Videography: When did you leave the OTP?

Whitehead: I left August 4, 1974—a few days before Nixon stepped down. I actually occupied the office until the end of September, but during that time I was functioning on Mr. Ford's transition team. Since I had been involved in planning for the transition, I stayed on the White House staff two extra months.

continued on page 38

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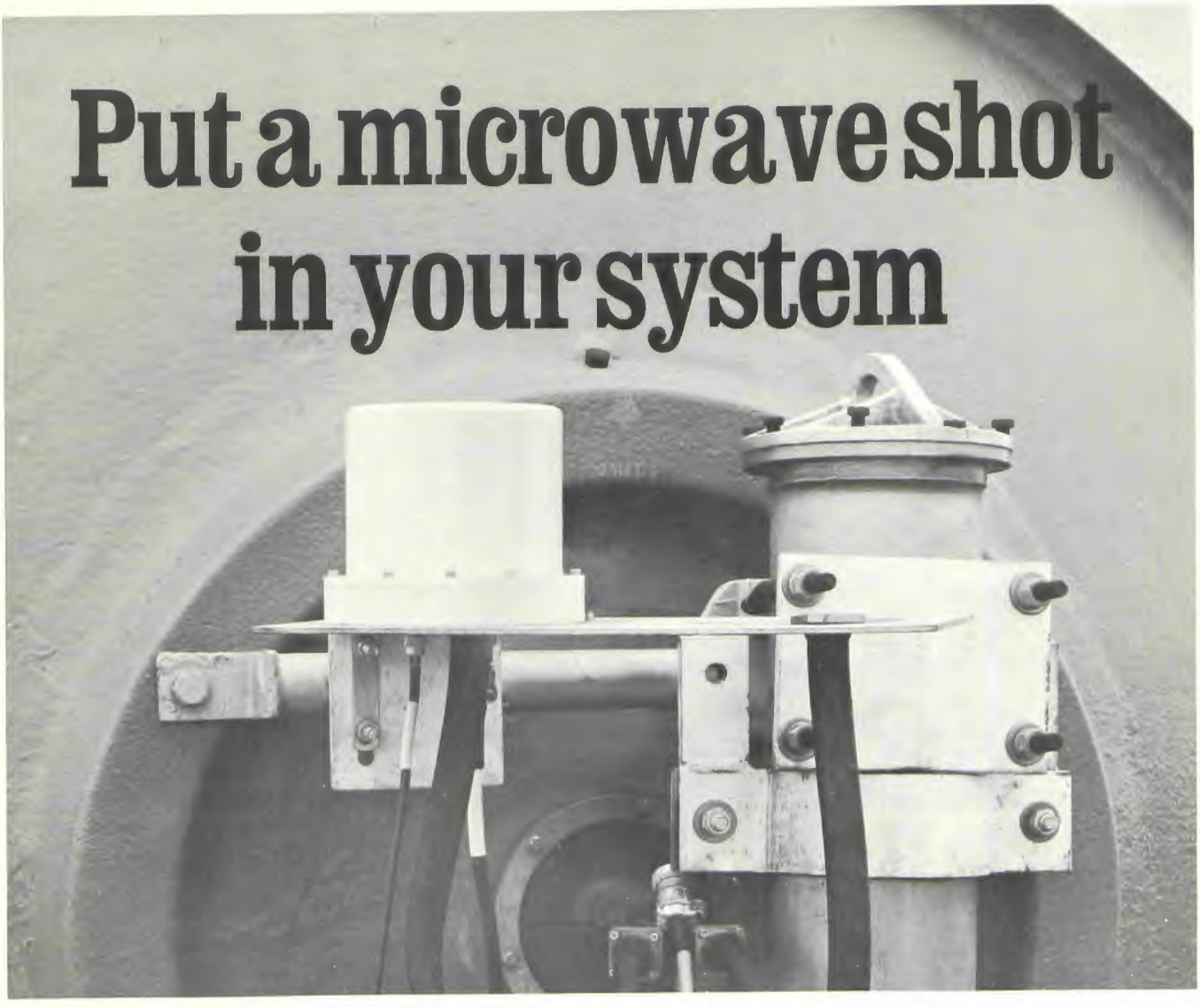

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VIDEO HARDWARE GETS SMART

Bill Etra has combined video and computer technologies in an SEG that can control the entire teleproduction process

by Peter Caranicas

Imagine a special-effects generator that's also a video switcher, an image manipulator, a colorizer and a hybrid analog-digital computer for video. Imagine that it can perform a full range of special effects, do infinite-reentry video-switching under computer control and be used by a single operator as a control center for automatic preprogramming of an entire tv production, including remote control of the cameras, integration of lighting changes, actor cueing, prompter-device coordination—all without the necessity for cameramen, audio engineers, lighting directors and tv directors.

Such are the claims of the Intelligent Video System (IVS), a device combining many recent refinements in video and computer science, which leapfrogs the complex technology of existing television switching equipment. The majority of today's production switchers are based on technical advances built up piecemeal over the years, with each step forward simply added on to existing systems. IVS is an attempt to wipe the video-switcher slate clean and to include all the traditional switching functions, as well as some new ones, in a state-of-the-art system.

Some would describe IVS as a video synthesizer, although it cannot twist

Left and below: Etra experimenting at home

and decompose images and parts of images in the manner of a raster-scan synthesizer. It does process images, however, by changing their shapes and colors.

IVS is the brainchild of Bill Etra who, together with Steve Rutt, developed the Rutt-Etra video synthesizer, a raster-scan machine now used by several tv post-production facilities. Etra is presently assistant professor of fine arts at the University of Maryland, and divides his time between teaching there and experimenting at his loft in New York City. His main interest is video as a compositional tool—or video art—and he recently received a $13,000 grant from the National Endowment for the Arts and Humanities and the New York State Council on the Arts for research in that area.

Etra conceptualized IVS while exploring new ways of creating software and spent 2½ years developing it. But, although IVS was originally invented as an aid for video artists, it turned out to have important applications in bread-and-butter teleproduction work.

The heart of IVS is described as a matrix switcher that can switch faster than the resolution of a tv picture. A logic pulse turns on any points of the matrix to which it is addressed. A ramp control voltage fades up the matrix switcher. Two keywipe generators wipe a key to any shape in the matrix. Because the system's user deals with a matrix rather than a traditional downstream switcher, IVS allows results to be reentered at any matrix point for further processing. The matrix switcher is accompanied by a four-level key colorizer which, when used in combination with the matrix, permits levels of colorization that are virtually infinite.

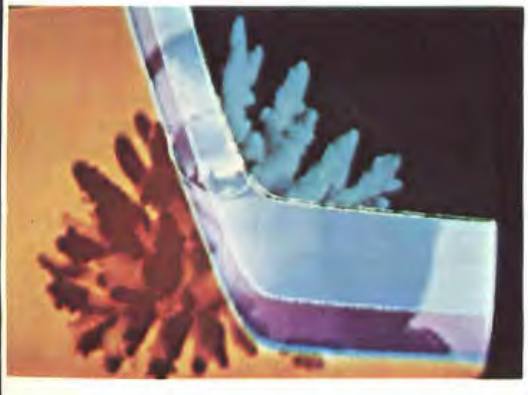
In its simplest form IVS can do multilevel keys, fades, dissolves, digital and analog outlinings, hard- and soft-edge colorizing, additive and nonadditive mixing wipe shapes, and so forth. Options include wave-form generation for more complex wipe shapes, coded chroma-key edge sharpening and an adaptor box to interface it with various audio synthesizers. Because its construction is modular, its options can be extended without making any parts obsolete.

Using still video images of coral and woman's face, IVS can produce effects such as (top, l to r) color key of coral with face inserted at level 4, key of coral with different color inserted at each level, and with computer matrix brought back in negative at level 2; and (above, l to r) a quantization of the coral with computer matrix filling level 1 and the face inserted into the highest level, a color negative of the same, and both the face and the computer matrix in negative at different levels.

IVS can be programmed with calculator-pad pushbuttons, which are used to insert whole sections of memory into the computer, and then commanded with a typewriter keyboard in relatively simple English: "Wipe; dissolve camera 3." By incorporating specific control boards, other extensions can be added to IVS, including servo controllers for remote camera units. A manual override panel will be available, however, to enable manual control of complicated sequences.

For postproduction work, part of the IVS system is an infinite positioner that can change the position of a prerecorded video picture and approximate any lost background or light level by sampling a reference selected by the operator using the manual override. In this way he or she can correct framing errors, leave the desired parts of a picture sharp and soften a scene's unwanted details.

A startling function of the completed IVS system will be its ability to translate videotape and film programs originally shot in black-and-white into color—a color that is a close approximation of the color that existed when the film or tape was originally produced, and which was lost. The process is a complex one because lighting—and therefore the various gray shades that represent the original colors—may change from scene to scene. For that reason no process of standard gray-level colorizing has heretofore worked well.



Above: image produced by using a soft-edged diamond to highlight a monochrome face over colorized coral. Below (top to bottom): face used to cut key for colorizer with coral video in layer 4; same, but with outline of coral in hue of layer 4; colorizer used for wipe function with images inserted in different layers.

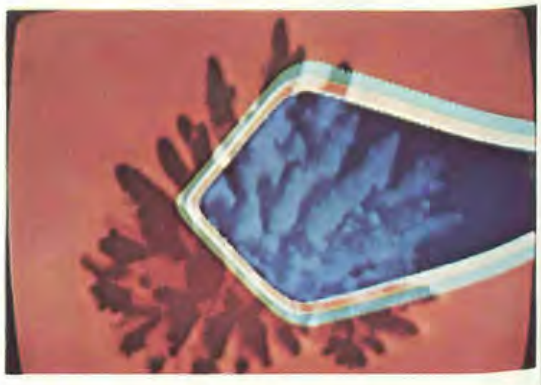
The IVS computer-colorizer is designed to circumvent these problems by allowing the hand-colorizing of specific frame areas, which can be "painted" by using a light pen on a monitor screen. The first frame of any scene—which in this context means continuous light conditions and absence of any movement—is hand-colored. The computer then locks onto the gray-scale balance of the frame, continuing to colorize sequential frames until it detects a change in the gray scale. It then stops the tape or film, automatically back-spaces to the appropriate frame, and the process is repeated.

In scenes with definable background and characters, a more complex mode of operation can be used: people can be separated from the background by brightness, distinguished separately, and automatically tracked from frame to frame until the conditions no longer exist. The degree of automation with which this can be accomplished depends entirely on the amount of computer power dedicated to pattern-recognition. Perhaps when the age of consumer video finally dawns, colorized versions of Charlie Chaplin and D.W. Griffith will be made available.

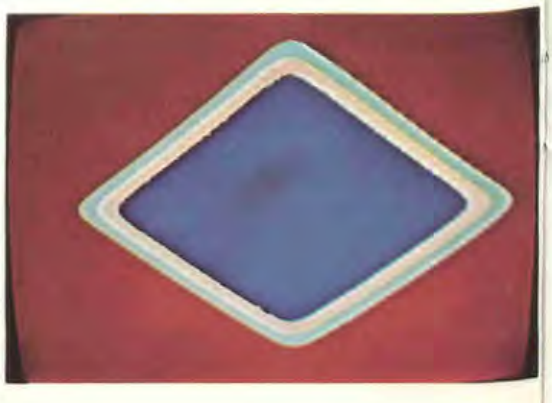
The IVS system will be marketed by Intelligent Video Systems Corp., a company to be set up by Visiondisc, Inc., a videodisc software concern. The basic core of the system will be priced at $8,500 or less. Adding computer features and the manual override will bring the price up to the $50,000 range.

These costs are based upon relatively modest production runs. They will, nevertheless, entail extensive marketing efforts. To this end, Visiondisc is approaching major broadcast equipment manufacturers and distributors. The main target would not necessarily be broadcasters but would extend to the world of educational and industrial television as well as to experimental video groups.

IVS's backers claim that the era of eyeball-judged video is set to supplant the era of instrument-judged video, making the system acceptable for all but the highest end of teleproduction. Its major advantage will be its ability to cut down on maintenance and personnel costs. If part of the system malfunctions, all that will be required to make the correction will be the replacement of a board. More important, a single director is all that's needed to program the computer controlling the cameras, lenses and lights. If IVS lives up to its promise, complex teleproduction and special effects will come within the reach of many groups who cannot afford them today.



Above (top to bottom): colorizer used again for wipe function with images inserted in different layers; special wipe shape; colorizer used as shape generator with low chrominance in layer 3 and low luminance in layer 1. Below: wipe into colorizer, color inserted without video. All photos: computer work by Lou Katz.



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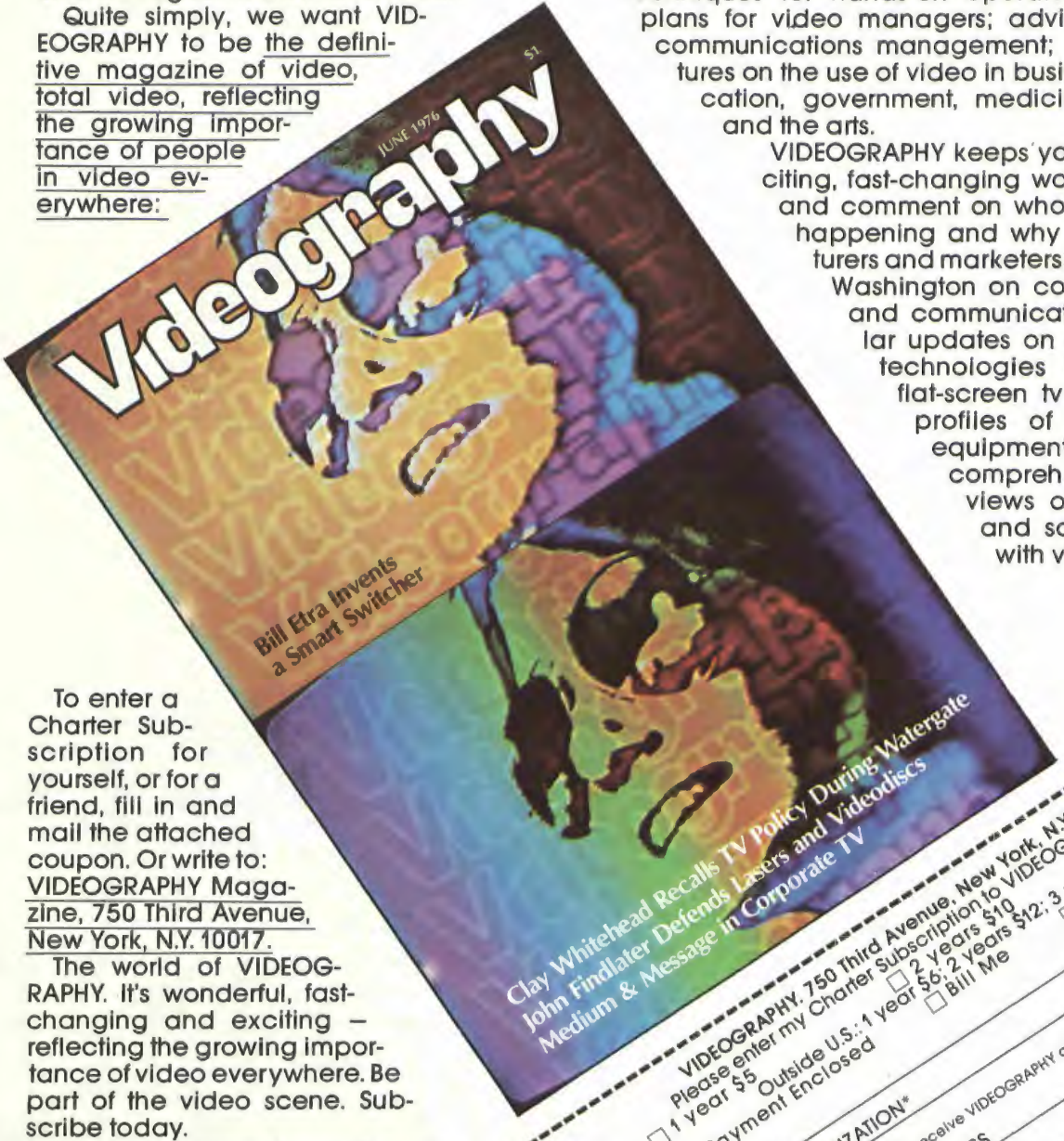

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Preparing Video Graphics

From flip chart to film chain, imagination is as important as budget

by Mick Roberts

Mick Roberts is sole owner of Mick Roberts' General Store in Budd Lake, N.J., and specializes in producing video graphics, slide tape programs, film, and script narration.

"If you can't get the message across in three seconds, you're dead." So says William Sunshine of CBS TV's graphic department. And in order to get the message across quickly, video graphics should be kept simple and clean.

To begin with, television's 4x3 aspect ratio requires wide margins. The camera can always move in on a small amount of type centered on an illustration board. Nothing, however, is more annoying than type that goes all the way out to the edges of the board. In such cases, there is no way to avoid showing the edges of the board on screen. This overscanning applies more to live, on-camera boards than to slides.

Rule of thumb number one: line length should not exceed 30 characters, including spaces. In order to be readable, type must be large enough not to fall apart on the tube. While this does not mean that one-inch letters must be used, anything that comes to less than half an inch on the screen will not be easily recognizable.

The simpliest graphic to prepare for studio cameras is white press-type on a black board. All that is needed for this is a t-square, triangle, the board, some white transfer type and a pencil. Before putting any type down on the board, make sure that guidelines can be erased without taking away the top surface of the board. Then line up the line under each letter, hold it steady and burnish the top side with a blunt but smooth pencil, stick or whatever works. If a mistake is made, most press-type letters can be removed by rubbing a piece of masking tape on the goof and lifting it off. Again, try it on an unneeded corner to be sure that the surface stays put. All of these supplies can be found at a graphics arts supply store.

A simple build can be done on a three- or four-line card by putting all lines on the card, and, with a horizontal wipe on the SEG, revealing one line at a time, top to bottom or bottom to top. Another easily accomplished card animation is a direct steal from the Letters To The Editor portion of *Sixty Minutes*. With the appropriate graphic in place, excerpts of letters are typed on white paper that is cut to fit on the art when flipped into place. The "letters" are taped to the graphic at the bottom, overlapping each other and with the tape situated outside the picture area. On cue, a stagehand flips each letter into place as needed.

Want more? Try a series of animation "cells" drawn in register then punched to fit a three-ring binder. Alternating the sequence both by camera and easel and using slow dissolves results in simple animation. A little care in art preparation and camera register can produce some nice effects.

No money for a character generator to move copy across the screen? Try building a black frame with standard-sized slots to fit precut black boards that are a few inches longer than the width of the frame. By using white press-type for the information to be "crawled" horizontally on the sliding frame and pushing it through the picture on a key setup, the possibilities are limited only by the imagination.

Viewgraphs or overhead tansparencies can also be a source of inexpensive and simple video graphics, but don't try to use them by projecting the image on the type of overhead machine used at most business meetings. Instead, buy or build a light box with a dimmer switch on it. Arrange it so that a set of printer's quarter-inch register pins can be taped to the frame. Next, cut some strips of masking vinyl or other stiff material that will hold dimension fairly well and punch one edge with a standard three-hole punch. Prepare the copy according to the requirements of

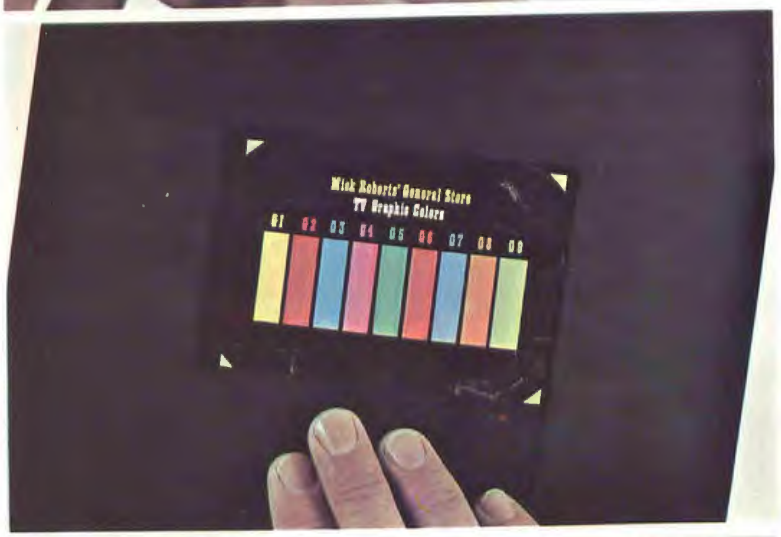
A copy stand with camera

whatever transparency maker is available, making certain that there is a large margin. By leaving the register pins in place, adding the pre-punch vinyl then taping the top edge of the transparency to it, all others can be placed in precise relationship to the video screen. An opal glass front surface for the dimmable light box will allow even, controlled light for the camera. Most manufacturers of overhead materials offer black on a colored background. Testing various colors may be necessary to find what works best.

For white or colored type on a black background, the best method is an ortho line negative used as is for white or with colored gels added to it. Colors should be added to the back of the negative (wrong reading) with a piece of frosted acetate sandwiched between the negative and the gel. The acetate smooths the colors and eliminates any imperfections that are usually found in gels. A theatrical lighting and supply house will usually have a good selection of colors. Again, use the light box.

This brings us to the production of slides. The 8x10 line negative just produced can be transferred directly to a 35mm slide. If a Westinghouse superbulb is used in the light box, all that's needed is a single lens reflex camera, a macro lens (to focus down to about 7 to 9 inches), an 80A filter to fit the lens and a copy stand. The superbulb, available at most hardware and lighting stores, holds a constant color temperature over a fairly long life. The 80A filter coverts the tungsten light-source for exposure on daylight film. By selecting five to ten standard gel colors and making test exposures, the standard shutter speed/f stop combinations that produce the best results can be determined. If the 35mm camera used has a double-exposure feature, a background color can be added to the slide after the initial "type" exposure is made. Either by using darker gels for backgrounds or cutting the exposure at least in half on any gels used for type and throwing the lens out of focus, the background is "burned" over the entire slide. Again, plan to keep notes and run a few tests to nail down exposures.

When making line negatives, a slight modification of the light box copy stand will be needed. Probably the easiest way to do this is to add four lights, two to each side of the stand at 45 degree angles. They should be placed about 18 inches above the copy plane and about the same distance from the centerline of the stand. An inexpensive used 4x5 press camera with a fairly decent lens will be adequate for most line work,



Top to bottom: the author demonstrates opaquing with black masking tape, then using a pin register with the punch.

Top to bottom: step-by-step production of a slide. 1) Copy as it looks before being shot on another film. 2) After processing. 3) Stripping in color, using frosted acetate between negative and color. 4) Shot on black. 5) Color background added by double exposing.

and a Kodak grey scale will also be helpful in processing the film. Starting exposures with Kodak 2556 4x5 film will be about 10 seconds at f/16. By including the grey scale in the frame with the type to be shot, the negative can be inspection-developed under a red safelight until the last four steps have turned completely black and the fifth is a medium shade of grey. Either Dektol diluted one to one or A-B litho developer may be used. Stop development, fix, wash and dry according to the instructions packed with the film.

Color backgrounds are easily done with chroma key. A 35mm line slide with color added over the right reading side will go right into the film chain. Thirty-five millimeter ortho film is available in 100-foot rolls from most franchise camera stores. A bulk film-loader and reusable film cassettes are also needed. The sales clerk will demonstrate how to use them.

After loading into the 35mm SLR, expose the graphic, leaving margins for the "safe title". If developing the film in a tray by inspection, then shoot one frame on the grey scale and keep all other exposures the same for that roll. Develop as for the 4x5 procedure above. For tank and reel development, shoot a series of tests on the grey card and develop according to film instructions, keeping a constant time and temperature standard, i.e., 4 minutes at 68 degrees F.

Agitation is equally important in tank development. Most photographers have some sort of agitation ritual that works well for them. Mine consists of loading the film on a reel; placing it in the tank; preparing the developer, stop and fixer; and bringing them all to 68 degrees F, I set my timer to zero. In three quick moves, I pick up the tank, start the timer and pour in the developer. After capping the tank, I invert it repeatedly with a positive but not too vigorous motion for the first 20 seconds. Then the film, developer and I take a 25-second rest. Another five seconds of inversion agitation, another 25-second rest, ad nauseum until 10 seconds before time is up. At that point I pour out the developer (it usually takes 10 seconds to empty the tank), stop the developing process with a weak acid bath or plain water, pour that out and add the fixer, according to instructions for the film. Wash and dry the film and it's ready to mount, color, project or whatever you have in mind for the project at hand.

Now a word about the relationship between the 35mm frame and the tv picture format. None of the formulas are of much use when squinting through the viewfinder of a 35mm

Top and below: a rough field guide is drawn on frosted acetate, lined up with the copy underneath, and the camera is adjusted; then the field guide is pulled off and the copy is shot.

camera. The frame looked through represents roughly 25x37 millimeters worth of film. The opening on a standard 2x2-inch mount is 24x36mm. The film chain will pick up 21x28mm of that. The safe title area is further reduced to somewhere around 19x25mm. So what does it all mean? A lot of confusion unless there is some reference point in the viewfinder to mark the four corners of the video screen format and, inside that, the safe title area. Some 35mm SLR cameras are available with vertical and horizontal lines etched on the screen. Through tests, what lines correspond to what proportions of the total picture can be established as well. (The horizontal lines are great for keeping the copy straight, too.)

The next-best method might be to draw field guidelines in several sizes for full 35mm frame, video screen and safe title area on clear acetate. By lining up the art and the overlay in the viewfinder, proper portion is automatic. Remove the acetate and shoot. Using rule of thumb number one—30 characters to the safe title area—it should be simple to make overlays for typewriter copy, press-type in several sizes or a variety of type sizes purchased from outside suppliers. Speaking of which, here's a quick list of where to get what:

- Slide production houses usually can produce the whole job given the time and budget.
- Typesetters can provide reproduction proofs ready for paste-up. Most will supply free type style books of all faces available.
- Stat services will resize paste-ups to a standard size for easier shooting. Most can make line negatives.
- Graphic arts stores sell press-type, colored gels, self-adhesive projectable colors for use directly on 35mm line negatives, illustration board, t-square, triangle, non-reproduction blue pencils, frosted and clear acetate, 3-D title letters, and miscellaneous supplies. (Some stores carry a bulletin board for small related businesses in the area, such as paste-up artists, designers, photographers, typesetters, compositer operators and so forth.)
- Theatrical lighting and supply houses make available gels, lights and lighting controls.
- Photo dealers can provide line film, developers and chemicals, slide film, processing, camera equipment new and used, and slide mounts. Like graphic arts, they can direct you to competent photographers in your area who may be able to supply graphic slides. Most photographers are also interested in video and, given half a chance, make excellent production people.

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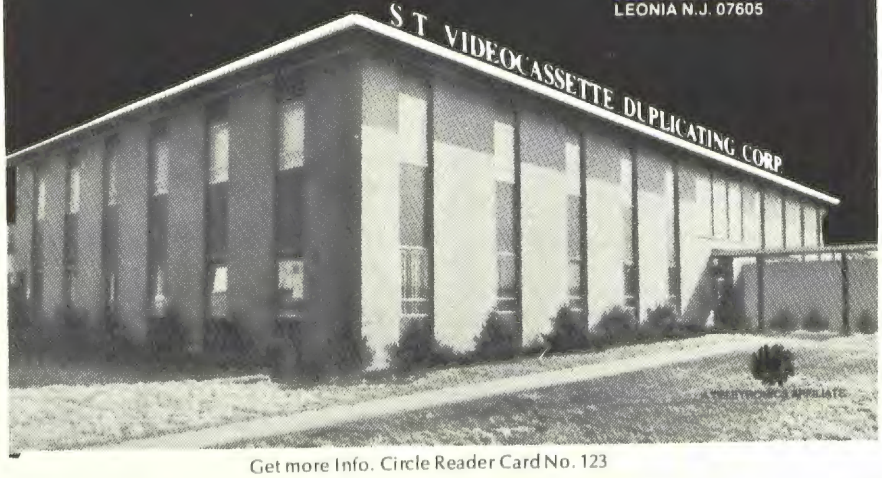

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"There was pressure on me from the Administration to do things I didn't feel comfortable doing."

Videography: Are you connected in any way with the OTP now?

Whitehead: Well, I know some of the people over there and see them occasionally, but I'm no longer directly involved.

Videography: In the end didn't the five-year funding become a three-year funding?

Whitehead: In the end it became a one-year funding. There is a three-year authorization, but the problem is really one of appropriation, and each year public television has to go back to the congressional appropriation committees. It's really a shame and I think public television should have continued to fight for the five-year bill. These kinds of structures are very important in communications policy. It's important that an institution like public television have some insulation from the daily and yearly process of government.

One of the greatest threats to the independence of the media is not a congressional committee or an administration that's hostile; one of the greatest threats is the congressional committee or the administration that's friendly and invites the media to get into bed with political figures. It's a kind of insidious erosio of the independence of the media. So I was sad to see the Congress adopt the one-year bill. It was unfortunate that the public broadcasting community accepted that so complacently.

Videography: Do you think a five-year bill will be passed some time in the future?

Whitehead: Oh I suspect it might, but it will be a long time.

Videography: What was the OTP's policy on cable television when you were director?

Whitehead: We began to organize a point of view. I did an awful lot of temporizing at the outset, realizing that cable is tremendously important in the future of communications. But like everyone else, we didn't understand it. Mainly we tried to preserve options.

There was some publicity about my involvement in the so-called cable compromise. We got involved in that simply because we realized that some compromise would be reached. The broadcasters intended to—and had the political muscle to—force the issues onto the agenda of the Congress. We felt at OTP that it would be sad indeed if the first cable legislation were passed in a crisis atmosphere. The broadcasters had all the political chips and had some measure of legitimacy in their arguments. But narrow policy issues like distant-signal importation are not what a national debate should be about. That's not what cable legislation should be based on.

So we at OTP got involved in a temporary way, trying to keep narrow issues from erupting so that we could plan broader policy actions for a later date. And we began to develop some views of our own about what policy made sense.

Videography: Did Nixon ever consider supporting cable as a counterforce to the broadcasters?

Whitehead: I think he did in some sort of vague way, but I never detected any firm views of his on the subject, nor any great interest on his part in the cable industry. As a practical matter, there was nothing he could really do because cable was just not going to be a major political force during the tenure of Richard Nixon's presidency. So, as a very pragmatic politician, he did nothing.

Videography: It was recently revealed that the Ford Administration plans to reconsider its proposal to deregulate cable television. What does that indicate about communications policy today?

Whitehead: Well, I think that incident illustrates two things. One, that it's humanly impossible to ask the White House to do anything that's going to seriously upset broadcasters during an election year. Secondly, it illustrates, the importance of having a strong and vital OTP. The Domestic Council's approach to deregulation, is precisely the kind of procedure that would never be on the agenda if people who know about communications were putting the agenda together. The idea that you can completely deregulate the importation of distant signals is just foolishness. There are serious copyright problems, and there are serious issues of equity and public policy.

It was sad to see that the White House had considered that kind of very gimmicky approach to deregulation of television. They should have started dealing with cable issues through a jurisdictional framework

rather than tackling substantive FCC rules line by line. The White House should not be involved in details such as distant-signal importation that properly come under the FCC.

Videography: What's the significance of the U.S. Court of Appeals ruling that the FCC must open its hearings to the public?

Whitehead: Government agencies in general don't like to be exposed to the public view. It's just much easier to sort out all the compromises that these agencies make if it's done quietly and privately. That's a powerful incentive for the people who are being regulated to play the game.

One way the OTP can bring issues to public attention is to take some relatively technical-sounding issue that the FCC has considered and, through its own expertise, find out what the policy implications of that issue are. The average newspaper reporter—even the unusually perceptive newspaper reporter—has difficulty here unless he's used to covering communications issues. The fact that we always used to force to public attention—either in the media or in the Congress—the longer-term and broader policy implications of some of the FCC decisions was behind a lot of the hostility that the FCC felt toward OTP. It makes their life much more difficult if many people recognize the broader policy implications of what they're doing.

Videography: Do you think that the growth of cable and pay cable will bring diversity to television programming?

Whitehead: It depends to a tremendous degree on how we allow the growth to progress and how we allow diversity to come into being. If the FCC has its way we will see the development of cable policy in a direction that will turn cable operators into mere multichannel broadcasters. If pay tv is not allowed to develop freely, then I think it's unlikely that we'll get any significant improvement. What we might get is a number of very dull channels that are programmed to meet the pet interests of various specialized interest groups. Some people might call that a diversity.

If, on the other hand, cable television develops basically as a common carrier and the regulatory activity of the government is held to the economics of video distribution, and not extended to the programming sphere, then I think a very vigorous kind of competition could emerge—not unlike what we see in the magazine business.

Videography: Do you mean many producers competing with each other?

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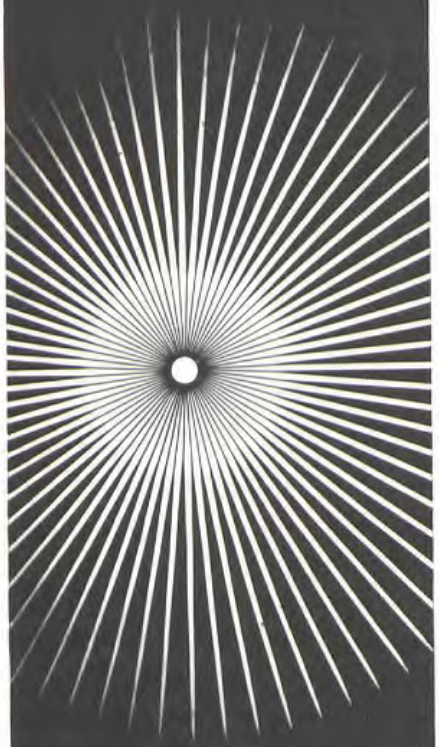

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"Everyone has to be answerable to someone, particularly when public funds are involved."

Whitehead: Many producers of diverse kinds of programming material—and a lot of speculative development. The FCC has a philosophy that no new service should be allowed until it has proven that it is needed. That's a very powerful way of reinforcing the status quo, and of assuring that the public never gets anything. I call it the Thoreau doctrine because when Thoreau was asked what he thought about the new Maine-to-Texas telegraph cable he cynically said that maybe people in Maine just don't have anything to say to people in Texas.

The moral of that story is that one should realize that in new communications technologies few of us really know what we want. We decide what we want based on what choices are put before us. Individuals decide what they want based on the choices that they have available. We rely on the creative people in our society, or the entrepreneurial people, to create ideas, to put them before us so that we can take advantage of them.

Videography: How can cable serve as a vehicle for such people?

Whitehead: If cable is really to have a significant impact, it must be organized so that creative, entrepreneurial people with ideas can put a little time and money into developing them and have a chance to make them succeed. They need exposure so people can see the programs, like them and talk about them. Alongside the opportunity for creativity and innovation, the public has to be able to pay to support that kind of program directly. The best analogy is to the print media. For example, a beautiful arts magazine can only exist if the few people who care about it have the opportunity to pool their resources by subscribing and paying the people who are doing the creative work.

Videography: What about advertisers?

Whitehead: They also have a role. But it has to be mixed. We've seen what relying totally on advertiser support does to television: it biases the programs totally in the direction of the mass audiences—the lowest common denominator of what people *will* watch. The whole emphasis, the whole philosophy of exclusively advertiser-supported tv is to build up an audience which you can sell to advertisers, not to please that audience by giving as many individuals as possible what they would really want to see. The programming is designed to keep them glued to their tv sets so they can be sold to advertisers by the thousands.

In cable you have the opportunity to turn it around and have a real market so that the entrepreneur has the incentive to figure out what people would really *like* to see. In most cases cable would develop into a mixture of consumer subscription and advertising. But at least the entrepreneur/editor will have the incentive to provide the best mix of ads and subscription rates so that the product approximates what the audience wants.

If you took a common-carrier approach, using cable as a distribution system in such a way that anybody who wants to can have his or her program over cable just by paying a fee like you pay United Parcel Service, then you'd have an unregulated market in programming. People would offer things for sale. Others would buy. And you'd get the kind of diversity you see when you go to a newsstand and look at the magazines.

Videography: What do you suppose most of the programs on such a system would be like?

Whitehead: I'm not one of those people who believes that cable television and diversity mean only high-quality, intellectual programming. For the most part people are going to continue to turn to television for entertainment. Most people are going to continue to watch the kind of programming they're watching now, and they'll get it for free because advertisers will find it economical to support it in order to get their message across to those large numbers of people—and who's going to pay for programming that's available for free.

On the other hand you'll find small groups of people who care about certain specialized subjects. Returning again to print, you'll find that three or four magazines are read by 50% of the readers. There's nothing wrong with that. The important point is not that we cram some kind of diversity down American tv viewers' throats, but rather that they have it there in case they want it. It's the availability of the option. If you say, "My child ought to

see what ballet is like even though I never watch it," you should be able to put down your 50 cents or your dollar and watch two or three first-class performances coming out of Lincoln Center.

Videography: Wouldn't the proliferation of such programming on cable tv be at the expense of other media, like books and broadcasting?

Whitehead: I think that's inevitable, and good.

Certainly as more diversity on cable tv becomes possible you could expect people in the magazine business to ponder what magazines they could create in video, or to issue video counterparts to their print editions. And I would also expect the network broadcasters and the public television community to start thinking in terms of alternatives. They would have to compete a little harder than they do now. That's the kind of competition that could work in the consumer's interest. It doesn't mean that they're going to go out of business—just that they'll have to pay more attention to what people want to see.

Videography: We're very far from such a scenario today. Won't established interests try to prevent it from coming about?

Whitehead: That's true. And the Congress and the FCC, through their accumulation of regulatory powers, and through the 1934 Communications Act largely aid and abet these interests rather than encouraging more competition.

Videography: Then do you see the changes coming about gradually?

Whitehead: I think it's going to be very gradual. My only hope is that it's not so gradual that it never happens. It is quite conceivable to me that the broadcast industry, the Congress and the FCC could combine and, through noble-sounding motives, perpetuate our present tv system, which is based on a scarcity of channels and on increasing government regulations. They could guarantee that cable television, with its abundance of channels, will never become a national medium. The accretion of programming regulations in the cable field could load so many public-interest responsibilities upon cable that it never becomes economically viable on a national scale.

That would be a great tragedy for this country because it would mean, around the time of our bicentennial, that we don't want the First Amendment to apply in the electronic media. It would be a decision to limit the principle of openness and freedom to the print media. That would be a real failure for the democracy with the greatest tradition of free expression in history.

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Washington View

IRWIN ARIEFF

Irwin Arieff is associate editor in the Washington office of Television Digest and writes regularly on communications issues.

COPYRIGHT LEGISLATION: Catching up with TV

The odds are excellent that the Congress will finally enact into law this year the first major changes in the nation's copyright laws since 1909. Athough last-minute changes still are possible, the copyright law revision will have an important impact on video producers, consumers and distributors.

Congress originally set up a system of copyrights based on a section of the Constitution calling for the granting to authors and inventors "for limited times . . . the exclusive right to their respective writings and discoveries." Of course, by now a 1909 statute could be expected to be a little out of date. Who could envision at that time the development of such diverse technologies as television and radio, cable and pay cable, and videodiscs and video tape recorders? In addition, the law failed to define precisely the right to use a copyrighted work without having to pay copyright fees. For example, an author presumably wouldn't mind allowing a book reviewer to quote from his or her latest work, but would mind if the reviewer's newspaper proceeded to reprint a few chapters.

While the courts and the private copyright organizations like BMI and ASCAP have filled in some of the blanks surrounding the new technologies' copyright obligations and what constitutes "fair use" of a copyrighted work, there have been some notable failures. As the failures mounted up, so have the pressures on the Congress to provide legislative clarification.

Perhaps the most notable failure concerns cable television. In a string of court challenges, both copyright owners and television broadcasters attempted to convince cable operators that they were "stealing" over-the-air broadcast signals by selling them to their subscribers for a monthly fee without further compensating the artists who created the programs. The cable industry argued that cable systems were merely large antennas, no more liable for copyright payments than the owner of an ordinary television set. While the courts disa-

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greed with cable's arguments, they generally ruled that they were themselves powerless to impose copyright liability on cable. They passed the buck to Congress, suggesting that the only way to make cable pay was by legislation.

After almost 10 years of delay and obfuscation, Congress finally is about to obey the courts' mandate, although it's still uncertain what obligations cable will have. The Senate-passed version of the copyright bill requires payment by a cable system to a certain percentage of its gross revenues, on a sliding scale with the largest systems paying the highest percentage and the smallest systems paying only a token amount. In addition, a copyright tribunal would be established to review the rates periodically. The several versions pending before the House at press time attempt to modify this scheme by exempting a system's "local" signals (on the theory that cable's carriage of local stations merely improves the local viewer's reception of a signal already available to him or her anyway), but retaining copyright payments for carriage of "distant" stations, which compete with local broadcasters.

Despite continuing efforts by some cable groups to avoid the payment of copyright fees completely, the vast majority of the cable industry has come to accept the necessity for copyright payments. Since the early sections of the bill have been rewritten to cover not only existing technologies but any that might be developed in the future, even if the section of the bill setting out cable fees were stricken, cable still would retain its copyright liability. If a court later held that cable must pay, the fees would be determined through bargaining with individual copyright owners—a procedure certain to result in higher payments than the present bill's statutory fee schedule.

While requiring cable systems to pay, the bill currently exempts from payment such services as master antenna systems on apartment houses and hotels, and common carriers like AT&T. It's uncertain, however, exactly when a video or audio system passes over the line from "master antenna" to "community antenna."

Although the notion of "fair use" is included for the first time in the current legislation, its definition is anything but definitive. It is in fact an invitation to the copyright owners and potential copyright abusers to fight it out in the courts. According to the bill as it is now written, fair use is determined by considering "the purpose and character of the use," "the nature of the copyrighted work," how much of the work is used in proportion to the whole and "the effect of the use upon the potential market for or the value of the copyrighted work." In other words, if you have any questions, wait a few years for the case law to develop a bit.

The television networks, along with the Public Broadcasting Service and a few other noncommercial program producers have attempted in advance of the law's passage to set out what goes beyond fair use by announcing "licensing" arrangements. The networks, for example, now allow schools and similar nonprofit institutions to videotape their news programs off the air in return for "modest" payments based on school size, intended use and other factors. PBS, the Public Television Library and the Agency for Instructional Television have announced a policy of allowing educators to tape their programs off the air for classroom use for up to seven days, after which time the tapes must be erased. In addition, the public broadcasters wangled a "compulsory license" out of the Senate, which allows noncommercial stations to use copyrighted works without first seek-

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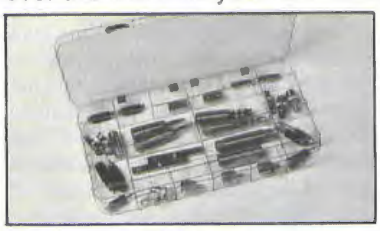

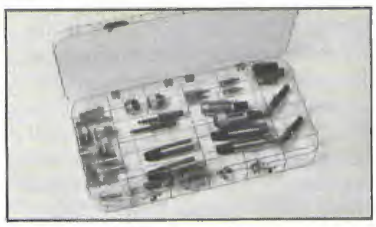

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2	SPJ-PP	Standard Phone Jack to Phono Plug
2	SPJ-BL	Standard Phone Jack to Jack
2	PJ-BL	Phono Jack to Jack
1	XLRJ-SPJ	XLR Jack to Standard Phone Jack
1	XLRP-SPJ	XLR Plug to Standard Phone Jack
1	XLRJ-SPP	XLR Jack to Standard Phone Plug
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3	E8JCM	EIAJ 8-Pin Plug, chassis mount
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ing permission from their creators. In return the authors receive only minimal copyright payments. Noncommercial video producers can be expected to exert heavy pressure on the House to make last-minute changes in these copyright abuses.

What about the individual who owns a videotape recorder, or the company audiovisual department director who wants to tape a program off the television, or to copy a rented instructional program on a spare recorder for later use? If this is done only for personal use, it is probably all right. If, however, copies are sold to friends, money is charged for watching the tapes or they are shown for business purposes, this would probably be considered breaking the law. Of course, enforcement of the law in this case poses additional—perhaps insurmountable—problems.

The only exception to these general principles would be for news libraries or archives, which can reproduce and distribute "a limited number of copies" of audiovisual news programs. This latter provision was the result of a CBS lawsuit filed against the Vanderbilt University Television News Archive charging copyright infringement. Vanderbilt regularly videotaped and indexed all network news programs as resources for scholars who want to use television source material in their research. (The *New York Times* has done the same sort of thing for years.)

Unfortunately for CBS, several private interest groups used the Vanderbilt tapes and index to do studies attempting to show that CBS News was biased against their favorite causes. As a result, CBS brought the suit charging infringement, to attempt to close down the Vanderbilt operation. Unfortunately, CBS didn't take into account Senator Howard Baker, in whose home state of Tennessee Vanderbilt is located. Baker introduced a successful amendment to the copyright bill which in effect will allow Vanderbilt to continue its archiving. Much to the chagrin of CBS, this amendment is considered "noncontroversial" by the House.

Many people in Washington have made a good deal of money betting against the passage of copyright revision legislation in past Congresses. But in this reporter's opinion, the copyright revision bill's time has come. The Congress has wrestled so long with the issues, and is so exasperated by the heavy lobbying and endless nitpicking, that the bill's chances for success are better than ever. If for no other reason, the bill's passage will allow our tired legislators to be rid of the whole mess for another 66 years.

Video Research

MARK SCHUBIN

Mark Schubin is technological consultant to Lincoln Center for the Performing Arts.

VIDEO DISPLAYS Part II: Flat-Panel TV

The video projectors described in this column last month may seem like the ultimate in video displays, offering pictures up to 75 feet wide. However, even a living-room-sized video projector requires a projection unit some five to ten feet from the screen (except for those that fold the optical path into a cabinet), a screen that cannot be touched and that offers a very narrow viewing angle, and a darkened room. The ultimate display? Ha!

As anyone who has read Dick Tracy these past few years knows, the ultimate display is a color tv worn on the wrist, or, for those requiring a larger picture, a color tv about half an inch thick, hanging on a wall or arranged neatly on a pole. The ultimate video display (for now, anyway) is, of course, the flat panel tv.

George Carey's first tv system in 1875 was completely flat (see **Videography**, April, 1976), but then along came Zworykin in 1923 with television that really worked—and a tube about four feet deep. In about 1956, two inventors, Aiken and Gabor, came up with flat, thin versions of Zworykin's cathode ray tube, proclaimed in a 1959 text on the subject with this prediction, "It is probable that flat tubes will find their greatest application in television reproduction."

Then, too, there was the cover story in the February, 1966, issue of *Popular Mechanics:* "Flat TV Picture Tubes Are Really Here. There are both color and black-and-white versions. I know. I've seen them in action. I've held them in my hands. And you'll soon be seeing them in a new breed of portable tvs sporting a famous maker's label around the end of this year." On the cover was a picture of a color tv set, about the size of a portable radio, viewable from both sides!

As you must know by now, 1966 came and went without any flat tv sets on the market. Why? What's wrong with flat cathode ray tubes that fold their electron beams much as the "home" video projector folds its optical path? The answer seems to be in the tube itself. The Aiken tube, the Gabor tube and even the Intertel tube *(Popular Mechanics)* seemed unable to maintain there vacuums or their mechanical strengths long enough to be used in tv sets. Still, research continues, both in the military and in the private sectors, and this form of flat panel tv, by far the simplest in concept, may yet see the light of the consumer market.

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The simplest in concept? Sure. As long as the display device is a picture tube, it needs only deflection coils or plates and a video signal to operate. It can utilize high-efficiency phosphors that fade at just about the right rate to be refreshed when the next frame rolls around, and it can use the exact same electronics that 53 years of television research have given us.

The alternatives? Well, a number of stadiums around the world (the new Yankee stadium in New York and the Olympic stadium in Montreal are two recent examples) have the capability of displaying tv images on their scoreboards by using a form of Carey's light bulb tv system. A matrix of, say, 80 by 120 light bulbs (the number used in Erie County stadium near Buffalo, New York), is controlled by a computer that controls the amount of power available to each light bulb. It's an ingenious system developed by Conrac, but it just won't work in the home.

Why? Ignoring the cost of the light bulbs (and color's a whole new problem) and of the computer and all other electronics, let's just look at the cost of the connections. A home tv set is capable of about 480 picture elements vertically and perhaps 420 horizontally (despite the fact that the displayed 3x4 picture format falls in the opposite direction). That's a total of 201,600 picture elements. Let us pretend, for the sake of argument, that consumers would settle for a mere quarter of their present resolution. That's still 50,400 picture elements. At a penny per connection (much, much lower than today's cost), the connections alone on such a tv would cost the manufacturer some $500!

Fortunately, there is no need to address each picture element individually. A matrix address of a 480x420 display would require only 900 connections, and various self-scanning techniques may reduce that figure considerably. Assuming the matrix addressing electronics are no problem, the next issue becomes one of what to use as the display medium.

Here there are many considerations: color primaries available, ease of matrixing and self-scanning, set-

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ability and resetability (few display media fade gracefully as phosphors do, and most need to be maintained or reset), minimum distance between picture elements, ease and cost of manufacture, power supplies required, brightness available, number of shades of grey possible, and so forth, plus one more, which will be discussed later. There also seem to be even more possibilities than there are criteria! Here are some of the major ones in the two general categories of light-emitting and light-reflecting technologies (where room light is used to see the display).

In the light-emitting field, besides the flat tubes and light bulbs previously described, the prime contenders are gas discharge or plasma panels (similar to neon and flourescent lights) and electroluminescence (phosphors that glow by direct electrical stimulation rather than by being hit with an electron beam—remember the flat, greenish plug-in night lights?). Among the major companies doing research in plasma flat-panel tv are Sony and Hitachi (both have low-resolution color prototypes), Zenith, Toshiba and many others. In electroluminescence, Matsushita (Panasonic), Sharp and Westinghouse seem to be leading an equally crowded pack, although the gas dischargers apparently have the color capability the electroluminescers lack.

Conrac's Telescreen scoreboard towers above a stadium in Buffalo, N.Y. (above), and displays a picture of Joe Namath (left)

Next to the research being done in those two technologies, all other light-emitting research pales by comparison. Still, there are a few worth looking at. Northrop has come up with a device using a separate electron beam for each picture element—no deflection circuitry is required. Other technologies include one using a fluorescent dye, the ever-present light-emitting diode (not very much research towards using it in flat-panel tv, though) and the previously mentioned flat tubes and incandescence.

In the light-reflecting field, the unquestioned leading technology is the liquid crystal, and the leader in tv research in that medium is Hughes Aircraft, which has already shown off-air tv pictures on prototypes and plans to utilize the same device both as a flat-panel display and as a light-valve projector. Of course, a number of other companies are also researching liquid crystal displays and research done in the wristwatch field

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may also be applied to a flat-panel tv.

The gap between liquid crystals and other promising light reflecting displays is even greater than the gap between the top two light emitting technologies and their lesser cousins, but here are some of the more interesting techniques:

- electrochromism, in which an applied electric field changes the color of the display material;
- electrophoresis, whereby a pigment, charged differently than the dye in which it is placed, squishes back and forth in a display cell as the front and rear electrodes are made alternately positive or negative;
- liquidics, in which dye is pumped into and out of display cells; and
- liquid vapor, in which a liquid sandwiched between ground glass is flash boiled, making the cell cloudy.

Then there's electrooptic crystals, colloidal dipoles and magnetooptics. In addition, Magnavox has demonstrated a very interesting technology whereby tiny magnetic balls, painted black on one side and white on the other (or in colors for a color display), are rotated by addressing wires to various degrees, effectively producing a grey scale. Whole pictures have been created with amazingly good results.

And what about the laser? Using an optical scanning system of rotating mirrors or prisms, such as the one described last month, a laser video projector could be folded almost completely flat since the beam would never expand (for practical purposes). Sure enough, that's what a company called Laser Video has come up with—a color video projector that hangs on the wall, makes pictures about five feet wide, and is about six inches thick! Which brings us to the criterion left out before: efficiency.

A typical tv set's brightness is about 100 foot-lamberts. Applying the formula of brightness times area equals light output, a 25-inch tv set (just over two square feet) is putting out more than 200 lumens of light. In a home-type tv, with an efficiency of, say, 10 lumens/watt, the tube is using up 20 watts. Big deal. But a typical efficiency for a laser may be 0.04 lumens/watt. The same 25-inch picture would take 5,000 watts at the same brightness!

The power required for many of the light-emitting flat-panel displays is equally high. Plasma panels at 0.05 to 1 lumen/watt would draw 200 to 4,000 watts for a 25-inch picture. Electroluminescent displays at 0.3 to 1 lumen/watt would draw 200 to over 600 watts and light-emitting diodes, at 0.5 lumens/watt, would draw 400 watts. Supposing a 1 lumen/watt efficiency, a 25-inch picture would use up 200 watts in the display, or 300 watts altogether. But a 3x4-foot wall screen would consume 1200 watts. You'd have to shut off the air conditioner to watch tv!

As the sets get smaller, unfortunately they don't improve. A wrist tv as small as 0.9x1.2 inches would consume a mere three-quarters of a watt in the display (assuming indoor brightness). Even with no power whatsoever consumed in the electronics, the wrist tv would work for a little more than two hours off a flashlight battery or 15 minutes off a watch battery.

Of course, these figures are for today's efficiencies and there's every reason to believe they'll improve. For instance, a fluorescent lamp has an efficiency of some 80 lumens/watt and is almost identical in principle to a gas-discharge display. At that efficiency, a 3x4-foot wall screen would consume only 15 watts and a wrist tv would operate for 20 hours off a watch battery.

Still, light reflecting technologies have an advantage in efficiency. Magnavox estimates that its magnetic balls display, in a size of about 3½x5 inches, driven at tv rates, would consume a mere quarter of a watt.

Flat-panel tv is definitely on the way and while light-emitting technologies seem to be in the forefront today, don't be surprised if, in the not too distant future, "What's on the tube?" is replaced by "What's on the balls?" "What's on the magnets," maybe.

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The Corporate Communicator

EUGENE MARLOW

Eugene Marlow is a communications consultant and chairman of the New York chapter of the International Industrial Television Association.

ASKING THE AUDIENCE: Does The Wizard Have All the Answers?

Once upon a time, there was a king who ruled a small but rich kingdom. His subjects made the roundest, smoothest wheels to be found, and all the kingdoms for miles around bought them for everything that needed wheels. This made everybody very happy, especially the king.

One day, the king's minister of news (bureau of other kingdoms) informed him that two neighboring kingdoms were planning to make wheels too. The king deduced that if other kingdoms began making wheels, his domain would still be small, but not so rich. He was frantic. However, the minister of wheel-making, a resourceful and loyal subject, had an idea: "Let's find a way of making more wheels faster and sell them before the other kingdoms make and try to sell theirs." The king quickly concluded that this was a good suggestion.

The minister of wheel-making immediately devised a plan. But there was a problem. "How shall we let our people know of our new plan to remain a small but rich kingdom?" queried the king. The minister of wheel-making was quick with the answer: "Summon the Wizard of Media to prepare a declaration."

"Excellent," said the king.

The Wizard of Media was rushed to the court, whereupon the king decreed that the Wizard would prepare a declaration to inform the people of the small but rich kingdom of the new plan to make more wheels faster.

"I cannot concoct declarations on such short notice," retorted the Wizard. The minister of wheel-making whispered in the Wizard's ear: "Can you devise a method whereby I can speak to all the people at the same time?" After some reflection, the Wizard replied: "Of course. I will surround the kingdom with mirrors. You will stand in the Valley of Echoes and your image and words will be seen and heard throughout the kingdom."

The very next day, the minister of wheel-making stood in the Valley of Echoes and began to explain his new plan. While resourceful and loyal, he was also a great talker, and he left no detail of his plan unmentioned. He explained all morning, through lunch and into the evening. He explained even as the king went to bed, content with the thought that his land would remain a small, but rich kingdom.

The next day the king awoke to shouts; all the people of the kingdom had gathered in front of his palace.

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"Down with the king, down with the minister of wheel-making, down with wheels," they yelled. For days the people of the kingdom shouted their demands at the king. It was not long before he grew very sad, whereupon he banished the minister of wheel-making and decreed that the Wizard of Media could never again use mirrors. The people stopped shouting, but they were not as happy as before—other kingdoms were making wheels too.

While this fairy tale has a grim ending, there is a communications moral in it. It points out one basic pitfall in the development of any communications program: ignoring the actual communications needs of the audience. A way of avoiding this pitfall is simply to survey a portion of the intended audience before communicating change to the entire audience.

Let's assume for a moment that instead of a small but rich kingdom that makes wheels we are analysing a warehouse division of a manufacturing company whose management has decided to install an electronic data processing system to handle inventory control; prior to the advent of the computer system, a manual system has been in use.

Like the people of the small but rich kingdom, division personnel are going to experience a major change in their daily working lives. Quite apart from the fact that the change will partially involve how things are done, the new computer system will create a change with regard to what is done (e.g., the system may create totally new ways of handling inventory control information).

Second, even though the people of the kingdom already knew how to make wheels, the personnel of the warehouse division may know nothing about computers or the use of computer terminals. This need for training, on top of the radical change brought about by the appearance of the computer, could result in much heightened anxiety beyond the emotional reactions to the change itself.

Third, in our fairy tale the king and his aides assumed that what they wanted to say would be heard. This attitude serves to highlight the possibility that (in the corporate world) what management thinks needs to be communicated may be in direct conflict with the actual needs of the audience.

Fourth, the Wizard of Media failed to control the use of the media or his talent (i.e., the minister of wheel-making). Depending upon the audience's predisposition to communications content, the style and language of the communication must be appropriate not only to management's objectives, but also to the audience's needs. Not only did the minister talk purely from his point of view, his explanations were too lengthy and too technical. Experience has shown that the subject expert is not necessarily the one who should present technical information.

One of the basic functions of communications is to create understanding. In the fairy tale the king and his court clearly knew what they wanted to say and accomplish. However, if the perceptions of the people (employees) are not in consonance with the perceptions of the king (management), understanding will not take place. The creation of understanding is necessary for the facilitation of change.

In sum, a communications story can achieve a happy ending when a representative portion of the intended audience has been surveyed before the communication receives total dissemination. Interviewing various members of the prospective audience can reveal perceptions and communications needs heretofore not realized or understood by management or media producers. Furthermore, preproduction reactions from the audience can help media producers decide on program style, concept and language.

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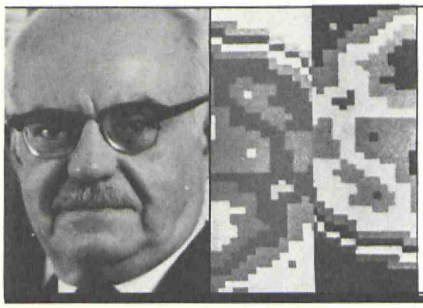


Victor Ancona is a marketing communications executive and award-winning photographer, cinematographer and graphic designer.

GLOBAL VILLAGE: Spanning Worlds Of Study and Display

In 1969 John Reilly and Rudy Stern combined forces and established Global Village—inspired by Marshall McLuhan's new vocabulary—as a vehicle for producing and displaying their work. It was the first video group in the United States and would be a blueprint for multiple installations throughout the country.

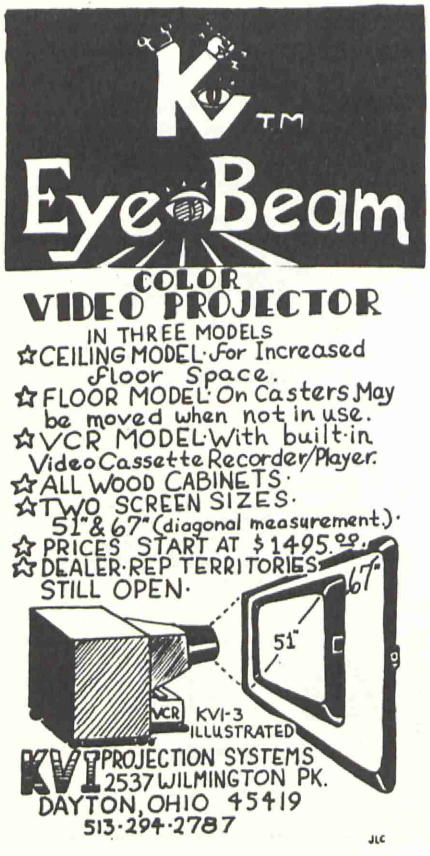
Schooled in communications theory and research, John Reilly was a teacher and a producer-director of 16mm films before his interest switched to video. Rudy Stern was involved in kinetic theatre and light projection which led him to work with Timothy Leary's Theatre of Life spectacles. Reilly and Stern formed Global Village because broadcasters were not interested in their new approach to video. Since then, Stern has gone his separate way.

"In the beginning, it was a corporation with investors. We were several years ahead of our time, and it didn't catch on as fast as we had hoped. In 1971 we incorporated Global Village as a non-profit group, and fortunately we now have a lot of support," recalls Reilly. This includes funding from the Rockefeller Foundation, the National Endowment for the Arts and the New York State Council on the Arts.

After its inauspicious start, Global Village, located in the SoHo district of Manhattan, is today a beehive of video activity where the latest expressions and techniques are discussed and taught to avid video newcomers.

The Video Study Center, a division of Global Village, is a focal point for the creative study and use of video tape in New York. It schedules workshops, seminars and regular viewing of center tapes as well as guest artists and other organizations. The Center has offered the longest running continuous courses in video to more than 2,500 students from the United States, Europe and Asia. In cooperation with The New School, it offers an opportunity for students to learn video in an actual studio setting rather than the traditional classroom environment. While most colleges train people in video as a craft, useful for jobs in the television industry, the Video Study Center teaches video as a medium of expression.

Courses available include an intensive video workshop, electronic editing, an advanced video workshop, the video synthesizer, and a citizen's survival guide which is a special course designed to make the student-



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citizen more responsive to the possibilities and responsibilities of broadcast television.

"There are so many aspects to video that we bring in working professionals, the best we can find, to our classes," director Reilly says. "They act as resource people—people who run cable companies, video artists, public tv station managers and station owners. We believe in team teaching.

"At first, our students were individual artists who wanted to express themselves through the video medium, but now, more and more, our students are journalists who want to expand their work possibilities, professionals working for corporations, people in school systems who will be using video equipment, or those who want to change job directions. We've had a minister, for example, who wanted to use cable programming as part of his ministry. Companies are sending us their people, now that they see the advantages of video as a communicative and training tool Most of the students who take courses at the Center today are individuals in business who see the possibilities of video, then excite their superiors into setting up video departments."

Commenting on his preference for video over film, Reilly believes that people who get involved in video have a personality suited to the medium. "I started in film and enjoyed it immensely. However, the processing of film, the long stage of editing, the fact that you have very little feedback—for weeks, sometimes longer—often interferes with the flow of the work. Video is quicker, suits my personality more," he explains.

"Some artists have an objective of their art and travel many routes to get it. Some are very suited to one medium versus another. I could work in film: I have the background, the training, the experience. I've done it, but my own aesthetic, my own feeling for video, offers me more. Each artist must find his own medium of expression. For me, video is more plastic; you can recreate it, you can mold it, you can play it back to people. Video is more organic than film."

John L. Reilly (Photo by James M. Newman)

Besides directing the Video Study Center of Global Village, John Reilly is actively involved in the production of video documentaries. His latest effort, for which taping has already been completed, is a documentary based on his wife's pregnancy and the birth of their first child, Lars, on September 28, 1975.

Aptly called "The American Way of Birth," the program will be shown on

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New York's public television station WNET/13, with the hope that it will be picked up by the Public Broadcasting Service (PBS) and shown nationally. The conceptual idea, production and finished product is a team effort involving himself and his one-time student and now wife, Julie Gustafson, who is a video artist in her own right and is currently an artist-in-residence at the Television Laboratory at WNET/13.

One of the reasons for doing work himself, Reilly states, is that "it's important to keep active in your field, especially if you're teaching." While commercial television for artists like John Reilly is still a long way down the road, he claims that work for public television is now.

For the past year and a half, Reilly has been attending national conferences involving people at PBS and the Corporation for Public Broadcasting (CPB), talking about how to involve independent groups in public television. His will and energy should bring about salutory results.

As a man who believes democracy requires the presentation of a broad spectrum of public issues with as many divergent viewpoints as possible, Reilly recently made a modest proposal for an Op Ed page for television. In the February 23, 1976 issue of *Access*, he wrote: "Television is our most pervasive medium. We are, at present, limited by the structure of broadcast programming. We have done little to allow for the many voices to be heard and seen, or for effective investigation. Television reporters have not had the freedom of print reporters to explore controversial subjects. Public television is an ideal place for a video Op Ed page to start." (The concept of an Op Ed page originated with *The New York Times* in 1970 to provide a forum for viewpoints varying from the *Times'* own editorial columns. The name is derived from the placement of guest articles opposite the editorial page.)

The Second Annual Documentary Video Festival recently held at Global Village drew record crowds. Festival director Reilly admits that "out of over 100 entries, 65 tapes were chosen, some good, some OK, some excellent. The idea was to offer a showcase for video people's works; to be reviewed; to be in a brochure; to be professional. We have to encourage people to work and act professionally," says Reilly, talking as a teacher.

"The response was incredible. Every showing over the weekends was sold out even though one Sunday program lasted a total of five hours and ten minutes. It's amazing how many people are excited over video."

Global Village offers a free Guest Artist Program in which anyone qualified may submit an application describing a project and may have it produced for exhibit, cablecast or broadcast (via time base corrector). Except for the cost of video tape used in production the guest artist will have at his or her disposal a complete 4-camera (black-and-white) studio, special effects generator, a full complement of lights, and a complete audio system aided by a producer/director and a full crew of up to eleven people.

This opportunity should be of interest to dancers, choreographers, sculptors, graphic artists, and video artists. Since the program is supported by the New York State Council on the Arts, it is open only to residents of New York State.

Even though the original concept of Global Village has changed, the increasing interest in video today may well shorten the time when John Reilly's dream of video theatres throughout the country will come to pass.

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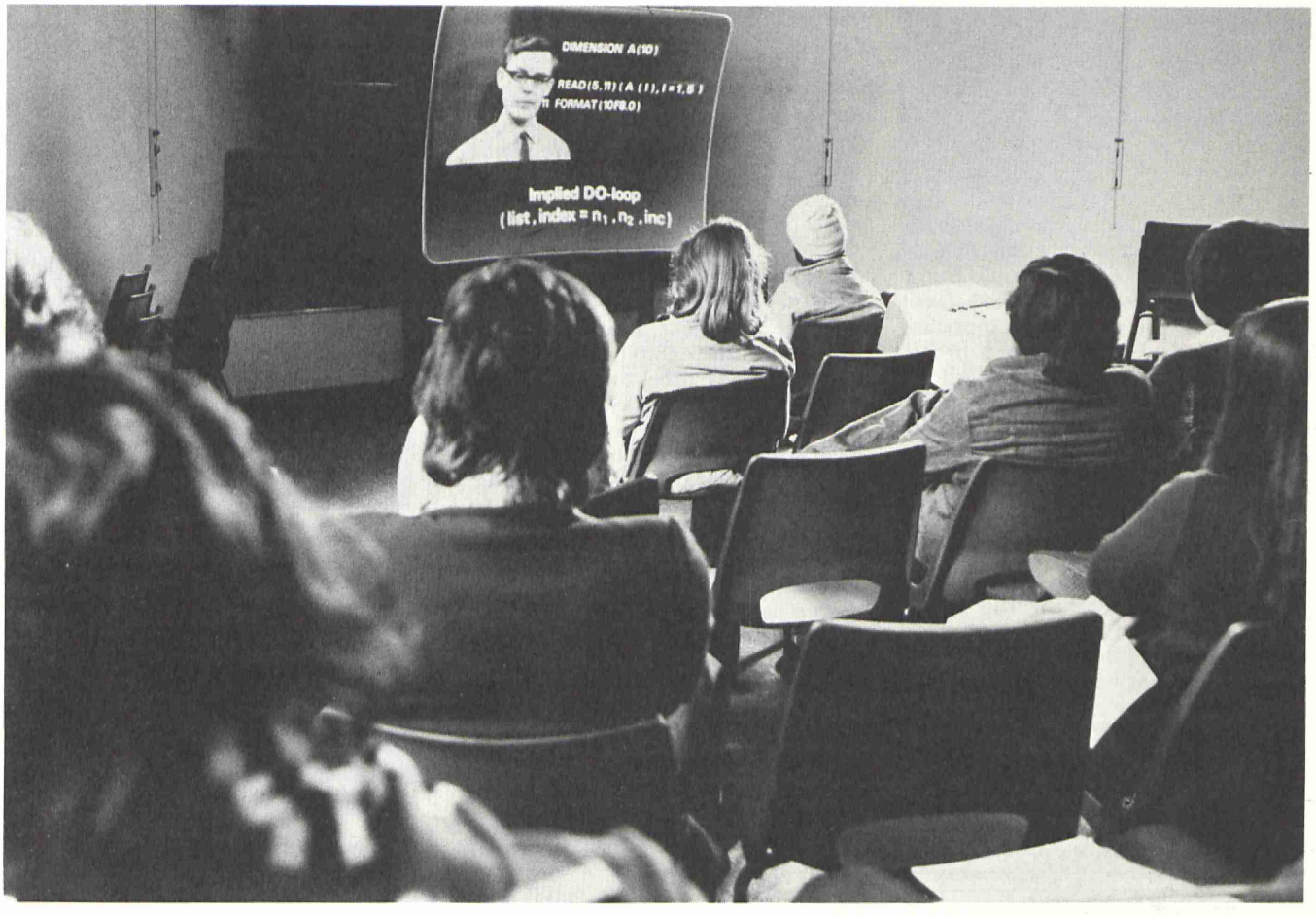

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SOFTWARE REVIEW

Kennedy Shooting Shot Twice; Reviewer Finds Viewers Victims of Second Shooting

"What it is is figuring out what it is," explains the distressed actor who plays Jackie Kennedy (yes, she is portrayed by a man). "It was cathartic," says the actor who has the role of her husband. "A beautiful enactment," exclaims one woman who plays herself in the videotaped re-enactment of the assassination of President John Kennedy produced by the Ant Farm and T.R. Uthco.

Entitled *The Eternal Frame*, this presentation never does figure out what it is about and thus emerges as a pointless bit of ego flexing by the man who portrays Kennedy. While the actor who plays Jackie talks informally about his feelings of dislike for the production because it is too structured and his role too uncomfortable, the man who plays the former president shrugs his shoulders and explains that making the tape ended his interest in the affair and his concern with image vs. reality. It was certainly nice for him to be able to work out whatever it was he worked out; it is unfortunate that the rest of us have to be subjected to his private psychotherapy.

It is also unfortunate that this is the first tape available from Electronic Arts Intermix (New York City) to be discussed on these pages. With such productions as *Scape-Mates* by Ed Emshwiller, Nam June Paik's *Global Groove* and *The Irish Tapes,* (one of the first major documentaries recorded on half-inch black-and-white video equipment), Electronic Arts Intermix offers a wide-range of videotapes for purchase and rental to organizations for nonprofit use. It also will provide an editing room at no cost to individuals working on tapes the organization views as worthwhile.

In this reviewer's opinion *The Eternal Frame* is worth very little. Opening with footage of the real Kennedy assassination in Dallas, it switches to the actor-Kennedy giving speeches (in an acceptable rendition of the famous accent) dated in the 1970's about his view of the electronic media and image. At one point he explains that while he speaks, all the viewers see is his face and that is all it is, a face, and nothing more—this is emphasized by a cut to the actor putting on his makeup.

It would seem that he is trying to tell us that all the screen shows us is image, and the tape is supposed to prove this by its reenactment. However, this isn't the case. If the tube brings us image devoid of substance we should find ourselves experiencing similar emotions when viewing the Ant Farm's presentation, yet we don't. One spectator does get teary-eyed as she watches the sketch: the rest laugh and stare showing little feeling.

If *The Eternal Frame* is trying to demonstrate that there is more to a presentation on tape than the image, it does succeed, but so what? This in no way voids the point of *The Selling of the President*, which demonstrates so aptly how tv can be manipulated to project a desired image.

The tape ends showing the real assassination and the reenactment. They were hard to tell apart, but what that means is far from being clear.

The Eternal Frame is available from Electronic Arts Intermix at a purchase price of $175 and rental prices of $125 for one month and $75 for one week. Circle 207 on reader card. N.C.

Language and Lit Series for Primary School Grades

Storytime is a new literature/language series for kindergarten and first-grade students from Great Plains National (Lincoln, Neb.). Produced at WCET-TV in Cincinnati by the Greater Cincinnati Television Educational Foundation, the series is aimed at "generating interest and appreciation of literature in young children."

Narrator Jean Beasley is aided by color visuals as she tells one story on each of the thirty-two 15-minute tapes.

The series can be previewed at no cost or obligation on either quadruplex videotape or ¾-inch cassette. Each preview package contains a copy of the teacher guide that accompanies the series. *Storytime* may be leased or purchased from GPN. Circle 201 on reader card.

New Tapes Out On Computer Technology

Advanced Systems, Incorporated (Elk Grove Village, Ill.) has added eleven titles to its revolving library of courses. The following are examples of the new titles available in computer technology.

- "IMS Application Programming" is the second course in the Information Management System curriculum.
- "MVS/JES2 System Control Statements" is designed to meet the needs of operators and applications and systems programmers who work in the MVS/JES2 environment.
- "Minicomputers" is for those individuals who are investigating the potential use of minicomputers in an existing data processing environment.
- "VS2 Dumps" focuses on the programmer who will be writing or maintaining programs in a VS2 environment.
- "Programming Logic & Techniques" is aimed at personnel with no previous data processing experience involved in systems analysis management, programming management, operations management, systems programming, applications programming or systems analysis.

Additional titles include "Finance for Non-Financial Managers," "The Business of Writing" and "Presentations that Work." Courses vary from two to sixteen tapes and all are accompanied by coordinator's guides and student guides and workbooks. Circle 206 on reader card.

Media Services For the Deaf On Two Tapes

Videotapes of the California Library Association's December 1975 conference "Library Services to the Deaf and Hearing Impaired" are available from the California Video Resource Project (San Francisco).

The two tapes are in black-and-white and run about 45 minutes each. All of the verbal presentations are handsigned with a split-screen insert.

Topics covered by the tapes include "Story Telling for Deaf and Hearing Impaired Children," "The Law and the Deaf" and "Captioned Films: Their Sources and Use." The second tape also features a handsigned play done by student actors from the Davis campus of the University of California.

The tapes may be purchased only as a set at a cost of $125 on ¾-inch cassette or $100 on half-inch reel-to-reel. Circle 202 on reader card.

Freaky Flix, Rock Bash Pix, For College Kix

For college campuses and cable and pay-tv stations, New Line Video Link offers a wide range of entertainment videotapes on ¾-inch cassettes and color half-inch

continued overleaf

reel-to-reel.

Tape titles range from the Beatles' *Magical Mystery Tour* to *Flash Gordon Conquers the Universe* to *Ali-Foreman at Zaire*. Taped rock concerts can be rented, as can excerpts from both the New York women's and New York erotic film festivals. *The Repeater* takes a look at the problems of the chronic prisoner while *Pursuing the Dream* highlights the political career of Congresswoman Shirley Chisholm.

With the growing popularity of large-screen projection units in public gathering paces such as bars, New Line Video Link is in the process of expanding the number of tapes available to include more sports programs. Circle 203 on reader card.

Excellent Tapes For Adolescents Available from AIT Library

The Agency for Instructional Television catalogue describes "Self Incorporated" as a "series planned and developed by leading health educators, learning specialists, and educational broadcasters . . . designed to help young adolescents cope with the problems that arise as a result of the physical, emotional and social changes they are experiencing." And if the lesson entitled "Different Folks" is representative of the quality of all the programs, the series is indeed superb.

"Different Folks" chronicles a day in the life of the Barnum family with special attention focused on son Matt. Glenda, the mother, is a veterinarian and provides most of the family's income with her 9-to-5 job. The father, Wally, is a book illustrator who works at home, cooks breakfast and dinner, and shares the housework with Matt and his sister Judy. Matt is uneasy about this situation.

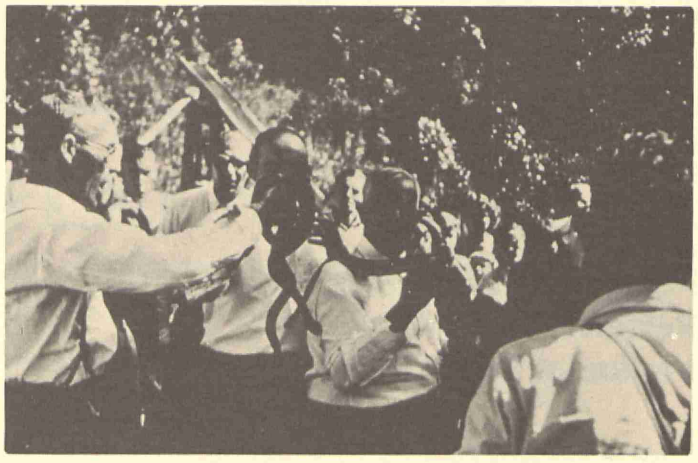
The program begins with a family breakfast during which Matt is forced to turn down an invitation from friends to go minibike riding on the beach after school in favor of coming home to clean the livingroom and to do the laundry. A friend comes by to accompany Matt to school and the camera records the outsider's changing expression as he views Wally decked out in an apron preparing to do the breakfast dishes. He appears more uncomfortable as Glenda hands her husband grocery money.

At school, Matt's friends begin to tease him about his father's masculinity and his mother's role as breadwinner. These taunts lead Matt to desert his housekeeping chores and ride Wally's motorcycle to the beach to rendezvous with his friends. When his parents arrive at the beach and Wally fixes the now-broken minibike, the boys realize that apparent sex roles can be deceiving.

The program portrays a believable situation filled with realistic individuals whose behavior is true to life. There are no surprises, although the presentation isn't dull. "Different Folks" sets out to create a situation through which a point can be made and it does just that.

Each of the other 14 color programs that comprise the series deals with one day-to-day problem common to 11-to-13 year-olds. Topics covered include dating readiness, privacy, achievement, peer-group pressure, family relationships and moral decision-making.

"Self Incorporated" was produced for AIT by the Northern Virginia Educational Telecommunications Association, Annandale; KETC-TV, St. Louis; and UNIT productions of the Utah State Board of Education, Salt Lake City. Preview prints are available in videocassette or 16mm format to prospective purchasers free of charge except for return postage. Single programs may be purchased on 16mm for $180 or on videocassette for $125. Discounts are offered for quantity purchases. Rental fees are based on the total school enrollment of all schools participating in the television service and can be obtained from AIT. Circle 205 on reader card. N.C.



Snake Handlers in Medi-Tel Tape

Altered States of Consciousness—The Snake Handling Church of West Virginia is one of a new series of tapes available from Medi-Tel Communications (New York City), a subsidiary of Windsor Total Video. The series is titled *Transcultural Psychiatry* and is being produced in association with Dr. Ari Kiev of the Social Psychiatry Research Institute.

The snake handling tape looks at the Holiness Church, a fundamentalist religious sect in operation in West Virginia. Alternating between scenes of Sunday afternoon rituals and Dr. Kiev's explanation of what is taking place, the tape examines the reasons for and results of altered states of consciousness.

The West Virginia sequences, shot in color by Dr. Kiev, trace an afternoon's events, which begin with Reverend Turner, microphone in hand, urging his parishoners to feel the spirit of the Holy Ghost. As the momentum increases members of the church join him on stage where there is much dancing and chanting.

Ultimately spirits get sufficiently high that poisonous rattle snakes are passed among the participants without ill result. To prove that they've "got the spirit," individuals also place their hands in flames, and this proves to be an especially interesting sequence when we see one young man register pain, while the others display no sign of discomfort.

These scenes are interspersed with shots of Dr. Kiev who discusses the therapeutic value and universality of this type of practice.

Although the West Virginia scenes are victims of Dr. Kiev's less-than-exciting camera eye, the tape is interesting. And it becomes more so when the viewer realizes that there are individuals who have been killed handling these same snakes, thus adding voracity to the ritual taking place.

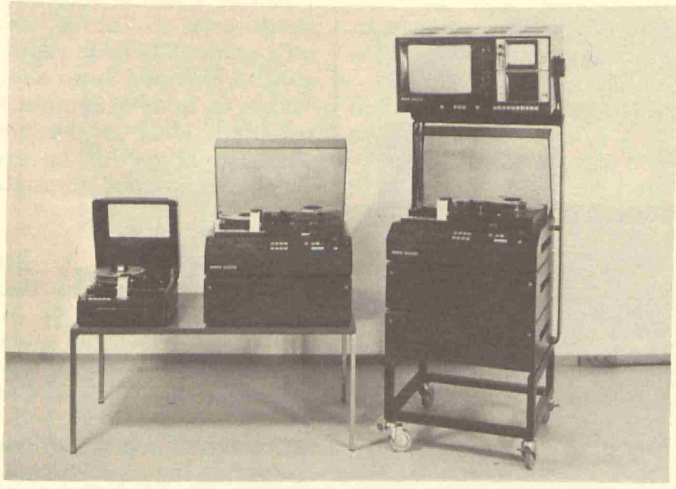
As part of a series aimed at professional and academic communities, the tape offers fairly technical explanations of the phenomenon. While not wishing to dispute Dr. Kiev's psychiatric expertise, this viewer was a bit disappointed by the strictly medical explanations that necessarily left some questions unanswered.

For example, when discussing the reasons that the flames did not burn people's hands, Dr. Kiev states that the changed state of consciousness can block out pain. The fact that the skin is unburned is dismissed with a general remark that something (never specified) happens leaving the skin unharmed.

Despite this shortcoming, the tape is compelling and should serve to broaden psychiatric horizons.

Additional titles currently available in the series are *Mastery of Stress—Chinese Martial Arts* and *Traditional Healing in Nigeria*. They can be obtained in color videocassette, half-inch reel-to-reel or 16mm black-and-white. Purchase price is $25 per program or $2,000 for a complete series of ten. The rental/preview price of $50 for two weeks is applicable toward purchase price. Circle 204 on reader card.

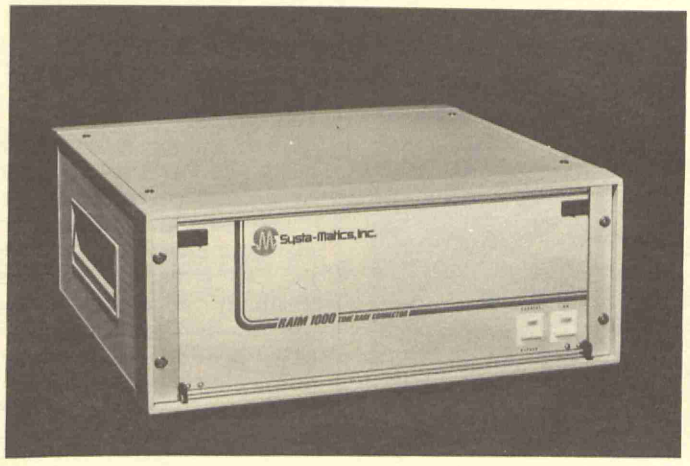
HARDWARE REPORT



RECORDING SYSTEM 301
The **Bosch Fernseh BCN** system is a new generation of broadcast-quality television tape recorders using the helical-scan technique, two video heads and the segmented-field technique on one-inch videotape. The three versions of the BCN system are: the BCN 40 that weighs 67 kilograms; the BCN 50 that weighs 107 kilograms and can be equipped with picture and waveform monitoring facilities; and the portable BCN 20 weighing 20 kilograms. The BCN 40 and 50 are designed to a modular building-block concept with each unit weighing less than 37 kilograms. All the BCN units are compatible with every standard tv and color tv system as well as with all types of editing systems.

TETRODE 308
RCA Electro-Optics and Devices has come out with the industry's largest air-cooled tetrode, rated at 55KW sync output. Designated type 4690, the forced-air-cooled beam power tube is applicable for both high and low band-VHF-tv service with 15 dB gain. The 4690 55KW system will cost approximately half the price of two 25KW transmitters and combiners, selling in the $3,200 to $3,500 range.

TIME BASE CORRECTOR 303
The RAIM 1000, a time-base corrector from **Systa-Matics**, Inc., features instant picture lock-up of no more than .250 second, full picture correction above and below the head switch and full correction within the window, while errors in excess of the window will not cause picture breakup. A floating signal window that automatically centers on the error, effectively doubling the window range for skew error is also provided. Operating controls of the RAIM 1000 consist of two switches: an "On-Off" switch and a "Correct-Bypass" control. Not designed to meet the requirements of the broadcast industry, the corrector sells for $2,995.



DISC RECORDER 314
The EFS-1 Frame Stor recorder from **Arvin/Echo** electronically stores stills on a flexible Discasette. Its major applications include: relief of the character generator overload, reduction of graphics storage, relief of telecine overload, protection of on-air trouble slides, and still storage and super effects for mattes. The EFS-1 system sells for $12,250.

PROJECTOR 305
The KVI Eye Beam is a new video projector from **Keyser Video** Inc. It is available in three models: the KVI-1, ceiling mount; the KVI-2, floor console on casters; and the KVI-3, which is a floor console with built-in ¾-inch color videocassette recorder/player. The standard screen is 32x40 inches with over 8.8 square feet of viewing area and a diagonal measure of 51 inches. The super screen is 40x54 inches with over 15 square feet of viewing area and a diagonal measure of 67 inches.

VTR 302
The **Ampex Corporation** has introduced a new helical videotape recorder with an automatic-scan tracking (AST) system that can provide broadcast-quality slow-motion and still-frame playback. The VPR-1 teleproduction recorder is designed for professional broadcast, CCTV and postproduction users.

With the optional Ampex AST accessor, the special scanner assembly provides fully automatic tracking, still-framing, 1/5 speed and manual frame-by-frame jogging for simplified editing. Prices for the VPR-1 begin at under $20,000.

IMAGE ENHANCER 309
A television image enhancer for educational and industrial use has been developed by **Corning Glass Works'** Memory Products Department. The series 7000 has been designed for use with cameras that often operate under marginal lighting conditions and that do not produce high-resolution pictures. The unit features a choice between table-top or rack-mounted models, front panel horizontal detail control for maintenance of horizontal and vertical balance and limiter circuits that permit full enhancement without blooming or sync interference. A full two-line vertical contour unit, the series 7000 is priced at $1,750.

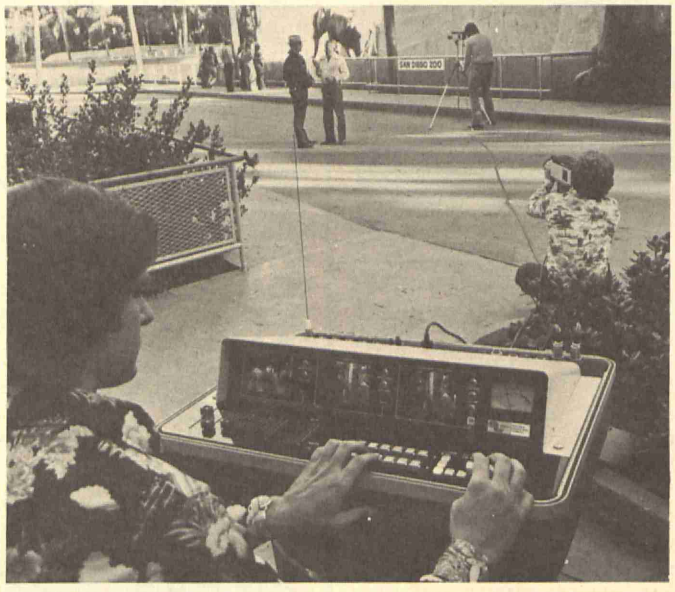
MONITOR **315**
GYRR Products new video monitor offers better than 500 horizontal lines of resolution. Designed for time lapse, the G 99 is compatible with nearly all available television equipment. An automatic horizontal phase control optimizes the unit for time lapse use.

FOR EDITING **304**
The Tempo '76 series from **Datatron,** consists of five systems with graduated sophistication. The series makes it possible to add SMPTE Time Code capability to a basic Datatron Control Track editing system. This new equipment provides the basic Control Track unit for $7,600 and allows the user to add on SMPTE Time Code capability with two SMPTE readers. The editor acts as a complete editing system whose primary function is to control vtr's in the assembling of electronically edited masters. The unit can also be used for automatic cueing and on-air playback. It can function equally well using standard SMPTE Edit Code or the standard Control Track pulses.

PRODUCTION CONSOLE **306**
Television Research International's portable color production console, the PPC-1, includes a 5-inch color trinitron monitor for program monitoring, two 5-inch monitors for multicamera preview monitoring, a six-input vertical interval switcher, a five-input audio mixer, sync generator and all necessary intercom amplifiers, pulse distribution amplifiers, etc.

The two preview monochrome monitors and trinitron color monitor are positioned for correct operator's viewing and are shielded by a neutral-density shade filter to allow glare-free operation in full sunlight. The broadcast vertical interval switcher features solid-state crosspoints, input clamping, mixing amplifiers, heavy-duty fader bars, Clare-Pendar switches and modular electronic construction. The two-bus, six-in-out switcher features built-in black burst and insert video keyer for insertion of titles, etc. The switcher is capable of desolves to and from inserts.

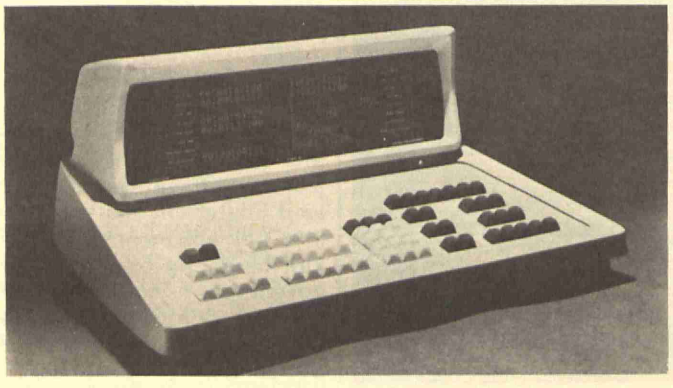
The PPC-1 is self contained in a 3-suiter sized suitcase and may be AC or DC powered for field operation. It sells for $12,500.



EDITOR **313**
CMX's system 340X is an expandable videotape editing configuration. It features look-ahead cue and pre-roll functions allowing the record vtr to operate in continuous motion during many editing operations. Instead of placing all logic and control in the central processor, separate intelligent interfaces (microprocessors) are used for each machine plugged into the system. Because the 340X uses intelligent interfaces, CMX can now inter-marry control and mix quad and helical vtr's, video discs, synchronous audio recorders and switchers of many varieties.

At the heart of the system is an interactive keyboard display and computer unit that generates signals, questions and responds to the operator's commands and replies. The computer's memory logs all edit decisions made during the course of an edit session. This decision list can be outputted to a punched tape or other command medium for future auto assembly.

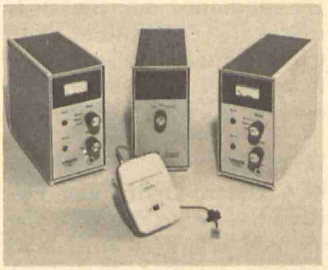
The 340X also offers list management that appears on the CRT screen. This allows flexibility in re-structuring the edit decision list permitting single edit decisions or entire time blocks to be deleted, resequenced or otherwise manipulated.



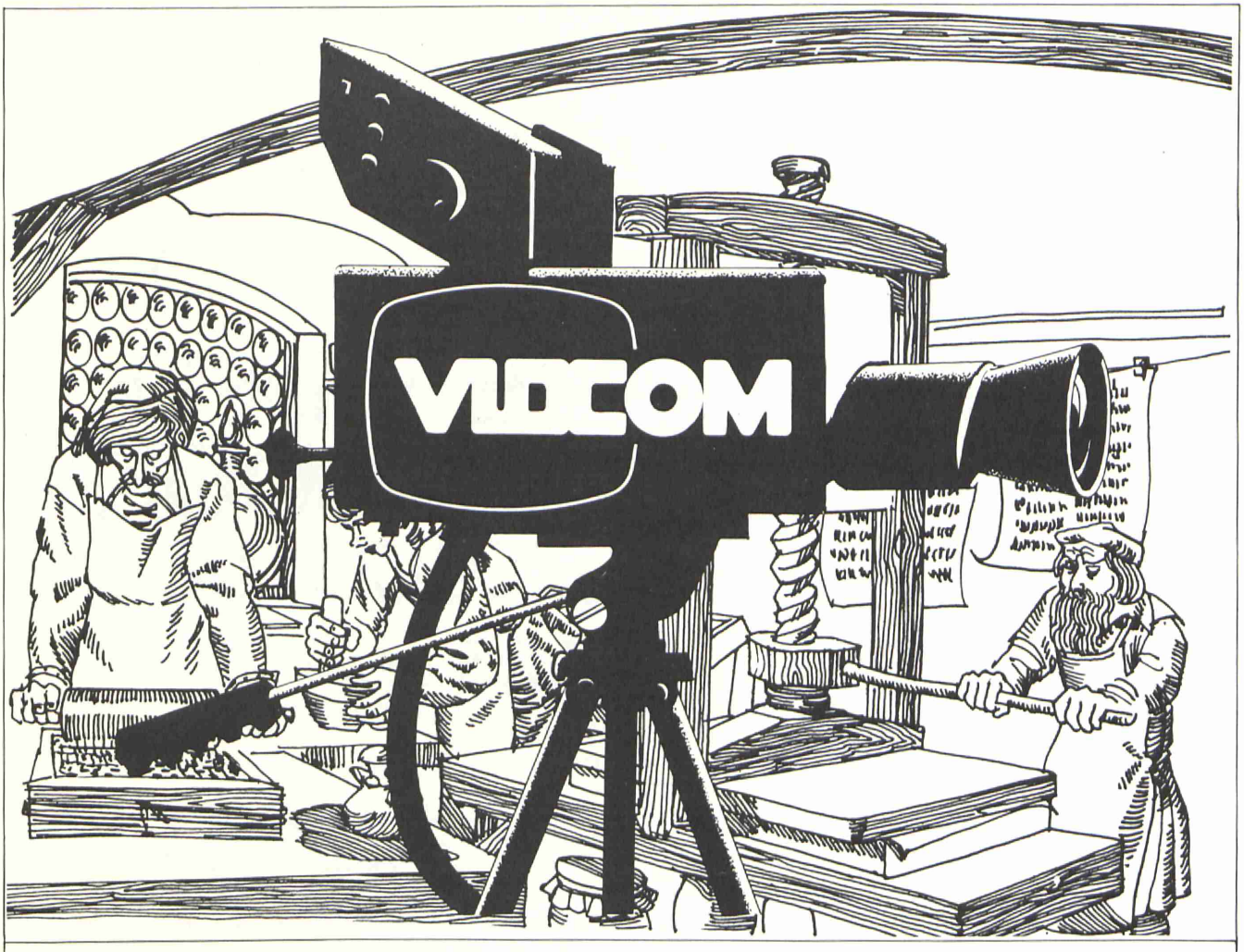
CONVERTER **311**
The Digital Intercontinental Conversion Equipment (DICE) from **Marconi Communication Systems Limited** was designed by engineers of the U.K. Independent Broadcasting Authority. It will convert 525-line NTSC color television pictures as used in the United States and Japan to 625-line PAL standards used in Europe, and vice versa. A SECAM output can be provided as an alternative to the PAL output if required. DICE is the first standard converter to use digital techniques throughout.

LIGHT METER **317**
The **Power-Optics** new dual purpose light meter is designed for television studio use. It is calibrated by low- and high-range buttons. One range covers 0 to 50 fL, and is calibrated to suit faster light for setting the peak white on color and monochrome monitors. The other is scaled from 0 to 10 fL, and is calibrated for continuous light so that it can be used for rapid checks and comparisons of set lighting.

MICROPHONES **316**
The Diversity Wireless microphone system from **VEGA** uses the VEGA PRO series transmitters and receivers in a diversity reception mode designed to eliminate all fades and dead spots caused by interference between direct and reflected radiation that cancel, resulting in loss of signal. In the diversity setup, two VEGA PRO receivers, placed three feet or



more apart, both receive the transmissions. Both receivers feed a model 62 diversity combiner that selects the receiver with the best signal strength within microseconds. The system is composed of models 54 or 55 transmitter, two model 58 receivers and model 62 diversity combiner.



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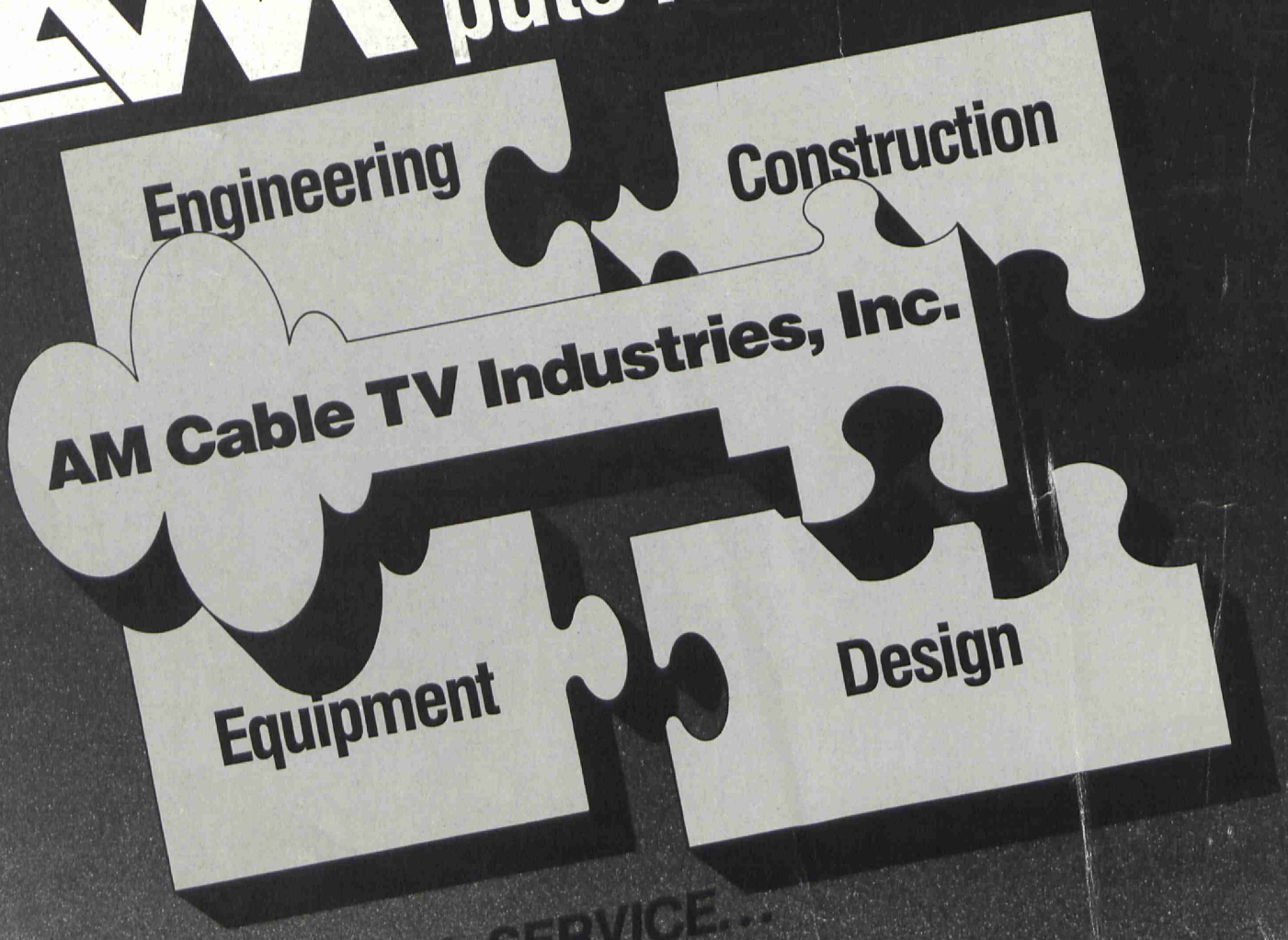

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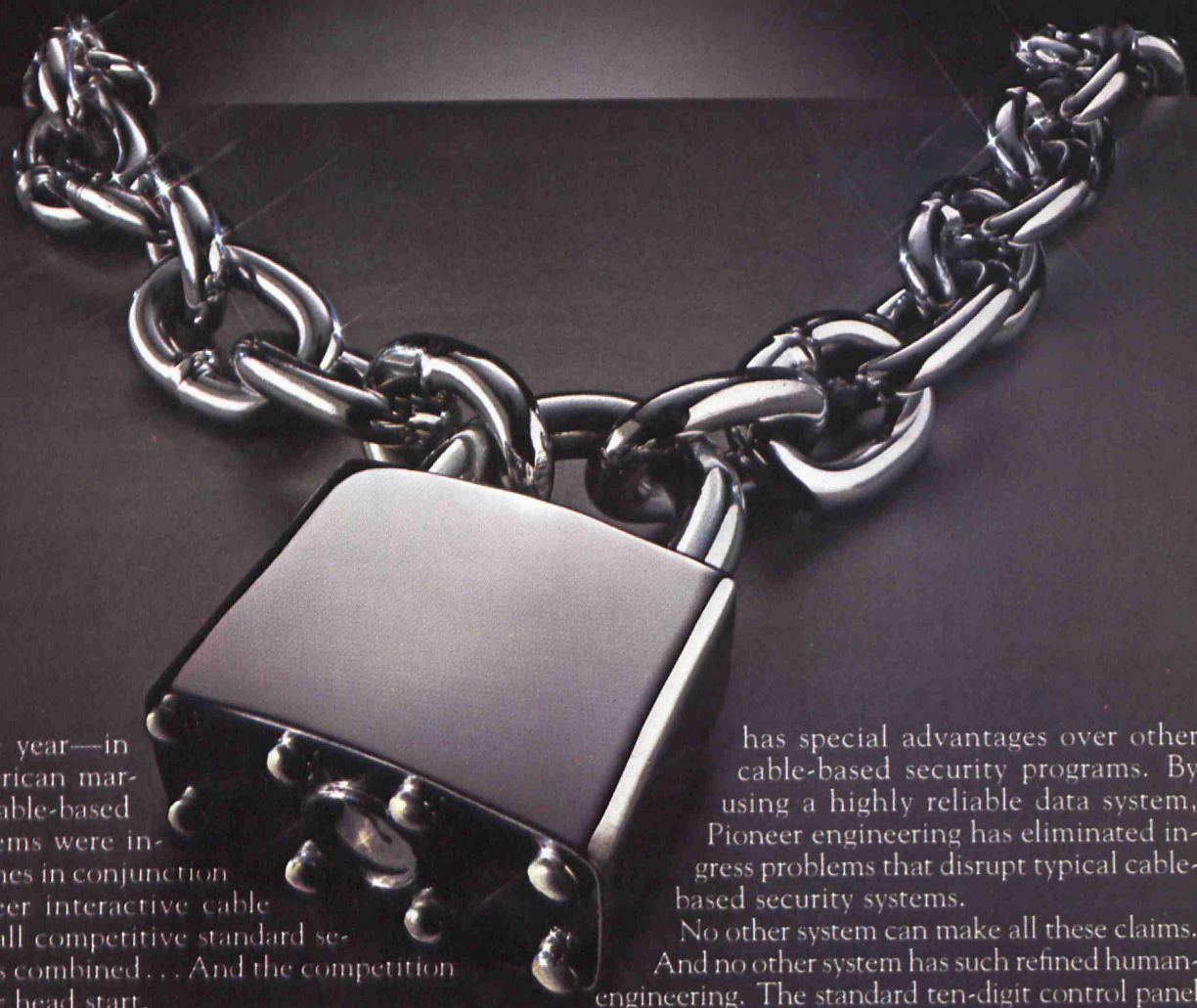

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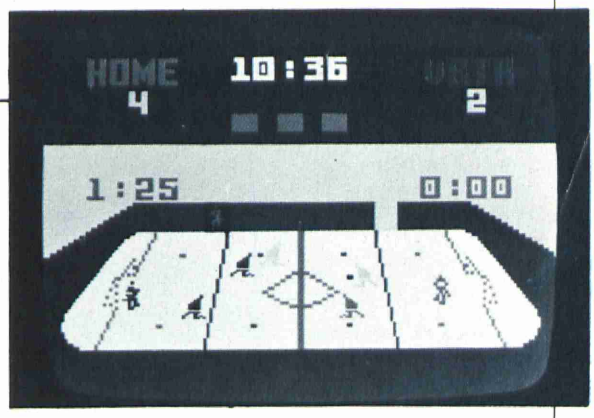

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LETTERS

Bully for You

Frankly, I very infrequently correspond with magazine publishers regarding editorial content; however, your article, "Too Much to Take," has prompted me to temporarily abandon my usual approach.

As you will recall, this article was printed in the April 13, 1981, edition; it took Ted Turner to task for his failures in the human relationship area.

You are to be commended. Criticism of his verbose, vain, self-aggrandizing is long (or should I say has been) long over due.

We here at Superior tip our collective hats; had I been writing to you fifty years ago, I would have said "bully for you."

Philip W. Collins, Sr.
Chief Executive Officer
Superior Installations, Inc.

At Last

I want to thank you and Jeri Baker for the recent story on low-power television. For months I have been trying to find a clear and concise summary of the subtleties of the issues. I no longer have to look. I thank you and my files thank you.

Jonathan Dana
Vice President Programming
Atlantic Television, Inc.

More on Sports

I am very disappointed that in *CableVision*'s May 11 cover story on cable sports, Black Entertainment Television was left out entirely.

Starting last September, BET began coverage of black college football and basketball from some of the nation's historic black colleges. We carried ten football games, including the popular Bayou Classic from the Super Dome in New Orleans before 75,000 fans, and nine basketball games, featuring some of the best teams in the country—Grambling, Alcorn, South Carolina, etc.

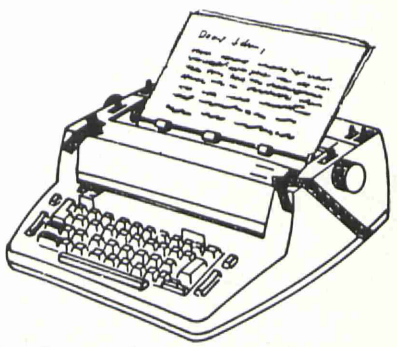
Of particular importance is the fact that BET's coverage of these games marks the first time these NCAA colleges have received national television distribution, either by the three networks, or any other cable service. It is no secret that a large number of professional black players come from these schools, but until BET began telecasting these games, neither the teams or the players were receiving the national exposure they warrant.

BET's presentation of black college sports not only gives our viewers some of the best in top notch sports, but we also highlight the academic achievements of the schools involved by each week interviewing either the school president or spotlighting student body activities. In fact, our basketball series has been nominated for a 1981 ACE Award!

Additionally, and again for the first time, black college tennis will receive national distribution when BET presents in June and July the Michelob Light Black College Tennis Classic from Grambling University. We are covering the mens and doubles finals.

As we plan for our 1981-'82 football and basketball season, we anticipate increasing the number of games we will televise, as well as look to other equally exciting black college sporting events. Be assured we will keep *CableVision* informed of our activities.

Vivian E. Goodier
Executive Vice President
Black Entertainment Television



On Target

Your (Barbara Ruger's) editorial dated March 16, 1981, on "Cable's Threat to Advertising Agencies" is a classic. You are 100 percent on target with your comments.

Fortunately, there are more and more agency personnel who are starting to work with cable. I hope you can't write the same article a year from now.

George Babick
Vice President/Sales Manager
Cable News Network

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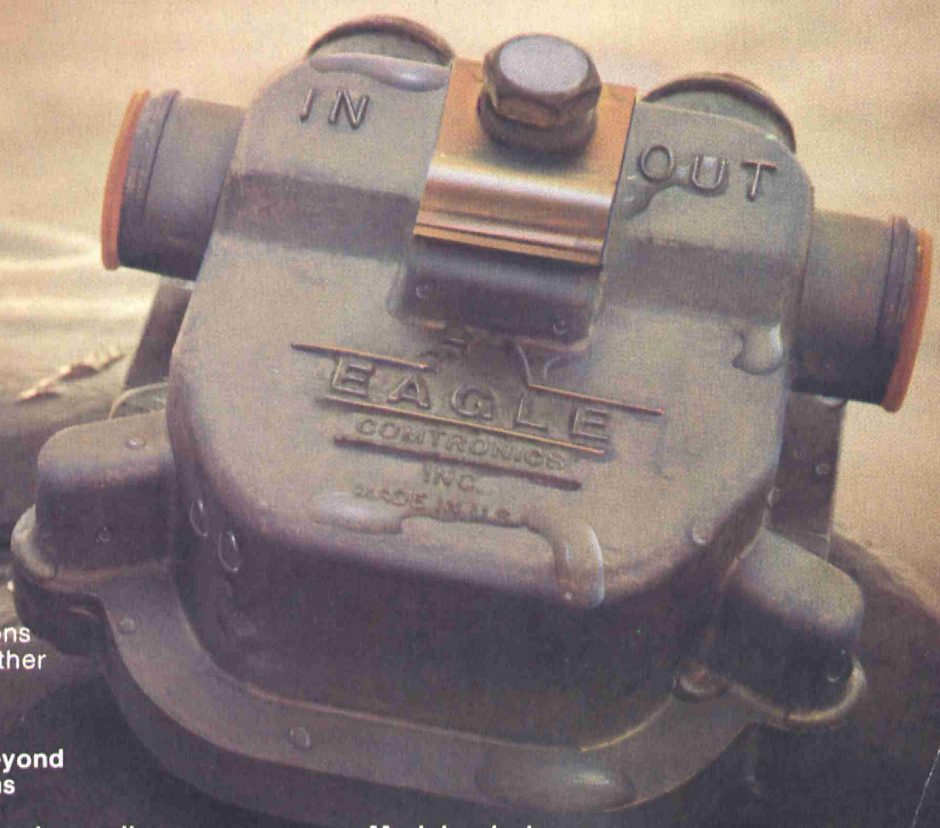

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- **Easily adjusted for aerial or pedestal mounting**
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- **Available with either clear iridite or E coating**
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COLOR CODE	orange	gold	white	black	green	purple	yellow	red	silver	blue
TAP LOSS										
INSERTION LOSS										
5 MHz		2.2	1.2	.5	.4	.3	.2	.2	.2	.2
300 MHz		2.7	1.4	.7	.5	.4	.3	.3	.3	.3
400 MHz		3.1	1.6	.8	.6	.5	.3	.3	.3	.3
450 MHz		3.2	1.7	.9	.7	.6	.4	.4	.4	.4
500 MHz		4.5	2.0	1.1	1.0	.9	.7	.7	.7	.7
ISOLATION- out to tap										
5 MHz		30	32	34	40	43	46	49	52	55
300 MHz		30	32	34	38	41	44	47	50	53
400 MHz		28	30	32	35	38	41	44	47	50
450 MHz		25	27	29	32	35	38	41	44	47
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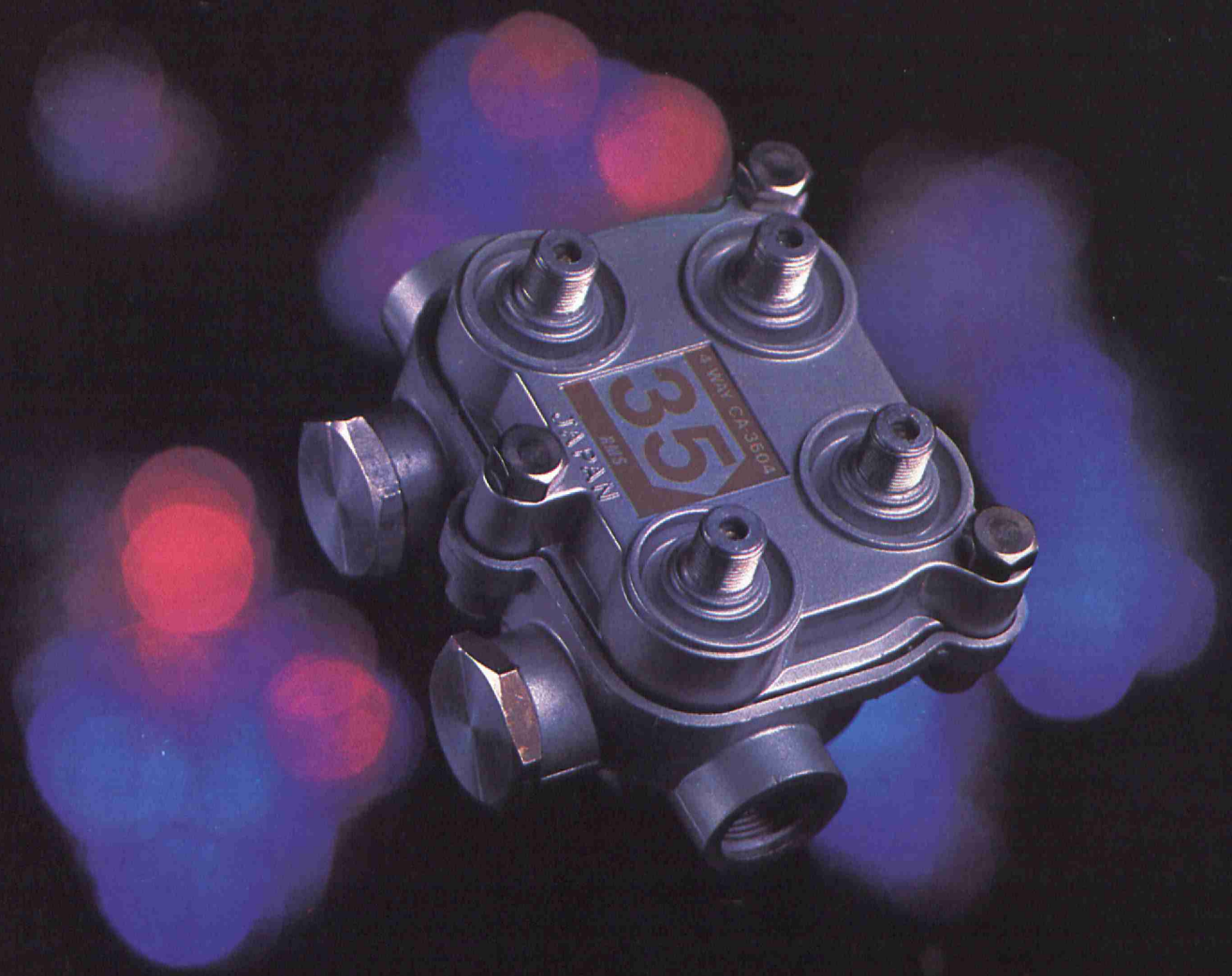

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Do We Have To Take It?

TOCOM President Mike Corboy reports that the Dallas-based firm, which specializes in two-way equipment, has money problems. TOCOM just can't decide whose money to take. "The banks are almost pushing money at us," Corboy says. "One New York bank is offering to finance an individual project of ours. This is a total reversal of the 1970s. And, I would expect this situation to last for at least five years." On the other hand, Corboy says "The market offers us cheap money. We are thinking of going out for another equity offering this fall for between $10 million and $20 million."

The BETA President Is Coming

Hearst/ABC Video Services has apparently made its decision on who will be president of its upcoming BETA women's programming service, now set to begin next January. According to Hearst Cable Communications President Ray Joslyn, the cable industry will hear all about the company's choice before this week is out. "We still have some elements to finalize as we go from a handshake to a firm agreement," Joslyn told *CableVision*, "but we're just about set. We're very pleased, and we think people in general will be pleased with the choice." Joslyn declined to say whether the person soon to take charge of BETA was picked from within the cable industry.

No Black Tie

It's official—no mandatory black tie and no *Queen Mary* for CBS Cable's event during opening night of the NCTA convention in Los Angeles. Searching around for a land-oriented way to wine and dine operators and get its cultural message across in subtle fashion, the soon-to-be-launched service opted for several sections of Los Angeles' Museum of Natural History for its nighttime festivities. Repeating its Western Show philosophy of matching the entertainment with the surroundings (and the type of shows the service intends to do), CBS has lined up another array of talent, going from music players to mimes. Unlike the Western Show, where everyone knew Sarah Vaughan would be on hand to perform, the service is keeping any special guests for NCTA a surprise until showtime. For those who want to exchange a peek at the 17th century artwork for 20th century footwork, a dance band will be around to perform until late evening. As for formality, Marketing Vice President Charlotte Schiff-Jones says most attendees will have their tophats and tails on anyway. "We dropped the mandatory status this time as a courtesy to those who found it an imposition," she said. "But I have a hunch that most people will continue the black tie tradition."

Premiere Plods On

Still without a consensus of how, if at all, to approach the Justice Department with a new pay network plan, Premiere last week was said to have been abandoned by the first studio to leave the ship. "Paramount seems weak in incentives to go on," acknowledged network Chairman Burt Harris, "but there has been no formal withdrawal." All studio management is considering such issues as the slack theater business, the greater size of the immediate pay TV payoff to be left behind if films were to be held for a proprietary network, and the shrinking number of titles to which studios own pay TV rights weighed against the increasing number needed to counter-program competing networks, according to Harris. Nine people are still on the Premiere staff, Harris and Marketing Vice President Ken Castell among them.

Five Years To Live

From the way management is negotiating with the striking writers guild, Mel Shavelson, president of Writers Guild of America West, gets the impression that management thinks broadcast television as it now exists will be dead in five years. "Incredible as it may sound, judging by their response to our proposals, management has decided to write off movies and network TV completely," said Shavelson. "They're writing off television as it is today, because they know it is only going to be around five more years. They'll do their best to stay in the business with reruns, reissues, and runaway productions. Remember that MCA [now MCA-Universal] at one time was the largest talent agency in the world. When they acquired Universal, they had to make a choice because of the antitrust laws. They threw out the largest talent agency in the world to get into television. Now they're making the same choice as far as theatrical motion pictures is concerned to get into pay TV." Shavelson also sees a connection between this trend and Marvin Davis' interest in acquiring 20th Century-Fox. "Fox was first to put movies on cassettes simultaneously with theatrical release. Now I wouldn't be surprised if they find a way to get movies into cassettes first. That's the plum. That's why Davis is spending his money on that particular company," said Shavelson.

Down For the Count

The less than one-minute-long Monday night heavyweight boxing bout between Gerry Cooney and Ken Norton was not exactly the pinnacle of fisticuffs. It did, however, cause some fireworks between ABC and the Cable News Network. ABC was miffed for two reasons: first, the network had rights to rebroadcast the fight and had scheduled it to be aired on *Wide World of Sports* the following Sunday. But since the heavyweights were only 54 seconds into the bout when Cooney pasted Norton to end it, there was hardly anything to show. It's difficult to sandwich too many commercials into a 54-second event. Second, ABC charged CNN with pirating the bout off the live Home Box Office feed, an action that would further dilute the Sunday audience. CNN President Reese Schonfeld refuted the charge by saying that CNN has an agreement with HBO that allows the all-news network to take one minute of any of the fights HBO transmits and use the tape on the network. Schonfeld said that it wasn't his fault that it only lasted 54 seconds.

Copyright Owners Take Arguments On Compulsory License to Congress

WASHINGTON, D.C.—The complex dilemma over what to do with the cable compulsory license was thoroughly batted around May 14 before several members of the House Subcomittee on Courts, Civil Liberties and the Administration of Justice. This first of two scheduled hearings quickly turned into a forum for the proponents of abolishing the structure that governs copyright payments for transmitting imported distant signals.

A trio of prominent witnesses reiterated their often-repeated stance in favor of eliminating the compulsory license: Jack Valenti, president of the Motion Picture Association of America; Bowie Kuhn, commissioner of Major League Baseball; and Vincent Wasilewski, president of the National Association of Broadcasters.

Valenti opened the testimony by railing against the inequities of the current copyright mechanism. He asked Congress to do two things: "respect the rights of property owners" and "establish competition in the television marketplace that isn't there now." In explaining these requests, Valenti produced a string of figures and a series of charts to support his claims. He stated that "ten companies control 50 percent of all the cable subscribers" and "50 companies control 75 percent of all the subscribers."

He then stepped up to a chart that compared the rate of return on equity of cable companies with the same figures for the *Fortune* 500 companies.

"Fifty-five percent of all cable systems have a 20 percent rate of return or more," Valenti said. "The *Fortune* 500 companies only make 14.4 percent."

"The bottom line," he said, "is that cable makes a very, very handsome profit."

Valenti then finished his financial litany by saying that, in return, cable systems pay only 1.2 percent of their expenses for copyright fees. "Should these profit-making companies be subsidized by Congress?" he asked.

Before allowing anyone to take a stab at Valenti's rhetorical questions, the hearing proceeded to the second witness, Bowie Kuhn. Kuhn stated that the "valuable and cherished properties" known as professional sports events have "indeed subsidized the cable industry."

"I find it ironic," he continued, "that we in professional sports are continuing to subsidize cable at a time when we are struggling very badly to make ends meet."

Kuhn maintained that cable programmers very actively promote sports events such as those delivered over superstations, but "pay us nothing . . . for the sports they purloin." He asked that Congress provide baseball with "territorial exclusivity" and protect professional sports franchises from the "destabilizing impact" of cable systems importing sports events through distant signals.

The final witness, Wasilewski, expressed his concern for the impact of the compulsory license on broadcast stations. "The compulsory license does give cable systems an unfair advantage not only over their broadcast station competitors but also over any other video programming service."

"The marketplace should be permitted to function freely unless there are compelling public interest reasons dictating governmental intervention," he said. "Thus, we urge that cable carriage of distant signals no longer receive the special treatment accorded it by the present compulsory license.

"However," Wasilewski added, "we would suggest that you also require carriage of all local signals [on cable systems]."

After the trio of witnesses had completed their prepared testimony, the subcommittee members asked some

NEWSWIRE

SAN DIEGO, CALIFORNIA—Oak Communications, Inc., a subsidiary of Oak Industries, Inc., **has** agreed to the **purchase** of its **second cable system.** Oak will purchase Castro Valley Cable TV which serves 2,000 subscribers in Alameda County, California. Completion of the transaction is expected in July. Oak, a veteran supplier of cable hardware and owner of five STV operations, acquired its first cable system (Oxnard, California) last fall.

NEW YORK, NEW YORK—The **United Artists Theater Circuit**, Inc., **has accumulated 298,800 shares** of the 735,000 shares **of UA-Columbia Cablevision**, Inc., stock it seeks in order to increase its current 27.6 percent holdings in the company to just under 50 percent. UA-Theater Circuit issued a $90/share tender offer, conditional on getting that amount last month in order to increase its voting power in the company, and thereby defeat the $80/share offer made by Knight-Ridder Newspapers, Inc., and Dow Jones & Company. Knight-Ridder, Dow Jones and UA-Columbia, however, have already sewn up about 1.83 million of the company's 3.3 million outstanding shares, preventing them from being tendered under UATC's offer. Meanwhile, the Theater Circuit has obtained a June 1 hearing on its claim for relief against the three other companies in the Delaware State Chancery Court. In proceeding with its intent to accept the Knight-Ridder/Dow Jones offer, UA-Columbia Cablevision sent a proxy statement to the FCC for approval last week.

NEW YORK, NEW YORK—Xerox Corporation has revealed that it **will drop its plan for the multi-million dollar Xten data communications radio network**. The company, which has been fighting increased competition from overseas suppliers in the domestic copier market, said economic considerations caused it to cancel the project. Xerox said, "Other demands on the company's resources, combined with the substantial level of investment required to implement Xten in today's uncertain economic environment of high interest rates and inflation have diminished the attractiveness of the Xten investment . . ."

WASHINGTON, D.C.—The National Cable Television Association has confirmed **plans to conduct a teletext experiment** next month in New York. According to an NCTA spokesperson, the test, to be conducted at Viacom Cablevision in Long Island, will **help determine the association's position on teletext standards in the U.S.** A preliminary report on the test is expected to be completed by the end of next month. Also jumping on the teletext

pointed questions. Representative Harold Sawyer (R-MI), questioned the witnesses one by one, pointing out what he perceived as inconsistencies in their statements. He told Wasilewski that it did not seem fair to ask for abolition of the compulsory license on one hand and then demand compulsory carriage of broadcast stations on the other.

Sawyer then turned to Kuhn and said, "I suppose even Exxon could lose money if it paid all of its employees $500,000 a year." He questioned the logic of franchise owners "bidding themselves out of profits," by paying exhorbitant salaries to professional baseball players.

The final target of Sawyer's questioning was Valenti. "I noticed there aren't any figures on what your clientele earn," he said.

Valenti responded by saying there was an inherent difference between the large cable companies and the movie producers. "We are not shielded from competition," he said. "I'm very congenial to profits, but you shouldn't shield or put under glass a profit-making company."

Representative Barney Frank (D-MA), who has introduced legislation that would abolish the compulsory license (see p. 50, "Government and Law"), also noted the inconsistency in Wasilewski's position. "Compulsory carriage seems to me like compulsory watching," he said.

After a good deal of debate between the Congressmen and the witnesses, Subcommittee Chairman Robert Kastenmeier (D-WI) said that it seemed as though "the main perpetrators are the distant signals." He suggested that perhaps the entire issue could be settled by "reforming the Copyright Royalty Tribunal to make it work better."

"We've got a tough job ahead of us," Kastenmeier said. "Whatever we do, we've got to give it more thought than the CRT was given [when it was established by the Copyright Act of 1976]."

The second hearing on the compulsory license is scheduled for May 21. On that date, the cable industry will be given a chance to state its reasons for retaining the current structure. Scheduled to testify are Monroe Rifkin, chief executive officer of ATC; Thomas Wheeler, president of the National Cable Television Association; and Steve Effros, executive director of the Community Antenna Television Association.

—David Price

RCA Joins Up with RCTV To Produce Cable Programming

NEW YORK, NEW YORK—RCA Corporation's intent to enter the cable programming field, signaled by the remarks of outgoing Chairman Edgar Griffith two weeks ago at the company's annual shareholders meeting, (CV, 5/18/81, p. 15) was made official last week. The parent company of NBC will join its rival network broadcasters, ABC and CBS, in the cable programming business through a joint venture with Rockefeller Center's upcoming pay service, The Entertainment Channel. RCA will work with RCTV as co-developer and operator of the service, targeted to debut next January.

Further details regarding the venture are being held off by both companies until a press conference next week at the National Cable Television Association convention in Los Angeles, where RCTV will make its official debut as an exhibitor. But sources at RCA and RCTV have confirmed to *CableVision* that RCA executive Herbert Schlosser will play a key role in the service's development, along with RCTV head Arthur Taylor, the former president of CBS. Schlosser, currently handling the bandwagon last week was NBC, which announced plans to file with the Federal Communications Commission for permission to conduct an experiment of the Antiope teletext system this fall. If approved by the FCC, the test would be conducted at KNBC/Los Angeles, one of the network's owned and operated stations. Antiope, the teletext system developed in France, is also being touted as the U.S. standard by CBS, which filed a petition with the FCC to that effect last year.

WASHINGTON, D.C.—The United States Court of Appeals for the District of Columbia has affirmed the FCC's jurisdiction over pole attachment regulations. The decision was viewed by cable industry representatives as a major victory. The case was brought before the court by several utilities arguing two points: first, that the FCC had no jurisdiction to regulate pole attachment contracts that existed prior to February 1978, when the federal pole attachment law was passed; and, second, that the FCC was wrong in determining that Congress intended that cable companies should pay for only the space on a pole used specifically for cable attachments. "The court affirmed the FCC's regulation and instructed the FCC to proceed with its regulation of pre-existing contracts," said Jay E. Ricks, a Washington attorney who represented the cable interests in the case. "It was a clean sweep." In order to appeal the decision, the utilities would have to seek review by the Supreme Court. "I do not believe the Supreme Court would take this case," Ricks said, "so this is probably the end of the road." Tom Wheeler, president of the NCTA, was also encouraged by the decision. "We're pleased the court agreed with our position that the FCC has been properly serving as a forum to consider and resolve unfair pole attachment charges imposed by utilities," Wheeler said.

NEW YORK, NEW YORK—Home Box Office and U.S. Cablesystems, a wholly-owned subsidiary of Rogers Cablesystems, **have agreed to introduce Cinemax corporate-wide**, according to Rogers' vice president for U.S. operations, Robert Clasen and HBO's vice president of affiliate relations, Peter W. Frame. U.S. Cablesystems' commitment of all of its five systems will put Cinemax in front of almost 400,000 homes. The system operating in Syracuse, with 33,000 cable subscribers and 25,000 HBO subscribers, introduced Cinemax in March 1981. Newbuild franchises where Cinemax will be introduced within the next year are the suburban Los Angeles cities of Huntington Beach, Westminster, Fountain Valley, and La Mirada, plus unincorporated areas of Orange County, which have a combined total of 130,000 homes passed; the city of Portland, Oregon with 130,000 homes passed; and the southwest suburbs of Minneapolis with 63,000 homes passed.

programming end of RCA's recently-launched SelectaVision videodisc system, will reportedly handle similar chores under the joint venture.

RCA, in tandem with NBC, has been exploring the feasibility of entering the cable programming arena for some time, reportedly rejecting the lead of CBS and ABC in attempting advertiser-backed services for the pay route. That contention is challenged by A.G. Becker media analyst Tony Hoffman, who says the company may have more up its sleeve to unveil.

"This is probably going to be the first shoe dropped by RCA in regards to cable programming," Hoffman told *CableVision*. "If they are going to make a move in this area, you know that they're going to get in with both feet," said Hoffman. "They're going to follow the lead of CBS and ABC in offering ad-supported services, but they feel that both networks are barking up the wrong tree, in offering cultural fare that way.

RCA seems to believe that an advertiser-supported service needs a much larger profile than the one cultural programming offers. Although they've announced a pay service, they're probably going to try to move as quickly as they can in getting a basic service off the ground."

Announced last December at the Western Show, The Entertainment Channel will present feature films and original programming in several categories, including performing arts, comedy and children's shows. A sizeable portion of the product to be offered on the service will come from the British Broadcasting Corporation, through a long-term agreement giving the service first rights on BBC product. The agreement was reached last fall. Overall, according to Taylor, $25 million will be spent on programming for the service's first year of operation.

According to RCA Executive Communications Vice President Leslie Slote, NBC affiliates were informed of the venture before the deal was officially announced, adding that the network would not play a part in the venture. The venture is expected to be a hot topic of conversation this week among the affiliates, when they gather for their annual meeting in Los Angeles.

The joint venture also has industry executives speculating about how RCTV will approach negotiations for a transponder. At the moment, no transponder has been lined up by the service, but RCA's entry into the picture will in all likelihood change all that, with dollars to spend and the company's Americom division getting ready to award slots for the remaining space on Satcom IV, due to be launched this fall.

Hoffman speculates that "RCTV will probably establish an arms-length relationship with the satellite people, similar to the way General Motors handles its Pontiac and Chevrolet divisions, as separate entities. Both companies will do their best to keep things separate, but the dollars will eventually go in one pocket and out the other. It's unclear how the Federal Communications Commission will react to this."

But even if they don't use RCA's transponder space, Hoffman adds, a quick placement on a satellite before the scheduled launch date is all but assured. "They can outbid everybody now if they want, because they have the dollars," he said.

—Simon Applebaum

Fowler Receives Senate Confirmation

WASHINGTON, D.C.—By unanimous consent of the United States Senate, Mark S. Fowler was confirmed as President Reagan's appointee to the Federal Communications Commission May 14. Earlier this year, Reagan announced his intent to name Fowler as commission chairman after he cleared the confirmation process.

Fowler was initially nominated in March, but several delays occurred before the final confirmation. Most were attributed to governmental red tape; however, a story that was reported in the *Washington Star* two weeks ago caused a final protraction of the confirmation process.

According to the newspaper, Fowler's law firm, Fowler and Meyers, was being sued for malpractice by a group of Florida businessmen who had hired the firm to represent them in applying for a radio station. Fowler's firm had sued the businessmen for failure to pay a $14,000 legal bill. In response, the businessmen filed the countersuit.

Although Fowler denied any malpractice, Senate Democrats, led by Ernest Hollings of South Carolina, delayed the confirmation until they could review the case. Apparently, they found no evidence to withhold confirmation.

In *CableVision*'s NCTA convention issue (June 1), there will be an exclusive interview with Fowler.

Turner Files Suit Against Networks; Calls for "Decent" Programming

WASHINGTON, D.C.—The incorrigible Ted Turner aimed his salvos at the major broadcast networks at a press conference here May 11. When the smoke had cleared, the president of Turner Broadcasting had launched a blistering denunciation of the network's "predatory and illegal practices" and called for a Congressional investigation of network programming.

At the same time, Turner's Cable News Network filed suit against ABC, CBS, and NBC, alleging that the networks had violated antitrust laws with their practice of "pooling" news coverage. Not content to stop with the networks, Turner included several other notables in the request for injunctive relief: President Ronald Reagan, White House Chief of Staff James Baker, and Deputy Press Secretary Larry Speakes.

Turner's complaint stems from the practice of pooling used for covering certain events. One of the networks is responsible for setting up and operating the lights and videotape equipment. The other networks share the footage.

According to the suit, "The basis for participation in a pool and the manner in which pool coverage will be accomplished are determined by the network defendants.

"Membership terms for participation in pool coverage are often made so onerous as to effectively preclude participation," the legal action continued.

Beyond simple exclusion from the pool, the unique methods of CNN have exacerbated the problem. The networks generally use only a brief portion of the

(Continued on page 17)

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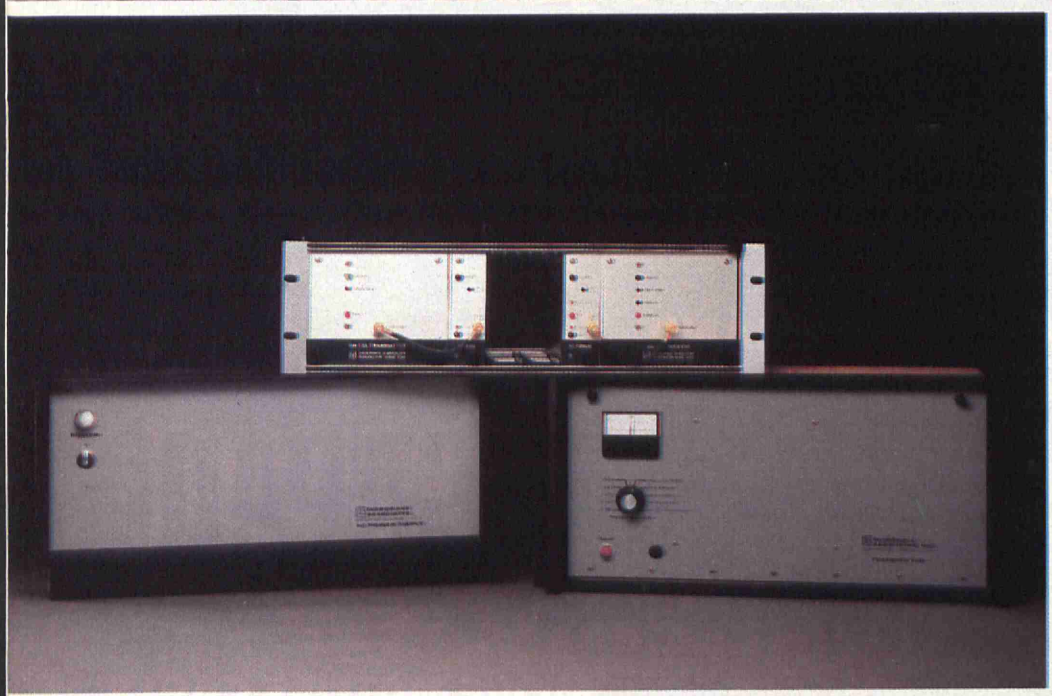

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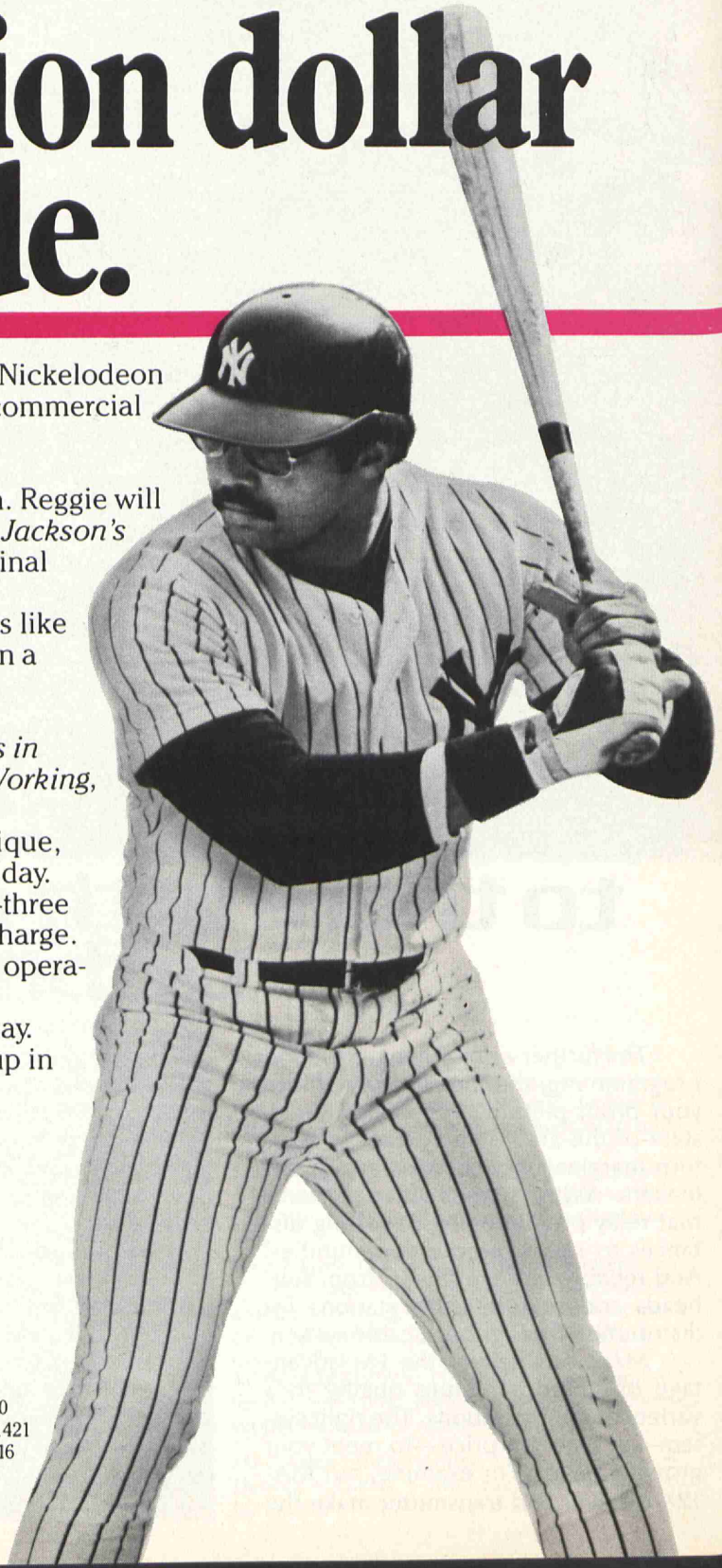

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(Continued from page 12)
tape for the evening newscasts. By contrast, CNN likes to go live at these events and the results are often catastrophic, according to Reese Schonfeld, president of CNN.

"For example," Schonfeld said, "ABC will rack and focus the lens while we're on the air. We go live all the time, and we have different needs."

According to the CNN president, he was given conflicting information when he tried to solve the problem.

"The White House says it is the networks; the networks say it's the White House," Schonfeld said.

So, in order to end the run-around, CNN named both the White House officials and the networks in the suit.

"All we really want to do is to be able to cover the news completely and accurately," Turner said at the press conference. "No one should be able to abridge our constitutional right to do that. Our action is not aimed at the President himself, but rather at a relatively new White House policy apparently developed by his staff that seeks to limit access to news events to a select few. This policy flies in the face of everything America stands for."

The lawsuit, filed in the U.S. District Court for the Northern District of Georgia, claims 16 "unlawful and predatory practices" by the networks, including, "treating CNN in a discriminatory manner . . . failing to inform or misinforming CNN as to the establishment of pools . . . and knowingly providing CNN pool material not suitable for its needs."

"An intent of this combination and conspiracy has been to disrupt and destroy CNN's operations and to preserve the network defendant's monopoly over the market for the production of television news programming," the suit alleged.

The White House had no comment on the suit.

NBC officials in New York issued a brief statement regarding Turner's allegations.

"Pool material has always been available to anyone wanting it, including the Cable News Network," an NBC spokesman said. "CNN has always gotten the material for charges far below cost. CNN has not been thwarted in any way in providing news coverage and we believe its suit lacks merit."

After his discussion of the pooling problem, Turner moved on to the "indecency" of network programming.

"I am also calling for a congressional investigation into the programming practices of the three major networks and the theatrical matter of the motion picture industry for the purpose of determining whether they have had a detrimental effect on the morals, attitudes and habits of the people of this country," Turner said.

In response to a question about what proof there was that network programming was detrimental, Turner likened the matter to the widespread use of pesticides. He said that several years ago, it was common practice to "spray the country" with DDT. Only years later was it discovered that the pesticide was killing "eagles and pelicans," Turner said.

"Current programming by the three major networks is polluting the minds of our people," Turner said. "There needs to be a sense of responsibility at the highest network levels because our young people are watching programs daily which are molding their values to a far greater degree than what is taught in the home and in our schools.

"I don't know what the result of such an investigation will be," Turner continued, "but my guess is they will cause the American people to cry out for massive changes in network programming and motion picture releases—change to glorification of the good guy instead of the bad guy, change from indecency to decency, change from immorality to morality, change to programming that appeals to the best in people instead of the worst."

Turner stopped short of calling for an amendment to the Constitution to codify his quest for decency. He said that he hoped the solution could be found within the free enterprise system.

ABC Restructures Television Division To Emphasize New Technologies

NEW YORK, NEW YORK—ABC announced a restructuring of its television division last week aimed at emphasizing "new technologies," primarily cable television.

Under the new structure, which will be implemented in July, Frederick S. Pierce, executive vice president of ABC, will relinquish his second title as president of ABC television in order to devote substantially more time to the development of programming for the new technologies. John Severino, vice president and general manager of KABC-TV, the ABC-owned television station in Los Angeles, will succeed Pierce as president of ABC television.

"In designing a structure that would provide more efficiency, the flexibility to deal with continuing changes in the television business, both at the national and local levels, and the expansion of news, information and sports programming, I felt it was important to realign these major activities," said Pierce.

Pierce stressed that the "new organization will continue to place a priority on our television activities, while at the same time utilizing our expertise to take advantage of opportunities and meet the challenges of the new technologies. This is a prime concern of mine for the foreseeable future."

Ironically, ABC, whose executives were more openly critical of the cable industry than their rivals at NBC and CBS, is moving into cable more aggressively than the other two networks. With the debut of ARTS, a cultural service created in cooperation with Warner Amex, ABC became the first commercial network to enter cable programming. ABC's second cable venture, BETA, a women's channel being created through a joint venture with Hearst Publications, is slated to launch later this year.

In addition to ABC executives' vocal criticism of cable, the networks' affiliates last year formed an organization called View to promote the advantages of broadcast television to the public. ABC is the only broadcast network to turn down advertising from Home Box Office. While HBO's commercials have been accepted by NBC and CBS, ABC has continually rejected them on grounds that the pay network is competition.

—Susan Spillman

CBS Cable President Dick Cox Reveals Details for Cultural Network

NEW YORK, NEW YORK—The walls in his office are still bare seven weeks after Dick Cox took the helm of the recently upgraded CBS Cable Division. Clearly, the new president has had other things on his mind. He announced some of them last week during his first round of press interviews.

The basic cultural network, still unnamed, will launch Monday, October 12, on Westar III, transponder 6, to affiliated systems serving 1.5 million subscribers. MSOs, including American Television and Communications, UA-Columbia, Times Mirror and Storer, have not pinpointed specific markets yet, a CBS spokesman said later, so there is no breakout of new versus existing or urban, suburban or rural takers.

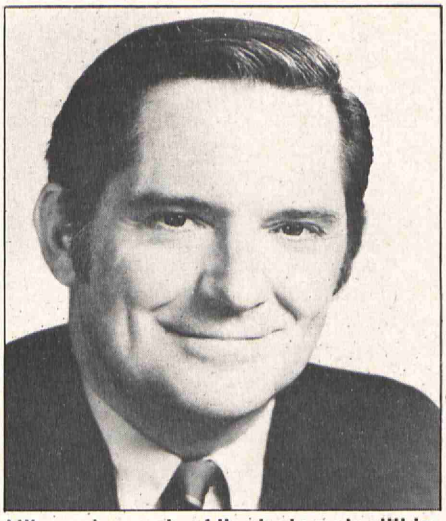
The feed will run 12 hours, seven days weekly, from 4:00 p.m. to 4:00 a.m. On launch day, programming begins at 7:00 p.m. The 4:00 p.m. to 7:00 p.m. slot will normally be filled with a repeat of the previous night's fare. Premieres will run from 7:00 p.m. to 10:00 p.m. and they will be moved around the schedule as a block. The overall repeat schedule has not been established, *CableVision* was told.

So far, a list of advertisers has not been announced. When asked how many there are, Cox replied crisply, "None." He attributes that to the "natural tendency of everything to slow down and get reviewed when a new president comes in. Our sales group has had only two weeks, really, to hit the bricks and discuss our menu. They've come up with very enthusiastic advertisers but haven't had time to get any commitments."

Pitches are being made to sponsors of programs or series, so there may never be a rate card, Cox says. "We're not selling minutes. What we charge will reflect the cost of the material."

Commercials will not be of the 30-60 second variety, but may run several minutes at a time. They will be placed at "reasonable breaks" within a show, according to the company.

Each three-hour program block will consist of an anchor and bridge material. "Too much of the best ballet, music, drama, whatever, is not a good way to program," Cox believes. "To complement, to sell the material, we'll bookend it with theme-related segments, mostly original."



Although much of its strategy is still in the planning stages, CBS Cable President Dick Cox says pitches are being made to sponsors of programs or series. "We're not selling minutes. What we charge will reflect the cost of the material."

The program will also feature a host—"a renaissance man or woman"—who will inform and orient viewers. "I know ABC has a similar approach. I don't know who thought of it first," says Cox.

(His comments about competitors ABC, Bravo, PBS and RCTA were muted because he is unfamiliar with them as yet, he said.)

Original material is running 60 percent of all programming so far. CBS Cable owns all subsidiary rights to it but may be barred by the FCC financial interest rule from similar rights to acquire product in which its ownership is less than 50 percent. Parent company lawyers have requested a clarification from the FCC, whose language in the 1969 rule did not specifically rule out subdistribution in the cable and home video markets, but only in broadcast syndication. The matter is pending, complicating relations with program suppliers who want to retain after-market rights.

(Also pending is CBS's request for a waiver allowing it to own a testbed cable system. The matter will probably be incorporated into the investigation of cross-ownership rules that the FCC is expected to initiate.)

Affiliates of the new network will be paid $0.15 per subscriber per year in "promotional support" and will be reimbursed at $0.10 per subscriber at launch to fund system image advertising separate from CBS Cable. As for traditional affiliate compensation, Cox says he will "never lead the way" to it.

About those bare walls. One day soon, Cox will hang the framed saying that accompanied him through his years at Young & Rubicam and his own production/consulting firm, D.C.A.-TV. It says, "The future cannot be predicted. But it can be invented."

Westinghouse Forms Subsidiary To Produce Cable Programming

NEW YORK, NEW YORK—Westinghouse Broadcasting Company (WBC) made its intentions to enter the cable programming arena official last week. As the industry pondered over how WBC would make use of its ten Westar transponders, the company announced the formation of Group W Satellite Communications (GWSC), a new division that, beginning early next year, will create and distribute programming to cable systems.

Making the announcement in New York, Group W President and Chief Executive Officer Daniel Ritchie said GWSC's creation was "an important step in our plan to be an important source in the supply of new program services to the nation's cable subscribers."

Ritchie stopped short of giving specific details of the division's programming plans. According to a Group W spokesperson, those details may be revealed before the end of this week.

CableVision has learned that GWSC will draw upon one of its Westar IV transponders for its first service, which will be launched next January. The service will not be used in conjunction with Home Theater Network, the mini-pay family movie service acquired by Westinghouse earlier this year.

There are reports that Group W is

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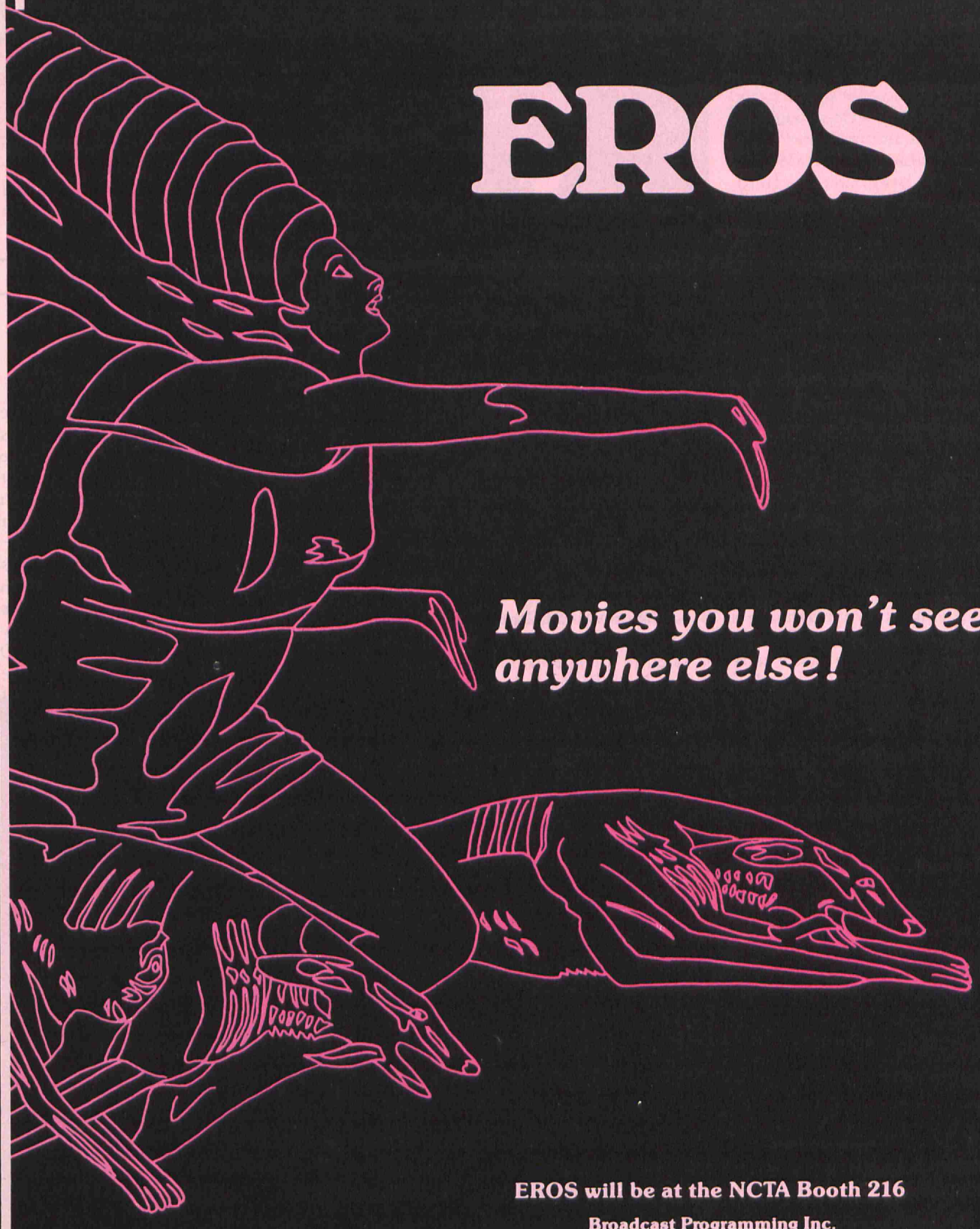

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considering giving Ted Turner's Cable News Network a dose of competition by starting up another all-news service. Dow Jones and CBS are also said to be considering the idea. Earlier this year, Group W's television division launched Newsfeed, a daily news exchange service among its stations.

Another possible target of GWSC is the children's programming field, suggested by Ritchie in an interview with *CableVision* last February (CV, 2/23/81, p. 45). "In looking at things that need to be done," he said at the time, "one of the areas you look at as a citizen and a parent is children's programming. We are taking a careful look at that."

William Baker, president of Westinghouse's television station group, has been named chairman of GWSC, with the presidency to be filled by Jonathan Hayes, former vice president and general manager of KDKA-TV/ Pittsburgh. Both men were unavailable for comment on Group W's plans for the division.

GWSC will distribute its programming over five transponders on Westar IV, under Westinghouse's arrangement with Western Union. Westar IV is scheduled to launch early next year. When Westar V is launched in late 1982, GWSC plans to move its services to the five transponders Westinghouse leased on that satellite.

Group W President and CEO Daniel Ritchie said Group W Satellite Communications' creation was "an important step in our plan to be an important source in the supply of new program services to the nation's cable subscribers."

Group W's agreement with WU has touched off a controversy over WU's satellite arrangements. Recently, Robert Wold filed a complaint before the Federal Communications Commission (see "Business").

—Simon Applebaum

NEA Endorses Nickelodeon, ARTS

NEW YORK, NEW YORK—Departing from its format of handing out endorsements to individual programs or television series, the National Education Association has announced its intention to place a stamp of approval on Nickelodeon, Warner Amex Satellite Entertainment Company's children's channel. The decision announced last week marks the first time that the association has endorsed a full channel of television programming. The organization represents more than 1.7 million primary and secondary school teachers around the country.

According to NEA President Willard H. McGuire, the endorsement will extend to ARTS (Alpha Repertory Television Service), WASEC's joint cultural programming venture with ABC Video Enterprises. The three-hour nightly service, featuring performing arts programming mostly acquired from foreign sources, began cablecasting over Nickelodeon's transponder (Satcom I, transponder 1) last month. "We see the channel, including ARTS, as the most comprehensive and ambitious programming package yet devised by television programmers to meet the needs and interests of the nation's youth," McGuire noted. "We who teach commend WASEC for its contribution to the improvement of children's programming and for advancing the potential of the television medium as a reinforcing educational tool."

Starting June 1, WASEC plans to take full promotional advantage of NEA's decision by running an on-air message on the endorsement at the beginning and end of Nickelodeon's programming day. The message will also be repeated intermittently between programming. At the same time, NEA will promote both Nickelodeon and ARTS shows through the organization's collection of brochures and publications, including *The NEA Reporter*. Nickelodeon Programming Vice President Cy Schneider called the endorsement "extremely gratifying."

Past recipients of NEA's recommendation include *The Undersea World of Jacques Costeau* (ABC), and *The American Short Story* (PBS).

SPORTS

Early Knockout Scrambles HBO

NEW YORK, NEW YORK—Home Box Office's campaign to give viewers top boxing contests on a par with the commercial networks received a short but solid uppercut early this month (May 11) when heavyweight contender Gerry Cooney needed only 54 first-round seconds to pummel Ken Norton's chances for a comeback at Madison Square Garden. As a result of Cooney's quick work in the ring, the pay television network's reported $550,000 payment for the right to televise the fight went down at the count of approximately $10,185 and change per second.

Because HBO's sports department had a scheduling commitment to stay on the air with its coverage until at least 10:30 p.m. (Eastern time), the announcing trio of Barry Tompkins, Larry Merchant and welterweight champion Sugar Ray Leonard were mandated to keep going with whatever could be drummed up at the spur of the moment until regular programming could be resumed. That meant progress reports on Norton's condition, replay after replay of the fight, back-and-forth conversation about Cooney's next boxing step, his ability as a fighter, and the heavyweight picture in general. It was tightrope walking live before the viewers, both on and behind the camera, the kind of unexpected broadcasting sports producers hope to avoid when the best laid plans for a long contest suddenly fall to the canvas. And in HBO's case, without benefit of a commercial break.

The result of the fight also delivered a sorely unneeded punch to Madison Square Garden's boxing department,

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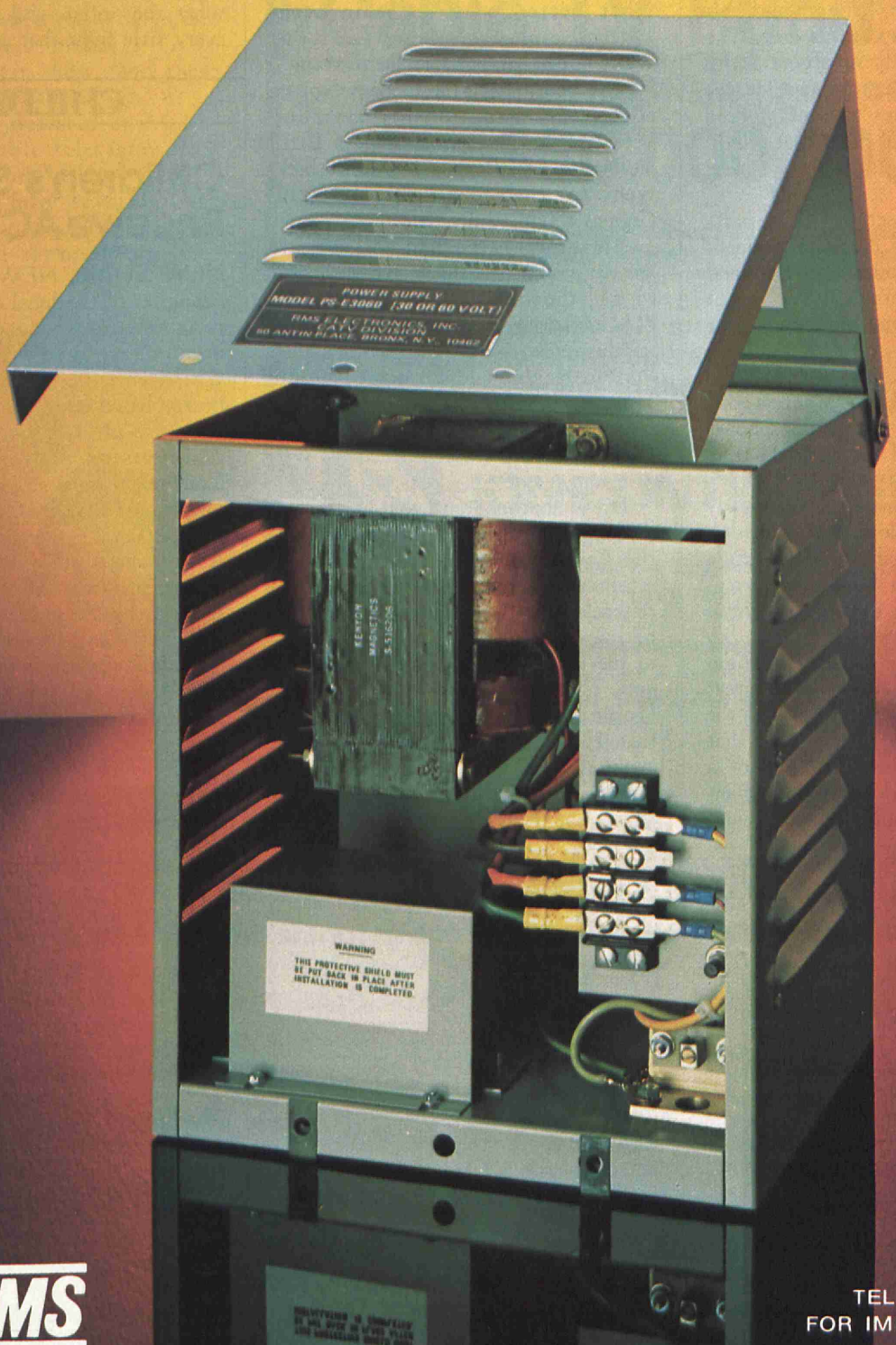

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reportedly $400,000 in the red ink because of lackluster sales at the box office. MSG took over promotion of the fight, following last February's postponement of several title matches due to the Harold Smith/Muhammad Ali Professional Sports controversy. The controversy, allegedly involving Smith with an embezzlement scheme at the Wells Fargo Bank in California, forced cancellation of several bouts that would have added fan interest to the Cooney-Norton card.

As could be expected, HBO Sports Vice President Seth Abraham tried to shed the best light on both the fight and his network's coverage. "We're not upset with the outcome of the fight," he explained. "It's not out of the ordinary for heavyweight fights to end early. One nice thing about being a pay network, however, is that our phones were not ringing off the hook the next morning by advertisers demanding make-good spots as the result of an early finish. In fact, we'd love to have another Gerry Cooney fight. He's a devastating puncher. And with him in the ring, there is always going to be the potential of a very quick knockout."

On the last comment, Abraham knows whereof he speaks. The great white hope's victory last week was the second time in less than a year that Cooney has made quick work of a heavyweight contender and HBO plans at the same time. Last fall, Cooney went more than 54 seconds, but just slightly, to flatten former heavyweight contender Ron Lyle, the main event in a card cablecast over HBO. Between then and May 11, the network has fared somewhat better with its main event matches, cablecasting three fights that went more than half the distance. HBO's bout before the Cooney-Norton fight, the championship matchup between heavyweight champion Larry Holmes and challenger Trevor Berbick, went to a 15-round decision with Holmes retaining his title.

Abraham says the fight will not have any major effect on the network's intent to get the best matchups it can for cablecasting. The network's next middleweight contest between champion Marvin Hagler and former champion Vito Antuofermo, scheduled for next month, is promised by most boxing experts to be a closer contest, as well as a longer one.

But in another arena, that of pay-per-view programming, Abraham believes the Cooney-Norton fight may force rethinking of the concept on the part of its backers. "If this fight had been pay-per-view, it would have created a strike in the ledger of the concept. It had to hurt. The idea is a double-edged sword. People using the idea have to understand that if you use it for a boxing event, the match has to be unusually special to justify that second fee the subscriber pays. The two Leonard-Duran fights were that kind of event.

"I don't believe those people will turn away from offering fights in that fashion down the road, but they will have to learn to be more selective about what they offer, and not jump in for every title fight that comes along."

CHILDREN

Children's Shows Receive ACT Honors

NEW YORK, NEW YORK—Two examples of the local origination cable programs for young people received honors last week from Action for Children's Television (ACT), the Boston-based television advocacy group. *I Like Kids Creating* (Continental Cablevision of New Hampshire/Concord system) and *Reach For The Sky* (Blackhawk Cable Communications/Hurst, Texas) were the recipients of ATC's annual Achievement in Children's Television awards. The systems were selected by the group for having made "a significant contribution towards improving children's television" during 1980. The awards also cover programming on radio, commercial and public television.

I Like Kids Creating, now completing its fourth season on Continental's 8,900 subscriber Concord system, is a weekly

WEEKLY PROGRAMMING HIGHLIGHTS

CableVision's Recommended Shows for the Week of May 25

Bravo
5/25—*Bravo Magazine*. This segment spotlights floutist James Galway, the revival of the big band sound, and ballet stars Valery and Galina Panov.

Calliope
5/28—*Madeline*, an animated version of Ludwig Bemelmans' classic children's story of a French girl's visit to a hospital.

ESPN
5/28—*Seventeen Junior Tennis Tournament*.

Escapade
5/30—*Vanessa*.

GalaVision
5/29—*El Hombre del Muneco (The Puppet Man)*. A man who believes good luck would save him forgets that the Mafia has no mercy. Oscar Zamora and Theresa Cepeda co-star.

Home Box Office
5/30—*The Black Marble*.

Home Theater Network
5/25—*Star Trek: The Motion Picture*.

Nickelodeon
5/28—*Matt and Jenny*.

Showtime
5/30—*Wholly Moses*.

SPN
5/31—*The Award Winners: Black Orpheus*. The legend of Orpheus and Eurydice in the guise of a Brazilian carnival is the setting of this classic motion picture.

SIN
5/27—*European Cup Championship Soccer Final*.

The English Channel
5/31—*Wuxing People's Commune*. A documentary on one aspect of modern times in the People's Republic of China, narrated by Donald Sutherland.

The Movie Channel
5/27—*Rough Cut*.

USA Network
5/30-31—French Open Tennis. Preliminary round action via satellite from Paris.

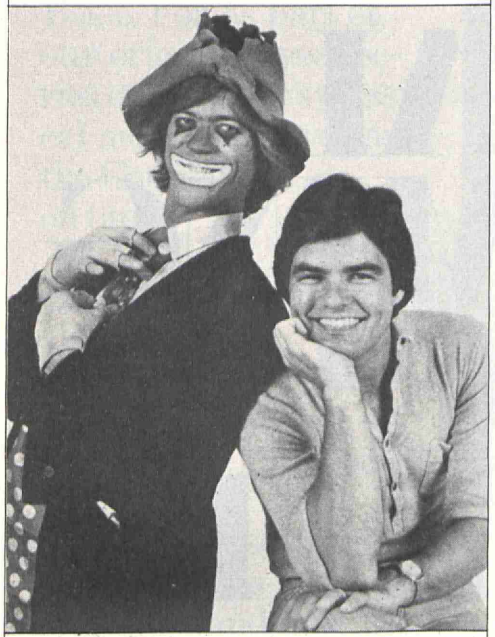
WOR-TV
5/28—*Day of the Dolphin*, starring George C. Scott, Trish Van deVere.

WTBS
5/30—Baseball: Atlanta Braves vs. San Diego Padres.

program created and produced by fifth and sixth grade children at Concord, New Hampshire's Milville School. Using a magazine format, the children cover topics ranging from government to schoolwork.

"These are kids that start learning media and communications skills in the first grade," noted producer Greg Urchin. "It's their show, and they dictate the subject matter."

One segment, presented at ACT's conference on cable television last month in New York (CV, 4/20/81, p. 24), showed how several fifth graders staged a presidential forum, with each child representing one candidate.



Bob "Hobo Bob-o" Olsen (left) and Monte Stewart are the stars of "Reach for the Sky," Black Hawk Cable's ACT awarding-winning program.

On the air since last fall, *Reach For The Sky* is a weekly half-hour mixture of songs, comedy sketches and story-telling, taped before a live audience at the Hurst (Texas) Public Library.

"We build each show around a theme or hobby," explains its producer, Jay Helton, "trying to tie various elements together. In a show we did recently on ballet, we had the host discuss dance with a teacher from the Ft. Worth ballet, then created a skit where one of the characters, a clown, dreamed about dancing with a ballerina. Of course, the clown acts out his fantasy with a member of the ballet company."

The show has a potential reach of 11,000 homes through Blackhawk's Hurst cable system.

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NEW ISSUE - DECEMBER 8, 1980

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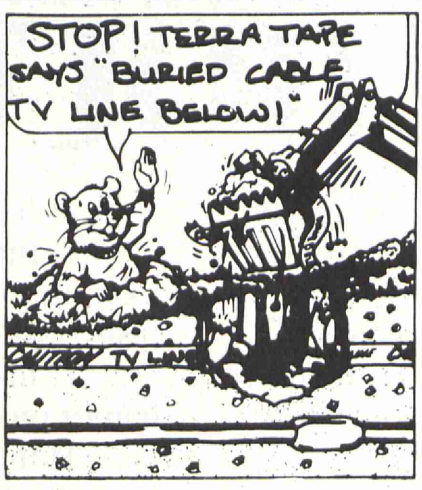

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Gilford doing comedy bits and pieces from his hits, "Cabaret" and "A Funny Thing Happened..."

There's character actress, Jane Alexander, living out the letters and diaries of a Jane who often acted like a character, Calamity.

And there's someone else who marches to the tune of a different drummer. Or dances to them. Twyla Tharp, dancing to the tunes of Willie "The Lion" Smith, Bruce Springsteen and Bach.

From Bach to Basie. For, as part of our original 5-year series on America's classical music, jazz, we have the Count down on tape.

From Basie to bop. We also have bop singer Betty Carter, Sonny Stitt and Johnny Hartmann in concert.

Of course, there are some acquisitions, all of them measuring up to our original standards.

Like Bernstein conducting, living and breathing Beethoven in Vienna, the city where Beethoven lived.

And Liv, a 60-minute extreme close up of Ullman, her lives and loves.

And a love letter to Russia by prominent Soviet emigrés ("When I Think of Russia").

There's talk about philosophy, literature and just plain talk; quiz shows, fashion shows and theatrical shows; reviews, previews and for comic relief, comedy.

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After all, we want to get you as excited as viewers will be.

So we'll put more dollars at your disposal. And more local and national advertising than you've ever had before.

And something you've never had before: in-depth research not just on CBS Cable but on all cable.

What's more, we'll even set you up in business. The ad business. (No, don't run out and buy a grey flannel suit.)

We'll provide you with local time and help you sell it to local advertisers looking for the upscale, intelligent audience they can't efficiently get through the usual channels. And national advertisers too.

So if you have a basic need to get a little lift and give a little uplift, call (212) 975-1766 or come see us.

Or send a cable.

CBS CABLE

Lift for you, uplift for your subscribers.

Wold Files Complaint with FCC Over WU/Westinghouse Satellite Deal

NEW YORK, NEW YORK—Only two weeks after Western Union signed a multi-million dollar pact with Westinghouse Broadcasting for ten transponders, the Robert Wold Company (a user of satellite time on Westar) filed a complaint against the common carrier with the Federal Communications Commission.

In its complaint, filed with the commission two weeks ago, the company claims that WU "has been discriminating against Wold, and is in violation of several FCC regulations." Getting down to specific cases, Wold's complaint contends that WU discriminated against the company in favor of other customers, whose orders for fixed-term transponder services came in after Wold's requests for additional transponder space.

Focusing on the WU/Westinghouse transponder deal, Wold states in its complaint that WU has recently contracted for the sale and lease of ten transponders on Westar IV and V to Westinghouse. Aside from the fact that the terms of the transaction are not set forth in WU's tariff, the common carrier's contract with Westinghouse "is in defiance of its prior stated intention to fill transponder requests in order received, and the long pending order of Wold for three additional transponders."

Moreover, Wold's attorneys say, "In view of the unique relationship already existing between WU and Westinghouse by virtue of their Vidsat (Westinghouse's satellite-based program distribution service) agreement, the recent, non-tariffed multi-transponder contract with Westinghouse raises additional questions of favoritism by WU to Westinghouse".

Vidsat is a Westinghouse-owned satellite service, involving the use of Westar's satellite capacity, a Westinghouse uplink and a mix of Western Union, Westinghouse and customer-owned downlinks. The service delivers Group W and independently produced programming to 100 television markets.

Westinghouse's August 1980 "Petition for Declaratory Ruling" (filed with the FCC) describe WU's role in the Vidsat contract "as a non-exclusive agent for Group W Productions in the sale of Vidsat services." WU will receive a commission for business referred to Group W.

Commenting on this agreement, Wold lawyers state, "The special contractual relationship which WU enjoys with Westinghouse, taken together with its lease-sale of at least ten transponders to Westinghouse, requires immediate investigation." Since the Vidsat agreement had not been filed with the commission, Wold says, "it is impossible to analyze its implications. However, the fact that WU is entitled to sales commissions for directing program distribution business to Westinghouse (rather than Wold, Hughes Television Network, or other WU customers providing such services) represents a clear case of discrimination and carries with it serious antitrust implications."

WU Vice President of Broadcasting Services James Ragan told *CableVision*, "there are two sides to every story," but declined further comment on the Wold complaint, saying, "It's inappropriate to comment since the issue is before the commission." WU has 30 days to file a response.

Wold's president, Robert Wold, indicated that other WU customers would soon follow his company's lead and file complaints against WU. John Tagliafarro, president of Hughes Television Network, signaled out as another possible WU customer who will soon file a complaint, told *CableVision* that on May 1 Hughes filed comments with the FCC regarding policy and rules concerning rates for common carrier services, in which they refer to the Group W deal. When asked about the whole satellite situation, Tagliafarro said, "On advice from counsel I cannot comment on the matter because this might turn into some kind of litigation."

Wold and other WU customers believe that the recent untariffed sale by WU of its future transponder capacity represents a violation of FCC regulations. In his complaint, Wold says that WU has been selling off significant portions of these satellites to selected customers on an untariffed basis, at prices which appear excessive, "if its own cost figures are to be believed."

"It appears," add Wold attorneys, "that WU has made a conscious business decision that such transactions will be more profitable to it than the provision of common carrier service on a tariffed basis."

Another satellite observer, Dick Smith, executive vice president of Southern Satellite Systems, believes that WU is signing up the bigger clients to long-term, multi-million dollar deals in anticipation of the surplus of transponder capacity that the industry will have in a few years. Right now, Smith says, "It's definitely a seller's market."

—Hugh Panero

Abcom Finds Niche In Full Service

NEW YORK, NEW YORK—The phenomenal growth of the cable television industry has spawned many new companies and nurtured scores of others. Abcom, for example, is a small but aggressive full-service construction project management firm, which has been serving the cable industry since 1965. Recently, however, the firm has come into its own with revenues for the next year expected to be in the $20 million range.

Almost 75 percent of Abcom's work is cable related. The company has managed the construction of Manhattan Cable's $4 million operations facility in New York, as well as Home Box Office's $6 million network facility (also located in Manhattan). Just recently, the company completed work on Warner Amex Satellite Entertainment Company's (WASEC) multi-million dollar operations center in Smithtown, Long Island.

According to Abcom President and Chief Executive Officer Michael Zenobio, Viacom (which owns Showtime with Teleprompter) will be next. "We have just completed negotiations to manage the construction of their operations facility, to be located in Central Islip, Long Island."

Despite these recent successes, Zenobio describes his company as having gone through a corporate identity crisis. 'For a long time," he said, "we have been providing the services of a project management firm, but marketing

ourselves as a general contractor. It took a new member of our staff to recognize that we were wearing the wrong hat."

Now that Abcom has straightened out its identity problems, the company has embarked on a national campaign to inform the industry about its service. Abcom executives believe that the commitments being made by large MSOs to upgrade existing facilities will result in a greater need for its services.

Building uplink and operations facilities for cable companies is Abcom's stock and trade. And, for a small company, Zenobio says the work is paying off, with revenues for this year expected to be close to $10 million. But it doesn't come easy, Zenobio adds. "We walk our clients from the beginning of a job, through the finding of real estate, to the ribbon cutting ceremony opening up the facility. This is an exciting industry and we intend to grow right along with it."

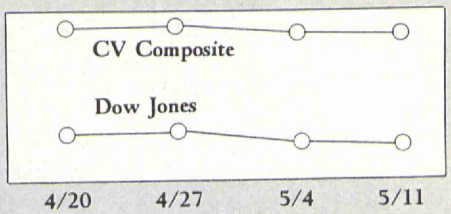
NOTES

A contract for 300,000 electronic directory terminals is about to be awarded by the French PTT Administration to **Alcatel Electronique**, a subsidiary of CIT-Alcatel of the French Compagnie Generale d'Electricite Group. Because of the magnitude of the order, the unit price is approximately $200. Alcatel, the lowest bidder, was chosen as the supplier because of the economies of scale achieved by single sourcing. Other manufacturers will provide components, including Matra, which will supply advanced integrated circuits. The videotex terminal will be available in a variety of display sizes and may incorporate telephone sets of advanced design and enhanced facilities.

The contract represents the first step in the collaborative agreement, announced last fall between Tymshare and Intelmatique, the promotional arm for the telecommunications products and services being developed under the French Telematique program.

New tariffs providing discounts to 45 percent over basic line rates are now available to customers using private leased satellites lines furnished by **RCA American Communications, Inc.** The new tariffs became effective April 1, 1981, and are designed for large-volume users faced with anticipated communications costs increases. RCA Americom now offers fixed-term tariffs for one-month, one-year, two-year and three-year service commitments. The one-month and one-year commitments carry no line minimum, and provide a 20 percent

Advances	26
Declines	36
Unchanged	7
CV Manufacturers	925.88
CV Operators	806.50
CV Services	505.50



THE MARKET

Company	Stock Exch.	Closing May 11	Closing May 4	Net Change in Period	% Change in Period	1981 High	1981 Low	P/E Ratio
Operating Companies								
Acton	ASE	16½	16¼	+ ¼	1.54	19¼	15⅛	13
Adams Russell	ASE	29⅜	27⅞	+1¾	6.28	29⅜	22	27
AEL (Am Elec Lab)*	OTC	14¼	13¼	+1	7.55	16⅜	12⅜	d
Central Telephone	NYS	28	28¼	- ¼	2.61	30	23⅛	7
Comcast A	OTC	25¼	25¾	- ½	1.94	25¾	17⅜	28
Cox Broadcasting	NYS	66¼	67½	-1¼	1.85	71	54¼	20
General Electric	NYS	63⅛	64½	-1⅜	2.13	69¼	59⅛	10
Harte-Hanks	NYS	36	36¼	- ¼	0.69	36¼	29½	13
Heritage Comm.	OTC	14⅛	14⅜	- ¾	5.04	17⅜	12¼	51
Jones Intercable	OTC	7¾	7½	+ ¼	3.33	7¾	5	
Multimedia, Inc.	OTC	34¾	35	- ¼	0.71	35¼	27	15
New York Times	ASE	33¾	34¼	- ½	1.46	34¾	27¾	9
Rogers Cablesystems B	OTC	10	9⅜	+ ⅜	3.90	13⅛	9¼	
Rollins, Inc.	NYS	19	19⅛	- ⅛	0.65	21⅛	16⅞	14
Storer Brdcstg.	NYS	36½	37¼	- ¾	2.01	40½	28⅜	19
TCI (Tele-Comm.) A	OTC	28	29¼	-1¼	4.27	31¾	23	
TPT (Telepmptr.)	NYS	34	33¾	+ ¼	0.74	34¾	31½	25
Times Mirror	NYS	51½	50¼	+1¼	2.49	12	39¾	12
UA-Columbia	OTC	79	79½	- ½	0.63	81⅜	55½	49
United Cable TV	OTC	26⅜	27⅜	- ¾	2.74	36	23½	34
Viacom	NYS	59¼	57½	+2¼	3.91	60¼	44	18
Warner Comm.**	NYS	48⅜	48½	- ⅛	0.26	52½	33⅜	20
Wometco	NYS	18¼	19¼	-1	5.19	21⅜	15⅜	12
Wrather	ASE	26⅛	27¼	-1⅜	5.86	29⅜	22½	d
Service and Finance Companies								
Allied Artists	OTC	¼	¼			¼	⅛	
AM Cable TV*	OTC	24¾	25½	- ¾	2.94	25½	18¼	29
Avco	NYS	26¼	28⅜	-2⅛	7.49	32⅜	23½	5
Burnup & Sims	OTC	16⅜	15⅜	+ ¾	4.80	17⅜	12¼	16
Columbia Pictures	NYS	38⅞	41¼	-2⅜	5.76	44¾	35	8
Disney (Walt) Prod.	NYS	54½	56¼	-1¾	3.11	63¾	49¼	15
General Tire**	NYS	24⅛	24	+ ⅛	0.52	26	18¼	10
Gulf & Western	NYS	17¼	17⅜	- ⅛	0.72	18⅛	14	4
MCA	NYS	55⅜	52¾	+2⅜	4.98	59	42½	11
MGM Filmco	NYS	9⅞	10¼	- ⅜	3.66	12	7⅞	20
TeleMine Co.	OTC	12¼	10¼	+2	19.51	13	8¾	
Time Inc.**	NYS	71	70¼	+ ¾	1.07	76¾	53¼	14
Transamerica	NYS	20⅜	20⅜			22¼	17½	6
Turner Broadcasting	OTC	22½	23	- ½	2.17	23½	13	d
20th Century-Fox	NYS	64	63	+1	1.59	64¾	46¾	11
Tymshare, Inc.	NYS	47¾	49⅞	-2⅛	4.26	55½	39	28
Manufacturers and Distributors								
Anixter	NYS	33⅛	32½	+ ⅜	1.92	38⅞	26½	16
Arvin	NYS	15⅞	15⅞			16⅞	13	18
Augat	NYS	46	47	-1	2.13	48⅛	35⅜	22
C-COR Electronics	OTC	19¼	16¼	+3	18.46	19¼	15¼	
Compact Video	OTC	17⅞	18⅜	- ¾	4.03	22⅜	17⅞	17
Comtech	OTC	6½	5¾	+ ¾	13.04	6¾	3	d
Contl. Tel.	NYS	16⅛	16⅜	- ¼	1.53	17⅜	14¾	8
Eastman Kodak	NYS	73⅞	75⅜	-1¾	2.31	84⅜	68⅛	11
GK Technologies, Inc.	NYS	49¾	49⅜	+ ⅛	0.25	50⅛	34	9
Gen. Instrument	NYS	111⅜	112¼	- ⅜	0.56	114¼	74¼	15
GTE	NYS	28	27¾	+ ¼	0.90	29⅜	24½	7
Harris Corp.	NYS	52¾	54	-1¼	2.31	59½	43½	20
Insilco	NYS	19⅜	20⅛	- ¾	3.73	23⅜	18¼	10
IVC (Intl. Video)	OTC	⅛	⅛			⅛	⅛	
M/A-COM, Inc.	NYS	27½	26¼	+1¼	4.76	32⅜	22¼	35
Marmon Group/Cerro	ASE	18¾	18⅜	+ ⅜	2.04	19¼	17¾	
Microdyne	OTC	29	29¾	- ¾	2.52	33	17½	30
3M	NYS	58⅞	59¾	- ⅞	1.46	64⅞	56¾	11
No. Amer. Phillips	NYS	49¾	50⅜	- ⅜	1.24	52⅛	36¾	9
Oak Industries**	NYS	32	31½	+ ¾	2.38	34	21⅛	16
RCA	NYS	25½	25⅛	+ ⅜	1.49	32¼	25	8
RMS	ASE	14⅜	15⅜	-1	6.50	17⅞	14¼	17
Scientific-Atlanta	NYS	30	29⅜	+ ⅜	1.27	34¾	18⅛	39
Sony	NYS	20⅜	19⅞	+ ¼	3.77	20⅜	14¾	12
Tektronix	NYS	57½	58¼	- ¾	1.29	62⅜	49½	12
Telemation	OTC	2¼	2¼			2¼	1¾	
Texscan	ASE	37	37			40⅜	19⅜	33
TOCOM	OTC	16	15¼	+ ¼	4.92	17	12¾	d
Wavetek	OTC	16½	16½			21½	12½	36

* Also indicates involvement in manufacturing.
** Also indicates involvement in entertainment and/or system operation.
d indicates deficit.

INTRODUCING A NEW DIMENSION IN CABLE TELEVISION.

Cable television is about to enter a new era. For the first time, the power of stereophonic sound teams up with the visual impact of television, to create Videophonic Music. It can be seen only on MTV: MUSIC TELEVISION™, cable's first all-music video channel, beamed by satellite in stereo, 24 hours a day. And it's offered free to you.

MTV is a unique programming concept, featuring video records, the latest development in contemporary music. "Video disc-jockeys" (VJ's) will be on air to introduce the music and keep viewers up to date on the latest music news. Plus we'll feature live concerts from all over the world.

This new and exciting service is offered free to subscribers as part of the basic cable package. But it can generate income like a pay service. That's because you can increase your subscriber profits with stereo hookups and second-set charges.

What's more, MTV is advertising-supported, with two minutes of every hour yours to sell locally. The income opportunities are substantial.

Research shows that an all-music channel is in great demand by our target audience–people between 12 and 34 years old. And an average of at least one person in this age group lives in every cable household. So not only will it appeal to existing subscribers, it can also attract a lot of new people who may never have been interested in cable before.

And to get your potential audience geared up, we're launching MTV with full advertising, promotion, and marketing support.

Any way you look at it, MTV is sure to provide you with enormous profit opportunities. It begins August 1, 1981, so contact our nearest regional office now, and sign up for MTV: MUSIC TELEVISION, beamed through SATCOM I.

NEW YORK:	CHICAGO:	ATLANTA:	DENVER:	DALLAS:	LOS ANGELES:
Helaine Ciporen,	Scott Hults,	Steve Adams,	Larry Schneider,	E.A. "Buzz" Hassett,	Peter Lauer,
212/944-4250	312/661-1670	404/320-6808	303/741-3600	214/241-1421	213/506-8316

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MTV
MUSIC TELEVISION™

and 35 percent discount over the basic line rate, respectively. In order to qualify for a 40 percent discount, customers must commit to a minimum of 150 lines for 24 months. The maximum 45 percent discount requires a commitment of 240 lines for 36 months. The new tariffs apply to all RCA Americom-served cities.

General Electric Cablevision and Biloxi, Mississippi, city officials broke ground in April for new office facilities, to be located in the urban renewal area of Biloxi. Present for the ground breaking were, from left to right, Leonard Collins, architect; J.O. Collins, prime contractor; Ernest Melvin, president of the Harrison County Board of Supervisors; Frank

Barhanovich, Biloxi city commissioner; John Humphries, G.E. system manager; Paul F. Schonewolf, G.E. operations manager; Jerry O'Keefe, mayor of Biloxi and Dominic Fallo, city commissioner. General Electric's new facility is expected to be completed in December of this year. The system currently serves 22,000 subscribers in the Biloxi and Ocean Springs areas.

Essex Communications has purchased the Clear Vision Group of cable systems by a limited partnership, of which an affiliate of Essex is the general partner. With the addition of the Clear Vision systems, Essex Communications now operates 31 cable systems in six states with a total of 35,000 subscribers. Additional acquisitions are expected to put Essex at the 50,000 subscriber level by mid-year. Essex is a joint venture between CATV operators Dave Pardonner and Paul Field, and Oppenheimer and Company, the New York investment banking firm.

Matrix Enterprises has announced the addition of six new cable channels for Lenoir City and Loudon, Tennessee, one of which will be Cinemax, the 24-hour movie channel. The system upgrade will involve a capital investment of over $150,000. Other services to be added include the Cable News Network; WOR-TV; The Appalachian Community Service Network; WRIP-TV (Channel 61), and PBS station WSVN-TV.

ABC, CBS, HBO and NBC were joined by major independent producers and local stations utilizing the **Entertainment and Sports Programming Network, Inc.'s,** mobile facilities for sports, news and entertainment productions during ESPN's first year in the leasing market. The 1981 Presidential inaugural balls, the Lincoln Center Theater Company's production of "MacBeth," coverage of the Iranian hostage return and coverage of ten professional collegiate and amateur sports highlighted the first 12 months of ESPN's leasing division, the company reported.

Tymshare, Inc., has signed a contract with **MATRA**, a French manufacturer of telecommunications equipment, for purchase of 100,000 personal computer terminals. Under terms of the multi-year contract, MATRA will provide Tymshare with three models of desk top CRT terminals, including a personal communications terminal. Tymshare will market the compact terminals throughout the United States for managerial desk top use, as a personal terminal for home use, and as a point-of-sale communications terminal for retail merchants.

Karnack Corporation, a media firm based in Austin, Texas, will increase service to its cable television subscribers with 10,000 new **RCA** 36-channel converters. Valued at more than $500,000, the converters on order from RCA Cablevision Systems will be distributed to subscribers of five cable systems. Karnack owns 11 systems in Texas, with a total of 20,000 subscribers.

Cable Systems Design Group, Inc., and **Jackson Enterprises** have developed a cooperative program that will enable both companies to offer the cable television industry a complete engineering, design and construction package. Cable Systems Design Group, a Washington-based engineering and design firm, specializes in computer-aided system design, and is an affiliate of Malarkey-Taylor and Associates. Jackson Enterprises has 16 years' experience in mapping, construction, and specialty tools.

Compact Video Systems, Inc. has leased office space in its new entertainment center to three major corporations. The rentals under these three leases will total $26,000,000, with terms ranging from ten to 30 years. Occupancy is expected to begin by August 1. According to Robert E. Seidenglanz, president of Compact Video, the three firms are RCA Corporation, Chapman Financial, Inc., and Attorney's Office Management, Inc. Seidenglanz stated that only 25 percent of the new building's space remains available and several firms have expressed interest in leasing it. The center is located at 2813 West Alameda Avenue in Burbank, California. The seven-story, bronze-glass office building contains over 100,000 square feet with an adjoining four story 291-space parking area.

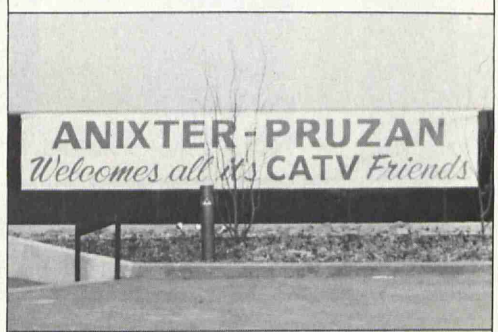
General Instrument's **Jerrold Division** has announced it will supply Cable Atlanta with converters for Atlanta and nearby franchises. The agreement, worth approximately $4 million, calls for Jerrold to supply at least 50,000 Starcom IV™ 58-channel digital converters, half with optional infrared remote control. Delivery began in March and will reach a monthly rate of 7,000 units.

Prime Cable Corporation, a privately owned and operated cable television company headquartered in Austin, Texas, has completed the acquisition of 80 percent of Comax Telcom Corporation, West Seneca, New York, and its cable operation, International Cable. Prime's cash acquisition for an undisclosed amount was finalized April 22.

Prime now serves 117,000 basic and 75,000 pay television subscribers in five states.

Joel Smith and Clair Bloom have announced the formation of **Smith, Bloom Associates, Inc.**, consultants to the cable television industry. Both of the principals are pioneers in the cable business with experience in all phases of cable TV activities. Smith, Bloom Associates is prepared to make evaluations of properties and franchises for acquisition, prepare franchise proposal volumes, make presentations to city councils, provide engineering, construction supervision, personnel screening and selection, marketing, and management.

Anixter-Pruzan opened a new Western National Accounts Office recently at 6000 South Ulster, Suite 106, Englewood, Colorado 80111, (303) 741-2900. The



event was celebrated with an open house in January, where over 200 guests viewed demonstrations of Anixter-Pruzan's on-line computer systems.

OVER 50 SYSTEMS SOLD.

See why over 50 cable operators—including a major MSO—bought their own Toner computer system.

AT BOOTH 401

The one cable computer system you can't afford to miss.

We'll show you:

☐ How your subscriber records—both basic and pay—can be as current as the last payment received at the counter.

☐ How to control your delinquent accounts—to collect or disconnect.

☐ How to generate work orders, coupon books, statements, late notices, and all those reports required for pay.

☐ You do *what* you want *when* you want. It's *your* system.

Get all the answers from the cable specialist who understands computers.

Talk to us. In person at the booth. Or over the phone, toll-free. 800-523-5947. In Pennsylvania 800-492-2512.

Cable Computer Systems Inc.
969 Horsham Road/Horsham, PA 19044

Toner

No matter what size your system, we have the computer for you.

The "Video Shopping Center"

Hughes Plans Cable Bird

Until Satcom III vanished into deep space in early December 1979, RCA Americom had a virtual stranglehold on the cable satellite business. With plans for two satellites of cable programming, the common carrier had cemented an enviable position as the satellite carrier to the cable television industry.

carry cable traffic disappeared, RCA's relationship with the cable industry entered a phase that could be described as strained at best. While remaining the industry's primary satellite carrier, RCA Americom has faced a steady litany of complaints and lawsuits from disenfranchised programmers. As a result of what some programmers describe as RCA's arbitrary and capricious handling of allocation procedures, there has been little love lost between RCA and some of its customers.

Faced with a situation where demand far outweighs supply, RCA has found it impossible to please or accommodate every existing or potential cable programmer. Some programmers, as a result, have begun looking to other suppliers to fill their satellite transmission needs.

This year, Western Union, which has long been eyeing cable, began to stake out a plot of cable turf when Southern Satellite Systems abandoned RCA and pioneered the use of Westar III for its Satellite Program Network. Other potential programming networks, including CBS Cable, have aligned themselves with Western Union rather than paying the resale premiums being asked for transponders on the RCA satellites. But, the biggest coup for Western Union came recently when Westinghouse finalized an agreement with WU for ten transponders that should accommodate its ambitious plans for cable programming development.

Clearly, in the 18 months since Satcom III was lost, turmoil has reigned in the cable satellite program arena. Executives at the major cable program companies have spent as much time haggling over transponders as they have spent on program development. There is not a company with plans for cable programming that hasn't spent endless hours evaluating and reevaluating its position with regard to satellites. As one program executive put it: "Transponders have become a preoccupation, siphoning measureless effort from our real business. A week hasn't gone by since Satcom III disappeared that we haven't dealt with the problem."

Not If, But How

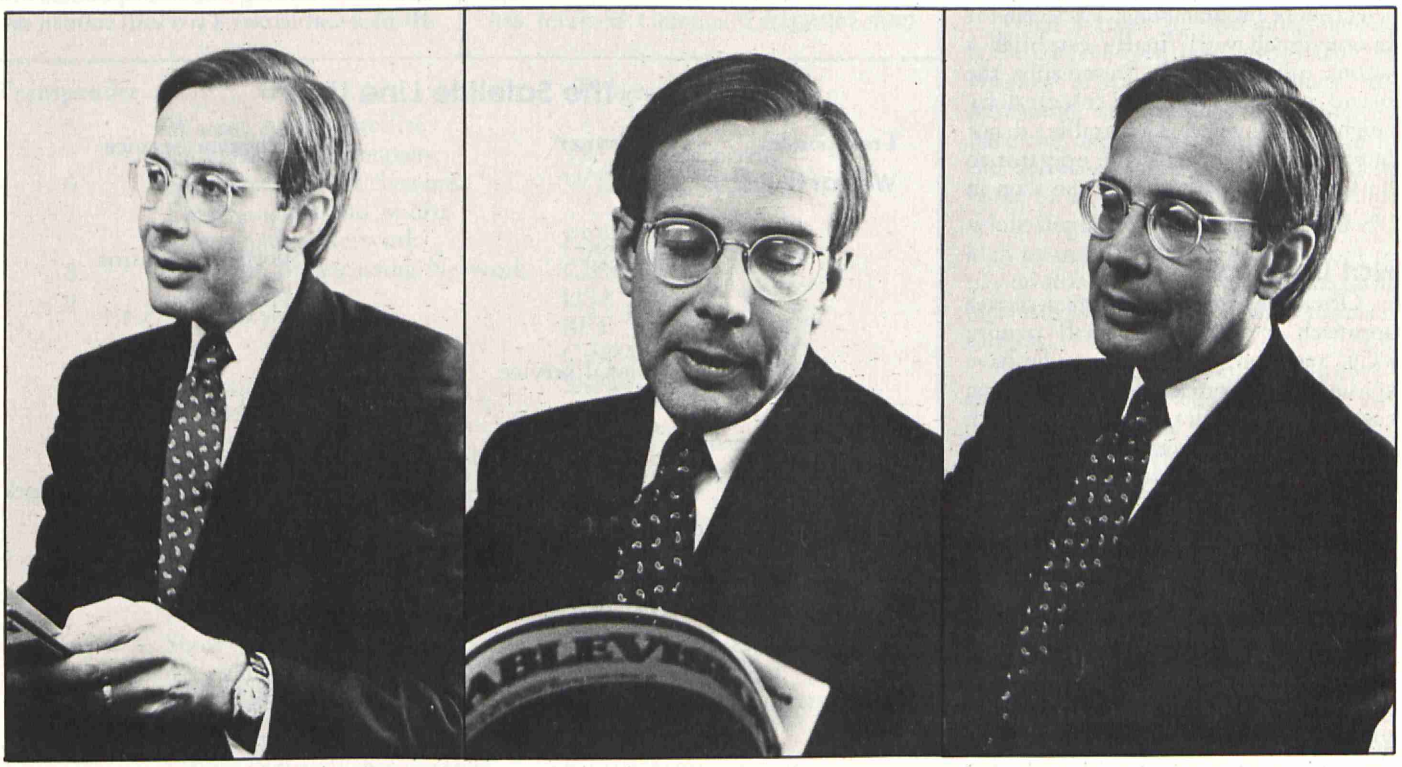
The problem haunting every operation is how and where to establish a second cable network—and at what cost. The issue is fast coming to a head. Programmers are going to be forced to make a choice with respect to a second cable network and future transponder needs. Many companies appear to have ruled out Western Union as a serious contender for accommodating the industry's needs. "They are unwilling to move their traffic around and dedicate a satellite to cable programming," says one executive well ensconced in the satellite dilemma. The two chief contenders, therefore, are RCA and the new boy on the block, Hughes Communications.

Clearly, RCA hopes to make Cable Net Two the second major satellite of cable programming. Already, eight companies hold transponders on RCA's Cable Net Two and RCA has filed a proposal with the Federal Communications Commission which would give each of those firms a second transponder. Under the RCA proposal, the remaining six transponders would go at auction to the highest bidder. The commission is slated to consider the matter July 6. If it gets FCC approval for its auction plan, RCA will head for Sotheby's within 30 days. The auction approach has never been very popular with programmers who recall RCA's last lottery for allocating the two remaining slots on Cable Net One. "I hope this time they use something classier than a plastic wastebasket," says one executive, joking about the container from which RCA pulled lots for transponder allocations worth millions of dollars to programmers.

But before programming companies leave for RCA's auction block, big decisions are going to have to be made on the satellite front. The decision confronting many of the industry's major program companies is whether to stick with RCA and attempt to develop its Cable Net Two or go with the newest entrant, Hughes Communications.

In recent weeks, Hughes has been approaching companies with its own ideas for developing a second cable network—the result of months of work by Hughes to launch its own domestic satellite system and, simultaneously, address the needs of cable.

In December 1979, while RCA was celebrating, somewhat prematurely, the successful launch of Satcom III from the



Clearly, there is a continuing role for common carrier transponder service, says Hughes President Clay Whitehead, but with increased competition resulting from the FCC reducing regulations and authorizing new satellite companies, he feels that the time has come for competition in the ability to meet specialized customer needs not just on price. "Our approach won't fit everyone's needs," Whitehead admits, "but we believe it is an attractive alternative to the carrier service offerings. We are trying to get the transponder uncertainty out of the way so programmers and cable operators can get on with the business of making cable grow."

Kennedy Space Center, Hughes Communications was quietly applying to the FCC for permission to construct and launch two 24-transponder domestic satellites. Having cast its lot with RCA, the cable industry paid little heed to Hughes' application. But today, Hughes has captured the undivided attention of every major programmer with a unique proposal for the development of a second satellite of cable programming.

Unlike the common carrier model of leasing transponders that has been pursued by RCA and Western Union, Hughes Communications is approaching the industry with what it calls a "Video Shopping Center." Utilizing its Galaxy I satellite, which will be launched in May 1983 and occupy the orbital slot at 135° west longitude, Hughes is proposing to sell rather than lease transponders. Although still reluctant to go public with details of the plan, Hughes president and the former chief of the Office of Telecommunications and Policy, Clay T. Whitehead, described Hughes' approach in these terms: "Being a non-common carrier will allow us to cut through to some of the real needs of the cable industry. A common carrier must hold itself out to the public for hire on a non-discriminatory basis. Not being a

common carrier, we can select our customers to organize a number of cable programmers." Whitehead sees Hughes as playing a useful role that will guarantee the best selection of cable programming in one location.

Whitehead likens the way other satellites have developed to Ventura Boulevard. "On Ventura Boulevard you have a crazy quilt of businesses that grew up around each other." He contrasts that to a shopping center where a developer can assemble a collection of stores to create the best shopping environment.

By selling transponders and by hand-picking the companies which will be leased on Galaxy 1, Hughes promises to guarantee the cable industry a strong selection of programming, a selection it is convinced will finally establish a second cable network. Presumably, the blend of programmers selected by Hughes will make it desirable, if not imperative, for every cable operator to build a second dish so they can shop in the video shopping center.

Not Unprecedented

Obviously, the non-common carrier approach is unique and will require FCC sanction. While some who have studied the approach feel it has been carefully constructed to meet with FCC approval, others are wary of the idea. "They are charting new waters," says one programmer. "This is a complete departure from anything that has been attempted. Hughes' proposal represents a serious divergence from common carrier law. They do not have permission to do this."

Other legal sources insist there is precedent for each part of the Hughes proposal but admit the pieces have never before been assembled in this fashion.

"The Hughes concept has been constructed so as not to fall into a common carrier pigeonhole," says one attorney. "No one is guaranteeing the FCC will buy it, but the precendents are there."

Clearly, Hughes' proposal will be examined by the FCC as it looks at every carrier's methodology for allocating transponders. But, it would appear to be counter to recent regulatory trends in the FCC and Congress to try to block the Hughes approach. With petitions now in hand regarding RCAs' proposition and the recent filing by the Robert Wold Company against Western Union's handling of the Westinghouse/Teleprompter deal, the FCC will have to undertake a serious examination of the transponder allocation issue.

Calls to programmers suggest that Hughes has limited its offering to a very select group of the strongest program suppliers, suppliers who will need more capacity to accommodate their programming plans for the next decade. Since Hughes Galaxy 1 satellite is not slated for launch until May 1983, it has little to offer programmers with immediate satellite transmission needs, nor does Hughes intend to pursue those whose needs are immediate. Its strength lies in what it can offer companies willing and needing to buy for long-term capacity.

The Hughes proposal is not for everyone. Because programmers will not be leasing from a common carrier, they will have to pay upfront for their transponder. And given the current marketplace value of a transponder (estimates run from $10-20 million) it is surmised that Hughes is beginning its negotiations in the $15 million range. Only companies with deep pockets will be in the ballgame for space on the Hughes' bird. Financing, however, is said to be available.

Whether they opt for RCA or Hughes, programming companies are going to be paying steep tariffs for the immediate future to play in the satellite game. It is speculated by some that at auction, bidding for transponders on RCA's Cable Net Two will start in the

The Satellite Line Up

Transponder	Owner	Program Service
Westar III		
1	Audio	
2	Hughes TV/ Blairsat	Sports, Integration (day)
3	Intelsat	(Mexico - U.S.)
4	Audio	
5	Occasional service	
6	CBS	CBS Cable
7	Message	
8	Spanish International Network	TV Broadcast service
9	Satellite Syndicated Systems	Satellite Program Network
10	ABC	Program Integration
11	Cable News Network	Program Integration
12	Occasional service	
Comstar D-2		
6	Entertainment and Sports Programming Network	Program Integration
7	National Christian Network	NCN (day)
	Rainbow Programming Services	Bravo/Escapade (night)
8	Spanish International Network	SIN
11	Warner Amex Satellite Entertainment Company	
13	Trinity Broadcasting Network	TBN
15	Showtime Entertainment	Showtime
18	Home Box Office	HBO
19	American Medical Buildings	Las Vegas (various)
Satcom I		
1	Warner Amex Satellite Entertainment Company	Nickelodeon/ARTS
2	PTL	PTL
3	United Video	WGN-TV, Chicago WFMT-FM, Chicago Lifestyle Jisal Dow Jones
4	Inoperative	

$10 million range. If, however, the major programmers look to Hughes for their long-term transponder needs, prices paid for RCA's Cable Sat Two may come down. This would be a boon to smaller companies who are nervous about the ability of larger companies to bid up prices.

Unlike common carriers, which can place no restrictions on how transponders are used, Hughes' will have covenants regarding use and resale. Companies will not be able to pick up an arsenal of transponders and resell them to anyone they choose. Transponders which are resold will have to be resold to someone who will use them for cable programming. Of the 24 transponders which will be dedicated to cable, only 18 will be sold to companies. The remainder will be retained by Hughes as protection of its 18 and will not be leased. The suggestion has been made, however, that Hughes will contract for the programming of these transponders on a preemptable basis. Whitehead said Hughes itself would not enter the programming business as has RCA.

While actively soliciting the major suppliers of cable programming, Hughes is not trying to unseat RCA's Cable Net One. "We want to see lots of capacity," says Whitehead, "and a two-dish standard for the industry." Hughes has made a commitment to promoting and developing a two-dish industry. To facilitate the industry's move to a two-dish standard, Hughes has retained Communications Technology Management to develop a coherent scheme for moving the industry in that direction.

And, just as HBO pioneered the development of the first cable satellites, it will probably play a pivotal role in which way the industry moves on a second dish. It's no secret that many companies are waiting for HBO's decision. HBO President Jim Heyworth admits that HBO is seriously looking at the alternatives. "We are investigating the possible use of Hughes in the future," says Heyworth. "We are looking for expanded capacity. Our position is let's get more people to put up more satellites. Obviously we are investigating and exploring all the logical alternatives."

What appeals to most programmers is the control over their destiny that the Hughes proposal affords them. By purchasing transponders, programmers have the opportunity to participate in the delivery system and be assured of being on a strong cable satellite. And, while Hughes' asking price is considered high by many, programmers who opt to pay up front will be immune to the tariff increases that can be levied by common carriers.

Whatever the outcome, Hughes entry is well-timed. RCA has encouraged interest in a second carrier by changing its allocation system in midstream and creating confusion with its auctions, lotteries, two-for-one deals and talk of joint venture partnerships. Hughes enters the game in the midst of a confused marketplace, a marketplace that is sure to be even more confused for the immediate future by the entrance of more suppliers. Hughes hopes to bring order to the reigning chaos. But for the short term, its entry has again sent strategic planners back to the drawing board to assess whether Hughes' blueprint makes sense for the industry.

Over the next several months, a clearer picture of the long configuration of the cable satellites is bound to emerge as program suppliers work their way through the satellite maze. For as Whitehead pointed out, cable cannot achieve its potential until it leaves the satellite maze behind it. The success of Hughes Galaxy may be the break that will allow programmers not now on RCA or Western Union satellites to negotiate more realistically. "It could be the best outcome for all of us," says one industry observer.

Transponder	Owner	Program Service
5	Warner Amex Satellite Entertainment Company	The Movie Channel
6	Southern Satellite Systems	WTBS-TV, Atlanta
7	Entertainment and Sports Programming Network	ESPN
8	Christian Broadcasting Network	CBN
9	USA Network	USA Network BET C-SPAN
10	Showtime Entertainment	Showtime (west)
11	Warner Amex Satellite Entertainment Company	The Music Channel
12	Showtime Entertainment	Showtime (east)
13	Home Box Office	Transponder currently inoperable
14	Southern Satellite Systems	Cable News Network
15	Warner Amex Satellite Entertainment Company	
16	Showtime (Compact Video has exclusive contract for occasional use) until 1/82.	Video Teleconferencing Video Concert Hall National Jewish Television
	Appalachian Community Service Network has daytime hours on weekdays	Appalachian Community Service Network
17	Showtime (leasing to Eastern Microwave, Inc.)	WOR-TV, New York
18	Reuters	Data Spanish International Network (at night)
19	United Video (7:00 a.m.-noon) Times Mirror (noon-7:00 a.m.)	Shopping, movies
20	Home Box Office	Cinemax (west)
21	Premiere	Home Theater Network (7:00 p.m.-midnight)
22	Home Box Office Modern Satellite Network (leasing to Hearst/ABC Video)	HBO (west)—(at night) Slated for Beta (12:00-5:00 p.m.)
23	Home Box Office	Cinemax (east)
24	Home Box Office	HBO (east)

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Josh Denham (left to right), Mattel Electronics president; Gary Stein, The PlayCable Company vice president/general manager; and Fred Shuh, General Instrument Broadband Communications Group senior vice president.

A New Revenue Source

PlayCable: Not Toying Around

After one year and five test markets, PlayCable is ready to let the entire cable industry in on its fun and games. Next week at the NCTA convention, the company will officially launch the marketing of its Intellivision, 24-hour video games channel, to cable systems nationwide. Intellivision (intelligent television) is being brought to the cable industry through a partnership of Mattel, Inc., creator of the Barbie doll, and General Instrument, parent company of Jerrold Electronics.

Mattel introduced its sophisticated video games to the commercial television market through a multi-million dollar national consumer advertising campaign in early 1980. Despite competition from Atari and Magnavox video games, over 200,000 Intellivision master components were purchased in 1980 with Mattel's entire stock selling out last Christmas.

While Intellivision is available to both commercial and cable television audiences, it is poised to be more convenient and economical to consumers via cable. Both audiences must purchase the Intellivision master component priced between $229 and $300. The master component has two hand controls and a 16-bit microprocessor that provides a full range of sound effects, music and color for the games.

Non-cable subscribers must purchase the various game cartridges at $30 a shot from retail outlets. Cable subscribers receive between 12 and 15 games each month through a special unit at the cable system's headend for a fee of between $6 and $10. The headend unit is being sold to systems by Jerrold for a price in the $10,000 and $12,000 range. PlayCable will provide the software to cable systems for $5 a month per subscriber. In addition to profiting from the software, cable operators can gross up to $100 from the sale of each master component. The component will be wholesaled to operators for $110, $20 less than Mattel's wholesale price.

Unlike such early video games as Pong, Intellivision's growing library—which now has 25 challenging video games—requires skills not easily mastered in three days. For example, in baseball each competitor controls nine players—score a home run and hear the crowd cheer. In golf (which up to four persons can play), choose the wrong club or angle and watch the ball splash into the lake and sink.

PlayCable was test marketed over the last year in five systems: Rochester, Minnesota, and Santa Clara, California (Teleprompter); Boise, Idaho (United); Moline, Illinois (Cox Cable); and Jackson, Mississippi (ATC). Another test got underway last month in Rogers Cable in Canada. The Rochester system was tested prior to Mattel's consumer campaign, so Santa Clara was later substituted in order to take advantage of Intellivision's increased consumer awareness. Two hundred components were produced for each test market. In Jackson and Moline, all two hundred units sold within four months. In Santa Clara the entire stock was sold in half that amount of time. The only snag in PlayCable's test was United Cable's Boise newbuild, where not quite all of its units were sold.

"There are still some problems in marketing to new-builds," admits Jim Wiesenberg, director of marketing for PlayCable. "It's complicated to introduce the master component at the same time you're explaining what cable and all of the pay services are."

In its test markets, PlayCable introduced Intellivision with a full-color, direct-mail piece which explained the service and encouraged subscribers to call for a free in-home demonstration. Overall, PlayCable sold its service to 60 percent of those who responded to the direct mailing and had a home demonstration. Those who didn't respond to the promotional piece were followed up with a phone solicitation, resulting in a 30 percent close rate.

Between 80 and 90 percent of those who purchased the master component already subscribed to a pay service. Churn among PlayCable subscribers was less than ten percent in all markets over the first six months. The majority of these were attributed to subscriber relocation, according to Wiesenberg. "When subscribers make the $200-$300 purchase for the master component they are considered committed subscribers," said Wiesenberg, "Furthermore, the test markets indicate that, with proper training, it is possible for an operator to market PlayCable with his existing manpower."

With the increased awareness of Intellivision through Mattel's consumer advertising, Gary Stein, vice president and general manager of the PlayCable Company, adds that in-home demonstrations won't be necessary.

PlayCable's initial test market, Rochester, got off to a sluggish start last summer when components sales via credit cards were squelched by the credit crunch. In its subsequent markets, however, PlayCable served as a third party non-recourse financier for subscriber time payment purchases.

An undisclosed financial institution will provide cable subscribers with the same time payment plan.

"Now that Intellivision has taken

"We did a lot of soul-searching. It was a very easy launch to foul up. But it was an outstanding success."

Ernie Olson,
Vice-President of Marketing/Operations, MetroVision.

In Lincoln, Nebraska, MetroVision recently replaced its two stand-alone services with Showtime and HBO. Ernie Olson and Victoria Barkan, Director of Marketing, were interviewed by Showtime about this launch. Excerpts follow.

QUESTION: Ernie, you've been in on lots of launches. How would you describe this one?

OLSON: The most complicated I've ever done. I think Vikki would agree.

BARKAN: We had a great deal to tell the subscriber, what with the dual conversion, different rates for the pay services, and not being able to carry the full Showtime schedule.

QUESTION: Why did you insist on Showtime and HBO? Why not Showtime and somebody else? Or HBO and somebody else?

OLSON: I always thought Showtime/HBO was the best combination. Granted, there's some duplication in movies. But there's a lot of difference, a lot of variety, particularly in specials and other programming. Showtime and HBO are compatible. They complement each other.

QUESTION: The Lincoln launch produced a 56% increase in pay units and a 5.4% basic lift, with 76% of first-time pay subscribers taking dual service. Were you expecting results like that?

OLSON: No. Showtime had some projections. We had some projections. And we beat them both. Seventy-six percent taking Showtime and HBO—that's getting close to a new-build situation!

BARKAN: We also got tremendous lift in basic subscribers. In a mature incumbent system, that's quite rare.

QUESTION: Vikki, how would you rate Showtime's performance?

BARKAN: They showed that they knew what they were doing. They had a tremendous way to approach a dual market. And taking into consideration the idiosyncracies of this launch, Showtime developed a plan that worked for Lincoln.

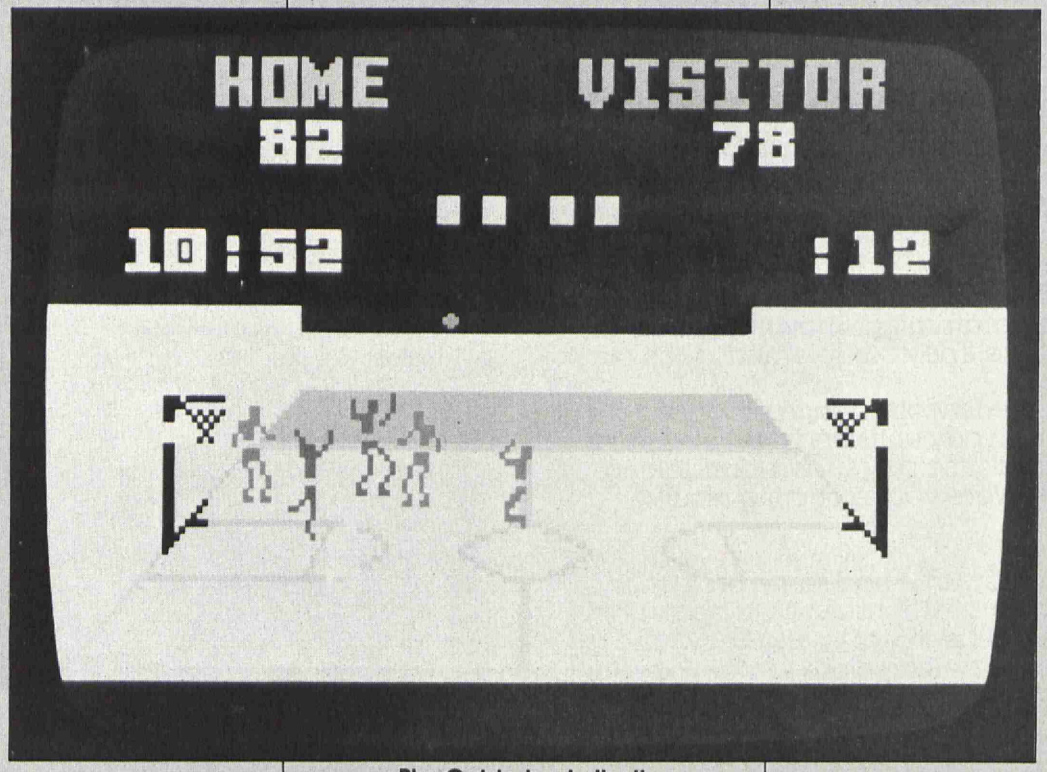
OLSON: The thing that made it a success—and Vikki has said it—is the fact it wasn't a Showtime promotion. It wasn't an HBO promotion. It was a Lincoln Cablevision promotion. And I think that was the key to making the whole thing work.

QUESTION: Well, that about wraps it up. Would you like to add anything?

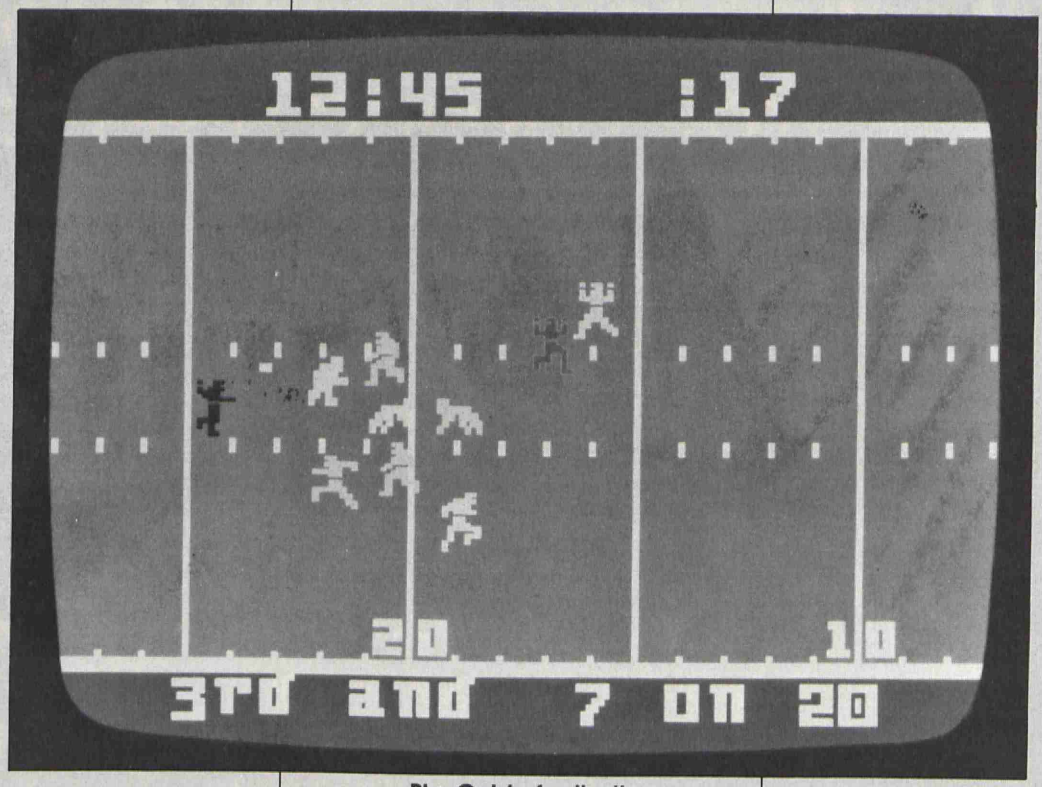
OLSON: I couldn't be more complimentary of the time and help we got from Showtime. It was something I've never seen in the industry, particularly when you're also selling a competitor's service. I'm very pleased.

Showtime Regional Directors:
North East: Art Gusow, (516) 671-6104. **South East:** Bob Mason, (404) 633-4326. **North Central:** Dick Ingebrand, (312) 346-4526. **South Central:** Bishop "Butch" Henley, (817) 267-3125. **Western:** Reva Melniker, (415) 820-1046.

PlayCable hockey.



PlayCable basketball.



PlayCable football.

off, having sold out across the country in its first year, and as brand awareness for Intellivision grows as a result of Mattel's advertising, our sales message becomes easier and easier," said Stein. Stein is conservatively projecting penetrations of five to ten percent of basic subscribers.

PlayCable is toying with the "31 flavors" concept whereby certain stables are available all the time, with old favorites and a brand new game introduced each month.

Although to the subscriber PlayCable is an interactive service, since video games are electronically summoned by a push of the button, PlayCable operates on all one-way cable systems and does not require a video channel. Instead, data is transmitted through unused portions of the FM band.

Intellivision is designed to be upgraded to a home computer with a keyboard component that fits right into the master component. With the keyboard component and additional preprogrammed software, Intellivision is capable of handling a broad range of educational programs including foreign language courses, stock analysis, and a Jack La Lanne physical conditioning course, according to the company. Though several programs have been created for use with the keyboard component, PlayCable will not market it before Mattel offers the item to commercial television audiences.

Mattel intentionally masked Intellivision's capacity to unfold into a home computer under the disguise of an electronic game. The strategy was devised so as not to intimidate consumers into thinking they needed a PhD from M.I.T. to master the unit. With the two-step introduction, Mattel hopes to hook the public on Intellivision's games, then reveal its secondary capacity without scaring them off with the words "home computer."

Just when the second phase will be nationally marketed, however, is still in question. Last week Mattel, Inc., delayed the national introduction of the computer keyboard. Spencer Boise, vice president of corporate affairs, declined to give the specifics of the delay, except to say that the unit would not be on the market this year.

"We want to do additional research on consumer attitudes first," Boise said. Boise would not say where the tests would be conducted or give a new launch date for the keyboard component.

Meanwhile, PlayCable will be making its debut to the cable industry next week. In addition to revenue, PlayCable believes it will be contributing to the success of the cable operator's changing role in his community. The cable operator will need to retail hardware to his subscribers in order to merchandize software, if he is to provide the enhanced services now being tested in the industry, says Stein. Such is the case with PlayCable, since every PlayCable subscriber must own an Intellivision master component, purchasing it either from the operator or from a retail store. And with PlayCable, he adds, the operator makes that transition by selling entertainment for which he is known, and also selling a product that has demonstrated its national demand.

—Susan Spillman

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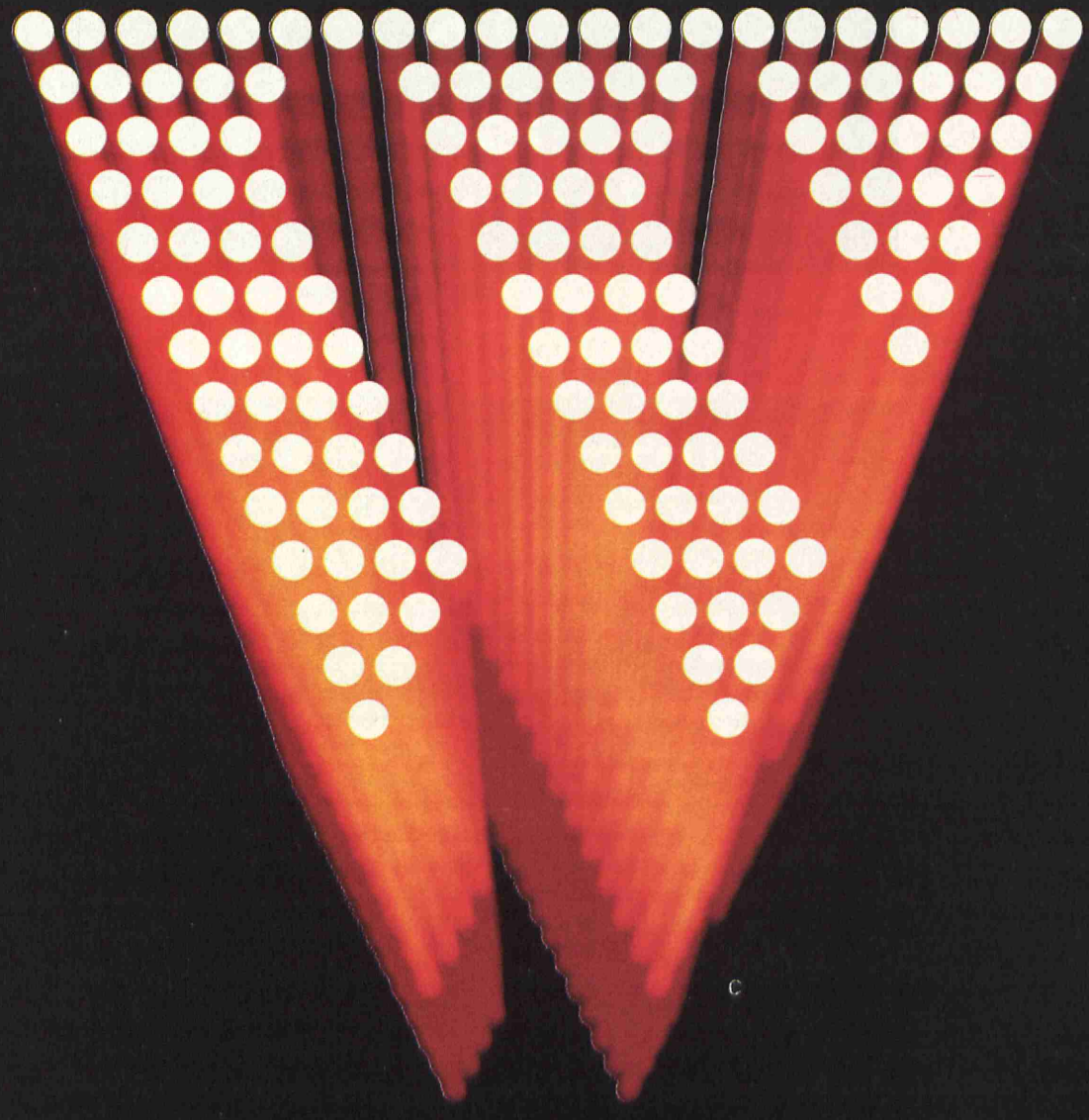

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Minneapolis Sustains Mayor's Veto, Dashing Northern's Franchise Hopes

MINNEAPOLIS, MINNESOTA—The chances of Northern Cablevision, a Storer subsidiary, holding on to the Minneapolis cable franchise slipped further away last week. The city council voted seven to six to sustain Mayor Donald Frazer's veto of a prior council vote to amend the city's cable ordinance. The upgrading of the ordinance was a requirement of the state's Cable Communications Board for the city to receive certification of the franchise, granted two years ago.

Storer supporters sunk deeper into depression at the council meeting, when Alderman Tony Scallon made a motion to start the franchise process over again. Commenting on his resolution, Scallon told *CableVision*, "We don't have a contract with anyone at this point, and we still need cable in Minneapolis."

The Scallon motion was referred to the council's House Ways and Means Committee. A legal staff will investigate the propriety and legal status of starting the process from scratch. A formal resolution will then be presented to council.

Alderman Scallon and Van White, two relatively new councilmen, abstained from voting to amend the city's cable ordinance, but last week they both voted to sustain the mayor's veto. The council had voted seven to four to amend the ordinance.

One city official said, "Everyone around here is waiting for Storer to file a lawsuit against the city."

Storer Vice President John Grubbs would not comment when asked if his company intends to file such a suit. "It is a very fluid situation right now, and as a company we are evaluating the situation," said Grubbs.

According to industry sources, a suit, if filed, would assert that Northern has a firm contract with the city in light of the 1979 award of the franchise (as stipulated in the city's cable ordinance). On the other hand, city and state officials believe that the ordinance clearly states that the contract with Northern would only take effect when the state's Cable Communications Board issued a certification of confirmation. On April 10th, the board denied confirmation of the award, saying that the ordinance was deficient in several ways.

Just two weeks ago, Storer filed a lawsuit against Rogers Cablesystems and several subsidiary companies (CV, 5/18/81, p. 18). The suit, filed in Hennepin County District Court, charges that Rogers' subsidiary, Minneapolis Cablesystems, "by their continual efforts to induce council and the mayor to breach the franchise contract between Northern and the city, have interfered with the contractual rights of Northern in the formation and performance of the franchise contract."

The failure of Storer supporters to garner the nine votes needed to override the mayor's veto has opened the door for Cablesystems to return to the Minneapolis franchise competition should the city issue a second RFP. Commenting on the council decision, Bob Clasen, Cablesystems vice president of operations, indicated his company was very pleased by council's decision to sustain the mayor's veto.

Mayor Frazer has been an adamant proponent of municipal ownership or some form of private/public ownership of the city's cable system. St. Paul city officials recently rejected six applications for the city's cable system in favor of municipal ownership, offering the city the option, after five years, of buying back 50 percent of the systems at two-thirds market value. Sources say the Canadians would offer the city of Minneapolis the same option. Not to be outdone, Storer has also provided a similar provision.

The confusion about municipal ownership among city officials was epitomized by a comment made by Scallon. When asked if he favored municipal ownership, he responded, "I'm positive toward the idea, but not necessarily in favor of it."

—Hugh Panero

NOTES

Falcon Cable TV has been awarded a cable television franchise for four unincorporated areas of Los Angeles County. On a motion made by Los Angeles County Board of Supervisor Pete Schabarum, the board gave its consent for the cable company to build a 54-channel cable system at its May 5 meeting. Over 18,000 homes are included in the unincorporated areas of East Pasadena and Chapman Woods in Pasadena, South San Gabriel, and southern Altadena. The system will include a local program channel, community, government and educational access channels, 17 over-the-air stations in the Los Angeles area, distant broadcast signals, satellite channels, children's programming, sports and news channels and a consumer shopping guide channel. Pay channels available to subscribers will include Home Box Office, the Z-Channel, Showtime, The Movie Channel, Cinemax, GalaVision, and the Asian Channel.

U.S. Cablesystems, Inc. (USCI), wholly owned by Rogers Cablesystems, Inc., announced that two of its affiliates have received franchise awards in the United States. **Dickinson Pacific Cablesystems** (50 percent owned and managed by USCI) was awarded the franchise in Stanton, California, which has 9,000 households. This brings the number of homes under franchise to DPC to 115,000. **Woodstock Radiant TV** (80 percent owned by USCI), which serves 4,000 homes in Camas, Washington, has been awarded the franchise in Washougal, a contiguous community of 2,000 households across the Columbia River from Portland, Oregon. These awards bring the total number of households under franchise to affiliates of USCI to 390,000.

The Andover, Massachusetts, Board of Selectmen voted May 4 to award Andover's cable television franchise to **Rollins Cablevision** of Massachusetts. The franchise area encompasses 8,690 homes.

The Andover system will have 52-channel capacity, two-way interactive capability, a tiered addressable converter, security, medical and fire alert systems, and a local origination/public access package. Rollins will also install and maintain an institutional link between all municipal buildings, schools, hospitals and libraries. Among the features of the Rollins package for Andover is an agreement with Merrimack College (in Andover) which will provide college courses, sports events and other programs for cable subscribers. Construction on the Andover franchise is underway, at a cost of $3.1 million. The system is expected to be completed by the end of 1981.

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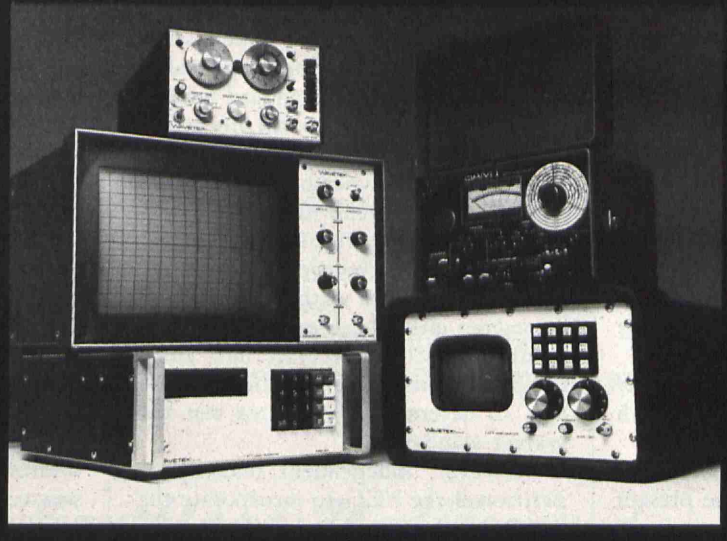


Congressmen Introduce Bills Affecting Retransmission of Distant Signals

WASHINGTON, D.C.—Two members of the House Subcommittee on Courts, Civil Liberties and the Administration of Justice introduced separate cable copyright bills May 12. The first, introduced by subcommittee Chairman Robert Kastenmeier (D-WI), would amend the current compulsory license required for retransmission of distant signals. The second, drafted by subcommittee member Barney Frank (D-MA), would eliminate the compulsory license entirely.

The legislative flurry came just two days before the subcommittee convened the first of three hearings on the cable copyright issue. After the initial hearing on May 14, subsequent sessions were scheduled for May 20 and 21. When introducing his bill, Kastenmeier said one of his goals for the legislation was to "encourage testimony and debate."

"The entire bill is primarily a means of directing discussion and debate to a solution to the cable copyright problem which is fair to all parties," Kastenmeier said.

The Kastenmeier bill includes nine district provisions. It would:

- make the compulsory license available for only a limited number of distant signals;
- grant the Copyright Royalty Tribunal the power to establish syndicated exclusivity rules;
- allow the CRT to establish "just and reasonable" royalty rates for use of the compulsory license;
- grant sports teams full copyright protection with respect to cable retransmission of games within a radius of 50 miles of the stadium;
- establish an exemption from copyright liability for all systems with fewer than 5,000 subscribers;
- eliminate much of the current paperwork cable systems must file with the Copyright Office;
- grant the CRT subpoena power; and
- eliminate a provision of the present law "which appears to require an automatic stay in distribution of royalties upon judicial review."

In introducing the legislation, Kastenmeier said that the provisions "constitute middle ground."

"I am aware that critics of the existing system, particularly program producers, broadcasters and sports leagues, would prefer legislation abolishing the compulsory copyright license altogether—to adopt what they call a 'marketplace' solution," Kastenmeier explained. "Similarly, representatives of the cable industry would prefer the existing law."

Also, in eliminating the copyright liability for smaller systems, Kastenmeier said the legislation reflects a pragmatic approach to copyright payments.

The legislation introduced by Frank follows an entirely different course.

"Basically, he [Frank] would like to return the use of copyrighted materials by cable systems to the free market rather than have them regulated as it stands now," explained a member of Frank's legal staff.

The legislation would eliminate the compulsory license altogether, beginning January 1, 1983. An example of the effect of the bill can be seen in the case of independent superstations. Under the bill, the superstation would negotiate in turn with the individual cable systems that wanted to carry it.

As drafted, there are three notable exemptions included in Frank's legislation. Cable systems serving fewer than 2,500 subscribers would not be liable for any copyright payments. In addition, cable systems "located in whole or in part within the local service area of the primary transmitter" would be exempted from copyright liability for carrying that station; and, finally, a cable system could pick up the secondary transmission of a network television program "that is not available from any television broadcast station located in whole or in part within the local service area served by the cable system."

Although there are substantial differences between the two bills, the spokesman from Frank's office indicated the discrepancies would be sorted out after the hearings.

"We're not closed minded about our approach," he said.

—David Price

FCC Opts To Use CATV Service Area In Processing Cross-Ownership Waivers

WASHINGTON, D.C.—Despite objections from the cable industry, the Federal Communications Commission has decided to use a proposed cable television service area standard instead of a franchise area standard in processing waivers of its telephone company/cable television cross-ownership rules.

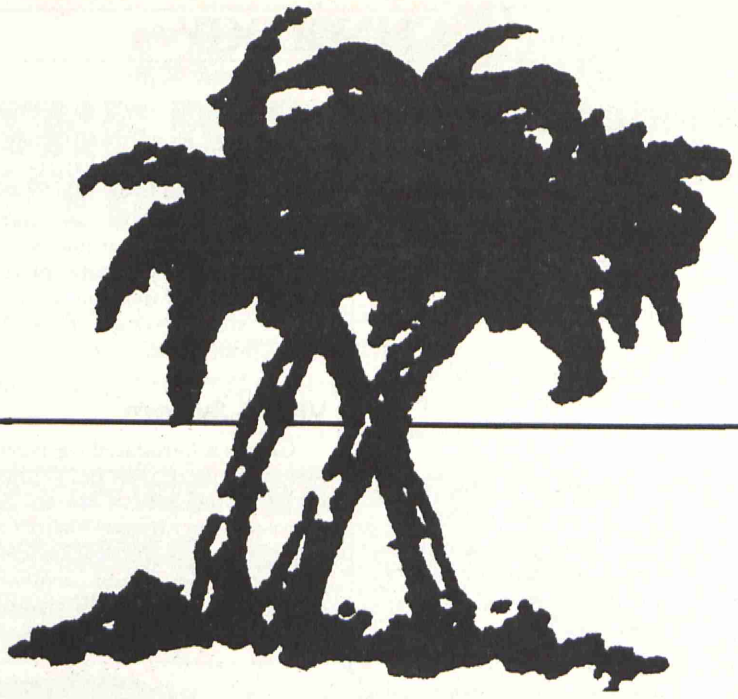
Under the current rules, there is a "rebuttable presumption" that independent cable television service could not exist in an area with fewer than 30 homes per mile of cable plant. The 30-home-per-mile criterion had been computed within the specific franchise area to determine if the area met the waiver standard.

However, independent telcos have petitioned the FCC to incorporate the entire proposed cable television service area when computing the homes per mile. At the last commission meeting, the FCC found that under the franchise area standard, "independent operators could propose to serve core areas, leaving rural areas unserved where phone companies could not serve them on a stand-alone basis."

The National Cable Television Association has argued that using the proposed television service area concept allows telcos "to design mammoth service areas encompassing numerous communities and unincorporated counties as a means of overwhelming potential competitors."

The organization further stated that the telcos will have the opportunity "to 'gerrymander' their areas to include high density locations in a large service area" which includes low density locations.

"As the sweeping cross-ownership exemption levels proposed by the telcos demonstrate, they have no sincere interest in providing cable television service to truly rural areas," stated an NCTA filing on proposed elimination of the cross-ownership restrictions in rural areas. "Rather, their real motivation is to insulate the existing telephone monopoly in all core towns and communities within the telco service area from potential competition from independent cable operators."



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Sony Develops Video System For High-Definition Market

TOKYO, JAPAN—Sony Corporation has developed a new, high-standard video recording and playback system that may vault the company into the race to produce equipment for high-definition television. The video system is based on technology developed by NHK of Japan.

In February of this year, CBS held a demonstration of high-definition television in Washington, D.C. The system that CBS showcased was also based on pioneering research and development that NHK began in 1968.

The Sony contribution to the HDTV field is called the Sony High Definition Video System (HDVS). The prototype features 1,125 scanning lines and 60 fields per second with a frequency bandwidth of about 30 MHz. The entire system is comprised of the following: a high-definition three-tube television camera which incorporates a newly developed one-inch high-resolution, pickup tube; a one-inch wide-band RGB VTR which employs a new high-density recording format: a wide-band digital time base corrector with a new wide-band AD converter; a 20-inch and 32-inch high-definition Trinitron monitor; and a 100-inch high-definition television projector with a wide-band picture tube for projection use.

The new system is expected to enhance the production of both motion picture and television product, according to Sony. The company stated that the HDVS will expand the range and scope of special effects by using electronic processing.

The HDVS will also lend itself to a number of delivery systems, Sony claims. Among these will be "satellite broadcasting, cable TV or optic fiber transmission in the future," the company stated.

PRODUCTS

Monitor

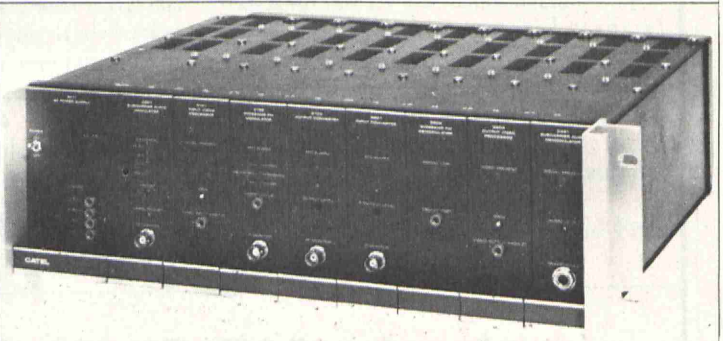
Satellite Communications Network has unveiled an antenna capable of receiving simultaneous transmissions from up to 14 different satellites. The Satellite Communications Network multi-satellite antenna, which is to be manufactured exclusively for the company by Antenna Technology Corporation of Orlando, Florida, receives signals from any satellite within a 52-degree field of view, according to the manufacturer. It has performance characteristics similar to those of a conventional 4.6-meter antenna. For information, contact Satellite Communications Network, 1 World Trade Center, Suite 8833, New York, New York 10048; (212) 466-0507.

Video Equipment

RCA Broadcast Systems has introduced a new television camera/video tape recording system that combines a compact broadcast-quality color TV camera and videotape recorder in one hand-held unit. The Hawkeye system includes a fully-integrated system of recording camera, full-feature studio video tape recorder, and editing capabilities. The heart of the Hawkeye system is the single-unit recording camera, designated the HCR-1, which makes practical a one person in-the-field video production unit. The HCR-1 combines camera, recorder, microphone and batteries in a single, rugged weather-tight unit, weighing only 21.5 pounds including lens. The camera portion of the field system is a three-tube unit using new high performance ½-inch Saticon or lead oxide pickup tubes. The camera viewfinder includes LED displays which indicate battery status, verify that the signal is on the videotape, display shooting time and warn the operator when the end of tape is near. The Hawkeye system uses a baseband recording technique called Chroma Trak for recording on ½-inch video tape in standard VHS cassettes. Twenty minutes of recording time is provided on each cassette. For information, contact RCA Commercial Communications Systems Division, Bldg. 2-7, Camden, New Jersey 08102; (609) 338-2839.

Video System

Catel has introduced a generation of video FM systems with 450 MHz capacity. Called the WFMS-3000, the system is a 70 MHz I.F. based system which covers the extended bandwidth of cable television super trunks, from 14 to 450 MHz. According to Catel, a major feature of the new system is the modular design, with user-programmable options which allow the WFMS-3000 to be configured into a virtually transparent link for broadcast video, high speed PCM data, on coax, or analog fiber links. The WFMS-3000



Catel's WFMS 3000 video FM system.

System is housed in a 19-inch by 5¼-inch EIA rack mount cabinet, with sufficient module space for dual modulators, dual demodulators, or mod/demod combinations for duplex operation. Options are available for sub-carrier audio transmission, 124 ohm balanced video pairs, and DC battery bank operation. For information, contact Catel, P.O. Box 1389, Mountain View, California 94042; (415) 969-9400.

STV Decoder

Zenith Radio Corporation and **American Television and Communications Corporation** have introduced a wireless, remote-control subscription TV decoder which is both all-channel and addressable. The STV decoder utilizes the SSAVI-I encoding system for over-the-air pay TV operations, and will tune all standard VHF and UHF channels. The unit is capable of being addressed and descrambled on up to 20 separate encoded over-the-air pay-TV channels. For information, contact Zenith Radio Corporation, 1000 Milwaukee Avenue, Glenview, Illinois 60025; (312) 391-8181.

Oscilloscope

A TV/monitor oscilloscope, the Gould OS3350/5, combines the performance of an NTSC 525-line waveform and picture monitor with that of a general purpose 40 MHz dual-trace scope in a single, compact package, according to **Gould, Inc.** A timebase generator in the unit allows it to be used for line-by-line examination of 525-line waveforms or to display complete pictures. It accepts standard level composite video signals with or without sound-in-sync signals and provides five different triggering modes: line 15 through 21 in either field 1 or field 2; field; line repetitive; field selector; and line

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JAMES SCOTT VS. EDDIE GREGORY (a.k.a. EDDIE MUSTAFA MUHAMMAD) OCTOBER 24, 1978	MIKE ROSSMAN VS. ALVARO YAQUI LOPEZ MARCH 2, 1978	LEON SPINKS VS. GEORGE JEROME JUNE 1, 1977	MUHAMMAD ALI VS. JOE FRAZIER SEPTEMBER 30, 1975	MUHAMMAD ALI VS. GEORGE FOREMAN OCTOBER 31, 1974

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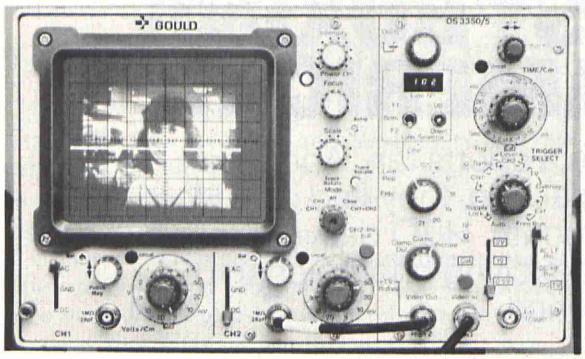

The Gould OS3350/5 TV monitor oscilloscope.

selector. In line selector the chosen line is indicated on a three-digit LED display. A multiturn vernier control provides triggering delays up to 90 μs, allowing parts of a line to be examined in detail. The displayed video signal can be clamped or not. When the unit is used to display a TV picture, the triggering point selected may be displayed as a bright-up line on the picture, enabling a direct relationship to be established between waveform and picture. In conventional operation, the Gould OS3350/5 functions as a general purpose 40 MHz, 5mV/cm dual-trace scope with signal timebase control.

For information, contact Gould, Inc., Instruments Division, 3631 Perkins Avenue, Cleveland, Ohio 44114; (216) 361-3315.

Security Enclosure

Cablemate Products, Inc., has introduced two products designed for the cable television industry. The first product is the multi-subscriber security enclosure (MSE), which accommodates splitters and couplers for homes, apartments and duplexes. The product features one-piece construction for time-saving installation and allows for fast subscriber audits. The MSE comes in four models: two rain-proof models and two models for indoor applications. The second product is an aerial support called Cabletite ™. The support offers a built-in stabilizer. Two sizes fit all cable diameters. For information, contact Cablemate Products, Inc., Cable TV Products Group, 666 Sugar Lane, Elyria, Ohio 44035; (216) 365-9954.

Dehydrator

A semi-automatic dehydrator designed for applications where periodic desiccator replacement is practical is now available from **Cablewave Systems**. The SPD-10 dehydrator has an output capacity rating of 1.0 scfm (0.47 liters/sec.). Output pressure is factory set at 3-8 psig (0.21-0.56 kg/sq. cm) but may be readjusted in the field to operate anywhere between 2 and 15 psig. (0.14-1.05 kg/sq. cm). Differential is fixed at 5 psig (0.35 kg/sq. cm). A check valve prevents loss of pressure back through the compressor, and a standard low pressure alarm switch, factory set for 1 psig (.07 kg/sq. cm) offers SPST contacts for remote monitoring. A high pressure safety relief valve protects transmission line components in case of excessive pressure buildup. The valve is set at 10 psig (0.7 kg/sq. cm); leak rate will keep up with the capacity of the compressor (1.0 SCFM). A bleedoff orifice is located in the input connector fitting to the manifold block to bleed pressure from the canister so it is not under pressure when shut off, thereby allowing safe removal when it is necessary to restore the desiccator. It also allows removal of pressure from the head of the pump so it is not under load when the motor compressor is turned on. For information, contact Cablewave Systems, Inc., 60 Dodge Avenue, North Haven, Connecticut 06473; (203) 239-3311.

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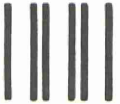

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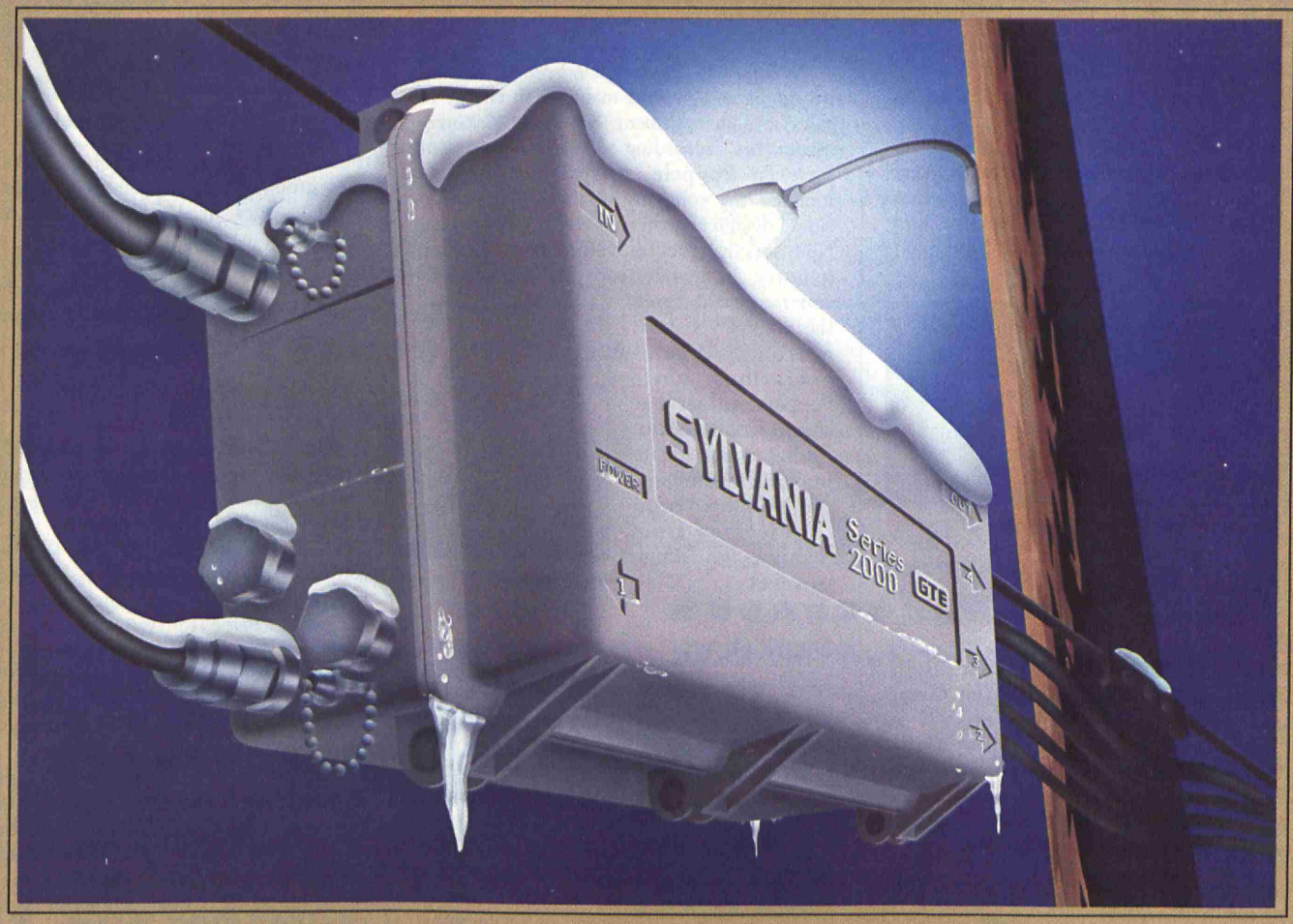

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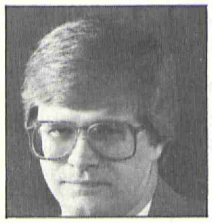
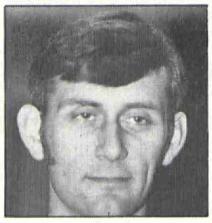
Business

John L. Medinger has been named director, industrial relations, for **ITT Cannon Electric**-North America. He will be responsible for industrial relations, safety and security for ITT Cannon facilities in Santa Ana, Fountain Valley and Pomona, California; Phoenix, Arizona; and Whitby, Ontario. Medinger joined ITT in 1973 as an employee representative for ITT Telecommunications, Raleigh, North Carolina. Promoted to supervisor compensation and benefits in 1974, he subsequently worked as manager, compensation and benefits, and vice president and director, industrial relations.

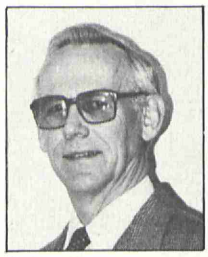


J. Medinger



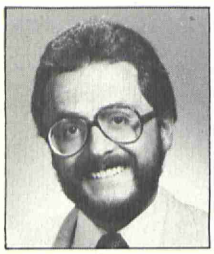
J. Loots

Additionally, **John P. Loots** has been promoted to process service manager for ITT Cannon in Santa Ana, California. Loots will be responsible for industrial and mechanical engineering services in the shells process center. Loots joined the Great Britain facility of ITT Cannon in 1971 as process planning engineer. He subsequently worked as chief industrial engineer and production manager. He earned a bachelor's degree in engineering from Kingston College of Technology in England.



J. Dunbeck

Joseph T. Dunbeck was named vice president of planning and product development for **Chester Cable**. Dunbeck joined Chester as director of business and new product development following a position as corporate director of quality assurance for Foster Forbes Company.



P. Rodkinson

Peter M. Rodkinson has joined **Liberty Communications, Inc.**'s headquarters staff in Eugene, Oregon, as director of marketing for Liberty's cable television operations. Prior to joining Liberty, Rodkinson was national sales director, preceded by serving as Western regional marketing director, for United Cable Television Corporation in Denver. Previously, he served as Western district manager, Showtime Entertainment in Seattle, and held various cable television marketing management positions in the Northwest.

William E. Endres has been appointed president and general manager in charge of sales and management for **Tele-Measurements, Inc.**, according to outgoing president **Jack R. Poppele**. Endres and Poppele founded the company in 1961 as a professional design engineering and sales organization serving the television broadcasting industry. In his new capacity, Endres will continue to oversee the company's engineering and sales operations, while Poppele will serve as chairman of the board. Endres is a graduate in business administration and electrical engineering from Syracuse and Lehigh universities.

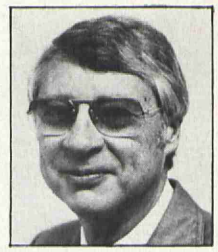
W. Endres

Marketing

J. Phelan

John F. Phelan has joined **Sony Corporation of America** as western regional manager. Phelan brings to his new position nine years of experience in sales and management of professional audio products. Prior to joining Sony, he was vice president of sales at Filmways Audio Services, Inc., where he had previously served as general manager. Earlier he was manager of professional sound products for Shure Brothers, Inc. A graduate of St. Mary's College in Winona, Minnesota, Mr. Phelan holds a bachelor's degree in sociology and has studied management at the Wharton School, University of Pennsylvania. He is a member of the Audio Engineering Society.

Richard Wadman and **Jason Beckett** have been appointed to sales management positions at **Colony Communications**. Wadman, who had been coordinating sales programs in the Boston area, has been promoted to sales manager. Sales and telephone marketing supervisors in all three locations will report to him. Beckett will be commercial account manager in Boston, responsible for sales activities and apartment complex contracts. He joined Colony Productions in 1980 from Starcase, where he supervised telephone sales.



R. Winselar

Russ Winselar has been promoted to vice president of **Omega Video, Inc.** Winselar will be responsible for all professional broadcast marketing for the video systems company. He joined Omega Video in October, 1974, as a member of the broadcast sales group. He was promoted to regional sales manager in 1978, and was named director of marketing in 1980.

Prior to joining Omega, he was a sales engineer with 3M's Mincom Division for 13 years. Winselar received his BSEE from the University of Delaware.

Programming

Craig Sager has joined **Cable News Network**'s Sports Division as one of six sports anchors. Sager anchored his first show for CNN March 24th on the 7:30 CNN Sports program. He joins CNN from KMBC-TV in Kansas City, Missouri, where he reported and anchored evening programs. Prior to two years of sportscasting in Kansas City, Sager spent six years with Florida TV stations in Ft. Myers, Sarasota, and Tampa. He holds a bachelor's degree in speech from Northwestern University.

Additionally, **Anthony Collings**, former London and Bonn bureau chief for *Newsweek*, has joined CNN as Rome bureau chief. Collings was bureau chief for *Newsweek*'s London and Bonn bureaus for seven years. He has covered major stories in Europe, the Middle East and Africa. He was also a reporter with the *Wall Street Journal* in New York and editor of *Veritas*, the newspaper for the Army Special Forces. Collings holds a bachelor's degree in politics from Princeton and a master's degree in international relations from Fletcher School of Law & Diplomacy. In addition to his native English language, Collins speaks Russian, German, French and Italian.

Associations

The **Missouri Broadband Cable Association** elected its 1981 officers earlier this year. **Don Eggebrecht**, St. Joseph Cablevision, was named president; **Maurice Zion**, Chillicothe Cable TV, vice president; **Joe Becknell**, Cablecom of Joplin, secretary; and **Larry Wright**, See T.V. Colorado, treasurer. MBCA also named four members to its board of directors: **J.C. Daniels**, Cablecom of Kirksville; **Ron Foster**, Carrollton CATV; **Jerry Jones**, Cape Girardeau Cable T.V., and **Jerry Rutherford**, Telecable of Springfield.

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Demo CVS-500 Time Base Corrector (Mod. for ¾")	18,000	5,000
Demo BJA Chromaton 14 Synthesizer	8,000	3,450
Demo (2) Sony VO-2860 ¾" Editing Recorders	12,000	Both 6,650
Demo JVC CR4400LU Broadcast ¾" Portable w/AAP44LUAC/Shipping Case	5,000	3,770
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1 Comprehensive 56M-2 Shotgun Mic
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Appeals Court Rules Against Signal Pirates

SAN FRANCISCO, CALIFORNIA—In a decision which could have a considerable impact on the future of pay TV, the Ninth U.S. District Court of Appeals here ruled that it is illegal to intercept a pay TV signal without proper authorization from the station.

The decision overturns a ruling made by U.S. District Court Judge Lawrence T. Lydick in Los Angeles las summer that pay television signals are part of the public airwaves and can be intercepted legally.

Lydick refused to stop 13 electronics companies from producing and distributing equipment designed to intercept signals from National Subscription Television, owner of ON TV and Oak Broadcasting, the licensee for Channel 52.

Lawyers for the electronics firms argued that pay TV signals should be left unprotected because the airwaves "belong to the public" and that NSTV should not be granted a monopoly control without express permission from Congress.

ON TV attorney Arthur N. Greenberg, upheld by the circuit court, maintained pay TV is protected by Section 605 of the Federal Communications Act of 1934, which prohibits the unauthorized interception of television and radio signals intended for use by paying subscribers only.

The suit will be sent back to the U.S. District Court to determine whether damages are to be awarded to ON TV. There is a possibility of a Supreme Court Appeal, but observers say it is unlikely that the Supreme Court will hear the case owing to a similar decision made by Sixth Circuit Judge Cornelia Kennedy in Detroit last August.

With two appellate courts in agreement, the Supreme Court would have little reason to review the case.

Kenneth J. Golden, attorney for the 13 manufacturers and distributors, could not be reached for comment. None of the defendants contacted would comment on the case.

—Patricia Goldstone

VIDEO CASSETTES/DISCS

Videocassettes Seized Worth Millions in Lost Revenues

DENVER, COLORADO—FBI agents May 4 seized 650 videocassette tapes from six Curtis-Mathes television retail stores in Denver, Colorado Springs and Pueblo. The tapes, which were circulated by a video club available to members for a $100 fee, were suspected of being illegal duplicates of motion pictures, some of which had not yet been released for home video use.

At least one tape was a copy of *The Empire Strikes Back*, said Richard Bloeser, director of the Film Security Division of the Motion Picture Association of America (MPAA).

In addition to the tapes, agents confiscated several pieces of equipment believed to be used in possible copyright

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violations. The evidence has been turned over to the United States Attorney, who will determine whether to convene a grand jury. No indictments or charges have been filed so far.

The matter was brought to the attention of the authorities after several customers complained they were receiving copies taped directly off television sets, rather than legitimate, first-quality editions, Bloeser said.

Stores named in the action were TV World, Inc., and Curtis-Mathes Showroom, both of Denver; 444 TV Store, Lakewood; Pueblo Warehouse Video Showroom, Pueblo; Home Entertainment ShowKase, Inc., Colorado Springs; and World of Color, in Arvada.

Last year, the FBI seized 16,000 illegal tapes in actions resulting in 60,000 convictions for video piracy. At least 90 individuals are waiting trial after being searched by the FBI.

The penalty for copyright infringement—renting or selling illegally duplicated tapes—is one year in jail and/or a $25,000 fine.

Bloeser reported that one individual in Houston, Texas, recently was convicted and sentenced to a four-year term in prison, plus a $100,000 fine for selling illegally duplicated tapes to oil drilling rigs and tanker operators.

The FBI estimated that the tapes seized in Denver represented $6.6 million in lost revenue to movie and theater companies.

Bloeser said that video piracy is a "very rapidly growing problem" because of the ready access by the public to video recording machines.

—Victoria Gits

RCA Will Add 26 Titles To Videodisc Catalog

NEW YORK, NEW YORK—Twenty-six releases, ranging from this year's Oscar-winning film *Ordinary People* to two network television documentaries will be added to RCA's SelectaVision videodisc catalog this summer. The new titles, bringing the total number of available videodisc programs to 126, were unveiled last week before an RCA distributors meeting in Las Vegas.

Three of the additions come from the company's agreement with Paramount Pictures for product last fall: *Ordinary People*, *Urban Cowboy* (to be seen next month on pay cable) and *Airplane*, which will be released ahead of its pay TV debut. A fourth film under the RCA-Paramount agreement, *The Elephant Man*, will probably be released in videodisc form this fall. Other films added to the catalog include *Goldfinger*, *The Pink Panther*, *Chinatown* and *American Gigolo*.

RCA videodisc Market Planning Director Howard Ballon told distributors at the meeting that the company will increase production on several titles already available, in addition to placing new ones on the market.

"Titles like *Rocky*, *The Godfather*, *Heaven Can Wait* and *The Muppet Movie* have been our strongest sellers," Ballon said. "In six weeks, these titles have sold close to 15,000 copies each."

Rocky will be one of the titles stepped up in production to meet demand, Ballon added, along with *Grease*, *Saturday Night Fever*, and *Star Trek: The Motion Picture*.

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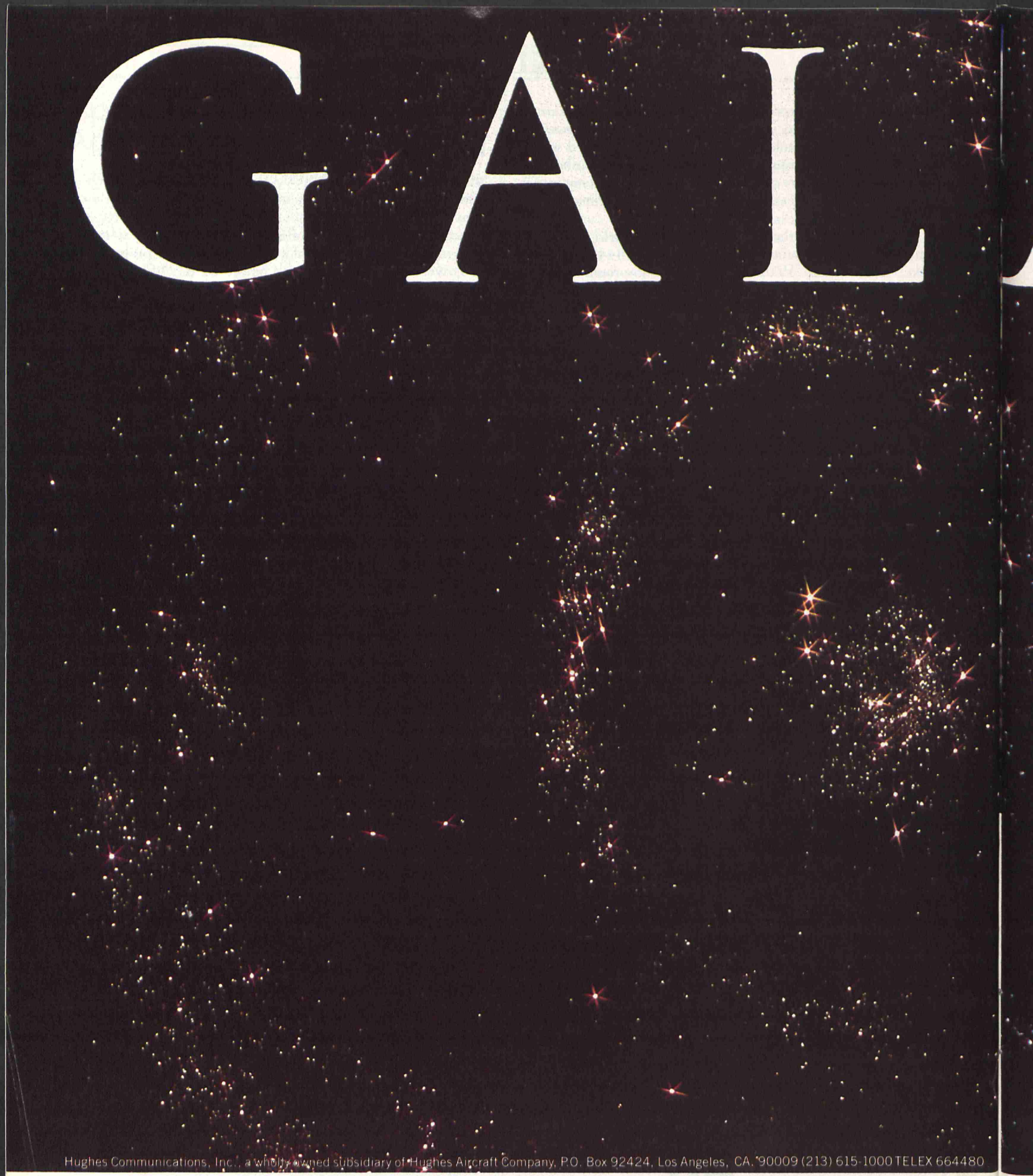

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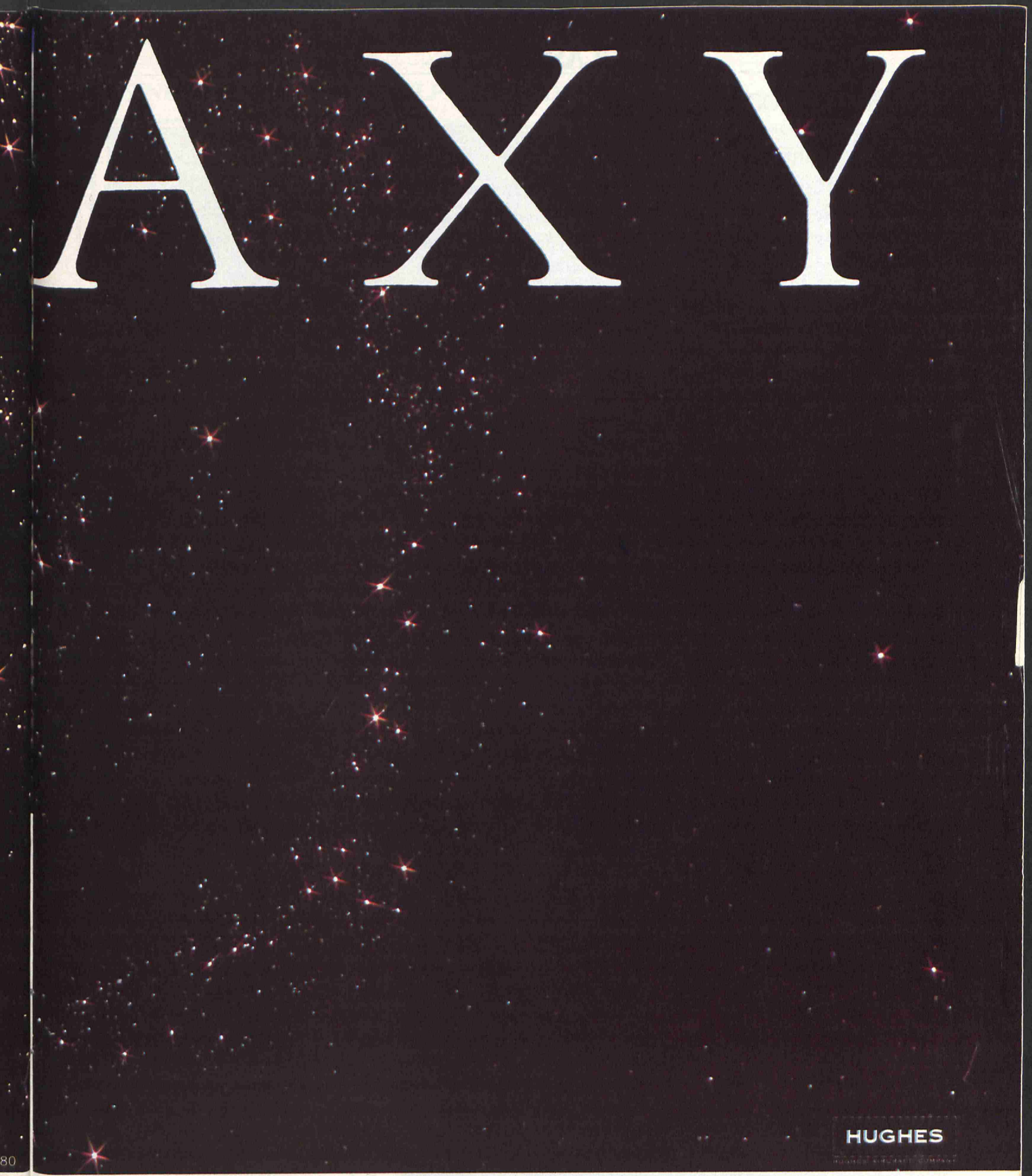

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EVENTS

MAY

18: The **Dallas Cable Club** will hold a meeting at the Hilton Inn at Mockingbird Land and Central Expressway, Dallas, Texas. A presentation on TOCOM's 55 Plus system will be made. Contact Buzz Hassett, (214) 241-1421.

20: A meeting of the **Chicago Cable Club**, hosted by Continental Cablevision, will be held at the Chicago Marriott Hotel. Contact Sharon Schmidt, (312) 693-9800.

20-22: Infomart and **Online** are sponsoring "Videotex '81," a seminar on videotex communications at the Royal York Hotel in Toronto, Ontario. Contact the firm at (416) 598-1981.

20-22: The 7th annual Los Angeles Professional Videoshow will be held at the Los Angeles Convension Center, sponsored by "**Educational & Industrial Television**" magazine. Contact Ellen Parker, (203) 743-2120.

21-22: TeleStrategies, Inc., is sponsoring a seminar, "Understanding Telecommunications Technologies for Non-Engineers," at the Twin Bridges Marriott, Washington, D.C. Contact TeleStrategies, (703) 734-7050.

22-23: The **National Federation of Local Cable Programmers**/Mid-Atlantic and Northeast Regions, the **Tri-Stat Telecommunications Advisory Committee**, the **Riverside Church** and the **Channel L Working Group** are hosting a two-day conference entitled "Cable TV—Programming Your Community Channels" at the Riverside Church in New York City, Contact Chuck Sherwood, (212) 964-2960.

22-23: The **National Federation of Local Cable Programmers**/Southwestern Region is sponsoring a two-day seminar entitled "After Franchising" at the Texas Christian University, Fort Worth, Texas. Contact Ed Deane, (214) 521-3111.

26-28: Information Gatekeepers, Inc., is sponsoring "Electronic-Office '81" at the Commonwealth Pier Exhibition Hall, Boston, Massachusetts. Contact Michael A. O'Bryant, (617) 739-2022.

28: TOCOM is sponsoring a seminar, "Winning with 55 Plus Technology," at the Bonaventure Hotel, Los Angeles. Contact Sherri Scott, (214) 438-7691.

29: The **Cabletelevision Advertising Bureau** will hold its first general membership meeting in Room 202 of the Los Angeles Convention Center concurrent with the NCTA convention. Contact Roger Ahrens, (212) 580-8814.

29-June 1: The **National Cable Television Association** is holding its annual convention at the Los Angeles Convention Center, Los Angeles, California. Contact Dan Dobsin, (202) 463-7905.

JUNE

1-5: The **Community Antenna Television Association** is holding a cable television technical training seminar at the George Washington Motor Lodge-East in Philadelphia, Pennsylvania. Contact the CATA at (305) 562-7847.

4-5: TeleStrategies, Inc., is sponsoring a seminar on "Satellite Communications" at the Twin Bridges Marriott in Washington, D.C. Contact Telestrategies, (703) 734-7050.

9-11: A **Jerrold** technical seminar will be held at the Plaza Airport Inn, Millbrae, California. Contact Len Ecker, (215) 674-4800.

9-11: The International Marketing Center of the U.S. Department of Commerce, Paris, France, is sponsoring an exhibition and seminar on U.S. fiber optics, **"Fiber Optique-'81."** Contact Ellen M. Bond, (617) 739-2022.

14-16: Montana Cable Television Association will hold its annual meeting at the Sheraton Hotel in Billings, Montana. Contact Bob Briney, (406) 586-1837.

14-17: The **Institute of Electrical and Electronic Engineers** is holding its 1981 International Conference on Communications at the Hilton Hotel in Denver, Colorado. Contact Bob Skelton, (303) 779-0600.

15-16: The National Endowment for the Arts and Temple University are supporting a conference entitled "**Cable Television and the Independent Producer**" to be held at the university in Philadelphia, Pennsylvania. Contact Professor Alan Bloom, (215) 787-1873.

16: Showtime and Wometco Cable TV will host a dinner meeting of the **Atlanta Cable Club** at the Atlanta Stadium Club, Atlanta, Georgia. Contact Marian McConnell, (404) 898-8500.

16-18: A **Jerrold** technical seminar will be held at the Princess Kaulani Hotel, Honolulu, Hawaii. Contact Len Ecker, (215) 674-4800.

16-18: Nepcon East '81 will focus on the East Coast electronics manufacturing industry and take place at the New York Coliseum, New York, New York. Contact Industrial & Scientific Conference Management, Inc., (312) 263-4866.

18-19: The **Multi-Cultural TV Council** is sponsoring an opportunities seminar entitled "Minorities and Cable TV," at the Hyde Park Hilton in Chicago. Contact Shirley Griffin, (312) 743-4376.

22-26: Hughes Aircraft Company's microwave communications products has scheduled a technical seminar on its AML local distribution microwave equipment at the firm's Torrance, California, facility. Contact Seminar Registrar, (213) 517-6100.

22-26: The **University of Wisconsin** is offering a short course on "Laser System Design" at The Concourse in Madison, Wisconsin. Contact Donald Baxa, (608) 262-6381.

23-24: A **Blonder-Tongue** MATV/CATV technical seminar will be held in Baltimore, Maryland, in conjunction with LCA Sales, Inc. Contact Glenn Stawicki, (201) 679-4000.

23-25: A **Jerrold** technical seminar will be held at the Best Western Arena Motor Inn in South Williamsport, Pennsylvania. Contact Len Ecker, (215) 674-4800.

24: The bi-monthly meeting of the **Appalachian Mid-Atlantic Group** will be held at the University Lodge, Shippensburg, Pennsylvania. "Text Equipment" will be the meeting's topic. Contact Tom Carbaugh, (717) 263-8288; Lee Burkholder (717) 263-8591.

24-26: Data Communications will be sponsoring a conference on "Teleconferencing and Satellite Systems Technology" at the Sheraton Centre in New York City. Contact McGraw-Hill Conference and Exposition Center (212) 997-2855.

25-26: The **New York State Commission on Cable Television** will hold its "Seventh Annual Northeast Cable Television Technical Seminar" at the Empire State Plaza Convention Center in Albany, New York. Contact Robert L. Levy, (518) 474-1324.

25-26: "Understanding Telecommunications Technologies for Non-Engineers" is the topic of a seminar sponsored by **TeleStrategies, Inc.**, at the New York Sheraton in New York City. Contact TeleStrategies, (703) 734-7050.

28-30: A second workshop on "How to Video-Teleconference Successfully," sponsored by the **Public Service Satellite Consortium**, will be held in Denver, Colorado. Contact PSSC, (202) 331-1154.

JULY

7-9: A **Jerrold** technical seminar will be held at The Concourse in Madison, Wisconsin. Contact Len Ecker, (215) 674-4800.

9: The **National Federation of Local Cable Programmers** is sponsoring a pre-convention seminar for access and program directors at the Atlanta Biltmore Hotel, Atlanta, Georgia. Contact Cindy Kuper, (404) 523-1333.

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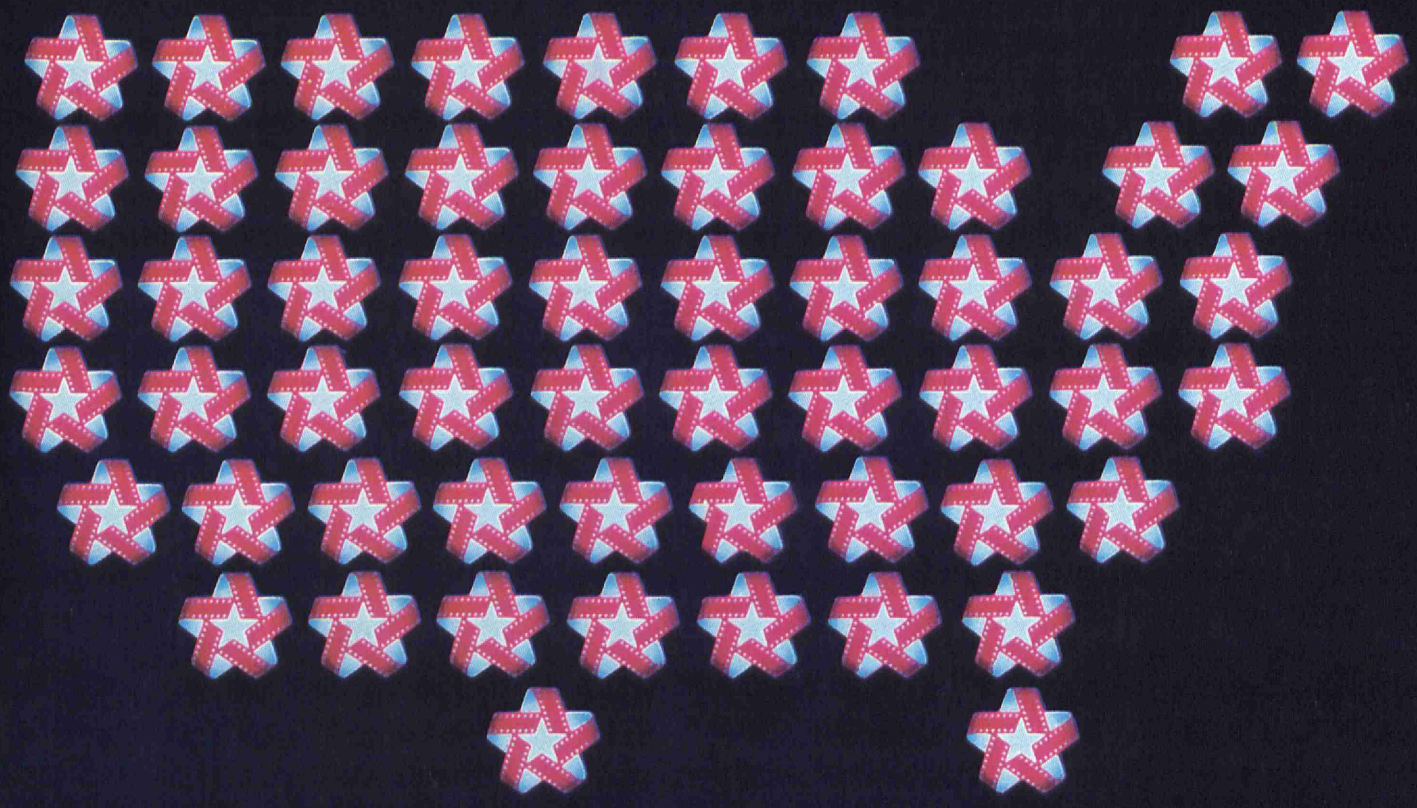

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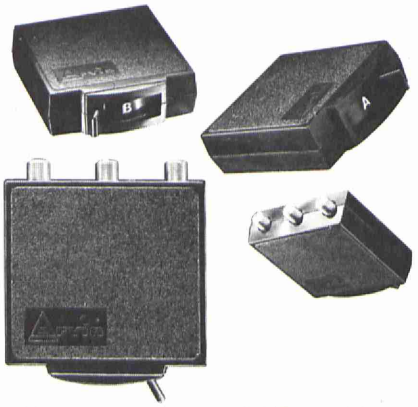

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Cable 1, Utah 0

The cable television industry's First Amendment case was heard in Utah last week, and, fortunately for the industry, it ended with a first round victory for cable operators. Federal Judge Bruce Jenkins' decision to grant a temporary restraining order blocking the Utah statute, which would have made cable transmission of "indecent" material a Class A misdemeanor, is a significant milestone for the industry.

While the final decision in the case will not be made until mid-June, it is consequential that the court acted swiftly to issue a temporary restraining order on the grounds that, as Jenkins noted, "there are serious and substantial questions as to whether the statute is unconstitutional on its face and a serious question as to the intrusion by the state into important areas protected by the First and 14th Amendments."

The case, which was brought by four Utah cable television companies and Home Box Office after the Utah legislative passed a law that would make it illegal to distribute by wire or cable material deemed "indecent," bears watching by the industry.

The circumstances surrounding the Utah case are not unlike those that could arise in other communities or states. A group of concerned citizens, which included a woman whose claim to fame was getting a Coppertone billboard removed in Salt Lake City, prevailed upon a certain state senator to introduce anti-pornography legislation targeted for cable. While the first draft of the law referred only to cable carriage of pornography, in the final hours sponsors added the word "indecent." It was that word that triggered Home Box Office and several cable operators to file suit. Under Utah law, programming with even isolated scenes of nudity would be classified as "indecent." That, HBO and others note, would make it possible to prosecute operators for showing not only top box office attractions such as *Kramer vs. Kramer* but retransmitting, for example, a public broadcasting station showing *I Claudius*. Additionally, it could affect programming on any of the cultural or arts channels.

With the overblown publicity cable is getting for its hard R movies (*TV Guide* recently devoted a lead story to the subject and last week, *The Wall Street Journal* ran a front page piece entitled "Monroe, La. Agonizes Over the Sexy Movies On Its Cable Television"), the alarm is being sounded. And this publicity is certain to result in more skirmishes as concerned citizens move to legislate program content.

Already in Florida a bill has been introduced in the legislature which would ban R-rated movies between the hours of 6:00 a.m. and 10:00 p.m. Again, violation of the law would be a misdemeanor of the first degree. In Florida, the bill has not yet come up before committee, and the attorney for the committee argues against going forward with legislative action on First Amendment grounds.

These efforts may be but the opening chapter in what could be an ongoing fight to legislate what can and cannot be shown on cable television. Clearly, I am not defending the showing of pornographic material on cable. But as Judge Jenkins states, "This is not a case involving pornography." It is a case involving non-pornographic material which one state legislature characterizes as indecent.

Barbara J. Luger

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PARTING WORDS

Excerpts from In and Around the Industry

Sex and Violins

"Hoping to provide a new wrinkle, four cable operators have joined to produce pay TV's oddest couple. Five evenings a week, the Rainbow channel advises viewers to 'send the kids to bed' and turn on its Escapade service, offering *The Happy Hooker, Naughty Nymphs, Hot T-Shirts* and other films of the genre. The remaining two evenings, Rainbow serves up concerts, ballet and other cultural fare. Over 60,000 subscribers have signed on, and plans are afoot to offer the two services separately. Apparently sex and violins won't mix for long."

—Peter Bernstein, from "The Race To Feed Cable TV's Maw," an article in *Fortune* magazine (5/4/81)

"Our Masada"

"From my point of view, this could be our Masada."

—Milton Maltz, president of Malrite Broadcasting, talking about cable and the copyright act at the NAB convention (4/13/81)

Still the One

"The one recurring topic has been the new technologies. You have been concerned about the threat they pose to our joint future as broadcasters. We share your concerns. But we do not accept the blind optimism of Pollyanna or the gloom-and-doom beliefs of Cassandra. Realistically, we look at the new technologies as an opportunity and as a challenge . . . All in all, they will fragment or dilute the traditional broadcasting audience to a certain extent . . . Though our share of the audience may be less, we feel we will be appealing with the increase in the number of television homes to at least the same number of homes we are reaching today—so obviously we will continue to be the mass medium the advertisers and the public will turn to."

—ABC Chairman Leonard Goldenson, speaking at the ABC Television Network affiliates meeting in Los Angeles (5/6/81)

Future Expectations

"Broadcasters are best equipped to understand the programming, engineering and financial risks involved in developing new technologies, new systems. We must be allowed to invent, to innovate and to improve the communications industry as we have in the past. We must strive to keep the federal government on the deregulatory path, by not permitting it to foreclose us from the future."

—National Association of Broadcasters President Vincent Wasilewski, speaking at the NAB Convention in Las Vegas (4/12/81)

Pennies from Heaven

"Is CBS Cable a potential marketplace for you? Yes . . . that's the good news. But rather than calling cable the pot of gold at the end of the rainbow, I'd prefer to say it offers pennies from heaven."

—Stephanie Sills, West Coast senior producer for CBS Cable, speaking at New Medium's workshop for independent producers in San Francisco, jointly sponsored by the National Endowment for the Arts and the Corporation for Public Broadcasting (5/81)

Option Assessment

"One of the most pressing and unresolved issues in home video and information technologies for government policymakers, industry executives and consumers alike is whether or not uniform standards should be set for these communications technologies, and if so, who should be responsible for setting them, and when they should be set. For example, if teletext standards are developed and enforced at too early a stage in hardware development, technological innovation could be retarded and the competitive marketplace for the service could be artificially skewed. Absent standards however, the production of necessary software may be inhibited, as software producers wait to see which system will best capture the consumer's fancy. This hesitancy, in turn, may undercut hardware development and public acceptance of the service itself. Accordingly, it is now time to assess a number of policy options aimed at resolving this type of Catch-22 situation."

—Stuart N. Brotman, president of Communications Strategies, Inc. speaking at the ninth annual Telecommunications Policy Research Conference (4/28/81)

It's the Medium

"No conceivable structural change or possible qualitative upgrading of television offers a real answer to those critics who are concerned, not with the quality of television programming in any specific sense, but with television itself. For those who decry the effects of television as an enveloping semantic system, for those who are concerned that it is a pied piper beckoning children away from the traditional transmission of their parents' cultural values, for those who are concerned that it steals time away from their ability to relate to their peers, for those who believe that it has made us a nation of compulsive consumers, for those who are profoundly concerned that the medium must inevitably teach the false and dangerous message that it is reasonable for men and women to be entertained all the time—for all of these [Marshall] McLuhan's insight was right when he concluded that it is after all the medium, not the message, that is the problem."

—Richard W. Jencks, former CBS general counsel, from the book, *Network Television and The Public Interest*, published by D.C. Heath and Company

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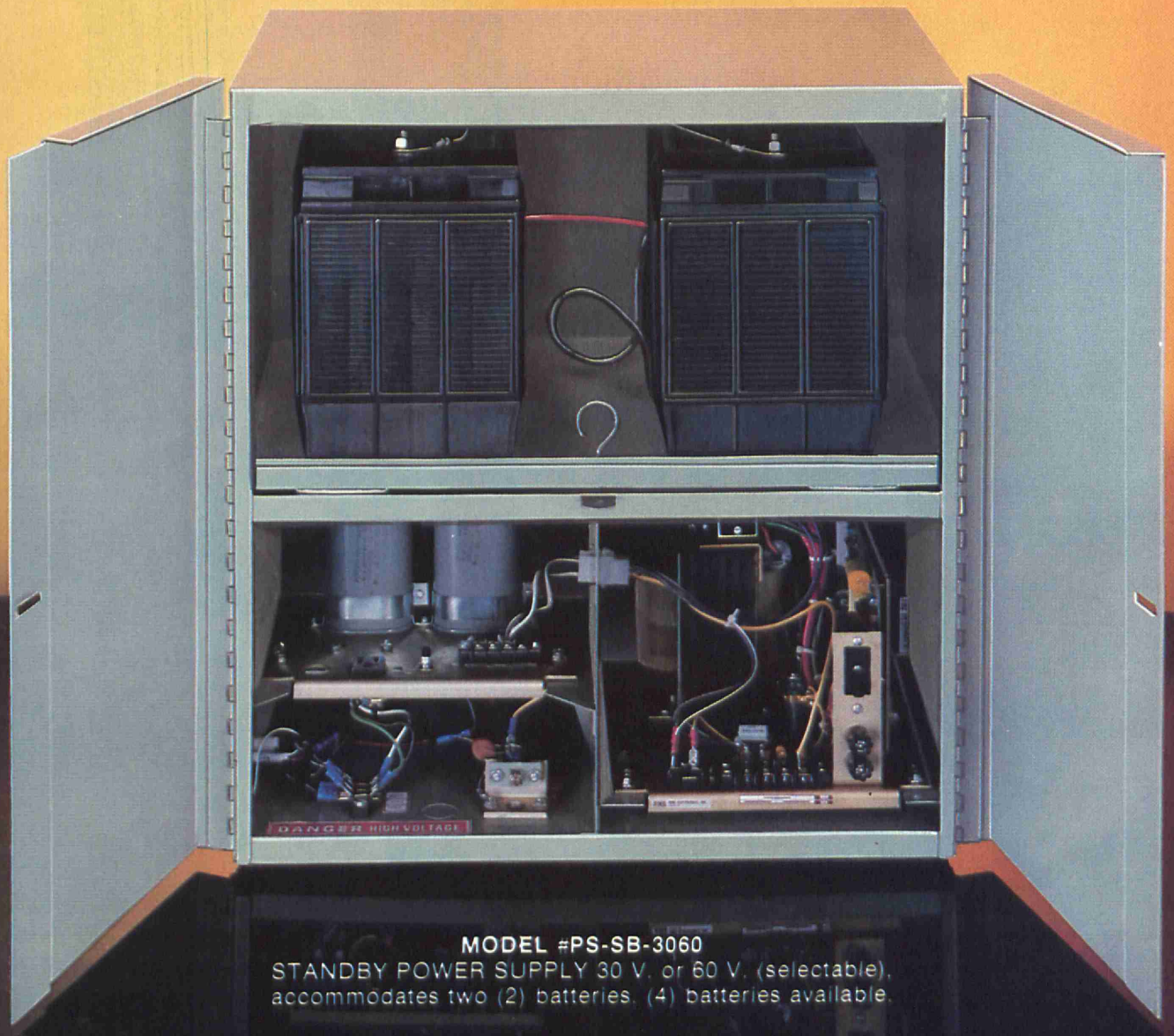

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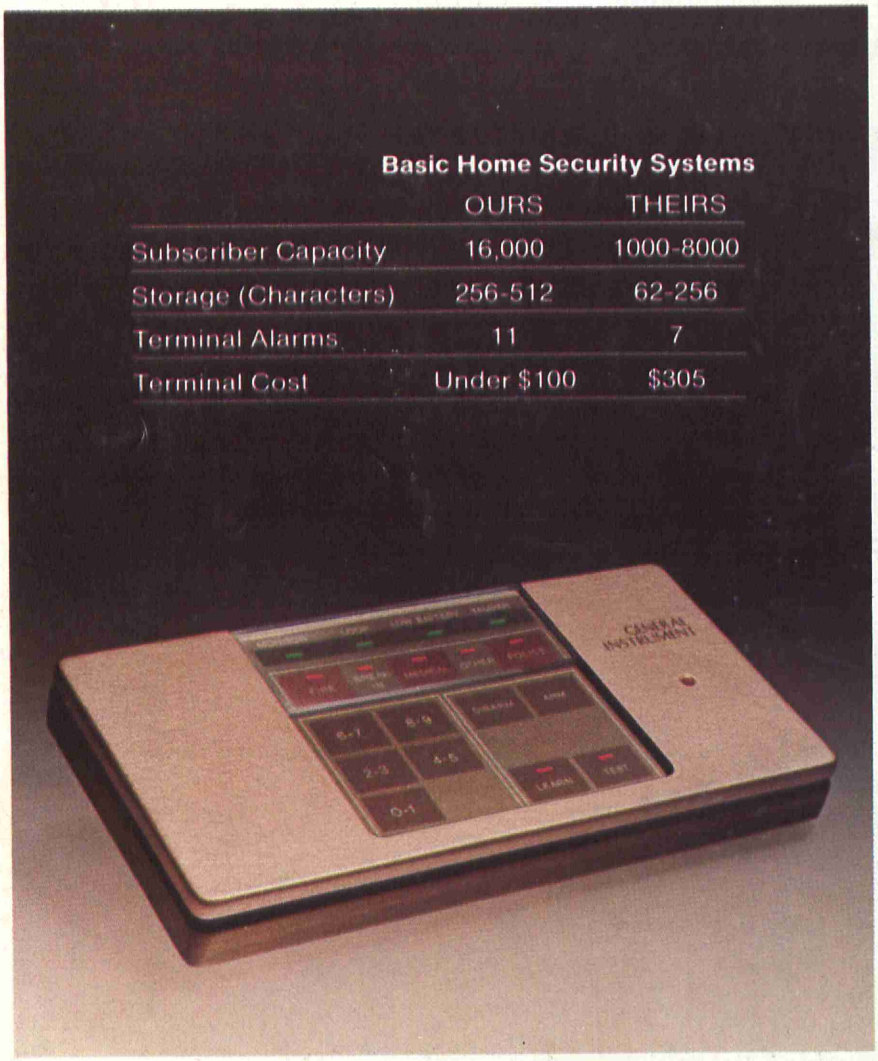

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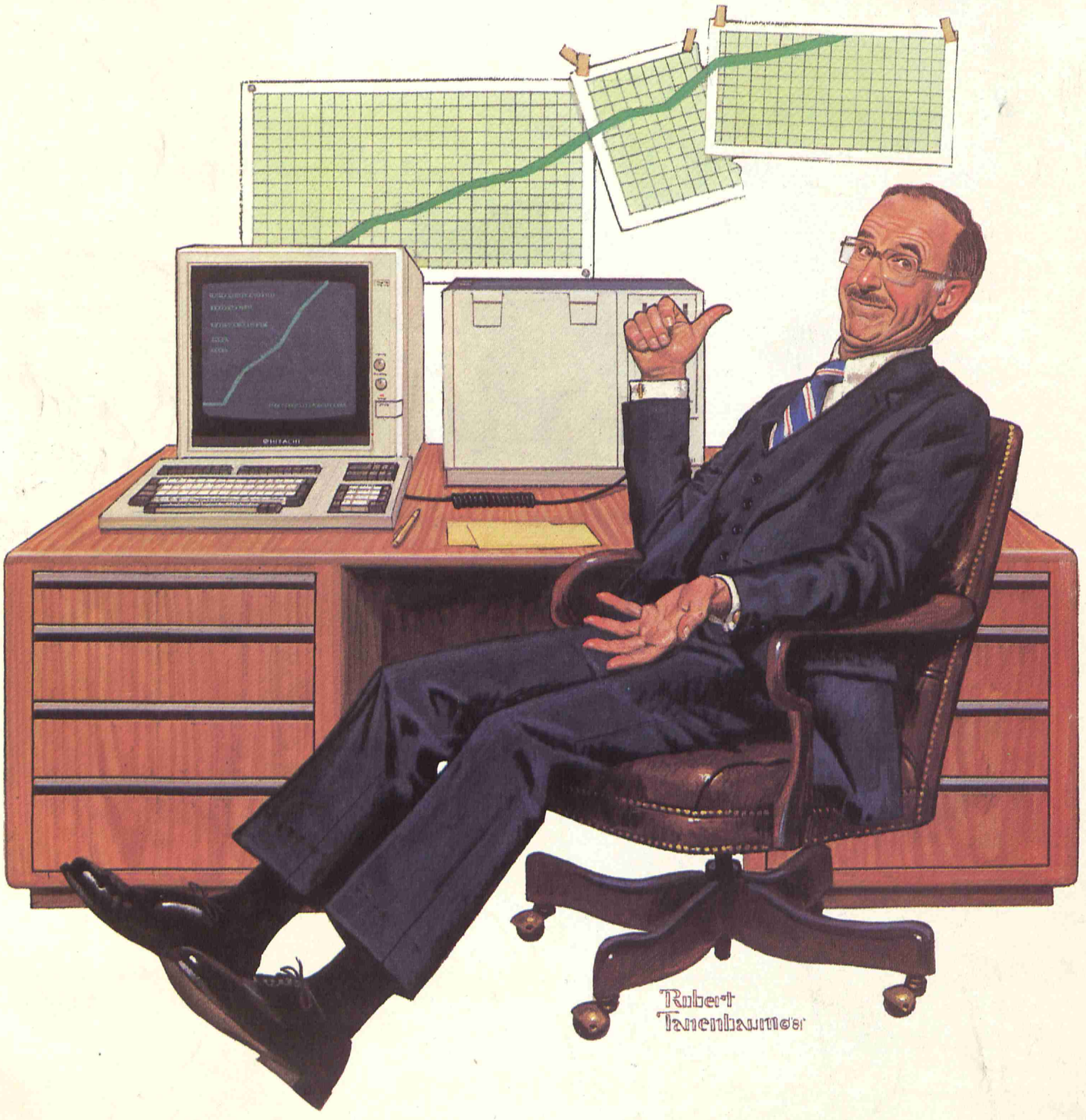

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To provide the system best suited to your business needs, Hitachi produces a full range of computers, from those large enough to control the business and management data of a major enterprise to convenient minicomputers. Take for example the 16-bit personal computer. Working at a much faster rate than the preceding 8-bit generation, it speeds up the flow of data and cuts user time to a minimum. Expandable memory capacities of 128,000 to 1,000,000 bits of information allow much greater flexibility. Independent processing means none of the problems caused by sluggish time-sharing or CPU downtime. And best of all, this new generation has been built specifically with business-people in mind. Offering the advantages of multicolor graphic display, multi-language capability, and easy networking thanks to compatibility with many of the world's top systems.

Development of truly business-oriented computers hinges on semiconductor engineering and research — areas in which Hitachi excels. Already, our engineering experts are busy perfecting the next breakthrough in computer technology, CMOS microcomputers which will be smaller, lighter and less costly to produce than currently used NMOS components. CMOS is expected to enable production of a full-function computer so compact that it can be carried in a briefcase.

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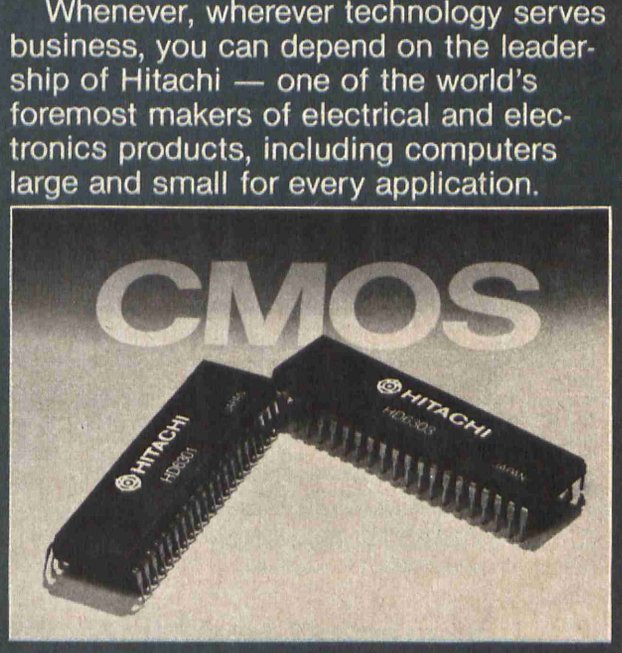

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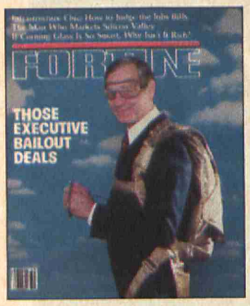
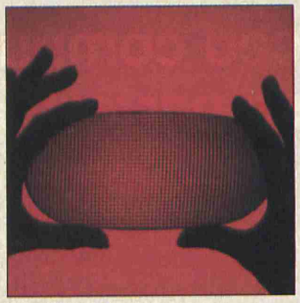


The landing is soft for executives wearing golden parachutes, but the contracts are controversial. The cover photograph is by Larry Williams, the story is on page 82.



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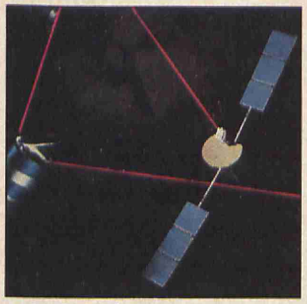

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The Editor's Desk

It's news at FORTUNE when the executive editor responsible for story development cops an assignment for himself. Allan Demaree first saw possibilities for a piece on the relationship between jobs and programs to rebuild crumbling public facilities right after the congressional elections. At that point, he says, "Republicans and Democrats were both saying that these are the two most wonderful things in the world—why wouldn't they go together?" Demaree wondered why

Demaree

they would. In a memo proposing a fast story on the subject, he asked: How bad is the national infrastructure? How would public works programs create new jobs? And how many jobs would they create? "After thinking so much about how to do it," he says, "I decided that I really wanted to do it myself."

The story, "Infrastructure Chic: How to Judge the Jobs Bills" (page 122), exemplifies many of the elements that Demaree and Ann Hengstenberg, a member of the board of editors, look for in developing story ideas for FORTUNE. "Whether it's a tale, a company profile, a discovery story, or a public policy analysis, the article ought to have a central idea, an insight that is larger than the topic itself," he says. "It has to suggest to the reader how to think about a subject, how to evaluate it."

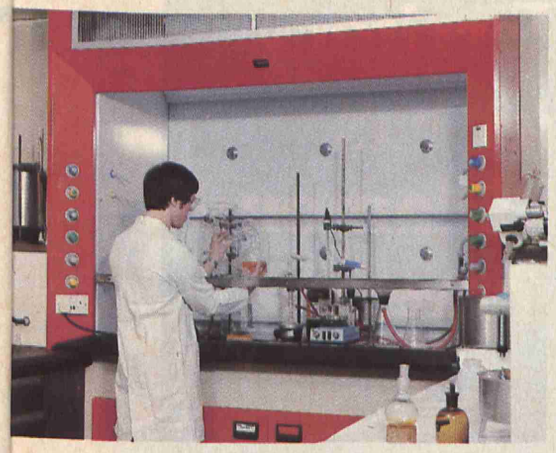
Demaree began by "working the phones like crazy." His aim: "To get to people without an ax to grind, but with some data, sources who can separate the folk wisdom from what we really know about public works and jobs." He discovered that some of these were Washington bureaucrats (at the Office of Management and Budget and the Bureau of Labor Statistics), some were Reaganites, and some were liberal Democrats.

"Essentially it was a Washington story," says Demaree, who is no stranger to reporting there. After Princeton and the Army, one of Allan's early jobs was working in Washington for the McGraw-Hill World News Service in the mid-1960s, covering the Supreme Court and Congress. In 1967 he received a Nieman Fellowship to study economics, law, and government at Harvard. He came to FORTUNE the following year, figuring that his background had prepared him well for writing on public policy matters. Instead, he soon became a specialist in corporation stories. "I started off modestly," he recalls, "with AT&T and General Electric. I soon became known as the writer on lumbering giants." He began editing in the early Seventies, and until this issue hadn't written a story since "Why the Tax Cut Looks So Dangerous" in May 1978.

Of his brief return to the front lines of journalism, Demaree says, "It really is fun; now I remember why I got into this business in the first place." He claims that reporting this story was not difficult: "I'm going to be much less sympathetic with writers from now on." And the writing itself? "Anyone who tells you it's easy to write has been away from the typewriter too long."

William S. Rukeyser

Managing Editor



Austin-UK adds chemistry lab to Wellcome's research complex.

New to the research complex of The Wellcome Foundation Limited in Beckenham, U.K., is a three-story, 80,000 square foot medicinal chemistry laboratory complex for the synthesis of pharmaceutical chemicals.

To assist in providing its scientific staff with technically excellent facilities, Wellcome engaged The Austin Company of U.K. During the planning phases, Wellcome scientists and Austin designers developed a full-scale prototype work station as the basis for the six modules on each floor of the building. A module accommodates six chemists, each of whom has an individual U-shaped work station with a fume hood in which most reactions are carried out. The U shape of the work station, with the fume hood at its base, offers workspace free of disruptive traffic.

Austin built the facility of reinforced concrete with maintenance-free interior finishes, and equipped it to fulfill the short-range and long-range programs of its owners.

Please contact The Austin Company, Cleveland, Ohio 44121.

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DIM PROSPECTS FOR U.S.-SOVIET TRADE

Wide World

Armco's Verity (left) and Soviet Prime Minister Tikhonov

The embargo wasn't the only problem

President Reagan's announcement that he was lifting the 11-month-old sanctions against companies supplying materials for the $15-billion Siberian natural gas pipeline came at an opportune time—shortly after the death of Soviet President Leonid Brezhnev and just before more than 250 American businessmen, including the chief executives of Armco, Dow Chemical, Dresser Industries, Pepsico, and Occidental Petroleum, arrived in Moscow for the first meeting in four years of the U.S.-U.S.S.R. Trade and Economic Council.

Despite the turmoil of Brezhnev's funeral, the Soviets put on three busy days of talks for the American businessmen. Foreign Trade Minister Nikolai Patolichev read off to the group a trade shopping list that included chemical and petrochemical equipment, consumer goods, and agricultural and food processing machinery. Patolichev and other officials, though, demanded that the U.S. "renounce once and for all" the use of trade sanctions.

On the American group's last night in Moscow, Soviet Prime Minister Nikolai Tikhonov hosted a steak-and-sturgeon dinner in the frescoed splendor of the Great Hall in the Kremlin's Palace of Facets. The new Soviet leadership used the occasion to send its first policy signal to the Reagan Administration. The message was warmer than recent Soviet pronouncements and stressed Moscow's interest in more trade as part of the next Soviet five-year plan. Tikhonov also had a private meeting with **C. William Verity Jr.**, 65, chairman of Armco and the co-chairman of the council.

After the meetings, there was a little optimism about future trade. Summed up Donald Kendall, chief executive of Pepsico, who's negotiating to build 15 new bottling plants in the Soviet Union, "The whole atmosphere was very positive and it could represent a change in the direction of our relations."

But amid all the bear hugs last week came some stiff words. Reportedly irked at the businessmen for denouncing sanctions, Arthur Hartman, U.S. Ambassador to the Soviet Union, warned in one of the meetings: "It is not realistic, and it has never been realistic, to isolate our economic relationship from our overall political relationship."

Despite the furor surrounding the pipeline sanctions, the restrictions accomplished little. They did not change Moscow's policy in Poland or Afghanistan, and work on the pipeline continued. And while the trade sanctions affected three U.S. companies, only one lost a deal. Caterpillar Tractor was forced to annul its $90-million sale of 200 pipe-layers, a contract eventually won by Japan's Komatsu.

General Electric, on the other hand, expects to provide some of the $175 million of components for gas turbines ordered by three European licensees, and Jack B. Gatzemeyer, general manager of the company's international gas turbine department, plans to rehire some workers laid off at the Schenectady, New York, plant. Dresser Industries, which spent some $750,000 in legal fees fighting the sanctions and for penalties to subcontractors for postponing orders, will complete an order to ship $20 million of booster compressors for the project through its French subsidiary.

Even if there is some improvement in the political climate between Moscow and Washington, U.S.-Soviet trade is likely to remain small. At its peak in 1979, total commerce between the two countries reached only $4.5 billion. The U.S. that year shipped $3.6 billion in exports, mostly grain, while the Soviet Union sent $873 million of goods ranging from platinum to sable furs and vodka. Trade between the two countries this year will be an estimated $3 billion, compared with $2.7 billion in 1981.

STAFF: Eleanor Johnson Tracy, Susie Gharib Nazem, Lisa Miller Mesdag, Anne B. Pillsbury, David Weld Stevens

Ed's Quiet Exit

A new boss for World Airways

Edward Daly, 60, the flashy founder and 82% owner of World Airways (1981 revenues: $372 million), has rarely shunned controversy. He undercut major U.S. air-

continued

lines in 1979 by offering a cross-country air fare of $99 and then took out full-page newspaper ads to explain what he called the David and Goliath battle. In the last days of the Vietnam War, Daly became a momentary folk hero when he defied government orders and personally flew into Danang Airport to rescue more than 200 women and children. Yet last week Daly relinquished the offices of president and chief executive of World Airways with an uncharacteristic lack of panache. The terse explanation from World headquarters: the boss wants to pursue "other obligations." Wall Street's speculation: bankers who are keeping World afloat had eased Daly out.

While Daly remains chairman, **Brian Cooke**, 63, becomes president and C.E.O. Cooke, who worked for Hawaiian Airlines for 20 years before joining World in 1964 as treasurer, persuaded banks earlier this year to defer payments on $14 million in debt. He is also credited with having a winning way with the unions. Two years ago, World suffered a bitter, five-month strike. But it will take more than a new leader with a pleasant style to make World profitable (1981 loss: $20 million). Unless the economy picks up soon, Ed Daly's World Airways could go the way of that other colorful price-cutter, Sir Freddy Laker's Laker Airways.

"Up Against the Wall"

Occidental's big sell-off

Dr. Armand Hammer, who at 84 still "gets all tingly" when he closes a deal, now has the less than tingly task of selling off many of the companies he has acquired for Occidental Petroleum in the last two decades. Up for sale: parts of Island Creek Coal (1981 sales: $1.1 billion), Occidental Chemical ($1.4 billion), and agricultural chemical operations ($976 million). Sale of these divisions and a dozen or so other assets is expected to bring in approximately $3 billion in cash over the next two years. Says a security analyst close to Occidental: "The doctor is pushed up against the wall."

Hammer's $4-billion takeover of Cities Service in August has precipitated the sell-offs. The deal, which Cities Service shareholders are expected to approve this week, will nearly double Occidental's annual sales to $26 billion, but it will also dramatically increase its yearly interest expenses. Even though Cities Service sold its gas exploration company last month to Northwest Energy for $355 million and is seeking a buyer for its Louisiana refinery, which has a book value of $900 million, Occidental is still burdened with $5 billion of long-term debt—five times more than before the acquisition. The oil glut hasn't helped either. In the third quarter, Occidental's earnings plunged 82% to $25 million on sales of $4.4 billion.

John Bryson—Sygma

Occidental's Hammer aboard his private Boeing 727

Now Hear This

"We had to have an impasse, and I don't think a combination of Attila the Hun and Job could have clarified it."
—Pete Rozelle, 56, NFL Commissioner, describing the 57-day-long football strike.

"I am deeply troubled. I have the feeling that we are now in the second phase of a world depression. I don't want to forecast any mischievous dramas or tragedies, but I very clearly see dramatic development as being possible."
—Helmut Schmidt, 63, former West German Chancellor.

"I think if we want to understand the entrepreneur, we should look at the juvenile delinquent."
—Abraham Zaleznik, 58, psychoanalyst and Harvard Business School professor.

"I always ask who is the boss. If the answer is, 'We are all equal,' I say forget it. There has to be a boss."
—Royal Little, 86, explaining how he judges investment proposals made by new companies.

Zapped

Games By Apollo in Chapter 11

Rangy Texas entrepreneur **Patrick J. Roper**, 39, last year launched Games By Apollo Inc. in time for the Christmas buying spree with a video program called Skeet Shoot. This Christmas, though, may be bleak for Apollo. The Dallas-based manufacturer of cartridge games, which once foresaw sales of more than $30 million by the end of the year, has been felled by Benton & Bowles, its New York advertising agency. Benton & Bowles, which is suing Apollo to collect a $2.5-million bill, has persuaded a Dallas court to issue a temporary restraining order forbidding the company from selling its inventory of 200,000 video cartridge games. Apollo, in turn, has filed for reorganization under Chapter 11 of the Bankruptcy Act. Its fate could signal a larger shakeout of the initially attractive, but now cluttered, video games market.

Roper, who was inspired to get into the video games business one day last year when he was playing NFL Football on his Mattel Intellivision machine, insists he'll recover. Says he: "We will reorganize, we will pay our bills, and we will be back." But his prospects seem dim. Apollo is at least $6 million in debt. If the courts concur, Benton & Bowles will presumably sell its share of the Apollo inventory.

Apollo is already pared down to nine employees. Last month Roper had over 100 and talked of taking on 300 more. He had even hired a laid-off Braniff pilot to develop a new video game. It is called Final Approach and has joined the Apollo line of games that includes Lost Luggage, Pompeii, and Squoosh.

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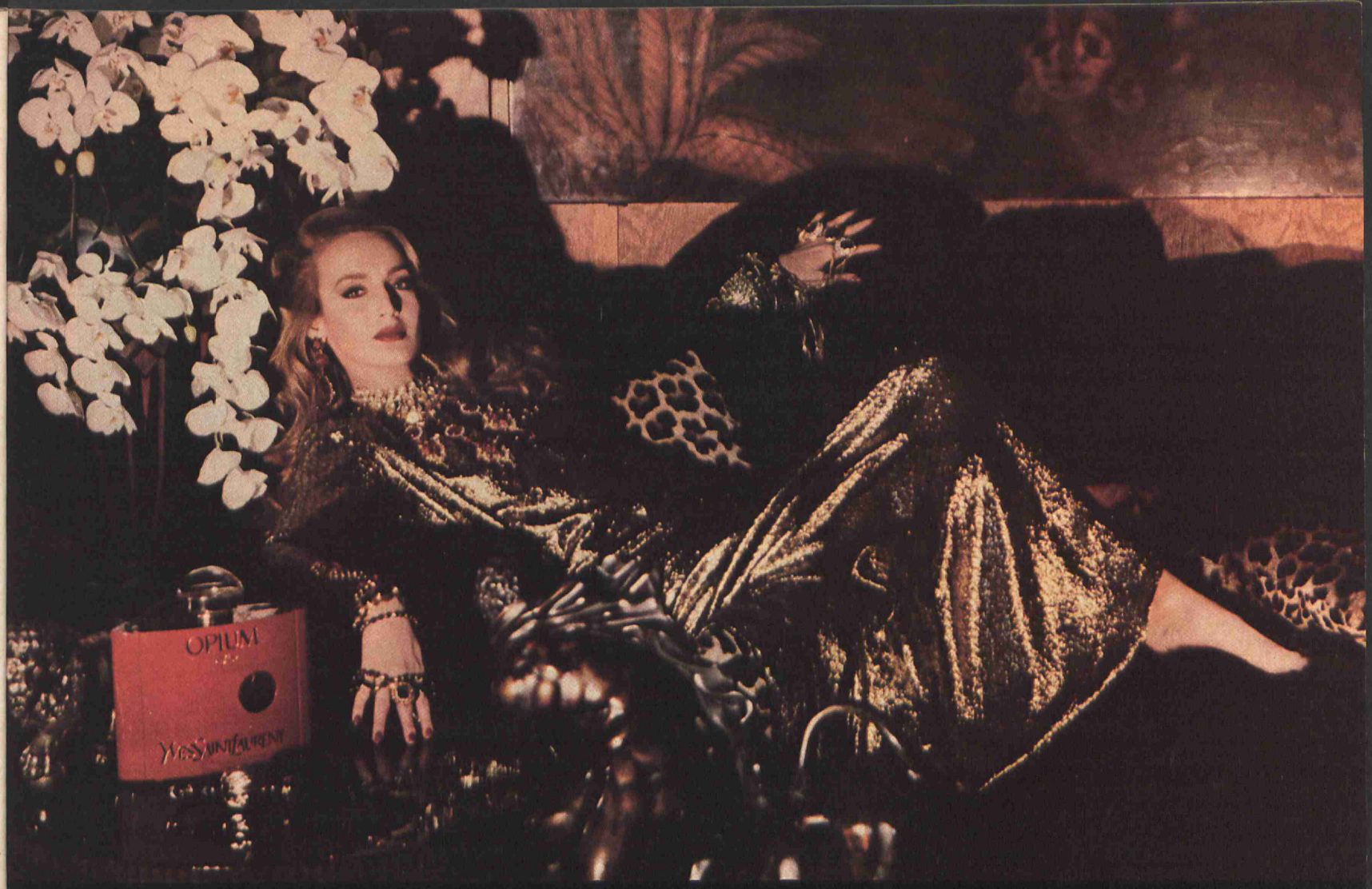

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Schutz and a Porsche 944

A Deal of Equals

Wheelabrator merges with Signal

In the aftermath of the fierce megabuck takeover battle between Allied, Bendix, and Martin Marietta, the news of a merger between Signal Companies and Wheelabrator-Frye was anticlimactic. Shunning the fashion of offering hefty premiums to shareholders, Wheelabrator, an engineering and construction firm, agreed to a stock swap valued at $946 million, which worked out to be $2.75 a share *below* Wheelabrator's stock price at the time of the announcement. Says **Forrest N. Shumway**, 55, the chief executive of Signal who will continue in that capacity in the merged company: "Newspapers are full of accounts of acquisitions that pay a lot of money with nothing left for the future except substantial debt. Our idea was to put together a company that can preserve cash." Adds **Michael D. Dingman**, 51, Wheelabrator's chairman: "We're giving the investor a chance to act like an investor."

Even though Wheelabrator is smaller (1981 sales: $1.5 billion) than Signal ($5.3 billion), Dingman and Shumway speak of the company as a combination of equals. The Signal-Wheelabrator combination will be rich, with $500 million in cash. Shumway and Dingman are also looking to raise more money by selling operations that don't fit the "bigger framework." Signal's most profitable divisions are Garrett, a manufacturer of aircraft parts and gas turbine engines, and UOP, which designs petrochemical plants. Security analysts speculate that Signal's Mack Trucks, expected to lose $40 million this year, is a likely candidate for sale.

Vroom Vroom

Fast sales for the Porsche 944

West Germans were surprised two years ago when an American who had never driven a Porsche, much less worked in the automotive industry, was handed the wheel of the prestigious Stuttgart-based sports-car maker. But **Peter Schutz**, 52, has steered the stalled company toward a surging success.

The key to that performance is the popularity of the Porsche 944, a masterpiece of speed and efficiency that can go 130 mph, yet has an EPA highway rating of 30 mpg. Against advice of Porsche colleagues, Schutz chose to lop $3,000 off the car's proposed U.S. sticker price, bringing it down to $18,450. That gamble paid off. Since Porsche introduced the 944 in this country in June, more than 3,300 have been sold—approaching a quarter of the sales the company had projected through the end of 1985. By February, Porsche expects to be turning out 105 of the 944s per working day, a daily production record. Schutz recently divvied a $2-million bonus among Porsche's 5,150 workers.

Engineers at the company's research and development center near Weissach, West Germany, are redesigning the engine of the classic 911 model. The body will not be changed, but the company will incorporate some features of the 944 under the hood. After that, Porsche may literally be flying. Schutz has had preliminary talks with U.S. airframe manufacturers about Porsche engines for light aircraft.

Shumway of Signal (left) and Dingman of Wheelabrator

Michele Singer

Going Private

Britoil is de-nationalized

British Prime Minister **Margaret Thatcher**'s plan to reduce the size of the public sector by "privatizing" nationalized industries is moving into high gear. Last week investors began buying stock in Britoil, the exploration and production arm of the British National Oil Company, at an initial offering price of about $3.60 a share. The Thatcher government intends to sell 51% of Britoil to private investors. The tender offer, valued at $910 million, will be the largest ever made at the London Stock Exchange. Says Secretary for Industry **C. Patrick Jenkin**, 56: "The Tory dream of a capital-owning democracy is coming true."

With vast oil production rights in the North Sea as well as in Dubai and Indonesia, Britoil has become increasingly profitable over the past three years, and London security analysts are rating the stock a good investment. The one cloud hanging over Britoil is the policy of the Labor party if it returns to power. Labor has vowed to re-nationalize the company. **Peter Shore**, 58, the party's spokesman on economic af-

continued

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RIVE GAUCHE
n'est pas un parfum pour les femmes effacées.
Parfums
YVES SAINT LAURENT

fairs, says that the price of the stock would not be "a penny more" than investors are now paying for it. Says Shore: "Let that message be registered by all those who hope to make a killing." Despite these warnings, the Thatcher government will be pressing ahead with plans to de-nationalize the British Steel Corporation, Rolls-Royce, and British Telecom.

English Muffin Wars

Thomas sues Entenmann's

Samuel Bath Thomas first started hawking the tasty, if plain, English muffin 102 years ago in New York City's Greenwich Village. Although the muffin has all but disappeared from Britain, it has become a breakfast staple for many Americans. S.B. Thomas Inc. of Totowa, New Jersey, which proudly calls its product the "original" English muffin, last year had sales of more than $120 million, 50% of the market in the U.S.

Thomas now believes that its cherished, inimitable recipe has fallen into the hands of another old-time bakery, Entenmann's. Thomas claims that three former employees who recently changed bakers' hats filched the formula. Entenmann's, founded by a German immigrant in Brooklyn in 1898, and in the process of being acquired by General Foods, sold $333 million of rich pastries last year, but its breakfast fare was largely Danish, not English. Hoping to keep its secret and a substantial share of the market, Thomas has sued in a New Jersey court to prohibit Entenmann's use of its recipe. While the alleged breach might not be high industrial espionage, Thomas believes that this is more than a bit of mischief in the nooks and crannies of the muffin trade.

Hair-Raising Idea

Pilo-Genic has growing profits

A variety of elixirs, nostrums, and potions have been brewed for centuries as a cure for baldness. Hippocrates prescribed a mixture of opium, essence of roses or lilies, wine, and the oil of unripe olives. **Anita Young**, 60, president of Pilo-Genic Research Associates, a chain of hair clinics, is the latest in that long line. She argues that baldness is often caused by hormonal imbalances, poor hygiene, and stress. Moreover, she claims that in some of those cases, she can retard the loss of hair and stimulate growth. This month Young will add four new hair-growing clinics to her chain, bringing the total to 60. Pilo-Genic revenues this year are expected to be $7 million, up 35% from 1981.

Young's prescription consists of patented products containing biotin that were developed by **Edward Settel**, 67, her physician husband. While doctors who run the clinics boast about the products, others in the medical community dismiss them as mere cosmetics.

A flamboyant former ballerina, Young opened her first clinic in New York in 1974. The company does no advertising, relying on clients to spread the word. Those seeking to save their scalps include doctors, lawyers, business executives, performers. A third are women. Says Alfred Rosenstein, a Manhattan attorney who has been using the products for five years: "My friends say I've got to be joking, but I'm not losing my hair anymore."

Joyce Ravid

Young (left) of Pilo-Genic

Peter and Steven Halmos of SafeCard

Bud Lee

Selling Peace of Mind

SafeCard Services' hot line

The millions of credit cards lost or stolen each year in the U.S. mean good business for **Peter** and **Steven Halmos**. The brothers are the chairman and president of SafeCard Services, the largest and most profitable credit-card-protection firm. For $12 per year, customers losing their cards can phone the Fort Lauderdale firm, which then notifies department stores, banks, oil companies, and other card issuers to stop accepting charges on that account. Even though Congress has limited cardholders' liability for unauthorized purchases to $50 per card, Peter Halmos, 39, says that people are willing to buy his service for both convenience and peace of mind. SafeCard now has 5.5 million subscribers, and sales last year were $26 million—60% higher than in 1980. Says Halmos: "An immense number of people use credit cards as a way of life. If all of a sudden they lose their wallets and find themselves with only cash, they panic."

The Halmos brothers, Hungarian refugees who came to the U.S. in the early 1950s, started SafeCard in 1969 with an initial investment of $100 in cash. Says Peter: "I wish I could say we did a lot of market research first, but we didn't do any." However, the company is now busy doing market studies in Japan, where it will expand next year. F

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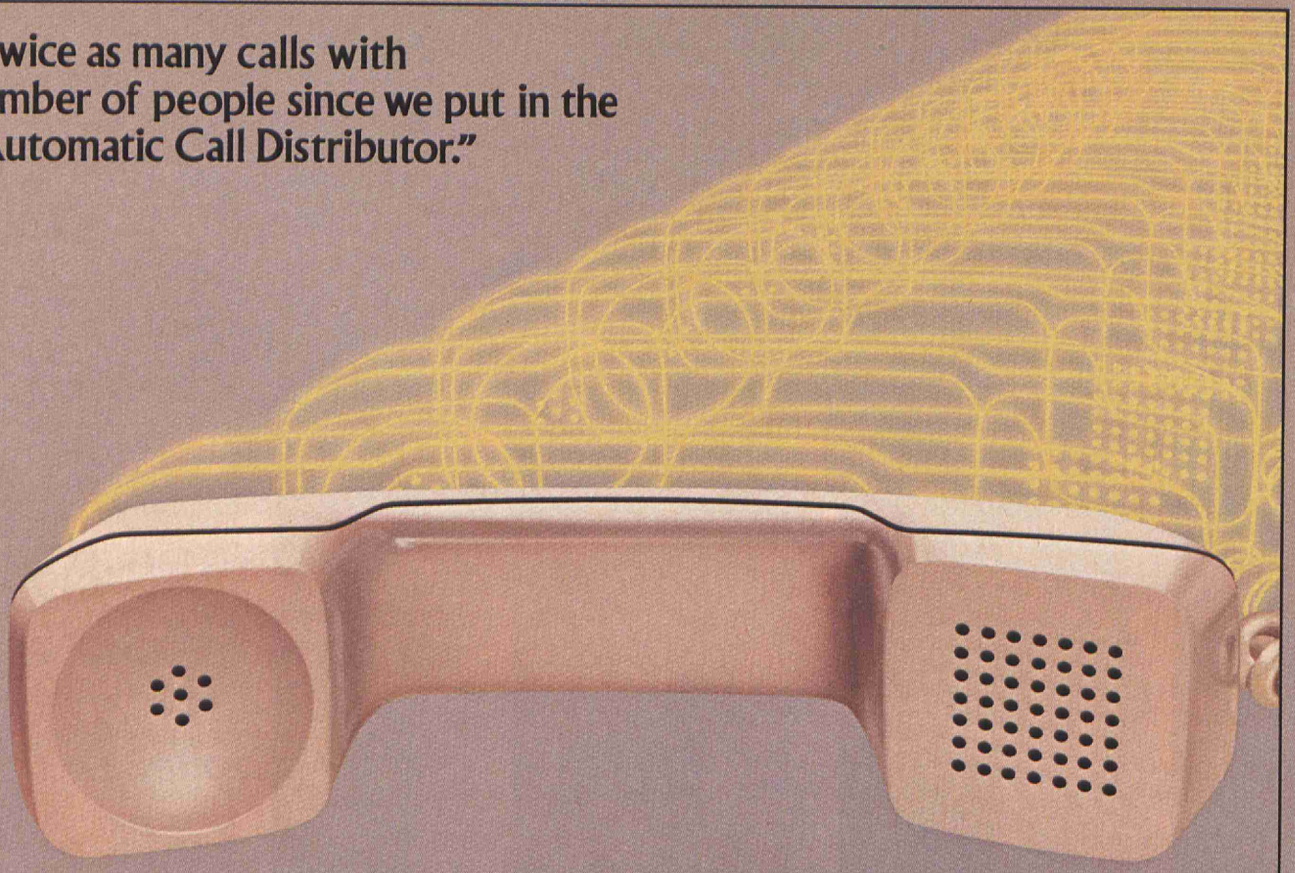
KOUROS.
Les dieux vivants ont leur parfum.

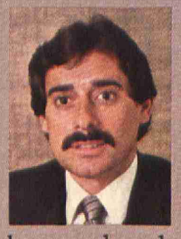
The new fragrance for men from Yves Saint Laurent.

Parfums
YVES SAINT LAURENT

"We answer twice as many calls with the same number of people since we put in the Datapoint Automatic Call Distributor."

—Manuel A. Rosales
Vice President
Capital Preservation Fund
Palo Alto, California





"We had 20 people handling 30,000 calls a month on 20-button keyset phones," says Manuel Rosales. "With our Datapoint ACD, the same number of people process 60,000 a month. And we have reduced employee stress while improving customer satisfaction.

"Our ACD saved us $400,000 the first year because we're handling those additional calls without adding people, adding phones, or renting more space. And that doesn't take into account revenue we might have lost with the old system because callers couldn't get through.

"A money fund is an over-the-phone business. And Capital Preservation believes in first-class service for its customers," says Rosales. "Investors call in to check their balances, ask about rates, transfer funds, or ask for information packets on the funds." The Datapoint® Automatic Call Distributor will boost the productivity of any organization that depends on a lot of incoming calls.

Here's how it works.

1. The ACD automatically routes calls to the proper agent or agent group according to your programmed instructions. Calls are distributed evenly so more calls can be handled without adding people or telephone lines. (Capital Preservation Fund actually *cut* the number of lines from 49 to 25 and the phone bill from $80,000 to $40,000 a month.)

2. When your needs change, you can modify the way calls are routed with simple commands at the ACD control console.

3. When all agents are busy, the ACD holds calls in a first-call, first-served queue. That shrinks hold time and reduces the number of abandoned calls. (Average hold time at Capital Preservation is only 11 seconds. Less than 1% are abandoned.)

4. The ACD can process calls differently during different time periods. For example, you can add on staff as backup agents during peak hours, drop them off again during slow hours.

5. The ACD records information about each call including the time, the duration, which line it came in on, which agent handled it, and other facts. Agents can use "wrap-up codes" to add particulars to a call record. This helps Capital Preservation spot trends and correct any problems up front.

6. The ACD analyzes call information, tabulates it in simple formats and hands it over in useful printed reports. How many calls does each agent handle? What's the average hold time between 9 and 10 A.M.? Could you get along with one less toll-free 800 line? The ACD's computer records can tell you nearly *anything* about your phone traffic.

For information on the ACD or other Datapoint systems, call (800) 531-5639. In Texas, call (800) 292-5099. Telex 767300 in the U.S.; 06986622 in Canada; or 923494 in Europe (UK). Or write Datapoint Corporation, Marketing Communications, T41FO, 9725 Datapoint Drive, San Antonio, Texas 78284.

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It costs more to do it, but we match plaids on collar, flaps and placket.

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All our shirts have a 7-button front, and buttons sewed to stay on.

Lands' End Flannel Shirts. Easy to look at. Comfortable to wear. Made with painstaking care.

We invite you to compare the features above, which are standard equipment on any Lands' End flannel shirt, with any other flannel shirt you like.

We don't think you can beat them, even for more money. We offer them in two weights of 100% cotton, and in a single weight flannel blending cotton and wool. You'll find them proudly displayed in full color in our Lands' End catalog.

No single breakthrough. Frankly, the features above, which we insist on in our shirts, are not notable breakthroughs taken singly and separately. But finding all these features in a flannel shirt at Lands' End prices—that *is* exceptional.

It comes from a philosophy we apply to whatever we offer you at the time we either buy it or have it made. We don't ask, "What can you leave out to make it cheaper?" We ask, "What can you put in to make it better?" You'd be surprised how unusual this attitude is, and how pleased our sources are to show us the full range of their talents.

Our buyers aren't the only fussy people. Fussy as our Lands' End buyers are, even they get checked out by our Quality Control people, who have the last word at Lands' End.

If they nix a buy—in shirts or anything else we sell—there's no Supreme Court to grant a hearing. They *are* the Supreme Court.

And that's for your protection, along with our guarantee:

"If you are not completely satisfied with any item you buy from us, at any time during your use of it, return it and we will refund your full purchase price."

The price, of course, is determined only after we're sure we have the quality we want in the product. That way we are sure we offer you value.

Leaf through our catalog for full details. Fill in the coupon, send it in, and we'll mail you a free catalog. Better still, call us at 800-356-4444. It's toll free, 24 hours a day.

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P.S. Please call after 5 P.M.

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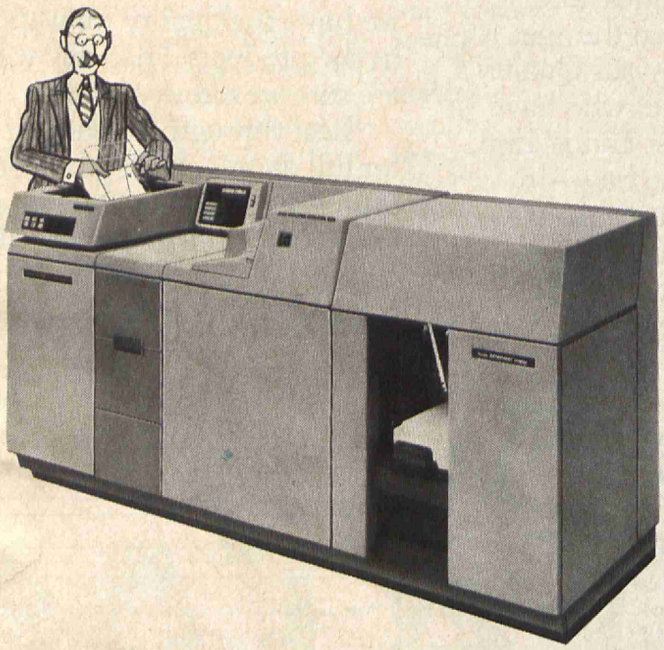
"Oh, go ahead, Clarence, indulge yourself. What if you're ever lost in the North Woods?"



Fascination with multiple-purpose devices is seldom rewarded with truly useful products. We are pleased to offer an exception: the Kodak Ektaprint copier. It does enormously complex jobs involving automatic collating, stacking and stapling. It can also make a single copy with equal efficiency.

Result? Versatile, productive, easily managed output. The Kodak copier does more, all by itself, than a Swiss army of lesser machines all over the place.

May we demonstrate?

Write: Eastman Kodak Company, CD2507 Rochester, N.Y. 14650.

Kodak

Kodak copiers. Everything they do, they do well. And they do everything.

Toshiba Video Cassette Recorder V-9500 with 4 heads.

The show-stopper snow-stopper.

When the TV action you've videotaped looks so good you want a longer and closer look at it, you push a button to stop the scene. The last thing you need is a blurred picture or sound distortion.

That's why Toshiba had to design a more intelligent video cassette recorder with twice as many heads. Two of the 4 heads specialize in clearing away the lines, jitters and fuzzy pictures known as "snow." Now you can freeze the sports action or dramatic moment with perfect clarity.

Add to this 117 potential channels, plus a wireless remote control with 18 operation modes. And the Toshiba VCR loads from the front, a real space saver.

Another technical leap forward from Toshiba, the experienced integrated manufacturer in the electrical, electronic and energy fields.

*A federal court has ruled that recording copyrighted material off the air without consent is in violation of existing copyright laws.

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New study from Ogilvy & Mather

What Corporate Advertising Can Do –and Can't

IN 1981, American corporations spent $500 million on corporate advertising. Much of this money was wasted by trying to do things that can't be done.

Ogilvy & Mather has just distributed to its offices around the world a new slide-and-film study of corporate advertising. Here we reveal some of our conclusions.

We have learned that good corporate advertising can:

- Build *awareness* of a company.
- Make a favorable impression on investors and security analysts.
- Motivate employees and attract recruits.
- Influence public opinion.
- Strengthen relations with dealers.
- Influence legislation.

We have learned that corporate advertising cannot:

- Gloss over a poor record or a weak competitive position.
- Boost the price of your stock next month.
- Swiftly turn the tide of public opinion.

There are no quick fixes. Advertising can spread the truth about your company, but cannot *conceal* it.

Many companies have no clear image because they are not well known. Says the Opinion Research Corporation:

"The invisibility and remoteness of most companies are the main handicaps. People who feel they know a company well are five times more likely to have a highly favorable opinion of the company than those who have little familiarity."

Smith Barney was highly respected by Wall Street cognoscenti, but little known among the investing public.

Ogilvy & Mather hired John Houseman to go on television and tell investors that Smith Barney *makes money the old-fashioned way—they earn it.* Within four months investor awareness of Smith Barney and what it stood for went up 49 percent.

Clear Objective

Exactly what image do you wish to project? To whom? For what purpose? Research can help you decide.

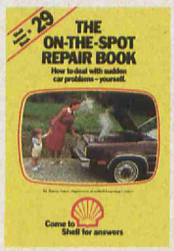
What remains is technique. Most successful corporate advertising follows these principles:

1. Build credibility. Only five percent of Americans associate the word *trust* with the word *business.* You build trust when you use facts rather than vague generalities.

Make your ads look informative and newsy—more like editorial pages, less like other advertisements.

On television, *demonstrate* your point. Nothing builds credibility better than evidence people can see with their own eyes. In England, Shell slowly panned its cameras over a serene valley after a pipeline had been put under it. No sign of the pipeline. Point made.

2. Involve your audience. Don't lecture people—talk to them. Get them to participate. One way is to give them information they can use—as in our booklets for Shell. *(For results, see illus-*



5100 to 1

Through September 30 Shell had received over a million letters commenting on its series of helpful booklets.

Favorable letters outnumbered unfavorable 5100 to 1.

Advocacy Advertising

Getting a fair hearing for your side of the case

MORE AND MORE companies are turning to advertising to put forward their side of the case on public issues.

Ogilvy & Mather has conducted advocacy campaigns for many clients. Here are highlights from what we have learned from our research, our successes, and our failures.

Who influences opinion?

To present your side of the case effectively, you must know who your audience is already listening to.

Today's television heroes, movie stars, talk show hosts, and investigative reporters command more respect than you do. They sound off on issues in colorful language, easy to grasp and easy to remember.

EXAMPLE: During the 1980 energy crisis an actor, the hero of a crime-oriented TV series who has no special expertise in energy matters, disclosed his views on a nationally televised talk show. His rambling, illogical, accusatory explanation of the energy crisis was *cheered by the audience.*

Advertising can help. It pays to observe these principles:

1. Simplify the issue. Many complex issues can be addressed in simple yet accurate language.

A classic example of simplifying the issue is this headline for a 1945 advertisement for the Chesapeake & Ohio Railway:

A HOG CAN CROSS THE COUNTRY
WITHOUT CHANGING TRAINS
—BUT YOU CAN'T

But don't overdo it. Simplistic distortion insults people's intelligence, and can do more harm than good.

2. Present the issue in terms of the public's self-interest. The public is interested in your *products,* and will read your product advertising. By contrast, few people care about your *problems.*

Show how your point of view coincides with the public's self-interest. If it does not, don't advertise.

3. Be candid—and show balance. People expect advertising to be biased on behalf of the advertiser. By pointing out the other side as well as your own—playing fair and showing balance—you can overcome much scepticism.

When Houston Lighting and Power was planning its first nuclear power plant, it anticipated resistance and ran advertising which dealt with this complicated issue in a candid and balanced way. The number of Houston residents with favorable attitudes toward nuclear power increased by 20 percent the first year. There was virtually no opposition when the

How to read faster

By Bill Crosby

tration. This campaign is now working equally well in 13 other countries.)

3. Be different. In our full study we list 17 slogans from current major corporate campaigns. Few people in any audience can correctly identify more than a couple. They are indistinguishable from each other.

Search for something that can set your company apart. Ten years ago, Ogilvy & Mather first advertised Merrill Lynch as the company that was "bullish on America." Today, despite a change of agency, the bull continues to set Merrill Lynch apart as a leader.

4. Look of importance. A few large advertisements can be more effective than a bunch of small ones.

1,086,582 favorable

213 unfavorable

Long copy looks important—and works. Readership falls off fast up to 50 words, but drops very little between 50 and 500 words. (You are still reading *this* advertisement, after 538 words.) In three years, International Paper has received requests for more than eight million reprints of long-copy advertisements like the one shown at left.

NOTE: Copywriters should not confuse *long* copy with *pompous* or *rambling* copy. You can say a lot without getting heavy-handed or long-winded.

5. Coordinated campaign. Your press relations, speeches, brochures, films, employee relations—all should sing the same tune as your corporate advertising. This can make a sizable difference in results.

6. Measure your progress. Many corporate campaigns are discontinued before they have had a chance to work. This is because:

- A research program for measuring progress is not set at the start.
- Objectives are not defined clearly enough to allow measurement.
- The budget is easy to raid to bolster earnings in a bad year.
- Brand or division managers want the money to sell products.

Measurement allows weaknesses to be ironed out, and permits management to *see* progress toward specific and important goals. Companies which demand measurement run corporate campaigns longer and reap greater rewards.

Four Fallacies

MANAGEMENTS often wonder if it pays to address corporate advertising to the financial community. Here are four fallacies about this kind of advertising.

Fallacy 1: *A company with an aggressive advertising program gets known as a stock promoter.*

Competitive commission rates have made Wall Street lean and pressured. An intelligent investor-relations program, including advertising, can make it easier for analysts and brokers to do their jobs. They will appreciate it.

Fallacy 2: *The best policy is to let the record speak for itself.*

The record explains where you have been, not where you are going. To appraise a company sensibly, investors need to know why it should *continue* to prosper.

Fallacy 3: *A company loses credibility when earnings turn down.*

Declines in earnings or other bad news seldom hurt a company's credibility. Only *surprises* do that. A company that is forthright and accurate has little to fear.

Fallacy 4: *Open disclosure will help competitors.*

SEC requirements are increasingly demanding. Your competitors read your 10K and 10Q reports. It pays to give investors the same kind of useful information.

company later announced plans for its first nuclear plant.

4. Get a head start. Act before opinions form and emotions heat up. Not always easy. It's like Will Rogers on the stock market: "All you do is buy some stock, and when the price goes up, sell it. If the price doesn't go up, don't buy it."

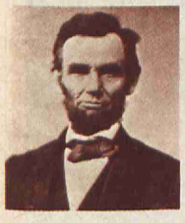
But when you *can* anticipate problems it pays to do so—as Houston Lighting and Power and others have shown.

5. Know who your target audience is—and why. Your choice will determine your costs. For example, it costs less to advertise to a few state legislatures than to the public.

The so-called "influentials" or "thought leaders" often present a tempting target. But campaigns addressed to them seldom actually work, because nobody really knows who they are. A bishop? A bartender? A political activist? They are spread throughout the population and impossible to reach with discrete media programs.

Among the successful campaigns we have studied, fully half were addressed to the general public on television.

Advocacy campaigns that fail generally choose the wrong target, lack commitment (one-shot advertisements instead of persistent campaigns), are weak in craftsmanship, or advocate hopeless causes. Those that succeed follow most of the principles outlined here.



"Public opinion is everything. With public sentiment nothing can fail; without it, nothing can succeed."
ABRAHAM LINCOLN

"The public be damned!"
WILLIAM H. VANDERBILT

TO SEE OUR COMPLETE PRESENTATION on corporate advertising, please write on your business letterhead to: **NEW YORK**, Graham Phillips, 2 E. 48th St., New York, NY 10017, (212) 907-3400; **CHICAGO**, Bill Whitney, 200 E. Randolph, Chicago, IL 60601, (312) 861-1166; **ATLANTA**, Neill Cameron, 401 W. Peachtree N.E., Atlanta, GA 30308, (404) 588-1866; **HOUSTON**, Jim Hine, 1 Allen Center, Houston, TX 77002, (713) 659-6688; **LOS ANGELES**, Gerry Smith, 5900 Wilshire Blvd., Los Angeles, CA 90036, (213) 937-7900; **SAN FRANCISCO**, Alan Mooney, 735 Battery St., San Francisco, CA 94111, (415) 981-0950.

Ogilvy & Mather

WE ADDED ELECTRONIC FUEL INJECTION, MORE TORQUE, MORE ENGINE. AND SUBTRACTED HUNDREDS OF DOLLARS IN PRICE.

1983 sticker prices* hundreds of dollars lower on Cavalier Sedans, hundreds of dollars lower on Cavalier Wagons, hundreds lower on Cavalier Coupes and Type-10 Hatchbacks.

End result? A superb, new 1983 line of Chevrolet fleet cars from a leader taking charge. A leader that says you shouldn't pay exorbitantly for what you need a small fleet car to do. And backs it up with new higher compression, electronically fuel-injected 2.0 Liter power in a full line of spirited, new small sedans, coupes and wagons. And does it at sticker prices lower than last year.

Make it a point to drive a new Chevrolet Cavalier. Experience kick, quiet, comfort and quality that will make you quickly forget you're driving a small car. Now all at prices low enough to make you think twice about any other small car–domestic or import.

Cavalier–from America's sales leader.

CHEVROLET FLEET SALES

GM

*Based on a comparison of Manufacturer's Suggested Retail Prices for 1982 and 1983 models. Level of equipment varies. Some Chevrolets are equipped with engines produced by other GM divisions, subsidiaries, or affiliated companies worldwide. See your dealer for details.

USA-1 IS TAKING CHARGE

Chevrolet

CAVALIER · CELEBRITY · CHEVETTE · CAMARO · CITATION · MALIBU · MONTE CARLO · CAPRICE · CORVETTE

Letters to Fortune

PUSH vs. Busch

As a black businessman, I must speak out against what may seem to be widespread black support for the Jackson clan ("PUSH Collides with Busch," November 15). In my view, Jesse Jackson is an egotistical, power-hungry extremist who is still living in the 1960s. Anheuser-Busch executives are right in their stand against such foolish rhetoric.

Although Jackson recognizes the deficiencies at Anheuser-Busch, he fails to realize that many black people are greatly appreciative of Anheuser-Busch's efforts in supporting a variety of black functions, ranging from entertainment to politics. Jesse Jackson is not an ambassador for all black Americans, and businesses should not be fooled into thinking he is.

DARRELL A. ELLIS
St. Louis

Your categories of financial contributors to PUSH left out people like myself—individuals who are not members of any group but contribute a modest sum each year because we believe in the economic and social goals pushed by Reverend Jackson.

WILLIAM H. MAUK JR.
McLean, Virginia

As a black reader of FORTUNE for over ten years, I am proud to see the magazine recognize that the black man is not just a poverty pocket in America, but rather a viable, functioning entity in American society and history. Thank you for your recent fair-minded articles.

N. VAN SHACKELFORD
Gilroy, California

Video Games

"Cashing In on the Cartridge Trade" (November 15) mentions Custer's Revenge, an X-rated video game manufactured by American Multiple Industries. This game is blatantly discriminatory and demeaning to the 1.5 million American Indians who live in the U.S. today.

JULIE WALKER
National Congress of American Indians
Washington

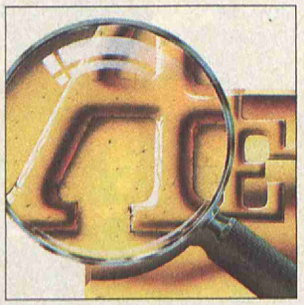
Aetna's Glow

Strange, where was Peat Marwick when Aetna was engineering its accounting coup to take future tax benefits into current earnings ("Behind the Profits Glow at Aetna," November 15)? This is the key to the financial puzzle.

Aetna, one of Peat Marwick's megaclients, provides, no doubt, a breathtaking contribution to the revenue of its Hartford office. Now would Peat Marwick really bite the hand that feeds it? I think not. More generally, does the CPA-client relationship even vaguely approach arm's length? Again, I think not. Let's face it, fellas, he who pays the fiddler calls the tune. And in this case the Aetna has made an unseasoned fiddle sound like a Stradivarius.

JOHN R. BERGER
Simsbury, Connecticut

Carol Loomis does it again (and again), turning muddy waters into clear and sparkling streams. Her piece on the Aetna's aggressive ac-



counting practice took material almost anyone else would have ducked and rendered it not just understandable but fascinating.

ANDREW TOBIAS
New York City

De Lorean's Ride

In "John De Lorean's Long Downhill Ride" (November 15) author Ann Morrison incorrectly labeled cocaine hydrochloride as "China White." China White is the name given to heroin coming from Southeast Asia. "Snow White" would have been a more appropriate nomenclature for the "toot."

PAUL MANDICH
U.S. Penitentiary
Lewisburg, Pennsylvania

Reader Mandich is serving a 20-year sentence for distributing controlled substances.

Address letters to FORTUNE, Time & Life Building, Rockefeller Center, New York, N.Y. 10020.

Reagan Stymied (cont'd)

I was completely shocked and appalled at the cover of the magazine with the tasteless cartoon of President Reagan ("Stymied by the Deficit," November 15).

It is certainly the province of every American to choose the candidate who appeals to him. But the cartoon of the President makes him out to be a weak and silly person who appears simply scared to death.

LEICESTER H. SHERRILL
Tucson, Arizona

My son Austin, age 5, saw your drawing of President Reagan. Although he is not a Republican (at least not yet) he felt the drawing was "making fun of the President" and that "God did not want people to do that." I felt good that our nation's children still have respect for the highest office in our land.

ROB HARTLEY
National Director of Marketing
Kinder-Care Learning Centers
Montgomery, Alabama

Your hideous caricature is worth a million dollars of liberal Democratic advertising.

PHILIP A. HOOVER
Dallastown, Pennsylvania

Orchids to Bruce Stark for his portraiture, and to A. F. Ehrbar for his excellent article.

WARREN A. TANNER
Denver

The cover illustration is fantastic! No one could improve on that. One can almost feel the dismay expressed by the President's face. If awards are given for such works, this one certainly ranks in the top five.

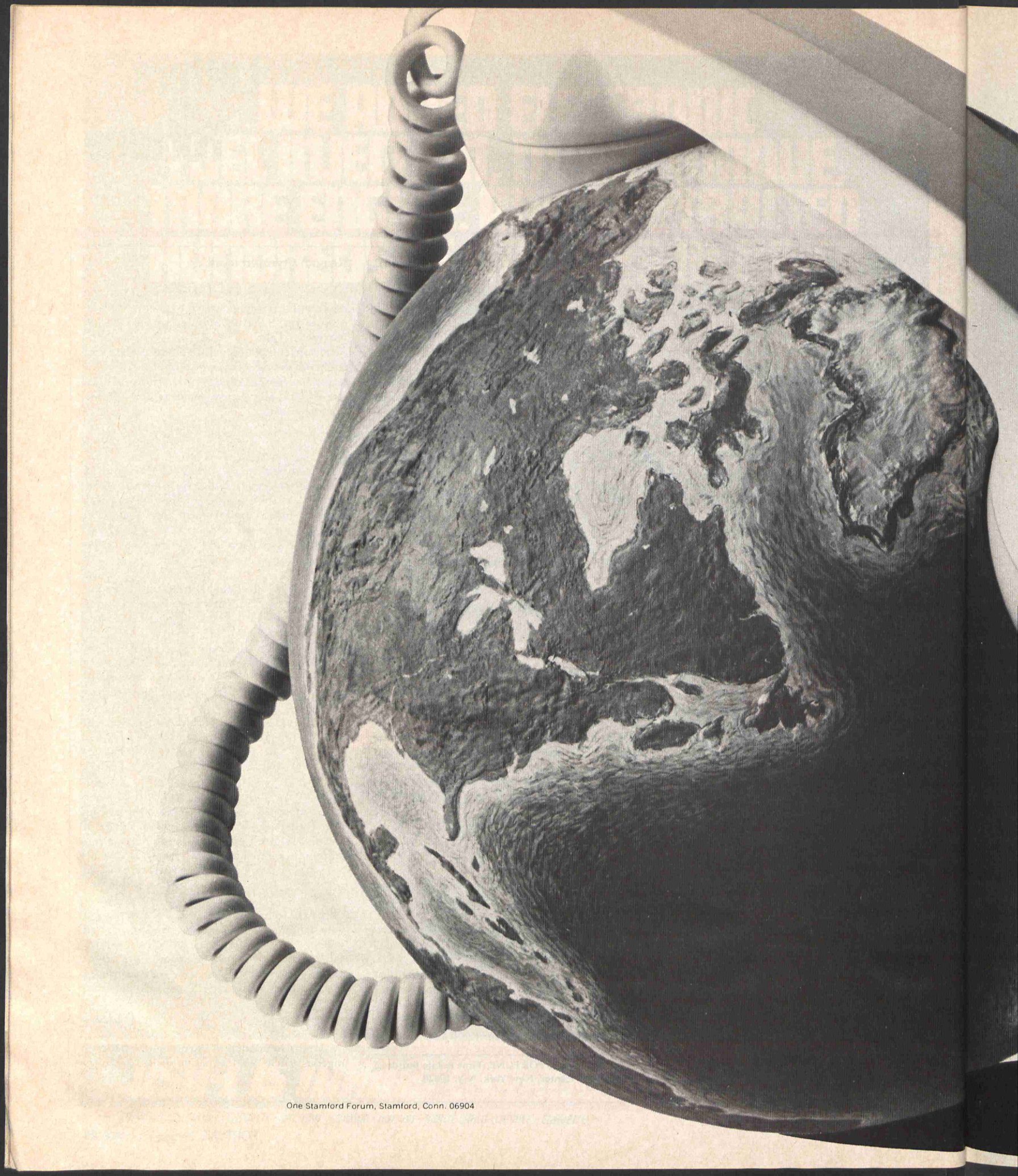
FRED W. YEARNEAU
Edina, Minnesota

Richard Kane of Bartlesville, Oklahoma, notwithstanding (Letters, November 29), I found your cover of President Reagan to be a winner. Wouldn't it be interesting if you got a whole new bunch of subscribers from San Francisco to make up for the humorless bunch in Oklahoma?

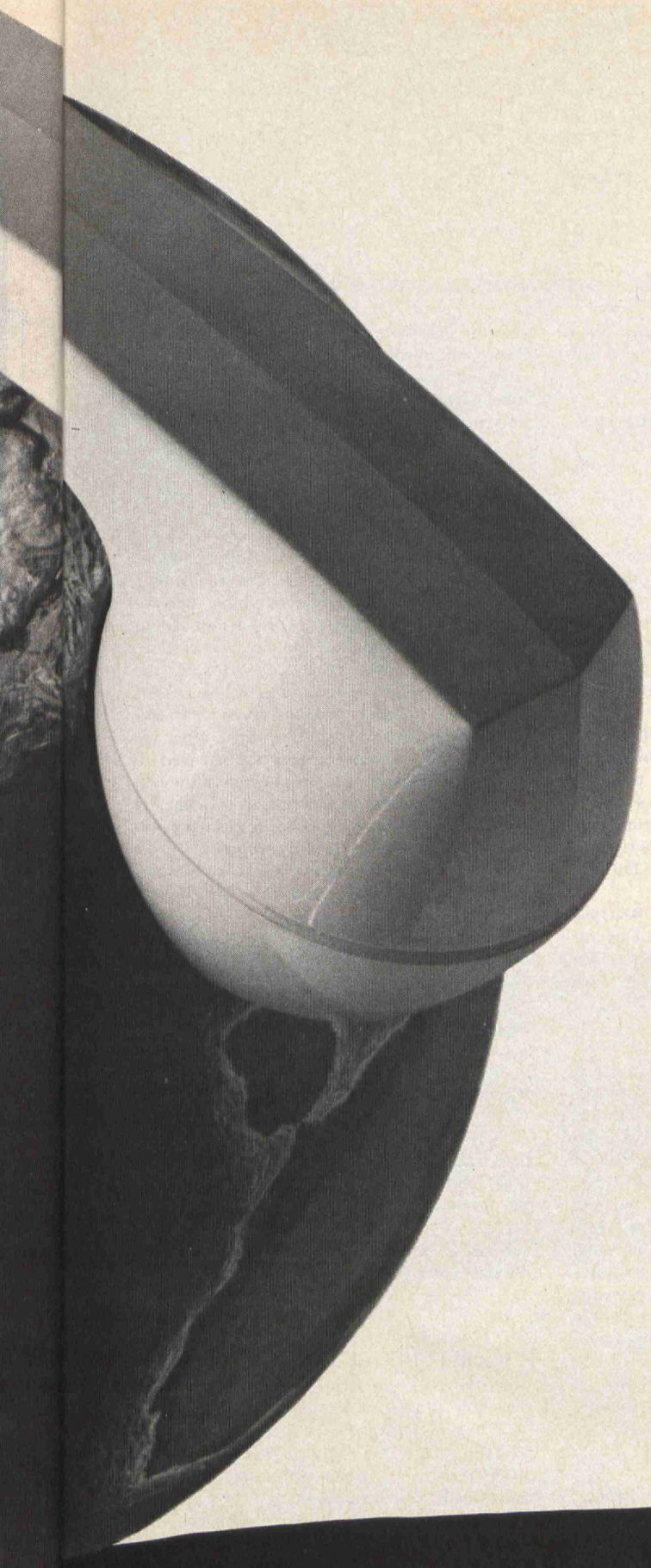
JEAN M. BERK
San Francisco

Mr. Ehrbar's article is the best and most courageous article FORTUNE has published in the de-

continued



One Stamford Forum, Stamford, Conn. 06904



"Improving telecommunications all over the world? GEE!"

(No, GTE!)

At an oil camp on a wind-whipped island off the tip of South America, a GTE digital switching system links the camp with the outside world.

Along a 6½-mile route between Brussels and the nearby city of Vilvoorde, a GTE optical communications system carries hundreds of telephone calls at once on high-speed pulses of light.

We brought solar telecommunications to the jungles of Colombia. Microwave telecommunications to Mexico and Spain. And satellite telecommunications to such countries as China and Italy.

We provide telecommunications for countries—like Algeria and Venezuela. Or just cities, if need be—like Vancouver, B.C., and Honolulu, Hawaii.

There's hardly a part of the globe that isn't affected, in one way or another, by GTE. Of course, the degree of involvement may vary. But, as far as we're concerned, the degree of importance is always the same.

GTE

Letters to Fortune *continued*

cade and a half that I have been reading the magazine. I pray you can find a way to the President's ear or better yet his heart. Otherwise we are all up against it. More power to you.

AMITAI ETZIONI
University Professor
George Washington University
Washington

Work in the Cathedral

Re "Up from Salvation," your derogatory article on the building program at the Cathedral of St. John the Divine (Keeping Up, November 1): The Cathedral does indeed provide jobs and job training for two dozen young people who would not be otherwise employed. The inference that this is a minute part of our projected goal of raising $30 million is a distortion. Our goal is to endow the building program over a long period of time, and therefore the employment of that number of people over many years is not disproportionate to the amount.

The Cathedral has many other programs of social concern—advocacy and care of the elderly; vocational guidance and placement for unemployed young people; the Cathedral Works, which also employs apprentices and manufactures ceramics and textiles; two gymnasiums used by the school, St. Luke's Hospital, and neighborhood children; a program for homeless men; and various other good works.

(Rt. Rev.) PAUL MOORE JR.
Episcopal Bishop of New York
New York City

Bendix War (cont'd)

Re "Behind the Lines in the Bendix War" (October 18): The prime responsibility of every board chairman is to make money for his stockholders. Bill Agee did that. People who bought Bendix stock for under $40 a share had an opportunity to sell at $75 to $80. Why do people resent a chairman having stock options and also making a profit?

The Bendix that Agee inherited from Mike Blumenthal was cumbersome, plodding, and unimaginative, and sorely needed the reshaping Agee gave it. The dismembered portions were losers and well rid of. His internal reorganizations added cohesiveness and improved communications, and did serve the best interest of the stockholders.

Regarding Mary Cunningham, Agee's personal life is his own business. It is also his prerogative to choose his own consultants. Even though she is his wife, I'm sure like other board chairmen, he listens to his wife—then makes up his own mind.

DANIEL H. SCHURZ
Retired Bendix employee
Scottsdale, Arizona

Consumers Union

Earlier this year you carried an article that noted that "credibility is essential" to the success of our magazine, *Consumer Reports* ("Soulful Trouble at Consumers Union," February 22). You went on to report on the outcome of a libel case against Consumers Union—the only verdict handed down against our organization in its 46-year history.

This week the U.S. Court of Appeals for the First Circuit overturned that decision in a unanimous opinion. We have always been proud of our reputation for objectivity and are, of course, gratified by the outcome. More important, the ruling is a reaffirmation of the public's right to know and the media's right to engage fairly in critical and investigative journalism.

DAVID C. BERLINER
Assistant Director
Consumers Union
Mount Vernon, New York

Haunted Housing

"The Forces Haunting Housing" (Fortune Forecast, October 18) states that "an astonishing 40% to 45% of new [mortgage] commitments by S&Ls this year are ARMs" (adjustable-rate mortgages) which "shift the risk of interest rate fluctuations from lender to borrower," making "housing a more uncertain and less desirable investment." However, during 1982, where we have seen historically high nominal interest rates, and recently very high real rates too, there is surely as much chance of nominal rates falling, which they have in fact done, as of their rising further. In this case, a home buyer would certainly want an ARM.

PHILIP LAWFORD
London

Welfare Politics

Re *The Politics of Welfare* (Books and Ideas, November 15): I suggest that just as some countries in the past years have paid women to have children, we pay women *not* to have children. If a woman voluntarily agrees to limit her childbearing potential for a specified payment, she then agrees to a simple ovarian tubal ligation, which ensures that she will have no children.

D. BIMSEY MURDOCK
Los Angeles

Costliest Boondoggle (cont'd)

"America's Costliest Government Boondoggle" (November 1) is biased and misleading. The "laser" process is not a sure winner over advanced centrifuges. Capacity expansion schedules have been stretched out because of Congress's unfortunate policy of "closing the books" on foreign orders, and (later) because of sharp drops in orders here and abroad. However, sound expansion planning can neither ignore contractual commitments nor be based on processes that have only been tested in the lab.

In the meantime, production from what the article calls a "fantastic guzzler of electric power," gaseous diffusion, is still competitive. Over 30 years of process improvements have established world supremacy and billions of dollars of exports for the U.S.

JOHN SHACTER, P.E.
Technical and Management Consultant
Kingston, Tennessee

Postal Workers

As a postal worker, I am shocked by the outrageous stereotyped portrait of postal clerks in "Letter Imperfect" (Keeping Up, November 15).

Each morning at five I am outside unloading a mail truck at the beginning of a full day's work in which I conscientiously do my best to serve the public with a vital and necessary service.

FORTUNE is delivered to the homes of your subscribers the same day that it is received at the post office where I work.

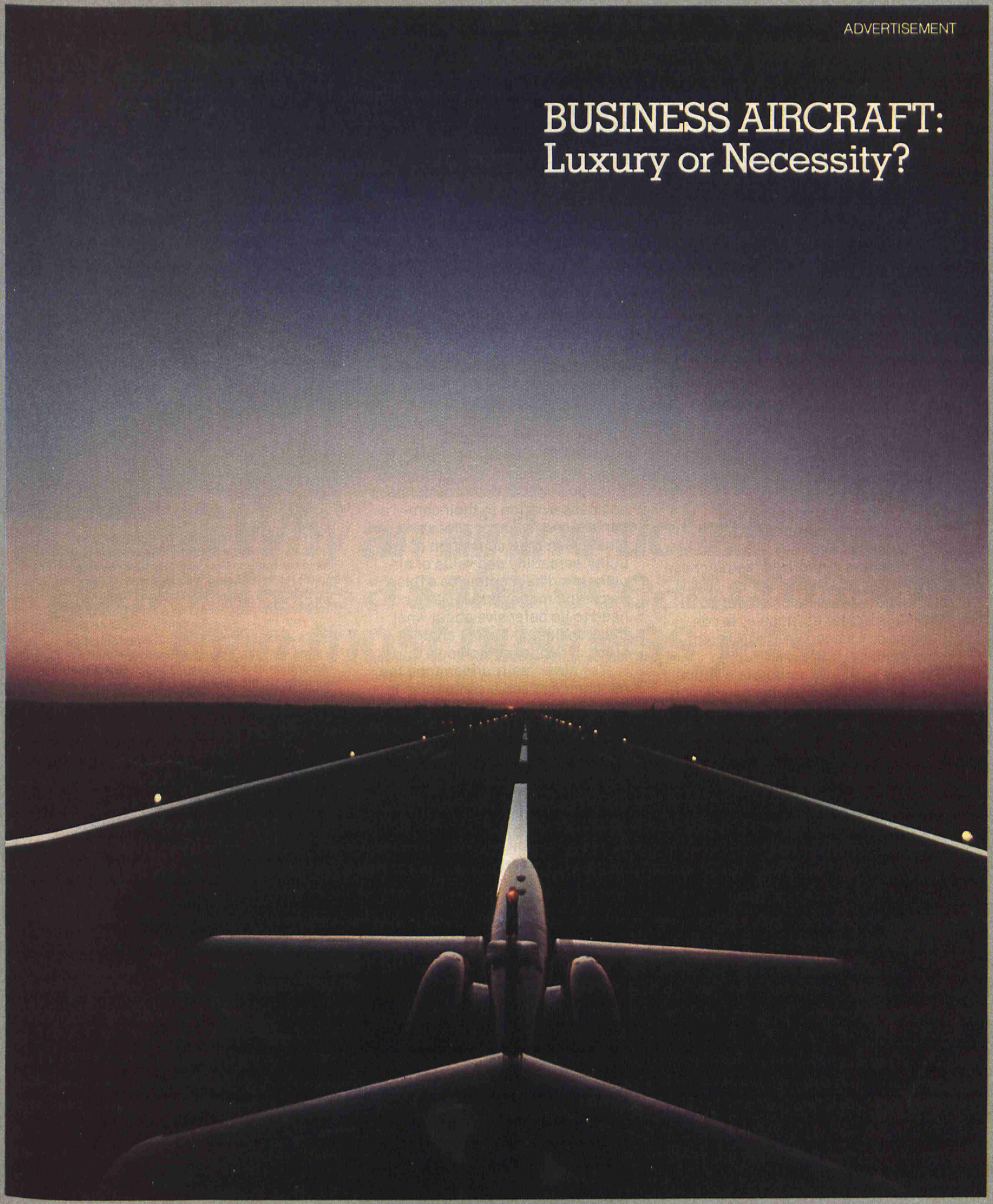
GERALD PAULISON
West Paterson, New Jersey

Here it is 1:30 Friday afternoon, and we've been told that our mail, which is normally picked up at 8 A.M., will not be picked up until 3 P.M.! The reason given is that there was too much mail because of the midweek holiday—Veterans Day—and that there were too few clerks. I hope this letter reaches you.

VINCENT DIAZ
President, Atlantic Thread & Supply Co.
Baltimore

ADVERTISEMENT

BUSINESS AIRCRAFT: Luxury or Necessity?



Corporate Aircraft Are Transforming the Way Companies Conduct Their Business

Executive Time-Savings and Flexibility Cited as Chief Benefits by Users

You don't have to tell Jack Moseley about the hassles of commercial airline travel. The 51-year-old chairman and chief executive officer of United States Fidelity and Guaranty Co., one of the nation's largest multiline insurers, remembers them very well—the crowded airports, long check-in lines, security inspections, officious gate agents, inevitable delays, juggling of schedules, missed connections, exhausted arrivals, the late-night flights back to his home in suburban Baltimore, not to mention the serious loss of time away from his office. In brief, the wear-and-tear of executive travel.

But that was before he was introduced to corporate aircraft.

Two years ago, U.S. F&G's board of directors authorized the purchase of a Lear 35A, a popular six-seat executive jet that cost about $2.5 million. As far as Moseley is concerned, it's been worth its weight in gold.

"We went into corporate aviation expecting that it would cost us more than commercial transportation but have the benefit of reduced wear-and-tear on our executives and the savings of their time in the office," Moseley says.

"Our experience has been that it has done all of those things and much more. It has allowed us to multiply ourselves geographically, while accomplishing much more work in much less time. I never fully realized how much time I wasted hanging around airports waiting for flights and connections. It was quite a shock."

What about the expense of operating a corporate plane?

"If you factor in all the other costs—hotel bills, food, not to mention executive salaries—the additional cash outflow is so small it is ridiculous," Moseley says. "In fact, during the first six months of this year, we recorded a positive cash flow from our flight operations."

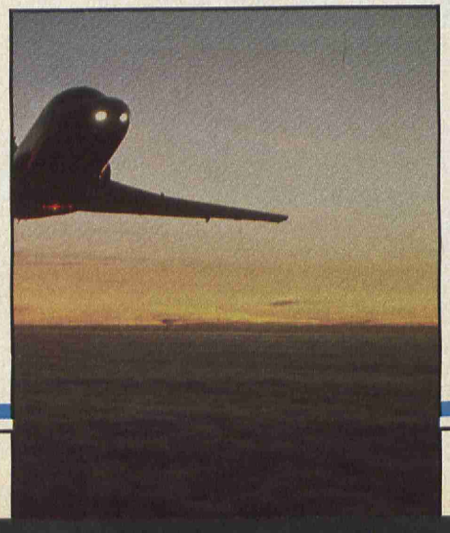
Does he ever wonder what he did before corporate flying?

"Many times," says Moseley. "But more important: if you asked me whether I would go back to flying commercial, my answer would be no. I'd stop traveling before I would give up corporate flying."

The Case for Corporate Aircraft

Tough talk, especially during a period when a combination of economic recession, high unemployment and poor earnings have sent many of the nation's top managers scurrying off to the closet when approached with questions about their corporate aircraft. But, as the following demonstrates, there are many other executives who remain quite open about the importance of business aviation to their companies; men who are almost fanatical in their conviction of the utility, versatility and value of airplanes and helicopters as a business tool; managers who see no need to be defensive about what they consider to be just another piece of capital equipment.

"I've never really understood the reluctance of some companies to speak out about their aircraft," says Darwin E. Smith, chairman of Kimberly-Clark Corp., which owns more than a dozen fixed-wing and rotary aircraft. (See page 30). "What could be more legitimate than something that allows a company to spread its management talent over a wide geographical area? We couldn't begin to operate without corporate aircraft."



Agrees Harold D. Hoopman, president and chief executive officer of Marathon Oil Co., which operates 12 planes: "We are very proud of the way we manage our corporate aircraft. They are neither a corporate perk nor a prestige item for the company. They are, and always have been, working tools—very essential operating tools."

These views are reinforced by William J. Spencer, the recently retired president of Citicorp: "There is a perception that corporate aircraft are some kind of boondoggle for senior management to go to the Super Bowl or play golf in Florida, when in reality they are instruments of effective corporate management. We have always taken an open stance on the question of corporate aircraft. We have nothing to hide."

CHARLES HARBUTT/ARCHIVE PICTURES, INC.

Harry J. Gray, CEO of United Technologies Corp., prepares to board a Sikorsky 76 executive helicopter en route to New York City from the company's Hartford, Conn., headquarters. Besides the helicopter, United Technologies owns five fixed-wing aircraft, including a used Boeing 727 and 737. "The biggest benefit of corporate aircraft for me is the flexibility and time-utilization it gives me. I don't think we could have built a corporation of this size (1981 sales: $14 billion), nor built it in the time that we did without the use of aircraft."

An Industry Workhorse

An insurer, a manufacturer, an oil company official and a banking executive—men whose businesses cut a wide and influential swath across the U.S. economy and whose industries are big and long-time users and proponents of corporate aviation. But there are others who are just as dependent on corporate aircraft as they are on the company computer.

Why an airline ticket guarantees a safer ocean crossing than most business jets.

Unless your business jet has three or more engines, it cannot meet the FAA safety standards required of commercial jetliners flying an hour or more offshore.*

That's why you need the Falcon 50. We designed the Falcon 50 with three engines because, from the start, it was intended to be a world-class business jet. With the range and the safety features you need for intercontinental travel. Why three engines? Because, should an engine fail en route, losing one-third your power and systems is obviously less serious than losing half.

*FAR 121.161 prohibits twin-jet airliners from operating further than one hour from a suitable landing field on scheduled passenger carrying flights.

Redundancy plus

Not only does the Falcon 50 have one more engine than every other jet in its class, it also gives you better redundancy in terms of systems: electrical, fuel, hydraulic, pressurization and flight controls.

What does all this give you? At the minimum, greater mobility and peace of mind. In a difficult situation, it can mean the difference of arriving safely at your destination. If you're a pilot, you understand. If you're not a pilot, you should ask.

Long trips...short strips

The Falcon 50 has a globe-trotting range of 3650 nautical miles (over 4200 statute miles), yet takes off and lands using surprisingly short runways. For example, it can fly 1500 nm from a 3000 ft strip, or 3650 nm from only 4700 ft—and land in only 2100 ft!

If you'd like more facts on one of the safest intercontinental business jets, and the most versatile, call Roy Bergstrom at 201-288-8479 or return the coupon below.

FalconJet
Teterboro, NJ 07608

☐ Please send me information on the Falcon 50. ☐ I'd like a sales presentation soon.

Name_____ Title_____
Company_____
Address_____
City_____ State_____ Zip_____
Phone ( )_____
Now flying a_____ FT12/13

We build them better than we have to. We have to.

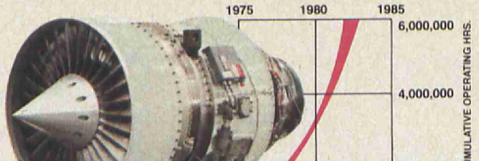
We take care of our family.

For the nearly 2,000 business aircraft in Garrett's TFE731 fleet—together flying more than 40 million miles a year—our support shows itself in many ways.

A commitment to excellence. It's the kind of support which shows our dedication to continuously increase the durability and reliability of Garrett engines. For the TFE731, it has achieved reliability levels equal to airline engines since its introduction. In addition, modernization programs—including High Rel—have increased fleet reliability by 30% in the last two years. And tomorrow's engines will be even better.

The Garrett TFE731 family:
Cessna Citation III
Dassault Falcon 10, 50
Gates Learjet 35/36, 55
British Aerospace 125-700, 731 HS125
Israel Aircraft Westwind I, II, and Astra
Lockheed Jetstar II
731 Jetstar
Rockwell Sabreliner 65A

Expanded customer support network. It's the kind of support that increases the number of Garrett TFE731 service centers to nearly



50, and raises the number of heavy maintenance centers to twelve around the world. With seven in the U.S., including Airwork in New Jersey and AiResearch Aviation facilities in Texas, New York, California, Illinois, Georgia, and Garrett Turbine Engine Company in Arizona.

GARRETT The Garrett Corporation
One of The Signal Companies

Plus international centers in France, Spain, Sweden, Australia, and Germany. Each center provides technical assistance and Hotline service seven days a week, 24 hours a day, and is backed by the full support of Garrett's worldwide field service organization.

A guaranteed Maintenance Service Plan. There's also the support of Garrett's TFE731 Maintenance Service Plan (MSP). A comprehensive program that guarantees maintenance costs, the MSP provides continuous financial coverage for scheduled and unscheduled maintenance, scheduled inspections, and engine modernization.

More powerful engines. Finally, it's the kind of support that shows our commitment to lead the industry with more powerful, more reliable, and ever more fuel efficient turbofans for new generations of aircraft. For example, our new TFE731-5, due for certification in 1983, is a quiet, 4,300 lb. thrust class engine with an even lower SFC than today's TFE731 engines.

For more information, contact: Garrett Turbine Engine Company, P.O. Box 5217, Phoenix, AZ 85010. Or call: (602) 267-3678.

GARRETT

BUSINESS AIRCRAFT

Consider the following: Xerox shuttles employees twice daily between its Stamford, Conn.,headquarters, and its Rochester, N.Y., plant in its new Canadair Challenger...IBM flies planeloads of potential computer-buying customers to its plants around the country aboard its Grumman Gulfstream IIs...Collins Avionics runs its two-plane company airline on daily round trips between its Cedar Rapids, Iowa, headquarters and its Dallas plant...Upjohn uses its Rockwell Sabreliners to carry teams of scientific and technical personnel to new products conferences around the country...Bill Parks and a team of Parks & Davis auctioneers head for a $1.5 million sale of oil drilling equipment in Parachute, Colo., on their Fairchild Merlin IVC... Executives of G&H Steel Service, Philadelphia-based steel construction contractors, visit a dozen building sites in five states in two days with their Piper Cheyenne III...St. Regis Paper rushes badly needed spare parts for a down mill in Western Canada aboard its Dassault Falcon 20...Peter Stroh of Stroh Breweries uses his Beech King Air 200 to arrange a multimillion-dollar acquisition...Tandy (Radio Shack) executives fly their Westwind II to visit vendors in three states... American Cyanamid managers visit far-flung plants and offices in a Gates Learjet 55...Digital Equipment uses a fleet of Bell helicopters to ferry engineers, executives, sales personnel and customers among the company's 14 facilities in Massachusetts and New Hampshire... General Electric executives are ferried from a Lynn, Mass., engine plant to New York on a Sikorsky S-76 helicopter...Executives of the Barnes Group, the world's largest producer of precision springs, hop across the country visiting distributors in their Mitsubishi turboprop. These are but a few examples of how important corporate aircraft have become to some companies and how corporate aviation in general has become a vital and integral part of the nation's economic system.

For these companies, business aircraft are transforming the way they conduct their business, operate their plants, market their products and transport their executives to

Kimberly-Clark's Darwin Smith: Up in the Air Over a New Plant Investment

The shiny new Canadair Challenger 600 is pulled from the K-C Aviation hangar onto the tarmac at Outagamie County Airport in Appleton, Wisc. In a few moments, a car stops next to the wide-bodied fanjet and out steps Darwin E. Smith, the 56-year-old chairman and chief executive officer of Kimberly-Clark Corp., the $3 billion diversified paper products manufacturer.

Smith glances at his watch as he heads toward the waiting aircraft. He is running a bit behind schedule because of some last-minute business at his Neenah headquarters. But then that's one of the nice things about corporate jets—*your* schedule is *its* schedule.

The nine-seat Challenger, one of the so-called "new generation" business jets on the market, is the latest addition to Kimberly-Clark's fleet. Since it was purchased last March, the plane has logged more than 350 hours of flight time—a slightly above-average utilization rate for corporate aircraft. It has some equally busy teammates. All 12 of Kimberly-Clark's aircraft—nine fixed-wing and three helicopters—are extensively used and the company soon may add a Sikorsky 76 executive helicopter to its growing fleet.

None of this is surprising because the company has had a long-standing commitment to corporate aviation, dating back to the purchase in 1948 of its first corporate plane, a six-passenger Twin Beech D-18. As a result of many years of experience in servicing its fleet, Kimberly-Clark organized its own K-C Aviation subsidiary in 1969 to service other users of corporate aircraft. Today, K-C Aviation is one of the major corporate aircraft completion and service centers with operations in Appleton and at Dallas' Love Field, and has plans to expand to Atlanta.

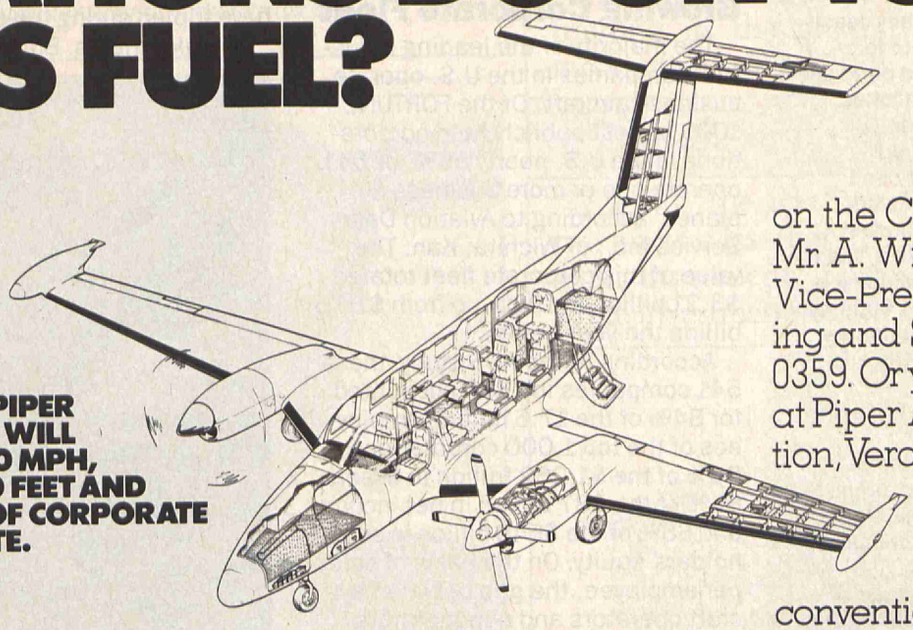
"We are no strangers to corporate aviation," Smith says, buckling in for the 90-minute flight to La Grange, Ga. "And we feel absolutely no need to defend our ownership of corporate planes to anyone. Because they are clearly justifiable."

Kimberly-Clark CEO Darwin E. Smith and Timothy E. Hoeksema, president of K-C Aviation, pause before boarding the firm's new Canadair Challenger executive jet for Georgia and Alabama where the company is considering sites for a new plant.

On this particular overcast September day, Smith is a man in search of an answer to a $100 million question: where should Kimberly-Clark build a major facility for producing non-woven fiberous material—the raw material for a wide variety of items from disposable diapers and sanitary napkins to industrial-strength tissue paper and various health care products. Would it be La Grange, or Dothan, Ala.? The two sites had been narrowed from a list of 10 possibilities and several hundred jobs hang in the balance.

Although Smith wouldn't have to announce his choice for many weeks, this trip was the final step in the decision-making process—his last chance to personally "eyeball" the sites, walk around, feel the soil, check out the environment and infra-

WHAT IF THERE WERE A PROPJET THAT DOES WHAT CITATIONS DO ON 40% LESS FUEL?



THE NEW PIPER CHEYENNE IV WILL CRUISE AT 400 MPH, GO TO 41,000 FEET AND MAKE A LOT OF CORPORATE JETS OBSOLETE.

If there is a line that divides the performance capabilities of jets and propjets, the new Cheyenne IV will simply fly over it.

At a cruise speed of 400 mph and an operating altitude of 41,000 feet.

Faster and higher than any Beechcraft, any Gulfstream, any Swearingen, any Cessna propjet—the kind of performance for which propjets were always advised they need not apply.

Put another way, on a 1,000-nautical mile trip, at cruise power, the new Cheyenne IV will be virtually as fast as a Citation I, coming in only one minute to five minutes slower from altitudes of 30,000 to 41,000 feet.

On a 1,500-nautical mile trip with six passengers aboard, again at cruise power, the Cheyenne IV will beat the Citation I and the Citation II by at least an hour. Simply because neither Citation is even capable of a trip like that without refueling.

And whatever the mission, the Cheyenne IV will perform on 35% to 40% less fuel than the Citations. Which, given jet fuel at $2 per gallon, adds up to a major advantage in its own right.

For more information on the Cheyenne IV, call Mr. A. William Newman, Vice-President for Marketing and Sales, at 305-569-0359. Or you can write him at Piper Aircraft Corporation, Vero Beach, FL 32690.

Just tell him you were considering a conventional propjet, but now you're interested in better performance.

Or tell him you were considering a light business jet.

But now you're interested in better performance.

Cheyenne

Piper Aircraft Corporation, Vero Beach, FL 32690
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structure, talk to local officials and his own area managers.

"Our landing here in this jet will cause considerable speculation about our decision," Smith says as the Challenger gently touches down at the La Grange airport. Waiting for him is another K-C jet, a Hawker-Siddeley 125, that had arrived earlier carrying other company executives. "I guess the only way to foreclose any speculation would be to get off with fishing rods," Smith jokes.

Actually, Smith is very serious about seeing to it that Kimberly-Clark's business aircraft are used strictly for business. When he became CEO in 1971, one of the first things he did was to institute a "flight authorization" procedure including a form to be filled out for every flight by all passengers, stating their names, positions, and purposes of trip and itineraries.

Would he have made this trip using commercial transportation?

"Have you ever tried to get from Appleton to La Grange on an airline? Anything is possible if you have unlimited time. But what CEO or busy executive has that luxury?"

The greatest single advantage of corporate aircraft is the "mobility that it gives you," Smith continues. "It only takes about 90 minutes to fly down here from Appleton, whereas if I came down by a commercial flight it would have taken six or seven hours. A great deal can be accomplished during that big time difference."

Indeed, in a little more than two hours, Smith and his team have inspected both the Georgia and Alabama sites and are on their way back to a company educational center near Sylacauga, Ala., where they will make up their minds during a three-day executive committee meeting.

Which will it be—La Grange or Dothan?

Smith won't say. But one thing is sure: whichever city wins out, it will have to prepare its airport for a dramatic upsurge in corporate flight activity, courtesy of Kimberly-Clark.

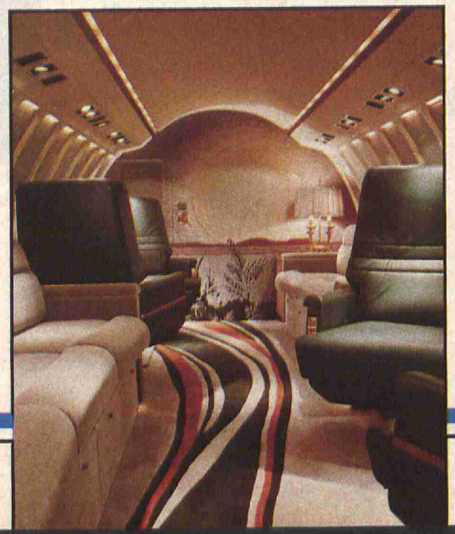
the benefit of their employees and shareholders. Or, as Thomas J. Watson, Jr., chairman emeritus of IBM Corp., observes: "There has been a real transition in the use of corporate aircraft over the past decade from the flagship of the fleet to a real general-purpose utility vehicle available to all layers of management, from customers and service personnel right on up to top management. And for a company's top executives, it can be something of a slave-driver."

Growing Corporate Fleet

The majority of the leading industrial companies in the U.S. operate business aircraft. Of the FORTUNE 1000 largest publicly held corporations in the U.S. nearly 55%, or 541, operate one or more business airplanes, according to Aviation Data Service Inc., of Wichita, Kan. The value of this corporate fleet totaled $3.21 billion in 1980, up from $1.76 billion the year before.

According to the ADS study, these 541 companies in 1980 accounted for 84% of the 17.6 million employees of the top 1,000 corporations, 89% of the $1.262 trillion in assets, 88% of the $87 billion in net income and 88% of the $548 billion in stockholders' equity. On the basis of sales per employee, the gap between aircraft operators and nonoperators was even wider—$105,252 vs. $75,376, respectively.

Beyond the FORTUNE 1000, in the U.S. alone more than 60,000 aircraft are operated by 36,000 companies for business use and to provide on-call transportation to business travelers at airports across the country that have few links with the rest of the nation. In 1980, business aircraft carried more than 50 million passengers and spent more time in the air (14 million hours) and recorded more flights (over six million) than the nation's commercial airlines.



Hard Times for Sellers?

With various estimates projecting a doubling of the number of passengers carried, hours flown and flights made by the end of the current decade, this should mean continuing growth for corporate aircraft manufacturers whose sales have tripled during the past 10 years.

Should, that is. But currently the industry is downbeat, experiencing one of its slowest selling periods in history, a slump that is expected to deepen further next year.

Canadair's Jim Taylor: Industry down, but will rebound stronger than before.

Even so, business aircraft manufacturers are taking the current slump in stride, arguing that however bad business may be, companies have pushed too deeply into the field of corporate aviation.

"If you chart the course of aircraft sales since the 1960s, you'll see several peaks and valleys but against a steadily rising plane of sales," says James B. Taylor, president of Canadair Inc., whose wide-bodied Challenger is one of the newest executive jets on the market. "The industry happens to be in a valley right now and will be through 1983. But the peaks are in view. The sheer pressure of time has made the business aircraft essential and I think you will see an upturn in corporate aircraft sales by 1984."

A leading insurance executive discusses safety and the company plane.

John V. Brennan, President of U.S. Aviation Underwriters, America's largest insurer of corporate aircraft.

Business aircraft have never been built better—and safer—than they are today. However, due to the complexity and high performance of these planes, pilot training is something every company must think about.

"Nine out of every ten aircraft accidents have pilot-related causes. We strongly urge our policyholders to set up regular refresher training programs using simulators that represent their exact make of aircraft.

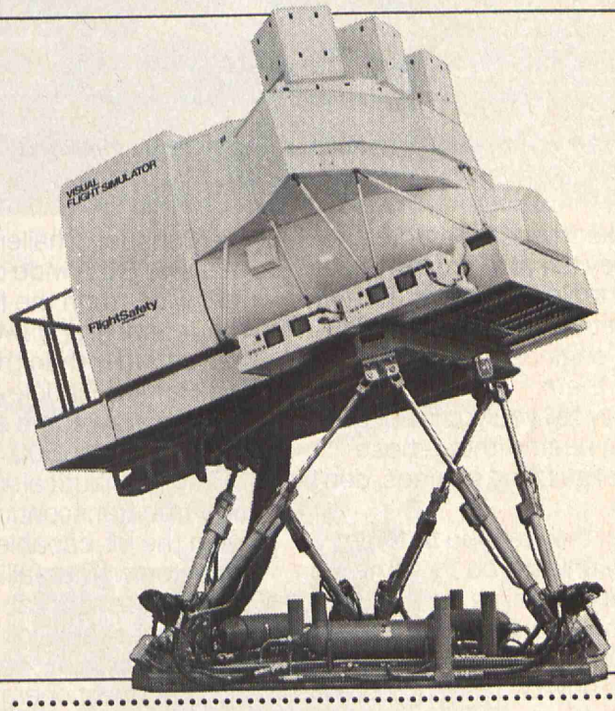
Pilot training is critical

"I insist that the pilots who fly our own company jet take simulator training twice each year—the same as airline pilots. We do our training with FlightSafety International.

"Our experience shows that simulators are the safest possible training environment. They enable pilots to practice and perfect all normal and emergency procedures under controlled conditions. The alternative of training in the aircraft is hazardous and incomplete—in addition, it wastes fuel.

Simulators: the safety factor

"Typically, the cost of refresher training for two pilots is less than the cost of one back-up flight instrument. That should be a worthwhile investment for any company."



FlightSafety International® offers simulator training programs for almost every type of jet and turboprop business aircraft. For more information send this coupon or call Jim Waugh, V.P. Marketing at (212) 565-4120 collect.

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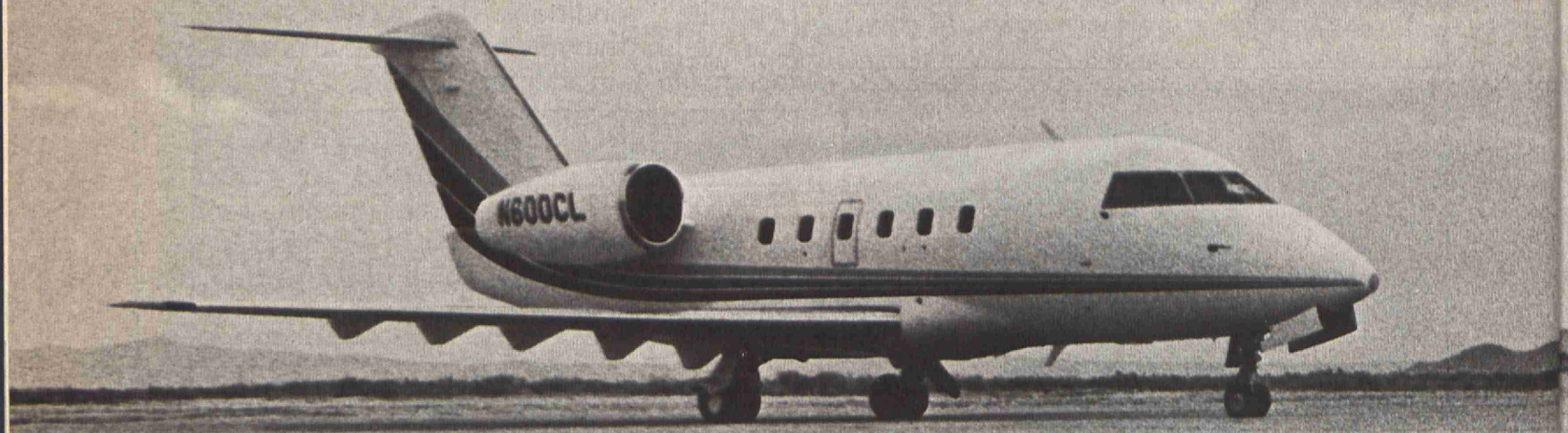


The transcontinental Challenger 600. NBAA/IFR range: 2,800 nautical miles,* with reserves.

Never take things for granted.

When they tell you you can't have a big, comfortable passenger cabin in a corporate jet unless you have big, fuel-guzzling engines to go with it, don't believe them.

When they tell you you can't get the range you need without those same big, fuel-guzzling engines, don't believe them.

And when they tell you to forget fuel economy unless you fly some cramped, narrow mailing tube with wings, don't believe them.

Believe us.

There are now two new corporate aircraft that are proceeding to stand the traditional and hidebound world of corporate aviation on its ear.

The Canadair Challenger 600 and the Challenger 601.

For the first time, you no longer have to choose between flying comfortably, flying economically and flying long-range.

All you have to decide is whether you're going to do most of your flying within continents, or between them.

The Avco Lycoming-powered Challenger 600. Now you can fly a big transcontinental corporate jet for the cost of a little transcontinental corporate jet.

It should come as no surprise that the Canadair Challenger 600, with its massive 8'2"-wide cabin, is a full *two feet wider* than the Falcon 200 and the Jetstar II, and *two feet, three inches wider* than the Learjet 55 and the Hawker-Siddeley 125/700.

It should come as no surprise that the Challenger 600, with its 2,800 NBAA/IFR nautical mile range, is the only true transcontinental corporate jet in the lot, capable of making NY-LA non-stop with unfailing reliability and a full passenger cabin.

What should jolt you considerably, however, is this:

The direct operating cost per mile of a Challenger 600 is no greater than that of a far smaller aircraft like the Jetstar II.

Hard to believe?

Maybe not so hard when you take into account the fact that at least 15 years passed between the introduction of these aircraft and the introduction of the Challenger 600 a mere two years ago.

Fifteen years ago, a gallon of jet fuel cost less than a dime.

Fifteen years ago, communities were less militant about noise—and so was the government.

Fifteen years ago, Federal Air Regulations were more lenient.

Fifteen years ago, executives were less demanding about the confining environment in which they had to spend hours getting from one place to another and from which they had to emerge, in whatever physical and mental shape, to do business for their stockholders.

But despite the fact that all this has changed over the years, the Challenger 600 is literally the only transcontinental corporate jet designed recently enough to cope with it.

Take noise. The Challenger 600 is one of the quietest corporate jets in the world, based on FAA measurements for takeoff, sideline and approach for landing.

Take federal design and operational requirements. The Challenger complies with stringent Federal Air Regulations Part 25 as redefined in 1976. It is the only corporate jet with two completely independent sets of flight controls, three completely independent hydraulic systems (with two separate power sources for each) and an AC electrical system with four independent power sources, allowing for complete aerodynamic control of the aircraft even with both engines failed.

Once it's understood that the Challenger represents nothing less than a decade-and-a-half leap in technology, the capabilities of the

*3,200 NM option available on the Challenger 600. The journeys quoted for the Challengers have been calculated using average annual wind conditions.

o corporate jets that do what d corporate jets to do.

The intercontinental Challenger 601. NBAA/IFR range: 3,500 nautical miles, with reserves.

longer-range version of the Challenger, powered by GE CF-34 engines in place of Lycomings, may not come as quite so much of a shock.

The GE-powered Challenger 601. It will fly you more economically and in greater comfort than any other intercontinental corporate jet in the world.

What is true of transcontinental corporate jets is equally true of intercontinental corporate jets.

It's been a long time between basic technological advances.

For example, the forerunners of intercontinental aircraft like the Gulfstream III and the Falcon 50 were designed fifteen and twenty years ago respectively.

So it should come as no surprise that the Challenger 601, despite its copious interior dimensions, averages a stunning 37% to 41% lower rate of fuel consumption per mile than the Gulfstream III, and even a 6% to 14% lower rate of fuel consumption per mile than the far smaller, shorter-range Falcon 50.

Yet the Challenger is bigger than both these aircraft in the one dimension most critical to passenger comfort and a realistic working environment: width.

Measured at the floorline, the Challenger is roughly 30% wider than the Gulfstream III and 48% wider than the Falcon 50.

As for range, the intercontinental Challenger 601 will fly you 3,500 nautical miles with full NBAA/IFR reserves still in the tanks.

Despite their meager fuel consumption, both the Challenger 600 and 601 are bigger than every other corporate jet in the one dimension most critical to passenger comfort and a realistic working environment: width.

Which makes it one of the very few corporate jets in existence that can cross the Pacific with one stop.

Or fly from New York to the Middle East with one stop.

Or from New York to Paris non-stop.

Or from Washington to Stockholm non-stop.

Or from Atlanta to Lisbon non-stop.

Or from Miami to Dakar non-stop.

To find out more about the two new corporate jets from Canadair that have changed everything, talk to Mr. James B. Taylor, President of Canadair Inc.

His telephone number is (203) 226-1581.

Or you can write him at Canadair Inc., 274 Riverside Avenue, Westport, CT 06880.

canadair challenger

BUSINESS AIRCRAFT

Wendy's International: Corporate Jets Aid Rapid National Expansion of Popular Hamburger Chain

R. David Thomas is to Wendy's International Inc. what the late Colonel Harland Sanders was to Kentucky Fried Chicken—a master promoter, energetic salesman and untiring symbol of his fast-food restaurant business.

Wendy's founder and senior chairman R. David Thomas strikes a pose in front of the Falcon 10 executive jet that has played an important role in his company's rapid expansion into the nation's third largest hamburger chain.

As founder and senior chairman of Wendy's Old Fashioned Hamburgers restaurants, Thomas and his colleagues during the past 13 years have built an empire of 2,400 franchised and company-owned restaurants in all of the 50 states, Canada, Puerto Rico, Australia, Japan and several European countries with annual sales running at more than $1.4 billion. And he credits corporate planes with helping his national expansion.

"I don't think Wendy's would be as successful as it is today without corporate planes," says the 50-year-old executive. "They enable us to visit three or four cities a day, meet with our franchisees and company store operators, see what their problems are and give them help and encouragement. You can't do that by telephone or mail. You have to go out and see your people eyeball-to-eyeball."

Thomas, who was a friend and admirer of the late Kentucky Colonel, estimates that he puts 50,000 to 60,000 miles a year on the company's Falcon 10 and Citation I. A typical "store visit" may mean 26 stops in six days, from Ohio to Massachusetts, to Connecticut and Maryland. In one three-day trip, Thomas and his staff visited more than 100 franchised restaurants. (Two-thirds of Wendy's restaurants are franchised.) "You couldn't do that on the commercial airlines," he says.

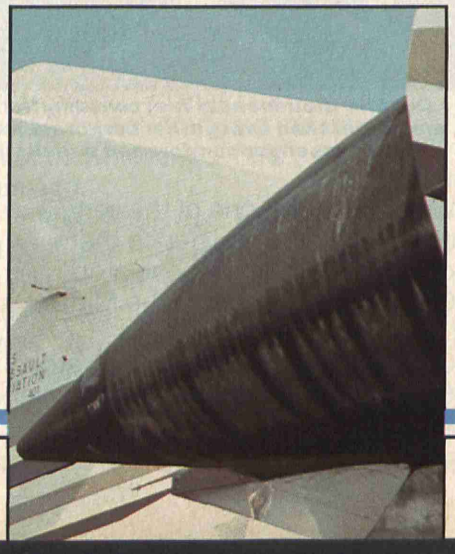
The aircraft also are used to transport Wendy's executives from coast to coast to attend business meetings, check on operations and investigate potential new sites. "There are significant advantages, both in terms of money-saving and convenience to executives, in having corporate aircraft at your disposal," Thomas says. To increase utilization and lower operating costs, the Dublin, Ohio-based company charters its aircraft to other firms when they are not being used by Wendy's executives.

Whatever their cost, Thomas can't imagine what it would be like to try to run his vast business without the airplanes. "You can't run a company like ours out of an office," he says reflectively. "Our business is out there with our restaurants. If you don't take the time to go out and visit your people, you'll have problems. And I don't like problems."

Clearly, the only future problem David Thomas faces is to keep pace with his own self-imposed travel schedule and the fast growth of his restaurant business.

A Good Time To Buy or Lease Aircraft

Upturn or not, most industry representatives concede that there is no better time than now to buy or lease an airplane. Prices on some models are being sharply discounted and as order backlogs shrink delivery times have accelerated.



"If you need an airplane," says William A. Strachan, vice president and general manager of General Electric Credit Corp.'s (GECC) equipment leasing/financing operations, "right now is a good time to buy or lease."

With more than $125 million of corporate aircraft on its books, GECC is the largest lessor of business airplanes and helicopters in the country. And, despite the recent decline in prime corporate borrowing rates, which tends to discourage leasing and encourage buying, GECC's leasing business remains strong.

The "off balance sheet" nature of leasing, plus the lower effective borrowing rates, savings of working capital, minimizing of downpayments and tax considerations, have kept this financing tool popular among companies in these depressed economic times, Strachan says.

Karl M. Parrish, chairman and chief executive of Manufacturers Hanover Leasing Corp., notes that technological changes within the business aircraft industry are causing some weakness in the residual values of some aircraft, hence encouraging companies to lease rather than buy.

"Buyers have to be careful about residuals in this market," warns Parrish. "Residuals were strong in the past because the technology was more stable. Today, however, the market has changed with emphasis on quieter, more fuel-efficient, longer-range airplanes. There is a new generation of airplanes already being offered that are making the older generation less attractive. Thus, the residual values will remain depressed."

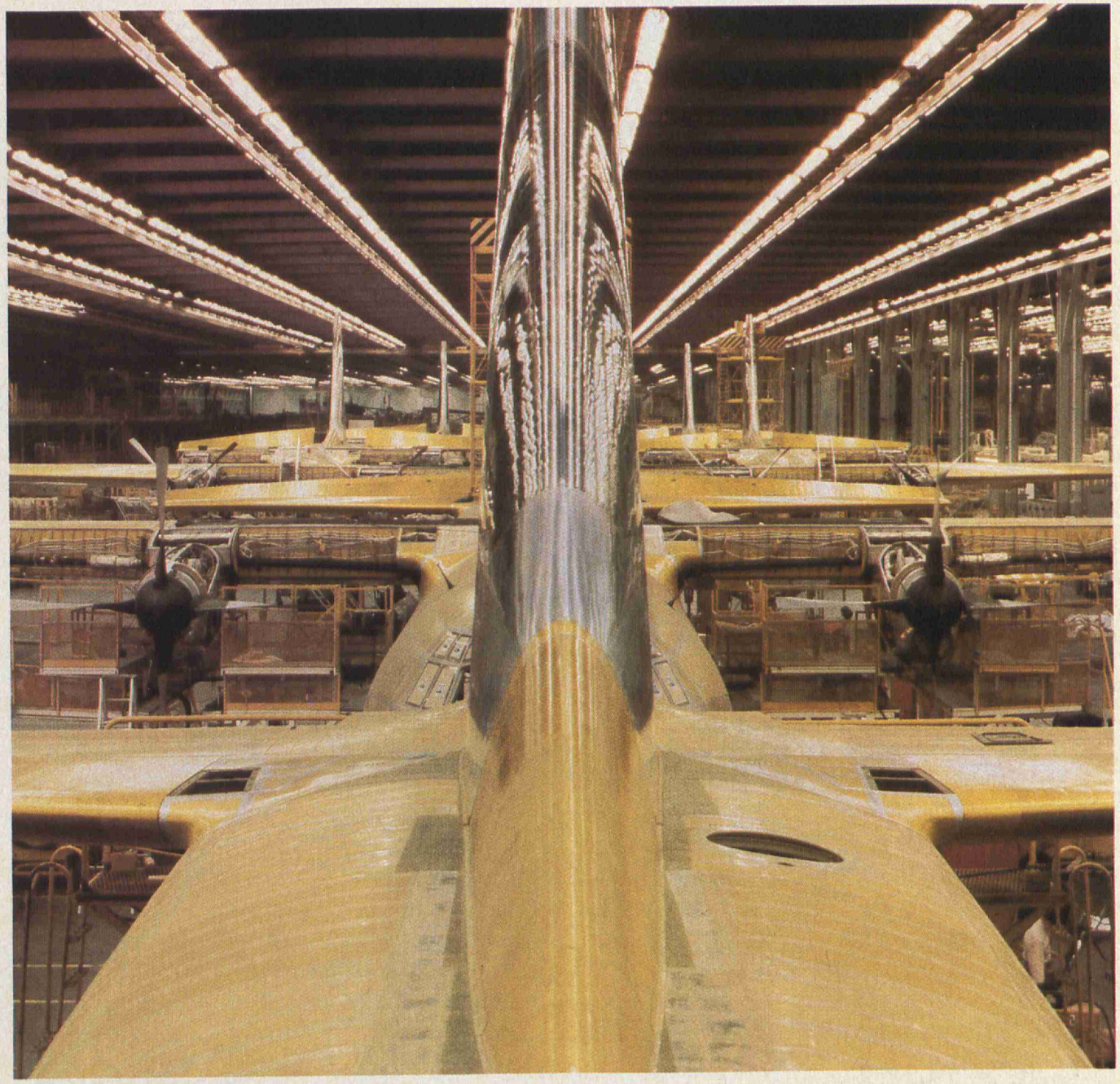
What Price Corporate Aircraft?

Buying a corporate plane can be an expensive proposition.

Most companies historically have started out small, with a turboprop and steadily worked their way up through small and medium jets, eventually reaching the larger jets. But whatever is purchased, a corporate plane doesn't come cheap, ranging in price from over $1 million

The Manufacturers...

...New technology. New capital incentives. They need new financing capabilities. Manufacturers Hanover Leasing, the largest bank-affiliated equipment financier in the U.S., is the capital component in industrial revitalization. Our local specialists offer action plans as varied and flexible as the businesses we serve. Because it's our job to help companies progress.



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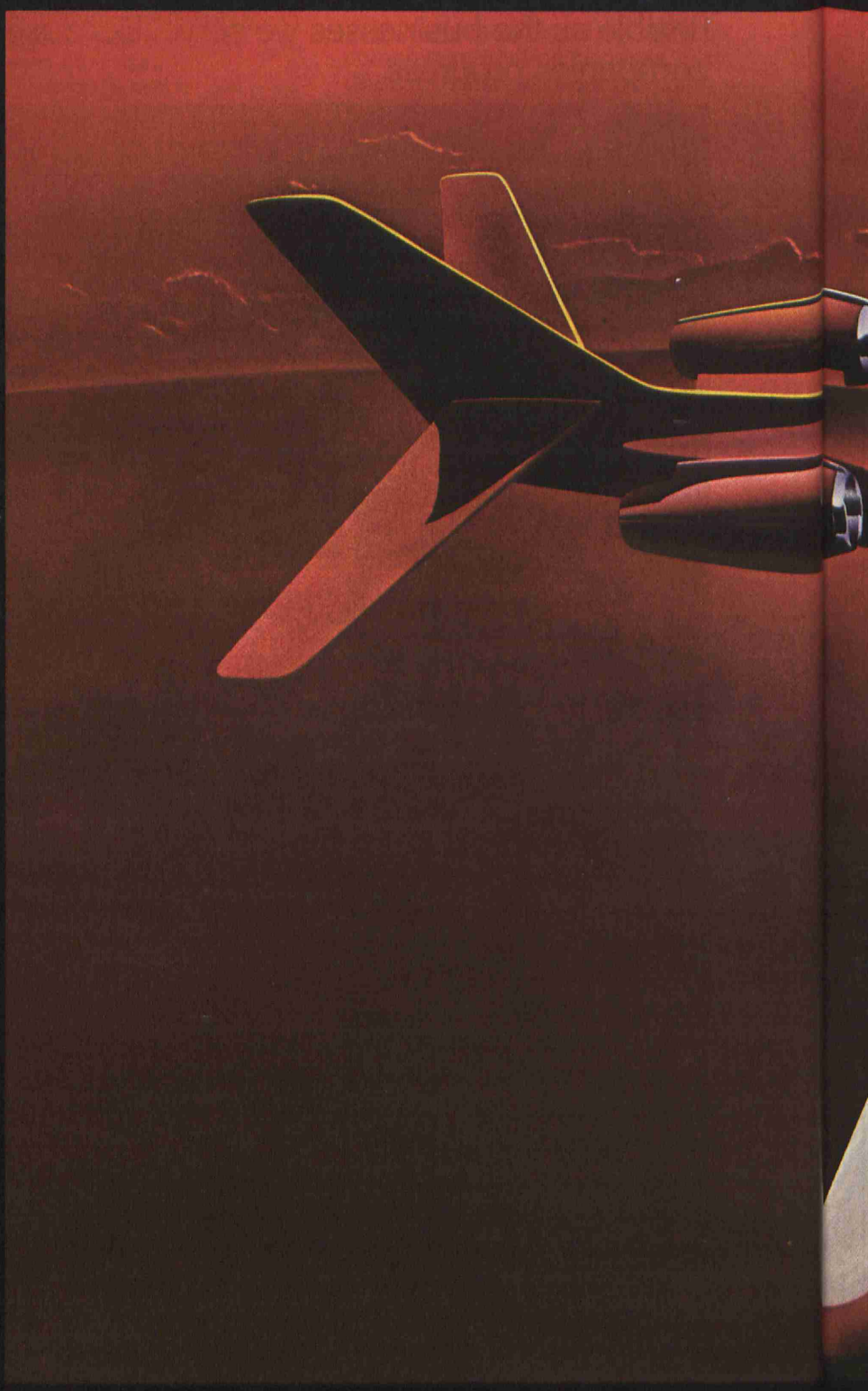
fuel economy ne



The new Westwind Astra will change some old, established ideas about business jets. First, it can fly both fast and far sustaining Mach 0.8 coast to coast, with an even higher dash speed. At eight tenths the speed of sound, 41,000 feet up, you cruise along with commercial jet traffic. And save a good hour to the west coast, compared with competitive advanced business jets. But, along with time, Astra also saves valuable fuel. This exceptional plane achieves high-speed, coast to coast performance without any significant increase in fuel burn for the journey. From advanced wing to sleek fuselage, the pure aerodynamic design was not done at the cost of cabin comfort. There's a full-sized lavatory and the other accouterments you expect from the Westwind class. And the crew will enjoy a highly advanced flight guidance system with digital pictorial displays. The Westwind Astra comes very close to being the perfect business jet in its competitive category of eight-to-ten-passenger aircraft. It saves time and money, while providing quiet and comfort to let you work or think, as you cruise at Mach 0.8.

To arrange a presentation, please contact Lou Freedman, VP, Atlantic Aviation, Wilmington Airport, P.O. Box 15000, Wilmington, Delaware 19850. (302) 322-7244.

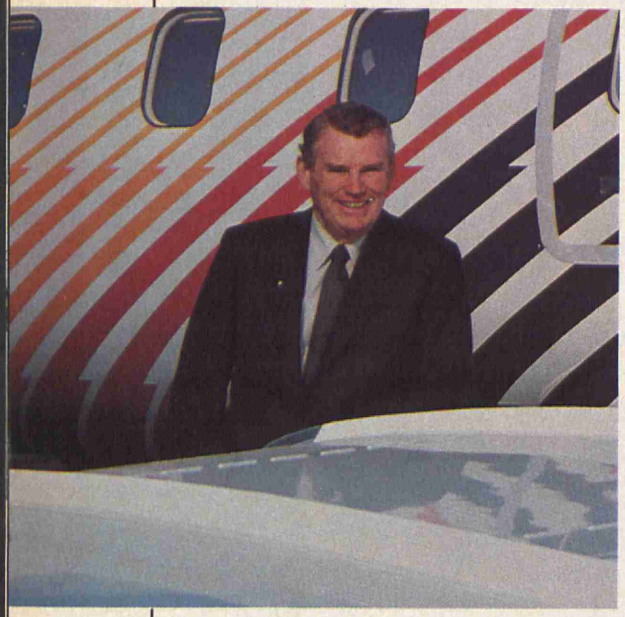
MACH
0.8
Coast to Coast

ach the speed of sound
edn't be left behind.

ATLANTIC AVIATION WESTWIND ASTRA

for a twin turboprop and $2 million-plus for a light jet to anywhere from $6 million to $14 million for a medium or large executive jet.

Added to this is the expense of setting up all the in-house administrative structure—pilots, maintenance people, and bookkeepers—to run the new flight department, an expense that can run as high as $40,000 a month for operating a small executive jet.



Gates Learjet's Bib Stillwell: The scheduled airlines are his industry's strongest boosters.

For example, a Cessna 340 II, used about 500 hours annually, would cost around $62,500 a year to operate, according to Terry George, supervisor of transportation analysis for Cessna Aircraft Co., of Wichita, Kans. Operation of a Gates Lear 35A may run as much as $385,000 a year, or $1.51 per statute mile for each passenger when fully loaded, according to *Business and Commercial Aviation*, a respected trade magazine. That compares with an average 12 cents per passenger mile by commercial airline. Indeed, on some of the larger executive jets, the cost of a one-hour trip exceeds $1,000.

Thus, with the exception perhaps of some corporate shuttle services which move large numbers of employees between fixed routes, travel on a corporate plane, on a mile-for-mile basis, is more expensive than on a commercial airliner.

But just how expensive is it?

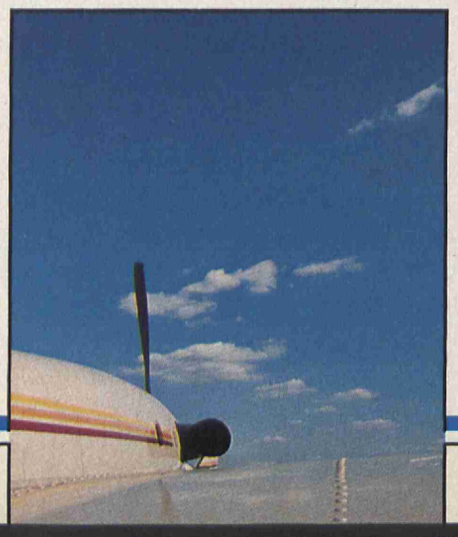
For a giant company like Honeywell Inc., with annual sales of almost $6 billion, the $6 million it spends annually on flying and maintaining its fleet of three Gulfstream II executive jets, represents a minuscule fraction of its revenues. According to Edson Spencer, the company's 56-year-old chairman and chief executive officer, the cost is small considering the extended sales and marketing reach it gives his company.

"About 80% of our flight hours are used to shuttle customers to our plants in the U.S.," says Spencer. "We sell very complex systems in which discussions with engineering personnel and equipment demonstrations are very important to closing a sale. Since we can't bring the plant to the customer, we bring the customer to the plant. It is a system that has worked very well for us over the past 12 years and has been very profitable for the company."

The Right Plane, the Right Time

However it is calculated, the cost of using a corporate plane pales by comparison with the amount of money that can be made by having one at just the right time.

Harry J. Gray, chairman and chief executive officer of United Technologies Corp., credits corporate aircraft with saving the day in a successful joint effort to snag one of the biggest contracts for military aircraft ever—a $2 billion order from the North Atlantic Treaty Organization to General Dynamics to produce F-16 fighter jets, powered by Pratt & Whitney engines. "The climax of three years of very tough negotiations occurred one Sunday morning in 1975 when I received a telephone call from Brussels telling me that the final decision on the contract was being made and that we and General Dynamics had to be there by 10 a.m. the next day to make our final arguments. Despite the short notice and the fact that key people were scattered all over the country, we were able to gather everyone involved by that evening in Hartford and flew overnight to Brussels on our corporate 737 and made the meeting by 9:55 a.m. Eight hours later we had the order. If we didn't have that aircraft, there is no way we could have reached Brussels in time to make our final bid and win the order."



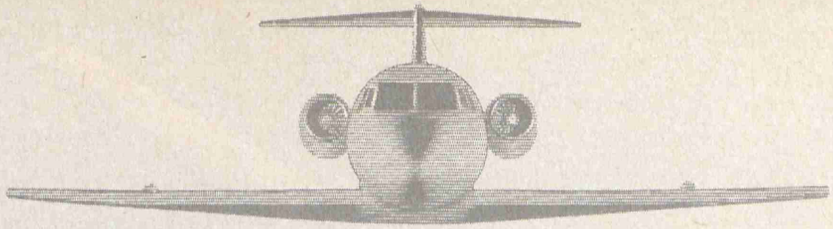
In a different area, Peter W. Stroh, president and CEO of Stroh Brewery Co., of Detroit, credits corporate planes with saving the day in his firm's successful acquisition of Jos. Schlitz Brewing Co., Milwaukee. In an interesting example of the little-fish-eating-the-big fish, the privately owned Stroh Brewery (volume: $565 million) acquired about two-thirds of the shares of the publicly owned Schlitz (volume: $882 million) during a tense, tough two-week unsolicited tender offer last April.

The Detroit brewer, which owns a Beech King Air and leases a number of other corporate planes when needed, used corporate aircraft to transport company executives, attorneys, expert witnesses and deposition-takers, "many times at a moment's notice," to and from Detroit and Milwaukee and Madison, Wisc., and Washington, D.C. "Things became pretty hectic there for a while," Stroh recalls. "Corporate planes gave us a flexibility that we would never have had if we were forced to rely on other forms of transportation."

Decline in Regular Air Service

Whatever the value of operating a corporate plane, there is little doubt about the future growth of the business aircraft industry.

Many factors are at work to encourage the increased use of corporate planes and helicopters, none more important than the reduction, and in many cases elimination,



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HIGH, WIDE, & HANDSOME.

And breaking records for owner satisfaction ...the Learjet 55.

Only 19 months after the first widebody Learjet 55 was delivered, more than 60 owners in seven countries had already flown a whopping eight million miles. And the praise they've heaped on the 55 is the strongest in Gates Learjet history.

The director of operations for American Cyanamid, for example, wrote: "In the 32-year history of this department, I have never introduced a new aircraft that was so well received. All the comments have been 100% favorable — from the chief executive down through the divisions. And the rate of utilization has been excellent."

Why such widespread satisfaction? Because the Learjet 55 was the first business jet to promise big-aircraft comfort with smaller-aircraft efficiency. And it's been delivering on every promise.

High performance and highest efficiency.

Cruising at 540 mph, the Learjet 55 is miles ahead of most other business jets. And miles above them, too.

The 55 can climb to 51,000 feet — well above the efficiency-robbing headwinds. And two to four miles above the turboprops.

It can depart safely from a runway as short as 3,900 feet to fly a typical 1,000 mile mission with eight passengers on board. Or fly six passengers non-stop from Los Angeles to New York (2,466

miles). And land quietly at a noise-restricted airport.

Best of all, it can take you at top speed from point A to point B on less fuel than any other business jet. Period.

Wide open spaciousness.

Inside, the Learjet 55 offers double the cabin space of our earliest models. There's room to get up and walk around. To stretch out in an oversized recliner. Even to seat four around a cabin-wide conference table.

It's comfort without compromise. And this spacious eight-passenger cabin provides every appointment an executive office deserves. Including a full aft lavatory in a private compartment.

There's 50% greater baggage space, too — including two external compartments. And a new access door allows direct loading and unloading of all cabin baggage.

Handsome craftsmanship... beautiful results.

There are many outward signs of the craftsmanship that goes into each Learjet 55. Including real hardwood trim on the cabinetry. Upholstery in genuine leather and woven wools. And the distinctive sleekness of body styling that is Learjet's alone.

But the real beauty of the Learjet 55 is the airline transport reliability that's been engineered into every component.

How soon could we deliver yours?

Sooner than you might think. Two company demonstrators are now in service and available for early delivery. Call 1-602-294-4422 to get specifics on delivery of a new Learjet 55 — or any of the other industry-leading Learjet models, including the new, longer range 55LR and 55 XLR.

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WHY HELICOPTERS?
Increased Executive Use Transforms Image of Rotorcraft from Workhorse to Thoroughbred.

Why helicopters?

Ask George A. Chamberlain, vice president of Digital Equipment Corp., the minicomputer manufacturer that uses a small fleet of Bell helicopters to carry engineers and other company personnel among its various plants in the northeastern U.S.:

"We've been able to decentralize our operations as needed without losing our ability to communicate directly with our plants. We consider helicopters an essential communications tool."

Or ask Jim Baldwin, president of Baldwin Co., an Orange County, Calif., building firm that specializes in custom tract housing, and owns a Hughes 500D helicopter:

"It enables me to get my work done, personally handle the situation and have time to work on other projects. With the helicopter, I'm more rested, so I can get more done."

Or hear Clifford J. Grum, executive vice president of Time Inc., which uses a Sikorsky 76 helicopter to carry executives within a 225-mile radius of New York City:

"It is a real time-saver. It allows a busy executive a great deal of flexibility in his travel plans and it is particularly valuable in leapfrogging over congested surface traffic between the office and the airport."

Bell Helicopter's 222B Twin executive helicopter is one of a new generation of rotorcraft that are proving popular with executives for avoiding congested urban travel and visiting nearby plants.

Or listen to Robert B. Salzman, vice president of Merle Norman Cosmetics, which keeps its Aerospatiale Gazelle busy shuttling executives and documents back and forth across Los Angeles:

"We consider the helicopter a very important business tool. Whatever it costs, it is so much less expensive for us, so much more efficient to operate by helicopter that our management really couldn't conceive of being without it any more."

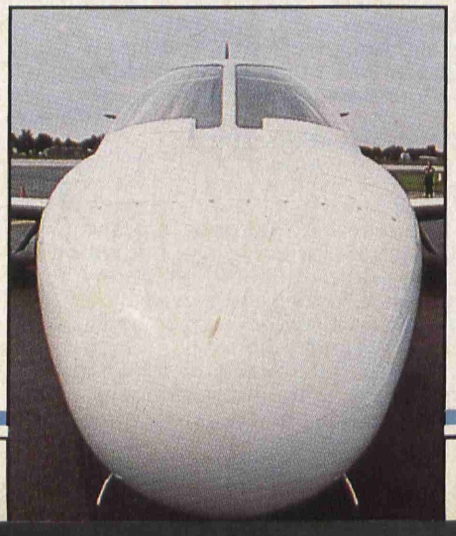
Mushrooming Executive Use

It wasn't too long ago that helicopters were unattractive, slow-moving, noisy, vibrating piston-driven machines used mainly for such mundane, but nevertheless important, jobs as patrolling oil pipelines and servicing offshore oil rigs, fighting fires, dusting crops, lifting logs and machinery on construction jobs, or rescuing wayward mountain climbers or stranded hikers. In short, real workhorses.

And they still are. But with a difference.

Today's helicopters are a new breed—sleekly designed, instrument-certified thoroughbreds with turbine engines, air speeds up to 170 miles per hour and capacities to cover distances of more than 300 miles quietly and comfortably. And, they are increasingly being used for top executive travel, staff communications and customer transport.

"Companies are finding that helicopters are often the fastest and most efficient way to travel short distances, whether between the office and the airport or from office to plant," says Mackie Mott, vice president of corporate marketing for United Technologies' Sikorsky Aircraft.



Agrees Carl D. Perry, executive vice president of Hughes Helicopters Inc.: "This is the decade of the helicopter. In the 1960s, it was little more than an aerial taxi. In the 1970s, it matured into an attractive, comfortable and efficient means of transportation for executives. Today, in the 1980s, it is an integral part of the transportation system and on the verge of dramatic growth."

World Production

Without counting all the new executive helicopters which are coming onto the market, like the Bell 222B Twin, the Sikorsky S-76, and the Hughes 500E, there are more than 8,000 civil helicopters operating in the U.S. alone, more than double the number four years ago. And, according to Bell Helicopter, the dominant producer in the business, the global market for helicopters may nearly double by 1990 with annual production reaching some 3,000 units.

Although these are world-wide projections, the majority of growth in tomorrow's helicopter market will come from the U.S., with particularly strong demand for executive twin-turbine rotorcraft—the fastest-growing segment of the market. "Companies like the added reliability of an extra engine when it comes to transporting their top executives around," says James F. Atkins, president of Bell Helicopter Textron Inc. "We even see growing demand for a 'light twin' helicopter with a gross weight of 5,000–6,000 pounds and will probably build one in the future."

More Composites, Less Weight

Like their counterparts in the fixed-wing industry, helicopter makers are constantly striving to produce lighter (hence, more fuel-efficient) helicopters through the use of new composite materials. Bell Helicopter uses composites to make its rotor blades and about 20% of its total helicopter airframe parts. About 40% of the outside surface and 17% of total parts of the Sikorsky 76 executive helicopter are made of composites, including the rotor blades, fairings, flooring, stabilizers, pylons and ducting.

"In 10 years," predicts Bell's Atkins, "you are probably going to be buying all-composite helicopters."

The future and corporate air travel.

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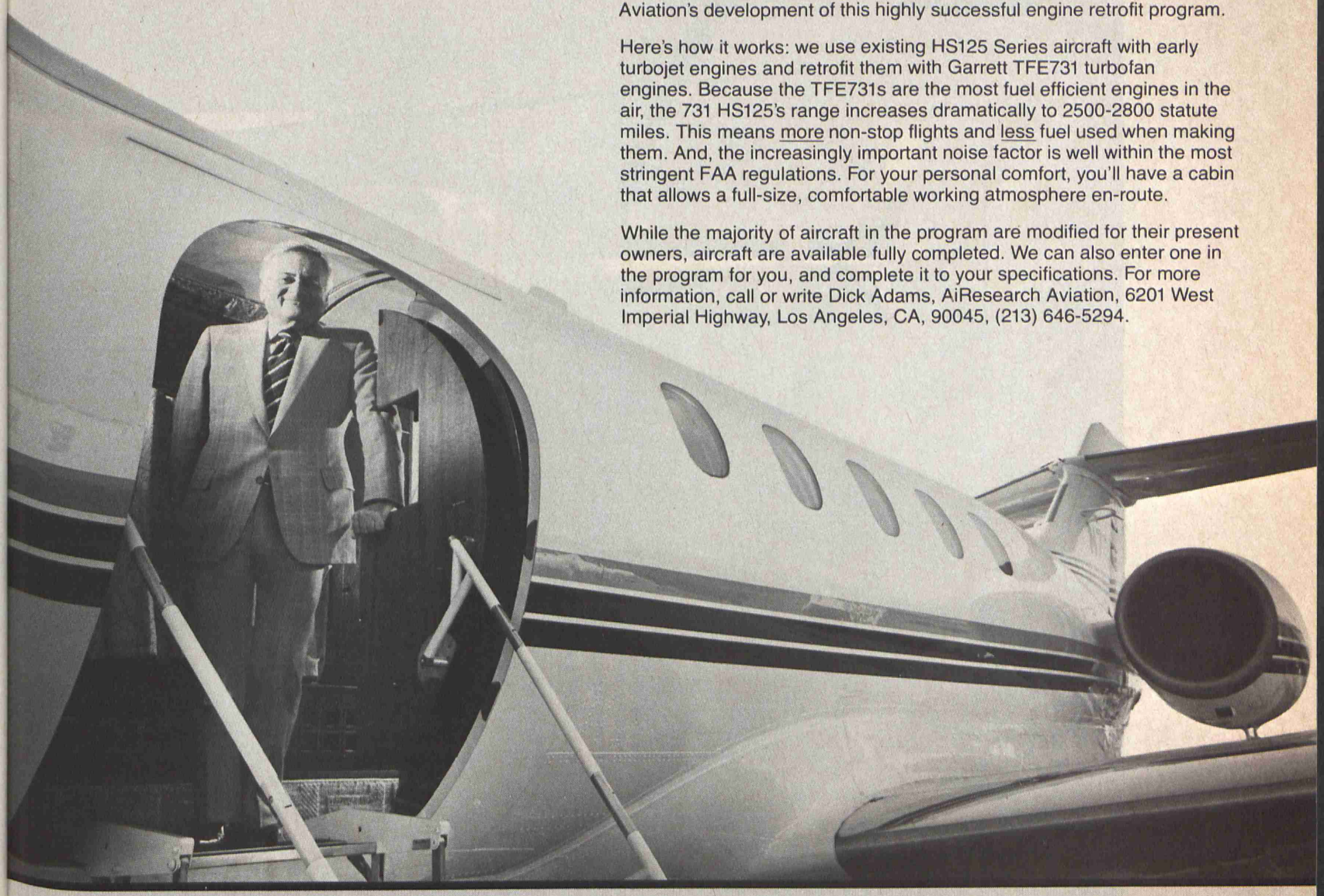
The 731 HS125 Retrofit Program was designed to provide large cabin comfort and fanjet efficiency at a low price. If you operate an older-generation turbojet aircraft, you can clearly see a future in that. Nearly 50 corporate management teams already do. They're now flying in comfortable eight-passenger cabins with stand-up headroom, private lavatories and modern fanjet performance as a result of AiResearch Aviation's development of this highly successful engine retrofit program.

Here's how it works: we use existing HS125 Series aircraft with early turbojet engines and retrofit them with Garrett TFE731 turbofan engines. Because the TFE731s are the most fuel efficient engines in the air, the 731 HS125's range increases dramatically to 2500-2800 statute miles. This means more non-stop flights and less fuel used when making them. And, the increasingly important noise factor is well within the most stringent FAA regulations. For your personal comfort, you'll have a cabin that allows a full-size, comfortable working atmosphere en-route.

While the majority of aircraft in the program are modified for their present owners, aircraft are available fully completed. We can also enter one in the program for you, and complete it to your specifications. For more information, call or write Dick Adams, AiResearch Aviation, 6201 West Imperial Highway, Los Angeles, CA, 90045, (213) 646-5294.



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"One always has time enough, if only one applies it well."

—Goethe

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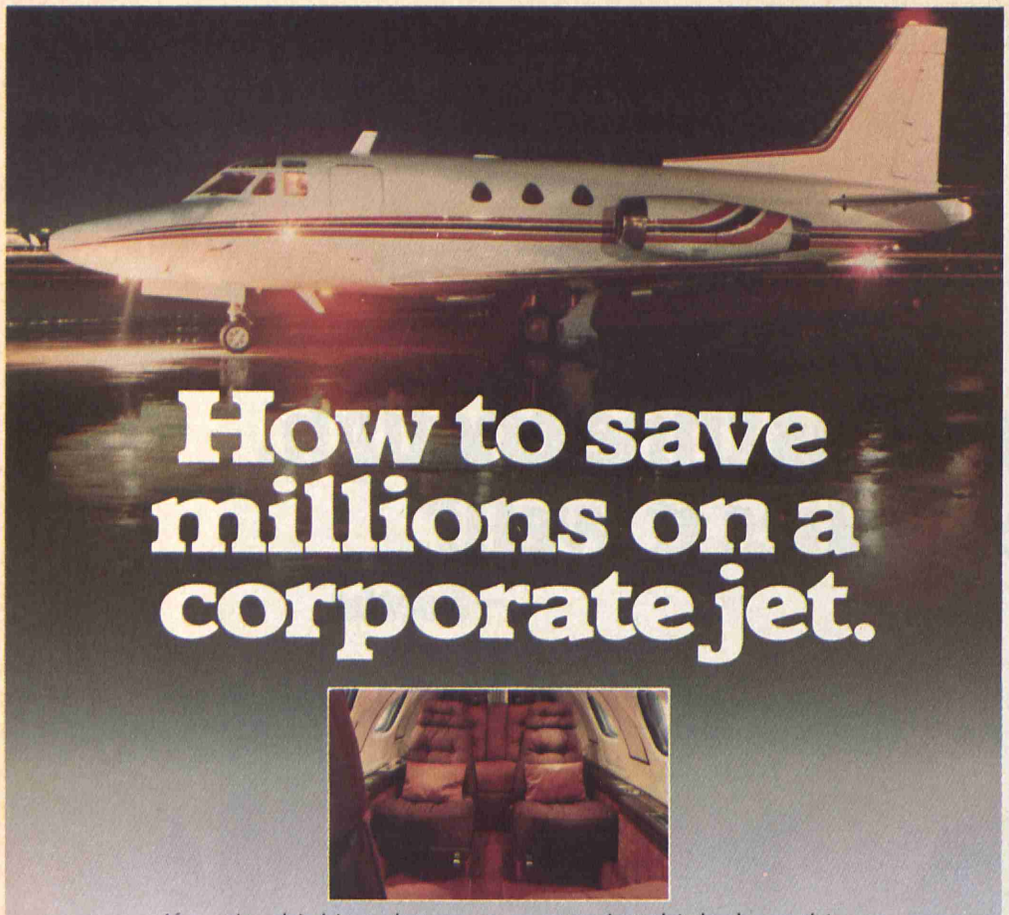

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If you're thinking about a corporate jet, think about this. With no sacrifice in comfort or performance, you can save millions of dollars by purchasing a FACTORY REMANUFACTURED Sabreliner® 40R or 60R. And save even more through factory remanufacture of your present 40 or 60.

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He'll give you the whole story, including how to save still more through our factory reconditioning program. All of it well worth thinking about.

Rockwell International

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...where science gets down to business

BUSINESS AIRCRAFT

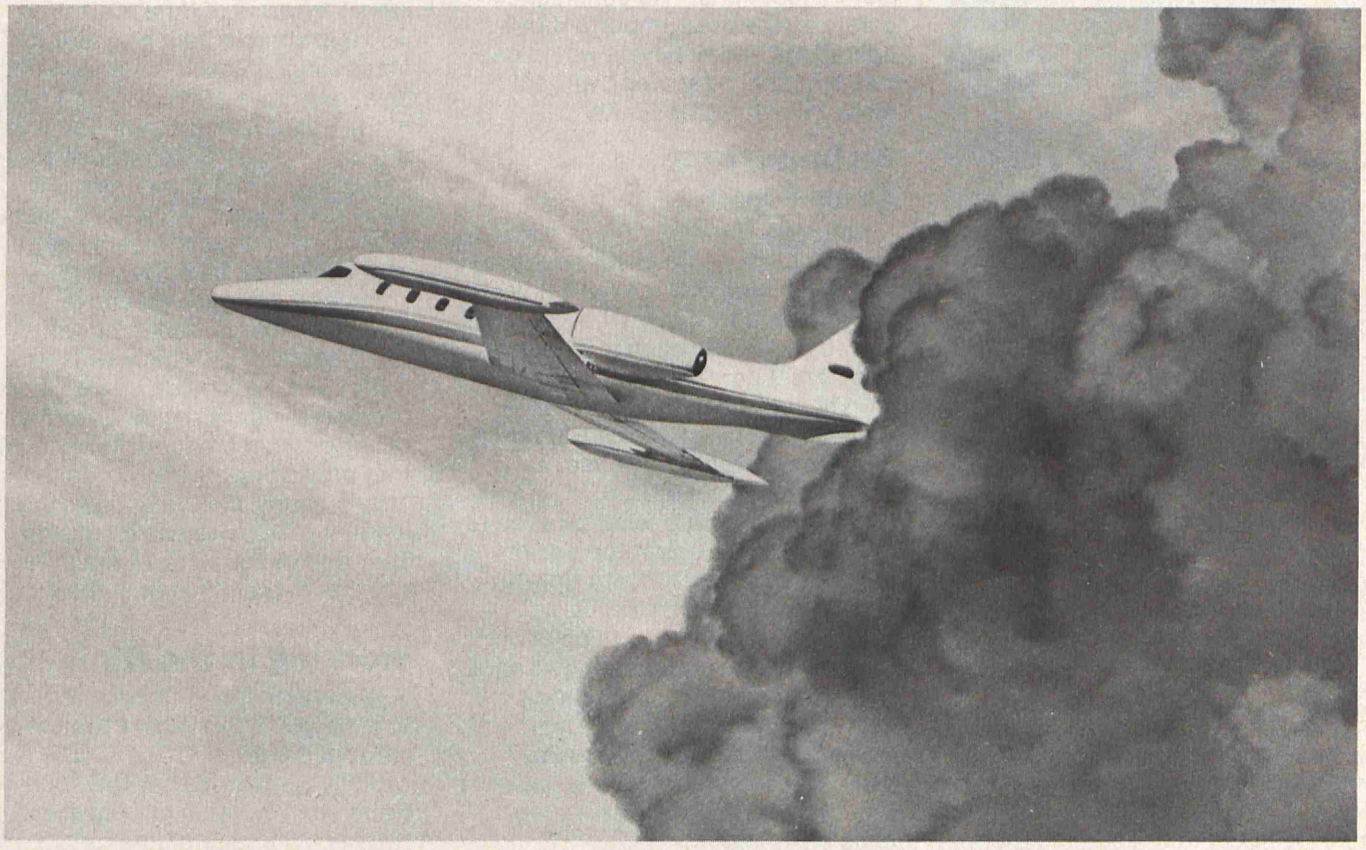
of regular airline service during the past few years, particularly since the Airline Deregulation Act of 1978.

Like their forerunners in transportation, the railroads, the nation's commercial air carriers have steadily been shedding nonproductive routes. In 1960, according to Civil Aeronautics Board figures, 567 points were served throughout the nation; in 1970, this dropped to 474; and, today, the number stands at fewer than 250. And as the airlines shift to larger equipment, economics are forcing them to give up still more of the unprofitable smaller cities and to cut schedules at others.

"The airlines are our biggest boosters—our best advertisement," says Bib S. Stillwell, general manager of Gates Learjet Corp. "The cost per passenger-mile of commercial transportation is so expensive today that the airlines around the world have had to change totally their marketing approach, away from the business person and toward the leisure traveler. The net result has been a deterioration of service to the business traveler."

Russell Chambers, president and chief executive officer of Intermedics Inc., the world's largest supplier of artificial heart valves, catches up on some work en route to a West Coast medical seminar. Because of its isolated location in Freeport, Texas, Intermedics depends heavily on its seven-aircraft fleet to keep in touch with its widely dispersed plants and to bring customers to these facilities. Chambers credits corporate aircraft with helping his company achieve seven consecutive years of record revenues and earnings. "They are our most important management, marketing and operational tools," he says. "We would operate much less successfully without them."

ENTERPRISING CAPITAL



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FTN-3

The Impact of Corporate Decentralization

Keeping in touch with far-flung operations has been a big incentive for many companies to use corporate aircraft. With the gradual decentralization of corporate management in the 1970s and the tendency to establish plants in harder-to-get-to areas in the Sun Belt and the less congested and more pro-business towns in the upper Midwest and Northwest, companies found themselves with a need to keep a close watch over their new operations—a need that increased in almost direct proportion to the concurrent decrease in scheduled air service and the simple lack of commercial air transportation in the first place.

Cable television broker Bill Daniels poses in front of his Lear 25B executive jet, which he says pays for itself once a year with the business deals he is able to make by using the aircraft. "It permits a corporate person to go places he might not go to because it is so hard to get there commercially," the Denver-based entrepreneur explains. "I have been able to put together many successful deals because I have been able to get to a certain place quickly when I was needed, which I couldn't have done without the plane."

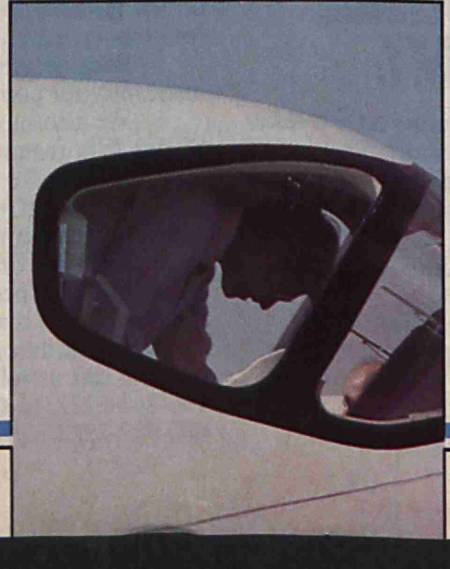
For a firm like Gerber Products Co., with annual sales of over $700 million and plants scattered all over the world, corporate aircraft, in the words of new CEO Carl Smith, "enable management to keep in touch with our operations wherever they may be located." The company operates a Lear 35 jet and two turboprops. Because its headquarters is located in Fremont, Mich., a city which is hardly a commercial aviation hub, Gerber relies heavily on its airplanes for even the most rudimentary travel needs. "They enable us to get our people to Chicago or Detroit to make regular airline connections," Smith explains," and to travel to our many plants and offices, or to bring staff back from those places to Fremont." In addition, the Learjet is used frequently to visit Gerber facilities in Mexico, Costa Rica and other distant locations. "We consider corporate aircraft very important to our operations and believe it would be very difficult to get along without them," summarizes Smith.

An Important Time-Saver

Naturally, the most important attraction of corporate aviation is the savings in time and the flexibility of movement it provides.

"You can accomplish in one day what might normally take you two days to achieve by commercial transportation," observes Harold J. Haynes, who retired last year as chairman of Standard Oil Co. of California. "A corporate jet allows you to leave San Francisco at the end of your working day and fly to New York and get up the next morning well-rested and ready for a full day's work, followed by the return flight to San Francisco in time for dinner that night. The alternative on a commercial carrier would be to take the 'red-eye' overnight and arrive in New York the next morning in no shape to do anything."

As one good example of time savings, Haynes once jetted from San Francisco to Saudi Arabia and back in 72 hours. "It would be pretty hard to do that on a scheduled airliner," Haynes says, adding, "and I'm not sure I would want to travel that way again myself."



A Flexible Option

Being able to work their travel schedules around their business schedules, executives say, gives them a flexibility that ultimately translates into higher productivity and, hence, greater profitability for their companies.

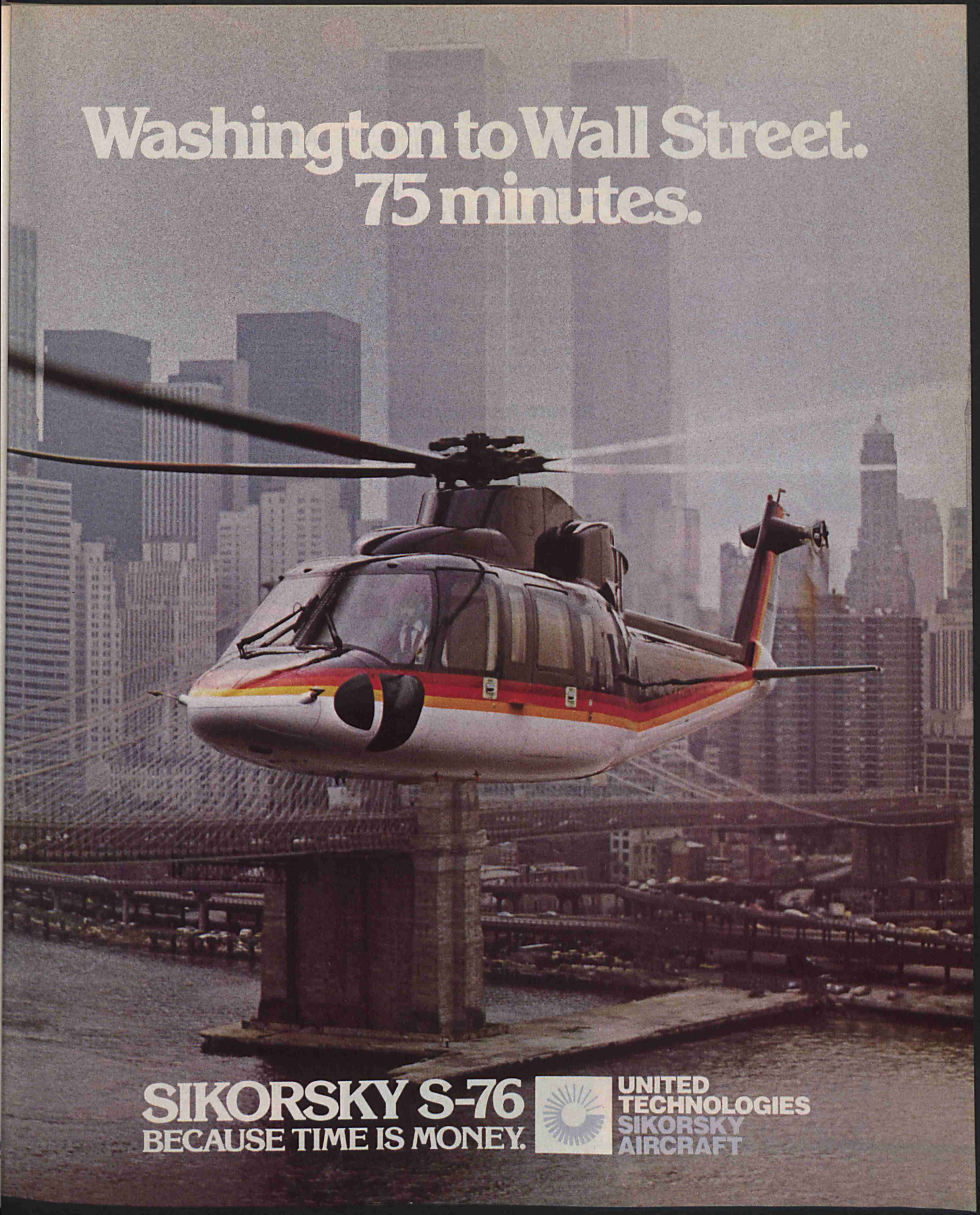
"Anything that improves your efficiency in terms of time utilization will help improve your profitability," notes John V. Roach, chairman and chief executive of Tandy Corp., owner of the Radio Shack chain. Roach, a tall, soft-spoken Texan whose company owns a Westwind II, should know what he is talking about since his firm more than tripled its earnings during the past five years.

James J. Morgan, executive vice president of marketing with Philip Morris Inc., which owns two Gulfstream IIs, couldn't agree more. "Corporate aircraft allow us to maintain maximum productivity because they are so flexible and convenient. They probably double or triple the amount of work we can do in a day. They allow us to work all the time whether in the office or in the air."

Working In the Air

Working in the air is another big advantage for business travelers on corporate craft.

Many companies say the hours in transit to a location give its executives and managers time for valuable in-flight meetings. "We find we are able to accomplish a fairly significant amount of work during a flight," says Marathon Oil's Hoopman. "When we are going to look at a project with a group of vice presidents and technical people, it is not unusual to discuss things on the airplane so that by the time we arrive there we will have been thoroughly briefed. Then, on the way back, we will recap the entire project based on what we saw and heard and will have pretty much reached a conclusion by the time we get back to the office. This spares us from having to call another meeting the next morning."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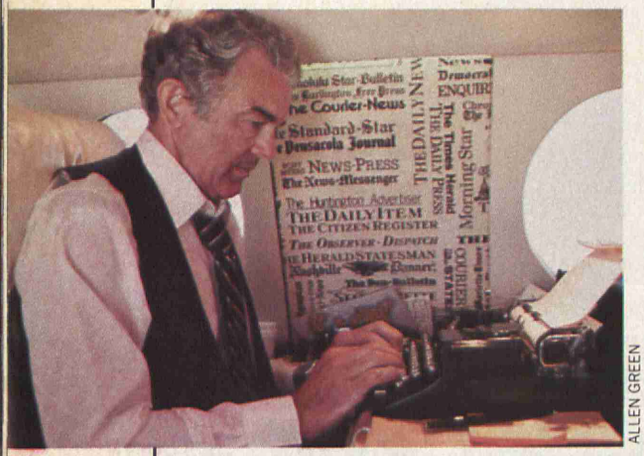
A Safe Form of Travel

Besides efficiency and convenience, corporate planes have proven to be an extremely *safe* means of transportation. According to National Transportation Safety Board statistics, corporate flying has the lowest rate of fatal accidents in general aviation—under 0.5 per 100,000 hours flown. That's slightly better than the record of commercial aviation and far better than the nearly four fatal crashes for each 100,000 hours of pleasure flying.



ALLEN GREEN

Busy newspaper executive Al Neuharth, chairman and president of Gannett Co., says his company's four-aircraft fleet played a major role in the launching of Gannett's new national newspaper, "U.S.A. Today," especially "in providing color photo coverage of major news and sporting events and moving production and circulation people around to various printing and distribution points across the country." Adds Neuharth: "We do business in 37 states and our aircraft are the only effective way for us to move around to our operations."

"Corporate pilots are among the best-trained and safest flyers in aviation," remarks Albert L. Ueltschi, board chairman and president of Flight Safety International (FSI). "Corporations are very careful about whom they let fly their top executives around the country. They want airline equivalents in competence, manner and flying credentials. Most corporations insist that their pilots meet the same government-established standards as airline captains."

Ueltschi notes that insurers are unlikely to cover a corporation's aircraft fleet unless the pilots have been through simulator training or actual emergency-practice flying in the type of aircraft the company owns. "Faced with the option of wasting fuel and risking their planes and pilots on training flights," he says, "corporations are increasingly turning to training like that offered by FSI."

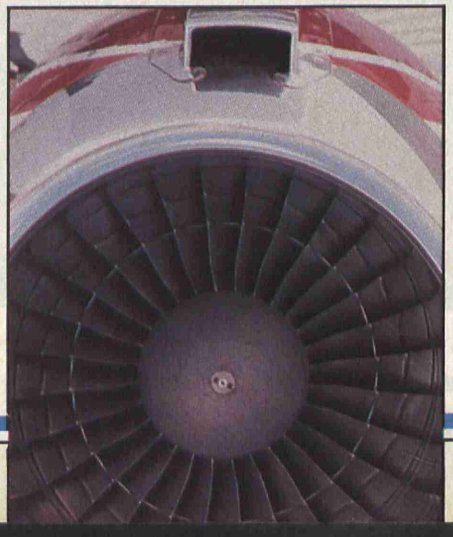
"Training is a major factor in whether we will insure a corporate aircraft program," says John V. Brennan, president of United States Aviation Underwriters of New York, one of the three largest U.S.-based insurers of corporate aircraft. "Today a risk may be acceptable or non-acceptable based upon whether they are having recurrent training for their pilots."

Secure Transportation

Safety of a different kind has also played a role in encouraging companies to use private means of transportation—the safety and security of their top executives.

Says Alfred Taubman, chairman of Taubman Co., Detroit-based real estate developers: "In today's realities, security is as important to a CEO as any other consideration in his working environment. You have better control over your personal security in a private plane than you do on a commercial carrier."

Taubman, whose firm owns a Falcon 10 and recently purchased a Canadair Challenger, credits corporate aviation with "expanding my business opportunities" and enabling him a few years ago to complete a major takeover involving Irvine Co., the big California land development firm. At the time, Taubman became a regular commuter between Detroit and Santa Ana, Calif., to file legal papers and engage in bidding. "It made the difference between putting the deal together and not being able to do it," Taubman explains.



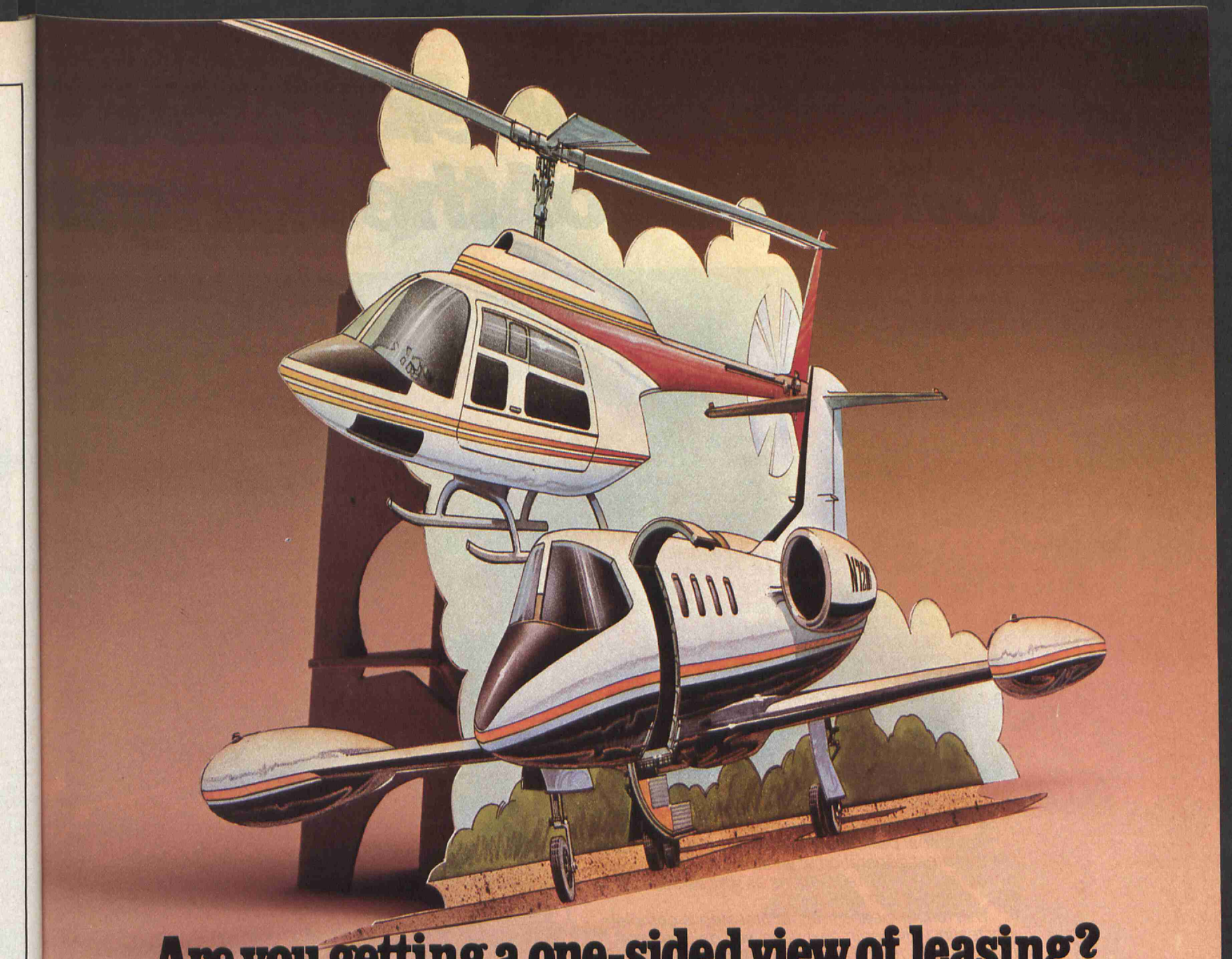
A Marketing Tool

But by far and away the most frequent use of corporate aircraft is as a marketing tool. Companies will fly sales people to remote customer locations for new product demonstrations or to service accounts with urgently needed replacement parts.

Drug companies find corporate planes useful in the introduction of new products. Upjohn Co., of Kalamazoo, Mich., for one, frequently uses its Rockwell Sabreliners to transport company technical and scientific people to the manufacturer's various sales centers around the country to hold meetings and press conferences relating to the introduction of a new drug or product. By using the airplanes, Preston S. Parish, Upjohn vice chairman says, "we save a good deal of time and greatly facilitate the introduction of new products. We have also improved our communications with regulatory agencies in Washington since we can fly in and out of Kalamazoo in much shorter time in our own planes."

Banks are particularly strong proponents of corporate aviation as a communications tool indispensable to the management of growth. With the trend toward inter-state banking and the general blurring of distinctions among financial companies, Citicorp, Bank of America, Chase Manhattan and other banks are relying quite heavily on their corporate air fleet to help them keep in touch with regional and national expansion.

In 1981, for instance, Manufacturers Hanover flew a total of 417,118 miles on its two British Aerospace 125s in connection with banking expansion—going everywhere from Anchorage, Alaska, Houston and Grand Rapids, Mich., to Los Angeles. "We are expanding into many regions of the country and find our aircraft very useful in hopscotching around to our various offices, particularly those in small towns where there are no major airports," explains Robert C. Ipswich, executive vice president.



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The Saab-Fairchild 340 is a joint venture of Saab-Scania in Sweden, and Fairchild Industries in the U.S.A., two companies with extensive experience in manufacturing both civil and military aircraft. This international heritage is reflected in the fact that the Saab-Fairchild 340 will be certified under the same international performance and reliability standards as the latest generation of jet airliners. Thus it meets all applicable U.S. regulations as well as those of nine other Western countries.*

This rollout means that our first step is complete. Flight testing will begin next year, with deliveries starting early in 1984. But it's also a conclusion; an end to the many months we've spent considering the Saab-Fairchild 340's future as an effective business tool.

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For complete details, contact: Jud Brandreth, Senior Vice President, Fairchild Aircraft Corporation, P.O. Box 32486, San Antonio, Texas, 78284, Telephone: (512) 824-4262, Telex: 76-7315.
Outside North America contact: Jan Hull, President, Saab-Fairchild HB, S-581 88 Linköping, Sweden, Telephone: (46-13) 18 00 00, Telex: 50153 sfhbhq s.

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FLIGHT LOG: *From New York to Houston With Many (Too Many) Stops In-Between*

(NOTE: Business aircraft—luxury, or necessity? Corporate tool or executive perk? To gain some insight into these oft-debated questions, section writer Neil Martin recently took a two-day business trip with executives of the Philadelphia based G&H Steel Service Inc., the nation's second largest installers of reinforcing steel, aboard the firm's executive twin-turboprop Piper Cheyenne III. The group, which consisted of Martin, Chairman Herbert A. Fogel, Vice President Keith N. Grant and Robert Reinhold, the pilot, visited a dozen G&H construction projects in six cities in five states in about 32 hours. The following is Martin's flight log.)

Monday, Oct. 11

0700: New York: It's Columbus Day but Columbus obviously wasn't a contractor. The sleek, beige and maroon-striped Cheyenne III pulls up within a few hundred feet of La Guardia's Butler Aviation terminal and I meet my hosts for the next two days. Little time wasted and we are airborne a few minutes later.

0950: Arrived Midland: Pilot Reinhold radioed ahead and a taxi is waiting to take us to a nearby nuclear power plant where G&H is involved in some support construction. It's a brief visit and we are back at the airport within 90 minutes.

1210: Left Midland and headed for St. Louis: Over cold roast beef sandwiches and coffee, Fogel tells me G&H purchased the Cheyenne III in 1981 to help the firm expand nationally. Construction activities in the Northeast, the company's main market, began to dry up in the mid-70s and G&H started to expand to the Midwest and beyond. Since many of the company's jobs were located in areas poorly served by commercial airlines, management decided to buy its own plane.

1415: Arrived St. Louis to check construction of a 44-story corporate headquarters building of Southwestern Bell Telephone in the downtown area.

1540: Departed St. Louis and headed for Tulsa. The Cheyenne is small but comfortably equipped to seat seven passengers. Interior is functional but rather spartan. No gold-fixtures, shag carpets or wide-screen video here.

1615: Arrived Tulsa. Another town, another job and another rush back to airport to keep our schedule on track. Getting a bit tired.

1740: Left Tulsa and headed for Houston. Pilot Reinhold described recent record-setting round-the-world flight on *Steel Away,* their name for the turboprop. It was a promotional trip to mark the company's 50th anniversary. It's beginning to feel like they are trying to set another record today.

1930: Arrived Houston, and, after a leisurely dinner, back to hotel and in bed before midnight.

Tuesday, Oct. 12

0630: Houston: Inspected four G&H projects—two parking garages, a high-rise office building and a shopping plaza.

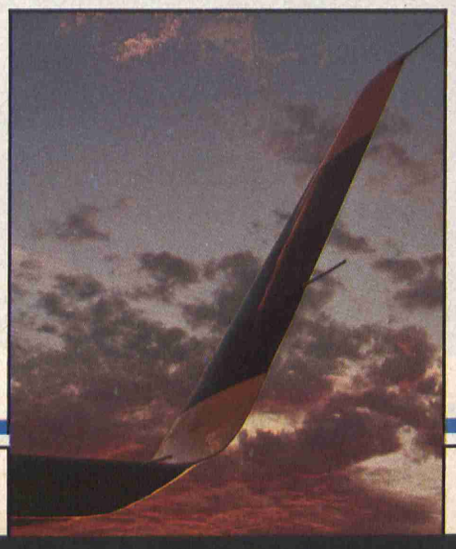
1130: Arrived Corpus Christi. Our visit prolonged because of problems on the job, an office building.

1400: Left Corpus Christi and headed for Houston where I was to catch a late-afternoon commercial flight to Los Angeles. Weather poor, but my hosts plan to push on to Dallas and Denver before calling it a day. Incredible stamina.

1510: Arrived Houston and thanked the G&H officials. "These planes can be slave-drivers, can't they," Grant smiles as he says goodbye. I nod a weary assent. So much for perks, I thought as I headed for the commercial terminal, looking forward to a nice leisurely wide-bodied flight back to L.A. Maybe if I am lucky, it will even be delayed.

Ideal for Customers

Other companies use their aircraft almost exclusively for customer transport. IBM regularly picks up customers from all over the country in its fleet of Gulfstream IIs and brings them to its plants for product demonstrations because, as one company official quips, "the samples are too big to move." American Cyanamid Co. keeps its two Learjets—a Lear 55 and Lear 25B—and Gulfstream II in the air more than 750 hours each year, to provide staff support and customer service. Says company vice president C.E. Austin: "Over the years, we have found our aircraft to be an extremely important sales tool that has allowed us to pick up customers, show them our plants, and impress upon them our ability to deliver a quality product on time."



Some time-savings advantages of corporate aircraft can be especially impressive. For example, Norm Winningstad, chairman of Floating Point Systems, an Oregon-based electronics company, recently used a Westwind II to make a six-day business trip to West Germany, with stops in New York (for a security analysts meeting); Dublin, Ireland, (to open a new plant); Hamburg, West Germany, (to visit an important customer); and Munich (for a press conference), before returning to Oregon. "There is no way I could have done that in the same amount of time on a scheduled airline," he says.

Steelcase Corp. of Grand Rapids, Mich., has accumulated more than 3,000 flight hours in its Dassault Falcon 20 since October 1979, the majority of it bringing customers to see its line of office furniture at its Grand Rapids, Mich., plant. Explains marketing vice president Clifford O. Boyce: "We are a profit-sharing company and are strictly accountable to our people as to the proper use of the aircraft. So, at least 90% of the time, it's used to transport our dealers and their customers. Generally, our executives use the aircraft strictly on a space available basis. If there

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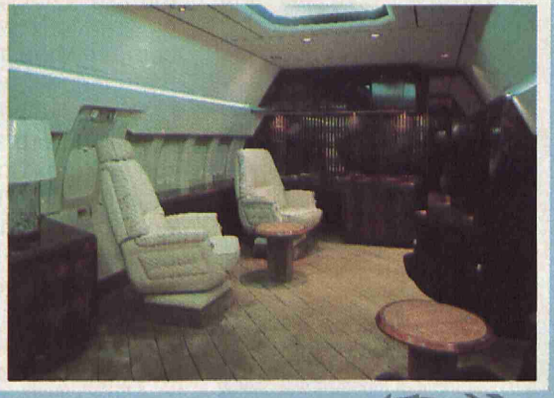

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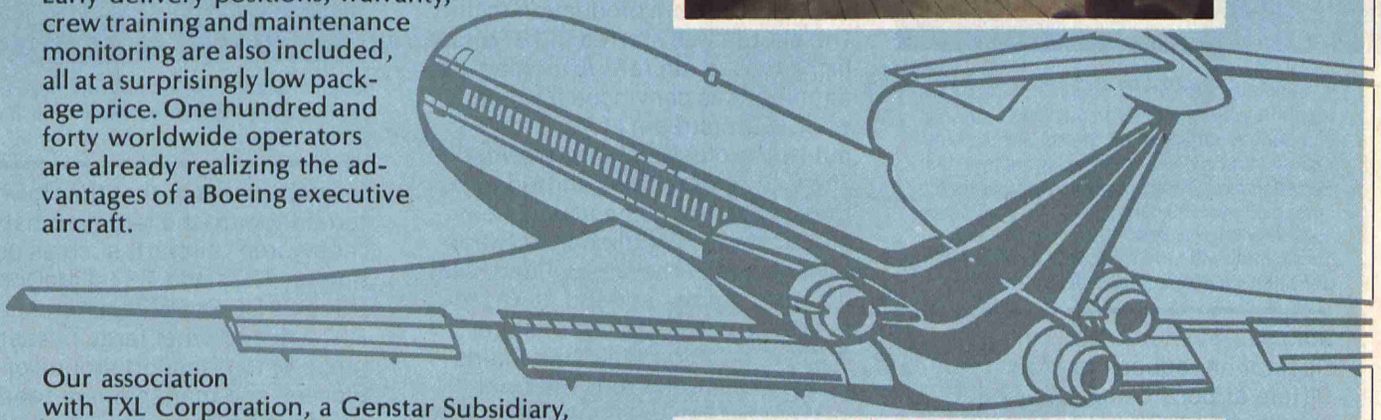

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is a schedule conflict between a customer and one of our executives, the executive gets bumped."

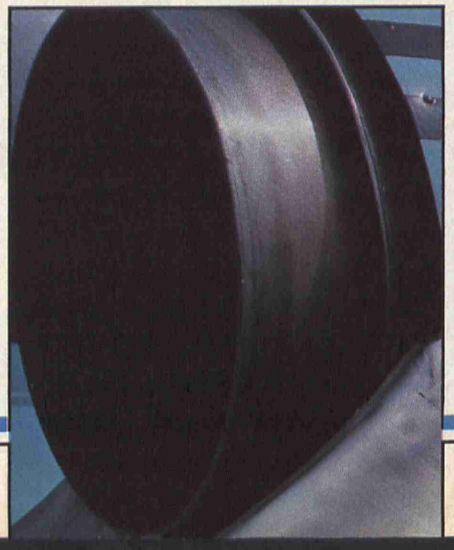
The Corporate Shuttle

Lack of regular air service has also forced many companies to establish in-house "airlines" to shuttle managers and staff between two or more points. For example, A.E. Staley Manufacturing Co., a $150 million corn and soybean processor, operates a fixed shuttle between its Decatur headquarters and Chicago's O'Hare airport, using a 14-seat Fairchild Merlin IVC, and has used temporary shuttle services to ferry engineers and supervisors to plants under construction in places like Fort Smith, Ark., Loudon, Tenn., and Velva, N.D. "Our problem is that we are a major international corporation located in a smaller city that has suffered withdrawal of scheduled service," explains Staley vice president David Satterfield. Ozark Airlines pulled out completely from Decatur last year, Satterfield notes, leaving the company with little choice but to expand its own transportation network.

E. Judson Brandreth, Jr., senior vice president of marketing for Fairchild Aircraft Corp., says his company is bullish about the corporate shuttle market. "Many companies today are in a transportation bind. They have plants and offices spread all over the country with no realistic or convenient way to reach them commercially. They simply will have to provide their own transportation via business aircraft."

Similarly, Trane Co., a Wisconsin manufacturer of air conditioning equipment, uses a 13-passenger Beech 99 twin-turboprop on a daily shuttle run between La Crosse, Wis., and Chicago and finds that it is less expensive than trying to transport employees back and forth by commercial means. Phillips Petroleum Co., the oil giant, has a regular "milkrun" between its Bartlesville, Okla., headquarters and Houston, while Owens-Corning Fiberglass Corp. of Toledo, Ohio, operates a 12-passenger turboprop shuttle, complete with a reservations system, wait-list, and flat-rate charge per trip, to Newark, Ohio, where the company has a major research facility and manufacturing plant.

Probably one of the most sophisticated corporate shuttles around is run by Xerox Corp. Using American Airline's "SABRE" computerized reservation system, the giant office machine company operates a daily schedule between White Plains, N.Y., which is close to its Stamford, Conn., headquarters, and Rochester, N.Y., its main production facility. The shuttle was started in 1975, utilizing leased aircraft. After management was convinced it would work, a Gulfstream I turboprop was put into exclusive shuttle service. The G-1, however, was shifted to Europe last spring to head up a new shuttle Xerox established between London and Einhoven, Holland, with a stop at Luton, England. It was replaced by a Canadair Challenger 600 on the 250-mile White Plains-Rochester shuttle run. The Challenger shuttle makes 2.5 round trips daily, and Xerox has two more on order. The company figures it flies between 15,000 to 18,000 employees a year on the shuttle, saving some $750,000 annually over commercial air tickets while reducing travel time. "Our travel services department produces a positive cash flow for the company," says department head Richard Van Gemert.



A Trend Toward Heavy Iron?

The basic transportation needs of some companies have mushroomed to such an extent that they have turned toward the large, so-called "heavy iron" aircraft, such as used Boeing 727s and 737s, McDonnell Douglas DC-9s, British Aerospace's BAC-11s and other large passenger models, to transport groups of employees and management teams across the U.S. and to international destinations.

ALLEN GREEN

Atlantic Aviation's Mack Graham: Business jets not threatened by new developments in video communications.

Wil Joiner, head of airliner sales for International Executive Aircraft Corp., (IEA) estimates that as many as "35 to 40 companies have 727s or other large aircraft in service, for use both domestically and internationally." What's more, the list of "heavy iron" users is growing, he says.

"The large U.S. multinationals with diverse and extensive international and national travel requirements are prime candidates for purchasing these bigger type of air-

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BUSINESS AIRCRAFT

The Collins Airline: G-1 Shuttle Service Solves Company Travel Problems

It was less than an hour before sunset when the big twin-turboprop Gulfstream 1 pulled up before the Collins Avionics hangar at the Dallas Addison Airport. A team of mechanics immediately began to swarm over the 18-year-old airplane, preparing it for a quick return flight to its home base in Cedar Rapids, Iowa, which is also the headquarters of Collins Avionics.

Collins employees and customers board the company's Gulfstream 1 shuttle at Dallas Addison Airport for the 140-minute flight to Cedar Rapids.

The load for the return flight is lighter than normal, only seven passengers—four Collins employees, two customers and a journalist. Usually, the 14-seat G-1, which makes daily shuttle runs between Cedar Rapids and Dallas, is packed.

Alan Wharry, the co-pilot, briefs the passengers on the safety features of the plane, the weather and the direction to the beer cooler and sandwiches. Despite its age, the big turboprop, which has nearly 15,000 hours of flight time on its log, offers the spaciousness and comforts of a first-class cabin on a commercial airline.

In fact, employees frequently refer to the shuttle service as "the Collins Airlines." The "airline" has been in business for more than three decades and has flown Gulfstreams since 1965, making it probably one of the oldest corporate shuttles operating. "The shuttle has served us better than any scheduled airline could," says James Churchill, president of Collins Avionics. "It enables our employees to get in a full day's work at our sister operations in Dallas and get back to Cedar Rapids by early evening. We could not operate as effectively or as efficiently without it."

The avionics manufacturer uses two Gulfstreams in its shuttle fleet and has access to a third owned by its parent, Rockwell International Inc. Each plane averages about 600 hours of flight time annually, is equipped with the latest technology and is immaculately maintained. And today each plane is still worth the $1.25 million it cost at the end of 1964.

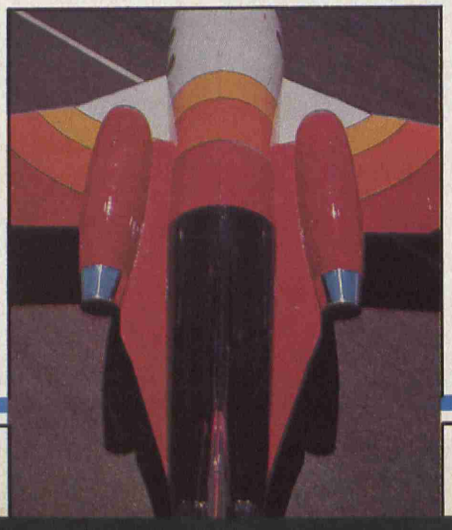
Travel coordinators within Collins' various divisions arrange all company travel. Seats are billed to the employee's department at the equivalent first class rate of a scheduled airline. Besides employees and customers, the shuttle carries company mail and packages on its daily "milk runs."

Despite the reliability and comfort of the Gulfstreams, Collins plans to replace them in the near future. "The G-1 has been a remarkable plane and served us well," says Churchill, "but it is time to refresh our fleet to give us more flexibility and frequency."

Perhaps. But for some Collins employees, the "Collins Airline" won't be quite the same without those big old, blue-and-white G-1s plying the corporate skies between Texas and Iowa.

planes," Joiner explains. The San Antonio-based IEA buys used 727s and rebuilds and modifies them to executive configurations. The company expects to place seven 727s by the end of next year. "Worldwide, some 25 to 30 used airliners will be placed in private applications annually," Joiner says.

Dee Howard Co., a major aircraft converter, is selling used airliners from the American Airlines fleet.



A New Generation of Aircraft

Whatever the size of tomorrow's executive aircraft, one thing is certain: it will have to be quieter and more fuel-efficient. This seems assured by the steep rise in aviation fuel prices and growing restrictions on noise at the nation's airports, particularly the smaller community business fields so heavily used by corporate aircraft.

This, in turn, has generated a spate of research activity by the airframe and engine manufacturers to develop planes with quieter engines, greater range and performance characteristics (and comfort); characteristics of what engine expert Ivan E. Speer, vice president of Garrett Corp., calls "third-generation" aircraft.

Explains Speer: "The 'first-generation' aircraft were those that evolved from the military—the Jetstars and the Sabreliners; jets with a military-like performance, but that ate up a heck of a lot of fuel. The 'second-generation' of planes like the Falcon 10, the Lear 35, the Citation IIs, the Westwinds were based on new engine technology and had the aerodynamics of the older-generation jets but were quieter and more fuel-efficient.

"Currently, we are seeing a new generation of aircraft with much higher performance characteristics and based on further advances in engine technology and aerodynamics; planes like the Lear 55, the Challenger, the Westwind Astra, the Falcon 50, the Citation III that can fly higher, longer and burn less fuel than 'second-generation' craft and, of course, are quieter."

The Challenger 600, Sabreliner 65, Westwind II, Dassault Falcon 50, Citation III, Mitsubishi Diamond I, and Westwind Astra—planes either already on the market or soon to be—have "supercritical wings"—an advanced drag-reducing design that commercial airliners will use eventually. The Westwind II, Challenger 601, Lear 55 and the Gulfstream III have wings that are bent at the tips—called "winglets" that reduce drag and improve fuel consumption.

Turboprop makers are also working on improvements in engines and

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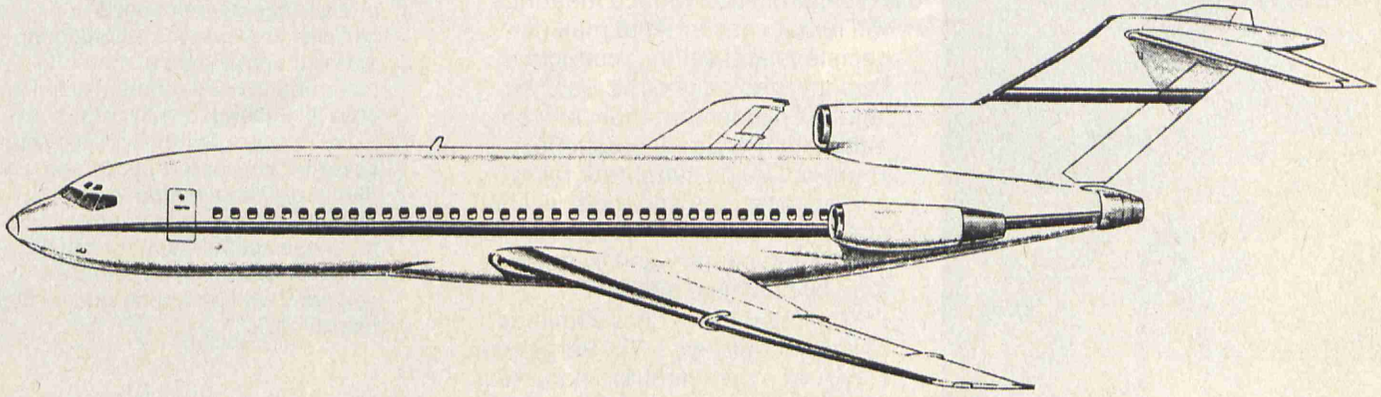

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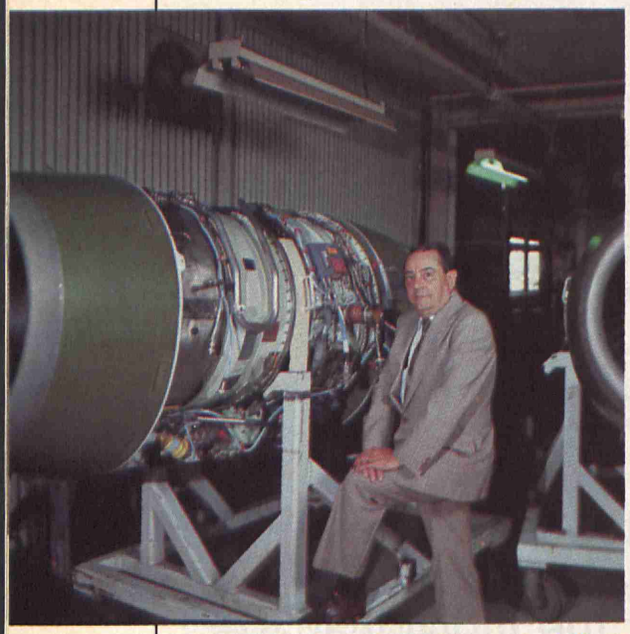
design to extend and expand the performance of their products. Fairchild, for example, is marketing successfully its Merlin IIICs. Piper Aircraft will start delivering in 1984 its new Cheyenne IV which will carry six passengers at 400 miles per hour and cruise at an altitude of 41,000 feet. "It will also use considerably less fuel," says A. William Newman, Piper's vice president of marketing. "In fact, on any given mission, the Cheyenne IV will use 35% to 40% less fuel than most frugal fanjets," he claims.



Garrett's Ivan Speer: A "third-generation" of business aircraft with quieter, more fuel-efficient engines.

In a similar effort to capture a share of the light-jet market, Mitsubishi Aircraft recently began selling its new Diamond 1 fanjet. Comments George H. Scragg, Jr., vice president of marketing: "The market for light-jets is very promising, especially in the current business climate, and will remain strong in the future."

A New and Improved Industry

What all of this means is that despite the current economic slump, business aircraft and engine manufacturers are pushing ahead with research and development that will likely strengthen the role of corporate aircraft in corporate America's future.

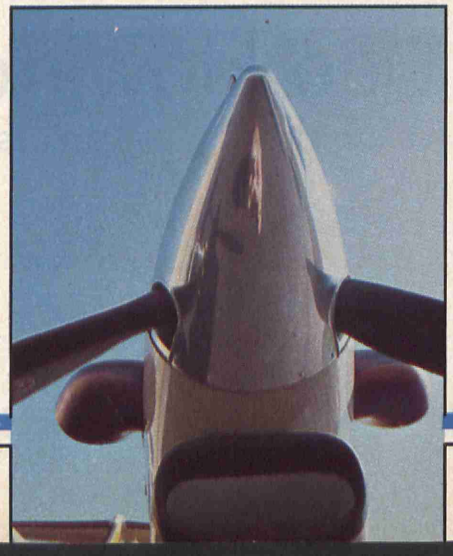
"Some people suggest that picture telephones, facsimile transmitters and other forms of electronic communications will lessen the need for corporate aircraft in the future," says Malcolm Scott Graham, senior vice president of the aircraft marketing group of Atlantic Aviation Corp., marketers of Israel Aircraft's Westwind executive jet series. "But I disagree. Face-to-face meetings will remain essential to making decisions and selling products. Personalized calls can create a selling environment that can't be matched by a video telephone. There will be no substitute for in-person meetings and there will be no better way to move businessmen around the country and overseas than by business aircraft."

"The business jet is a vital management tool," says Roy Bergstrom, senior vice president for marketing of Falconjet. "Because it lets managers get more done. The executive controls his time, instead of the other way around. Today, corporations are using their aircraft more and keeping them longer."

Poised for Growth

John H. Winant, president of National Business Aircraft Association Inc. (NBAA), a Washington, D.C.-based group that represents some 2,656 users of business aircraft, believes the same factors that led to the growth explosion of business aircraft in the 1960s and 1970s are as strong—if not stronger—now. Decentralization of industry and airline schedule cutbacks will continue to boost the need for business aircraft, he says. In addition, a number of recent developments in Washington, such as the passage of the new Airport Development Aid Program which provides for $19 billion in funds for development and modernization, have brightened the future. In addition, the new airports bill will provide funds necessary for modernization of the U.S. air traffic control system, thereby increasing capacity to provide for growth.

"Despite the many adversities that plague the business aviation community today," concludes Winant, "there is no question that its future is extremely bright. Pent-up forces and unfulfilled requirements are building all the time, even as we muddle our way through the current worldwide recession. These needs will eventually have to be met. That's why we sense that the 1980s will be the period of greatest growth for business aviation."



Flight Departments Under Contract

Many companies that own corporate aircraft leave their operation up to specialized management firms like Executive Air Fleet (EAF) of Teterboro, N.J. EAF operates 30 business jets and has some 80 pilots and 70 support people on its payroll. The company not only operates and maintains planes owned by its corporate clients but will charter them out for those companies that don't fully utilize their aircraft. Also, as a result of interchange agreements EAF's clients can exchange planes among themselves if one of their planes is in maintenance or a different sized aircraft is required for a specific trip.

EAF founder Matthew C. Weisman says that because of his company's fleet size, "we are able to use our economic leverage through volume purchases of fuel, common maintenance and supplies to provide a company with an airline-quality flight operation."

"Business Aircraft—Luxury or Necessity?" was written by *Neil A. Martin,* a Los Angeles-based journalist who writes frequently about domestic and international business topics for national publications. The section was designed by *Ariel Peeri.*

Cover photo was taken at Atlantic Aviation's Wilmington, Del., headquarters by *Allen Green.* All other photos, unless otherwise indicated, were taken by *Gregory T. Martin.*

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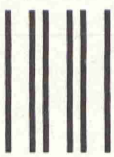

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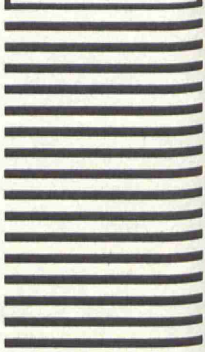


Hopeful Signs in a Flat Quarter

Based on early indicators, the economy is turning in another dreary performance this fall—which may be why the Fed thought it timely to cut the discount rate again, to 9%. When all the pluses and minuses for the summer quarter were added up, GNP growth was revised down from an 0.8% rate to an unprecedented zero. The current quarter may be another goose egg. But a look beneath the totals gives a different and somewhat brighter picture.

First, most of the drag from the shrinking foreign trade balance is over with. Last quarter's record drop in net exports turned out to be twice as severe as originally estimated. To get a feel of how foreign trade affected the economy, consider that the growth rate would have been 2.5% if the trade balance had merely remained at its spring level. The good news is that most of the drop is attributable to special factors: the volume of merchandise exports declined 5.5% in all, but nearly three-fourths of that was in agricultural commodities; and an influx of oil products accounted for much of the 4.5% increase in imports. The balance could deteriorate further next year, but another huge tumble is unlikely.

Right now the biggest negative is coming from a different source—the inventory problems of the auto industry. That too will be a one-quarter phenomenon. Car producers increased assemblies by 40% during the spring and summer. When it turned out that sales barely held their own, cars backed up in the showrooms. Now, if all goes as Detroit hopes, sales will increase this quarter, and with production cut sharply, dealers will be cleaned out of stock by year-end. It looks as though the scenario is being played out as advertised; sales rose late last month and then jumped in early November when GM and Ford reintroduced discount financing for customers (see chart). The maneuver will leave Detroit and the economy in better shape going into 1983. In the meantime the swing from inventory accumulation to a runoff is almost as much of a drag on total GNP as the shrinking balance of trade was during the third quarter.

The rest of business has been reducing inventory right along and the drop in industrial output last month makes it appear that the decline is continuing. Production fell by 1.5% from the third quarter's average, and only defense equipment was up. But the decreases in inventory and output are more modest and a lot less erratic than the goings-on in the auto industry. Once Detroit straightens itself out, inventory changes will start to contribute to economic growth again.

Outside of foreign trade and inventory, economic activity this quarter reflects trends that began earlier. Outlays for business plant and equipment will decline again, as they have all year (see story next page), and defense purchases will increase about as much as before. Another sizable addition to the government's stores of farm products will boost total nondefense spending, though other outlays will continue to fall.

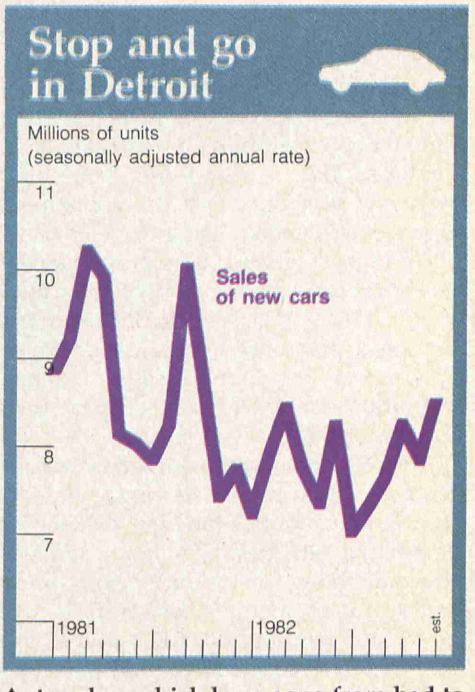
The return of the mortgage

The best recent news comes from the housing sector, where the trend in outlays is not only up, but also accelerating. Housing starts added another notch in October and at a 1.1 million annual rate were 31% above the low point 12 months before. The volume of spending on residential construction, which takes a while to catch up to starts, will increase 5% this quarter, more than in the last two quarters combined. Consumers and builders are responding in textbook fashion to the big drop in mortgage rates that's already occurred. The average rate for new conventional mortgage money stood at 13.8% in mid-November compared with the peak of 17.7% last February. The most recent study of housing markets by Advance Mortgage Corp., a large mortgage banker, indicates that seller financing is on the way out. More sales are being made with a standard first mortgage, so the seller gets cash with which he can buy another home. At the same time, price discounting by builders has eased and they're making a profit on the homes they sell. Even if mortgage rates don't get much lower, a healthy comeback in construction looks assured.

What is a lot less sure is how soon the disappointing trend in other consumer spending will change. The latest retail sales point to a possible reduction in purchases of consumer goods other than cars this quarter. After adjusting for inflation, October looks to be 1% below the third-quarter rate. However, a cheery Christmas season could wipe out that much of a decline in real spending.

A spurt in sales by year-end can't be ruled out. Sindlinger & Co., which surveys the consumer's mood, finds more confidence about job security than at any time since mid-July. By mid-November Sind-

continued



Auto sales, which have gone from bad to worse and back again over the past year, may be on a smoother course now. November sales were propped up by discount financing, but four of the last five months showed some increase.

CHIEF ECONOMIST Todd May Jr.
ASSOCIATE ECONOMIST Vivian Brownstein
STAFF Edward Boyer, Catherine Comes Haight, Lenore Schiff, Bruce Steinberg

linger's confidence index was up 35% from the low a month earlier. Real disposable income, which slipped in late summer, was bolstered by a bulge in transfer payments during October. It should grow more as employment begins to rise. The savings rate, which bounced up to 7.5% in July when taxes were cut, retreated to 6.5% and then recovered to 7% in October. Consumers could pare savings to finance spending. Even if they don't, total consumer outlays including cars and services will increase more this quarter than last.

A stronger performance in consumer spending, and in the economy as a whole, will come after the New Year. Putting the pieces back together, they still add up to little change for now—but reveal some built-in pluses for the future.

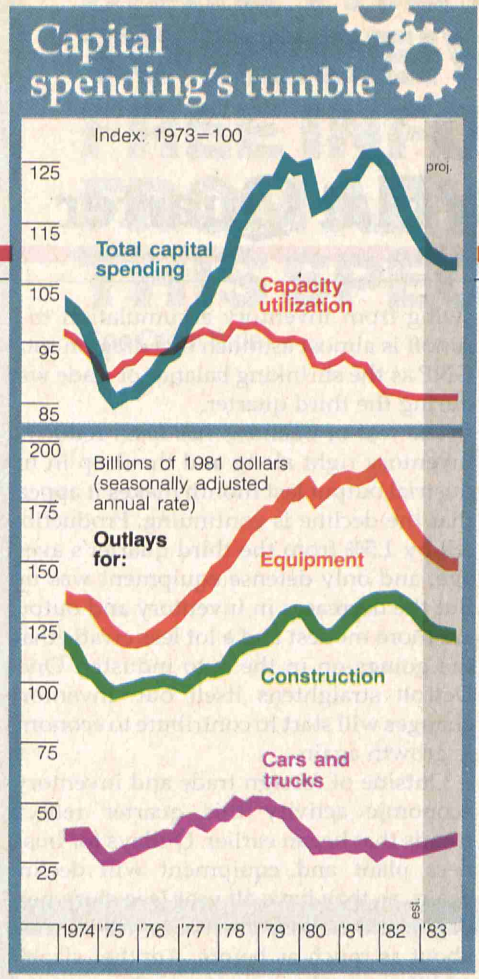
Capital Goods in the Deep Freeze

With winter's approach, capital spending plans have gone into hibernation—appropriations are down and projects are being canceled at record rates. But plant and equipment expenditures are already off an estimated 10% in real terms from their peak one year ago, and the adjustment process is more than half over.

The biggest villain is a huge overhang of excess capacity among the potential buyers of capital goods (see chart). The operating rate in manufacturing sank to 68.4% in October. For all businesses, capacity utilization for 1982 will be at a post-Depression low.

Awash in capacity, business has little incentive now to expand. As increased demand comes along, it can easily be met out of existing facilities. Companies are still spending money on products that promise an immediate saving in costs and an edge on the competition, but the benefits have to look pretty certain. Even high-technology sales have been off lately.

Compounding this cyclical problem is a longer-term one. The capacity utilization statistics charted above measure the ratio of output to total capital stock. So their movement reflects two influences: short-run changes in utilization in response to changes in output, and longer-run shifts in the productivity of capital. In manufacturing, the output/capital ratio has been weaker than other measures of capacity utilization that primarily gauge cyclical forces. This suggests investment is yielding less bang for the buck.



Real spending on plant and equipment will continue to slide through the third quarter of 1983, in response to the lowest capacity-utilization rate of the postwar era. Business purchases of new cars and trucks will turn up, but from low levels.

The statistics hint that the same problem affects all business. In manufacturing the trend has various causes—including worldwide over-investment in industries ranging from steel to petrochemicals—and it is obviously not a happy development. When the productivity of investment declines, this acts as a depressant on profitability and reduces the incentive to buy new plant and equipment.

The deterioration in the efficiency of investment has been paralleled by a deterioration in such measures of financial health as the ratio of long-term to short-term debt. It is now barely above its record low registered last summer. This debt ratio will improve in 1983, but at the cost of stunted spending on capital goods.

Good show for cash flow

Real cash flow was flat in 1982. Profits actually edged up in the third quarter—no mean feat with the economy in a trough. Cash flow will show modest improvement in 1983, in response to a weak recovery. But the proportion of cash flow devoted to capital outlays, currently 85%, will drop sharply next year. Balance sheet considerations will divert a goodly chunk of cash flow to stem the tide of short-term debt.

When capital spending is broken down into its components, structures and equipment have been marching to different drummers recently, but they're about to fall into step. Equipment purchases (other than cars and trucks) peaked a year ago and have since plunged 15% in real terms. Orders leveled out recently but are continuing to run well behind shipments, so an additional 7% drop in shipments is in store for next year. This will be partially offset by a 16% pickup in car and truck sales to business, which have been so low they are bound to bounce back.

Business construction held up through midyear, helped by a boom in office buildings, but has since slipped 5% in real terms. The lag in new contracts suggests that construction is poised to weaken further. Both industrial and commercial construction should dip another 7% by the end of 1983.

Adding it all up, FORTUNE estimates that business investment will decline another 5% in real terms before leveling out in the fourth quarter of 1983. This would amount to a total decline of 14% from the previous investment peak, about the same drop-off as in 1974-75. The growth of the stock of capital goods will slow to just 2.3% in 1983, its lowest rate in 25 years. But as the recovery strengthens, business investment will gradually pick up. F

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by Daniel Seligman

The Senior Citizens Score Again, Fraser's Follies . . .

Seniority, It's Wonderful

For quite a few years now, your correspondent has been just barely making it from one payday to the next, and yet he has hardly ever whimpered aloud and never once thought to ask for federal funding. He thereby offers a striking contrast to the National Council of Senior Citizens (NCSC), an organization of professional complainers that gets funded regularly by the U.S. Department of Labor and then uses its pumped-up influence to lobby for budget-busting social programs. Friends, life is not fair.

We must confess to not having known about this deal the NCSC has going with the government until apprised of it by certain reactionary friends over at the Conservative Caucus Inc. On stationery bearing a "Defund the Left" imprint, the reactionaries called our attention to an incredible-seeming fact—that even today, under the Reagan Administration, the federal government continues to provide financial support for some lib-lab advocacy organizations, which then turn around and support causes that are anathema to Ron. To be sure, the various laws authorizing this support have a lot of friends in Congress, so the Reaganites' views about ladling out the loot are not necessarily controlling. In September, the Administration tried to cut the program under which the NCSC is funded, but the cutback efforts were thwarted by a Congress acting scared, as usual, of the old folks. In this case, the relevant legislation is Title V of the Older Americans Act, under which Great Society masterpiece the council is getting about $35 million to run a program providing jobs for the elderly. In principle, none of this money can be used for lobbying or other forms of advocacy, but experience tells us that few things are as fungible as green money.

On a rough estimate, we would say that the National Council of Senior Citizens is responsible for about 42% of what's wrong with this country. Pawing over the clips,

Research associate: Andrew Kupfer

we could see instantly that the council has been out front on a sizable number of the entitlement programs that every respectable economist now yearns to cut. Here is a 1981 clip reporting on a mass meeting of oldsters in New York City that was addressed by the council's executive director, who was complaining about Ron's wish to cut some $40 billion from 83 major programs. Jacob Clayman, president of the council, had a highly counterfactual letter in the *New York Times* recently arguing that enormous prospective deficits in the Social Security system are a myth and that there is accordingly no reason to contemplate legislation adjusting anybody's benefit levels. The council has supported subsidized housing for the elderly. Also subsidized heating. It has opposed any efforts to tinker with those ridiculously expensive federal regulations requiring all sorts of special reconstruction of public facilities to make them more accessible to the handicapped. We cannot prove this but nevertheless take it for granted that the legislators who recently gave us tax withholding on interest and dividend payments were being leaned on by the council when they put in the part about an exemption for the elderly. Why shouldn't the elderly suffer like everybody else on the withholding front? You could argue, in fact, that they should have *extra* withholding because (according to a 1979 report of the General Accounting Office) they are disproportionately represented among Americans who are delinquent in filing tax returns. Why, it's enough to make one whimper.

A Soviet Sophisticate in the Valley of the Dolls

Mr. Andropov's personal life is as little known as the lives of Soviet leaders customarily are. A KGB agent who defected to the West . . . claims he was a friend of Mr. Andropov's son Igor and during visits to the Andropov home learned of the leader's taste for popular American music of the Glenn Miller variety, for books by such authors as Richard Llewellyn and Jacqueline Susann . . .

"I don't want to glamorize him," the defector said . . . "But I think he is more sophisticated . . . than any Soviet leader . . ."

—From an article in the *New York Times.*

Shadow and Substance at Chrysler

Doug Fraser's situation just gets weirder and weirder, but there is as yet no sign that the laws of logic will be applied to his case or that the double-talk about it will ever cease. Our logical misgivings about Doug's case began back in 1979, when he was first proposed for the Chrysler board of directors. How could the president of the United Auto Workers conscientiously serve as a director of a company with which the UAW negotiates? Two somewhat contradictory answers to this question were vouchsafed. First answer: there really was no conflict because Fraser was going on the board (in the words of a smarmy Chrysler P.R. fellow) "as a man of outstanding ability, not as a representative of organized labor." Second answer: Doug was going on the board as a union man and would (in his own words) "represent the United Auto Workers on the board and speak out on their behalf." However, Fraser often dropped a footnote to this second answer, according to which there was still no conflict of interest because his presence

Illustrations by Michael McGinn

. . . Boos for Queues, and Other Matters

would benefit the company by giving it valuable inputs from workers whose talents had too long been neglected. It was always hard to reconcile this kind of rhetoric with the observable fact that the company sponsored Fraser for the board as a *concession* to the union: his directorship was part of a package deal under which Chrysler got a significant break on the level of wages and benefits.

So now we have a strike against Chrysler by the UAW's Canadian members, and Doug has temporarily left the board because there might be a "perception" of a conflict of interest. But why would stepping down temporarily solve the problem? If the interests of the shareholders are identical to those of the workers, why isn't Doug the director needed more than ever during a strike, when people are losing sight of this interesting identity? If the parties' interests are not coterminous, why would they suddenly become so after the strike? Won't anybody ever answer these questions? Maybe not.

A New, Improved Religion

Andy Vladimir . . . who is chairman of Sharp Hartwig & Vladimir, a Seattle advertising agency, was invited to preach at his church, and what he talked about basically was how to get more customers for God.

Andy's point was that the church must fill the needs of its parishioners, just as Procter & Gamble fills the needs of its customers . . . What P&G does, Andy said, is give people what they want and need . . .

Andy contended that churches have the ability to help people with almost all their major concerns . . . "We can even sponsor karate lessons if it's important enough."

—From an article in *Advertising Age.*

The Case Against Lines

"Arne Boberg gets up at 3 A.M., trudges a mile and a half through the snow on the University of Minnesota campus, and gingerly climbs through a bathroom window at the experimental engineering building." That gripping sentence is the lead of a recent story in the *Wall Street Journal* about the fortunes, or rather misfortunes, of college students seeking interviews with corporate recruiters. It seems that Mr. Boberg forwent sleep for fenestration in a somewhat desperate effort to get up front on a line that determined the order in which students could sign up for interviews. You can imagine Arne's consternation when he found, after wriggling through the window, that about 20 other eager gophers were already waiting ahead of him.

However, his woes seem to have been minimal compared to those of Janet Werner, a five-foot-one marketing student at Texas A&M, also mentioned in the *Journal* story. Janet's problem was that her fellow Aggies tend to be most impolite to short folks. When Texas students line up for job interviews, it appears, there is a lot of strenuous jockeying for position, and under the Social Darwinist code currently prevailing in that part of the country a lack of reach can be a critical disadvantage. The *Journal* quotes Janet as complaining that "it's bad for short people because we're at elbow level, and we get elbowed in the head."

At the University of Chicago business school, people do not get elbowed in the head—at least, not whilst competing for job interviews—because Chicago people, believing in free markets, allocate resources by utilizing the price mechanism. Students at the business school are given bidding points for a variety of purposes. Instead of waiting on line for hours, they can express strong preferences for a given interview, or for a course that's offered by a particular professor, simply by bidding heavily for it.

When bidding on a course, they are given extensive information on it, including not only recent "prices" paid for entry but also data on the difficulty of the subject matter and assorted characteristics of the professors (who are periodically ranked by students on the quality of their teaching, the mercifulness of their grading, the amount of course work they dump on you, and other matters of interest in graduate circles). In bidding for job interviews, each student starts out with 500 points and a list, constantly updated, of the number of interview slots that various companies have set aside. The students enter their bids, at designated times, in on-campus computer terminals.

There is, we would say, something wrong with systems that require people to stand on line. Ordinarily what's wrong is that some misguided egalitarian in a position of authority is insisting on a below-market price for a scarce resource—or, more precisely, this person is declining to acknowledge that standing on line itself constitutes a price.

We cannot offhand see any good reason why people should be able to acquire scarce resources because of their ability to outwait other people; on the whole, it seems much simpler to let the issue be decided by spending power. Our position on lines, it will be observed, is basically congruous to that of Jonathan Winters's mother, who is, or at least deserves to be, famous for the dictum, cited some years back in a feature story on the mothers of famous comedians, that she wouldn't stand on line to see the apostles play baseball. At the University of Chicago Graduate School of Business, she wouldn't have to. ◼

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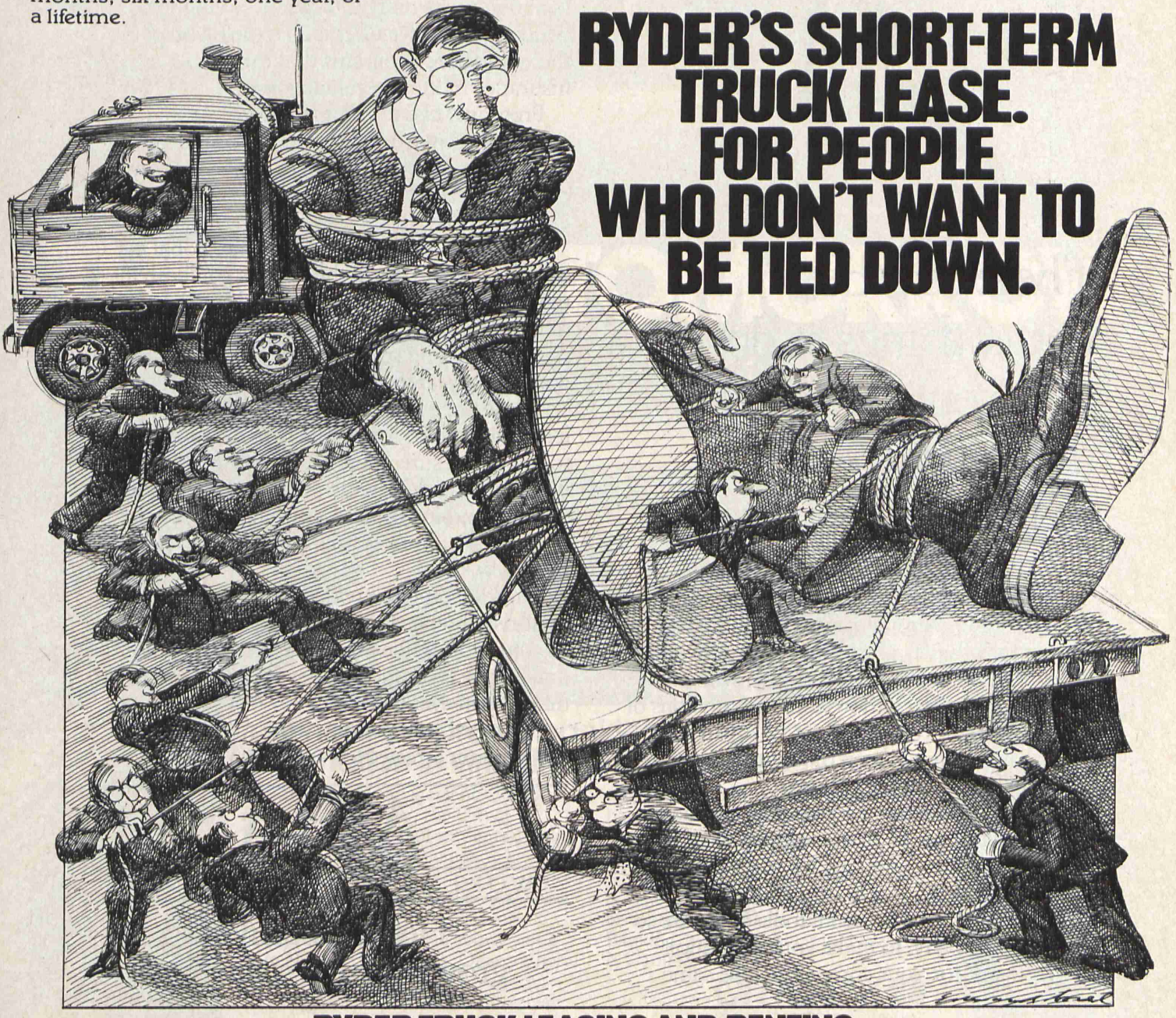

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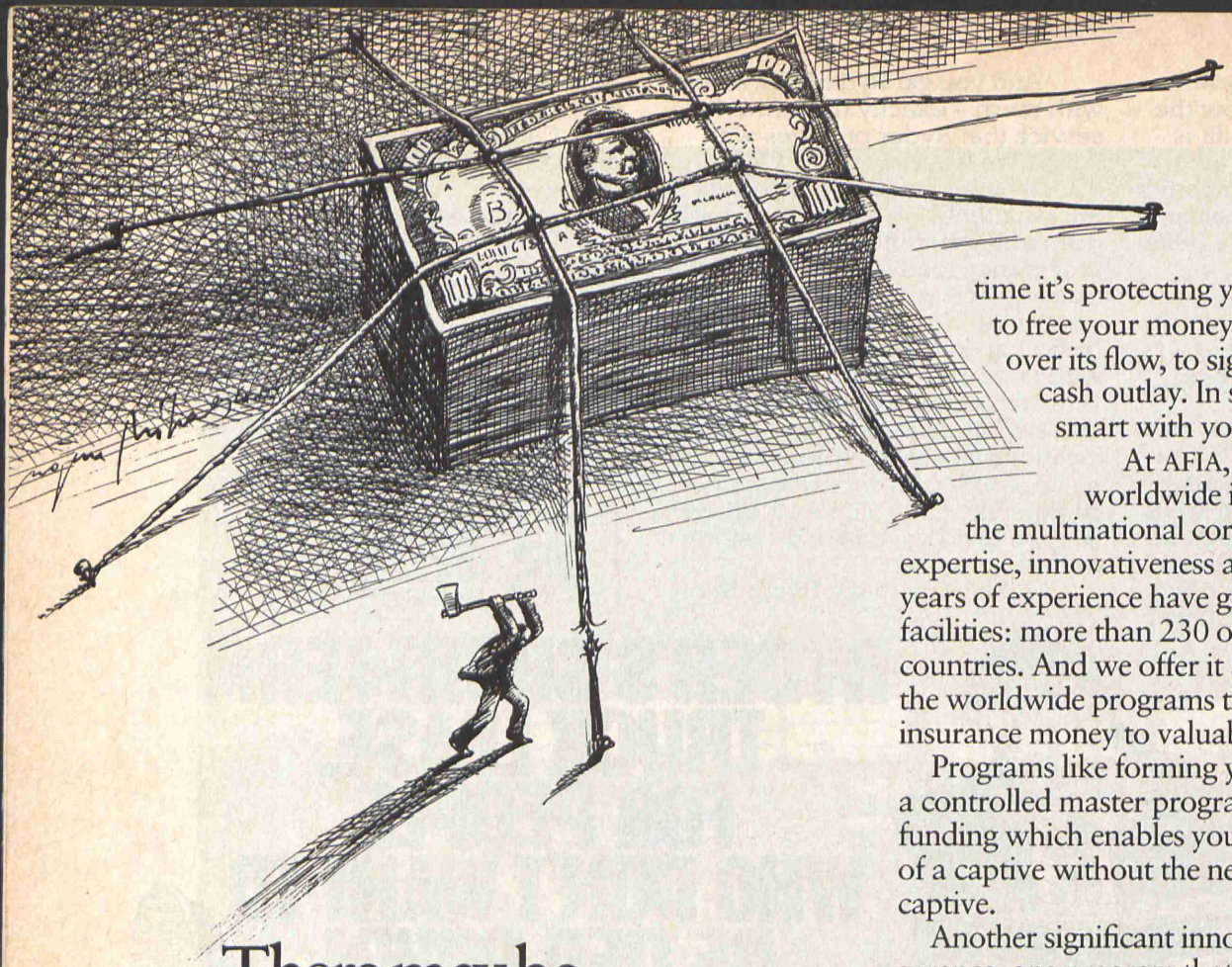

There may be better things to do with your company's insurance money than buy insurance.

For the multinational corporation, the cost of protecting its assets abroad—both people and property—has become a major one, with premiums ranging from thousands into millions of dollars annually.

And always it has been thought of as a necessary cost of doing business.

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Programs like forming your own captive. Or a controlled master program with deductible funding which enables you to derive the benefits of a captive without the necessity of forming a captive.

Another significant innovation is global insurance, one program that covers you both in the United States and abroad and has the effect of increasing your insurance buying power significantly and providing greater control of your risk management program.

Those are a few brief examples of how insurance can be made to work for companies today. To be sure, there are others: high deductibles, other cash flow programs, rating plans and unbundling of services (that is, paying for only the insurance services you need) to name but a few.

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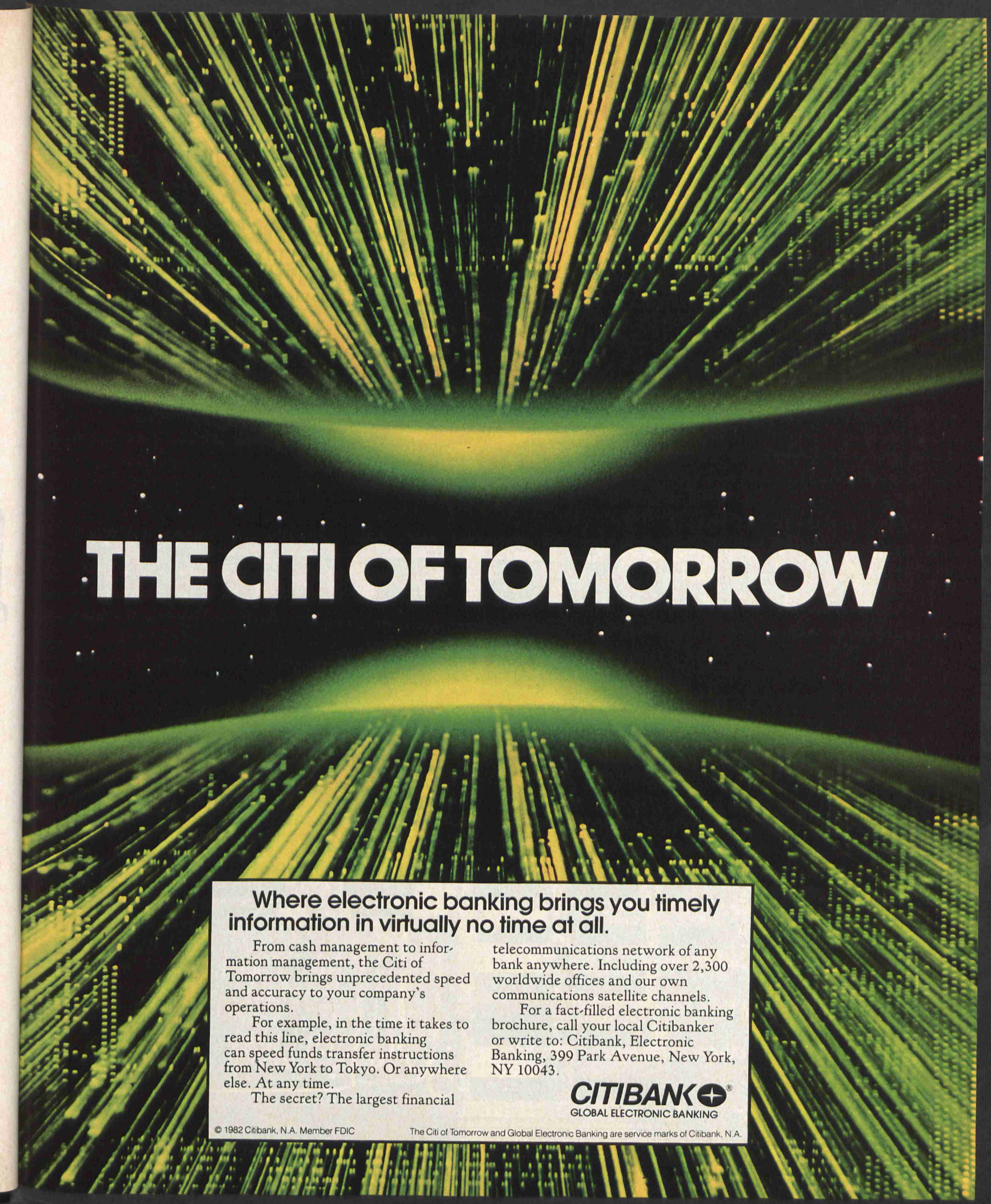

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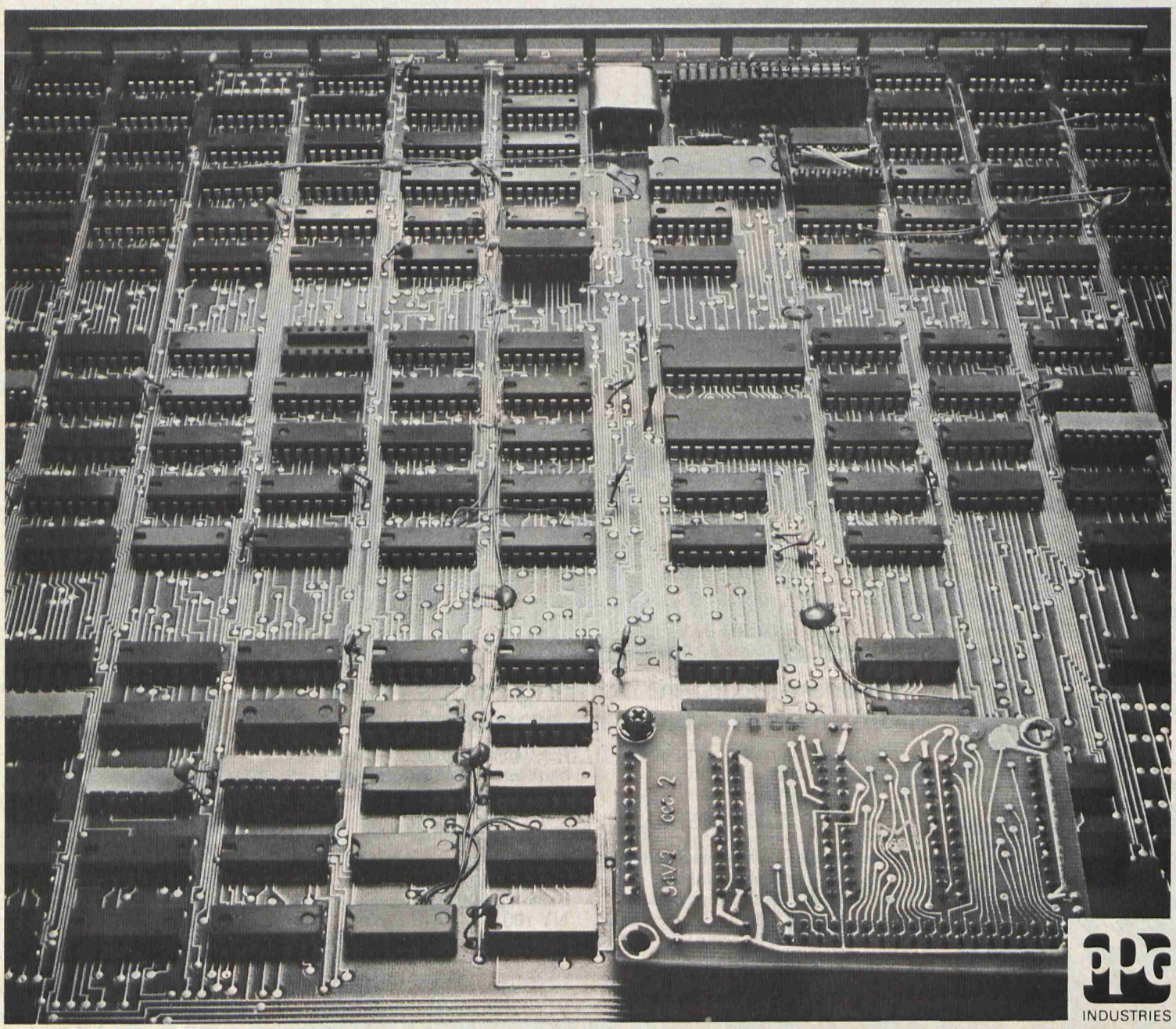

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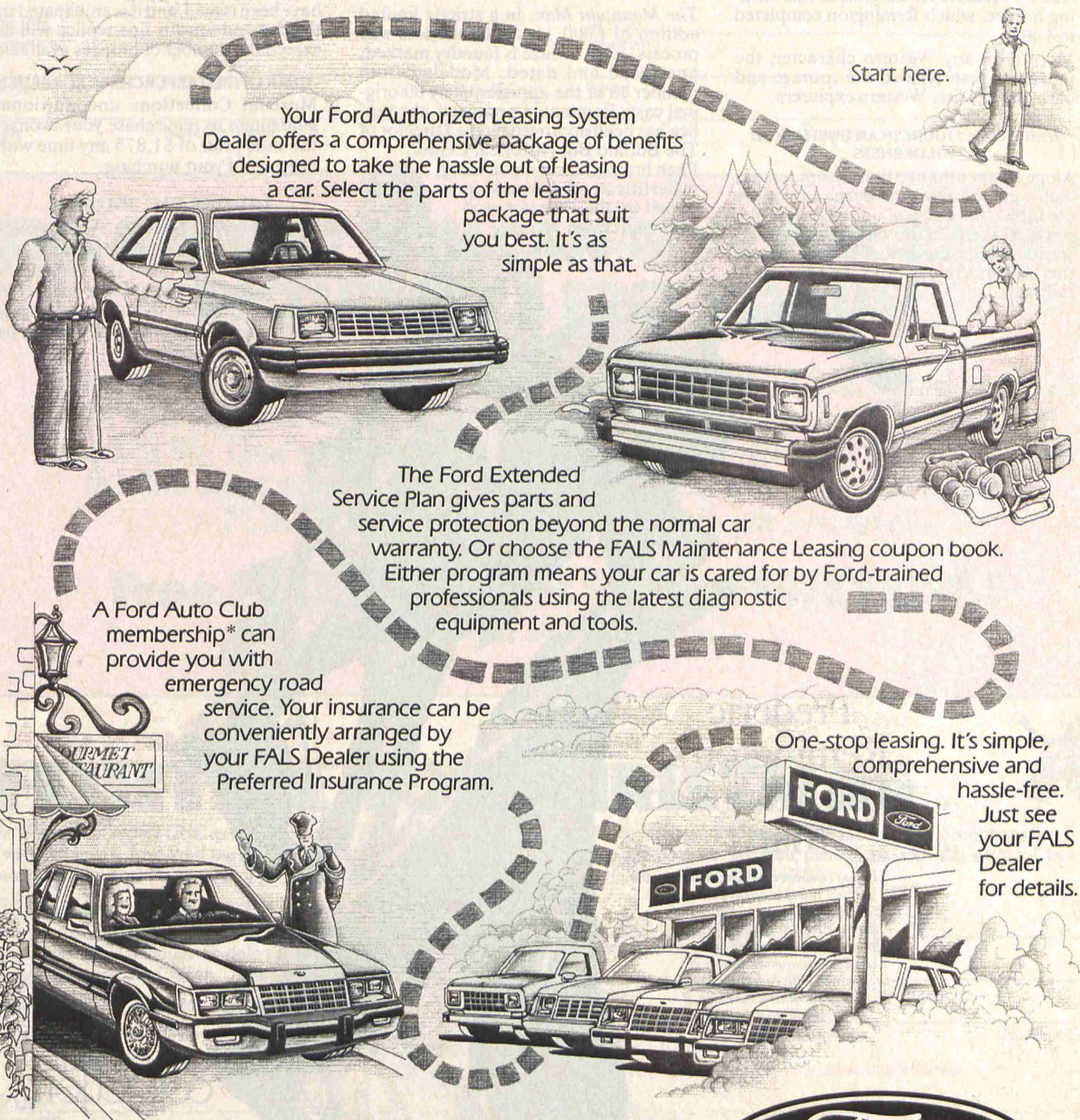

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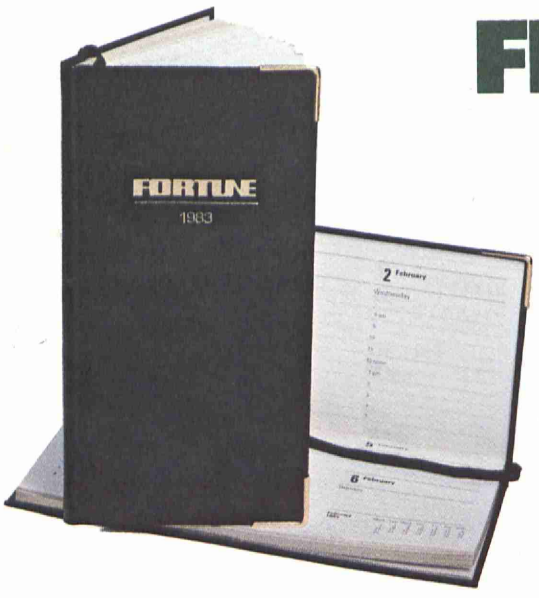

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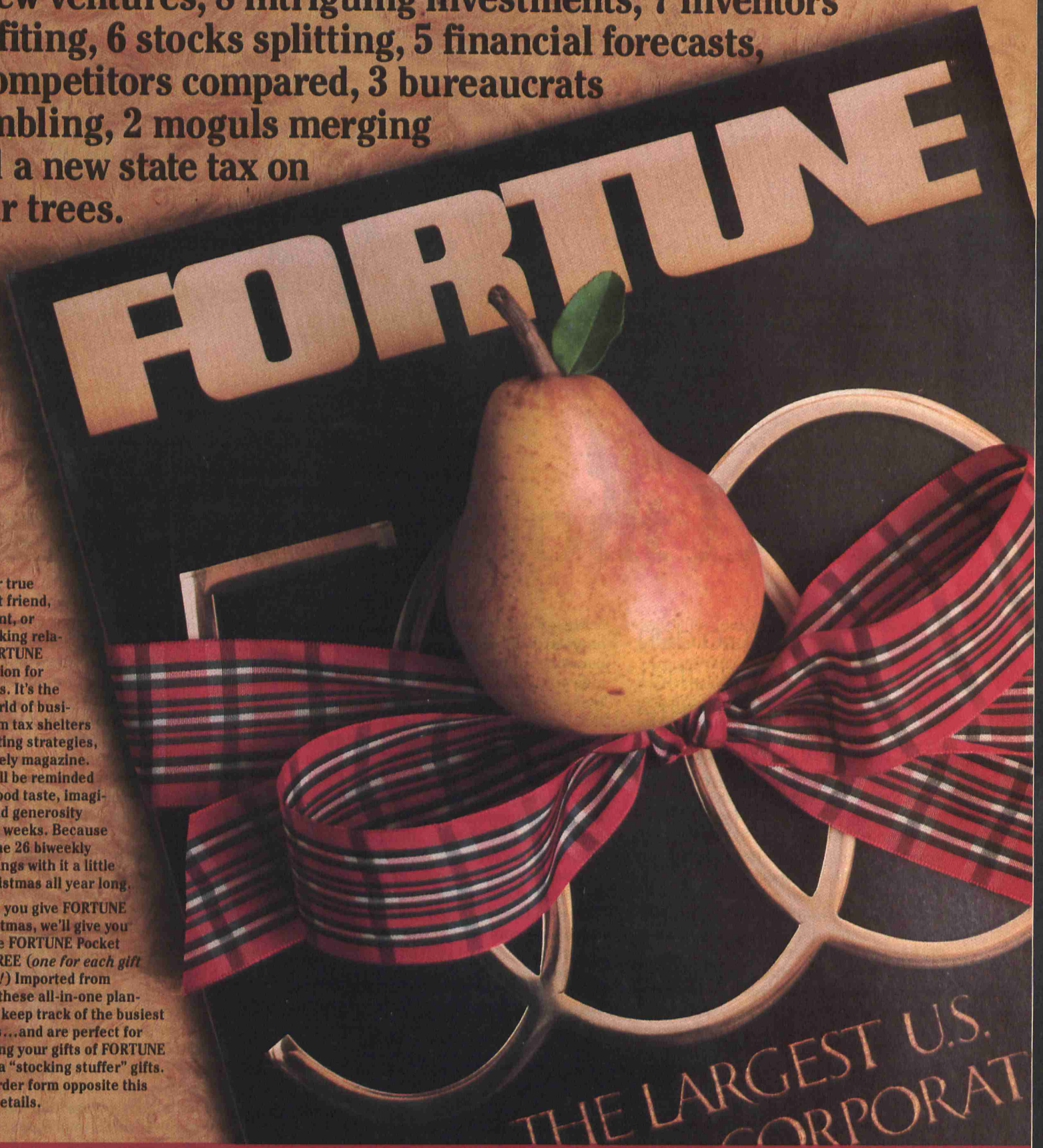

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FOR THE TRULY FORTUNATE. FORTUNE FOR CHRISTMAS.

COMPENSATION

Those E

"Golden parachutes" that compensate managers who lose takeover battles are stirring debate.

by ANN M. MORRISON

The quality of stockholder mercy is not strained. It allows executives with "golden parachutes" to droppeth as the gentle rain after a takeover attempt. These men are twice blessed. They are blessed if they win, for they keep their companies, their positions, and their compensation. They are blessed if they lose, for they still keep their compensation even if not their jobs.

A golden parachute is a special employment agreement, usually including a generous severance package, that protects certain key executives if control of their company changes hands. As the result of more than 1,700 mergers and acquisitions so far this year, on top of 2,395 in 1981, more and more golden parachutes are filling the skies. Ward Howell International, an executive-recruiting firm, recently examined the proxy statements of 665 industrial companies from the FORTUNE 500 and Second 500 lists. The study found that 15% offered parachute provisions to top managers. A FORTUNE survey that included the Ward Howell sample as well as retailing, financial, service, and other manufacturing companies turned up 155 with golden parachutes. The tables on the following pages are based on this survey. Pearl Meyer, an executive consultant at Handy Associates, a compensation consulting firm, thinks that as many as 30% of major corporations may have these agreements.

Research associates: Royce D. Wolfe and Jaclyn Fierman

Whatever the number, it is sure to grow unless the merger and acquisition craze evaporates. While there's no doubt that golden parachutes are fine for the executives who have them, their value to shareholders is the subject of lively debate.

The principal argument on behalf of golden parachutes is that executives whose company faces a takeover attempt will not be financially at the mercy of the would-be acquirer. So fortified, the reasoning goes, they will be able to weigh any takeover offer—and decide to accept or resist—strictly on its merits to the shareholder. "I truly believe that key executives need to be financially secure in order to strike the very best deal for their shareholders in takeover negotiations," says Meyer, who has sat in on a score of these

FORTUNE
December 13, 1982

Executive Bailout Deals

negotiations. B. Charles Ames, 57, who was chief executive officer of Reliance Electric when Exxon came acquiring in 1979, maintains that having a parachute made him more willing to stand up to the world's largest company. "It gave me the assurance I needed to do what I had to do," he says. First Ames got Exxon to raise its $65-a-share offer to $72. (Reliance had been selling in the mid-30s before the two companies began to talk takeover.) Then, when Exxon got bogged down in a Federal Trade Commission complaint that the proposed combination might be anticompetitive, Ames sued to compel Exxon to go ahead with the purchase of shares anyway. The FTC dismissed the complaint, and the shareholders got their money. Last year Ames moved on, voluntarily and without parachute benefits, to become chief executive of Acme-Cleveland, a machine tool company, where he also has change-of-control provisions in his contract.

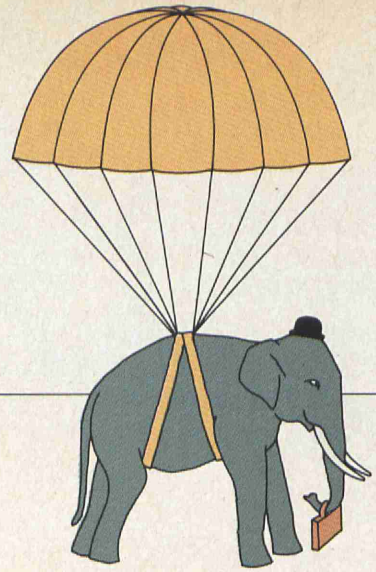
Stockholders are also supposed to benefit because golden parachutes enable companies to hire and retain good executives. The argument here is that they extend protection against arbitrary firing, a typical provision of employment contracts, into the uncertain environment of the takeover. Joseph Flom, merger and acquisition specialist with the New York law firm of Skadden Arps Slate Meagher & Flom, says golden parachutes "are so common that a management that refuses them might very well risk losing the services of a number of key employees." Without the security of a parachute successful executives might hesitate to join a firm whose stock they consider seriously underpriced and hence open to raiding. Defenders also argue that golden parachutes can be a useful strategic tool when they increase the price of a takeover so much that raiders have to rethink their plans.

For every defender there's at least one critic. Parachutes are "the latest stupid example" of companies playing follow-the-leader in compensation policy, David J. McLaughlin, national director of Hay Strategic Compensation Services, a management consulting firm, told a Conference Board meeting in October. "Why should we pay these guys more to act the right way?" he adds. Felix G. Rohatyn, a senior partner in the investment banking firm of Lazard Frères and a prominent corporate matchmaker, serves as an outside director of six corporations, one of which has golden parachutes in place. "I find them philosophically very troublesome," he says. "If an executive needs a multimillion-dollar contract to get his mind clear in a takeover situation, then maybe he should see a psychiatrist."

To some extent, both the rationales of the defenders and the righteous anger of the critics mask the reality that a parachute can be just another item in the compleat executive's compensation package, along with his bonus, stock options, special insurance, and early-retirement and pension plans. Like other parts of the package, the arguments for it or against it may be primarily pragmatic: Does it exceed the amount required to attract and keep the right people?

Furthermore, not all parachute agreements are alike. For example, the amount specified may not be as significant as whether the chute opens easily or only in

Illustration by Teresa Fasolino, after Magritte



extreme circumstances. A carefully drawn agreement can guard against some of the most egregious possible damage. All compensation arrangements can be abused. But parachutes do seem especially subject to abuse, both by promising shareholders more than can be delivered and by imposing unjustified costs.

Consider some recent manifestations. In late summer Martin Marietta's management, after girding itself in parachutes, spurned Bendix's offer of $48 a share for the company (it had been selling at less than $32 for most of the year) and joined forces with United Technologies to take over Bendix. Martin Marietta will end up as an independent company with a lower book value, higher debt, reduced bond rating, and 39% of its stock held by Allied. It is hard to discern the benefits to the shareholder in this exercise; the guarantee of financial independence that was supposed to ensure clearheadedness among Martin Marietta's top management did not keep that management from fighting like tigers to fend off a raider that rubbed them the wrong way, even though its bid could hardly have left the shareholders worse off than they are.

Bendix shareholders did better. The Bendix management, carried along by the most generous parachute agreements of this takeover season, is selling out to Allied at $85, up from $52.50 when it all began. But William M. Agee, 44, the chief executive of Bendix, has said publicly that he would not have done anything differently had he not had a golden parachute. Then why did he have one?

Asked to justify his $4-million bailout agreement—made during his takeover battle—Agee has usually responded that he didn't ask for a golden parachute but was certainly glad to have it. "The outside board was kind enough to give me one," he told a New York audience in October.

"Bullshit," says one of those outside directors. "The golden parachutes were initiated by management." In fact, he adds, the outside directors watered down management's proposals for the contract. The provisions now say that an executive cannot bail out unless he has suffered a "diminution in compensation or position" in the reorganized company. Originally there had been no such qualification. Though this is not likely to tie Agee to Allied (for his position will almost surely be diminished), it probably will encourage most of the 15 other officers protected by parachutes to stay. Another change imposed by the board requires that an executive who bails out and finds another job that pays as much will get full compensation for only 18 months, even though his contract might last for three or five years.

LARGEST INDUSTRIALS WITH PARACHUTES

COMPANY	FORTUNE 500 RANK	SALES in billions
Phillips Petroleum	15	$16.0
Sun	17	$15.0
United Technologies	20	$13.7
Ashland Oil	35	$ 9.3
Allied	55	$ 6.4
International Paper	77	$ 5.0
American Can	81	$ 4.8
Bendix	86	$ 4.4
Firestone Tire & Rubber	88	$ 4.4
National Steel	94	$ 4.1

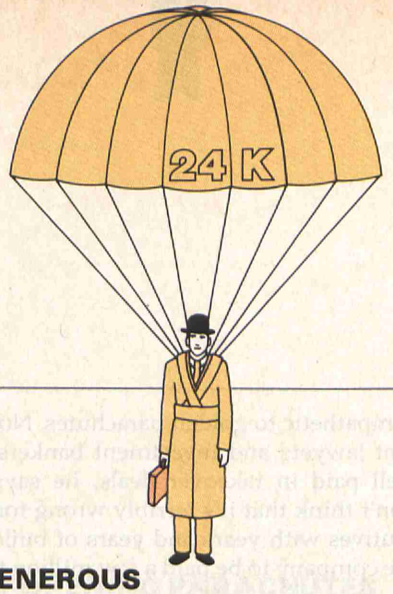
Du Pont's acquisition of Conoco—once No. 14 among the FORTUNE 500—proved last year that even elephantine companies can be hunted down and captured. Still it's hard to imagine a raider wily and determined enough to wrest United Technologies from its expertly acquisitive chief executive, Harry Gray.

Free-falling shareholders

At Brunswick Corp., as at Martin Marietta, managers with parachutes left stockholders in a free-fall. In January Whittaker Corp., a health care conglomerate, announced a hostile tender offer for Brunswick, a company that makes pumps, valves, outboard motors, bowling alley equipment and, at the time, had a thriving medical service business. The Brunswick management was thoroughly takeover-proof. Chairman K. Brooks Abernathy, 64, had a parachute protecting his salary through 1983 if the company changed ownership; ten of his top executives had agreements good for up to five years' pay; and the Brunswick outside directors with five years of service, those stalwart representatives of the shareholders, had guaranteed themselves a lifetime of fees—$22,000 per year. Brunswick not only spurned Whittaker's $26.50-a-share offer, it also sold off the object of Whittaker's desire, the medical unit, to American Home Products. When the dust settled in March, the Brunswick shareholders were left with a smaller, weaker company whose shares traded at half the level of the Whittaker offer.

Golden parachutes did not prevent executives of St. Joe Minerals from pursuing what a federal district judge called "a scorched-earth policy" in their efforts to fend off a hostile bid from Seagram last year. As soon as Seagram posted a bid of $45 a share (St. Joe was then selling for $25) its top executives wrapped themselves in parachutes, and the company undertook a defensive strategy that included buying back 25% of its stock at $60 a share, selling off a Canadian oil and gas subsidiary, and actively seeking other bidders. If all this failed, the St. Joe management said it would "pursue liquidation," and sell off its pieces to the highest bidder. Seagram went to court to restrain St. Joe from going ahead. Judge Milton Pollack not only excoriated St. Joe's strategy but declared that management's policy of awarding itself golden parachutes left "an aroma in the courtroom as if someone had thrown a skunk in the jury box."

In other cases top management seems to



have assigned a higher priority to assuring the quality of its parachutes than to maneuvering on behalf of the shareholders. Soon after Seagram began making overtures in May 1981, Conoco called a special board meeting. The first item on the agenda, according to one person who saw it, was not what the stock activity meant for the shareholders but how to put in parachutes.

Taking flight at Mohasco

The existence of golden parachutes is not hard to spot in proxy statements. The key is usually the phrase "in the event of a change in control," almost always found in one of the paragraphs following the table listing the company's highest-paid officers. Parachutes need a change of control to open them—often the acquisition of 40% or more of a company's stock, but sometimes less. Executives of UNC Resources, formerly United Nuclear Corp., have parachutes that can operate when anyone acquires as little as 15% of the company.

Low thresholds present at least two potential problems. If, say, Chairman Charles G. Bluhdorn of Gulf & Western, which holds stock in at least a dozen companies, woke up one morning with a yen for a little more stock of a certain company, he could unintentionally set off a flock of parachuting executives by noon. (Intentionally or not, when Gulf & Western's stake in Mohasco, an interior furnishings company, went over the magic 20% mark, four executives bailed out with some $800,000 among them.) On the other hand, if a 20% change in ownership is a clear signal that a hostile bid is under way, one would think that a company would want all hands at the battle stations, not heading for the escape hatch.

The proxy statement details what the executive should get after control has changed. If he or she is "involuntarily terminated"—sacked—the executive is usually entitled to his annual base salary and bonus for a number of years, plus automatic vesting of his retirement plan, easing of his stock-option restrictions, and continuation of his medical benefits. The bonus part of the package is sometimes defined as the maximum amount for which he might be eligible. An executive who never hit the target while he was employed could possibly end up making more money not working for the company than he ever did while he was there.

How long does the contract last? Most compensation consultants think that two years of total annual compensation gives an executive enough time and money to plant himself somewhere else. But the recruiting division of Handy Associates figures that even in these depressed days a top executive can usually find a new job in eight months or so. That means that for 16 months, a bailed-out officer can double-dip. In only a few of the 155 parachute-equipped companies whose proxy statements FORTUNE examined for this story are executives required to give back some portion of their severance benefits if they find another job. Bucyrus-Erie, Pullman, and, of course, Bendix are among them. In the FORTUNE survey, 55% of the companies guarantee executives' salaries for longer than two years.

Some proxy statements spell out circumstances under which an executive could resign but still reap his benefits. The reasoning is that a new management could do a lot of things to force him out—move his desk to the lobby, make him the night elevator operator, transfer him to Two-dot, Montana—instead of firing him with severance.

In some cases, though, executives can receive all those benefits if they simply decide to leave the company for no particular reason after a change in control. To be sure, there may be a catch—usually the executive's acknowledgment that he cannot "in good faith" continue to fulfill the responsibilities for which he is employed. Charles Ames of Reliance has one of these good-faith clauses in his current contract at Acme-Cleveland. "I'm not sure what it means," says Ames. "I only know it puts a hell of a burden of proof on me." No one else knows what it means either, or how great that good-faith burden actually is. As more golden parachute cases come to court, presumably we'll all find out.

In the meantime golden parachutes are most likely to encourage executives to stay around for the critical transition period after their company is acquired if the agreements clearly reward them for the effort. Hudson Bay Oil & Gas, acquired by Dome Petroleum last year, offered standard parachutes guaranteeing up to three years' salary to 12 officers whose employment could be voluntarily or involuntarily terminated within two years after the change of control. Anyone who stuck it out beyond that time automatically got an extra year's salary.

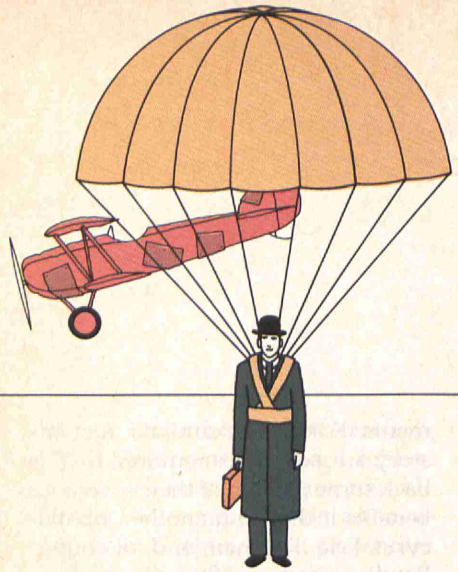
continued

MOST GENEROUS AGREEMENTS

COMPANY	CHIEF EXECUTIVE	AMOUNT in millions*
American Family	John Amos	$7.8
GK Technologies[1]	Robert Jensen	$7.3
Conoco[2]	Ralph Bailey	$4.1
Bendix[3]	William Agee	$4.0
Thiokol[4]	Robert Davis	$4.0
Allied	Edward Hennessy	$3.9
Pennzoil	J. Hugh Liedtke	$3.7
American Medical Int'l	Royce Diener	$3.1
Time Inc.	J. Richard Munro	$3.0
Celanese	John Macomber	$2.5
Esmark	Donald Kelly	$2.5
Hanna Mining	Robert Anderson	$2.5

[1]Acquired by Penn Central, 1981. [2]Acquired by Du Pont, 1981. [3]Acquisition by Allied pending. [4]Acquired by Morton Norwich, 1982. *Fortune estimates.

Of the 155 companies with parachute plans FORTUNE scrutinized, these offered the most protection.



MONEY-LOSING COMPANIES WITH PARACHUTES

CORPORATION	NET LOSS in millions
Gulf Resources & Chemical	$77.9
U.S. Industries	$62.7
Allis-Chalmers	$28.8
Publicker Industries	$24.0
Pabst Brewing	$23.5
Great Western Financial	$15.4
American Bakeries	$ 7.7
Munsingwear	$ 6.3
Cadence Industries	$ 3.1
AVX	$ 2.8
Mirro	$ 1.2

Golden parachutes are not necessarily awarded because of outstanding performance. Losses for the companies shown are for the 1981 fiscal year.

What the shareholder will not find in the proxy statement—or anywhere else—is evidence that the golden parachute necessarily serves its stated purpose in a takeover battle. Of course, these agreements are relatively recent and the variety of examples still limited. In some cases a plethora of golden parachutes can indeed make a takeover more expensive for the acquirer—any company wanting to put a bear hug on Beneficial Corp. would have to figure out how to get its arms around all 234 golden-parachuted employees, each of whom could walk away from the merged company with three beneficent years of salary guaranteed. But even Martin Lipton, the takeover strategist with the New York law firm of Wachtell Lipton Rosen & Katz, claims that a reasonable number of parachutes has "no deterrent effect whatsoever on takeover attempts." In most deals the cost of the employment contracts works out to less than 1% of the total transaction. Lipton, it should be observed, is not unsympathetic to golden parachutes. Noting that lawyers and investment bankers are well paid in takeover deals, he says: "I don't think that it's terribly wrong for executives with years and years of building the company to be paid a few million too."

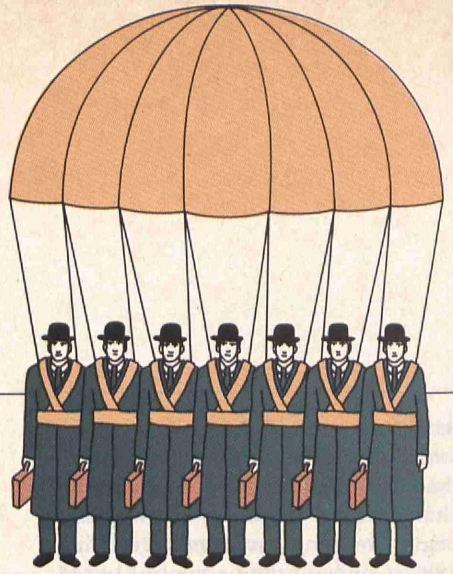
The urge to keep control

A golden parachute can certainly help mitigate the damage a takeover may do to an executive's pride, prestige, and power. The taken-over chief executive can rather suddenly find that he no longer is able to commandeer the company airplane, appropriate the best office, or have the last word. These losses may be harder to take than a loss in salary. But management's tenacity in cases like Martin Marietta and Brunswick suggests that no force acts more powerfully on executive ego than the urge to preserve control and repel challengers, no matter what the cost.

Losing a job is a risk of doing business, of course, and there is nothing new about compensating executives for living with that risk. What troubles the critics of golden parachutes is the thought that they can amount to overcompensation. "What we're seeing now is more and more reward for less and less risk," says Graef Crystal, a compensation consultant with Towers Perrin Forster & Crosby. If a manager's record is poor or indifferent, he certainly could use a parachute, but why is he entitled to one? If he is a good performer he may well be retained, even promoted, by the acquiring company, despite the personal bitterness often generated in takeover battles. Hicks B. Waldron, 59, chief executive of Heublein, has, since his company's October acquisition by R.J. Reynolds, been widely rumored to be a possible successor to J. Paul Sticht, 65, chairman of RJR. Neither side brought parachutes to that merger.

Even if an executive is redundant, bungling, and has made a lot of enemies during the takeover fight, he is not without resources. Almost all top executives have stock in their companies, which should run up in the course of the takeover. Ames of Reliance made some $3.8 million on his stock and options when Exxon took control. Many companies have introduced accelerated vesting of stock option plans that are triggered by a change in control. Under these, an executive can realize the cash difference between his option price and the selling price of the stock without having to purchase the stock. Walter McL. Robinson, 59, vice chairman of NLT, the Nashville-based insurance and entertainment company (Grand Ole Opry) that was acquired by American General Corp. early this month, realized almost $390,000 through this plan. He has said that he will take the money and forgo American General's offer of a three-year employment contract. Neither he nor any other NLT executive has a parachute.

Relatively few executives with golden parachutes have pulled their rip cords. Only a few lawsuits concerning golden parachutes have come before the courts, and none has been resolved. Stockholders of both Conoco and Bendix have sued their



MOST PEOPLE COVERED

COMPANY	PROTECTED EXECUTIVES
Beneficial	234
Kimberly-Clark	80
United Technologies	64
Colt Industries	30
Martin Marietta	28
Mapco	23
AMF	21
Emhart	20

Critics complain that golden parachutes protect only a chosen few at the top, leaving the troops below defenseless and demoralized. These companies may be trying to remedy the problem. In any case, a would-be acquirer of a company high on this list would have an expensive series of payments to make.

respective directors, charging that golden parachutes are a waste of corporate assets. Last month the Conoco shareholders' complaint was dismissed in the chancery court of Delaware on a technicality. The defendants, Conoco and some of its officers, had argued that because of its acquisition by Du Pont, Conoco has ceased to exist as a legal entity, and therefore its shareholders had no grounds for bringing a shareholder suit. The Conoco shareholders are appealing. The Bendix complaint charges, among other things, that the golden parachute contracts were entered into "for the sole personal benefit and aggrandizement of the individual defendants" because they provided for payment when the executives would no longer be working for Bendix. It is pending in the same court.

The case of Gulf Resources & Chemical is more complicated. This spring a dissident Gulf Resources shareholder, British-born investor Alan Clore, waged a proxy fight for control of the ailing company. The Gulf Resources board already had parachutes in place covering 21 officers and employees and amounting to $13 million—a bit more than the company reported in income from continuing operations last year. In fact, because the company closed a large mining operation, it reported a $77.9-million net loss for 1981. Clore won the proxy battle and fired eight top officers; the chief executive resigned the same day. A stockholder has filed suit in Delaware arguing that the company shouldn't have to pay their severance agreements because the stockholders had no say in them. In September Clore offered the fired executives one year's salary and bonuses if they would withdraw from the suit. They refused and took their claims to court; a decision is not expected for a year. Then he offered each of the ten executives still employed a three-year contract in return for dropping potential severance claims against Gulf Resources. They accepted.

FASTEST-OPENING PARACHUTES

20% change of ownership triggers benefits

COMPANY	BIGGEST STOCKHOLDER	PERCENTAGE HELD
Mohasco	Gulf & Western	23.5%
Olin	Hartford National	15.9%
McNeil	Richard A. Michelson	15.2%
C. R. Bard	International Paper	14.3%
Control Data	Morgan (J.P.) & Co.	9.3%
Rubbermaid	Blake & Co.	9.0%
Tampax	Endowment Mgt. & Research	7.6%
Midland-Ross	T. Rowe Price Associates	9.6%
Allen Group	Shufro Rose & Ehrman	5.4%
American Bakeries	No single shareholder owns 5% or more of the company's common stock	
American Brands		
American Sterilizer		
International Paper		

Most parachutes don't open without a change of control. But relatively modest shifts can trigger these.

Then there's the case of Nick A. Caporella, Victor Posner, and Burnup & Sims. In 1976 Caporella, who is 46, became the chief executive officer of B&S, a Florida-based miniconglomerate that designs and installs telephone and cable television systems and bottles Dr Pepper and Pepsi. Also in 1976 Victor Posner, the Miami Beach-based industrial scavenger, acquired 14% of Burnup & Sims. Since then Burnup & Sims's sales and profits have moved up smartly (in fiscal 1982 the company earned $9.3 million on $237 million), and Posner's investment moved up with it. In 1979 the board approved a golden parachute for Caporella that would pay a lump sum of 300% of his base salary, plus accelerated stock options, if any party acquired 29% of the common stock. By October of this year Posner had acquired more than 30% of the company, and Caporella resigned, taking 17 executives and $4 million in severance and stock options with him. Five stockholders then sued Caporella, complaining about the parachutes as well as about alleged insider transactions. At the end of October, Caporella was back in the chief executive's office, at least until January 1. He says he's looking for a successor and for ways to force the divestiture of the Posner holdings. Caporella is apparently the only executive to have his parachute money and his old job too.

Watch what they do

Shareholder actions seem unlikely to curb the parachute profusion, even though criticism is intensifying. But recent excesses may be creating a management backlash. In a survey of 170 chairmen of major corporations by the *Directorship* newsletter, 101 respondents said that their companies did not have golden parachute arrangements and did not expect to have them. A chief executive of a company with golden parachutes gave their classic defense: "If we are threatened by a takeover not approved by our board, we want our key executives not to worry or leave, but to stay and work diligently." For the parachuteless majority, one chairman intoned: "I and my board hold the opinion that golden parachutes are an unconscionable rape of a shareholder's assets."

Still, shareholders would be well advised to pay more attention to what managements do than to what they say. When T. Boone Pickens Jr., 54, Mesa Petroleum's chief executive, was asked about golden parachutes at a New York seminar on corporate reorganization in October, he replied, "My feeling, very simply, is to forget golden parachutes. I don't like them. I don't even like the tone of them."

Presumably, he was not referring to his own golden parachute, which, according to Mesa's 1982 proxy statement, would provide Pickens, at his discretion, "a termination fee equal to twice his base salary"—which last year was about $416,000—in the event of a change in control not approved by his board. F

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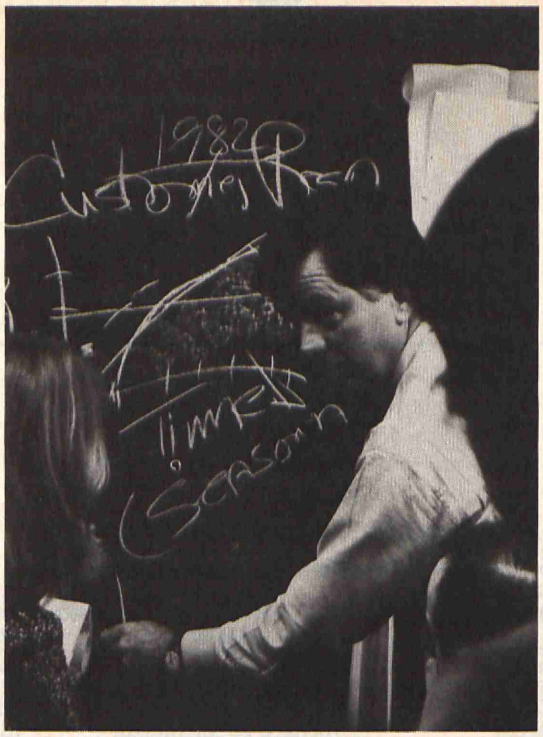

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Corning Glass Shapes Up

Its profits sagging unbecomingly, the resourceful 131-year-old company has gotten serious about redeploying assets.

by MYRON MAGNET

Corning Glass Works moves like an amoeba. For a century and more it has progressed by oozing from business to business. A new limb appears—Pyrex cookware, say—and swells from a minute bud to a quarter of the company's substance. Another primary limb meanwhile—let's take railway signal lenses—attenuates to insignificance and is gradually absorbed as the company unhurriedly flows to a new shape and a new position.

Now, though, change is coming a lot more violently to the company, still run by descendants of the Houghton family that founded it when Millard Fillmore was in the White House. A major limb has been chopped off, another is threatened with the same fate, and new ones are as yet only rudimentary. President Thomas C. MacAvoy, describing Corning's plight in different imagery, concludes ruefully: "It's like standing up in a boat trying to change your pants, and all of a sudden the sea gets very choppy. It's a little complicated—and it's embarrassing."

It sure is. Though Corning, perennially respected for technical excellence, seems certain to get its belt buckled at last—security analysts expect earnings to rise from this year's estimated $2.25 per share to $9 by 1984—its exposure just now is glaring. Last year pretax income, having declined 8% in 1980, dropped a further 15%, to $97 million, on almost flat sales of $1.6 billion. Operating income has weakened for three years straight, sagging 20% during 1981. Return on stockholders' equity has eroded by a third in the last two years, to 10.4%. More disheartening still is this year's third-quarter operating loss of $6.7 million, fortunately transformed into a net profit by the addition of $10 million of investment income.

The light-bulb shakeout

What happened? First, Corning's light-bulb glass business got turned off. Vital to the company ever since its glassblowers formed Thomas Edison's first bulb in 1880, lighting totaled a third of Corning's sales 35 years ago and as recently as 1972 accounted for 10% of sales and 9% of profits. Since then, though, an industry-wide shakeout has been under way.

Drooping demand, due to longer product life and consumers' reluctance to waste expensive power illuminating their houses like Versailles, has put the squeeze on prices. Constricted by a mature, even stagnant, market, the American lamp industry has concentrated since 1980 into the hands of three integrated producers—General Electric, General Telephone & Electronics, and North American Philips—leaving little room for Corning in the by now unprofitable business of supplying lamp glass. "A hundred years," as MacAvoy says, "is a pretty good run"—but with one lighting plant sold to GTE and agreement reached to sell it another, that run will essentially end for Corning next year.

Worse yet is the TV-picture-tube glass problem. Two-thirds of the company's earnings 15 years ago, that business is no longer profitable for Corning in the U.S. and barely so worldwide. Japanese electronics companies are to blame: they had driven American manufacturers out of black-and-white picture tube production by 1975, vaporizing Corning's part of that business in the process. Five U.S. customers remain for the company's color television glass—out of 28 two decades ago. Writhing under fierce price pressure themselves, sharpened by the recession and the weak yen, they pass the bruising along to Corning.

Things could deteriorate further: a so-called orderly marketing agreement between the U.S. and Japan, adopted in 1977 after entreaty by Corning and others, expired in 1980, ending restrictions on the import of color televisions to America. No new Japanese offensive has yet been launched, but Corning's shoulders are hunched in apprehension, even while

Chairman Amory Houghton Jr. (left), 56, and Vice Chairman James R. Houghton, 45, hold the future of their company—optical waveguides for telecommunications—in their hands.

Photographs by Hank Morgan

Searching for the DNA that gives a cell instructions to produce an enzyme useful for industrial food processing, a Corning microbiology technician (opposite page) separates a cell's DNA into its components by electricity. The proper component, when found, is spliced into a bacterial cell and allowed to multiply rapidly in a flask. Another technician (above) then transfers the cells to dishes containing a nutrient in which only cells possessing the desired enzyme-making DNA will grow.

the company's TV-glass development program gamely keeps chugging along. "I'm very reluctant to say, even as difficult as the domestic TV business is, that we should pack it in," declares MacAvoy. It's a luxuriant generator of cash, and it represents an investment of hundreds of millions of dollars. But given price and market pressures, cautions Chief Executive Amory Houghton Jr., "something dramatically different has got to happen for us not to be out" of the business in the U.S.

But wait. Help is in sight. Cultivated with hothouse intensity, potentially big new businesses are starting to bloom, in accordance with a strategy for repositioning the company that Corning management has long meditated. The plan, crystallized at the start of the Eighties, is to lessen involvement in mature, no-growth businesses like light bulbs and television and to ease away from such strong dependence on cyclical businesses like sealed beam headlight glass or the ceramic linings of heavy industrial furnaces. This would help Corning avoid getting so squashed every time the economy drops. From these old businesses, the company resolved to plunge headfirst into several high-profit, high-growth possibilities its redoubtable research and its traditional commercial activity had pointed out.

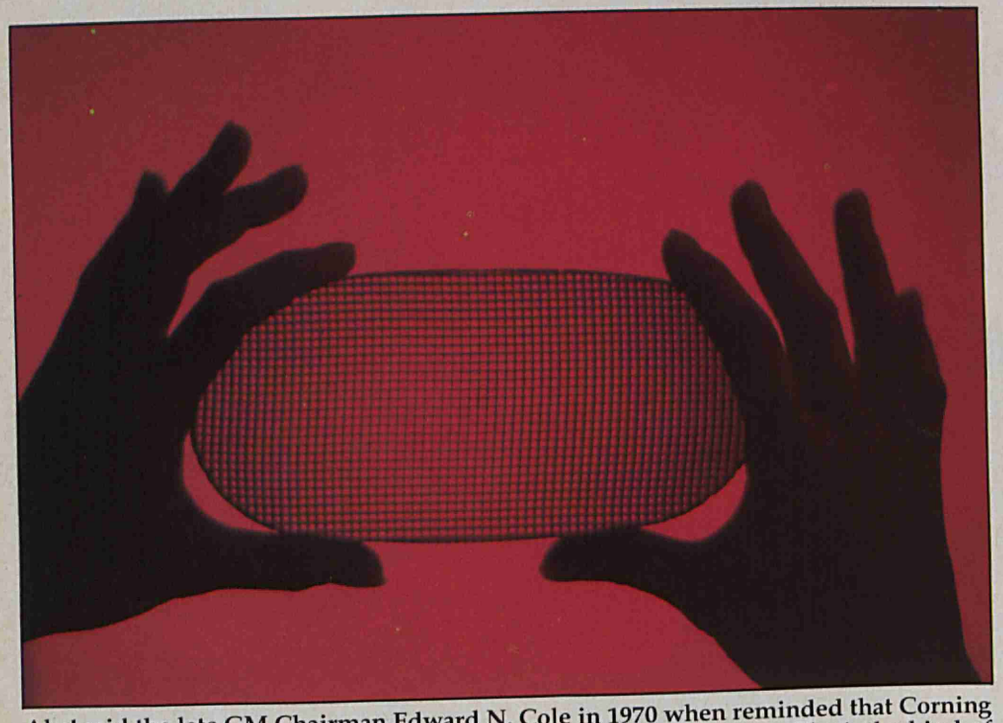
Sound by light

For lucrativeness and technical razzle-dazzle, none of these can top Corning's optical waveguide program. Waveguides are horsehair-thin strands of glass fiber, descended from the fiber optics that doctors use to peek in your stomach. Though found in cable-TV and computer networks, their chief application is in telephone systems, where sound going into a phone is transformed into digital code at a central office, transmitted by shooting laser-generated light through the glass cable, changed at another central office back into sound, and then relayed to the phone in your child's dorm or your customer's office. Light is perfect for this use: it can transmit digital code's two signals, like Morse code's dot and dash, by being either on or off, and its short wavelength allows signals to be tightly compressed. That, and the fact that messages move literally at the speed of light, allows each optical cable to bear 300,000 conversations at once—a load which, carried on copper wires, would require a cable 27 times thicker.

All well and good: but the technical trick

A technician (right) uses an electric current to sort DNA extracted from cells.

Stamped out like cookies from a glowing ribbon of molten glass, Corning's new Cornerstone plates get their edges smoothed by fire-polishing (right). Corning's laminated plates, three layers of different glass fused together, are strong enough to be warranted against breakage for two years. They have captured a quarter of the U.S. tableware market.



Aha! said the late GM Chairman Edward N. Cole in 1970 when reminded that Corning had developed a ceramic to use in an experimental turbine engine. *That's* the kind of stuff we could use for the cores of those catalytic converters we've got to put on our cars. Corning's cellular ceramic, above, now has more than half that market.

is to get the glass fiber so pure that the signal travels long distances before dimming enough to need beefing up by electronic amplifiers. Complicating the already horrendous manufacturing problems, the fiber's cross section needs to resemble tree rings, each of different glass, to keep the signal sharp. However great the theoretical benefits of optical communications, scientists despaired of getting glass this pure until Corning produced it in 1970. Discarding as unworkable the traditional technique of making glass by melting sand, Corning researchers instead heated extremely pure liquid chemicals in a revolving tube, relying on the resulting vapors to separate the glass into appropriate layers as it formed.

Because there's no market for this stuff until telephone companies embrace it, a cross-licensing agreement with Western Electric, aimed to speed development and strengthen an old business tie, sensibly followed at once. From then till now, AT&T has laid some 25,000 miles of glass cable, and phone companies overseas are unreeling it full steam ahead. "Optical waveguides," one Corning executive exults, "will rewire the world," and the profit potential is huge. When the company's waveguide sales hit $70 million, probably in 1983, the business will become fully profitable. Beyond that beckons a U.S. cable market expected to double and redouble in two years before soaring at a 50% annual growth rate to $1.7 billion a year by decade's end. Corning wants $400 million or so of that for its fiber: security analysts think that's in sight.

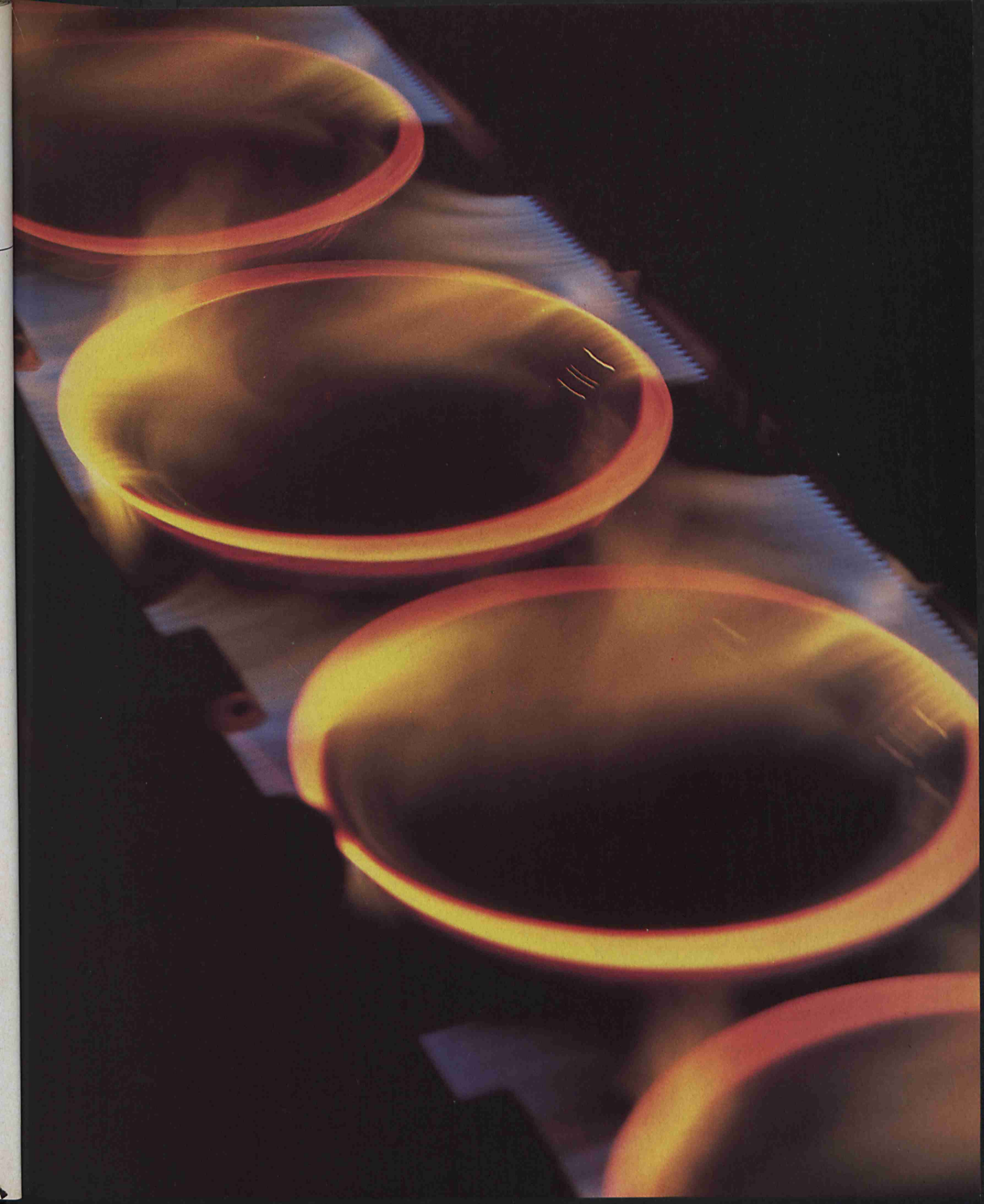
But it's no shoo-in. Corning must keep its technology and costs neck and neck with Western Electric, the other U.S. contender. In overseas markets especially, it will have to beat off three determined Japanese competitors. Finally, the company will have to decide how much of the optical communication business it wants to embrace. "Do you just become a commodity supplier and let the fully integrated companies whip you around?" asks Roger G. Ackerman, senior vice president for manufacturing and engineering. A cable company called Siecor, set up in 1973 as a joint venture with Germany's Siemens, answers this question with a clear no. Now Corning is studying components like couplers and lasers, themselves expected to be a $1-billion market by 1990, to see if further integration is in order. "We're looking at it internationally and nationally, vertically and horizontally," says Houghton, "because we didn't do that with TV or light bulbs."

Where the proteins went

Though it makes sense to find the world's foremost specialty glass company making glass fiber optics, Corning's excursion into biotechnology might seem odd. But that too started with glass—specifically with the column of glass beads down which the company's lone biochemist poured a mixture of assorted proteins to separate them in 1965. In went the proteins at the top; out from the bottom came ... water. "Well, he was a smart enough scientist to ask where in the hell the proteins went," recalls Richard Dulude, senior vice president for marketing and business development.

The answer was that they had stuck to the glass, and a further experiment showed that, when trapped, they stayed active longer than in any other state outside their natural environment—for six months instead of three days. That put Corning in the business of immobilizing enzymes—those proteins that, like the clergyman who marries you, have to be present for certain chemical reactions to occur, though they themselves are left unchanged.

It's true, as Merrill Lynch security analyst Charles Ryan observes, that the immobilization of enzymes is "a technology in search of a market." Being able to hold an enzyme still so it doesn't contaminate your final product or so it can be reused



This acid-etched glass ceramic film made by Corning is the key element in the alphanumeric—letters and numbers—display on Burroughs Corp.'s computer terminals and desktop calculators. Sandwiched between two layers of clear glass, the ceramic film holds a mixture of three inert gases, which, like the neon in a Las Vegas sign, glow when electrified.

isn't really what such big enzyme-using industries as brewing or tanning have been holding their breaths for. But Corning has already opened up a market for one process that can't be done economically unless the enzyme can be reused. To exploit it, the company formed a joint venture with Cincinnati-based Kroger Co., the nation's second-largest food retailer.

The new company, called Nutrisearch, has figured out a profitable use for part of the 30 billion pounds of polluting whey churned out each year as a byproduct of the U.S. cheese industry. Using the enzyme lactase, Nutrisearch converts the sloppy stuff into a protein-rich sweetener for ketchup or jam, protein additives for bologna or face cream, and a syrup perfect for fermenting into bakers' yeast. With Rube Goldberg-like circularity, Kroger not only makes cheese but also needs yeast for its bakery business, so it will provide the raw material and buy much of the product of the plant, scheduled to open next year.

Assured that enzyme technology had a future, Corning set up another joint venture, this time with Genentech; within two years the Glass Works will own 6.5% of Genentech and have a seat on its board. The mission of the joint venture, Genencor, is to generate big batches of scarce enzymes by recombinant DNA techniques and then to find out what industrial use they might have. Commercial winners could then be spewed out for sale by genetic engineering.

Finding a niche between the major segments of the biotechnology industry is Genencor's ultimate goal. Not traditionally the subject of high-powered research, the food business, including the transformation of cornstarch into high-fructose corn syrup for soft drinks and baking, is a likely candidate, company officials think. So is the conversion of common chemicals into high-value specialty chemicals. Some of this may turn out to be pie in the sky—high-fructose corn syrup is currently in glut—but Corning seems willing to bet a third of a billion dollars that Genencor and Nutrisearch will each be $100-million- to $150-million-a-year companies by 1990.

The last of Corning's crucial new enterprises, the growing, $400-million-a-year medical division, is a classic case of the tail coming to wag the dog. Pyrex glassware put the company in the lab business as far back as World War I—that's the same heat-proof glass that spawned a booming cookware line after the research chief's wife tried baking a cake in a Pyrex battery jar. But when instrumentation started supplanting test-tube and beaker chemistry in the Sixties, Corning cautiously supplemented the couple of primitive meters it already made with a high-powered instru-

continued

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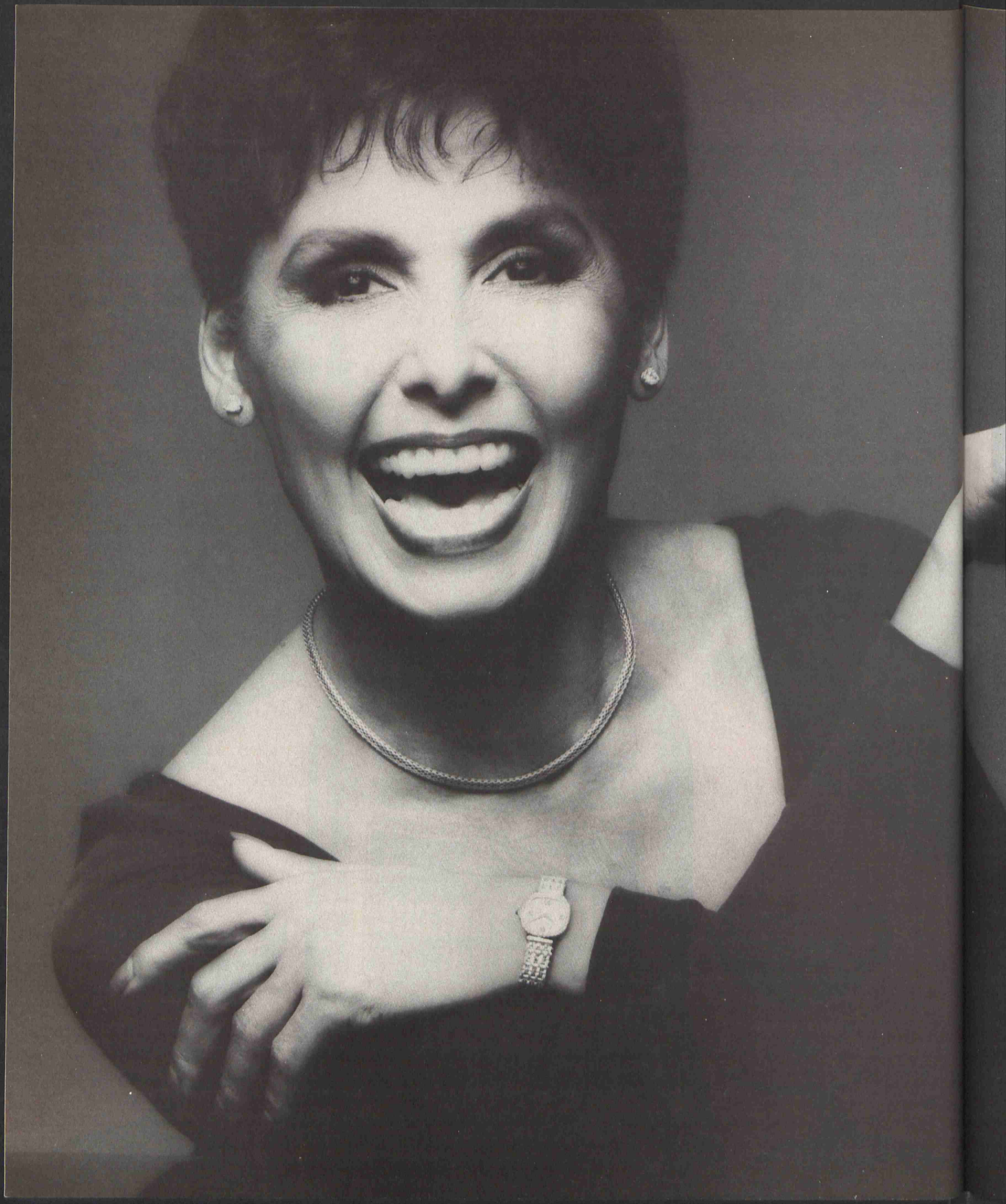

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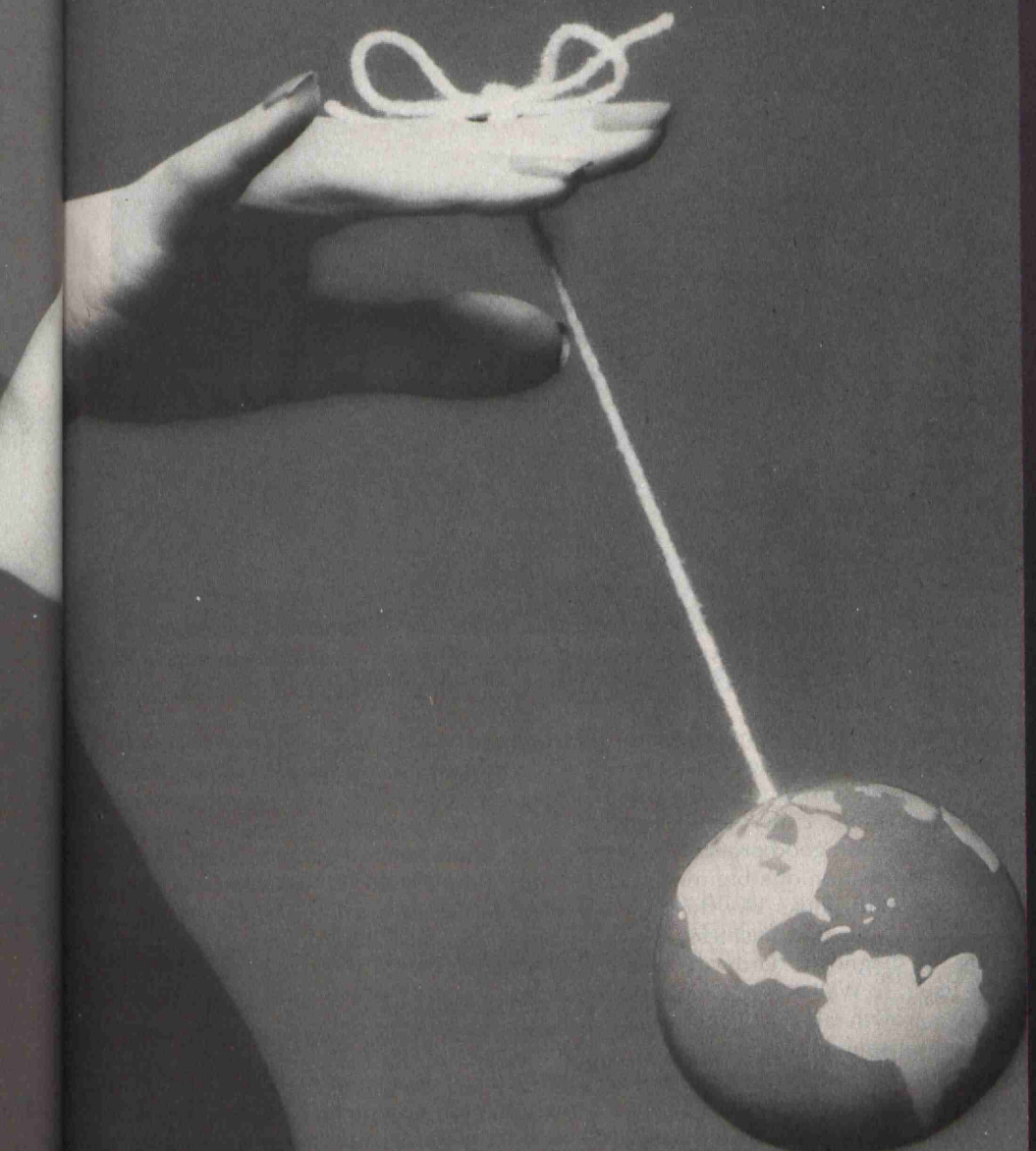

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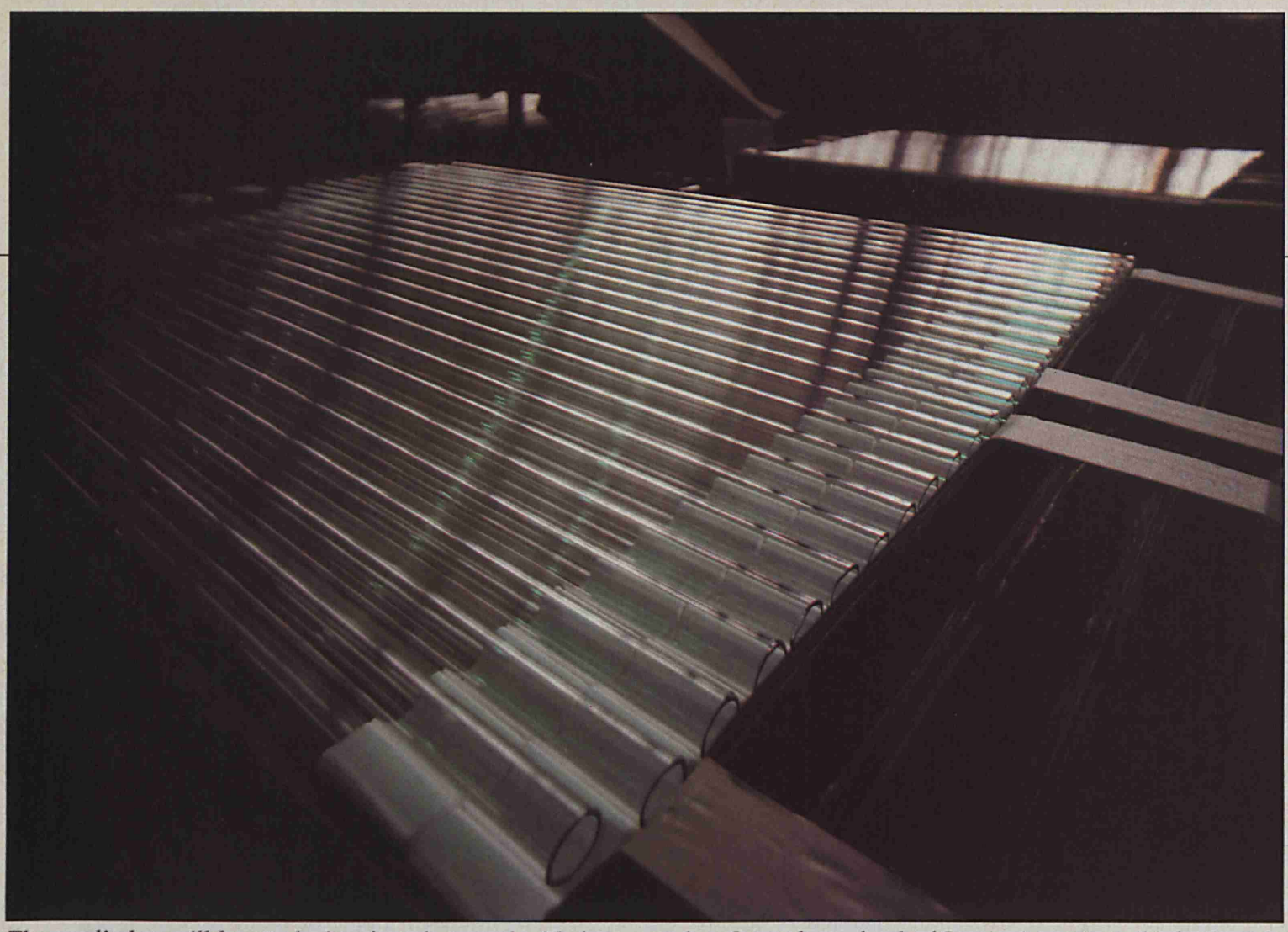

These cylinders will be attached to funnels topped with faceplates to form the glass envelopes of color television picture tubes. Once a huge chunk of Corning's earnings, this business is now a loser to Asian competition in the U.S. market.

ment designed to see how well a critically ill patient's lungs are exchanging oxygen and carbon dioxide. This was the first of several market successes; and when corporate management started reshuffling the company's assets three years ago, lo and behold, there was a blooming division, batting its eyelashes modestly and just waiting for a vigorous infusion of capital.

Corning's test tubes and beakers still sell, but it's the diagnostic equipment—from blood gas analyzers to radio immunoassay kits to routine blood testing machinery—that made most of the profits on the medical division's sales of $150 million last year. Of that, 8% is plowed back into research: a blood test to diagnose breast cancer is one major project, employing such 21st-century techniques as cloning legions of antibodies by splicing them onto wildly reproducing mouse cancer cells. "Cancer diagnostics generally is regarded as the next great bastion of growth in the blood testing field," says E. Martin Gibson, medical and scientific senior vice president. "If we can carve out a niche that we can be No. 1 or No. 2 in, then we can have good growth and good profits."

This year's acquisition of a big medical testing lab, Metpath, looks like the capstone of Corning's medical business, supplementing the diagnostic hardware with the service itself. To Wall Street, Corning's hope of a 20% growth rate for Metpath and Corning Medical sounds right.

Backing up these bold new businesses are prudent moves to wring more profits out of existing strengths. "We realized," says Vice Chairman James R. Houghton, "that we had a hell of an asset in our name." Why not extend the trademark and get more mileage out of the skill gained from 67 years of marketing Pyrex, Corning Ware pots, and Corelle dishes to consumers? Accordingly, two-year-old Corning Designs aims to press into the hitherto ignored department store and gourmet shop trade with sleek coffee carafes and the like. Similarly, since Corning already makes Sunsensor photochromic lenses—the ones that go dark when light hits them—next month's move into the disorganized U.S. sunglass market is a natural. Security analysts judge that the company's goal of dominating the business and hitting $100 million in sales in three years is well within reach. Having subcontractors make both the sunglasses and the carafes adds the virtue of using minimal capital investment to pump up profits.

Corning Engineering, six months old, tries to squeeze still more value out of a different Corning asset, its technology. If TV glass is a mature low-profit business in the developed Western countries, then sell TV glass *factories* to poor nations, as Corning has done in China and India. Or sell Corning's advanced technology to noncompetitors when the market potential

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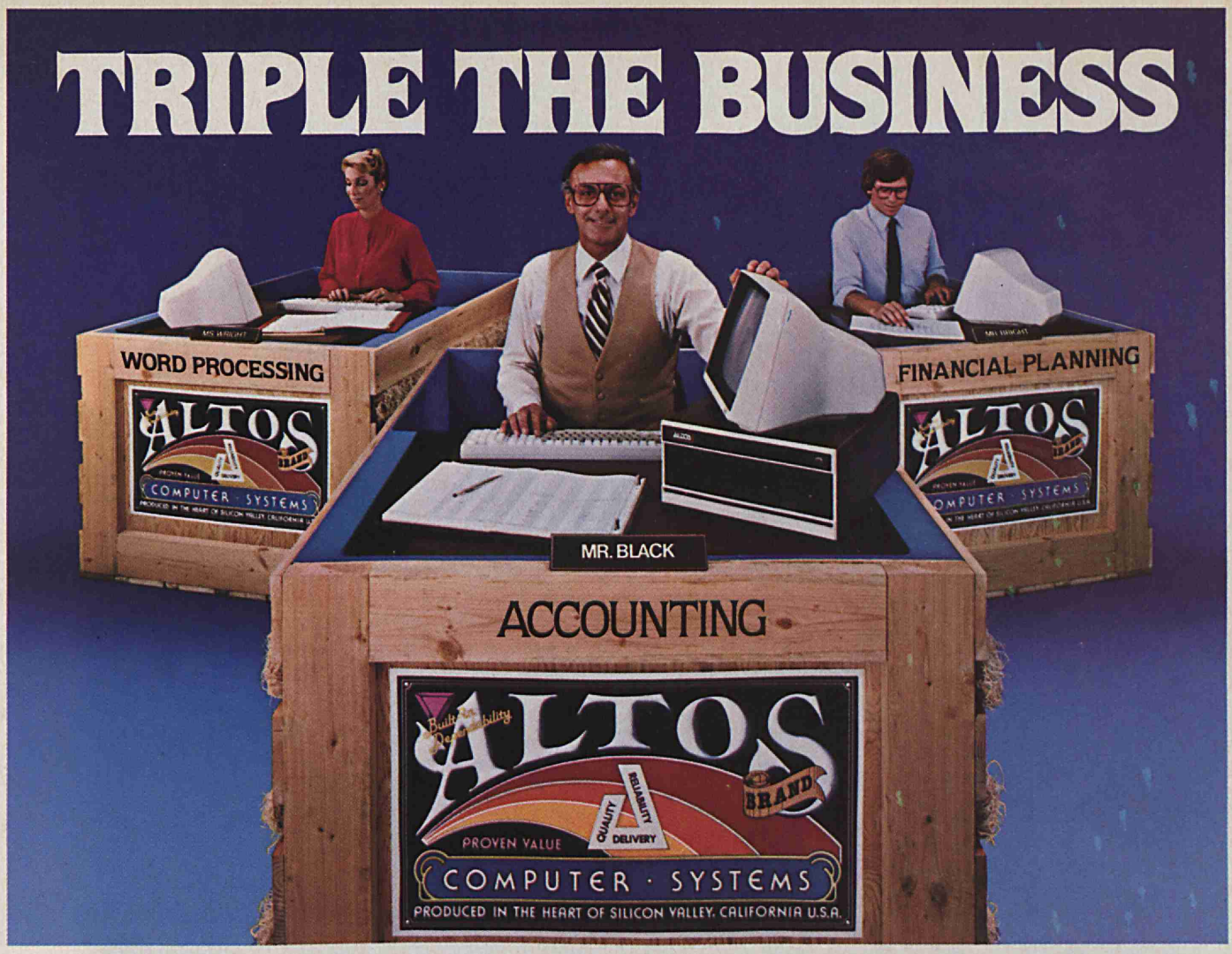

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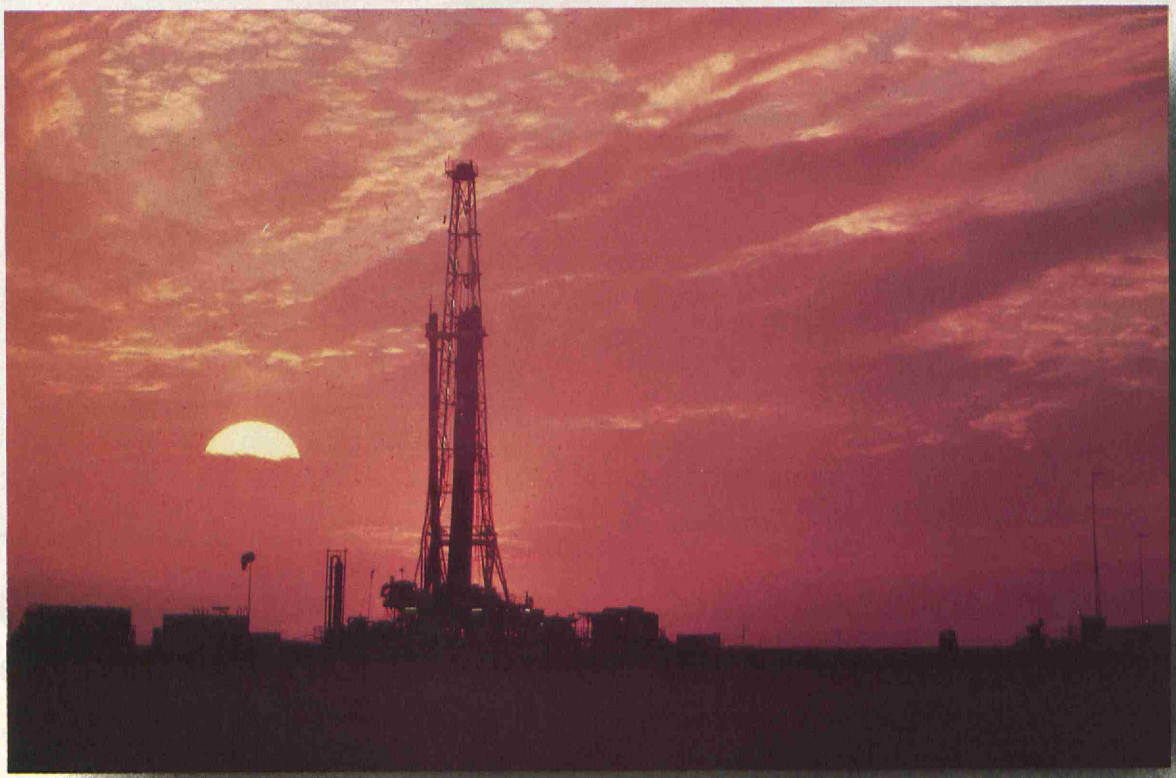

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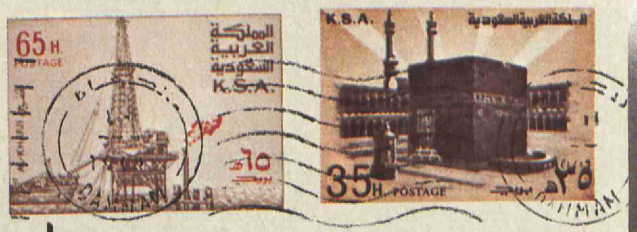

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At $16,500, this 6½-inch-wide copper-engraved Gazelle bowl, getting its finishing touches, isn't the priciest of Steuben Glass's knickknacks. Starting at $100, they soar to $275,000. When Arthur A. Houghton Jr., now 77, came to head Steuben in 1933, he signaled his break with the ornateness of the company's past by taking a lead pipe to $100,000 worth of overdecorated inventory.

justifies the risk that rivals could more easily snatch technical secrets.

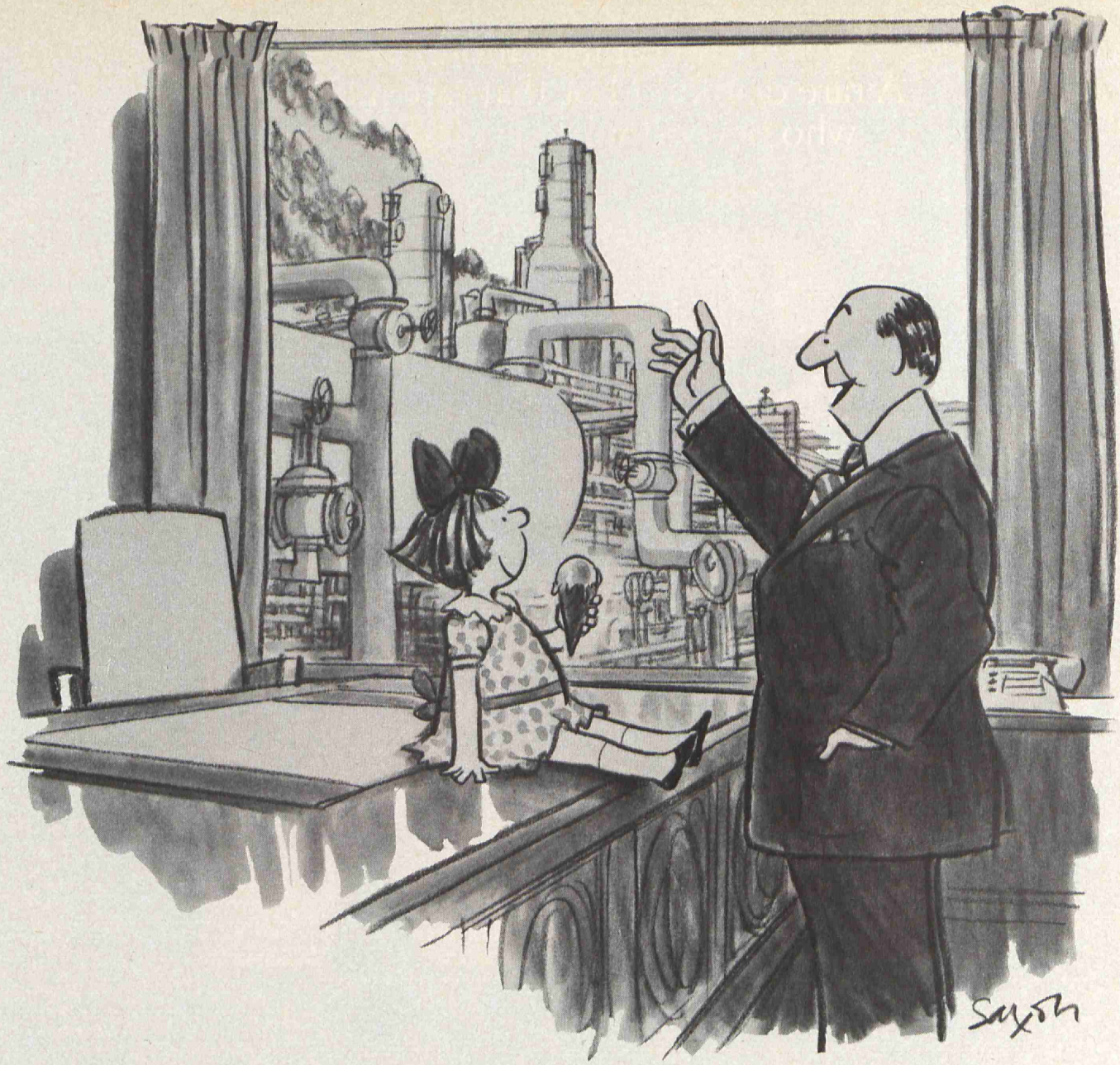
Along with all this, the company has gotten serious about productivity. Personnel reduction, coupled with new manufacturing efficiencies and such tactics as quality circles, has lowered the breakeven point from an estimated 63% of capacity to 55% in only two years. Running just now in the mid-50s, the company is spinning its wheels, but Ryan of Merrill Lynch predicts, "With a slight demand improvement, they'll be showing 50% greater profitability in four quarters."

"What Corning did over the last two years is what they've been saying they're going to do for the last ten," notes security analyst Donald Young of Laidlaw Adams & Peck, a New York broker. The question is, what took them so long? Wall Streeters, by way of answer, conventionally roll their eyes and point to the chairman and vice chairman, two brothers who are fifth-generation descendents of the Amory Houghton who founded the Glass Works in 1851 and whose family still controls it with about 30% of the stock. "A lot of what Corning does is to maintain a prestigious public image," says one analyst, going on to list the sleekly handsome corporate buildings, the splendid exhibition center and glass museum, the dean and bishop on the board, and the ownership of Steuben Glass, a company that—notwithstanding the beauty of its crystal—has never been much of a contributor to corporate profits. "I think you have an attitude among many investors that Corning is run as a private country club," this longtime student of the company concludes.

More serious is the criticism that the noblesse oblige attitudes of the St. Paul's- and Harvard-educated Houghtons, whose father and grandfather before them served as ambassadors after running the company, haven't always tended toward the corporation's best interests. For instance, some analysts judge, the company grossly overhired in the early Seventies and didn't cut back until the recession of 1975 forcibly proved that "it had to stop being a benevolent association," as Mark Hassenberg, a Donaldson Lufkin & Jenrette analyst, puts it.

The same sentiments, security analysts think, made management dillydally about freeing the company from dead-end businesses. As analyst Edward Schollmayer of Paine Webber Mitchell Hutchins sees it, "Concentration on those businesses retarded the development of other businesses." Finally, in Hassenberg's view, "Corning gives the impression that there's nothing better they'd like than to find a cure for cancer, and if they happened to make some money at it, that's fine. But

continued



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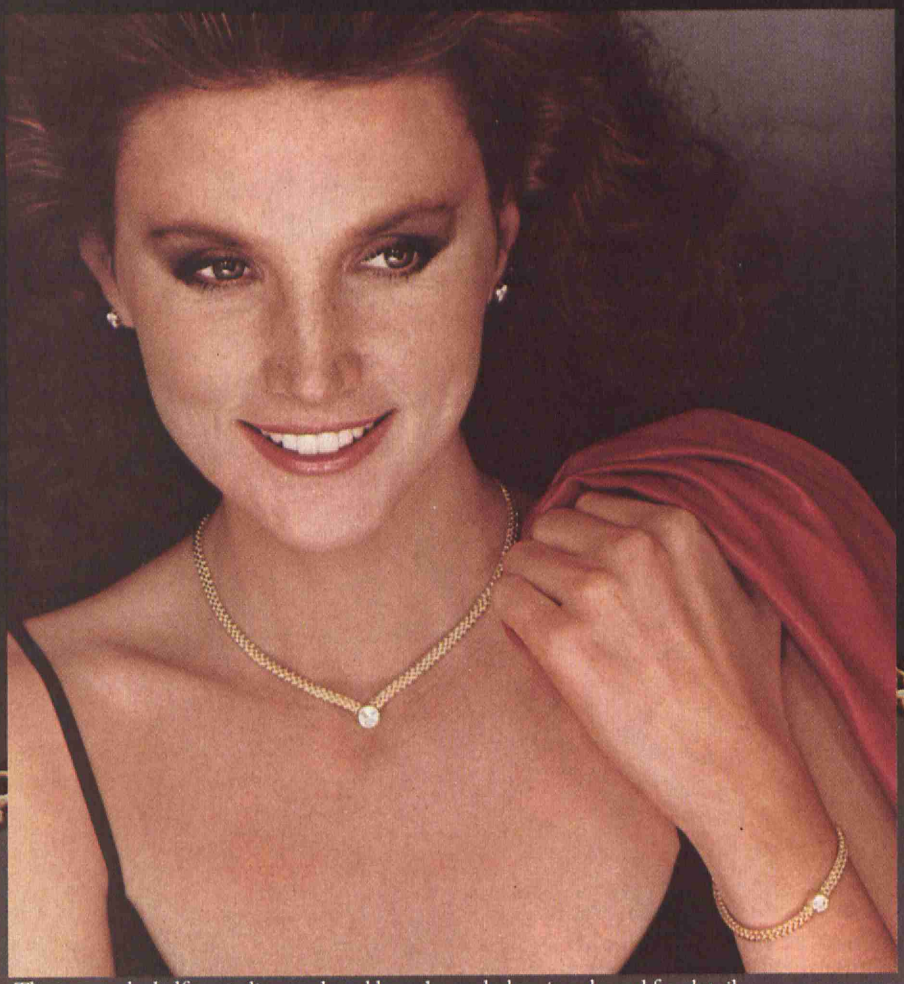

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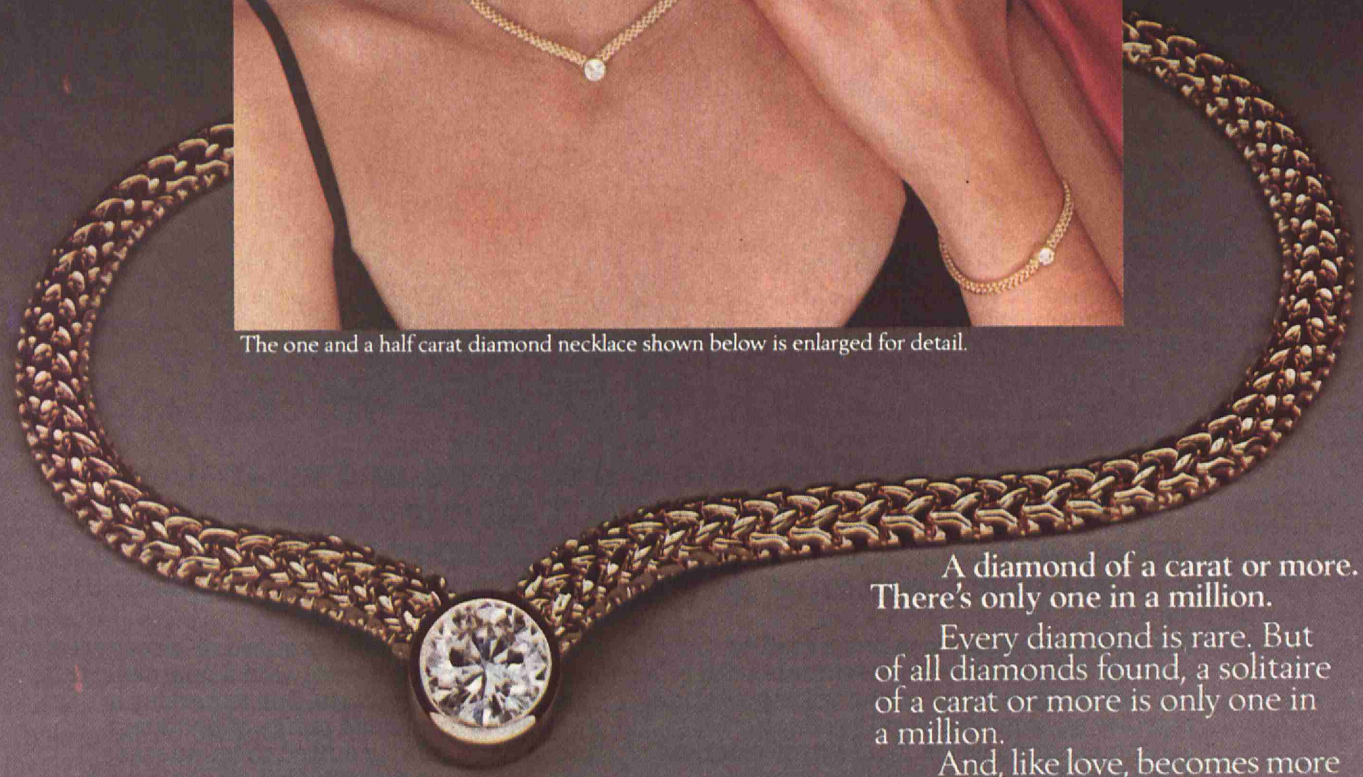

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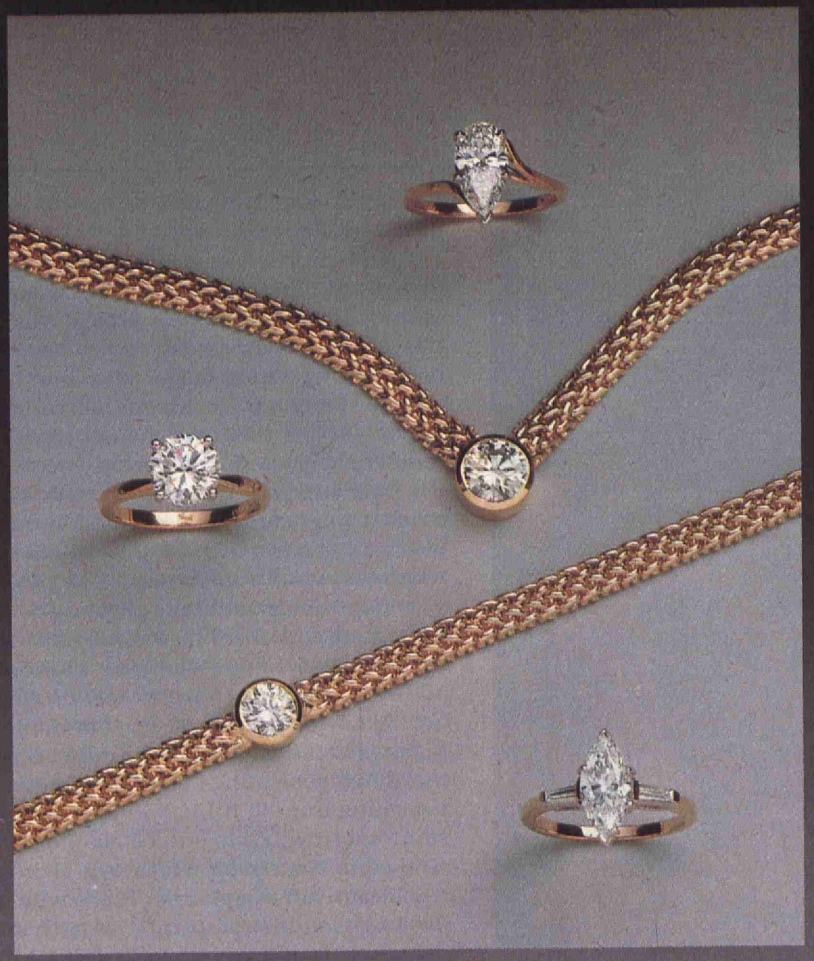

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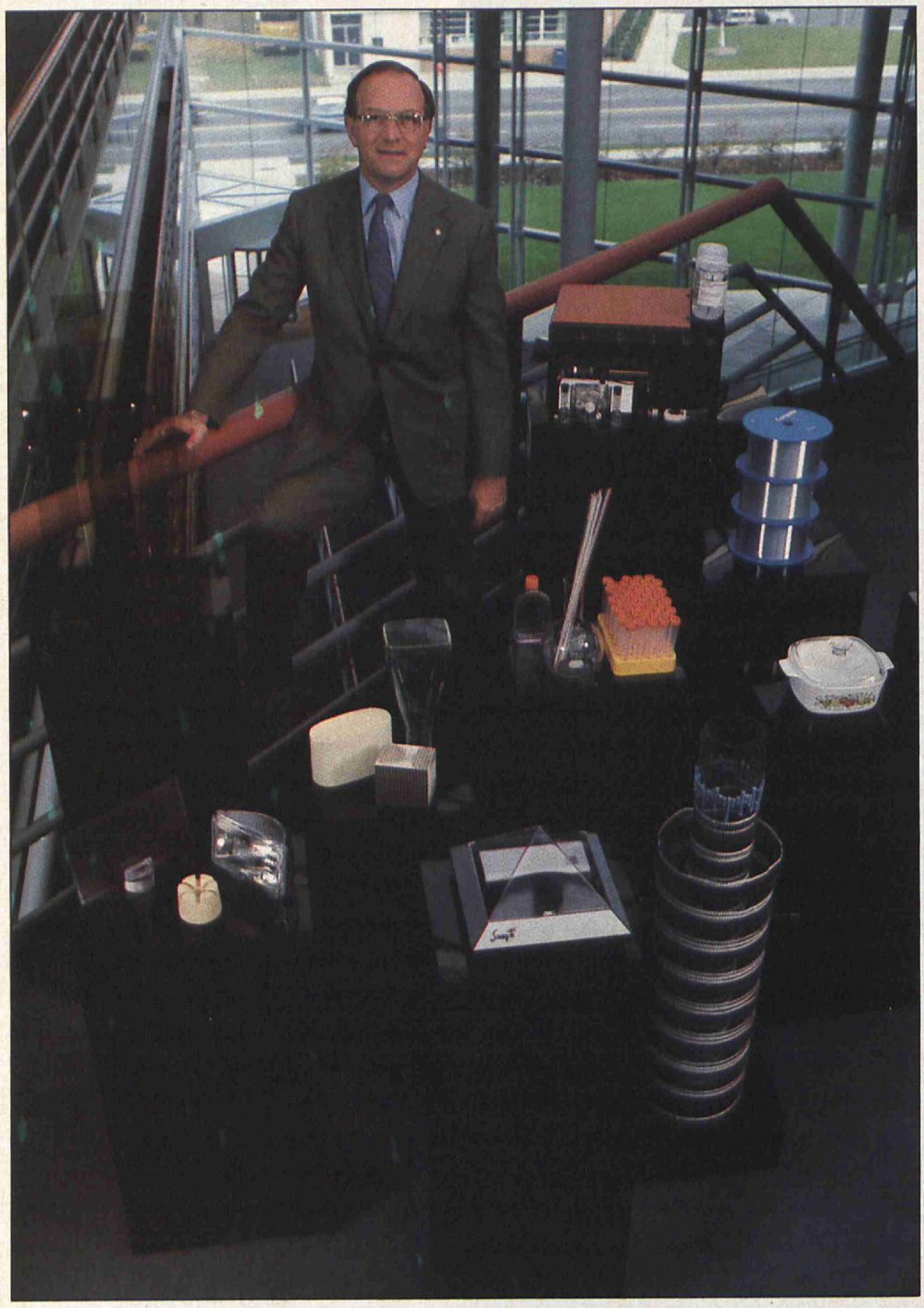


Surrounding President Thomas C. MacAvoy, 53, a Ph.D. who was formerly a chemist in Corning's research lab, is a sampling of the company's 60,000 products, from test tubes and Corning Ware through sealed-beam headlamp parts and thermometer tubing to a blood gas analyzer and ceramic nozzles for casting steel.

that's changing. Now they realize that you need cash flow to do good."

There's probably some truth in these explanations. Flowing out amid rich wreaths of smoke from the Montecruz cigars his father also smoked, as do his brother and one Corning top manager after another, Amory Houghton's courteous talk certainly sounds just different enough from an ordinary businessman's to make you wonder. But his explanation of what made such a rich man go into business doesn't sound like a dilettante's; it's too clear about the realities of wealth and power: "The people who take things out of the ground and do something with them are the ones that create the basic wealth—whether it's sand, or oil, or iron ore, or green beans, or what. The rest depends on that. The fun thing is to be right at the fulcrum, the pulsebeat of this thing, generating the force rather than benefiting from it. If I had to hang up my suit tomorrow, I'd like to be able to say I worked in something which was bedrock significant, not peripheral." That's why he likes keeping his company's research and corporate headquarters tucked into the same western New York valley with much of its manufacturing. "You get a sense of the reality of life," he says.

Looking for the long ball

However much paternalistic, family-owner sentiments are responsible for Corning's present crunch, over the long haul the whole complex of these attitudes has probably done more good than harm. Its most important effect, says Jamie Houghton, the vice chairman, is that "you're really looking for the long ball. You don't have this commitment to the next quarter."

As one result, the lab that's produced Corning's golden eggs since 1908 is sacrosanct and is annually offered up over 5% of the company's revenues. "Through thick and through thin, the Depression and everything, we swallow hard and keep on with the research," Amory Houghton notes. "You have to be so patient," he adds, for rewards are long in coming and—since a missile nose cone material

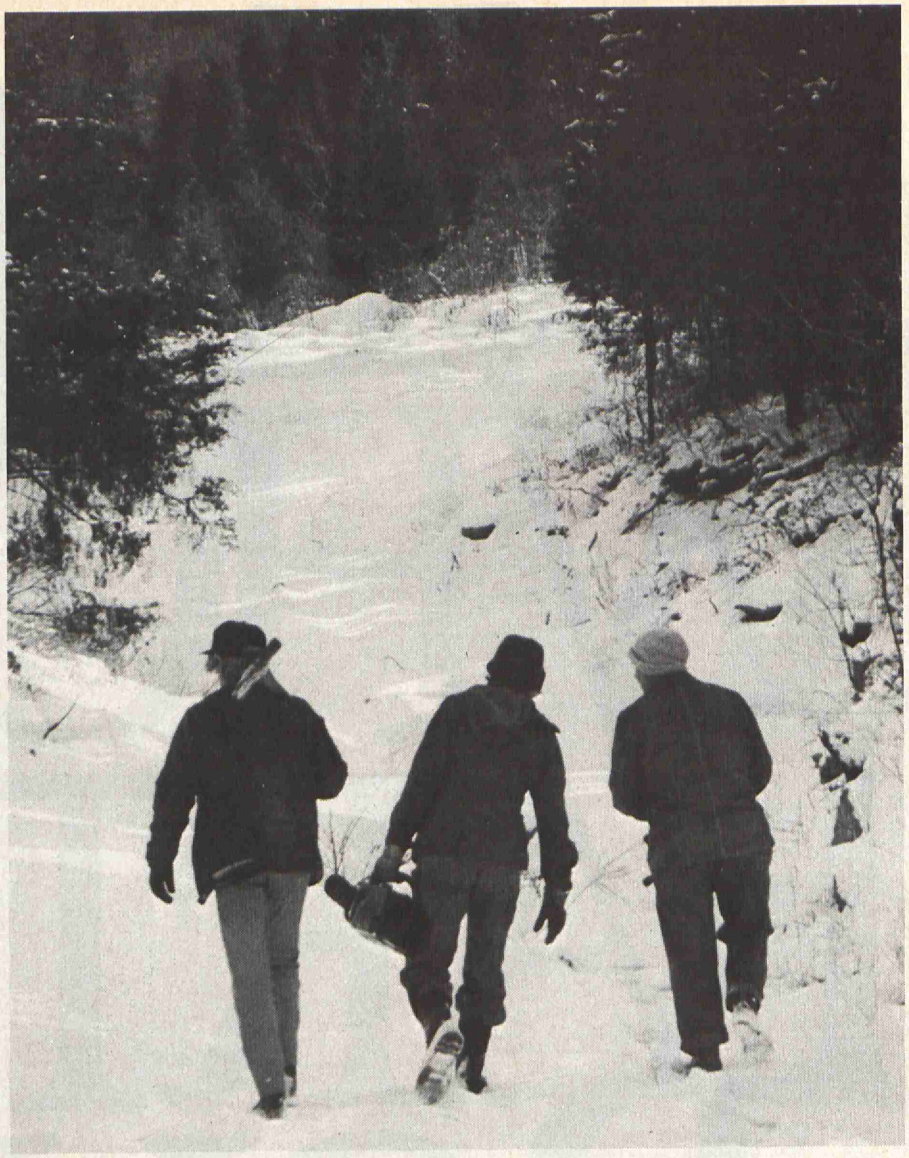
may only really pay off when made into Corning Ware—they never come in the expected shape.

Because part of the pleasure of business is being in charge, not many professional managers have much use for 50-50 joint ventures. But with slightly different personal ambitions, Corning's family managers have been comfortable with such ventures, crucial to their company's success since the Thirties, when Owens-Corning Fiberglas was founded. Corning had the invention; Owens-Illinois had needed capital and experience in huge-scale glass melting, along with some secondary patents potentially able to stymie Corning and thus better off neutralized. Having reaped great benefits from OCF, Corning will follow Owens-Illinois's lead and cash in its chips by 1986, under court order to dispose of its remaining 24% holding.

The most valuable asset

Even more golden has been Dow Corning, one of the nation's two major silicone manufacturers. Again the original invention was Corning's, but, says Amory Houghton, "Really a chemical process and a specialty chemical marketing knowledge were required, so therefore our alliance with Dow was the best thing that ever happened. If there was a partner that could take us into that in a big-league fashion rather than just fiddling around, that was what we wanted"—especially since General Electric and Union Carbide were strongly plugging away in that same area. The result: "The most valuable asset Corning has is Dow Corning," in one analyst's judgment. Corning can do this, says Jamie Houghton, because its management has no emotional investment in having total control and no qualms about seeing earnings appear on the income-from-investments line of its financial statement rather than on the operating-profit line.

For the Houghtons what counts isn't to be managerial superstars, applauded by Wall Street, but to keep their golden goose laying. The family's managed that for 131 years, and this generation's new strategy promises to refeather the nest. F



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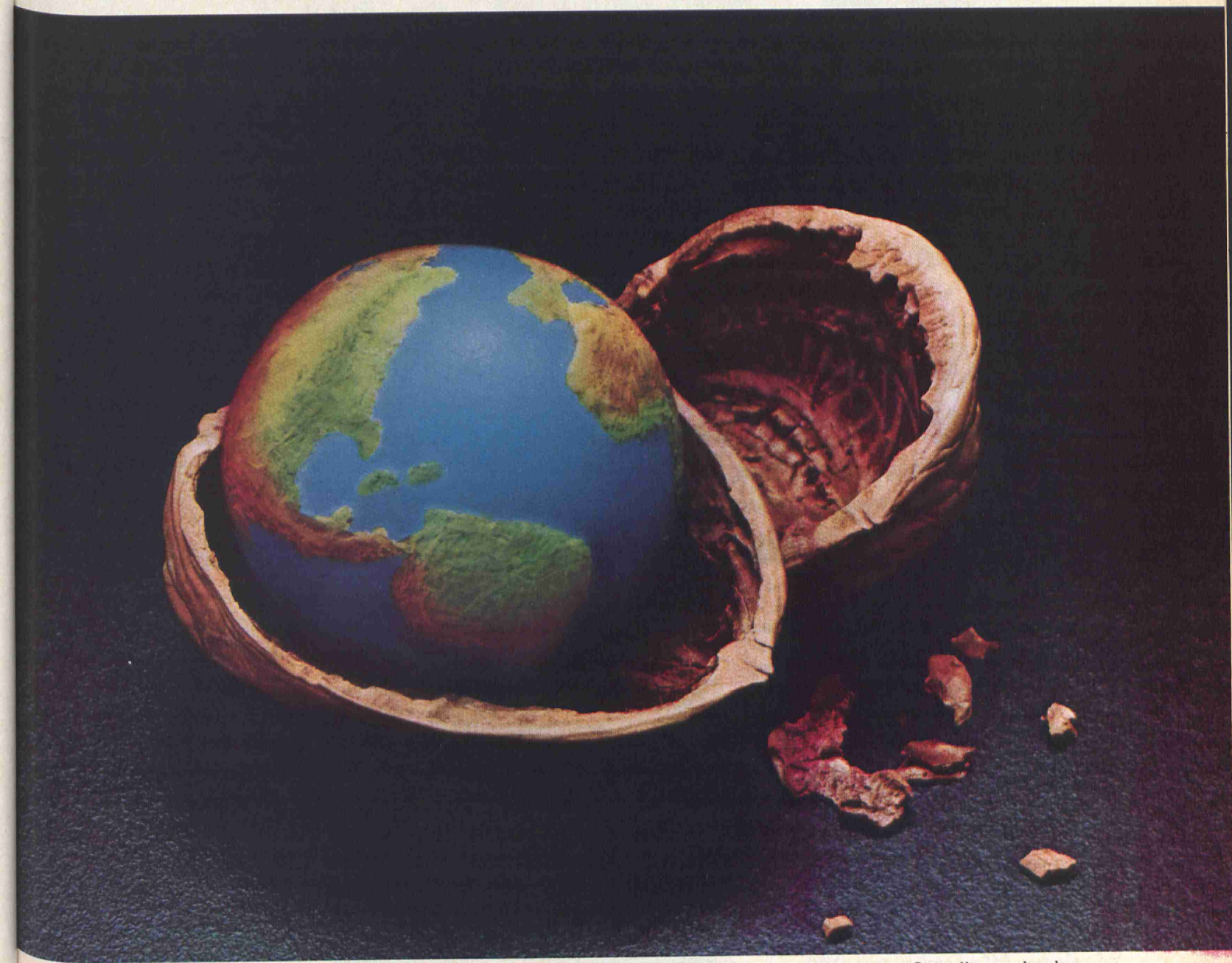

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SOCIAL SECURITY

Heading for the Wrong Solution

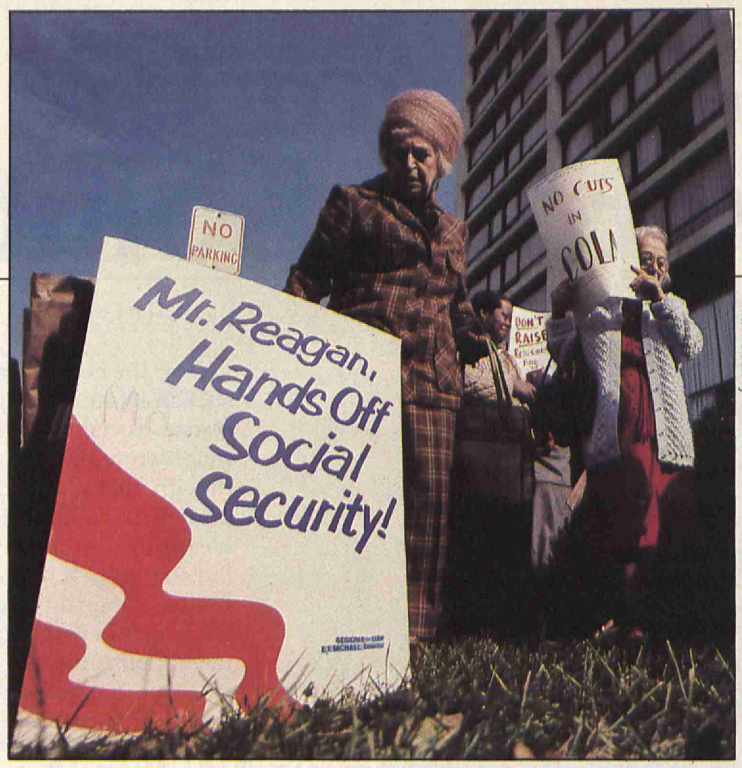
by A. F. EHRBAR

Congress will cope with the present crisis in Social Security, but odds are that it will pass up the opportunity to make some corrections that would save the system from a sickening plunge further ahead. The trouble is likely to be hidden for a time by temporary prosperity. Once the financing crunch of the Eighties is past, the Social Security retirement and disability programs should have 25 years of easy traveling. But after that comes the swift, downhill ride to bankruptcy as the baby boom generation starts drawing pensions. That sounds like a long time off, but the clock is ticking fast. The middle of the second decade of the 21st century is no more distant in the future than the 1950s are in the past.

Over the next few months Congress will suck in its stomach, puff out its chest, and rescue Social Security from impending insolvency. Unfortunately, it looks as though that's all Congress will do. The present Social Security crisis, clearly visible for the last four years, once loomed as the chance of a decade to bring about essential, long-run changes in the system. Reformers saw the short-run problem as a rare opportunity to open up the whole structure for inspection and to sell Congress on modifications that it wouldn't otherwise consider. But Social Security was so thoroughly politicized during the fall election campaign that Congress seems unlikely to look beyond the quickest, most expedient fix available.

The solons in Washington usually deal with Social Security crises by slapping Band-Aids on the problems and declaring them solved. This time around they'll have to use tourniquets. Otherwise, the Social Security Administration will exhaust its reserves and pension checks will start going out late. The trust funds (as the reserves are called) for the old age and disability pension programs will go dry by July. Congress will almost certainly keep the checks to beneficiaries going out on time by letting the administrators borrow from the Medicare trust fund, as they already are doing. But continued borrowing will soon deplete the Medicare fund as well. At the very latest, the Social Security system will run out of money late in 1984—just in time for the next election.

To escape that political nightmare Congress has to trim pension benefits or boost Social Security revenues by between $10 billion and $15 billion next year and by as much as $26 billion in 1984. But it will take a whole lot more to put the retirement and disability programs on a solid footing. Gradually building the trust funds for those programs up to 15% or more of annual benefits—the level of reserves needed to avoid the kind of cash bind Social Security is in now, with the funds empty—will require benefit cuts or revenue increases



Mark Godfrey

With the Greenspan commission meeting inside, Gray Panthers take to the street in front of the Ramada Hotel in Alexandria, chanting, "No ifs, no ands, no buts, no cost-of-living cuts." It's a scene that's likely to become very familiar as Congress wrestles with the Social Security deficit.

totaling some $150 billion to $200 billion over the next seven years.

The best clues to what Congress will do come from the National Commission on Social Security Reform, a bipartisan group of 15, familiarly known as the Greenspan commission after its chairman, economist Alan Greenspan. The deliberations of the commission make it clear that Congress will need an assortment of measures to close the multibillion-dollar gap. One probable step is to boost revenues by bringing some federal employees within the system. Congress may also alter the cost-of-living adjustments that have pushed Social Security pensions up faster than wages in five of the last seven years. But most surely, the Social Security system will get some huge infusion of new money in the next few years—from higher payroll taxes, special excise taxes on things like gasoline and liquor, or loans from the Treasury. Indeed, the payroll tax increases that some Congressmen are talking about are so large that they would take back most of next year's 10% income tax cut.

Six is not enough

The immediate crisis in Social Security resulted from a combination of congressional profligacy and the economy's dismal performance over the last four years. In 1977 Congress passed a series of enormous Social Security tax increases to pay for benefit improvements totaling about 30% that it had bestowed in the early Seventies. The payroll tax rate on workers and employers (each pays half) went from 11.7% in 1977 to 13.4% this year and is scheduled to rise to 15.3% in 1990. The "wage base" of maximum taxable earnings jumped from $16,500 in 1977 to $29,700 in 1981 and is now rising at the same rate as average wages; it is $32,400 this year and will be $35,700 for 1983. The maximum employer-employee tax will reach $4,784 next year.

The 1977 tax package was supposed to have kept Social Security humming along well into the next century. The 2.6 percentage points of the payroll tax allocated to the hospital insurance portion of Medicare has in fact proved adequate, at least for now. (Doctor bills, Part B of Medicare, are paid mostly out of general revenues.) But in setting the tax rates to support retirement and disability pensions, Congress assumed that the economy would enjoy low unemployment and fast productivity growth, brave assumptions that couldn't have been more wrong. Since benefits are adjusted upward each July in step with the consumer price index, the sorry performance of real, inflation-adjusted wages has had a wrenching effect on Social Security finances. In the last four years, pensioners received cost-of-living increases totaling 50%, while the wages that determine revenues rose only 37%.

If Congress could get the money to pay benefits through the Eighties, the retirement and disability portions of Social Security (known as the cash benefit programs) would be well fixed for the next 35 years. The 15.3% payroll tax rate that takes effect in 1990 will swell revenues. Shortly after that, the comparatively small age cohort born in the Depression years will begin to retire. The cash benefit programs—taken alone—could run up a cumulative *surplus* of $700 billion or more (in 1982 dollars) between 1990 and 2015, without any benefit cuts or further tax increases.

However, Social Security is sailing into other storms that will send those grand surpluses to the bottom. The immediate financial troubles are, in fact, the least in a series of problems that will keep the system in extremis virtually forever. Unless the growth of medical costs is curtailed sharply, which seems highly improbable, the currently flush hospital insurance fund will go broke just about the time that conditions turn sunny for the pension programs. The prospective Medicare deficits are so large that they more than offset the prospective surpluses in the old-age and disability programs.

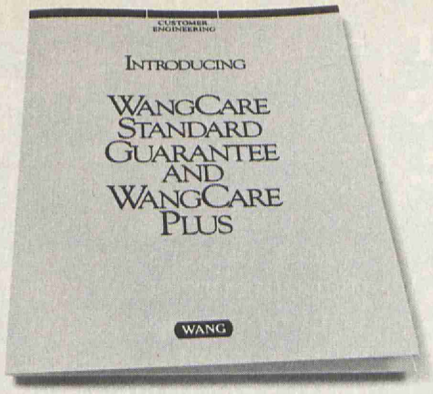
Boom, you're broke

The thunderheads will roll in around 2015, when the baby boom generation begins to retire. The combined employer-employee payroll tax rate needed to support the baby boomers in their sunset years would be more than 25%, based on "intermediate" demographic and economic assumptions of the Social Security Administration. A more pessimistic set of assumptions, which some experts believe more probable, yields a payroll tax rate of 40% or more. That means a potentially mutinous situation in which workers would be turning over $1 of every $5 of their paychecks to support the elderly.

Experts of every political stripe, apart from diehard expansionists like former Social Security Commissioner Robert Ball and Florida Congressman Claude Pepper, recognize that the only answer to the Social Security dilemma is a substantial re-

continued

Research associate: Peter D. Petre



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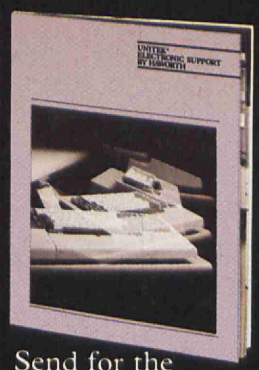

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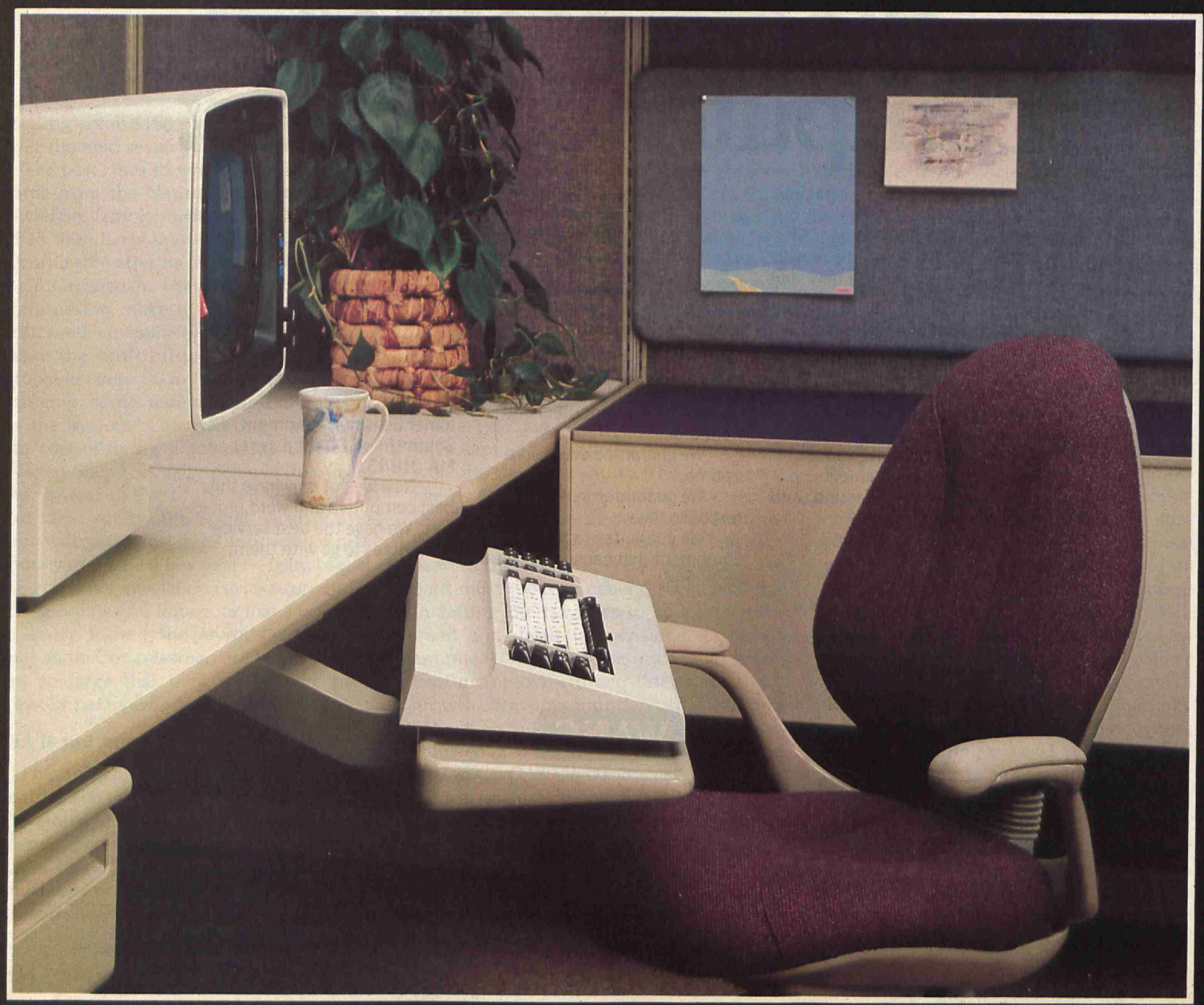

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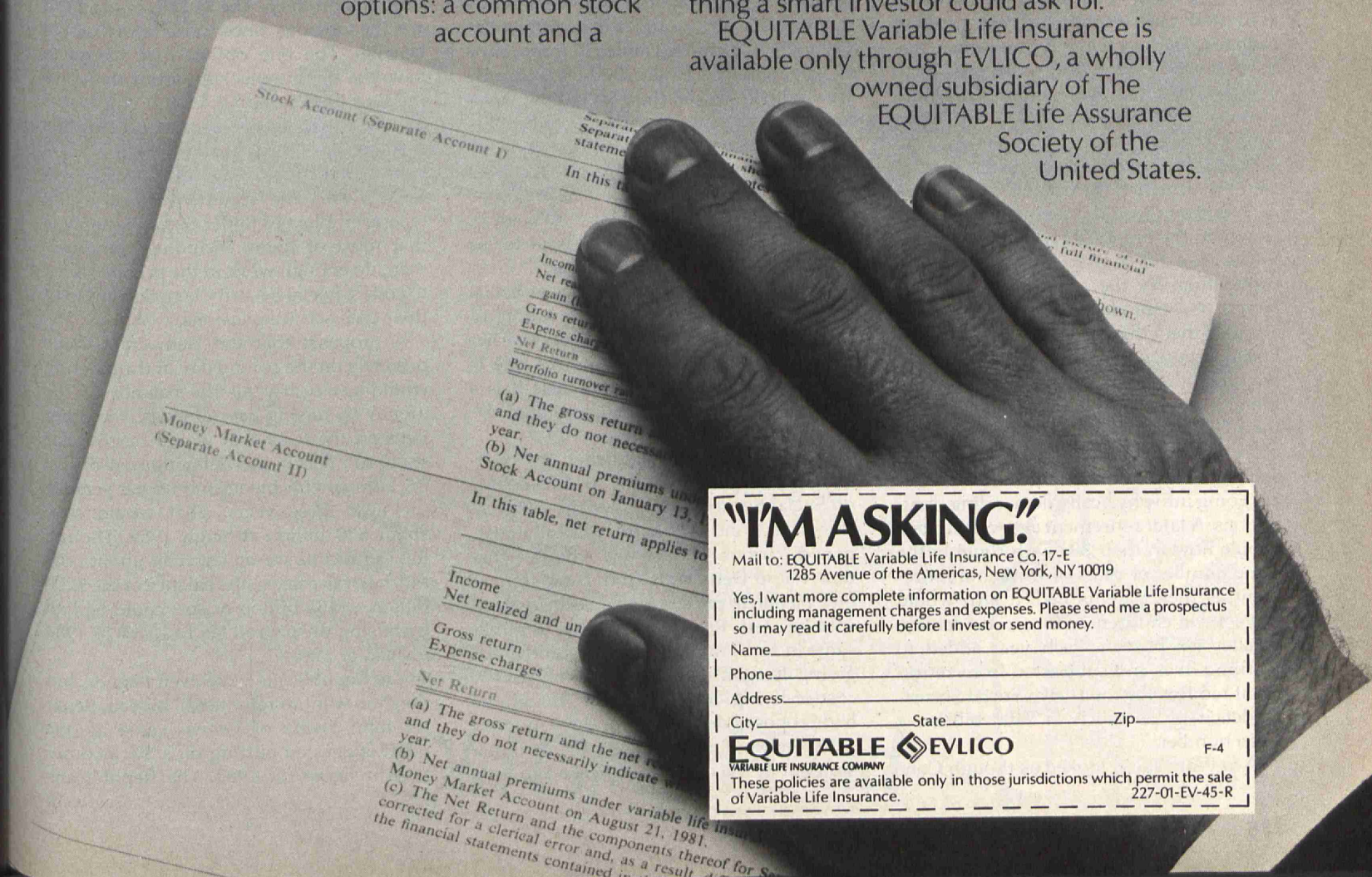

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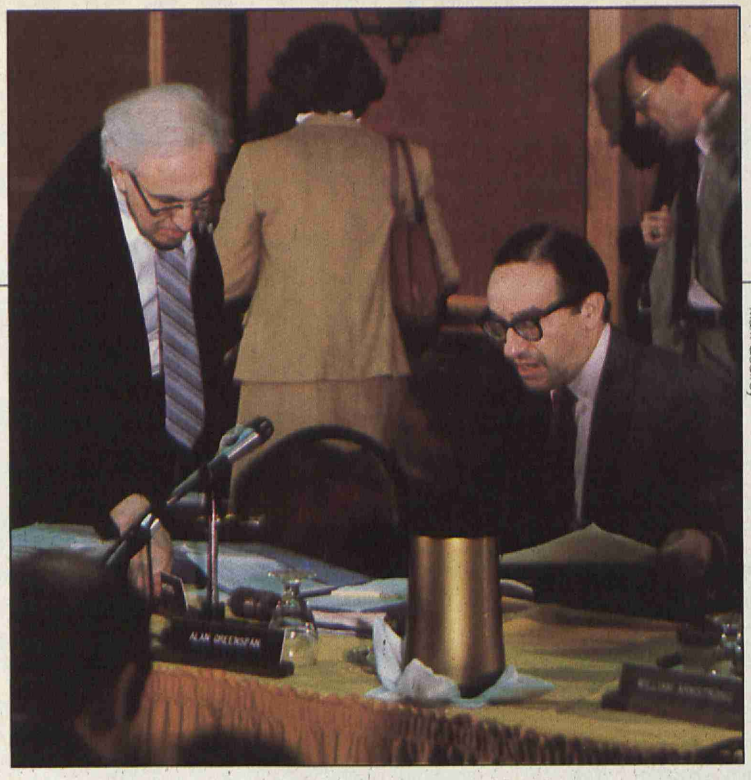


Mark Godfrey

Executive Director Robert Myers (left) and Chairman Alan Greenspan have moved the Social Security reform commission to a consensus on the size of the system's financing problem. Getting agreement on solutions will be a lot tougher. Myers, 70, was chief actuary of the Social Security system from 1947 to 1970.

duction in the growth of benefits—which needn't mean penury for the old. Considerable long-term savings could be achieved with comparatively modest changes, such as raising the retirement age to 68 for those who will retire after 2010 and reducing the benefit formula. Under present law, workers who earn average wages will get tax-free pensions equal to 41% of their pretax incomes. Martin Feldstein, chairman of the Council of Economic Advisers, would like to reduce that slowly to the pre-1970 level of 35% or so.

The case for a later retirement age is compelling. By the turn of the century, people 68 years old will have more years ahead of them than 65-year-olds had when Social Security began. And most people are spending more years in school and beginning their working lives later than their Depression-era counterparts. What's more, younger workers should be able to stay on the job later in life because fewer are going into physically demanding occupations. A later retirement age would leave people now in their 30s with roughly the same number of years of work and retirement as their parents had. It also would leave their children with a considerably smaller tax burden. Each year added to working lives and subtracted from retirement reduces the long-term Social Security deficit by as much as $400 billion, a large number.

Two years ago it looked as though Congress might enact some major reforms. President Reagan had campaigned on the promise to eliminate the long-term deficit in Social Security, and a few influential Democrats, including James R. Jones, now chairman of the House Budget Committee, and Jake Pickle, chairman of the Ways and Means Social Security subcommittee, were talking out loud about bona fide reform. However, the Reagan proposal set off such a howl from senior citizen groups that House Speaker Thomas P. O'Neill Jr. seized on Social Security as *the* issue to use against the Republicans this year.

The triumph of the old politics of Social Security is plainly evident in the actions of the Greenspan Commission. Unlike earlier Social Security commissions, this one is worth paying attention to because it is a dress rehearsal for the congressional debate that begins in January.

President Reagan established the commission a year ago, mostly to stifle debate on Social Security until after the congressional elections. Greenspan dutifully postponed serious discussions, though that didn't stop Democrats from campaigning on a pledge to protect Social Security from cold-hearted Republicans. The Republicans, in turn, ran a television commercial giving Reagan credit for last July's 7.4% cost-of-living increase, even though he had proposed delaying it for three months.

Greenspan finally brought the commission out of the closet two weeks ago for a three-day session in the ballroom of a Ramada Hotel in Alexandria, Virginia, while a platoon of Gray Panthers marched outside. The proposals the eight Republicans and seven Democrats came up with, and the few agreements reached by the entire commission, made it clear that the effectiveness of the Democrats' electioneering had killed any appetite for true reform. As an aide to a Republican legislator on the commission describes its goals, "We're looking for the easy changes that will anger the fewest people."

Bringing in the feds

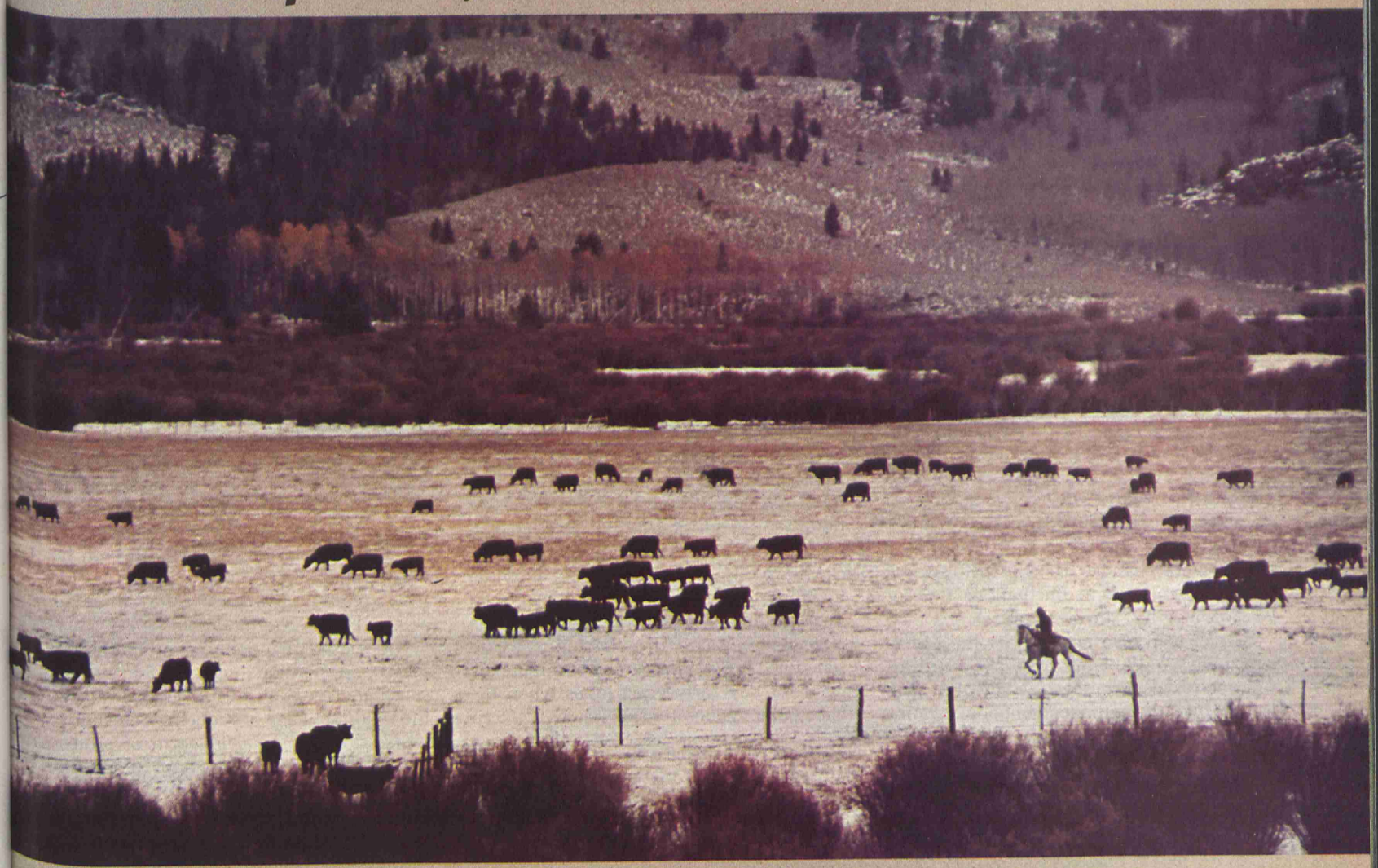
The commission's principal accomplishment was to agree that the financial hole in the cash benefit programs during the rest of the Eighties is $150 billion to $200 billion deep. The only ways to fill it are the obvious ones: raise taxes or cut benefits. The one option that seems to have the unanimous support of the commission is to bring all federal employees with less than five years of tenure into the system. The taxes paid by those workers would total about $32 billion over the next eight years. The argument for bringing federal employees under Social Security is that most of them, including Congressmen, do enough work in the private sector to collect Social Security benefits on top of their civil service pensions.

A proposal that the Democrats made privately on the second day of the meeting would get nearly all the balance of the money by raising payroll taxes. The other item on their list that would narrow the short-run deficit was delaying cost-of-living adjustments by one month per year for the next three years. That would save about $30 billion through 1989. Though the Democrats weren't specific about how much to raise taxes, the balance of the $200 billion—$135 billion or so—could be had by raising the payroll tax to 15.3% in 1984 instead of 1990.

The Republicans were even vaguer, but they too want to raise taxes. Indeed, Senator John Heinz of Pennsylvania at one point suggested putting on a 5% income-tax surcharge for 1983. The Republicans

continued

The Spirit of America



Wyoming Winter by Dick Durrance

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"Borrowing from general revenues would be like asking Amtrak to bail out Braniff."

were saying, however, that tax increases ought to be balanced by reductions in the Social Security cost-of-living adjustments.

One interesting idea that has been gaining adherents is a scheme developed by Robert Myers, the commission's executive director. He wants to tie the annual adjustment to wages instead of prices. The annual cost-of-living adjustment would be 1.5 percentage points less than the increase in average wages. Using that formula, Social Security revenues and expenses won't go any further out of balance, even with an aging population. Greenspan likes the formula. "Tying benefits to the C.P.I. and taxes to average wages has made the system grossly sensitive to fluctuations in economic activity," he observes.

Greenspan also argues that the Myers formula would be fair to retirees. Full inflation protection may be a laudable goal, but it piles the entire load of poor economic performance on workers. They pay once in the form of falling real wages and again in the higher payroll taxes needed to keep the elderly whole. In the period since 1975, when price indexing raised benefits 94%, the Myers formula would have yielded an increase of only 69%. Commission Democrats, who view reductions in future benefit increases as outright cuts, failed to perceive the beauty in Myers's idea.

One suggestion that has little support right now but will likely become a serious option in coming months is a bailout with loans from the Treasury, facetious as that might seem. As Senator William Armstrong, a Colorado Republican and a commission member, puts it, "Borrowing from general revenues would be like asking Amtrak to bail out Braniff."

The commission is set to meet again on December 10 to put together its final recommendations, but it is unlikely to reach a consensus on any detailed proposals. These negotiations are just the preliminaries before the main event in Congress, and neither side wants to yield too much too soon. In addition, no one knows what the two most important players—O'Neill and Reagan—are prepared to accept. As Jake Pickle describes the situation, tripping over his metaphors on the sidelines, "If Tip and the President could just get together over a couple of Irish whiskeys and agree not to make it a political football, that would enable us, the players, to get out there and run with the ball."

In the final analysis, the costliest aspect of the short-run cash squeeze may be the way it has diverted attention from the larger long-run problems. The Greenspan Commission has been so preoccupied with the immediate dilemma that it effectively ratified Bob Ball's contention that there really is no long-term problem worth worrying about. The commissioners concluded that the long-term deficit amounts to only 1.82% of taxable payroll. That is, an increase of 1.82 percentage points in the payroll tax above the current rate and scheduled future rates would eliminate the need for any further tax hikes when the baby-boom generation retires.

Opting for severity

The 1.82% figure is technically correct, provided that one accepts the "intermediate" projection that many economists believe is actually the "best case" scenario. The pessimistic projection, which the commission itself says is a more reasonable guide to the next seven years, shows a long-term deficit equal to 6.47% of payroll. Moreover, the 1.82% calculation holds true only if taxes are raised now. Since Congress isn't about to raise taxes to bankroll expenses that come due in 60 years, the deficit—in the percentage-of-payroll sense—grows a little each year. The calculation also conveniently ignores Medicare. Adding in the hospital portion of Medicare lifts the deficit, under even the intermediate assumptions, to 7%.

The commission's ideas for bridging the long-range financing gap are even more modest than its assessment of the problem. The options put forth by the Democratic faction include a one percentage point payroll-tax increase (half a point each for employers and employees) and a modest reduction in the benefit formula, both effective in 2020—37 years from now. Ball says he endorses those ideas only because he feels that Congress should make some gesture to reassure cynical young workers that they really will collect something. Says an exasperated Michael Boskin, a Stanford University economist who heads up the National Bureau of Economic Research's Social Security studies, "Ball has ruled out every severe option except the most severe of all—doing nothing about the long-term problem."

The Republicans, meanwhile, haven't made any recommendations for the long term, though Greenspan would like to gradually cut the benefit formula back to where it was prior to 1970, and both he and Congressman Barber Conable Jr., for two, have advocated raising the retirement age for people now under 45.

Greenspan and the other Republicans may be so silent on long-term reforms because any mention of moves like raising the retirement age or reducing benefit formulas draws such a firestorm of protest from the senior-citizens groups, organized labor, and liberal Democrats who make up the Social Security lobby. Talk of even distant benefit reductions is incendiary because it undermines the myth that Social Security is some kind of insurance system, or that benefits somehow have been earned. In truth, benefits are whatever Congress decides to dole out, and tax rates are determined by the cost of paying current beneficiaries. Also, the senior citizens recognize, cutting future benefits could establish a precedent for cutting current ones.

It is part of the sorrowful lot of the baby-boom generation that it will have to finance both its parents' retirement and a substantial portion of its own. The cruelest policy of all is to perpetuate the illusion that the following and smaller generation will be willing and able to maintain the present level of benefits for the baby boomers. Waiting, and changing the rules shortly before they retire, would be as inhumane as slashing the benefits of current pensioners. It may also prove politically impossible. Come 2010 or 2015 the Gray Panthers will be marching in regiments, not platoons. F

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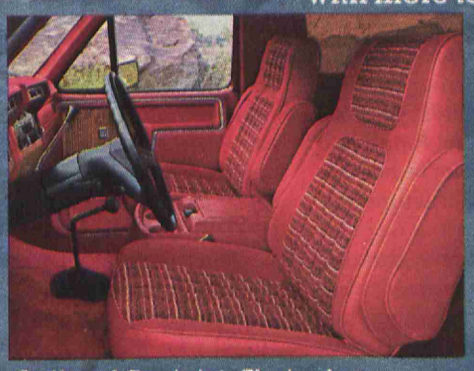

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PUBLIC WORKS

Infrastructure Chic: How to Judge the Jobs Bills

by ALLAN T. DEMAREE

Surely you've heard the latest. "Everybody's favorite term in Washington," says a bureaucrat, "is infrastructure." According to one recent magazine article, America's bridges and tunnels, subways and sewers, highways and byways are "heading toward collapse." Politicians see this as a catastrophe of the best kind. With 11.6 million unemployed to get working, what better chance to roll out the pork barrel and rebuild America? As an aide to the Senate Environment and Public Works Committee put it: "We'd kill two birds with one stone."

No one within a stone's throw of the Capitol wants to be last to cast this particular missile. Drew Lewis, Secretary of Transportation, says raising gasoline taxes a nickel a gallon and spending the revenue on highways and mass transit would create 320,000 jobs. Congressman Henry S. Reuss of Wisconsin, chairman of the Joint Economic Committee, suggests the Democrats can generate more jobs for less—600,000 for $3.6 billion. Late last week the Senate Republicans were gathering no moss as they looked for ways to play *Can You Top This?* They plan to counter the Democrats with a cement-mixing lollapalooza of their own in the upcoming lame duck session. "We all smell the same thing out there," says Bailey Guard, majority staff director of the Senate Public Works Committee. "You can see it coming."

Without doubt, America needs repair, but so does the verge-of-doom rhetoric. Supplicants for cash—public works departments, construction companies, unions, and their allies—inflate the nation's infrastructure needs, while politicians exaggerate what public works projects will do for the unemployed. The scariest generalities find their way into print. Congressional staff members write in a *Wall Street Journal* op-ed piece that "basic public facilities threaten to crumble from decades of neglect." A *Business Week* special report talks of "growing numbers of bursting water mains, flooding basements, creaking bridges, collapsing roads, and stalling buses." A *Newsweek* cover story on "The Decaying of America" calls the nation's sewers "subterranean time bombs." These and other articles borrow heavily from Pat Choate, former bureaucrat, now a senior policy analyst at TRW Inc. An author of *America in Ruins* and other works of advocacy, Choate has become the pied piper of infrastructure chic (see box, page 124).

Public works advocates are right that federal, state, and local governments are spending less on fixed capital than they used to. Netting out depreciation and adjusting for inflation, the value of schools, streets, sewers, and other civilian infrastructure grew 3.2% annually in the first two postwar decades. In the last ten years the capital stock grew only 1.7% annually. Conditions around the country vary markedly: Newark, New Jersey, estimates that 85% of its street mileage needs major repairs, resurfacing, or reconstruction; the city can't afford the bill. In Dallas, by contrast, the streets are steadily being improved. Things are worst in impoverished old cities that have been axing capital budgets and deferring maintenance while spending more on popular services.

Whether all declines in public investment are bad is debatable. After increasing 3.8% annually in the first 20 postwar years, the value of roads and bridges has edged up only 0.7% a year for the past decade. Barry Bosworth, an economist at the Brookings Institution who has been studying capital investment, thinks this unfortunate. "We know we're building roads where people are moving," he says, "so to get essentially zero growth there must be big declines in other places." But schools are a different matter. The growth of investment in them fell from 5.3% a year in the two postwar decades to 1.2% in the last ten years. Many schools have been closed and more probably should be sold as office space. Elementary school enrollment dropped 15.4% in ten years.

Trafficking in folklore

Much of what's said about infrastructure is best considered folklore. The executive director of the League of Iowa Municipalities, who has likened the state's roads to the Ho Chi Minh Trail, might be surprised to learn that, according to the latest Federal Highway Administration data, drivers can travel at 55 mph in peak hours on more miles of freeways, expressways, and non-urban arteries than they could three years earlier. While its estimates of the nation's fixed capital are the best available, the Commerce Department admits they have shortcomings. Commerce depreciates buildings, bridges, and sewer systems over standard assumed lives and makes no distinction between well-maintained facilities and those that have gone to pot. Sometimes older is better: the Louisville

Research associate: Ann Goodman

Adam Bartos

Shedding concrete, Manhattan's elevated Riverside Drive, built in 1898, exemplifies the decrepit public facilities that are visible in many cities. Less apparent is evidence that laws to create jobs can remedy the problem efficiently, or vice versa.

Water Co. reports that mains installed from 1926 to 1930 fail nearly four times as often as those installed from 1862 to 1900.

Perhaps buses are breaking down more frequently, but proof is elusive. The Urban Institute had so much trouble getting comparable data on vehicle downtime in various cities that it gave up. Some cities counted routine maintenance as downtime; others didn't. Some counted any time a bus wasn't operating, others only deviations from scheduled operation. Finally, downtime numbers were as much influenced by labor practices as by the buses' condition. In New York City, union agreements define loose mirrors as maintenance jobs that can't be performed by bus drivers and require a service call.

The gargantuan amounts repeatedly quoted as needed to rebuild America are, put charitably, imaginative. While declaring that absence of reliable data is a "national disgrace," Pat Choate nonetheless reckons the bill at $3 trillion (roughly the current GNP). Joseph M. Sussman, head of MIT's civil engineering department and no foe of rebuilding, calls the figure "a little bit loaded."

Even more reasonable numbers often reflect gilt-edged standards. The most recent federal survey put the need for investment in wastewater treatment at $119 billion. But this assumes building systems that will make all rivers and lakes "fishable" and "swimmable" by July and will eliminate all polluting discharges by 1985.

According to an oft-cited statistic, as much as $47.6 billion is needed to repair the 45% of the nation's 248,500 bridges that are "structurally deficient or functionally obsolete." That language could persuade a white-knuckled driver to swear off river crossings altogether—until he discovers the definition of "deficiency." In Department of Transportation lingo, deficiency can range from a serious safety hazard to inappropriate "deck geometry"—for instance, a bridge deck that is narrower than the highway and so might cause slowdowns in peak-hour traffic. Limited deck geometry and other less-than-catastrophic conditions account for more than half of bridge deficiencies. Federal fix-up funds are available on the basis of state inspections, so the states have an incentive to exaggerate deficiencies.

Politicians, for their part, have an incentive to exaggerate the number of jobs their initiatives will create. This largely accounts for the dizzying array of figures seen in the press. The *New York Times* recently described a "rule of thumb" that $1 billion spent on highways creates 25,000 jobs while $1 billion spent on sewage treatment generates 35,000. Yet Drew Lewis's numbers for his highway program come to 58,182 per $1 billion. And Henry

This Man Sells Infra-worry

Susan McElhinney

Pat Choate at ruin-side

Pat Choate, 41, is a man with ideas, some good, and no inclination to undersell them. He testifies before congressional committees, writes articles and books, provides research to Congressmen, and is widely quoted in the press. His main theme is that the decline of America's public facilities threatens to become "a critical bottleneck to national economic renewal." For him, the west wing of the Capitol (above), temporarily shored up with timbers, symbolizes the infrastructure's demise.

Choate's ideas are going places. He is urging creation of a National Public Works Bank that would guarantee local infrastructure debts. Congressman William F. Clinger Jr., a Pennsylvania Republican, plans a bill to establish the bank. Choate also wants the federal government to inventory public works, identify deficiencies, and start a capital budget. A bill to do that has 51 sponsors in the House and support from conservative Jack Kemp and liberal Tip O'Neill.

Washington is an ideal environment for Choate. He has a keen mind, missionary drive, a sense of how government works, and a neighborly manner that smacks of his Texas birthplace, Maypearl (named for the wives of two railroad engineers). A Ph.D. in economics (University of Oklahoma), he has worked as a state planner for Oklahoma and Tennessee, an administrator in the federal Appalachian program, and a thinker with Battelle Memorial Institute and now TRW Inc., which he joined in Washington 18 months ago.

Choate's ever quoted *America in Ruins*—co-authored with Susan Walter, a state planner turned GE liaison with state governments—is going into a mass-market edition and has been translated into Japanese. Meanwhile he is on to his next national worry. He's arguing for a U.S. strategy to retrain and upgrade the work force. America's human capital, Choate thinks, is as rundown as its physical capital.

Reuss's figures on bridge painting, sewer maintenance, and the like come to 166,667 jobs per $1 billion.

Those awaiting the imminent arrival of the fat man in the red suit will take these numbers to heart. The boys at the Bureau of Labor Statistics use a computer model to estimate the job-creating power of $1 billion spent in any industry and, killjoys that they are, manage to damp enthusiasm. One might assume, for example, that each job created by one of these schemes would provide a year of full-time work. The first thing one learns from chewing the fat at the BLS, however, is that not all jobs that look equal are created equal. The numbers bandied about don't distinguish between part-time and full-time jobs. An employee who puts in two hours a week counts the same as one who works five days of full shifts. For every 100 jobs in construction, 22 are part-time.

The job totals include not just on-site construction but also the labor employed producing materials and providing services needed to do the work. Sewer construction, for instance, counts not just digging the trenches and laying the line but also trucking the pipe to the site, pouring the steel, and mining the iron ore. Still, with all this counted in, the best the BLS computer can come up with for the jobs in Lewis's plan is 30,000 per $1 billion.

How does Lewis get 58,182? He hauls out the "multiplier." A handy gadget, the multiplier is used to calculate the jobs created by the secondary, tertiary, and quaternary effects of spending. That is, on his way home from work Rocky stops for a beer and tips Betty the barmaid who can now afford to have her nails manicured at Salon Royale by Sally Lou who has been saving up for that skirt over at the Vogue Shoppe where the manager ... Empirical data on the size of the multiplier is scant, but economists generally figure that each job for an original Rocky spawns another as his wages are spent.

To be fair to Lewis, he latched on to the employment issue for the political tug it could give a proposal he introduced nearly a year ago; he has been careful to state that roads, not jobs, are his goal. Raising the 4-cent federal gas tax for road building makes sense: as a user fee, it charges drivers for the highways they wear out. The tax hasn't been increased since 1959 (and is now worth 1.4 cents in 1959 dollars).

For the Democrats, jobs, not roads, are the goal. While dressing up his proposals in infrastructure garb, Reuss doesn't aim to achieve anything more ambitious than filling potholes; in fact his jobs would include inspecting for fire hazards, replacing school-crossing signs, and other work once supported by CETA programs. Even so, the 600,000-job figure is reached only by requiring that no beneficiary be hired for longer than six months. More turnover, more "jobs."

The jobs that vanish

While expounding on the jobs they are creating, the politicians somehow forget about the jobs they will destroy. Faced with higher taxes on gasoline under the Lewis plan, consumers will buy less gas and/or spend less on other things. As spending falls, jobs are lost. The BLS estimates that every $1 billion spent at the pump produces 14,700 jobs (not counting multiplier effects) and on consumer goods and services generally, 33,300 jobs.

Reuss's proposal would be financed by cuts in military spending. Tightening the military's belt may make sense, but jobs could get squeezed out of existence too. Some 25,900 people are employed per $1 billion of military expenditures.

No program Congress adopts will do

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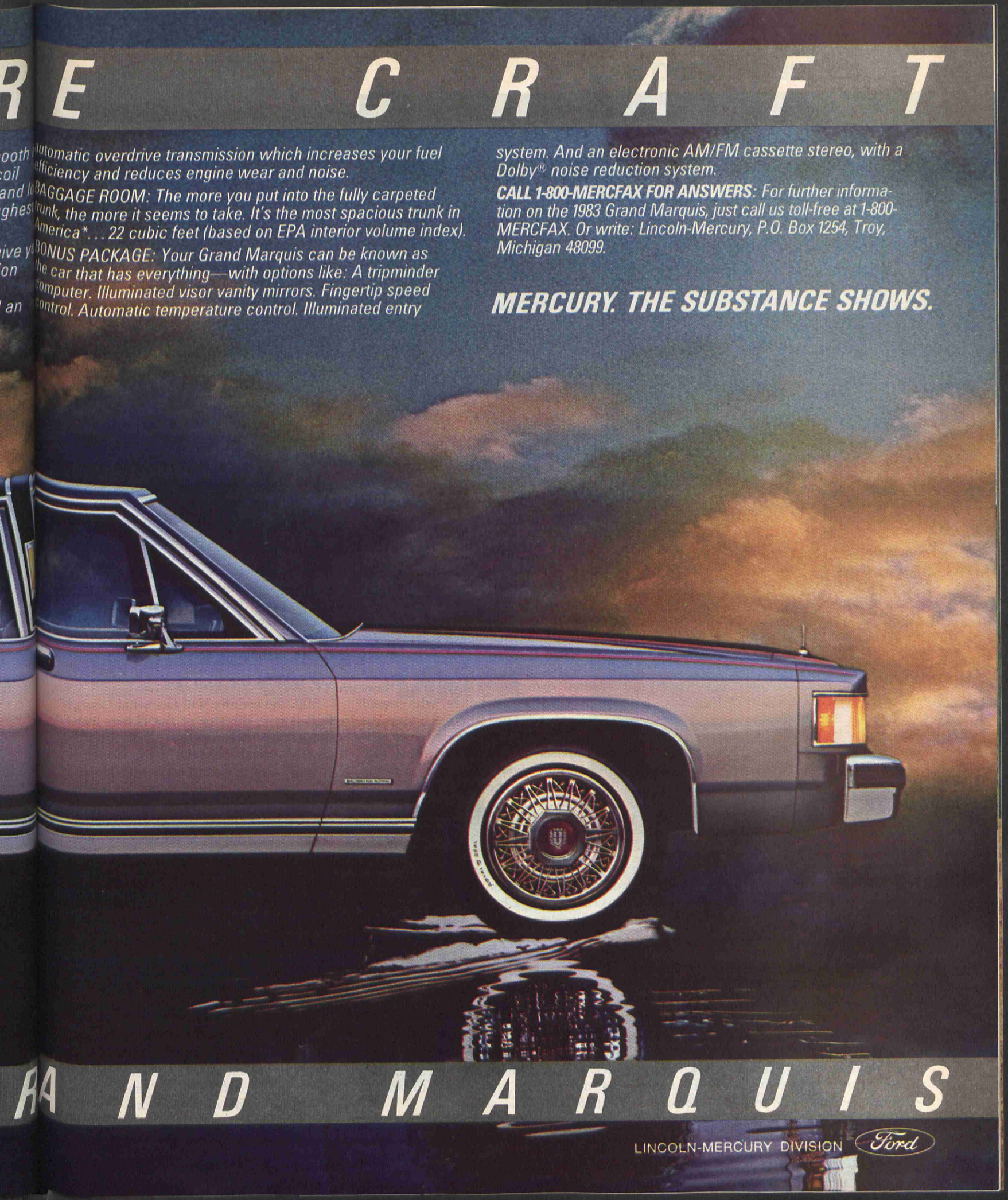

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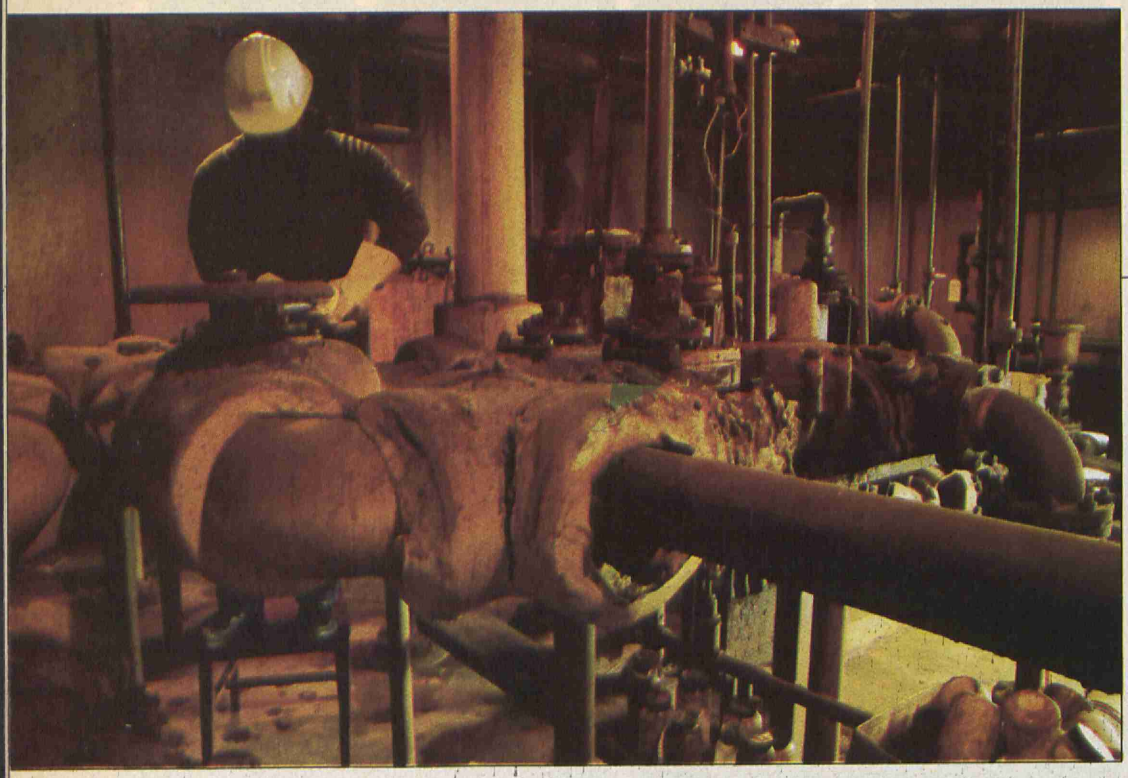

Andrew Sacks

The pump station in Detroit's wastewater treatment plant can handle 1.3 billion gallons a day, but the valves are 40 years old. The Water and Sewerage Department is asking for some $3.8 million in EPA money—75% of the cost of upgrading—to improve the plant. The state used to chip in an additional 5% until, a water and sewer man says, "it ran dry."

much good in this recession. Similar past efforts started up just in time to coincide with recovery, inflating prices of labor and materials as the economy expanded. The Accelerated Public Works program was aimed at the recession of 1960-61 but began in 1962; the Public Works Impact program, for the recession of 1969-70, started in 1972; and the Local Public Works program, for the recession of 1974-75, got going in 1977. The last program began shelling out money nearly 24 months after the economy hit bottom. Local Public Works did ultimately become countercyclical: the final pennies dribbled out of the Treasury in 1980, when the next recession began.

Complex public works take years to crank up and employ few of the nation's neediest. An Office of Management and Budget study estimates that only 12 in 100 jobs financed by the Local Public Works program went to the unemployed—and just over $2 of every $100 went for their wages. On average, unskilled workers kept their jobs less than four weeks. Yet the cost for a full year's job was $70,000.

Most beneficiaries came from outside the high-unemployment areas designated for aid; they were workers brought in by out-of-town contractors. They were paid in conformity with the Davis Bacon Act, which requires compensation to match the area's "prevailing" (read high, union) wages. Says Barry Bosworth, who was director of President Carter's Council on Wage and Price Stability: "To build highways will put a lot of people to work for wages higher than those earned by two-thirds of the American work force."

The politics of jobs programs practically guarantees inefficiencies. Anticipating that they'll receive federal funds for public works, local governments tend to hold their own money back from these projects. Charles L. Schultze, who served the Johnson Administration as budget director and President Carter as chief economic adviser, knows the syndrome well. "The big thing about money," he says, "is it's fungible. After the first year, if a state gets money allocated to high-unemployment areas, it adjusts its own budget to compensate." One analysis of the Local Public Works program suggests that local governments, awaiting federal money, postponed $22 billion of spending, thus lowering the GNP by perhaps $30 billion.

By allocating money to areas of highest unemployment, Reuss's proposal will clang the bell for a titanic wrestling match. "As soon as a formula is announced, all districts and states know what they'll get and start putting pressure on," says Schultze. "Publicly, the argument is about principle; privately, it's who gets what. With most lobbies having access to a computer, boy! they know within ten minutes what they get. It's a game of comparative computer runs."

The Local Public Works program had $22 billion in applications for the first $2 billion available. Pat Choate, then at the Department of Commerce, remembers: "Everybody panics. It's one time only. Let's rip the arms off of our Congressman. Got to get it. So you wind up with turkey projects brought in on a one-time basis. In our regional offices the projects were rolling in by the sackfuls. Our assistant secretary had a list of phone calls, these while-you-were-away slips, stacked a mile high. The poor guy, they just worked him over." If enacted, will the current proposals produce insanity again? Says Choate: "You can just bet on it."

Though President Reagan is right to resist the public works employment rage, the federal government can do some things. One—and it's cheap—is to adopt a national capital budget, as Choate and others propose. That would provide better information on the infrastructure and help legislators make informed trade-offs among competing demands.

Up against the iron law

Still, the country will face what George E. Peterson, director of the Urban Institute's Public Finance Center, calls "an iron law of social behavior": infrastructure "needs" always exceed economic demand or taxpayer willingness to pay. In reality, communities may not need storm sewers capable of handling the decade's single heaviest downpour. Some bridges, adequate indefinitely for auto traffic, may have to be closed to heavy trucks. Peterson says a large part of the gap between resources and wants will be closed not by increasing investment but by lowering gilt-edged standards and finding cheaper ways of replacing and refurbishing.

The effects on jobs should not enter the calculation. An economic recovery could produce more jobs in a single month than can be realistically expected from the employment legislation. Till recovery comes, it's senseless to attempt, in Bosworth's words, "a lot of little micropolicies that basically try to redistribute hardship." Aiming at two birds with one stone will just leave us with a wasted stone. F

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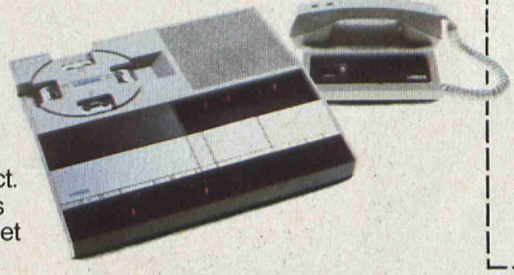

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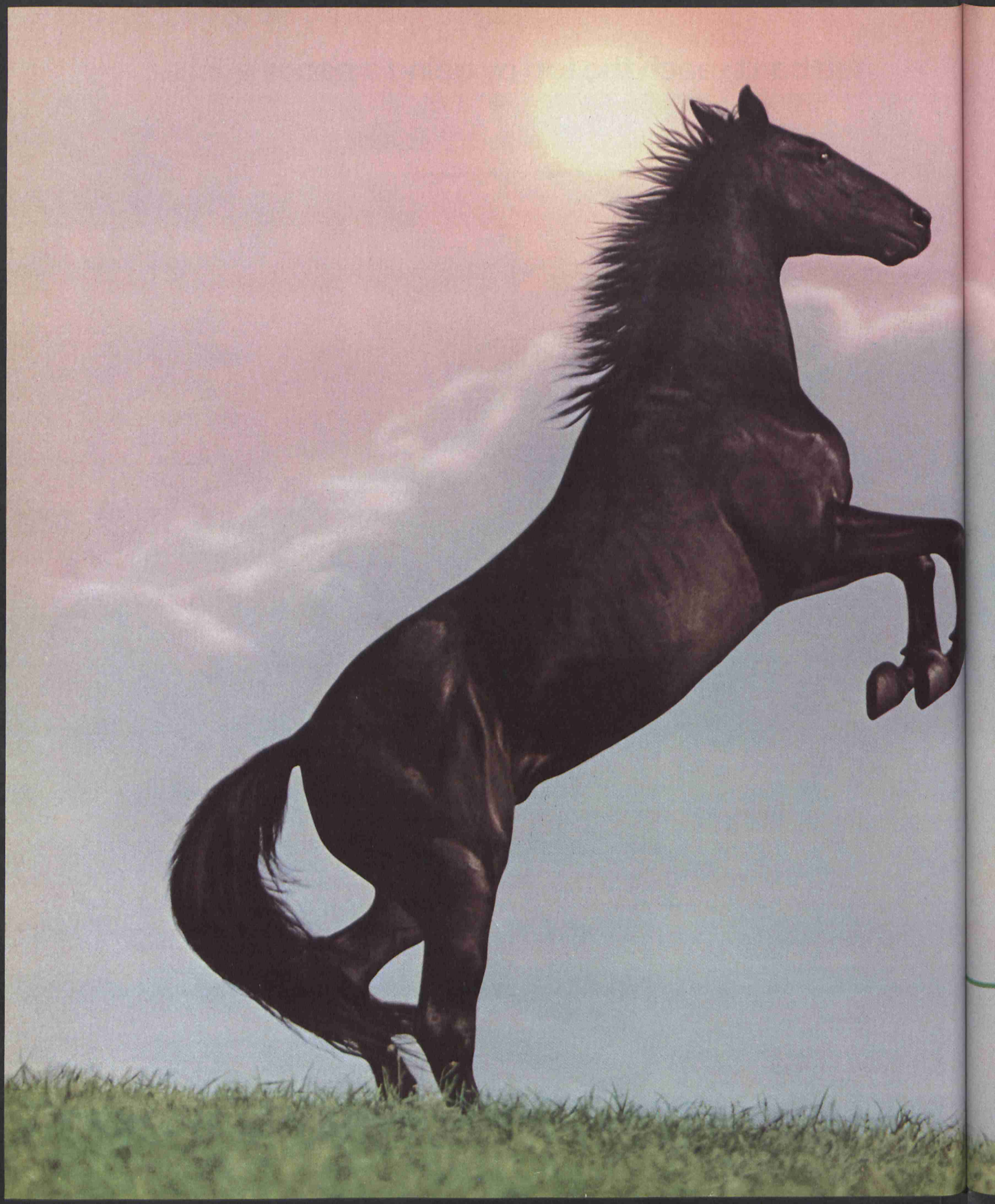

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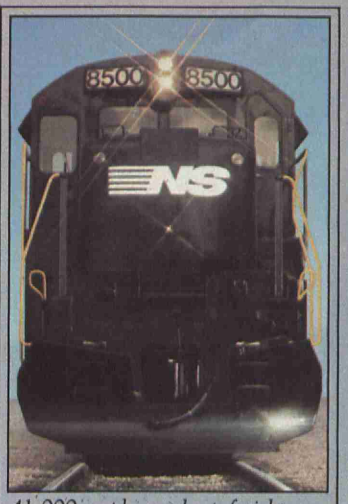

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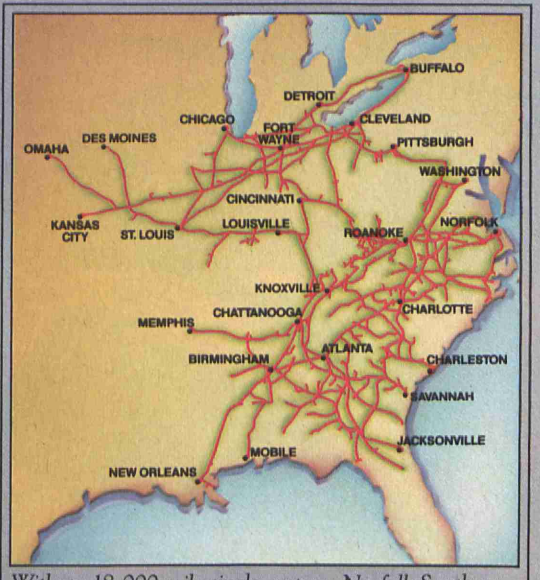

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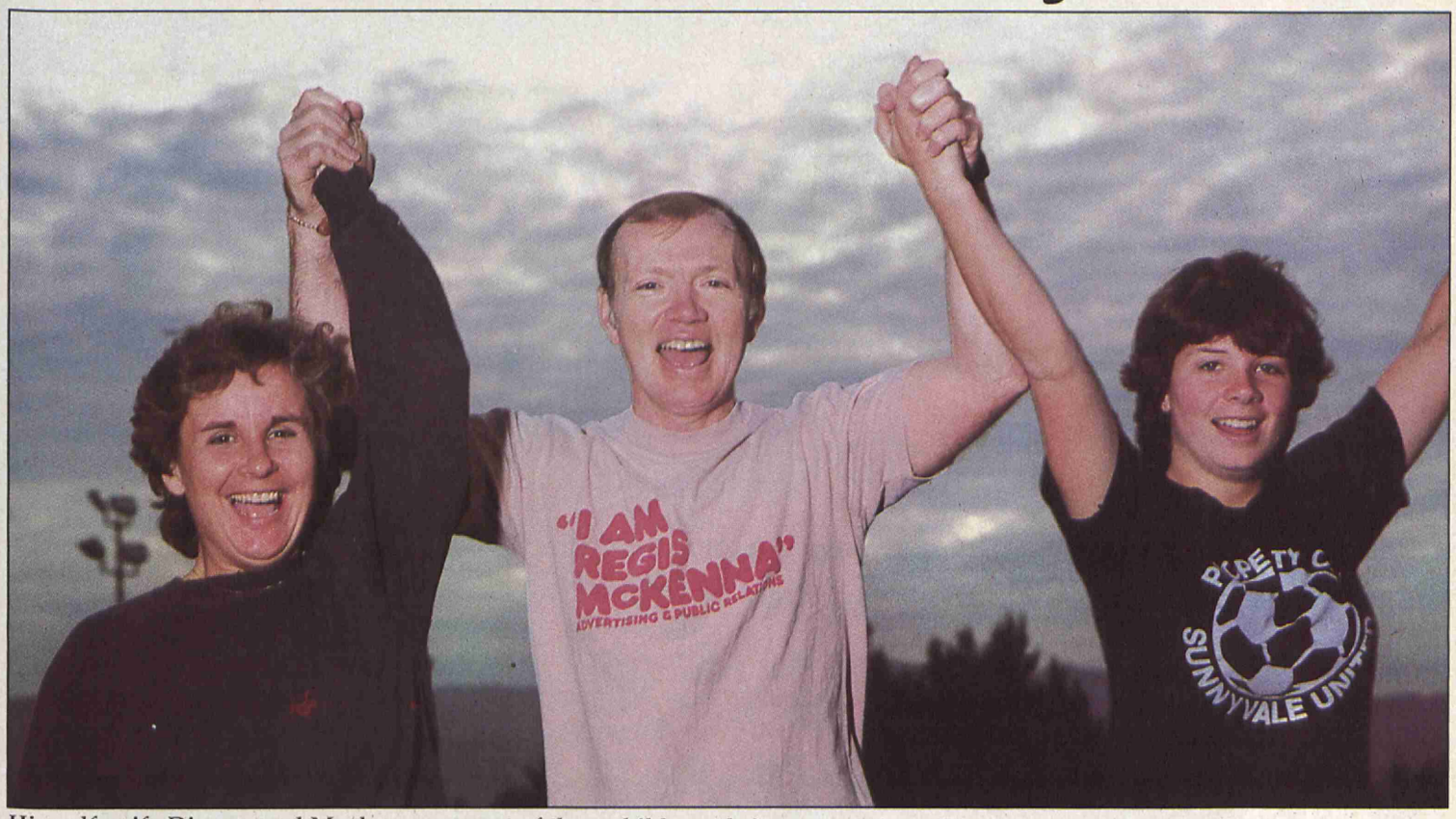

Mark Hanauer

Himself, wife Dianne, and Meghan, youngest of three children, thrive on running—Dianne even won a city council seat.

by BRO UTTAL

When 60 entrepreneurs and investors gathered last month in San Francisco, their host, the venture capital firm of Kleiner Perkins Caufield & Byers, produced a gilt-edged array of speakers. Among them: former President Gerald Ford, Robert H.B. Baldwin, president of Morgan Stanley Inc.—and a local public relations man, Regis McKenna.

McKenna, 43, was hardly out of his league. Indeed, to that audience he may have been the most important speaker of the three. He has made himself a mainstay of Silicon Valley's tight-knit venture community. His ability to garner press stories, security analysts' reports, and lavish price-earnings multiples for clients is legend. Simply being a client of Regis McKenna Public Relations Inc. has become a kind of anointment for a high-tech business.

Research associate: Brian O'Reilly

McKenna's reputation is all the more remarkable because his clients innately distrust public relations. Engineers turned entrepreneurs usually ignore any kind of marketing; venture capitalists raise their eyebrows when a struggling company buys costly services of uncertain benefit. Yet Paul Terrell, who used McKenna's firm when setting up Byte Shop, the first chain of retail computer stores, gushes, "Once you've got Regis, the venture capital people line up, and your chances of success soar." The moneymen agree. Says Ben Rosen, a well-known electronics analyst whose Sevin Rosen Partners is planting $25 million of venture capital in new businesses: "One of the first things we ask about a venture is whether Regis is available. He's everybody's first choice."

That high reputation will boost billings to the agency's 33 clients to around $3.8 million this year, making Regis McKenna one of the top 25 public relations firms in the nation. McKenna himself has profited along the way. By investing in his clients' stock, often before it is issued publicly, and by joining limited partnerships run by friendly venture capitalists, he has built a portfolio with a market value exceeding $4 million. Real estate and equity in his own business add another $1 million or so to his assets.

The key to McKenna's success is that he's nobody's idea of a flack. Slight and soft-spoken, he abhors press conferences, preferring to trot out his clients in

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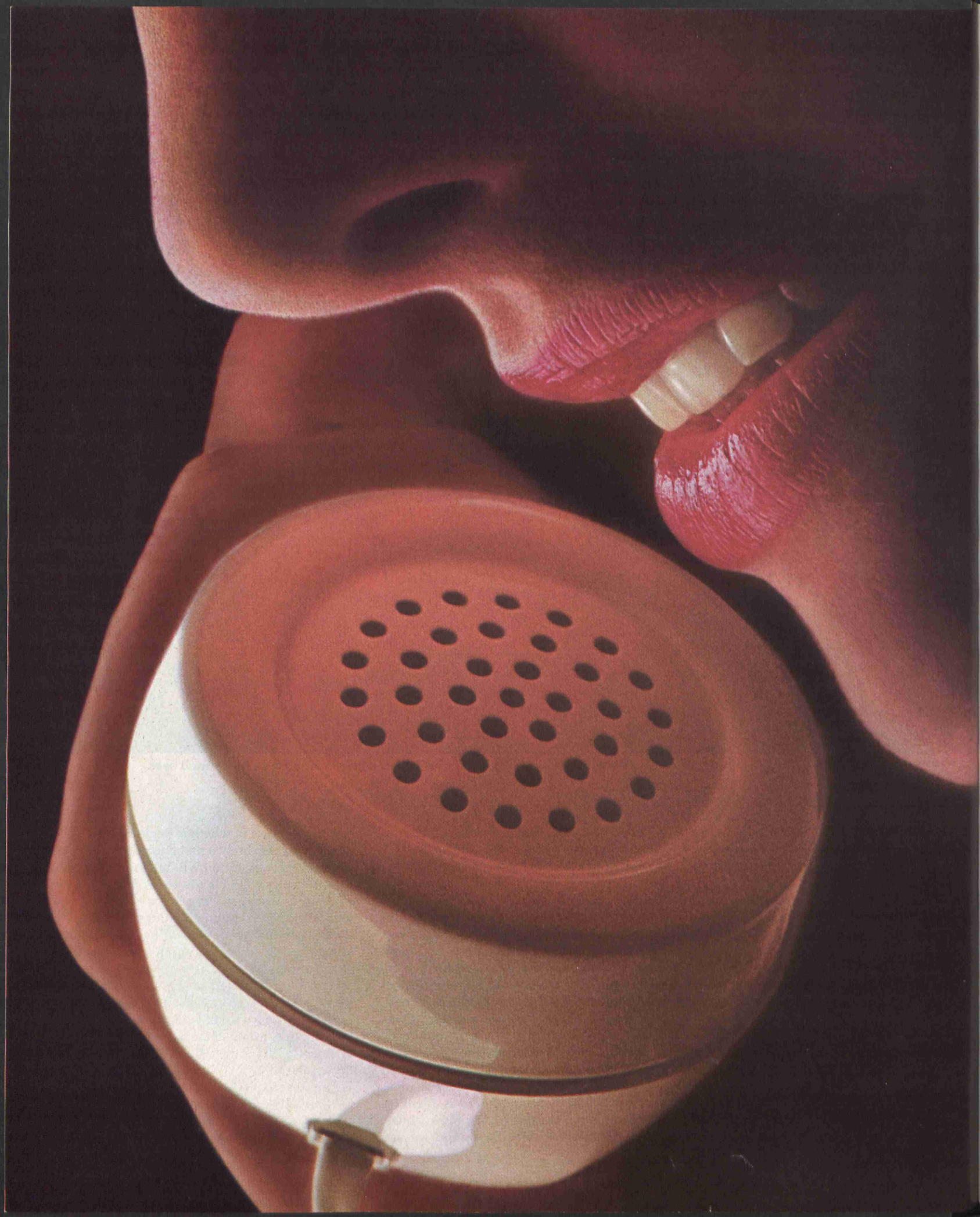

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These changes will take place gradually. So at first you might not even notice them. And they certainly won't affect the most important thing for you–your ability simply to pick up your telephone and get in touch with anyone you want to, whenever you want to.

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So call us. And we'll be talking with you. **Let's talk.**

Bell System

"Regis Is a 10"

One of the highlights of the Regis McKenna treatment is when McKenna or one of his associates brings the head of a usually small and unknown California firm to the East Coast for an introduction to the national media and to key security analysts. Dataspeed Inc., a high-tech firm based in Burlingame, California, was recently given one of these corporate coming-out parties. While the company has been selling sophisticated computer timing devices since 1977, it became a McKenna client only in September, after it decided to introduce a portable calculator-size stock-quotation device. Subscribers who pay $90 a month can program the machine to receive up-to-the-second trading information on any 40 stocks and commodities via signals from an FM radio station.

Dataspeed Chairman David B. Lockton, 45, went to McKenna at the recommendation of Peter J. Sprague, the chairman of National Semiconductor and a Silicon Valley friend. Lockton first had to spend four hours talking to McKenna about the technology of his product and its potential market. McKenna was interested and asked his account director, Patrick Corman, 39, to take charge of Dataspeed.

Corman and account executive Heidi Mason first spent six weeks interviewing analysts and market researchers about the industry and another two weeks working out a strategy with Dataspeed executives. They concluded that the company should stress that it would be bringing out a whole range of portable communications products. Says Corman: "I don't want Lockton perceived as just another guy with a new widget. Our goal is to establish our client as a telecommunications company." Once everyone at Dataspeed and at the agency agreed on the appropriate corporate identity, Corman presented Lockton with a 25-page program, complete with objectives, strategy, and a timetable.

The next step was the trip east. To prepare for the tour, Corman compiled a list of 42 questions that journalists or analysts were likely to ask Lockton and then spent two intense hours grilling him. Nothing was left to chance. The two planned even the optimal moment in an interview for unveiling the prototype of his product. Says Corman: "We don't want to program our clients, we just want to tip them off to what might be coming."

After all that preparation, Corman and Lockton spent five days talking with 22 journalists and analysts in New York, Boston, and Washington. Corman, whose rate is $85 an hour, stayed with the client during all interviews and occasionally suggested a new topic when he felt the discussion veering off course.

At the end of the tour Lockton was exhausted but delighted. Thanks to McKenna's reputation with the press for picking companies that turn out to be winners, Lockton had been able to see editors at FORTUNE, *Forbes, Business Week, Time, Newsweek, Venture, High Technology,* and the *Washington Post* as well as analysts at Standard & Poor's and Link Resources Corp., a New York-based market research firm. Corman had been careful not to "promise ink" (articles) during this trip, but he has succeeded in drumming up interest in Dataspeed. Next spring, when the product is formally launched, there will be another trip and perhaps at that time some ink.

The McKenna treatment does not come cheap. By the time Dataspeed's product is launched, the company will have been billed some $50,000, about 25% more than what another P.R. firm would have charged for the same services. The East Coast tour, including round-trip air fare, plush hotels, fancy lunches with journalists, and fat press packets, cost approximately $10,000. But Lockton feels the money is well spent. Says he: "On a scale of 1 to 10, Regis is a 10."

—LISA MILLER MESDAG

Chairman David Lockton (right) and account director Patrick Corman show a prototype of Dataspeed's stock-quote invention to Gary Slutsker (left), an associate editor at *Venture* magazine.

Eugene Richards—Magnum

quiet, one-on-one interviews. He purges his press releases of superlatives and even of standard high-tech adjectives like "leading edge." McKenna routinely warns that "public relations is a process, not an event," pointing out that his star accounts, Intel and Apple, cultivated the press and the financial community for years before they got results. Like Crosby Kelly, the financial relations specialist who a generation ago made Litton Industries seem a technology leader when it was largely hopes and dreams, he knows how to craft compelling images.

McKenna often seems to disdain the very idea of public relations: "When I go in to see a client, I don't want to talk P.R., I want to talk business strategy." Focusing on strategy instead of press coverage sounds like a good way to dress up ordinary public relations services and to discourage clients from asking what the firm has done for them lately. But McKenna does have a knack for helping a company define unique positions in the market for itself and its products and create strategies for attaining those positions. Before signing on he wants to understand what special benefits a company can offer its customers. If he can't see them, the deal is off.

"Positioning," or corporate and product differentiation, is standard procedure for consumer-products companies like Procter & Gamble. But applying it to newborn technology firms, especially ones that sell industrial products, is novel and difficult. The task demands intellectual rigor, sensitivity to the ultimate consumer, and creativity. That is a rare blend. James Lally, a Kleiner Perkins partner who spent six years at Hewlett-Packard, says even that outstanding computer and instruments company has only one or two people who can perform such magic.

McKenna comes by his talent in a roundabout way. The second to last of seven sons, he grew up in a blue-collar district of Pittsburgh. The family was devoutly Roman Catholic; four of the McKenna boys became priests or monks. But Regis was a tough kid. He played sandlot football in the same league that bred Johnny

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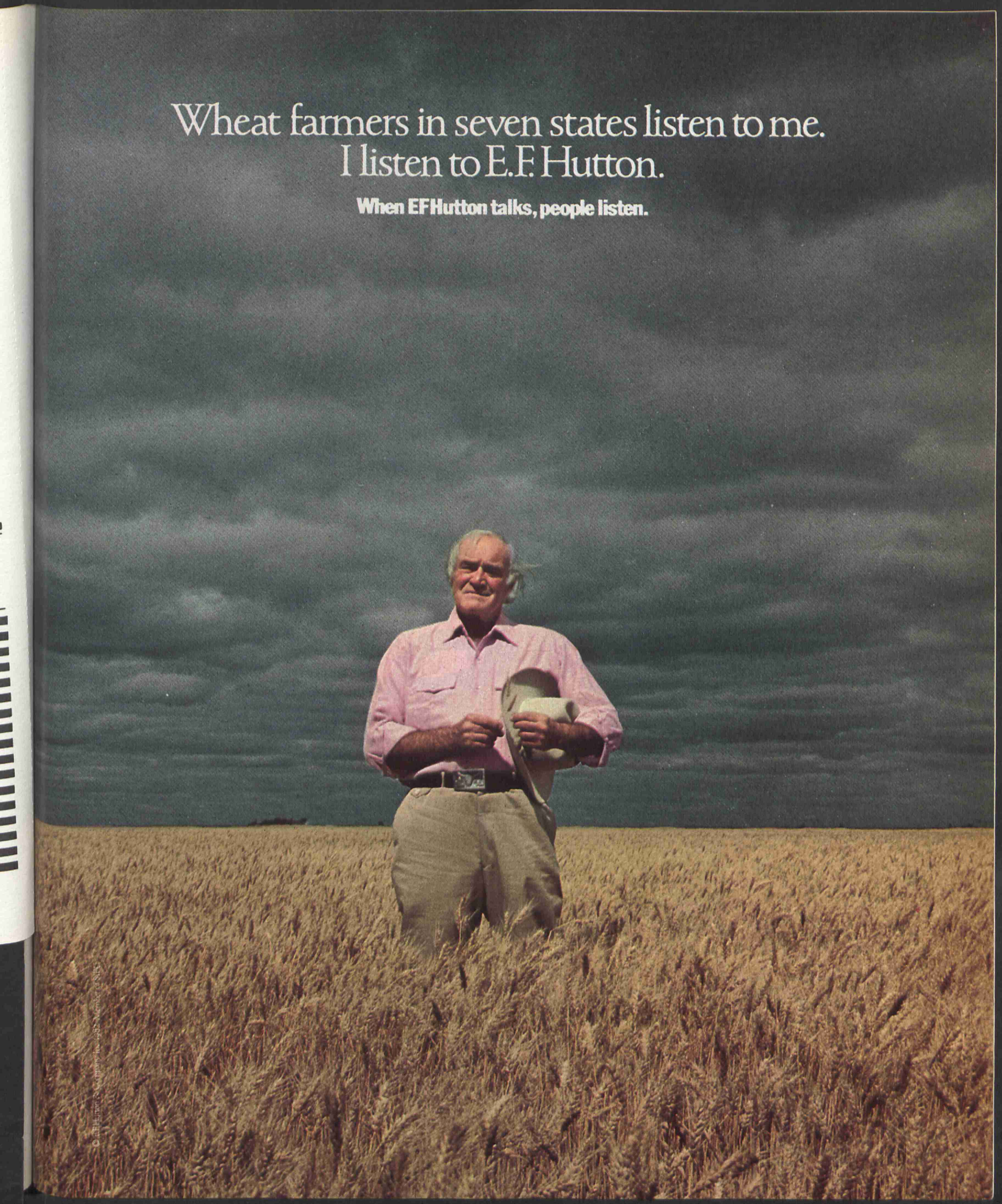
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Unitas, and his team once lost a fullback to a conviction for armed robbery. When hazed as a freshman at St. Vincent College in Latrobe, Pennsylvania, he counterattacked by coating the toilet seats in the upperclassmen's poorly lit dorm with slow-drying black paint.

McKenna never lost his fierce competitive spirit, but at 18, he says, "I discovered I was smart." He transferred to Duquesne in Pittsburgh and developed a strong interest in philosophy. McKenna thinks his training in philosophy has proved invaluable: "Phenomenology takes an unprejudiced view of what reality is; existentialism insists that you are what you do. So I gather mountains of information before making judgments, and I urge companies to create their own realities." Studying speculative physics at Duquesne also helped: "I realized that science and engineering aren't beyond any of us. I don't have to design an electronic circuit to know what it's supposed to do."

Rescuing National Semiconductor

Married to his childhood sweetheart at 20, McKenna did not graduate from college, but went to work selling space for technical magazines put out by Instruments Publishing Co. in Pittsburgh. After the company transferred him to California he changed jobs, becoming a P.R. man for a couple of early semiconductor companies. In 1967 the turning point came. He was called to help rescue National Semiconductor, then a $7-million-a-year company careening toward bankruptcy.

McKenna took over "marketing communications," which included advertising and public relations. Within three years National's revenues had risen sixfold to $42 million. Charles E. Sporck, National's chief executive, gives McKenna generous marks for the turnaround: "Regis spread the idea that we were a technological leader long before we actually were. His ads made people think everything new and good came only from National." Some ads, like one that ridiculed other chipmakers, were too scandalous to publish, so they were passed from hand to hand

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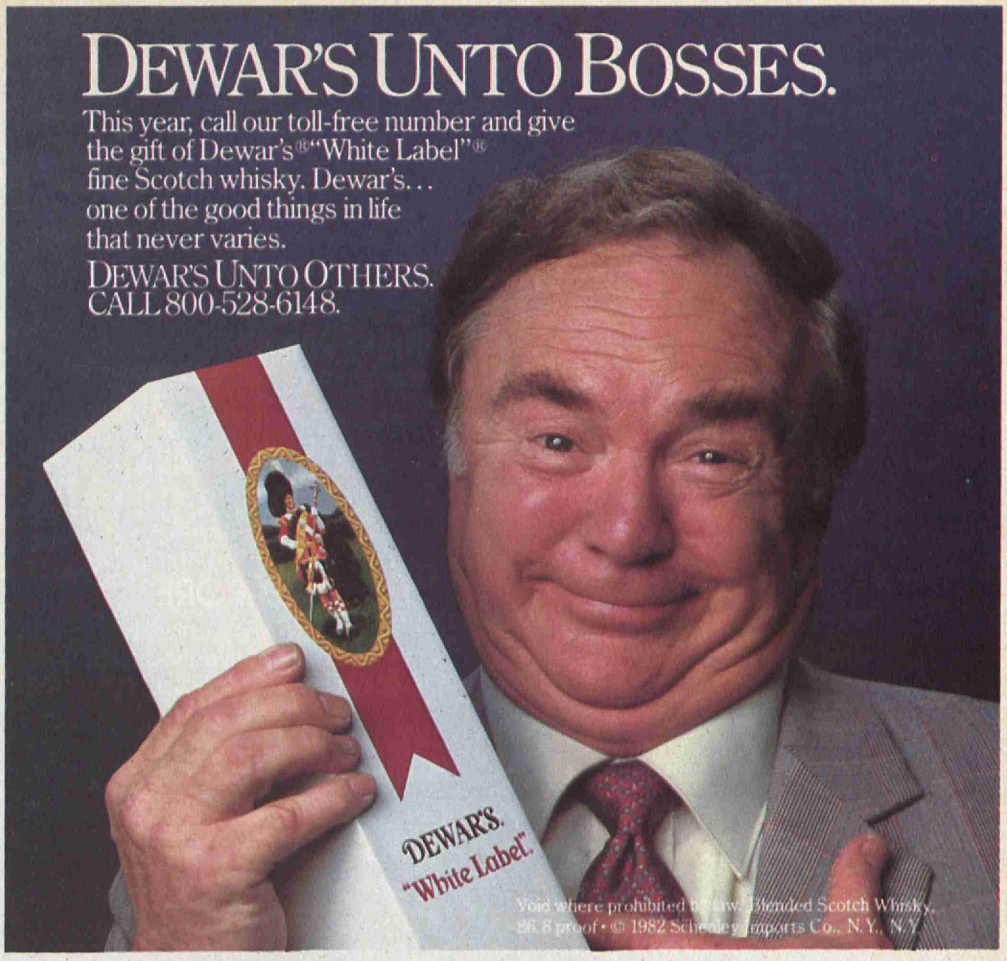

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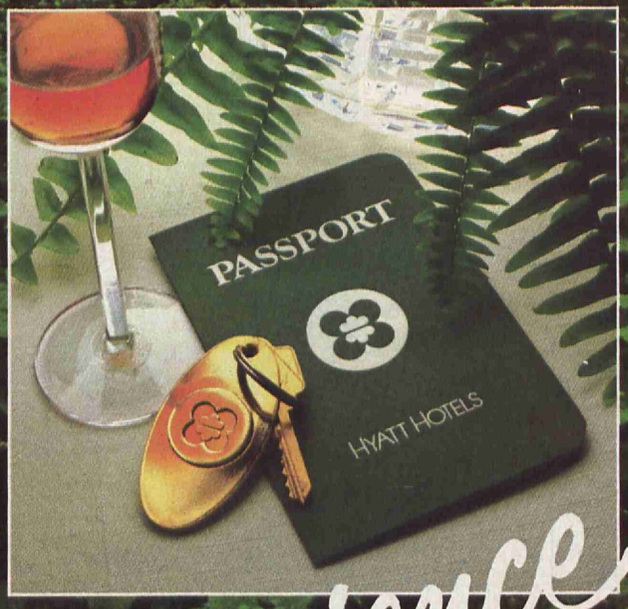

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He calls it "trading on fear, uncertainty, and doubt."

among National's salesmen, customers—and outraged competitors.

McKenna left National in 1970 to set up his own advertising and public relations firm, but the three years there had been decisive. National's computer division is now one of his largest accounts. An associate from National, Don Valentine, today runs Capital Management Services, one of Silicon Valley's most successful venture capital outfits; he's brought McKenna into a lucrative limited partnership, and the two continually steer clients to each other. It was also at National that McKenna concluded that stressing a small, unknown company's financial stability can do wonders for sales. He calls the tactic "trading on the customer's FUD—fear, uncertainty, and doubt about the competition."

The pitfalls of specsmanship

FUD is old hat in consumer packaged goods, but something relatively new for McKenna's industrial clients. Engineer-entrepreneurs usually try to sell products by crowing about the great specifications of a chip or computer system. But, says McKenna, "specsmanship is poor positioning because your advantage is always slipping away. The only permanent position you can maintain in the marketplace has to do with intangibles, like a company's personality."

The prime example is Intel, which has used McKenna for a decade and is the largest of his clients, bringing in revenues of $1 million a year. The keystone of Intel's business is the microprocessor. In the early 1970s the future of micros was hazy. Conservative engineers found them hard to use because they required a lot of programming and little of that software existed. McKenna attacked the problem with a series of advertisements in the electronics trade press that used bright photographs and sprightly writing to dramatize the value of Intel's micros.

The ads nearly lost him the account. Intel's engineers thought it demeaning to use pictures of ticker-tape machines (to stress the financial benefits of using the parts) or hamburgers (to show how micros

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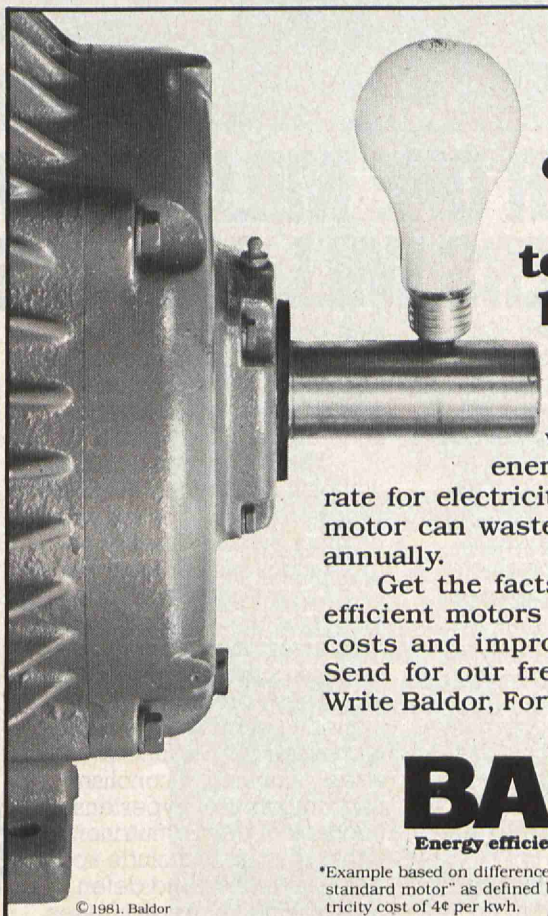

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"Regis clobbered us."

could be customized, just like Burger King's Whoppers). Nonetheless, the micro took off. Robert Noyce, Intel's co-founder and vice chairman, explains: "When all the world was convinced our micro was the way to go, they all wrote software for it, so it *became* the way to go. It was a battle of opinion, and Regis's marketing ploys had a lot to do with winning it."

According to L. J. Sevin, founder of Mostek, an Intel competitor now owned by United Technologies, McKenna did more than that: "Regis clobbered us by positioning Intel as the technology leader. Their stock had a multiple of 30 or 40 and ours went at 15, even though we were neck and neck technologically. They had an easier time hiring hotshot engineers and getting through to their customers' executives, not just the purchasing managers. I didn't realize P.R. mattered so much until it was too late." Sevin has no hard feelings: he's now one of the Sevin Rosen partners and grateful to McKenna for turning up attractive ventures.

The co-founder as boy wonder

McKenna's most famous client is Apple Computer, which he turned down more than once because the company had little money and was hard to handle. In 1978 he finally gave in, put together Apple's slick advertising campaign, down to the logo, and organized frequent press tours to the East Coast. Typically, McKenna built up Apple's credibility by including sessions with financial analysts and market researchers, even though the company was still privately held. He gave the new company a personality by casting co-founder Steve Jobs, then 23, as a boy wonder. But Jobs was more impressed by McKenna's skills as a marketing consultant: "He forced us at first to concentrate on creating a new product category, the 'home personal computer,' in order to distinguish our product from expensive minicomputers."

The results have passed into folklore. Within three years Apple rose to the top of a brand-new market. The financial P.R. paid off in 1980, when the company went public at $22 a share, some 92

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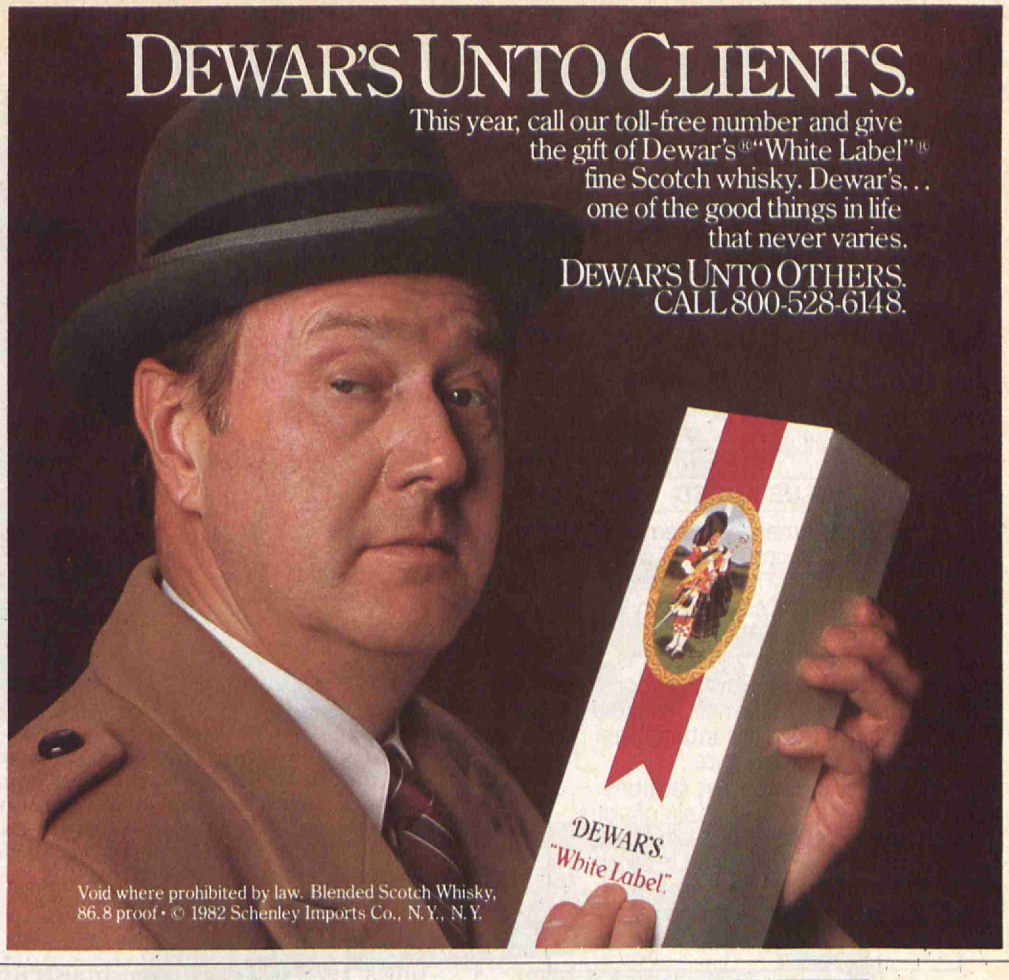

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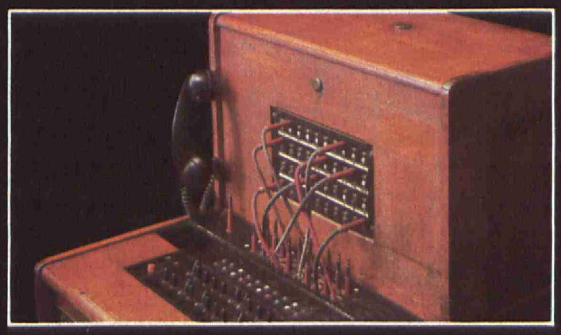

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Jean Gaumy–Magnum

Lecturing Apple's European sales force last month in Monte Carlo, McKenna, a diabetic, wore a constant companion on his belt—a $1,200 portable insulin pump that administers the hormone through a subcutaneous needle.

times 1979 earnings. Monstrously oversubscribed, the stock climbed to $36 and later fell to a low of $11. It now hovers around $30, more than enough to keep Jobs in the ranks of centimillionaires and to please McKenna, who picked up several thousand shares at 50 cents apiece before the initial offering.

Apple's success strengthened McKenna's long-standing resolution to abandon advertising. A self-confessed bad manager, he finds it hard to collect receivables, charge for the extra hours his 55 staffers spend on accounts, and delegate authority. As Apple's ad budget rose from about $670,000 in 1978 to $6 million in 1980, McKenna feared he would end up spending little time with start-up accounts.

Besides, McKenna's appetite had been whetted by his killing in Apple stock and the wealth of investment opportunities at his fingertips. In early 1981 he sold the ad agency for $1.5 million. He's been sinking his share of the proceeds, about $700,000 after taxes, into two dozen start-ups.

He's positioned himself

The P.R. part of McKenna's business still has problems. These are not in getting the clients: 25 of his 33 accounts have come on board since 1980. But he has trouble keeping them. Nineteen have left in the last two years, some because they went bankrupt, but most because they didn't like letting outsiders have so much say in setting P.R. and marketing policies or felt they were getting poor service. Newcomers envy the job McKenna has done for Intel and Apple and feel they don't get the same treatment without his personal attention.

Two months ago McKenna reorganized his firm to solve some of the problems. He's splitting the business into three parts: marketing services, to be run by Dave Blecki, a former vice president at Gould, a technology conglomerate; public relations, under Bruce LeBoss, a former editor of *Electronics* magazine; and an investment company that McKenna will run himself. McKenna will continue to advise clients but says he'll leave all administration to Blecki.

Nobody's betting this arrangement will be a panacea. McKenna has done such a good job of positioning himself as a P.R. guru that clients will always compete for a share of his mind. But the breadth of his interests inevitably is pulling McKenna away from daily operations. He gives free advice to entrepreneurs he can't take on as clients. Concerned with the threat Japan poses to the U.S. electronics industries, he's contributing his services to the Semiconductor Industry Association, a lobbying group. He's cultivated outgoing California Governor Jerry Brown and Gary Hart, the Colorado Senator, hoping to get tax concessions for high-tech companies. Eventually, Apple's Steve Jobs speculates, McKenna could become a White House press secretary. Perhaps phenomenology and existentialism could position Presidents too. F

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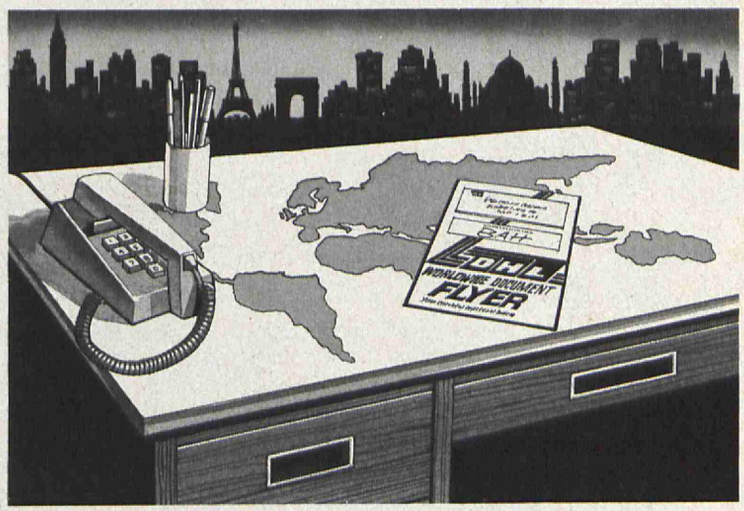

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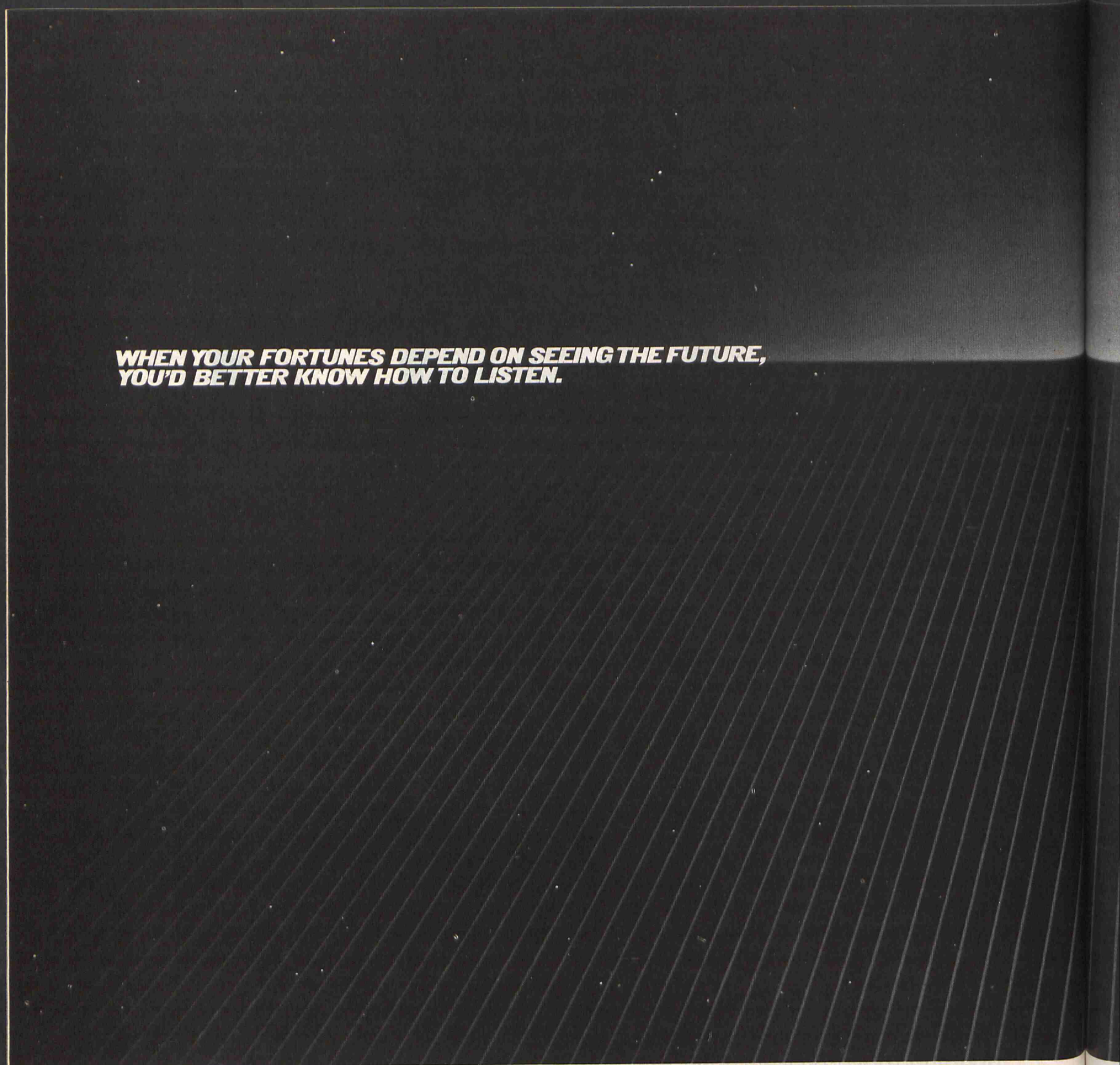

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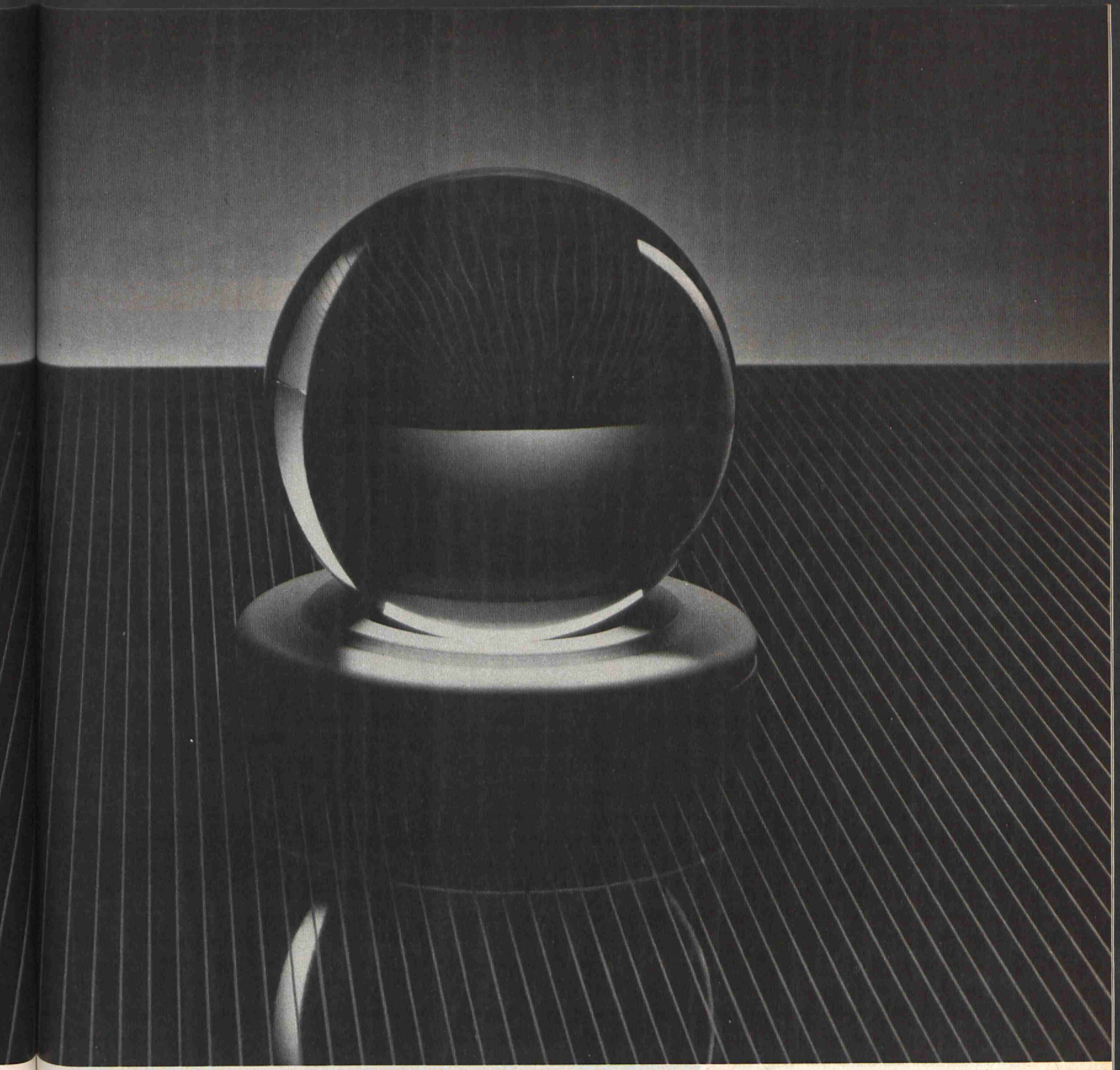

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COMMUNICATIONS

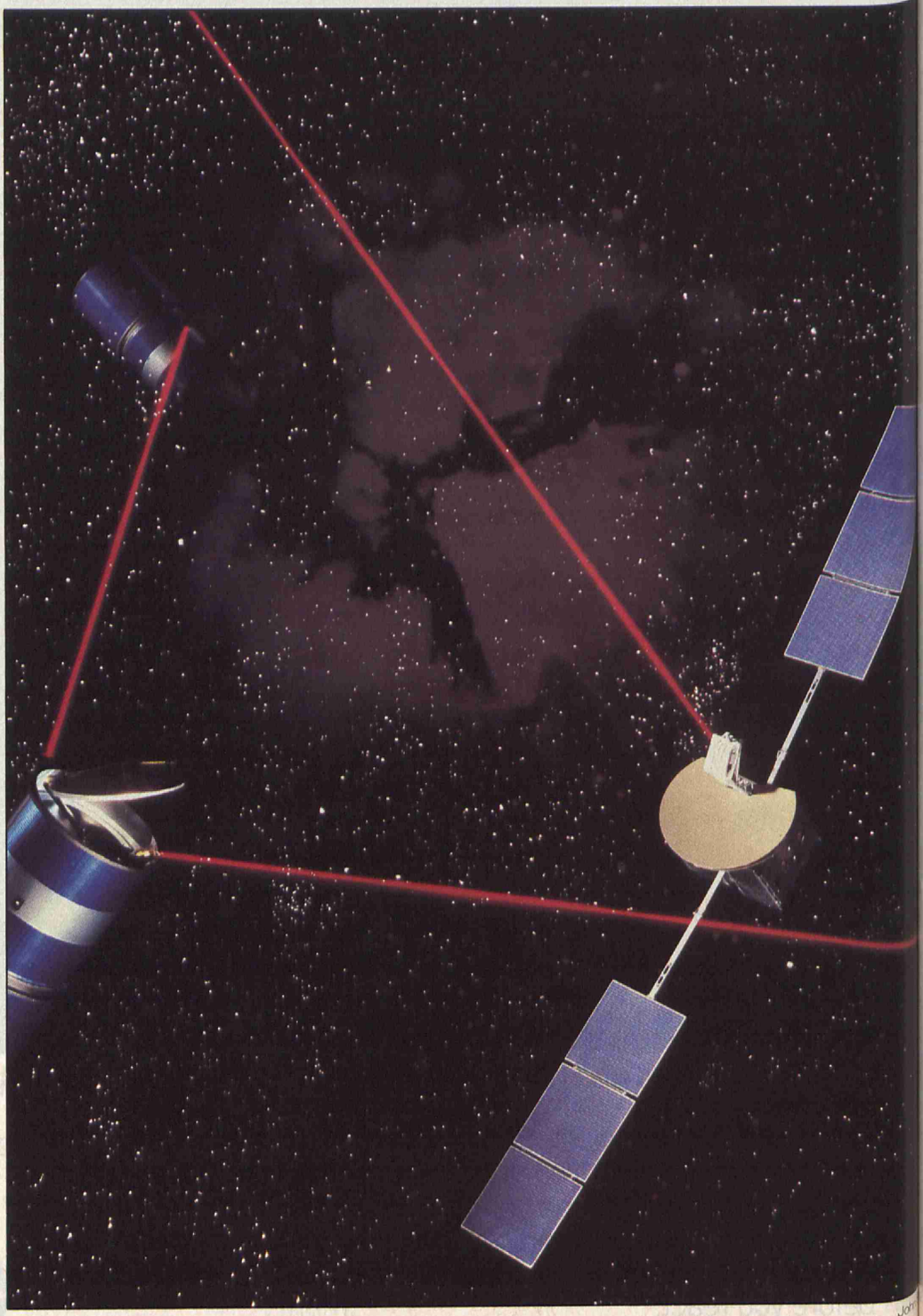
Lowering Skies fort

by JOHN COONEY

The past few years have been heady times for the commercial satellite business, which has been transmitting an ever growing volume of stock quotes, movies, sports events, telephone calls, computer data, and much more. When a new RCA bird went up last year, demand was white hot, and entrepreneurs who had reserved a slot for nothing more than the price of a 15-cent stamp sold their rights for millions (see box, page 154). Within a scant few months, however, unbridled optimism has given way to talk of a shakeout. Marketplace realities are suddenly limiting a technology that quite literally saw the sky as its only limit. In the near term at least, the constellation of satellites probably won't be anything like as vast as once projected.

Reasons for a more cautious outlook abound. Cable TV programmers, who had voraciously gobbled up transponders, now realize just how tough it is to make money in their business. The long-awaited boom in the corporate use of satellites—for data-transmission networks linking "offices of the future"—is still somewhere in the future. New satellite users do appear all the time; the U.S. Chamber of Commerce and the Roman Catholic Church, for example, both use satellite networks to distribute programs to their far-flung members. But the new applications aren't adding up to a big increase in demand. Indeed, revenues for satellite services grew by only 30% to a modest $250 million this year, about half as fast as security analysts had expected.

After the first successful launch by the space shuttle two weeks ago, 14 commercial satellites are servicing the U.S. All were built by either RCA or Hughes Aircraft and are owned and operated by four big companies. RCA has four, as does



The satellite operators battling for space business all buy their equipment from either RCA, which makes the windmill version, or Hughes Aircraft, whose satellites look remarkably like garbage cans.

Cable TV programmers are scaling back their plans —and their demand for orbiting antennas.

r the Satellite Business

Western Union's Westar. Comsat and Satellite Business Systems each own three. The 14 carry a total of 270 transponders—packets of circuitry about the size of a cigarette carton that receive radio signals from earth, amplify them, and bounce them back to receiving dishes scattered around the country. That may be about enough transponders for now. A once universal pattern of shortage has fragmented into a patchwork of overcapacity on some satellites and the opposite on others. "By 1984 there could be an overabundance of transponders," says Don Gooding, a senior analyst with the Yankee Group, a consulting firm. "If there is, people may be scrambling to unload them."

Silent circuits

Pessimists point to the findings of a recent check of satellites by the FCC's Field Operations Bureau. The monitoring, conducted in the afternoon on four June days, disclosed that 40% of the 216 transponders surveyed were idle at the time.

Optimists counter that the numbers are somewhat deceiving. The monitoring took place during a low-use time of the day, especially for cable TV traffic, much as if telephone usage were monitored at one o'clock in the morning. Moreover, some 20% of transponders are reserves, in case active ones should fail for any reason. The satellite operators have to have backup transponders to provide the service they are paid for, and big users like AT&T have backups too.

But some of those silent transponders reflect the inefficiencies that result from pell-mell expansion. In the rush to get transponders, companies reserved them years ahead of their planned use. Radio networks, for example, which can blanket the country for national advertisers, are a newly promising old business. Before going on the air, Transtar, a 24-hour all-music network, a subsidiary of Sunbelt Communications Ltd., paid $20,000 a month for two years to lock up transponder time on Western Union's Westar III. "We wanted to make sure we had one available when we needed it, so that's what we had to do," says Terry Robinson, Transtar's chief executive.

Phil Schneider, the vice president in charge of Western Union's satellite systems, dismisses talk of a glut as nonsense. All the Westar satellites have been fully occupied for the past six months and 12 of the 24 transponders on Westar VI, which will be launched next year, are already committed. "Our view is that there is not a glut," Schneider says. "True, the frantic rush to buy and lease transponders has subsided. But there is still more demand than capacity."

That judgment applies, however, only to particular satellites. Transponders are readily available on other satellites. Some companies with more transponder capacity than they need are trying to recover some of their costs by subleasing, and a new industry of transponder brokers has sprung up. A cable programmer with excess daytime capacity might turn to a broker to line up a corporation seeking cut rates for a few hours of data transmission. The price depends upon a number of variables, including the age of the satellite and the number of earth stations with antennas trained on that particular satellite.

Satellites have a life expectancy of only seven to 12 years before their solar-powered batteries fail. Long-term customers keep gravitating to the newer birds, and so space on the old ones is relatively a bargain. The first satellites launched by RCA and Western Union in the mid-1970s can be subleased for about $80,000 a month, while AT&T is asking $96,000 a month for one of Comsat's early birds. That compares with about $200,000 a month on the new Westar V. On the older birds, prices are softening. Says Paul Bortz, a partner in the consulting firm Browne Bortz & Coddington: "Better deals are being made today than six months ago."

But the main determinant of price is the number of listeners back on earth. To receive the signal, the customer, say a cable TV operator, must spend up to $25,000 to install a dish, and he isn't going to build a new ear for every talker in the starry skies. He will tune in only if the new satellite is beaming lots of stuff—pay-TV movies, for example—that he can sell at a profit.

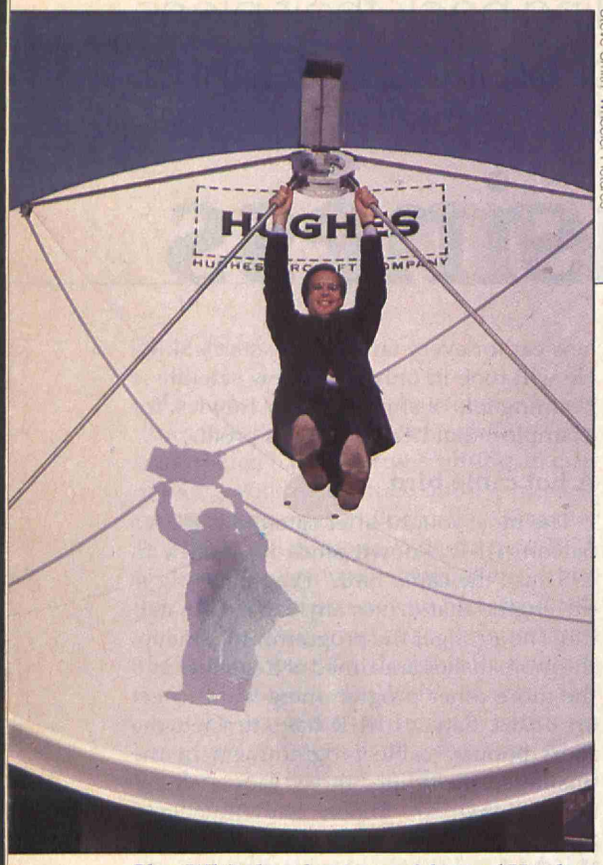
A hot cable bird

The most sought-after satellite is RCA's Satcom III-R, known since its launch in 1981 as "the cable bird." Programming is the engine that drives any cable TV satellite. The stronger the programming lineup, the more dishes are aimed at a satellite and the more other programmers want to get on board. Satcom III-R has attracted the most popular cable programmers in the business, including three movie channels—Home Box Office, Showtime, and Spotlight—as well as Ted Turner's round-the-clock Cable News Network and another 24-hour service, the Entertainment and Sport Network, backed by Getty Oil.

About 90% of the nation's 27 million cable TV households receive Satcom III-R fare, which is why programmers want to be there. Transponders on this satellite are in such hot demand that if one came on the market, the estimated price to acquire the lease and have the privilege of paying the $900,000-a-year tariff would be between $15 million and $20 million. "As Zeckendorf said, the three most important things about real estate are 'Location! Location! Location!' That's the key to the satellite industry as well," says Karl R. Savatiel, marketing manager for AT&T's Long Lines.

For the past two years, the people most dismayed by the escalating prices programmers were paying for a slot on Satcom III-R were at RCA itself. Along with the other three players—Westar, Comsat, and SBS—RCA had been licensed by the FCC as a "common carrier," entitled only to a regulated fee for its services, just like a trucker or a railroad. Now the rules are changing.

The outfit that freed up the sky for private enterprise was Hughes Aircraft, one of the satellite manufacturers. Its agent was Clay Whitehead, once a special assistant to President Nixon, later director of the U.S. Office of Telecommunications

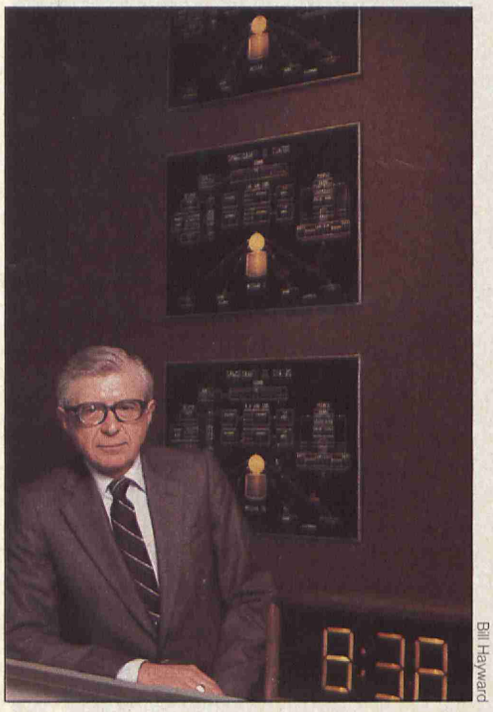


Steve Smith–Wheeler Pictures

Clay Whitehead, 44, president of Hughes Communications, is flying high after a marketing coup earlier this year. He sold all 18 transponders on a new bird, dubbed the Satellite Shopping Center, for a record total of $200 million.

Antonin Kratochvil

Andrew F. Inglis, 62, president of RCA American Communications Inc., has had trouble unloading some of the transponders on his Satcom IV satellite. His asking price: $13 million each.



Bill Hayward

Philip Schneider, 54, satellite strategist and a vice president at Western Union, dismisses talk of a transponder glut. Still, he has some slots available on his newest satellite, called the Westar VI.

Policy, and a man savvy in the ways of Washington. Whitehead, president of a subsidiary called Hughes Communications, wanted to do something bold in what he perceived as a "stodgy" industry.

After a good deal of brainstorming, Whitehead came up with a concept that startled the industry this year. He decided that instead of leasing transponders, he would *sell* them to customers of his own choice, just as if the gadgets were condominiums or retail space in a shopping mall. To competitors like RCA, Hughes's lawyers said in effect, well, if you were dumb enough to get licensed by the FCC as a common carrier, that's your tough luck, but there's nothing in the law that compels us to go that route.

After a careful study of its own regulations, the FCC concluded Hughes was right, whereupon Whitehead began looking for the kind of classy customer—the space equivalent of a Bloomingdale's—that could get his enterprise off to a fast start. Whitehead's quarry was Home Box Office, the fat-cat movie channel. HBO (a subsidiary of Time Inc., the publisher of FORTUNE) liked Whitehead's concept, which he calls the Satellite Shopping Center. It also liked the first-aboard price and took six transponders, paying an undisclosed sum that industry experts guess was about $10 million each. Once HBO signed, so did other desirable customers, including Cable News Network and SIN Television Network, a broad-range Spanish programming service. All told, the sale of 18 transponders on Galaxy I, as the Hughes bird will be called when it is launched next year, grossed some $200 million—more than twice the $75 million that it will cost Hughes to make the satellite and pay NASA to launch it.

RCA and Westar, the other two competitors in the cable TV business, are still classed as common carriers. But in the wake of opening free skies to Hughes, the FCC decreed that RCA and Westar could sell their leases for whatever the traffic would bear, provided that they did so in a "nondiscriminatory" way.

Something new at Parke Bernet

That has proved to be easier said than done. RCA's first attempt was an auction at Sotheby Parke Bernet where transponders were offered to the highest bidder like so much chinoiserie. Programmers were asked to bid for a lifetime lease on what was billed as the next hot cable satellite. Bid they did. When the dust settled, seven transponders had fetched a total of $90 million. Shortly thereafter the FCC overruled the auctioneers by declaring the procedure "unjustly discriminatory."

RCA then advertised that it would sell leases on a first-come, first-served basis for $13 million apiece. The price, the average bid at the auction, would serve as the tariff for a lease that would expire at the end of 1989. Three were quickly sold to Home Box Office, Warner Amex, and National Broadcasting Co., an RCA unit. But since then, none of the remaining five transponders has moved.

In an effort to make the terms more attractive, RCA next said that a nonrefundable deposit of $150,000 would reserve a transponder for 30 days while the potential buyer mulled over the deal. Instead of cash up front, terms were revised: a $1.5-

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If You Know the Rules, You're In like Flynn

The biggest role in shaping the domestic satellite communications industry has been played by the federal government. Some of the effects of this heavy hand on a booming growth business have been passing strange.

The original idea, set forth in the Communications Act of 1962, was that only a government-protected monopoly—another AT&T—would have the muscle needed to exploit the boundless opportunities of space. The 1962 act assigned that role to the Communications Satellite Corporation, or Comsat. Ten years later, after Comsat had exploited only the most obvious opportunities, such as providing backup for AT&T's long-distance service, Washington decided competition might spur progress. But the Federal Communications Commission treated all satellite companies as so-called common carriers. They had to lease satellite transponders on a first-come, first-served basis at a cost-plus fee negotiated with the FCC.

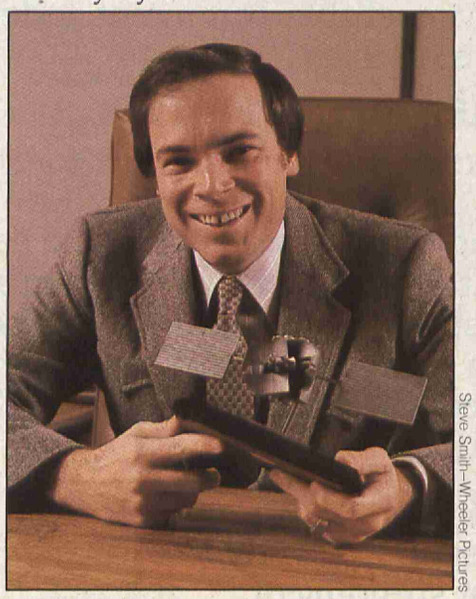
The new policy opened the way for some spectacular coups by alert entrepreneurs. They sensed that cable TV was about to take off and would need lots of transponders—to which Joe Blow had as much right as the richest corporation around. First come, first served.

The legendary speculator in this group was a young man named Timothy Flynn. Back in 1978, he was working in Los Angeles for one of the firms that had sprung up to supply programs to the infant cable TV business. The fee to reserve a transponder at the time was a 15-cent stamp on a letter of application. The price was right, so Flynn quit his job, became a consultant, and applied for a transponder of his very own.

He expected, and perhaps even deserved, a handsome profit for his alertness. The profit turned into a bonanza on that memorable day in December of 1980 when an RCA satellite called Satcom III, carrying 24 transponders, zoomed out of orbit and into outer space. It is still out there somewhere, perhaps checking out how things are on Jupiter and Mars, but it is not broadcasting pay-TV movies or doing any of its other assigned chores. A fairly tight market for transponders was transformed overnight into a desperate shortage.

Nine months later, Tim Flynn received the happy news that he owned the rights to a transponder on RCA's next satellite, Satcom III-R. At 30, Flynn cashed in. He sold the rights to his lease for $5.5 million to Warner-Amex Satellite Entertainment Corp., the cable TV programmer jointly owned by Warner Communications Corp. and American Express Co. Today president of Rainbow Communications, which among other things acts as a transponder broker, Flynn doesn't blush when talking about his coup. "I view myself as a David in a world of corporate Goliaths," he says.

Timothy Flynn



Steve Smith–Wheeler Pictures

The satellite operators have now been given more freedom to charge what the market will bear (see accompanying story), but a dominant government role seems inevitable in the first stage of the process, shoving the satellites into space. NASA not only sets launch fees but controls every aspect of the launch itself.

Columbia makes a buck

Thirteen of the 14 U.S. commercial satellites were sent up by expendable rockets at a cost of about $30 million each. The 14th, a Satellite Business Systems bird, was part of the payload when the space shuttle *Columbia* made its maiden commercial trip into space two weeks ago. While the shuttle will never begin to amortize its billions in R&D costs from profits on commercial business, NASA says that it more than recovers its out-of-pocket expenses for each commercial launch. The shuttle's 60-foot-long cargo bay can carry two payloads of the weight and size boosted by Atlas-Centaur rockets. NASA has announced, however, that shuttle rates will increase to about $40 million in 1985.

Competing with NASA is, of course, like going up against city hall. Some are determined to try. The European Space Agency's French-dominated private operating arm, Arianespace, is marketing its Ariane rocket as a practical alternative to the shuttle. To date, the Ariane's launch record isn't spectacular: Two of its first five tries were failures. Nonetheless, several U.S. satellite companies, including Western Union and GTE, have signed up, attracted by a reported 15% discount from NASA's listed prices.

A group of Texas entrepreneurs, quoting even lower prices, is putting together rockets from leftover bits bought from various suppliers. But since both NASA and Ariane are subsidized symbols of national pride, neither is likely to allow itself to be priced out of the skies.

million down payment and the balance spread over monthly payments. Even with these inducements, RCA's sales efforts have been fruitless to date. Nonetheless, RCA remains optimistic that the logjam will break, and rules out a price reduction. Andrew Inglis, president of the satellite subsidiary, RCA Americom, declares: "We will hold out. The time will come when we will get our asking price."

The other seller in what had become a buyer's market was Western Union, which weighed in with Westar V. This bird got off to a fast start. Ten transponders went to Westinghouse Electric Co.'s Group W broadcasting and cable unit. That deal alone assured that a lot of receiving dishes would be tuned in. Westinghouse owns the big cable operator Teleprompter, and Group W has launched a 24-hour news service with ABC called Satellite News Channel, which eats up six of the transponders.

Group W has many ambitious cable plans, such as an advertising-supported country and western music show. But Group W's star attraction, a partnership with Walt Disney, suddenly collapsed. Disney canceled its agreement with Group W two months ago and postponed plans for Disney Channel, a pay-TV service for young viewers. It now says it will launch the program on its own next April. CBS, however, which took two Westar transponders for its much-praised cultural channel, recently canceled the program, which was deep in the red. It is trying to sublease one of the transponders.

As CBS's decision suggests, the cable

continued

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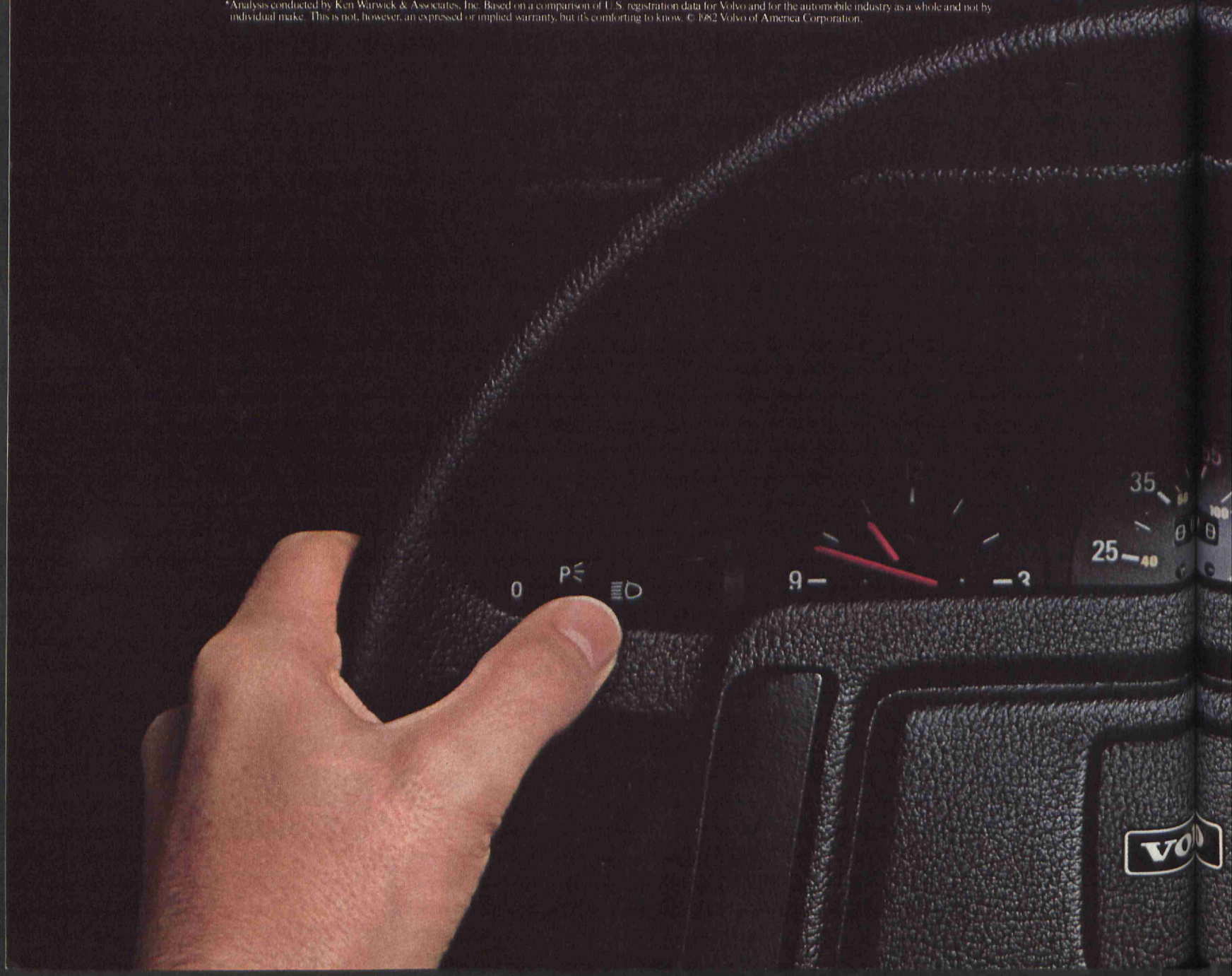

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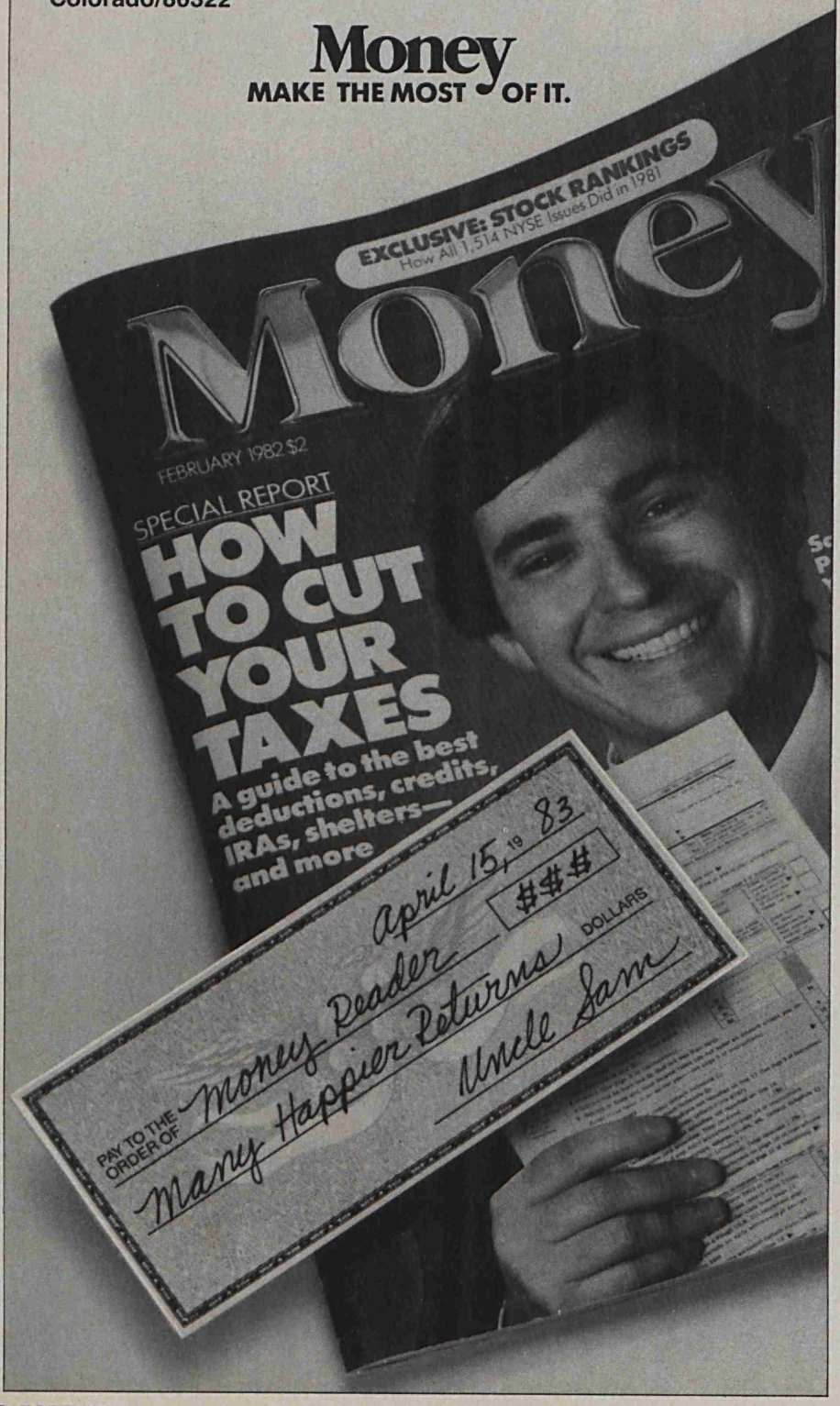

Only two cable programmers make money.

programmers are staring at intimidating realities. An hour-long program can cost as much as the $600,000 average that the TV networks spend. Yet while the networks will gross about $5.9 billion in ad revenues this year, cable advertising fell well short of the $250 million industry executives had anticipated. The only two programmers earning money are HBO, which makes potfuls, and its movie rival Showtime, which makes a little. The money comes from viewers, not advertisers.

"There is money to be made in cable, but it demands a long process of sitting tight," says Herb Granath, president of ABC Video, which has had its own financial headaches with ARTS, a cable programming venture with Hearst Corp. "The bloom is temporarily off cable for the satellite business," adds Walter Morgan, a consultant at a firm called Communications Center. "Now cable is winding down and other demand is coming along."

The distant promise of DBS

One much-touted new industry hopes to compete with cable by beaming programs to small rooftop dishes. The original theory was that direct broadcast satellites, or DBS, would serve the 35% of the nation too remote to wire—a boondocks business. Now there is talk that DBS could underprice cable companies and lure customers in richer markets.

So far the FCC has approved eight applicants to begin such services, including units of Comsat, RCA, and Western Union. Still to be determined are such issues as the number of orbital slots to be allocated to DBS and the power of their signal—for good rooftop reception it may need to be anywhere from ten to 40 times greater than that of existing satellites. Comsat's Satellite Television Corp., the first of such FCC-approved services, would be ready by 1986.

United Satellite Television, bankrolled by General Instrument Corp., plans to jump the gun by getting aboard a medium-powered Canadian satellite as early as next year. General Instrument says it can eventually make the rooftop dishes for less

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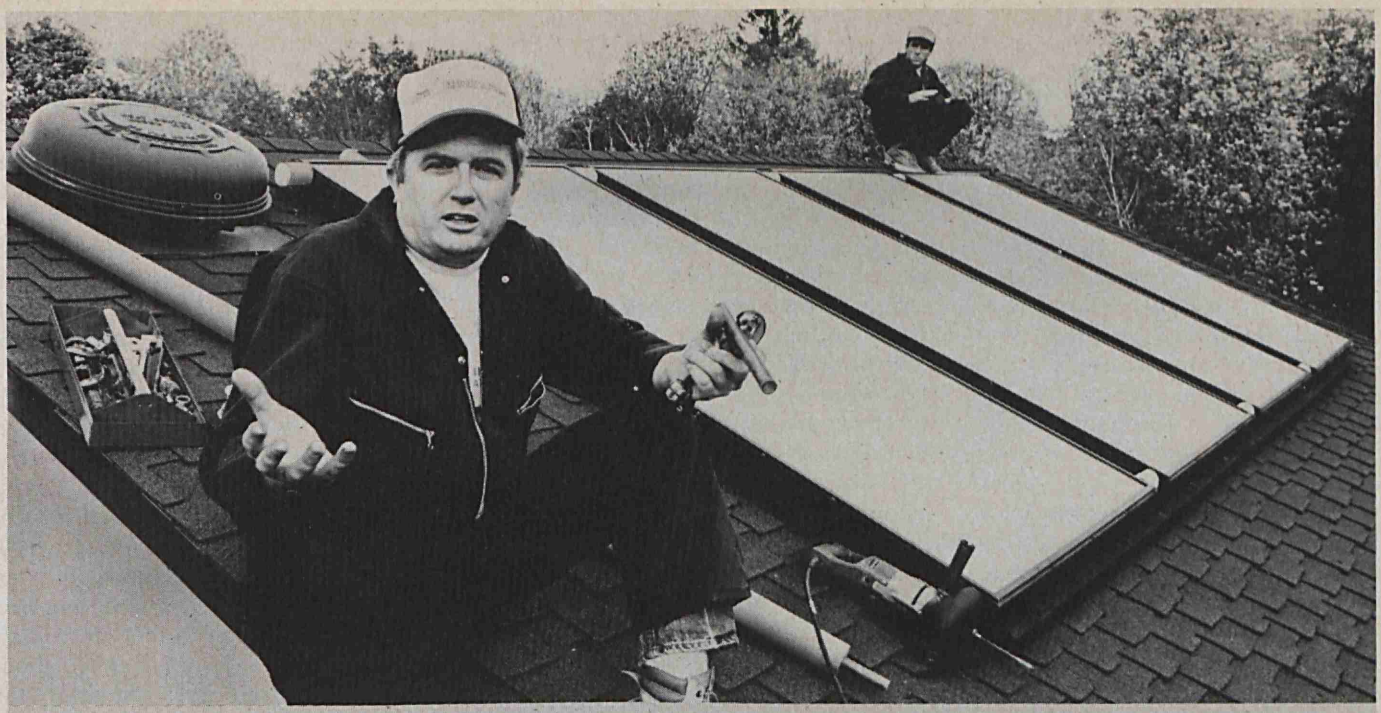

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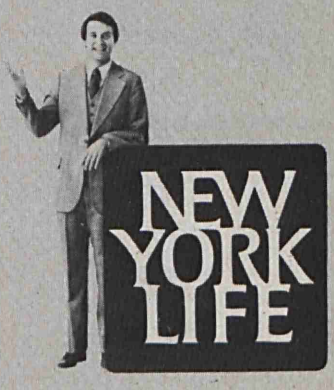

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than $500 through mass production, and UST plans to charge $35 a month for a four-channel network.

Right now DBS is one of the wilder crapshoots around. The cost estimates are only educated guesses. Oak Industries, a well-heeled company, planned to go the Canadian route too, but took a hard second look and canceled. Someday somebody will make money servicing those distant homes. But by the time DBS can take on the major markets in a serious way, they will have been wired at tremendous costs that were largely written off as the work proceeded. Pricing wars can be fun for a while, as Air Florida proved, but when the competitor is a Delta the challenger may get badly bruised. Dan Zinsser, an analyst with Goldman Sachs, is a skeptic about DBS. "A lot of companies that raced to get in their DBS applications may be just trying to protect their positions," he says. "They may or may not proceed."

Back to earth

That would seem to bring this lofty industry back to its beginnings as a low-cost supplier of mundane services to big companies. This part of the business is large and steadily growing but hasn't gone into orbit the way it was supposed to.

AT&T and GTE Corp., the second biggest telephone company, have relied for years now on a pair of Comsat "twins." Known as Comstar D-1 and D-2, they, like all commercial satellites, are in what is called geostationary orbit; that is, they whirl around through space at a speed matching the earth's rotation—small balls following the big ball—and so are always where you want them. What makes this pair different is that they are near each other and so can be reached, and heard, by the same earth stations.

They will soon need help to handle growing telephone traffic. GTE plans to launch two satellites of its own in 1984. Southern Pacific, which is selling its satellite system and its cut-rate Sprint telephone service to GTE, had scheduled two satellite launches next year. At least 11 of the transponders on the SP satellites will carry Sprint traffic.

Yet this side of the business, too, is governed by hard economics that space enthusiasts tend to ignore. MCI, which gives AT&T fits with cut-rate phone service, uses satellites to relay only 5% to 10% of its calls. The rest go by microwave stations here on earth—or plain old wires. "For very long haul transmission, satellites are cost efficient," says Gary Tobin, MCI's director of public relations. "But the average long-distance call, between 400 and 500 miles, is short of the point where we found satellites began to pay off."

Many people in the industry blame the slow growth of business traffic on what promised to be the new giant of the industry, Satellite Business Systems, a partnership owned by subsidiaries of Aetna Life & Casualty, Comsat General Corp., and IBM. It is generally described as a company born with three silver spoons in its mouth that immediately began to tarnish.

Part of the problem was timing. SBS was supposed to usher in that office of the future we have all heard so much about. My secretary in New York can send your secretary in San Francisco all the company's latest planning memos—and God knows what else—at the punch of a button. But American business has been putting itself through a severe process of self-criticism. One of the conclusions that has emerged is that corporate, white-collar overhead is bloated. Some of those planning memos

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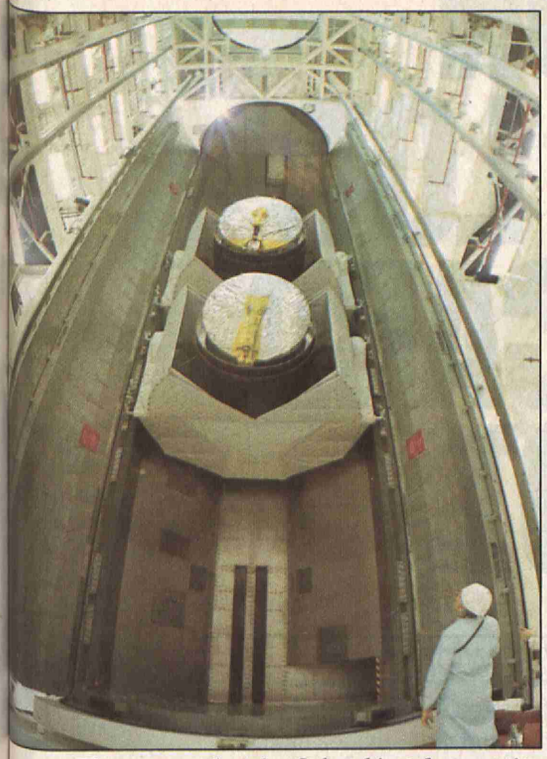

The space shuttle *Columbia* takes on its first payload, two commercial satellites. Both are now in orbit.

shouldn't have been written in the first place—much less transmitted at great cost to all the local guys who should, in any case, not be reading memos but stalking the factory floor in pursuit of the new theory, which is "hands-on" management and quality control.

But with all those spoons in its mouth, SBS never did much thinking about how to develop the market and how to deliver on its own promises. It insisted that companies buy the whole service or nothing. The package included one of the odder new ideas, videoconferencing, which is based on the premise that you can't really know what's on the boss's mind unless he appears on a screen at your home office, where you can watch for facial twitches, see whether he needs a haircut, or if the boss is female make raucous sexist jokes. SBS recently acknowledged its error by splitting up the package. You can now buy plain old data-transmission services from SBS without contracting for the dubious pleasures of seeing Big Brother on your office screen. But plain old business won't support the kind of growth envisioned for the satellites.

For the next few years at least this looks like one of those grubby, cost-conscious markets that new players enter at their peril. Some 40 satellites are scheduled for launch in the next five years, but consultants like Yankee Group estimate that a half-dozen of them will never fly.

Anxiety at Dow Jones

Some companies that recently paid big money for transponders are having nervous second thoughts. "There's a lot of uncertainty right now," says William Dunn, vice president and general manager of Dow Jones & Co., which uses satellites to transmit facsimiles of the *Wall Street Journal* as well as for numerous other services. His company recently paid a total of $23 million for two transponders on Westar V. "There was a great deal of corporate anguish over whether we should have bought more, or any at all," he says. "Some people will say we were smart; others will say we were foolish."

So the next time you go into Parke Bernet, consider the chinoiserie or maybe the 18th-century furniture a good solid value. Pass up the transponders. They are ugly little devils at best, and you may well be able to buy them cheaper next year. F

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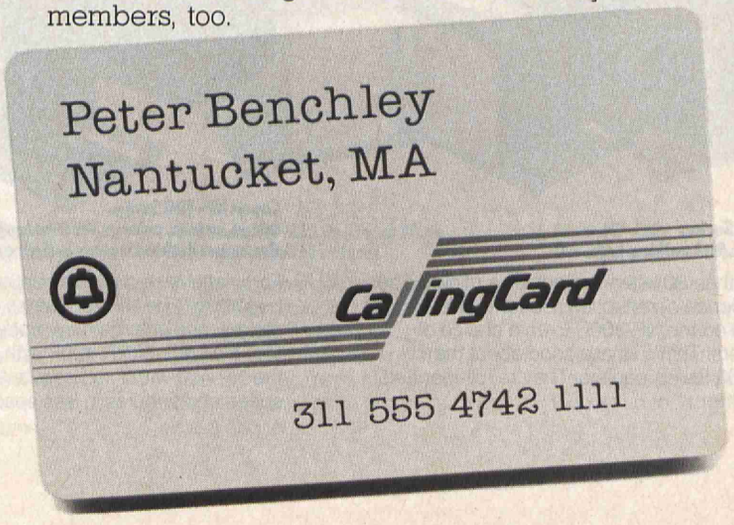

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Manville's new world is full of promise.

Manville

The chemical company abandons Park Avenue for a corporate commune. The building's terrific, the timing terrible.

HEADQUARTERS

Union Carbide Takes to the Woods

by WALTER McQUADE

From the air Union Carbide's new headquarters in Danbury, Connecticut, looks like an enormous displaced Aztec frog sunning itself amid New England foliage. Inside it is equally striking. Here is an office building that addresses the ancient question of which executive deserves the grander office, as compared with his or her superiors, inferiors, and peers. Union Carbide's answer: no one; well, almost no one. The orientally intricate architecture of the building gives each of Union Carbide's 2,358 executives and specialists the same size office—182 square feet, typically 13½ feet by 13½ feet—with two or more windows looking out on the sylvan view. A few executives are more equal than others, however. The chairman, president, and 15 other senior managers have as many as 3½ of these snug rooms.

Executive scramble

The building may well be a pivotal one in design for corporations, which in recent years have increasingly enclosed their staffs within rooms made of movable partitions that are constantly reshuffled like playing cards. Offices are expanded or contracted, refurnished and repainted; executives scramble among them as their fortunes change. But in Carbide's new headquarters an executive can move up or down the corporate ladder without leaving his office.

Research associate: Alison Rea

As pleased as Carbide is to be on the cutting edge of office innovation, the move has been much more expensive than the company anticipated. The final cost will be more than $230 million, which includes about $190 million for the building and $40 million for relocation. According to some reports, the total is well over twice what Carbide, which managed the construction, had budgeted for the job.

In retrospect, Carbide could not have timed the sale of its previous home, a 52-story skyscraper on New York's Park Avenue, more poorly. In 1977, near the nadir of the city's financial crisis and therefore a trough in the real estate market, Carbide agreed to sell the building to Manufacturers Hanover Trust Co. for $110 million, or $92 a square foot. Manufacturers Hanover held on to its own Park Avenue headquarters, a much smaller building, until 1981 and then sold it for $161 million, a whopping $333 a square foot.

And the move, which has stretched out over 2½ years, is being completed when Carbide, like the rest of the chemical industry, has been suffering from the recession. Earnings dropped 49% in the third quarter, and several thousand workers have been laid off at plants around the country. Under the circumstances Carbide has not felt much like celebrating its arrival in Danbury. Few photographers have been allowed on the premises. Union Carbide explains that the visitors' entrance is not quite finished nor is the landscaping complete. This is the first time pictures of the highly significant building have been published in a national magazine.

Despite the problems, the structure is likely to become a mecca for managers who need big new headquarters and for architects too. Typical of the building's delicate design is the way the behemoth is based on the earth. Its sinuous bend conforms to the shape of the open meadow on which it was built, riding the slope of the meadow rather than flattening it. At the northwest end the offices sit on short concrete columns. As the building stretches and the ground falls away, the columns get longer, repeating the shapes of the tree trunks. The windows are shaded by dark glass canopies to soften the summer sunlight; the aluminum walls are sandblasted

Carbide's 3,200 workers drive into the core of the new building on 19 lanes of roadway and then take short walks to their offices, which are in the 15 pods radiating from the center. When the building is finished, automobiles will not be allowed to park outside and mar the rustic landscape like those cars at center left.

Photographs by Adam Bartos

The standard office is 13½ by 13½ feet, decorated to the occupant's taste: traditional, transitional, Scandinavian, or modern. Marshall C. Lewis (above), director of corporate communications, chose transitional, with an Oriental rug.

to match the color of the concrete, a fastidious touch rare in such a large building.

Carbide's former chairman, William S. Sneath, decided to shift the company out of the city in 1976. He gave the familiar explanation that many companies offer when they leave: it was becoming increasingly difficult to persuade the promising young employees in the far-flung Carbide empire to move to expensive, congested, clamorous, crime-ridden New York. Carbide settled on a forest in Danbury, 70 miles north of the city. Once the hat capital of the country, Danbury has fallen on hard times in recent years. American men have been wearing hats less since the 1940s, and hat factories have closed; Danbury's other renowned institution, the Danbury Fair, folded its tents for good this year, its 112th. Mayor James Dyer was delighted to have Carbide come into the forest. The company will pay $3.2 million in real estate taxes this year, close to 9% of the town's budget.

The move is also a tax boon for many of Carbide's employees. Those who moved to Connecticut no longer have to pay onerous income taxes to New York State and New York City. Because Connecticut has no state income tax, Carbide's accountants pointed out to employees when the move was announced, someone making $20,000 a year in 1976 would have saved $922, one making $80,000 would have saved $5,837, and a $200,000-a-year earner would have been $11,600 ahead. Sneath's own situation was more complicated. He lived in Greenwich, Connecticut, and paid a nonresident tax to New York State and a commuter tax to New York City on his income, which last year came to $781,176. His maximum tax liability to New York State and City was $80,993, although whatever he paid would have reduced his income for federal tax reckoning. As it worked out, Sneath didn't get a break on his New York taxes because of the move. He took early retirement on January 1, 1982, at the age of 55, before the transfer to Connecticut was completed.

To help employees sell their homes, Carbide engaged Merrill Lynch's real estate arm. Carbide also underwrote employees' moving expenses and offered to pay for five years the difference in rentals up to $100 a month between their old apartments in Manhattan and equivalent accommodations around Danbury. If the former tenants wanted to buy houses, they were eligible for grants of as much as $6,000 to help with down payments.

Most impressive, Union Carbide agreed to pay closing costs and mortgage charges above 8½% for five years on new houses bought by migrating employees; or, if they held mortgages on old homes they had to sell, to pay the difference between those mortgages' interest charges and the new ones they were to assume, also for

In New York employees worked an eight-hour day with an hour off for lunch. In Danbury the day is 8½ hours with a half hour off for lunch in one of four cafeterias, like that above. Still, most workers spend more time at home because of shorter commutes.

five years. One reason the relocation costs jumped high above budget was that Carbide had not anticipated the staggering climb in interest rates. Carbide also volunteered to pay driver-training tuition for transferring employees who did not know how to drive and to pay interest on the first $6,000 of an auto loan. Severance payments, $1,200 at the minimum, were made to those who did not transfer.

To design the new headquarters, Sneath went to Kevin Roche John Dinkeloo & Associates. Roche is a renowned architect. In 1982 he won the $100,000 Pritzker Award, architecture's equivalent of the Nobel Prize. Born and educated in Ireland but a U.S. citizen since 1964, he is a forceful intellectual with a streak of Gaelic mirth beneath his gravity. Before Roche began designing the building, he spent most of a summer in the Union Carbide Building on Park Avenue interviewing several hundred employees about their needs and wants. That building, by Skidmore Owings & Merrill, was itself much admired in the 1960s. It was the tallest building constructed in Manhattan since the 1930s and was one of the early skyscrapers to incorporate the movable partition. The size of an office could be adjusted to the needs and, more important, to the authority of the occupant. An employee's rank on the organizational chart dictated not only the size of his office, but also the furnishings, down to what was provided on an executive's desktop. "I was interviewing one middle manager," Roche says, "and he told me nervously, 'They came yesterday and took away my water carafe!' "

"Offices were a symbol of prestige, not of function," Roche says. "Moreover, this created a bit of a problem for the managers, because furniture, finishes, and offices constantly had to be changed. They were playing games with people who were trying to get their jobs done."

The constant adjustments were costing Carbide $1.5 million a year, even without calculating lost time and efficiency during moves and refurbishings. Roche also studied the clerical and secretarial areas and decided they were uninhabitable. "Modern design is relentless on the lower ranks," he says. "Secretaries, for example, usually have to sit out in office traffic."

Convinced that all executives need approximately the same amount of space and equipment regardless of their positions in the pecking order, Roche began toying with the possibility of a uniform office size. Sneath liked the idea, and Roche put it on the drawing board.

When it ordered furniture for the offices, Union Carbide again diverged from common practice. In the 1960s and 1970s many corporations thought it important to present a monolithic image, and many an executive, when his or her company relocated from one building to another, ended

continued

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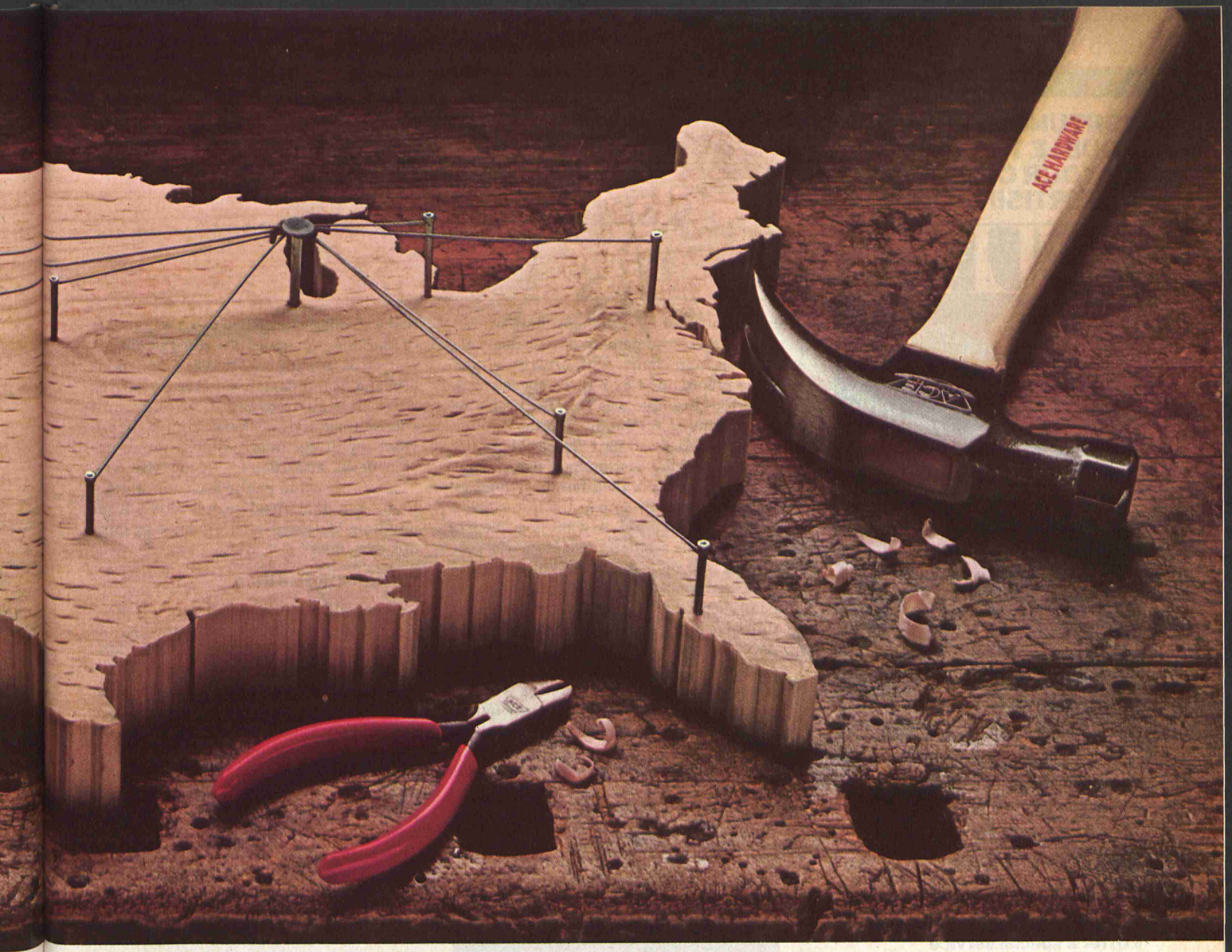

over 4,000 independent retailers.

Ace has a reputation for service to its dealers, so the 8100 fits neatly into the company's operations. "With the 8100, we cut the time to process a supplier shipment into our inventory from four days to a matter of only four hours," reports Roger Peterson, National Distribution Manager for Ace. "With the 8100 and good people, we're not working harder. Just a lot smarter."

Dramatic Gains

Peterson adds that productivity in Ace's distribution centers, measured by the man-hours to process 1,000 orders, has shown a dramatic 30 percent improvement over the past three years. Put another way, it costs 9.8 percent less to process each line item, despite a 30 percent increase in wages.

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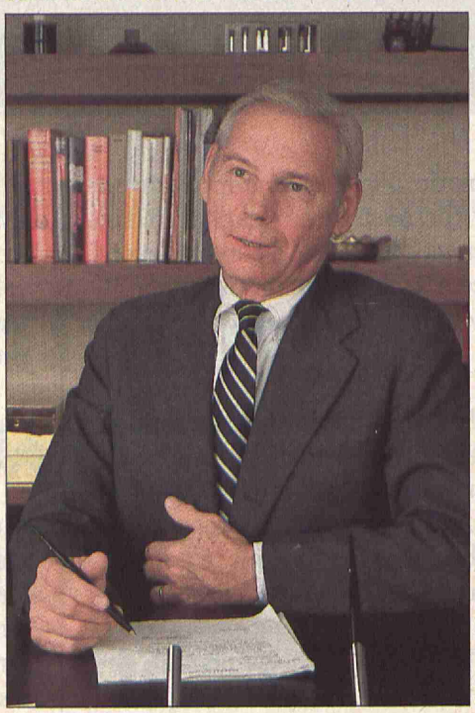
up surrounded by a perhaps flawless, but impersonal, arrangement of new desk, file cabinets, and chairs, with artwork on the walls preordained by a hired specialist. A notorious example was New York's handsome granite CBS Building on the Avenue of the Americas at 53rd Street, where the employees were discouraged from hanging photographs of their families, dogs, or yachts so as not to impair the immaculate look of the building. At CBS just one exception to the aesthetic discipline was permitted, and his name was William S. Paley. Chairman Paley brought his sculpture, paintings, and burnished antique furniture over from his old office on Madison Avenue. In the anteroom hangs a still life painted by his mother.

Roche wanted Union Carbide's workers to choose the furnishings for their offices in Danbury. While the company was still on Park Avenue, he requisitioned space and had his assistants mock up, at full scale, 15 offices furnished in arrangements of four different styles described by the architect as traditional, transitional, modern, and Scandinavian. Carbide executives were invited to wander through and choose their styles. "People didn't choose what architects might choose—high-design desks and chairs," Roche observes. "Those seemed to be the least appealing. I found out that most people don't want anything to do with chairs created by famous designers."

Chairman Warren M. Anderson brought along several pieces of well-used furniture from his Park Avenue office. He describes his taste as "1939 modern."



John Madere

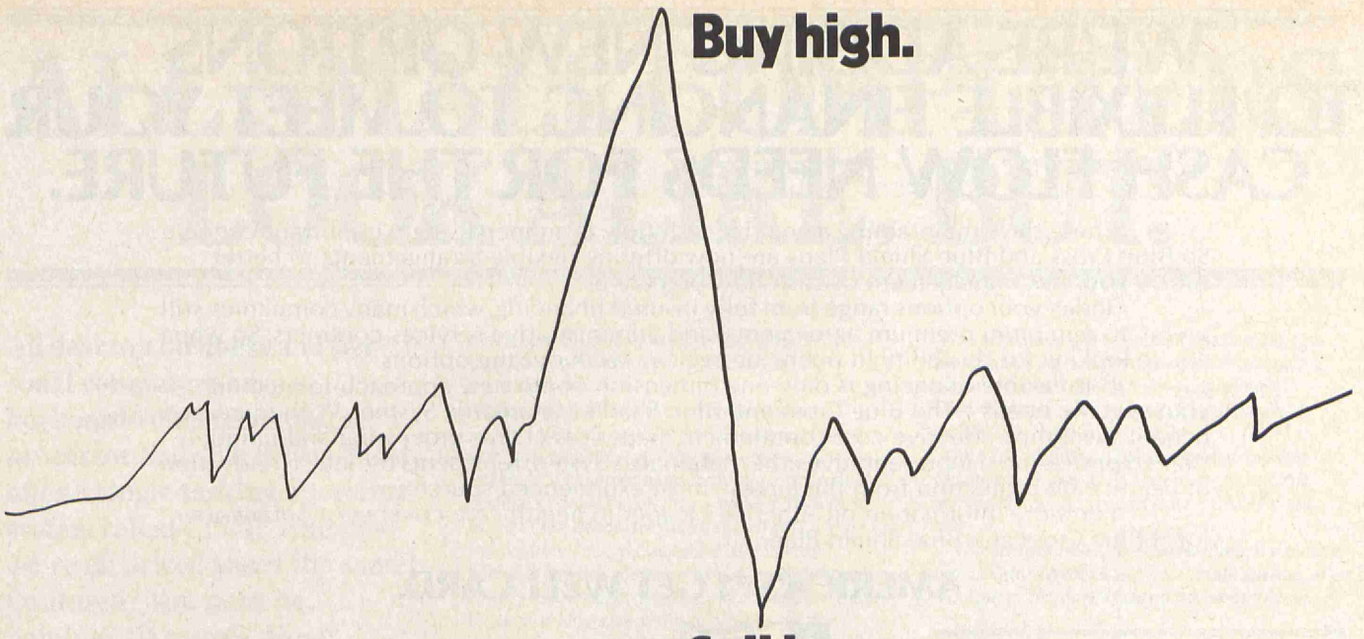
Down with tradition

Even with a mockup, many of them were unable to visualize the finished office, Roche continues. "For example," he says, "a glass table-desk was not a popular choice, yet when they saw one later in the finished building a lot of people said they wished they had chosen it. It was also interesting that the traditional style with paneled wooden desks and imitation period chairs was not popular at all. We are repeating this process for another client and have eliminated that style completely." The most popular mode was transitional: unadorned wooden desks and chairs. "People also asked for a lot of storage space," explains Roche.

In the Danbury offices no lighting fixtures are recessed into the ceiling. Instead lamps are closer to a domestic scale. This enabled the architect to use an eight-foot four-inch ceiling. Low ceilings mean that the building is smaller, a saving in both construction and heating costs. Nor is there any of the usual wall-to-wall carpeting in the offices. An eight- by 12-foot rug in the center of the room allows the border of the oak floor to show. Employees could select artwork in styles from Currier and Ives prints to exotic framed textiles. Whatever style office the occupant chose, the budget for furnishing each office was exactly the same, says Roche, except for those 17 executives at the top.

And wonder of wonders, the windows actually open, or at least can open. Roche installed windows that pivot, convinced that fresh air would not seriously disrupt the building's air-conditioning system.

continued



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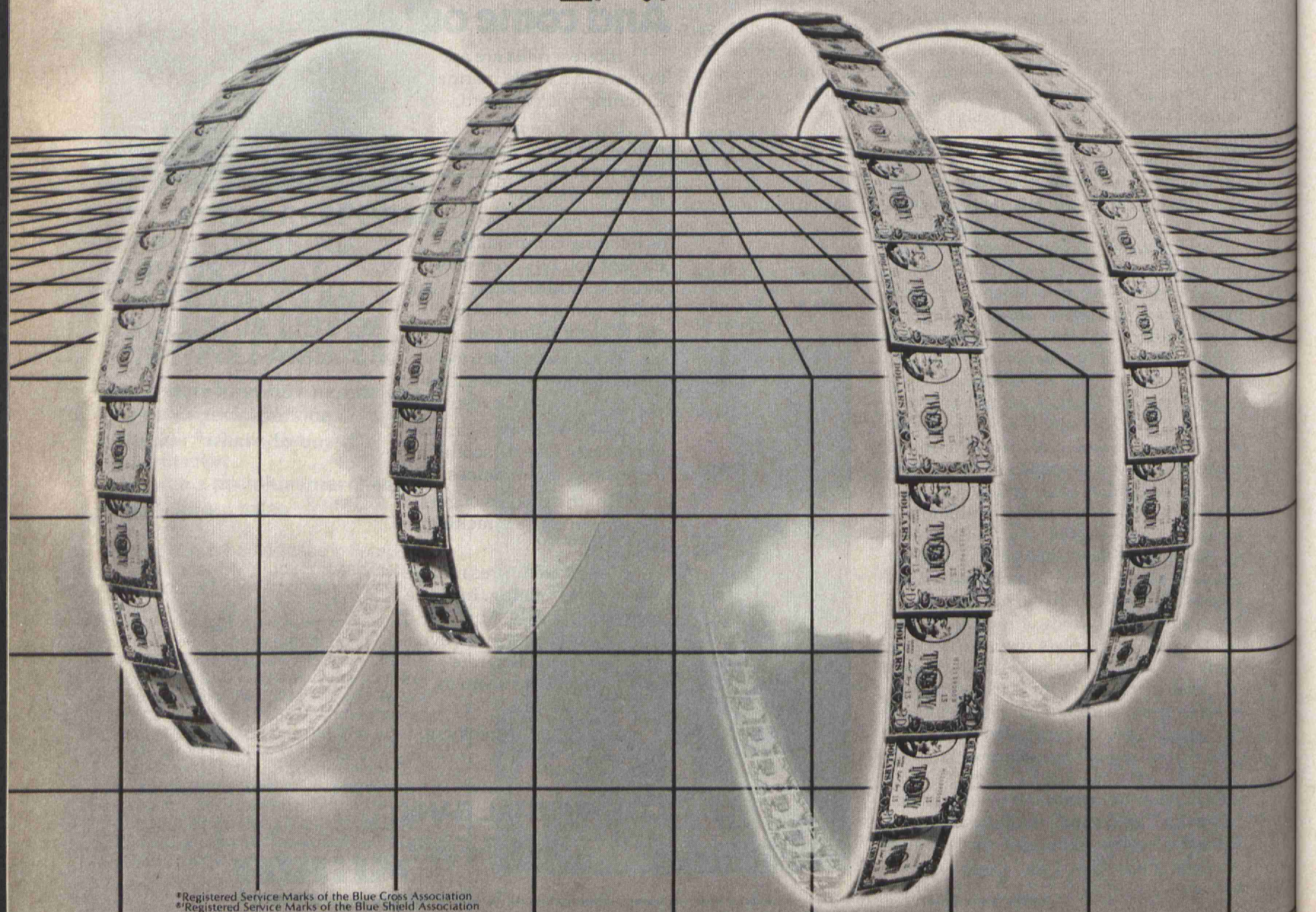

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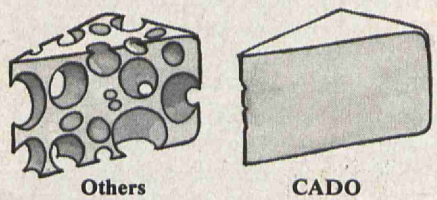
Space usage. Most computers assign equal space for each field of a record, regardless of its actual length. That means a ten-character entry in a 25 character field wastes 15 characters of expensive space.

CADO engineers had a better idea: variable length records. Each record uses only the amount required, eliminating senseless waste.



Others CADO

Sectoring. Disks are divided (much like a pie) into slices called sectors. Records must fit within a sector in conventional systems. Should a new record exceed the area remaining in a sector, the computer leaves that area blank and starts a new sector. CADO's "soft sectoring" ignores these illogical boundaries, using every bit of available space.

Storing numbers. Conventional wisdom requires all numbers to be stored in decimal form with each number requiring space equivalent to its length. CADO chose to use computer logic to store decimal values in binary form—***saving 50% or more of the space normally required!***

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MULTI-TASKING

Multi-tasking is computerese for the ability to perform more than one job at the same time. A simple example of this is the ability to print a report while entering another job. No personal computer and few small desktop computers offer that capability. CADO's unique base register addressing architecture allows ***four*** different tasks to be performed simultaneously with no noticeable degradation in response.

And every CADO system is expandable in your office to at least four work stations. Most small computers can't expand at all. Even with IBM's Datamaster, you have to buy a second computer just to get one more terminal.

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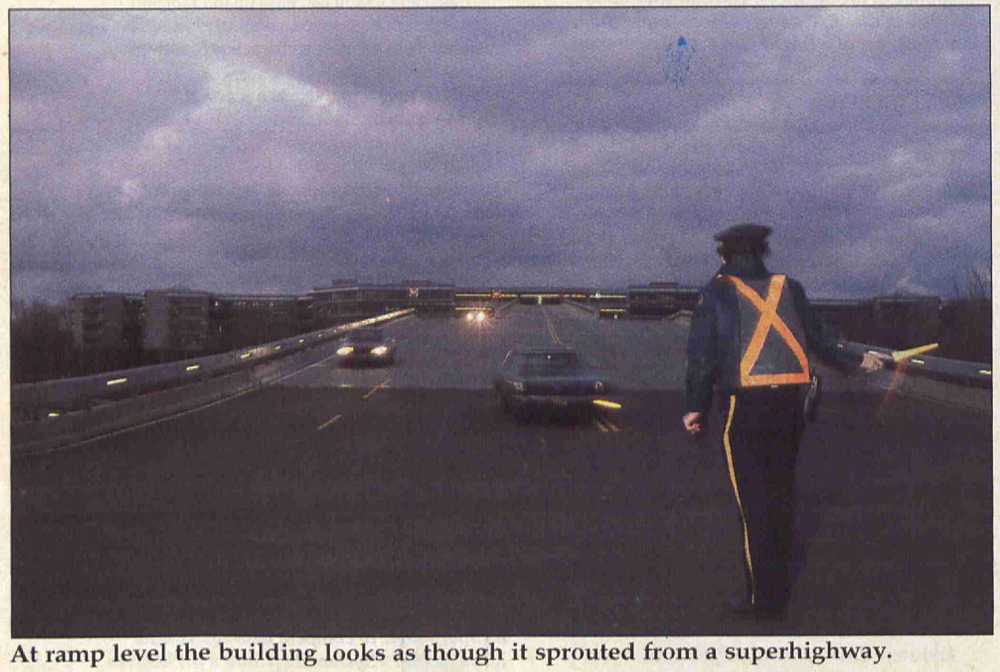
The fiberglass wall at left allows in daylight to illuminate the hall.



At ramp level the building looks as though it sprouted from a superhighway.

Carbide, which has to pay the heating and cooling bills, isn't so sure. It keeps the windows locked.

A final egalitarian touch to this painstaking design is the employees' parking—900,000 square feet for 2,850 cars, which occupies all four levels of the building's center and is entered by a formidable 19 lanes of roadway. All employees will be about the same distance from their cars, an average of 150 feet, under cover.

There are so many offices at Carbide that if they were lined up on both sides of a hallway, it would be 2.6 miles long. Instead they were arranged in pods branching out from a central trunk of the immense garage. One reason Carbide's new headquarters has taken so long to complete has been foundation problems for these pods and the garage. The borings that Carbide commissioned did not reveal the true condition of the subsoil, which turned out to be largely muck.

Not all employees were as enthusiastic about the move as Sneath. Though most were seasoned commuters used to struggling from the suburbs into Manhattan and back each day, many lived west of the city in New Jersey, or east on Long Island, a long way from Danbury. In the end, 800 of the staff of 3,200 chose not to make the move and left the company. These included 60% of the clerical and secretarial people and 20% of the managers and technicians.

And some who have moved are not especially happy with their new surroundings. They miss the excitement and the opportunities of Manhattan. Says one, "You can't just go across the street and get another job. The company has really wrapped us up." Clinging to the city are some 60 or 70 who still commute from Manhattan to Danbury and back on two company buses, a trip that takes almost two hours each way.

A lingering skyline

One who refuses to liberate himself entirely from New York's grasp is Sneath's successor as chairman, Warren M. Anderson, 61, who was born and raised in Brooklyn. Although he recently bought a condominium in Greenwich, which is his legal residence for tax purposes, Anderson sometimes commutes to his Manhattan apartment in a chauffeur-driven Cadillac.

Anderson says that he agreed all along with Sneath that the move to Danbury was right for the company, but he doesn't deny that he misses at least some things about the city, such as the walk to work in the morning along Park Avenue. When he arrived at the Danbury office his aides had hung pictures of the New York skyline in his windows. Governor William A. O'Neill of Connecticut came to call one day and out of politeness Anderson ripped down the pictures beforehand. Just as he suspected, there were trees outside.

Anderson has come to feel more at home in his 674-acre forest. Carbide's building occupies only 2% of the land and is not likely to intrude further. The building is constructed so tautly that there is no way to add a wing. That's okay, Anderson says cheerily. Considering the state of the chemical industry, he would just as soon have a building that could be shrunk a little. F

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STOCKS

Wall Street Yawns Over a Big Oil Strike

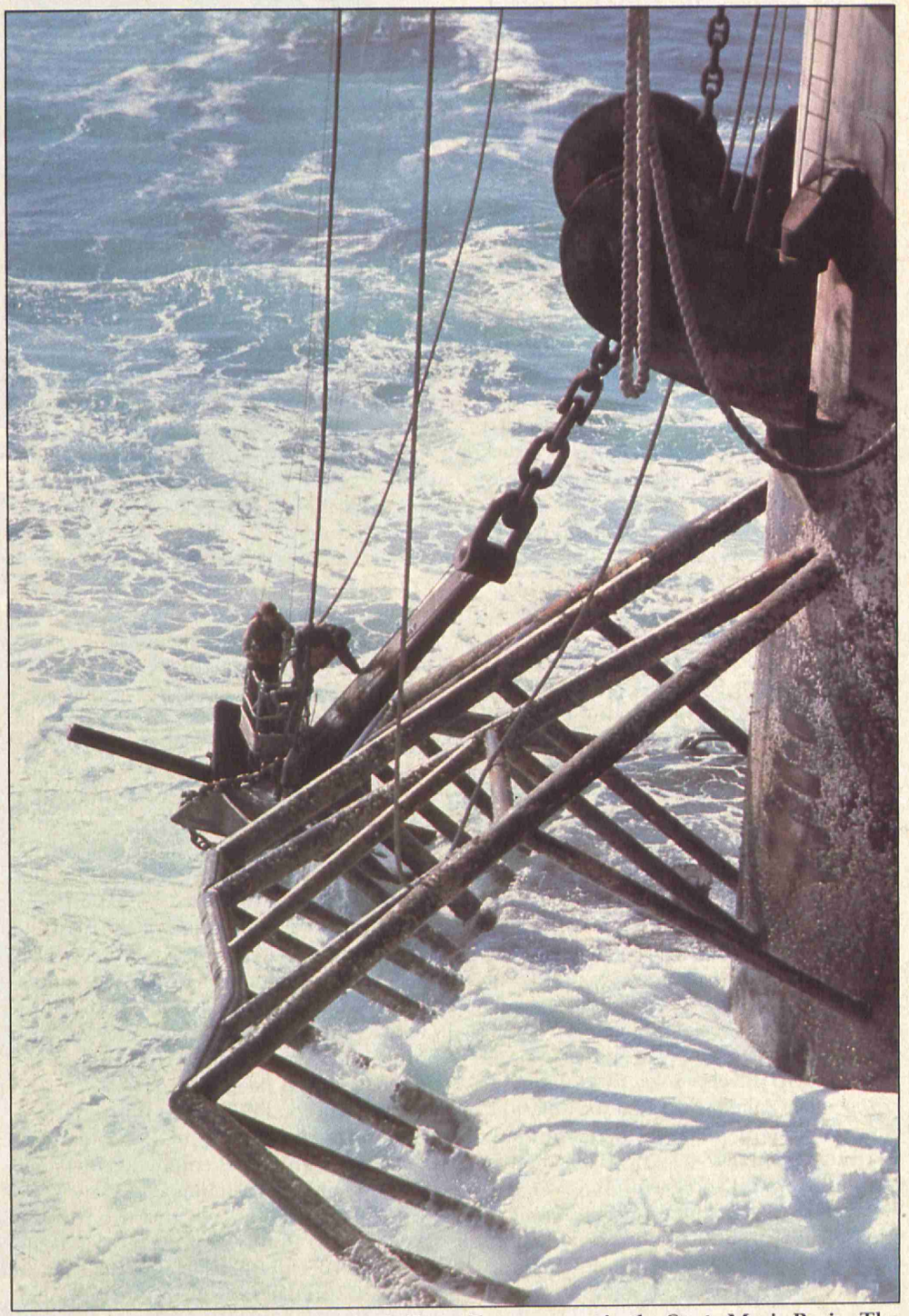
A find off California could double Phillips Petroleum's U.S. production. Why aren't investors cheering?

by ALEXANDER STUART

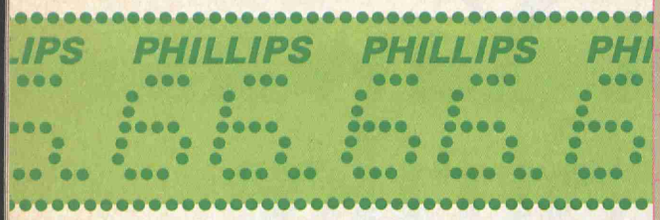
Good news electrifies Wall Street. Or that's what it's supposed to do. Yet when Phillips Petroleum Co. announced a spectacular offshore oil strike in late October, potentially the biggest discovery in the U.S. since Prudhoe Bay 14 years ago, the voltage generated in the investment community was barely sufficient to light a 40-watt bulb.

Phillips had been plodding along without a major domestic discovery for over a decade, feeding off the Greater Ekofisk Development, the tremendous fields it found in the Norwegian North Sea in 1969. Its oil and gas reserves were draining faster than soda through a straw in the dog days of summer. Then in the late Seventies it joined with Standard Oil Co. of California, better known by the name of its domestic operating subsidiary, Chevron U.S.A., and rolled the dice on a couple of lease sales off the California coast. In 1981 Phillips and its partner shelled out $333.6 million for a 5,000-acre tract—a record amount—and wildcatted their way to a phenomenal find. More good tidings have arrived from overseas, where Phillips seems to have turned up an impressive oil field off the Ivory Coast in West Africa.

The stock market has received all this good news with half a cheer at most. The stock has risen recently to the low 30s from a summer low of $23.75 a share, but only part of that rise can be attributed to the big discoveries and the rest to the market rally that has buoyed almost all stocks. As it is, Phillips's shares have not run up as far as those of most energy companies. Even security analysts who like Phillips are a little wary of it. Says Bernard Picchi of

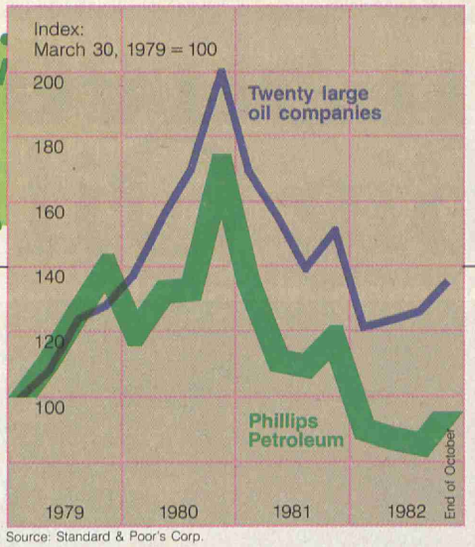


Workmen anchor a drilling rig in a Phillips-Chevron tract in the Santa Maria Basin. The grillwork keeps the anchor chain from banging against the hull.



A Stock Going Like 30

According to one story, the gasoline is called Phillips 66 because an executive boasted it would make a car go "better than 60, more like 66." But Phillips is sputtering on Wall Street. The company's stock has underperformed other oils since 1980, recently selling in the low 30s.



Source: Standard & Poor's Corp.

Salomon Brothers, the New York investment bank: "I'm recommending the stock almost in spite of myself."

Such coolness might seem puzzling because the implications of the California find for Phillips are profound. It will take many more months of drilling to delineate the size of the field, which is in the Santa Maria Basin, about 60 miles west of Santa Barbara. A reasonable guess at this point, however, is that the reserves underlying the Phillips-Chevron acreage probably amount to something like 500 million to one billion barrels of oil—well below the 6.7 billion barrels remaining at Prudhoe Bay, but nonetheless possibly the largest domestic oil discovery since that monster hit. A group led by Texaco has also struck oil nearby. William C. Douce, 63, Phillips's chairman, predicts that the company's 44% to 50% stake in the field could double its domestic oil output by the end of the 1980s.

A stalled engine

A percentage increase that large would be an astonishing feat for a company as big as Phillips, the nation's ninth-largest oil company, which earned $879 million last year on sales of $16 billion. "Of the companies I follow of comparable size, not a one has the potential to add so significantly to domestic reserves," says Picchi, the reluctant Phillips fan.

The importance of that assertion cannot be overstated. In the decade ahead the ability of Phillips or any other oil company to add to its oil and gas reserves will become the single biggest factor in determining its profitability. The reason, of course, is that the engine which powered industry profits to record levels—ever increasing oil prices—has stalled. Adjusted for inflation, prices could remain flat through the 1980s and might actually decline. Thus higher earnings from oil and gas production, still the source of over three-fourths of major-oil-company profits, will be possible only if a company has more hydrocarbons to pump. It now appears that Phillips will, Santa Maria be praised.

So why aren't investors loading up on Phillips stock? The general disaffection with the oils has something to do with it; since the November 1980 peak, oil company shares have skidded 48% in value. Yet investors have displayed skepticism toward Phillips whatever the direction of the market. Since 1980 the company has consistently limped behind the action in Standard & Poor's index of oil stocks (see chart). Phillips's low price has led some people to speculate that the company is vulnerable to a takeover. Maybe, but it would be very expensive. An acquisitor offering a premium of 50% above the market price for Phillips stock would have to pay about $7.3 billion, roughly as much as Du Pont spent on Conoco in the most expensive takeover ever. Not many companies can raise that kind of money.

For an explanation of investors' disenchantment with Phillips, one must first turn to the company's lackluster record in recent years. Like those of the rest of the industry, the company's profits have shriveled from "obscene" to downright lean, due to a combination of the oil glut, higher interest rates, and reduced demand. In the first nine months of 1982, earnings tumbled 34% from the same period last year, to $460 million on sales of $12 billion, a greater profit slippage than that experienced by its peers.

In exploration Phillips has trailed far behind the pack. A study of the 37 largest U.S. energy companies conducted by Paine Webber Mitchell Hutchins, the New York investment firm, shows that from 1977 through 1981 Phillips's proved reserves of crude oil worldwide declined at a compounded annual rate of 14%. Its global cache of natural gas eroded by almost 10% annually in those years. In stark contrast, the group's average annual decline in oil reserves during the same period was less than 4%; in gas, only about 1.5%.

The market's frosty response to Phillips has also been fueled by the bad luck that has stalked the company over the years. In 1977, for example, a blowout in a Phillips North Sea well spewed oil out of control for eight days. Two years ago 123 people perished when a floating "hotel" for Ekofisk workers capsized in a violent storm. Forty-one people were injured that same year following an explosion at Phillips's Borger, Texas, refinery. The mishaps have stirred whispers that Phillips is somehow a second-rate operator.

Nasty surprises

That gossip is unfair and ignores the solid reputation the company has established for research and technical skill. Phillips holds more than 8,500 patents worldwide, perhaps more than any other oil company. Royalties and licensing fees on those patents yielded $30 million to $40 million last year. Moreover, in the late 1960s Phillips pioneered techniques for completing and producing wells in the hostile North Sea that other companies have since copied. Nevertheless, even security analysts favorably disposed to the company believe that, as John J. Turo of the Houston investment firm Rotan Mosle puts it, "when things go wrong with Phillips, they really go wrong."

Some of the misgivings reflect problems at least partly of Phillips's making. Those who follow the company have been burned by nasty surprises that the company has sprung on Wall Street with distressing regularity. Phillips's earnings have often come in lower than the market's ace analysts were expecting, a loathsome occurrence to a group that prides itself on pennies-per-share accuracy in its forecasts. The most frequently cited example of a Phillips surprise, however, is a series of downward revisions in the reserves and production volumes from the Ekofisk field. "It fell off faster than we'd hoped," Bill Douce concedes today. But Phillips has not always been willing to face up to the

continued

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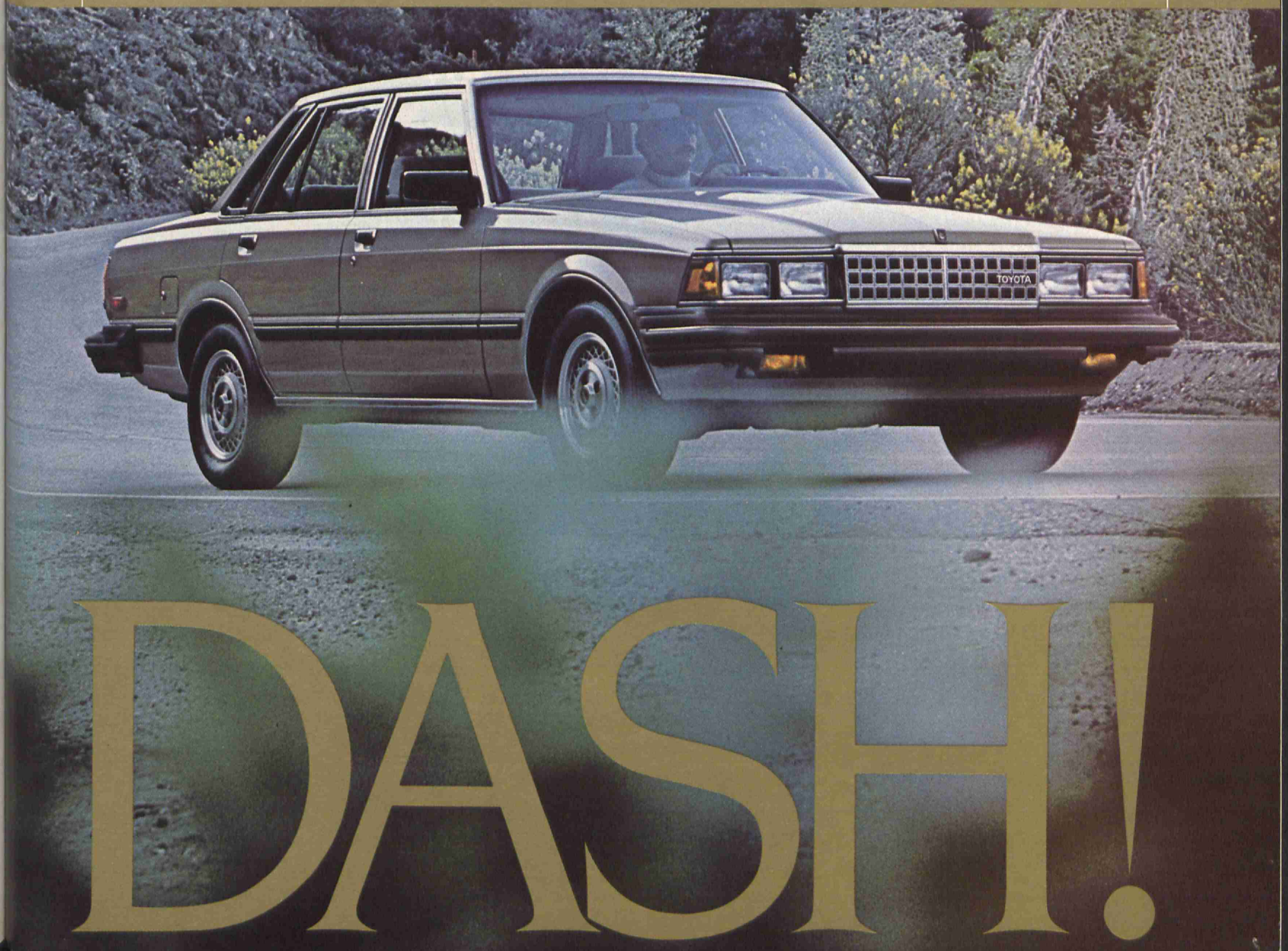

DASH!

"With Phillips," says one analyst, "you find out after the fact."

Ekofisk declines. Barry C. Good, the respected oil analyst for the investment bank of Morgan Stanley & Co., remembers that in the mid-Seventies a sharp-eyed analyst at another firm noticed that the reserve estimates in a prospectus for a Kingdom of Norway financing were much lower than those given by Phillips. Good recalls that Phillips dismissed the Norwegian figures as overly conservative. Yet they subsequently proved close to the mark.

Big-bet thinking

Consequently, says a disenchanted analyst, the company's image on Wall Street is "undoubtedly one of the worst in the industry." He adds, "If Shell had been the discoverer of Ekofisk, it would have telegraphed those reserve declines in advance. With Phillips, you find out after the fact."

Ekofisk both helped and hindered Phillips. The company's 37% share of the 2.9-billion-barrel discovery was the main reason Phillips was able to report steadily increasing crude production through the mid-Seventies. Investors responded warmly, bidding the stock up to a high of $66.25 in 1976. But the Norwegian discovery ultimately tarnished Phillips's reputation in the market because of the way it redirected the company's hydrocarbon hunt.

Phillips's approach, carried out enthusiastically after the Ekofisk find, was to be a "big bet" company, as Picchi of Salomon Brothers puts it. Phillips, founded in Bartlesville, Oklahoma, 65 years ago and still headquartered there, largely ignored onshore prospects and picked-over acreage offshore. Instead, it prowled the world's remote offshore areas, usually in deep waters untouched by man or drill bit, such as the relatively unexplored offshore Philippines.

The high-risk, high-return strategy has paid off so far only with the Ivory Coast strike. Otherwise, Phillips's big bets in faraway places have produced little. The promise of tantalizing geologic structures in the Philippines, for example, has yet to be fulfilled after more than a dozen wells. "They looked like the biggest structures in the world," Chairman Douce says. "If we'd

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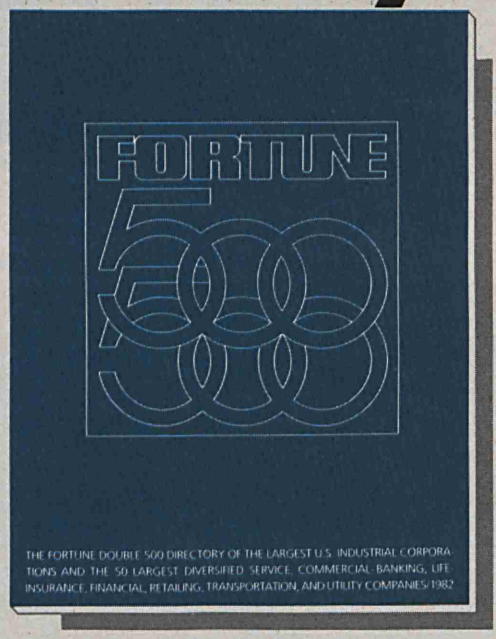

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Chevron warmed up, maybe because Phillips was gutsy.

hit, we would have been as big as Exxon for a while. But the suckers were dry."

Phillips's onshore domestic program dwindled as it gambled grandly abroad. At home, the company let other players take the exploratory risk: it granted drilling rights on its acreage in return for a small interest in any discoveries—a transaction known in the industry as a farmout. The low ebb was reached in 1978. Phillips finished the year with a net interest in only six new wildcats and 94 lower-risk development wells. Meanwhile the competition was bringing in a string of impressive finds in such areas as the Rocky Mountain Overthrust Belt and Louisiana's Tuscaloosa Trend. "We felt the opportunities were overseas," says Leonard M. Rickards, 55, senior vice president in charge of exploration and production. "Maybe we overdid it a bit."

Rank wildcats

With the reality of Ekofisk's decline looming, Phillips belatedly changed course. Indeed, the company launched an almost frantic search for domestic oil. The early returns were lousy. In 1977 Phillips laid out $200 million for some offshore leases in Alaska's Lower Cook Inlet—and came up dry in three costly wells. In 1980 the company bought into a sprawling prospect assembled by Anschutz Corp., a Denver-based independent oil producer: eight million acres that stretched from southern Idaho into southern Arizona. The partners drilled two "rank wildcats"—exploratory wells on acreage far from existing production—in an effort to test the southern limits of the hydrocarbon-rich Overthrust Belt. Oil had never been found that far south in the state. Phillips didn't find any either, after boring through thousands of feet of solid granite.

But at last Phillips's luck began to turn. In 1979 it had joined with Chevron to bid on some tracts in California's Santa Barbara Channel, next door to the Santa Maria Basin. The partnership was surprising, given Chevron's previous experience with Phillips. In 1976 Phillips had suddenly pulled out of an offshore lease sale in the

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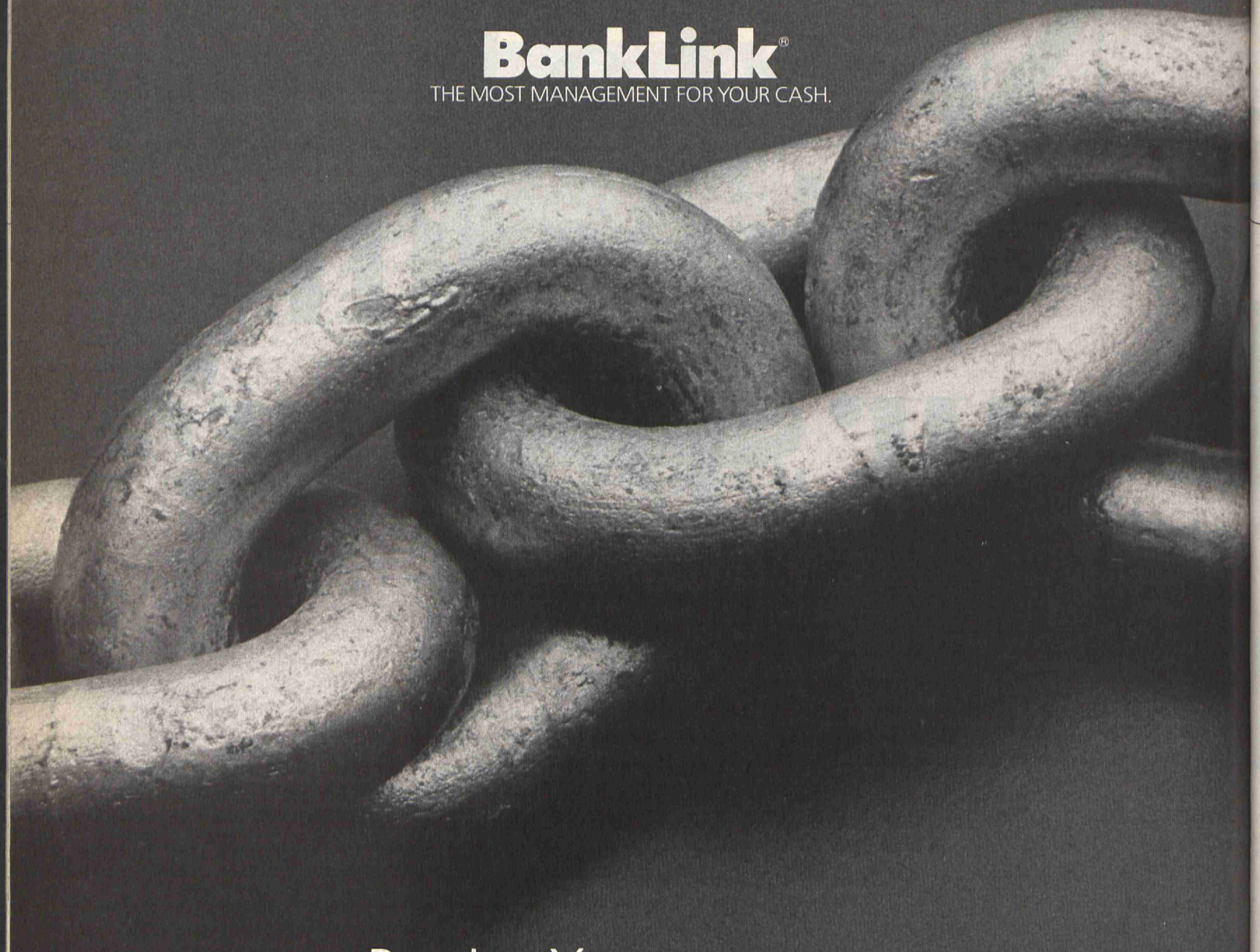

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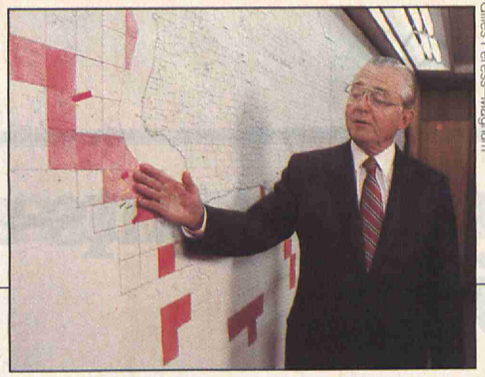

Gilles Peress—Magnum

Chairman Bill Douce in the Phillips map room gives a hand to the company's future, the Santa Maria Basin.

Gulf of Alaska, leaving Chevron high and dry. "We were pretty upset," recalls Lawrence W. Funkhouser, 61, who is in charge of exploration and production for Chevron's parent, Standard Oil of California. But Chevron obviously warmed up to Phillips over the next three years, perhaps partly because of Phillips's gutsy—and fruitless—foray into that Lower Cook Inlet sale. "We spent $200 million, found nothing, and I didn't get fired," says Rickards, Phillips's exploration boss. "I guess Chevron liked our style."

Chevron and Phillips each took 40% of the deal, and two other companies the remaining 20%. Chevron assumed the role of operating partner, making the day-to-day decisions on the first wells to be drilled. "We brought more to the sales than Phillips did," Funkhouser says without undue modesty. "We had been working around that area for a long time." What Phillips brought to the party was a willingness to plunge.

Bidding to buy

And plunge it did, though not at the 1979 sale. There the two companies picked up 83,000 acres for $295 million—relatively cheap. Information gleaned from wells drilled on those acreage blocks—the results of which were kept completely secret—prompted Phillips and Chevron to open their wallets at the next sale in May 1981. "We had knowledge no one else had," Bill Douce says. Adds C. J. "Pete" Silas, 50, Phillips's president: "We bid to buy. It was the opportunity of a lifetime." When the sealed bids were opened, Phillips and Chevron had committed to spend $600 million apiece. On a lease block adjoining an earlier Phillips-Chevron well, the partners anted up a record $333.6 million for just 5,000 acres, $172 million more than the second-highest offer.

The hefty lease expenses are only the beginning. Depending on how rich the basin proves, Phillips will have to spend perhaps $500 million and conceivably as much as $1 billion for development wells, production platforms, and the like.

All this comes when Phillips, like the rest of the industry, is feeling the crunch from one of the sharpest downturns in the oil business in the past 25 years. Douce has thus embarked on a rigorous austerity program. He's cut capital spending by 20% this year and foresees an additional 10% reduction in 1983. Operations have been sold, shuttered, or severely curtailed. But with the meter ticking on its already huge investment in the Santa Maria Basin, it's a safe assumption that Phillips will keep moving on that project.

Stock market palpitations, of course, are governed by expectations for the future as well as by past performance. The first production, and revenue, from the Santa Maria Basin are not expected until 1986 at the earliest. The belt tightening should help keep profits from sagging too much until then. Nevertheless, Picchi of Salomon Brothers predicts "uninspiring earnings" until the Santa Maria Basin begins pumping. The biggest worry is that while waiting for the California crude to start flowing, Phillips will be unable to stem the declines in production from its other properties—particularly at Ekofisk, the source of roughly 41% of the company's total 1981 oil output of 246,000 barrels per day.

Phillips hopes to bridge the gap to 1986 with previous discoveries now under development. The Ivory Coast find, currently pumping 11,500 barrels daily for Phillips, could provide a lot more help in the future if it lives up to its billing. And the company is contemplating a $2-billion enhanced-recovery project at Ekofisk in an effort to squeeze more crude out of that tired reservoir. Wall Street's low-wattage response to Phillips thus far seems to suggest skepticism about the company's ability to pull all this off—as if to say that the bridge to 1986 and the onrush of Santa Maria's subsea blessings may be a bridge too far. F

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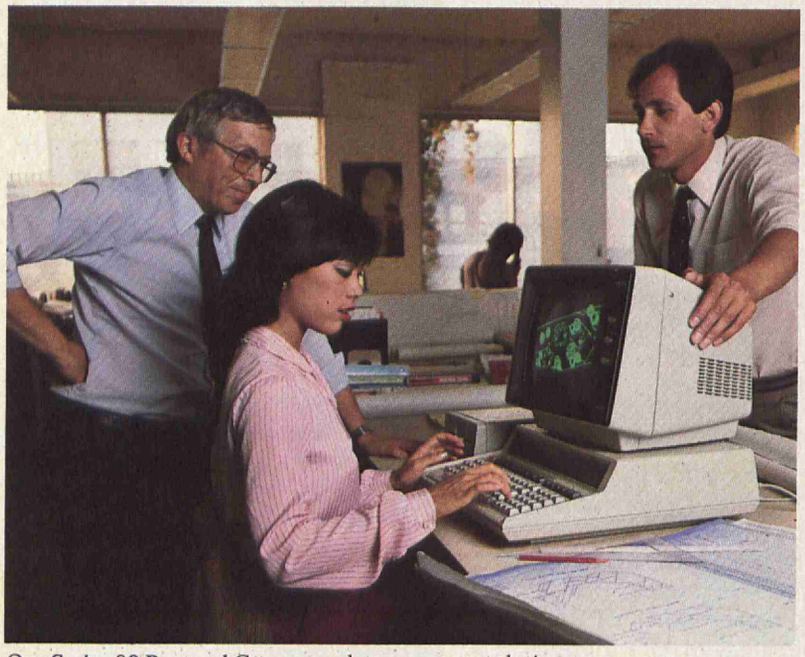

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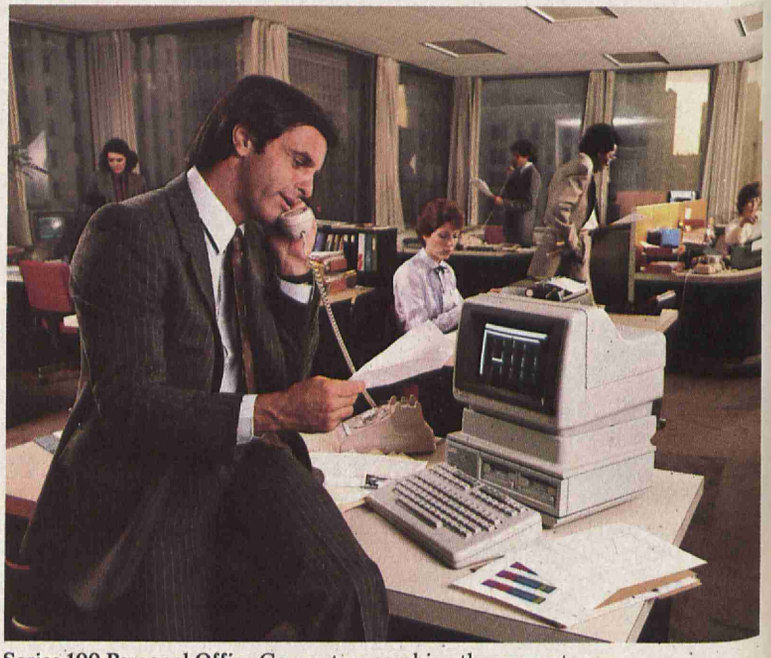

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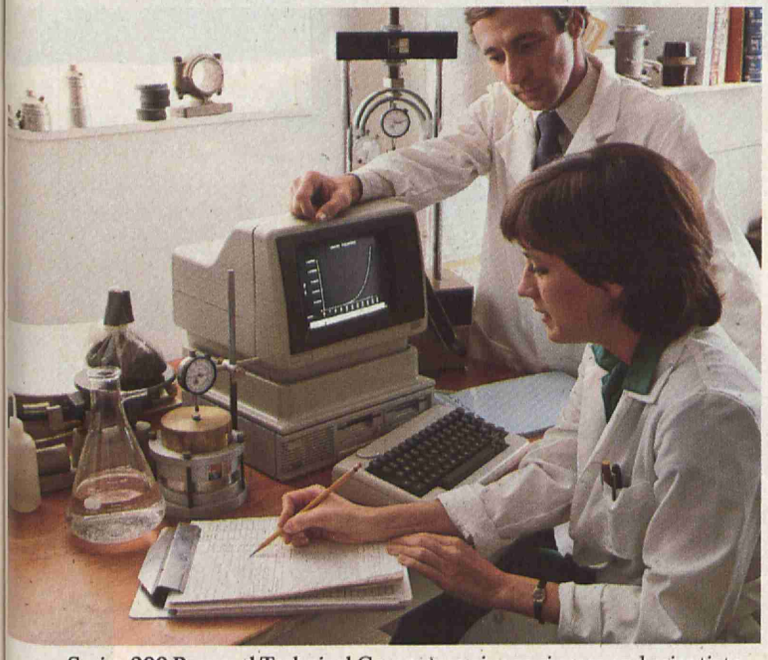

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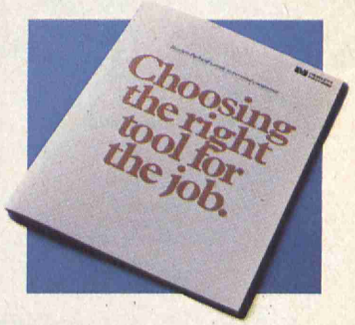

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Options on Futures Begin to Spread

by Mary Greenebaum

Until lately the only kinds of options—puts and calls—that investors could trade on an exchange were those on individual stocks. That changed in October, when the Chicago Board of Trade introduced options on Treasury bond futures. New York's Coffee, Sugar & Cocoa Exchange brought out options on sugar futures, and the Comex, also in New York, began to trade options on gold futures. These new options, based on futures rather than on actual T-bonds, gold, or sugar, are two steps removed from the tangible world, but options on the real things haven't been far behind (see box on page 192).

Other kinds of options on futures are likely to appear soon as part of a pilot program started by the Commodity Futures Trading Commission, the federal agency that oversees commodity trading. The CFTC already has received applications to trade options on heating-oil futures as well as on three stock index futures—S&P 500, New York Stock Exchange Composite, and Value Line Average.

The new options are a far cry from the shady over-the-counter options that investors got burned on in the past. Attempts by speculators to manipulate the grain markets caused Congress to ban options on some agricultural futures in 1936. The CFTC was created in 1974, partly in response to scams by bucket shops that were selling wildly overpriced or simply nonexistent options on such commodities as gold and sugar. Now the CFTC is gingerly letting the exchanges move into the business—closely watched.

Rights without obligations

Like all options, those on futures offer a way to speculate on price swings with limited risk but the chance of big rewards. The Comex has been promoting its options on gold futures as "gold for the not so bold." As the table below shows, the buyer of an option can never lose more than he paid for it. That's because a call represents the right—but not the obligation—to buy the underlying commodities or securities during a stated period at a set price called the strike price. Similarly a put establishes the opportunity—but not the requirement—to sell at the strike price.

If the market goes his way, the lucky holder of a put or a call can sell it at a profit or exercise it. But if the market should go against him, the damage is limited; the worst that can happen is that the option expires and becomes worthless. By contrast, a trader who goes into the futures market experiences the full effect of price swings up or down. He can win big, but he can also lose considerably more than he put up initially.

There is, of course, no such thing as a free safety net. A buyer of puts and calls doesn't make money until the prices of whatever lies behind them have moved enough to offset the cost of the options. So a trader who guesses right will always make more money on a futures contract

continued

Three ways of trying to profit from an upswing in gold prices are purchasing the metal, taking a long position in a gold futures contract (the equivalent of purchase), and buying a call option on the contract. The examples assume that at the outset both the futures and the option have an April expiration date and that the price at which the call can be exercised equals the market price of gold for April delivery. The futures price won't rise as much as the cash price—futures prices include carrying charges. Strictly speaking, the futures trader's return on a price rise of $150 an ounce is infinity, not 350%, because he doesn't actually invest anything and gets his collateral back intact.

HOW AN OPTION CUTS A GOLD TRADER'S RISK

METHOD OF TRADING	AMOUNT REQUIRED FOR 100 OUNCES	GAIN IF PRICE RISES $150 AN OUNCE	LOSS IF PRICE FALLS $150 AN OUNCE
OUTRIGHT PURCHASE	$42,500 CASH	$15,000 / 35%	$15,000 / 35%
FUTURES CONTRACT	$4,000 COLLATERAL	$14,000 / 350%	$16,300 / 408%
OPTION ON A FUTURES CONTRACT	$4,000 CASH	$10,000 / 250%	$4,000 / 100%

Source: Comex

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(ASH) *ASHLAND, KY.* Ashland Oil, Inc. today announced preliminary 1982 fiscal fourth quarter net income of $75.8 million, $2.34 a share, up 54 percent from $49.3 million, $1.45 a share, in the 1981 fiscal fourth quarter. Sales and operating revenues were $2.3 billion for the quarter compared to $2.6 billion in the 1981 fourth quarter.

Net income for fiscal 1982 of $180.9 million, $5.29 a share, up 101 percent from 1981 net income of $90.0 million, $2.22 a share, was also announced. Sales and operating revenues for fiscal 1982 were $9.1 billion compared to $9.5 billion in 1981. Ashland's fourth quarter and fiscal year ends September 30.

Net income for the quarter includes approximately $20.9 million resulting from the net effort of unusual items.

Net income for the year includes a total of $47.1 million resulting from the net effect of the unusual items mentioned above and those reported in previous quarters.

In making the announcement, John R. Hall, Ashland Board Chairman and Chief Executive Officer, said, "Ashland Petroleum had favorable results for the fourth quarter and for the year. Excluding the effects of unusual items, fiscal fourth quarter operating income in the petroleum segment totalled $78.8 million. This strong showing resulted from four principal factors:

- Ashland's crude oil position has been strengthened significantly through the change in supply sources. Relatively stable, lower-priced, domestic sources now account for about 70 percent of our refinery needs, compared to 58 percent at this time last year and 34 percent in 1980.
- The petroleum products market remained relatively stable during the last half of our fiscal year.
- Operational costs were significantly reduced through force reduction and more efficient energy utilization.
- Valvoline Oil Company had an outstanding quarter and year, reporting record net income for both periods and increasing market share despite the lower demand for motor oil.

"Reflecting the severe impact of the economic recession in demand for their products and services, several of our other operating segments reported a decline in operating income for the year," Hall said. "The performance of these divisions follows closely that of the general economy. We remain optimistic that each of these divisions will report improved earnings as the national economy improves.

"We are proud to report that Ashland produced strong earnings in a difficult economic year," Hall said. "We anticipate that the turbulent conditions that plagued the petroleum industry and the national economy throughout 1982 will continue during the next few years. Thus, management has concentrated its efforts on positioning Ashland to be able to compete successfully in this volatile environment. We believe that flexibility and cost control will be the keys to future progress, and we will continue to emphasize both.

"Over its history, Ashland has demonstrated its ability to adapt and succeed in difficult, changing environments, and we are determined to carry on that tradition," Hall concluded.

(*For Mini Annual Report Contact:* William Hartl, Director-Financial Communications, Ashland Oil, Inc. 410 Park Avenue, New York, NY 10022. Phone: (212) 421-1250.)

COLOR TILE, INC. O

(TILE) *FORT WORTH, TX.* Color Tile, Inc. reported earnings for the first quarter of fiscal 1983 of $2,349,000, or $0.23 per share, versus $1,625,000, or $0.15 per share for the same period a year ago.

Sales for the quarter were $57,375,000, as compared to $52,114,000 last year, a 10.1 percent increase. A total of 572 stores in 46 states were in operation at Sept. 30, 1982, versus 539 stores in 44 states last year.

First Quarter Ended September 30	1982	1981
Net Sales	**$57,375,000**	$52,114,000
Income before Income Taxes	**4,382,000**	2,954,000
Provision for Income Taxes	**2,033,000**	1,329,000
Net Income	**2,349,000**	1,625,000
Average Common Shares Outstanding	**10,414,000**	10,820,000
Net Income per Average Common Share	**$0.23**	$0.15

"We attribute the continued turnaround to our concentrated efforts for more effective advertising, our new store vignette display program, and our monitoring of operational expenses.

"Our gross margin improved 0.9 of 1 percent and our selling, general, and administrative expenses decreased 2.5 percent as a percent of sales for the same comparative quarters. Net earnings were up 53.3 percent and pretax earnings from operations, exclusive of interest effects, were up 82.4 percent," stated John A. Wilson, chairman of the board, president and chief executive officer.

(*Contact:* Barry W. Witt, Vice-President and Treasurer, Color Tile, Inc., 1820 Two Tandy Center, Fort Worth, TX 76102. Phone: (817) 870-9634.)

DELUXE CHECK PRINTERS, INC. N

(DLX) *ST. PAUL, MN.* Deluxe Check Printers, Incorporated reports that sales for the first nine months of 1982 reached $407,773,756, up 8.9 percent from $374,482,860 a year ago. Net earnings for the period were $46,554,764 or $2.03 per share, up 15.9 percent from last year's $40,182,546, or $1.75 per share.

Sales for the third quarter were $140,362,533, up 9.2 percent from $128,527,692 last year, while net earnings were $17,909,488 or $.78 per share, up 14.5 percent compared to $15,638,064 or 68 cents per share a year ago.

(*Contact:* Peter R. Hinsch, Financial Vice President, Deluxe Check Printers, Incorporated, P.O. Box 43399, St. Paul, MN 55164. Phone: (612) 483-7111.)

WETTERAU INCORPORATED O

(WETT) *ST. LOUIS, MO.* Wetterau Incorporated reported increased sales and earnings for the second quarter and first six months of fiscal 1983, it was announced today by Ted C. Wetterau, Chairman of the Board and Chief Executive Officer.

For the quarter ended October 2, 1982, Wetterau achieved record sales of $554.3 million, an increase of 17 percent compared with sales of $473.9 million for the same period the prior year. Net earnings for the second quarter reached $3.6 million compared with a net loss of $3.3 million, primarily resulting from an unfriendly takeover bid in the previous year. The incremental gain in earnings is $6.9 million. Primary earnings per common share for the second quarter were 47 cents, compared with a loss of 43 cents per share the prior year. Fully diluted earnings per common share for the second quarter were 45 cents, compared with a loss of 43 cents per share the prior year.

For the first six months of fiscal 1983, Wetterau reported record sales of $1.1 billion, an increase of 14.6 percent compared with sales of $937.3 million for the same period the previous year. Net earnings for the six months reached $6.4 million, compared with a net loss of $1.0 million the prior year. This represents a positive turnaround of $7.4 million. Primary earnings per common share for the six months were 83 cents, compared with a loss of 13 cents per share the year before. Fully diluted earnings per common share for the six months were 79 cents, compared with a loss of 13 cents per share the previous year.

Net earnings and earnings per common share for the second quarter and first six months of fiscal 1982 have been restated as a result of a subsequent change to the LIFO inventory valuation method. Primary earnings per common share have been computed based on the weighted average number of shares outstanding during the quarter and six months; fully diluted earnings per common share additionally assume the exercise of outstanding stock options and the full conversion of the company's convertible subordinated notes.

In announcing the quarter and six month results, Mr. Wetterau stated, "The company's management and directors are pleased with the progress evidenced in our year-to-date sales and earnings results, and the very positive contribution to growth from incremental business resulting from our aggressive marketing strategy. Fiscal 1983 is unfolding as planned and we remain confident that by year end the company will return to its historic pattern of successful performance and growth."

The company also announced that a registration statement has been filed with the Securities and Exchange Commission regarding the acquisition of Laneco, Inc. That acquisition is expected to be consummated in late November. Prior to the acquisition, Laneco will distribute to its shareholders all of the shares of its real estate subsidiary. The acquisition of Laneco is contingent on a favorable ruling by the IRS that this exchange is tax-free.

(*For further information contact:* Dick N. Dalton, First Vice President, Communications & Strategic Planning, or Ronald S. Humiston, Director, Public Relations & Communications Services, Wetterau Incorporated, 8920 Pershall Road, Hazelwood, MO. Phone: (314) 524-5000.)

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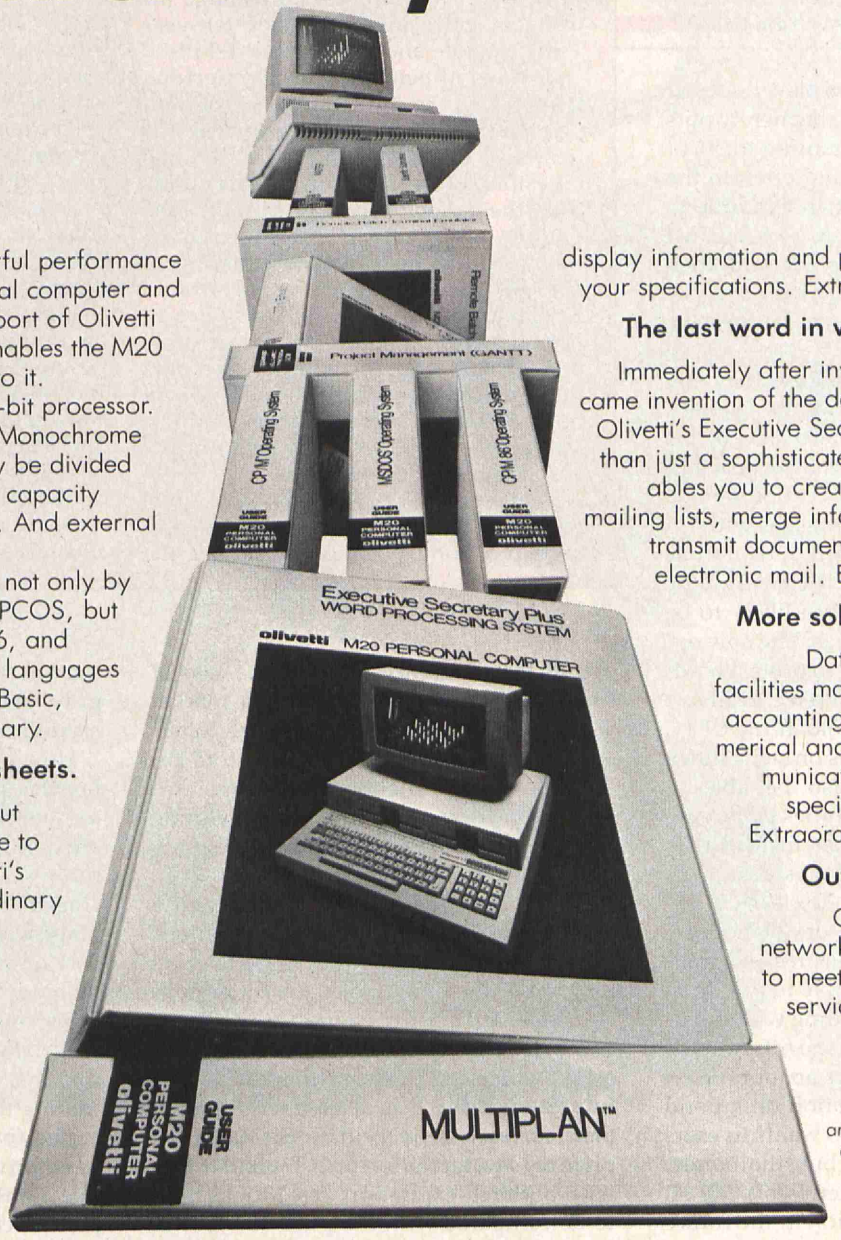

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than on an option. A futures player doesn't make an actual investment; he merely puts up collateral—usually amounting to 5% of the value of the contract, and often in the form of Treasury bills, which continue to earn interest. If the market goes against him, he can lose his deposit and then some. But if he at least breaks even, his position has cost him nothing because he gets his collateral back.

Hedgers like options because they can buy puts to protect their holdings against a drop in price. If the market value of his portfolio should rise, the hedger profits if the gain is greater than the cost of the put. By contrast, someone who hedges with futures is in virtually the same position as someone who has sold out his investment: the gains on his portfolio are likely to be offset by losses on the futures. The new options on futures offer ways to protect holdings on which options weren't available before, such as bonds or gold. If the CFTC approves trading in options on stock index futures, investors will also be able to hedge large holdings of equities by buying a single put on the market instead of a number of puts on individual stocks.

Options on futures have no clear-cut advantage for either speculators or hedgers over options on actual securities and commodities, but people who like to put up as little cash as possible in trading will probably go for puts and calls on the futures. The central difference between an option on the actual bond and an option on a bond future is that someone who wants to exercise a T-bond call has to buy the bonds, while the investor who exercises a call on the future can take a position in the future simply by putting up collateral.

Embedded interest

Calls on the futures of anything that yields little or no income may be cheaper than calls on the real thing. Robert Merton, a professor of finance at MIT, explains that an investor wanting to avoid tying up money in a nonearning asset like gold can't just buy a call on gold and invest in T-bills the difference between the cost of the call and the price of bullion; the market will price the gold call high enough to offset his interest income. Calls on gold futures don't have the interest income embedded in their price, because converting the call to a futures position involves only putting up T-bills as collateral.

As with all options, an option with a long life will typically cost more than one about to expire, since the longer option provides more time for the market price to reach the strike price. The gap between the two prices is also a key variable. Unlike a stock, which has only one market price, a futures contract has a different market price for each delivery date. So the strike price of, say, an option on a T-bond future with a March expiration date would have to be compared with the price of T-bonds for March delivery.

Volatility is another important factor. Buyers of puts and calls make money on price swings, and they will pay more for an option on a stock that fluctuates wildly than for one on a more stable stock. The new options on futures promise plenty of action. Thomas Rzepski, a vice president at Paine Webber, calculates that over the past couple of months T-bond futures have been about as volatile as the stock market (measured by the S&P 500), while gold and sugar futures have jumped around twice as much.

How profits in the new options will be taxed is still a conundrum. The IRS has yet to determine whether options on futures are going to be treated like options or like futures. Profits from options on stocks are considered short-term capital gains—the longest options go out only nine months—and are taxed at the same rate as ordinary income. In theory, some options on futures could produce long-term gains because the options run as long as 16 months—but so far there's virtually no trading that far out.

The futures exchanges are lobbying to have profits from the new options taxed like gains on futures contracts: 60% of the profit is considered long term regardless of the holding period, and the balance is short term. That works out to a maximum tax rate of 32%. Even if that proposal isn't adopted, traders in options on futures could conceivably have the best of both worlds. If the market went against them, they could let their options expire or sell them at a loss, but traders who were winning could save taxes by exercising their options to transform profitable positions into futures contracts. F

Research associate: Louis S. Richman

Action in the Real Things

A couple of weeks after the October debut of options on futures, the Chicago Board Options Exchange began to trade options on an actual bond: the 14% Treasuries due in 2011. Around the same time, the American Stock Exchange introduced puts and calls on a ten-year Treasury note and on 13-week T-bills.

Besides appearing less mysterious than options on futures to a lot of people, the options on fixed-income securities have the advantage for individual investors of trading in smaller units than their counterparts in futures. The options on the T-bond future, which cover bonds with a face amount of $100,000, have been going for around $2,000 to $5,000. The CBOE also has an option on actual bonds with a par value of $100,000—but in addition it offers puts and calls on securities with a par of only $20,000. These smaller options, available as well on the Amex, typically cost a few hundred dollars.

Theoretically hedgers could buy puts on either the bonds or their futures to protect a bond portfolio. But since the CBOE options are on high-coupon issues, investors whose bonds are selling around par may find these puts on the real thing handier for hedging than futures options. The T-bond futures contract sells at a deep discount, since it is based on bonds with an 8% coupon; that means a hedger might need more than one put to protect each $100,000 of face value in his bonds.

The options on fixed-income securities are opening the way for other new puts and calls. The New York Stock Exchange, the Amex, the National Association of Securities Dealers, and the CBOE all have plans to introduce options on stock indexes. The stock exchanges and the NASD would use their own composites while the CBOE is proposing to create a brand-new index of 100 stocks on which options are traded. New gold options are also in the works. The Pacific Stock Exchange has proposed options on gold coins like Krugerrands, and the Amex, with an eye to its retail clientele, wants to introduce puts and calls on a mere ten ounces of gold.

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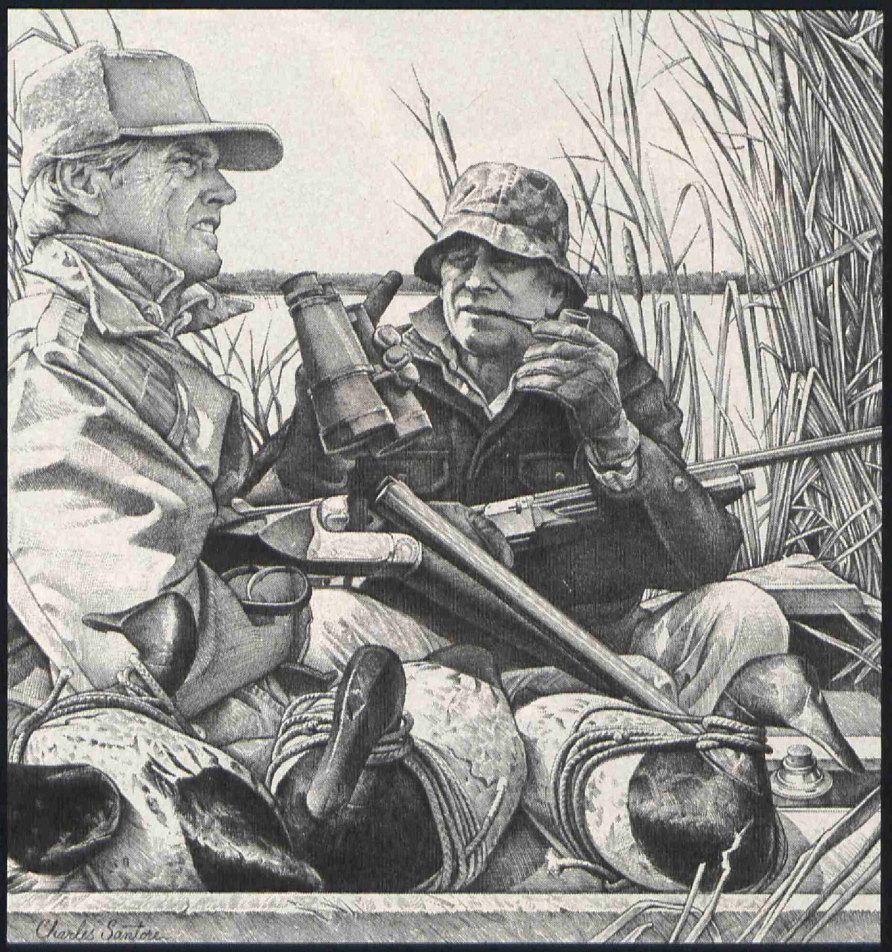

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In Search of Mexican Meals

by Patricia A. Langan

Americans are putting away Mexican food as never before—some $3 billion worth in restaurants last year. Of course, most of it isn't authentic. "Mexican food in U.S. restaurants is now at the stage reached by Chinese food 20 years ago—the chop suey and chow mein stage," says Diana Kennedy, a cookbook author and a critic of Mexican food. It reflects little of the rich cuisine, varying from region to region, handed down by the Aztecs, the Spanish, and even the French during their mid-19th-century occupation.

Nonetheless, what passes for Mexican food north of the border is earthy, hearty food, festive and inexpensive, that offers its own rewards. Mexican restaurants here have adopted mainly the cuisine of Sonora in northern Mexico, based on beef, mild chile peppers, and wheat tortillas. There are also domestic regional variations, most notably fiery Tex-Mex with its chili con carne and nachos—corn chips covered with beans, cheese, and jalapeño peppers and then broiled. And here and there, like sunken Spanish galleons, can be found real treasures of authenticity.

The basic all-purpose American-Mexican meal is most often found today in Mexican dinner-house chains like Chi-Chi's and W.R. Grace's El Torito. Sonora-style dishes are served most commonly as combination plates—tortillas in different forms with beans and rice. Tortillas filled with chicken, beef, or cheese become enchiladas; when deep-fried, chimichangas. Usually the atmosphere is more exciting than the food—you eat in a sparkling hacienda right out of postcard Mexico—and the odds against indigestion are in your favor. What could be incendiary is probably bland, although one chain, El Torito, varies spiciness not only from region to region but even from one Texas city to another. Chain executives like to say they are

continued

Steve Smith–Wheeler Pictures

Tortillas are made in full view of patrons at La Luz del Dia in Los Angeles.

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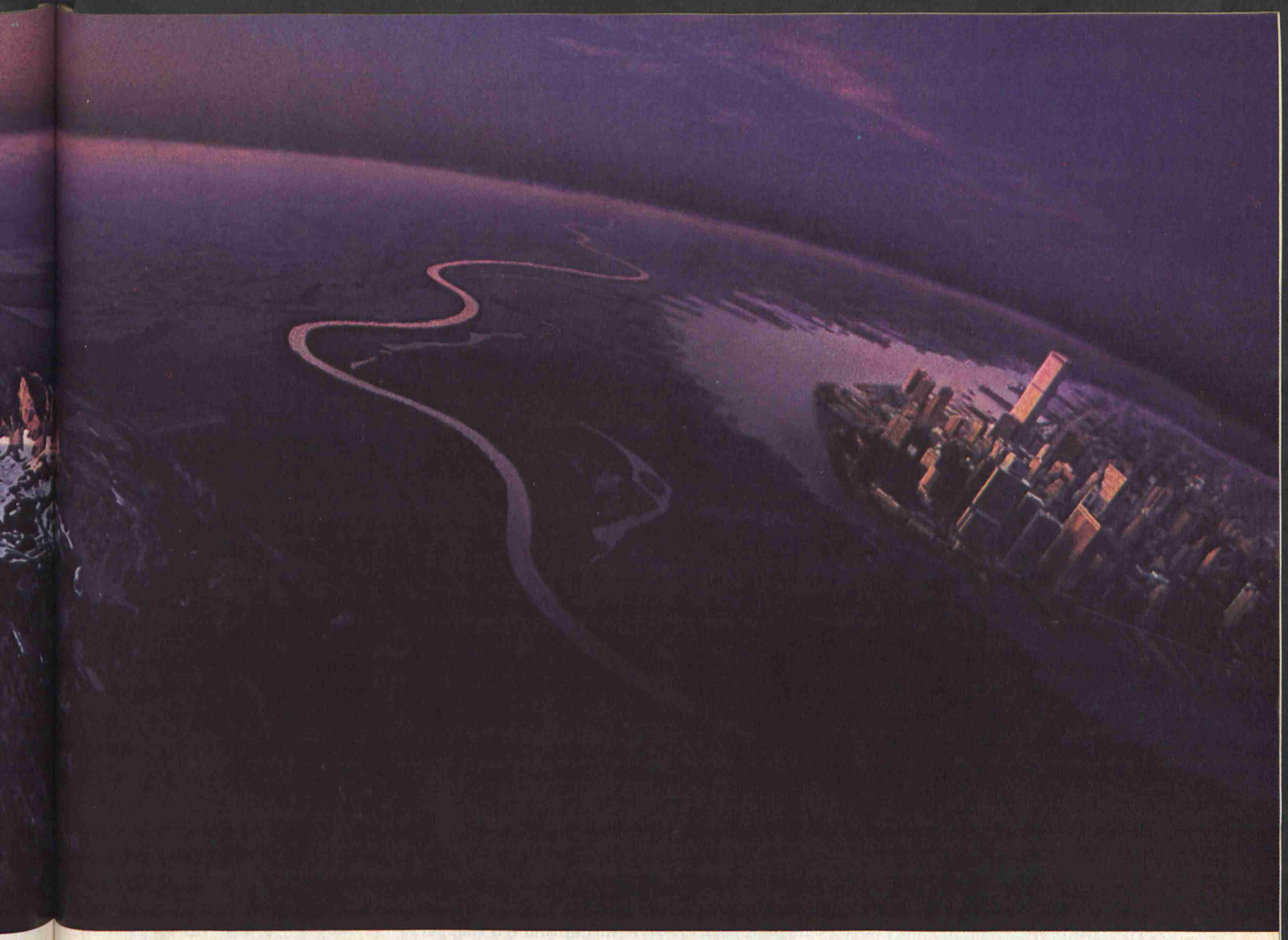

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developing new dishes to educate American palates to the subtleties and variety of Mexican cuisine, but creations like Mexican Pizza, Blue Margaritas, and Kahlua Mousse are more likely innovations.

Finding an individually owned Mexican restaurant does not necessarily assure intriguing food. Your chances of getting something more than a basic combo platter improve, but the meals are just as likely to be bland. Many long-established proprietors have grown to assume that their customers prefer pabulum to poblano (a dark green pepper), and they often don't use authentic ingredients—like cilantro (coriander) in guacamole and salsas.

My search for Mexican food with character took me from New York to Washington, Houston, Los Angeles, Denver, Chicago, and San Francisco. I had trouble finding first-rate places even though I'd gotten some tips from Mexicans living in the U.S. External appearances and guide listings that use words like "authentic" and "best" are meaningless: too often it's the Mexican antiques that are authentic and the location that's best. In Chicago, a good cross section of what's available in major U.S. cities, I was disappointed by a handsome canopied place on Michigan Avenue called Mesón del Lago. Nachos were covered with orange cheddar cheese, although authentic white cheeses are easy to find in Chicago. Two waiters went blank when asked to recommend authentic dishes. Flautas (tortillas filled with chicken, then deep fried) seemed to be the best bet until they arrived buried in sour cream. When excavated, the salsa verde (green sauce) was fairly zesty, but the tortillas were cold.

I fared better at Su Casa, a tranquil spot with Spanish colonial decor just a couple of blocks away at 49 East Ontario Street (312-943-4041). Su Casa's cuisine is mainly Tex-Mex; it has a combination plate, the usual enchilada dishes, and a Texas chili, all well spiced and interesting. But there's also a fairly hot salsa picante on the table for do-it-yourself seasoning and a smattering of well-prepared unusual dishes. Among these were a delicate trout with cilantro and Camarones a la Veracruzana (shrimp sautéed with tomatoes, peppers, garlic, and spices).

Rewards for the adventurous

Food with genuine Mexican soul is usually available only to the truly adventurous who are unafraid to stroll into Mexican neighborhoods and sit down in places whose atmosphere usually ranges from American luncheonette to borderline seamy. Liquor is rarely served, but most places offer well-chilled Mexican beer.

Chicago's family-owned Ostioneria Playa Azul (1514 West 18th Street, 312-733-9091), for example, is unprepossessing, to put it charitably. But the Veracruz seafood specialties are fresh and original. My choice: Tostadas de Ceviche de Jaiba—a crisp, thin tortilla covered with chopped crab, green olives, white onions, tomatoes, jalapeño peppers, and abundant chopped cilantro. Among the other possibilities: lobster in garlic sauce and Eternal Youth Shrimp, a breaded and fried seafood combination. (Credit cards aren't accepted.)

In Denver, Taqueria Patzcuaro is a cheerful, spotless place with a Mexican jukebox (2616 West 32nd Street, 303-455-4389). Caldo Pescado, a delicious spicy fish stew, is the weekend specialty. Other finds worth the short ride from downtown: tortas (Mexican sandwiches made with homemade bread), taquitos carbon (small soft tacos filled with beef), and an icy crushed melon drink. (No beer or credit cards.) Los Panchos, a roadhouse off I-70 not far from the airport, prepares a succulent beef barbacoa—barbecued meat steamed with a dark, rich, spicy sauce called mole (4780 Tejon Street, 303-455-1050. Credit cards).

The most accessible neighborhood spot I visited was La Luz del Dia (1 Olvera Street, Los Angeles, 213-628-7494), where neighborhood folk, tourists, and businessmen mingle comfortably in a relaxed and cheerful atmosphere. For 23 years Francisco Cázares has been turning out homemade tortillas and hearty food. His

continued

At Ostioneria Playa Azul in Chicago, chef Hermilo Huasano's seafood specialties include Veracruz-style shrimp and red snapper.

John Chao

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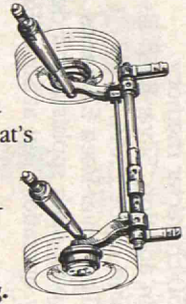

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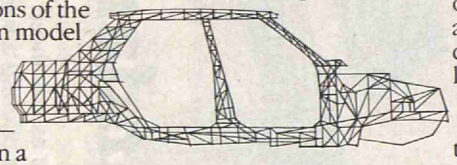

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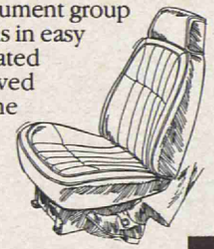

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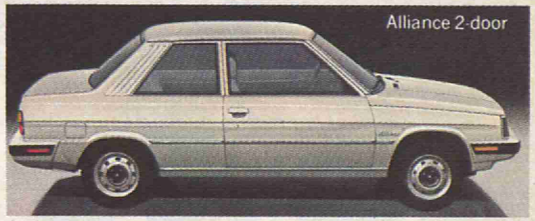

**Manufacturer's suggested retail price for the Alliance 2-door. Price does not include tax, license, destination charges and other optional or regionally required equipment.

Vehicle type: 5-passenger front wheel drive 2-door and 4-door sedan **Engine type:** Transverse-mounted, 4-in-line, Bendix single-point electronic fuel injection (Bosch multi-point in CA)

Steering	Rack and Pinion with Opt. Power Assist		
Brakes	Power-Assisted Front Disc, Rear Drum		
Suspension	4-Wheel Independent		
Displacement	1397 cc	Length	163.8 in.
Wheelbase	97.8 in.	Curb Weight	2-dr. 1945 lbs. 4-dr. 1980 lbs.

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Alliance DL 4-door

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Bob Gamel

Houston's Merida Restaurant on Navigation Street telegraphs its Yucatán specialties with a mural of Mayan monuments. Diners arrive at 8 A.M. for Mexican breakfasts.

cafeteria-style menu has dishes like picadillo (Mexican beef stew) and carnitas (crisp-fried pork). Ensalada de Nopalitos turned out to be a rare Mexican delicacy: cactus salad. Cactus eating may sound unappealing, but when the fleshy inner leaf is chopped up and mixed with tomatoes, onions, and cilantro, it's a tasty side dish. (No credit cards.)

A small but growing number of fancier places offer Mexican regional specialties and will appeal to people who do not have an explorer's fearlessness to back up their adventurous palates.

Houston's three Merida restaurants offer first-rate examples of Yucatán cooking, a cuisine prized even in other parts of Mexico for its singular blend of Mayan and Moorish seasonings. Owner Rafael F. Acosta, who opened the original Merida in 1972, imports spices from his native region and produces exceptional corn and wheat tortillas. The menu at all three places includes several dishes made with marinated roast pork and robust black beans. All three restaurants serve liquor and accept credit cards; the original one, at 2509 Navigation Street (713-227-0260), is a ten-minute drive from downtown.

Las Mañanitas in San Francisco's financial district represents an ambitious effort to offer authentic dishes from several Mexican regions. Among the specialties are such soups as Caldo Tlalpeño, a spicy red broth with chunks of chicken and avocado, named after its district of origin south of Mexico City, and tortilla soup from Oaxaca. From Puebla comes Chiles en Nogada, a cold chile poblano pepper stuffed with chopped beef, pork, pine nuts, raisins, and acitrón (a candied cactus), covered with a sweet cream sauce and chopped walnuts. It was delicious. Las Mañanitas is a handsome place with a gardenlike open patio, at 850 Montgomery Street (415-434-2088).

The most elaborate array of Mexican regional cooking I could find was at Antonio's in West Los Angeles (7472 Melrose Avenue, 213-655-0480). Antonio Gutiérrez, a talented chef from Monterrey, comes up with four different regional dishes every day. Always on the menu is jicima, a root with the crunchy consistency of a water chestnut. Sliced, sprinkled with chili powder, and mixed with fresh orange slices, it's a refreshing appetizer that's new to an American palate though it's a common snack in Mexico.

continued

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Machines whose advanced engines, it is purported, will propel a rider not merely down the road but into a whole new era of motorcycling.

An era which, with increasing predictability, lasts all of one model year. When yet another wave of "new era" machines rolls ashore.

There is one motorcycle company, however, whose technology is not so transient. A company not so anxious to scrap its last year's work. Or even its last decade's.

The Bavarian Motor Works of Munich, Germany.

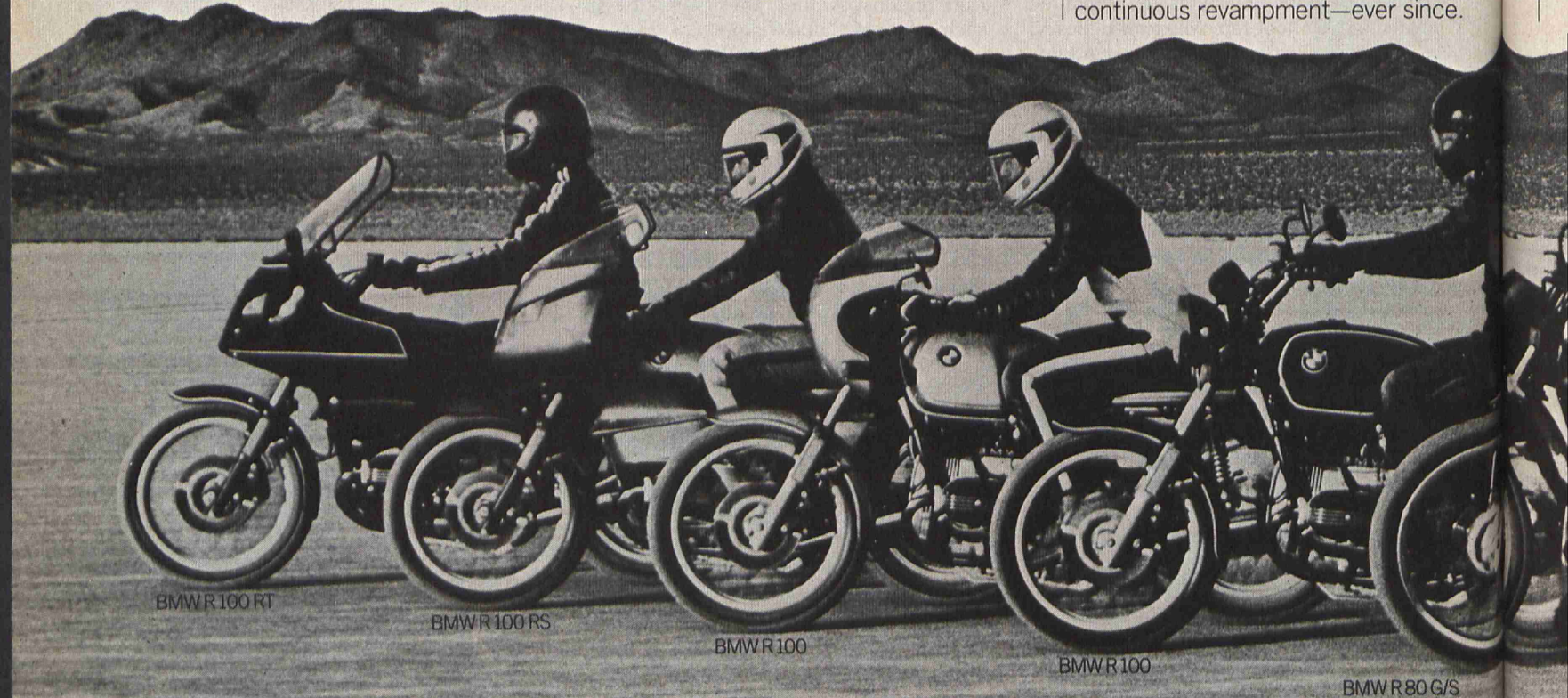
AN ENGINEERING HERITAGE THAT DIDN'T BEGIN THIS YEAR.

Before a motorcycle company can have a heritage, it must first find something worth building on.

While there are any number of manufacturers still searching for this elusive building block, BMW introduced in 1923 what many aficionados consider to be the perfect mechanical foundation for a motorcycle.

The horizontally opposed twin-cylinder engine.

A springboard which placed the BMW engineers on a path of continuous refinement—as opposed to continuous revampment—ever since.



BMW R 100 RT

BMW R 100 RS

BMW R 100

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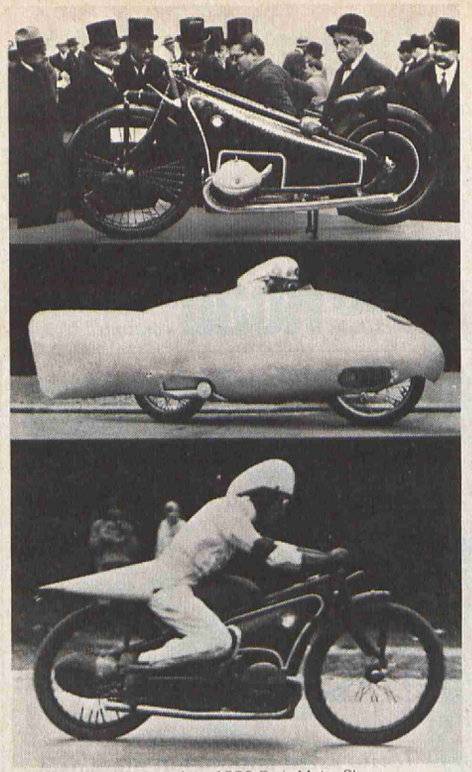

TOP: BMW is the rage of the 1930 Paris Motor Show.
CENTER: In 1937 BMW again builds the fastest motorcycle in the world, clocking 279.5 kph.
BOTTOM: BMW's set 9 world records in 1932.

SIMPLICITY IN AN AGE OF COMPLICATIONS.

"In typical BMW fashion," observed Cycle Guide recently, "the BMW engineers have brought their motor into the Eighties without resorting to needless complexity."

Indeed, the design of the BMW twin has grown not increasingly complex with the years but ingeniously simple—the hallmark of a brilliantly engineered machine.

It is the simple genius of the opposed twin which makes a BMW significantly less expensive to maintain and repair than most motorcycles.

And for that matter, far less likely to need repair in the first place.

With the cost of a motorcycle mechanic now hovering at about $20 an hour; with the price of a mere tune-up of certain multi-cylinder motors upward of $100, the BMW twin is becoming more appreciated by the day.

The rewards of this remarkable engine, however, are not purely financial.

THE JOYS OF BEING ONE OF THE FEW MOVING PARTS ON A BMW.

Cycle Guide flatly states that "no engine configuration known to man is better at aiding the low 'cg' required in a flick-left flick-right bike than the opposed twin."

Small wonder then that BMW's are renowned as extraordinary handling machines.

For, in contrast to motorcycles encumbered by the top-heaviness of their own engines, the BMW's cornering prowess is actually enhanced by its motor design.

Providing its rider with a control so exhilarating as to inspire the noted motorcycle journalist, Michael Jordan, to write of one BMW:

"Long after a clumsy Japanese hyperbike would have wrestled you into exhaustion, the R 100 RS urges you to uncharted apexes; the only limit to your enthusiasm is the amount of gas in the bike's 5.8-gallon fuel tank."

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Simply read their warranty.

In the case of BMW's limited warranty, you'll discover that we protect you against defects in workmanship and materials longer than any other motorcycle company in the world today.*

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BMW motorcycles have not only had a long and impressive past. We expect them to enjoy a very secure future as well.

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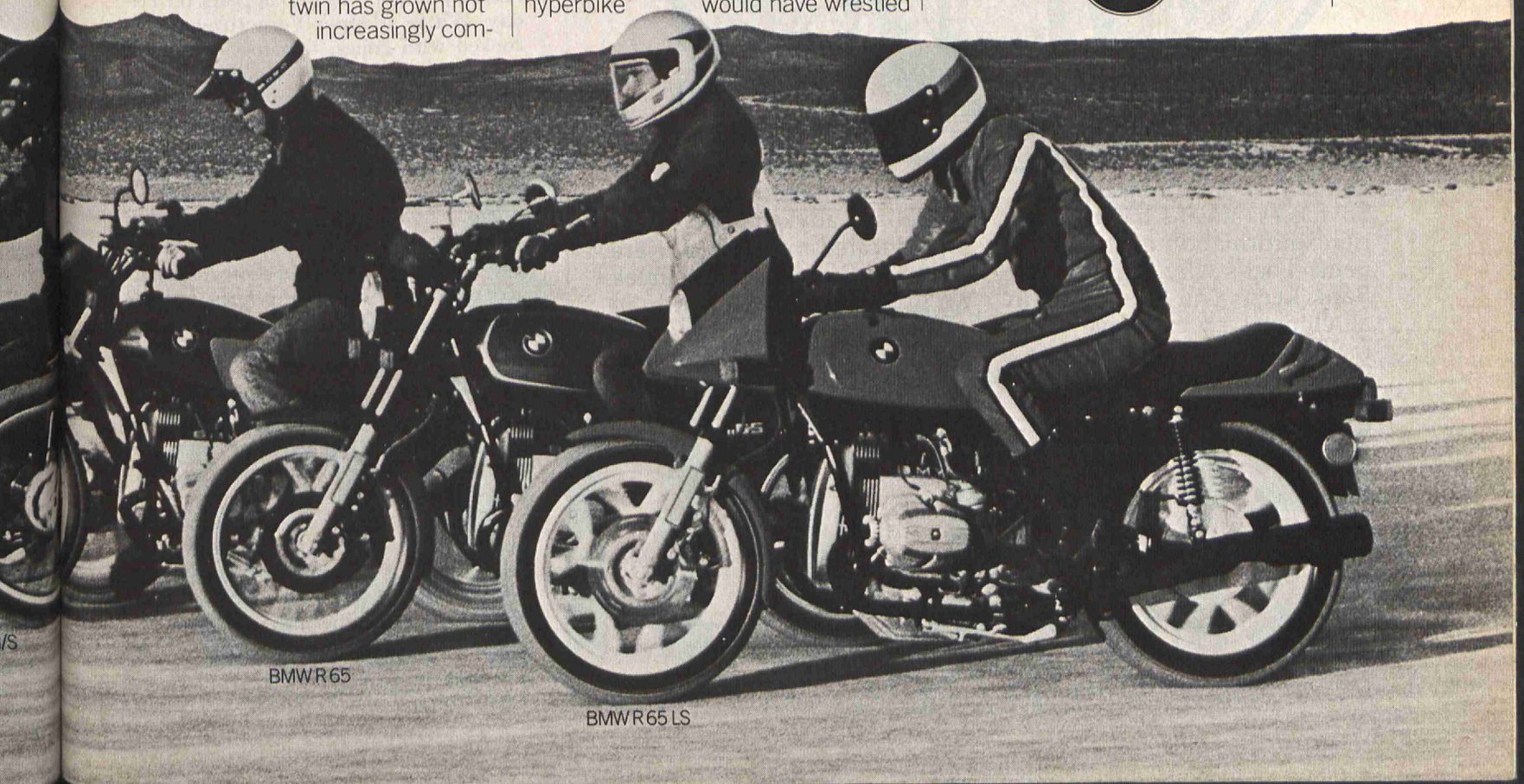

BMW R65

BMW R65 LS

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On the Road *continued*

John Madere

An El Torito salad and melon margarita

A subtle pipián sauce of ground sunflower and pumpkin seeds, herbs, spices, and chiles—its origin is Aztec—is served with chicken on Sunday. Later in the week cabbage leaves are stuffed with beef, chorizo (a spicy sausage), and chipotle chiles, which are dried jalapeños with a deep, smoky taste. A delicately flavored chayote, the pale green Mexican squash, filled with beef, cheese, and spices, appears on Friday. White snapper Veracruz-style is cooked with chiles, tomatoes, green olives, and herbs and served daily. The subtlety of the food calls for wine rather than beer, and Antonio has a large selection. My table tried a Mexican wine: Santo Tomas Special Reserve, a surprisingly rich, smooth burgundy-style red from Baja.

Places like Antonio's are still culinary outposts in a nation captivated by combo platters. But just as the old chow mein palace prepared American palates for the spicy regional Chinese cuisines that are now commonplace, so may dishes of Yucatán, Jalisco, and Michoacán proliferate in the years to come. Last month El Torito opened a specialty restaurant in Orange County, California, called Copa de Oro, to introduce *la gran cocina*—the high cuisine—of Mexico. The authentic dishes are to be "enlivened by the employment of recent culinary innovations." Whether this is a promise of excitement or an ominous portent remains to be seen. The outcome could be a bellwether of Americans' enthusiasm for Mexican authenticity. F

Cheers!

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VANITY FAIR

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Tenth in a Series

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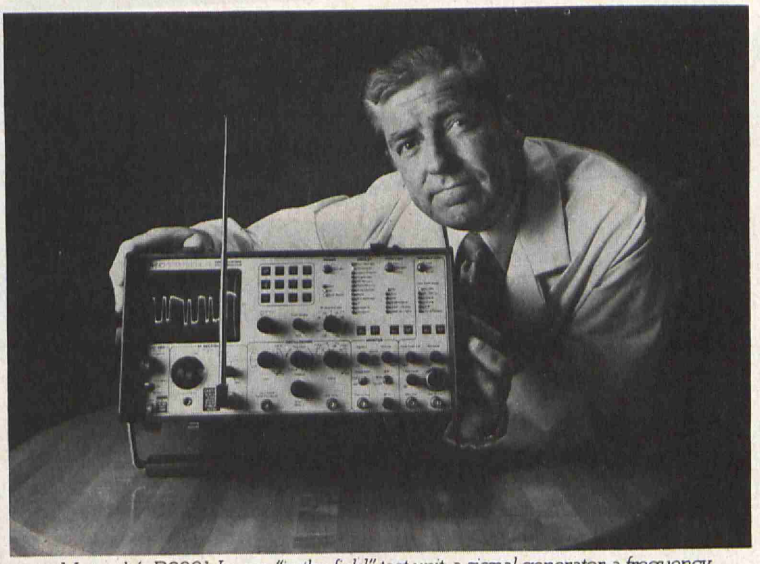
But it also takes employee understanding and motivation to make TMC work. Because employees are the prime movers in recommending new tools, methods and techniques.

That's where our Participative Management Program has been a tremendous help. Because this program not only makes every employee a member of the management team, it allows them to make recommendations to improve their own productivity.



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As participants in management, Motorola people know that better tools produce better quality, higher productivity, increased demand in the marketplace. And that helps reduce costs, preserve jobs, and make the company's products more competitive.

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There isn't another piece of service equipment like it. Amazingly, it not only services all Motorola's land mobile communications products, it can service anyone else's. As a result, the R2001 has expanded the test equipment market for us, in addition to providing a better tool for our own people.

Clearly, it's for reasons like this we're a world leader in land mobile communications. And it's also an example that proves our point.

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But to give them the right tools, you've also got to give them their heads.

And once you do that, they'll help you compete with anybody at home or abroad.

MOTOROLA A World Leader in Electronics.

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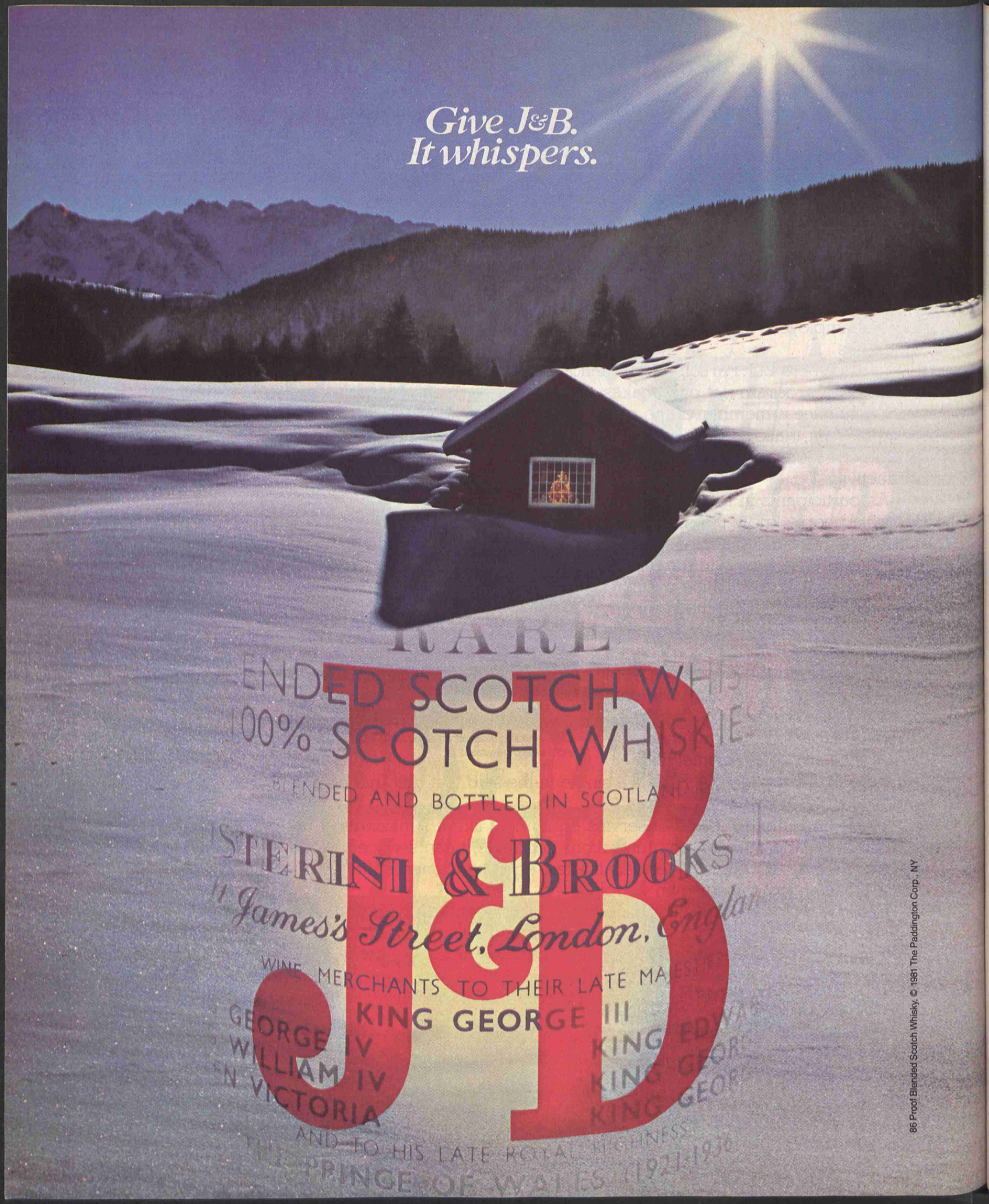
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Thunder on the Left

by Daniel Seligman

Three decades after Stalin's death (and a few days after Brezhnev's), we have a new book about Stalinism in America, and it seems remarkably topical. William L. O'Neill's *A Better World* (Simon & Schuster, $17.95) is an absorbing account of the wars fought years ago between our country's pro-Soviet "progressives" and its left-liberal anti-Stalinists. Much of this warfare was waged by intellectuals writing in journals of modest circulation but occasionally great influence like the *Nation*, which was rather consistently progressive; the *New Republic*, also progressive but not so consistent; and the *New Leader*, which was consistently anti-Stalinist. Sometimes the conflicts were expressed in straightforward electoral terms, as in the Progressive party's disastrous efforts to gain presidential votes for Henry A. Wallace in 1948. (He ended up with a popular vote of only a million and no electoral votes.) Sometimes the action swirled around organized intellectual happenings—one bizarre instance being the famous Waldorf Conference, formally the Cultural and Scientific Conference for World Peace, sponsored in 1949 by assorted progressive celebrities, including Lillian Hellman, Paul Robeson, and Thomas Mann, and ultimately featuring a delegation billed as cultural luminaries from the Soviet Union, who assured the crowd at New York's Waldorf-Astoria Hotel that the Russians wanted peace.

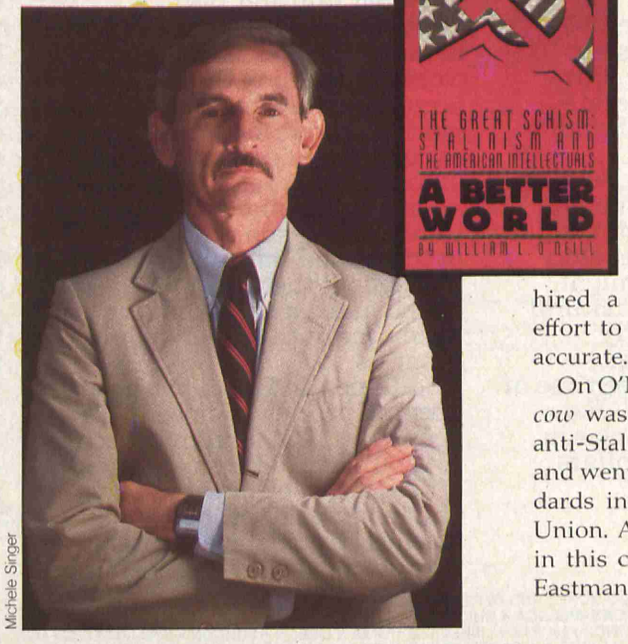
Most of the action described by O'Neill, a historian based at Rutgers, took place between 1939 and the Fifties. What makes his book seem topical in the Eighties is its demonstration of several links between the issues those distant wars were fought over and certain themes that keep recurring in our political life.

Rescued by the Germans

The progressives O'Neill is most interested in are "those Americans who were pro-Soviet without being members of the Communist party." They believed that progress toward "a better world" depended on the Soviet Union, and so they were powerfully predisposed to take its side in virtually all controversies. The Nazi-Soviet pact of August 1939—the event with which O'Neill begins his story—threw the progressives into terrible disarray, since most of them had been passionately committed to a view of Stalin as the world's preeminent antifascist. However, they were rescued from cognitive dissonance by the German invasion of the Soviet Union in June 1941, which enabled them more or less instantly to forgive Stalin and revert to uncritical support of his regime.

In this they were now joined by millions of Americans with no prior history of progressive attitudes, who rapidly persuaded themselves that Stalin's regime was exceptionally free and democratic. It is understandable that Americans would feel gratitude for the Russian military performance and perhaps natural that this would lead to a certain reticence about dwelling on the regime's murderous record. But the extent to which educated Americans were suddenly embracing fantasies about Stalin and the Soviet Union seems almost unbelievable in retrospect. Indeed, education seems to have been negatively correlated with common sense in this area. Gallup polls during the war showed consistently that college-educated and upper-income Americans were far more disposed than others to trust the Russians as postwar partners. O'Neill unkindly mentions a 1943 FORTUNE poll showing business executives to be the occupational group with the most faith in Russia.

O'Neill



Michele Singer

An easy boss

The exodus from reality produced some memorable observations about the Russians. Eddie Rickenbacker, a superconservative businessman then running Eastern Air Lines, returned from a Soviet visit to proclaim that the Soviets would soon achieve democracy (while we were in danger of losing it). Monsignor Fulton Sheen discovered that "the family is higher in Russia than in the United States, and God, looking from heaven, may be more pleased with Russia than with us." In his best-seller, *Mission to Moscow*, former Ambassador Joseph E. Davies judged Stalin to be a "clean-living, modest, retiring, single-purposed man" and an "easy boss"; Davies also reported that the Old Bolsheviks and generals purged by Stalin during 1936-38 had been guilty as charged and that the easy boss had acted with great foresight in eliminating the potential fifth columnists. All these absurdities and more were brought to the silver screen by Warner Bros., which hired a Soviet technical adviser in an effort to ensure that the film was entirely accurate.

On O'Neill's reckoning, *Mission to Moscow* was a kind of turning point for the anti-Stalinists, who lambasted the film and went on to demand more critical standards in public discussion of the Soviet Union. Among those playing major roles in this counterattack: Sidney Hook, Max Eastman, Norman Thomas, Edmund Wil-

continued

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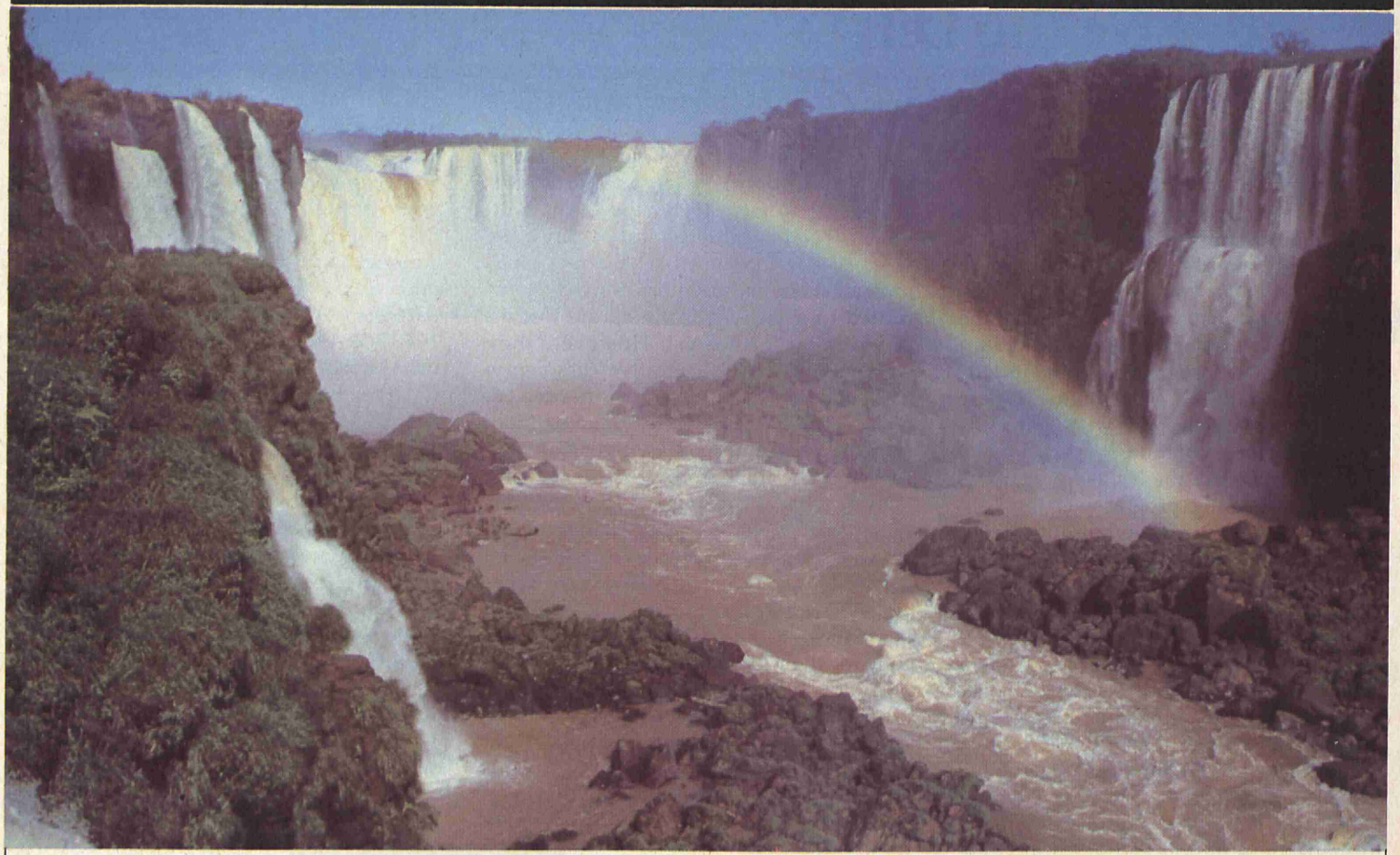

Perhaps what is most extraordinary about the beautiful Iguaçu Falls is not its vertical drop of 250 feet, but rather its ability to generate 9,500 MW of energy for Brazil's 120 million inhabitants.
Today, scattered across Brazil's 8.5 million square kilometers, are other natural attractions like Iguaçu, all helping to develop the nation's industrial might.
Thanks in part to these natural assets, the average yearly increase in Brazil's Gross National Product has been one of the highest in the world. Per capita income last year was in the area of 1,990 U.S. dollars.

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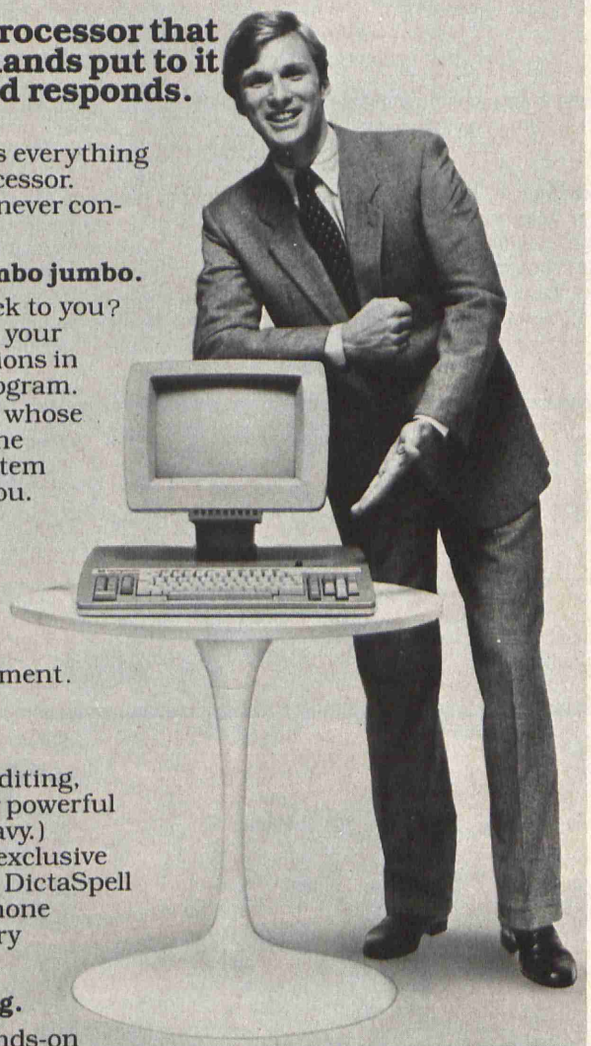

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—*Paul Fussell, New Republic*

THE NOËL COWARD DIARIES
EDITED BY Graham Payn AND Sheridan Morley

Photo courtesy Theatre Collection, Museum of the City of New York

698 pages
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son, and A. Philip Randolph. During the last two years of the war, criticism of Soviet behavior became increasingly acceptable—in part because the Russians did not look much like democrats when they began moving into Eastern Europe, in part, perhaps, because the war now seemed to be clearly won and so Americans felt less obliged to make emotional commitments to Soviet power. But it is hard to read O'Neill's account of our country's wartime detour into fantasy-land without wondering whether the will to believe the best about the Russians mightn't resurface again in other contexts and with similar results. The peace movement, both here and in Europe, occasionally acts as though it has a powerful need to believe that Soviet policy is benign.

On the defensive

The postwar years saw a steady shift in the terms of the debate between progressives and anti-Stalinists. Progressives increasingly found themselves not explicitly supporting Soviet policies so much as warning against red-baiting. The poor showing of the Wallace candidacy in 1948 left the progressives even more on the defensive, and with the North Korean invasion of the South in 1950, praise of Communists abroad became still rarer. Most progressive intellectuals denounced the invasion and supported Truman's decision to send in American troops. (I. F. Stone, a progressive journalist who has become something of a cult figure among young reporters, was an interesting exception. He wrote a book in 1952 offering up all sorts of reasons for believing that the war was really South Korea's fault.) By the early Fifties the retreat of the progressives had taken them to a position in which Soviet shortcomings were often conceded; except for a few holdouts, many of them writing for the *Nation*, progressives had been reduced to nagging about our own failings and those of our allies, and warning against anti-Soviet policies as leading to war—a platform that has survived pretty

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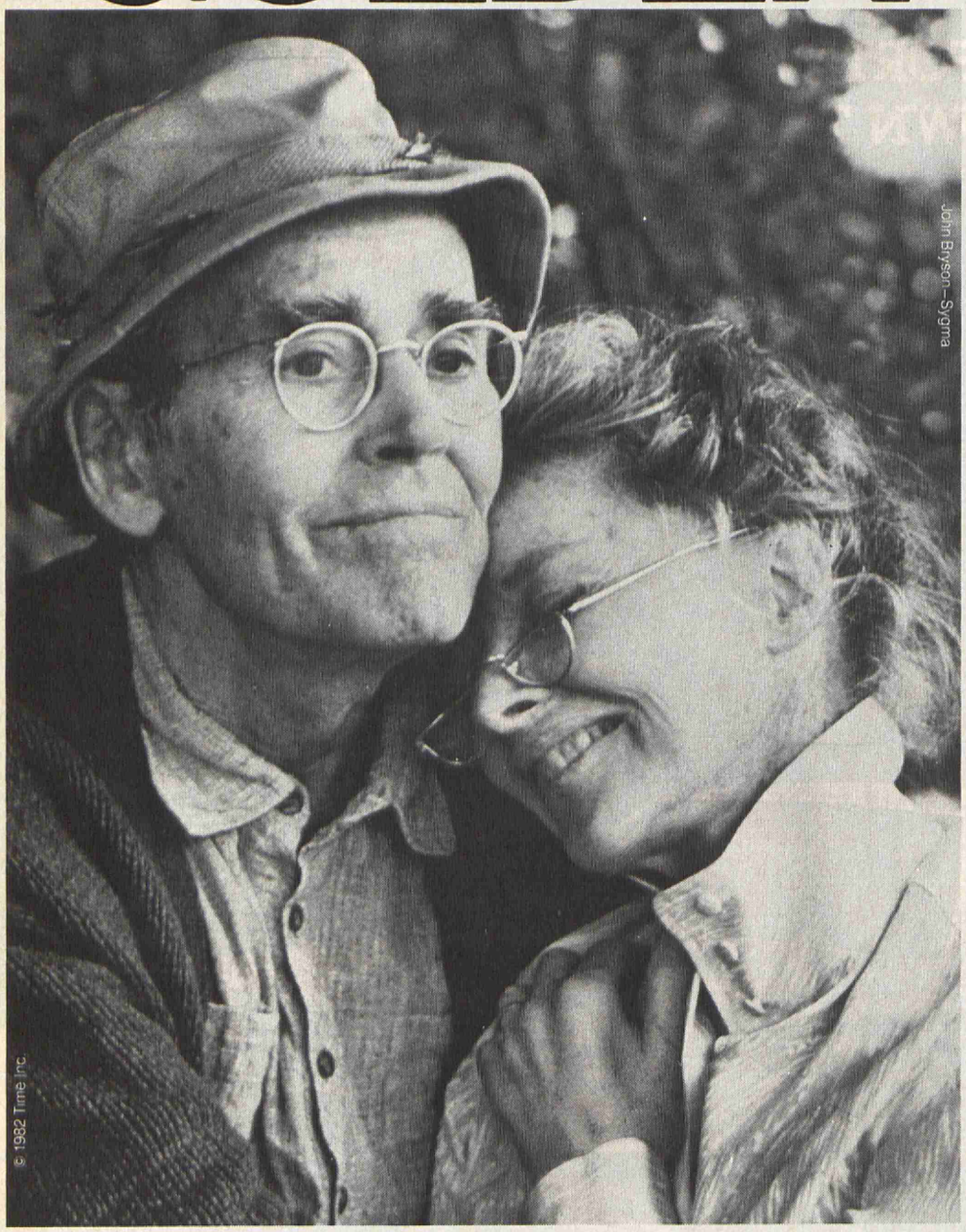

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much intact for the past 30 years.

O'Neill is consistently interesting, although not always consistent, in his account of the wars on the left during the McCarthy era. (One minor muddle: he can't seem to make up his mind about whether academic intellectuals were generally cowed into silence by McCarthy or were generally outspoken critics of the Senator.) The anti-Stalinists were almost unanimously opposed to McCarthy, although they had different strategies for fighting him and differences also about how seriously to take his threat. Many of the anti-Stalinists complained bitterly that McCarthy was indirectly legitimizing their enemies by making it appear that everyone identified as a Stalinist was an ordinary liberal being victimized by an unscrupulous demagogue. The charge plainly had some merit; years later anyone who's accused of being pro-Soviet, or even of being naive about Communist methods, can count on winning a fair amount of sympathy by crying McCarthyism.

Controlled admiration

Are progressives and anti-Stalinists still waging war in the Eighties? The answer is plainly yes, although the chemistry of the event has changed somewhat. Many who might be thought of as lineal descendants of the Forties progressives identify themselves primarily with Third World radicalism or the peace movement; their admiration for the Soviet Union seems to be under control and centered on the proposition that the Russians do not threaten us.

O'Neill is cautiously optimistic that progressives have learned something from history, and that many are forsaking the double standard traditionally applied in analyses of U.S. and Soviet behavior. However, he admits to being unsure about the extent of this reform. If it proves minimal, we can assume that there will be no shortage of anti-Stalinists—some of them, like Irving Kristol and Norman Podhoretz, identify themselves as neoconservatives nowadays—to pursue the argument. F

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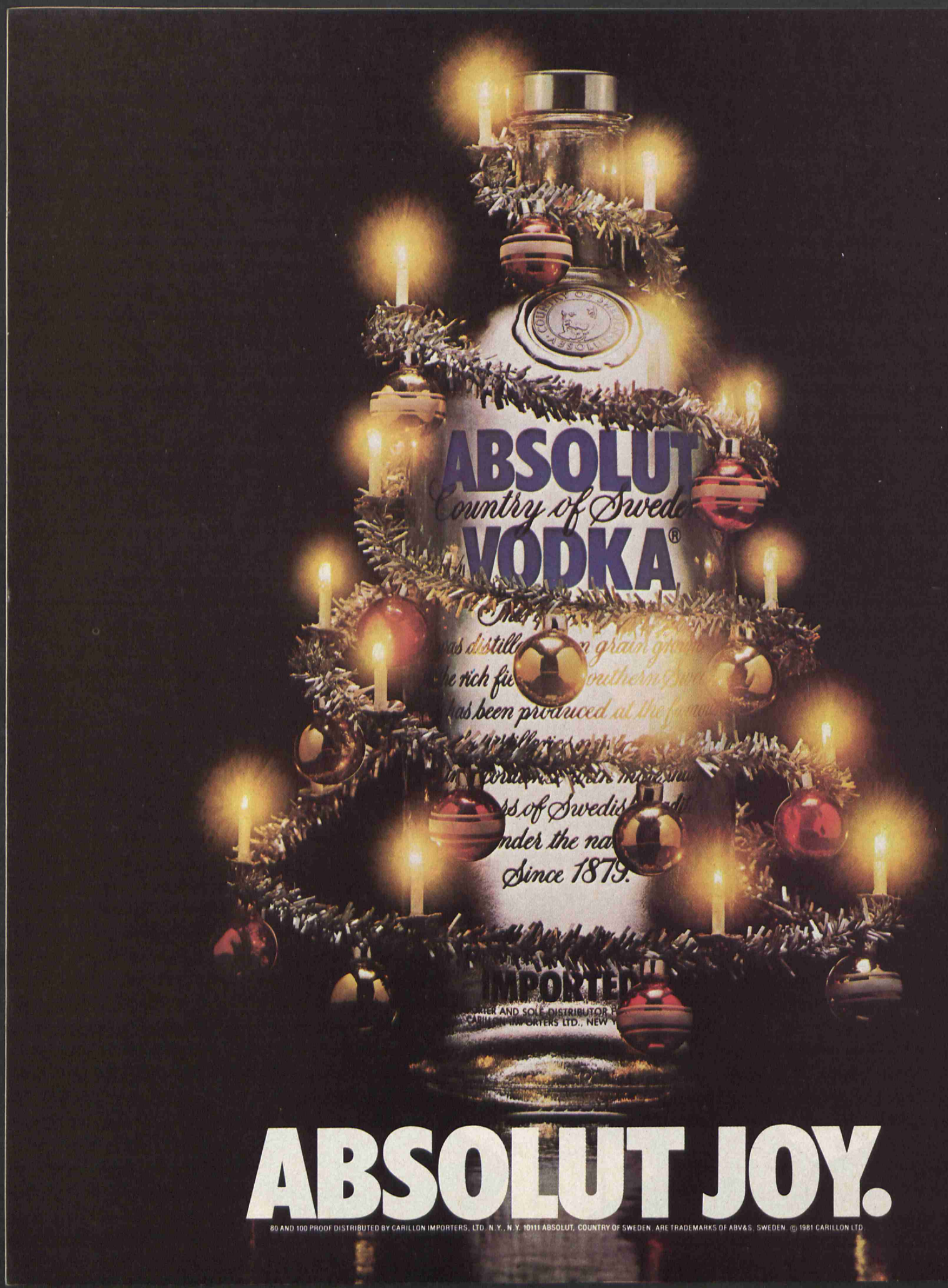

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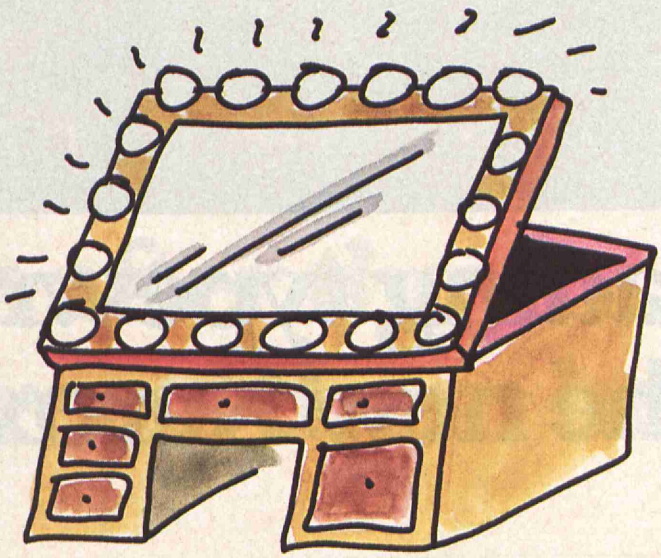
The Self-Absorbed Executive

by Walter Kiechel III

Goodness, a number of big-time executives have certainly been behaving strangely of late. There's John De Lorean, of course. And, on a different plane, Bill Agee—leaving aside the personal stuff, what is this business of riding roughshod over board members to consummate a questionable deal, then going to every arm of the national media to explain that, gosh, we only did it for the shareholders?

Minor weirdness abounds. Ted Turner, continuing to lose large sums on his loudly trumpeted challenge to network news, plunges again on a noisy, unsuccessful venture to televise pickup professional football games. David Mahoney, chairman of Norton Simon, takes to the television screen to hawk the services of his troubled Avis subsidiary—an okay thing, perhaps, for Lee Iacocca (an old hand at carmaking, reassuring the customers) or Frank Borman (astronaut/celebrity in his own right), but Norton Simon is a *conglomerate*, for heaven's sake.

Is it something they're putting in the water in those executive carafes?



Not your everyday vanity

No. It seems to be, instead, the manifestation of a new executive style, or at least a style we're seeing more of these days in the corporate world. To be specific, call it the narcissistic style.

In the last ten years professional observers of the human animal—psychologists, psychiatrists, sociologists—have become intrigued with the notion that certain aspects of contemporary behavior can best be understood by reference to a syndrome that they label narcissism. This isn't just your garden-variety vanity or swelled-headedness. It's a particular psychological condition, with a distinct—if much debated—etiology, associated ways of acting, problems, and benefits. Some experts have even gone so far as to assert the existence of a "narcissistic personality type," though the details—like the whole proposition—remain controversial.

While the clinical concept does seem to have explanatory cogency beyond the analyst's couch—see, for example, Christopher Lasch's best-selling jeremiad against contemporary civilization, *The Culture of Narcissism*—two considerations should be borne in mind before applying it willy-nilly to the goings-on in the executive suite. First, most students of the phenomenon would agree that this isn't a sort of bug that you either have or you don't. Different people affect the style to different degrees. "Every successful manager must have some element of healthy narcissism," notes Manfred Kets de Vries, a psychoanalyst and professor of management at Montreal's McGill University.

Second, assessments that anyone is far along on the narcissistic spectrum, much less a narcissistic personality type, can only be made by an expert with access to the subject's inner life. What a layman *can* do is to understand the drives and behavior that go to make up the style, then see whether this understanding helps illuminate a puzzling managerial action. Probably the best route to such understanding is to follow the career of that creature who never was: the pure, unalloyed, thoroughgoing corporate narcissist.

How did he get that way? Psychoanalysts generally believe that the condition begins with a fierce inner struggle early in childhood. Faced with an unbearable disappointment—Mother doesn't love me enough or at least not in the right way—the child also finds that his sense of self-esteem isn't sufficient to keep anxiety at bay. As a result, he starts to indulge in fantasies of grandiosity—"I'm not just all right, I'm the greatest"—thereby setting in motion the psychological motor that drives the narcissist: grandiosity opposing, trying to keep submerged, impaired self-esteem.

Drive him it will. Throughout his youth he will strive mightily to marshal support for his grandiose yet fragile image of himself—this by cultivating whatever good looks he has, learning to charm, and oftentimes just by working hard. All of which isn't, of course, a bad recipe for success.

Something electric

By the time he's ready to look for his first job on the road to management you'll be eager to hire him. He's well groomed, nicely dressed, articulate—indeed, he may talk a little *too* much—and confident, even cocky. Romantics around the office will say that, aah, there's just something electric about the guy.

A year after bringing him on, you'll probably congratulate yourself heartily. He's such a worker, it seems. Yes—because he needs a succession of triumphs to keep his idea of himself afloat and he digests those triumphs quickly. "Not all workaholics are narcissistic," observes Roderick Gilkey, a professor at Dartmouth's Tuck School of business administration, "but a lot of better-functioning narcissists are workaholic." Moreover, the man is creative. How better to set yourself apart from, and above, those around you than by doing things differently?

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Illustrations by Stuart Goldenberg

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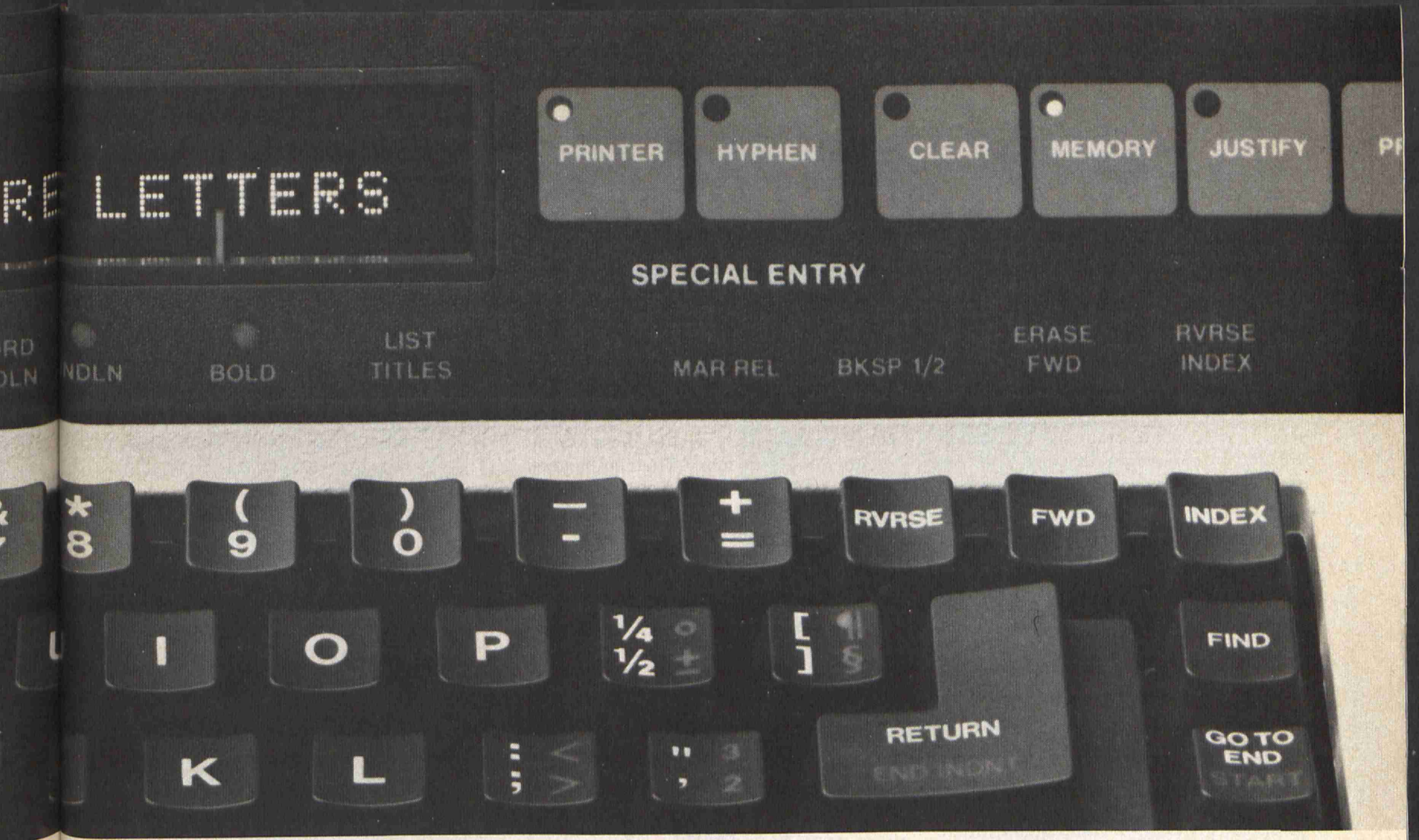

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Two years after you hired him you may not be so pleased. He has trouble holding on to good people. Predictable—it's in dealing with others that the narcissistic sort often first run into difficulty. They can seem warm, ingratiating, but as the people who work closely with them rapidly figure out, it's a pseudo-warmth, operative only as long as it serves the purpose of their self-aggrandizement.

The narcissist, you see, is quite alone mentally. A key aspect of the condition is the inability to see others as anything but part of the background, furniture on the stage set of Numero Uno's success. Gilkey tells the story of a young businessman who had been in treatment for a narcissistic disorder for two years. One day, in the course of a session with his analyst, he suddenly became agitated and began to perspire. "My God," he blurted out, "there are two of us in this room."

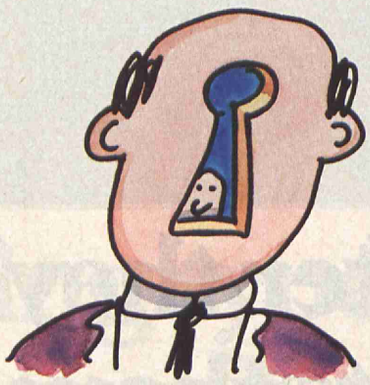
Such behavior can tend to alienate folks. Another young hotshot, rising fast on the financial side of the entertainment business, went around announcing his engagement and accepting the congratulations of his colleagues. The only problem: he hadn't bothered to pop the question. It never occurred to him that his intended might refuse or that she might be offended by his trumpeting the marriage before she knew of it. He's still single.

Corporate underlings who have the boss's latest Fabulous Project popped on them in a meeting with the big brass can understand her reaction.

Building a cocoon

As he enters the middle passage of his career—from age 30 on, say—the future courses open to the narcissist become more clearly defined. There are the individuals who have gotten away with it. None of their dramatically risky ventures bombed. They changed jobs, or companies, frequently enough to avoid being exposed as Attila the Hun. ("Oh, he's arrogant, but . . .") The spouse was complaisant, or venal. Such men often persist, climbing the corporate ladder, perhaps expanding their arena—they're always on stage—to include café society or money-intensive sports. They may even, heaven help them, begin to curry the press's favor.

Others aren't so lucky. Their employers, valuing the creativity but deploring the inability to play on the team, build a sort of cocoon around them. They become "our brilliant art director" in an advertising agency or "our favorite mad scientist," heading up the company laboratories—coddled, flattered, not trusted, unlikely to



rise any higher. "You know how those guys are . . ."

Still others end up finding their large corporation too small a theater for them to play out their grandiosity in. They leave, sometimes to start their own company. And what do they call it? "Naming the company after yourself is almost a pure giveaway that there's narcissism at work," observes Theodore Millon, director of clinical psychology at the University of Miami. It was, you may remember, the De Lorean Motor Co. The car was known simply as "a De Lorean."

Whatever his career situation, for the hard-core narcissist the progress through middle age usually represents increasingly tough sledding. Inclined from the beginning to be what clinicians term "sexually exhibitionistic"—no, not flashing in the park; preening, and taking care to be seen squiring beautiful women—he can be devastated by any deterioration in his looks. One narcissistic executive realized how troubled he was—troubled enough to seek treatment—when he mistook someone else for himself in a group photograph. The shock came because the other man was considerably uglier than he.

By this time, too, the hollowness of the narcissist's emotional ties begins to tell in his personal life. His wife may leave—to him, inexplicably—in search of warmth. Or she may come to seem less than perfect in his eyes—crow's-feet and all that—prompting him to, as they say, trade one 40 for two 20s.

At work, even if he has attained a top job, he's a prime candidate for feelings of "Is that all there is?" Faced with midlife wounds to his continually imperiled self-esteem, his insatiable grandiosity seeks all the more urgently after confirmation, support. His deals become bigger and riskier. Colleagues begin to question his business judgment. "A problem with narcissists is that they don't get anxious when they ought to," suggests Professor Abraham Zaleznik of the Harvard Business School. "Civilization depends on people feeling anxious."

High highs and low lows

In a sense, the narcissistic style is setting him up for what might be called The Big Mess. Something goes wrong—his latest venture gets into financial trouble, his current bold corporate stroke hits a snag. Grandiosity fights all the more visibly with dark feelings. His highs get higher, his lows lower. People around him are buffeted by the flipping back and forth.

Because his grandiosity can't permit him to seem a loser he embarks on a quest for smashing victory to redeem the defeat. By this time, however, his grandiose feelings may have gotten so far out of hand that his "reality testing"—the technical term for being in touch with the real world—becomes impaired. His never very strong regard for others, their values, laws, and sensitivities, slips even further. "I'm the greatest," he tells himself. "I can

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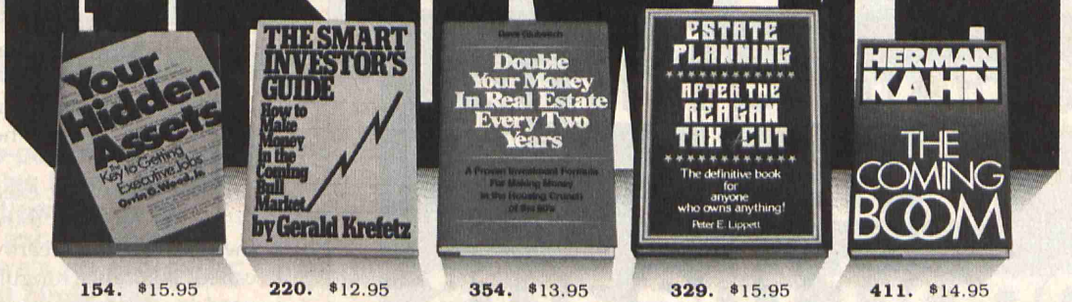

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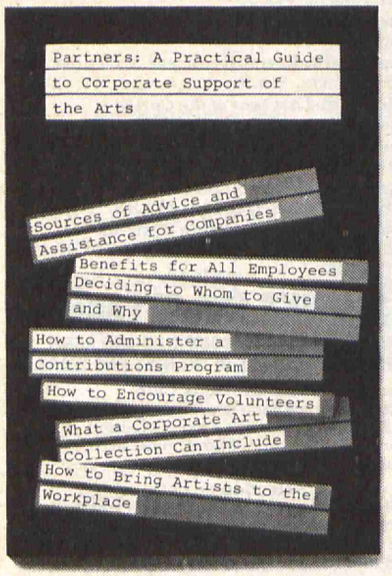

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do whatever I want, things that other people can't do." Bingo—he gets himself into The Big Mess.

Is the narcissistic executive style actually on the increase these days, or does it merely seem so? Years ago, it may be recalled, insurance mogul W. Clement Stone used to give out special silver coins that bore his face on one side.

Clinical observers aren't certain whether the incidence of narcissism is growing, or whether, having developed the concept, we simply find more of it about. Most do suspect, however, that the style is, as they put it, overrepresented these days in the population of business executives. Not necessarily at the very top, where sound judgment and a capacity for team play are still at a premium, but probably in the echelons just below.

The danger of too little

If you go looking for examples of the style in the chief executive's office, the experts think you're most likely to find them—aside from companies where the guy's name is on the building—in conglomerates. Dealmaking, takeovers, the dramatic corporate coup are much more to the narcissistic taste than building a career in machine tools over 30 years.

The danger posed to American business, if one is posed, may not be from too much of the style, but from too little. "I don't think corporations should overreact to De Lorean, or the few instances like this," suggests James A. Wilson, a psychologist and professor at the graduate school of business of the University of Pittsburgh. "Companies have been excessively seeking after the stable, even dull, executive, and haven't allowed themselves the flamboyant or expansive one." It's right to value the creativity and excitement that accompany the style.

At the same time, bear in mind the fate of the original, mythological Narcissus. Entranced by his reflection in a pool, oblivious to everything else around him, he fell into the water and drowned, still clutching after his own image. F

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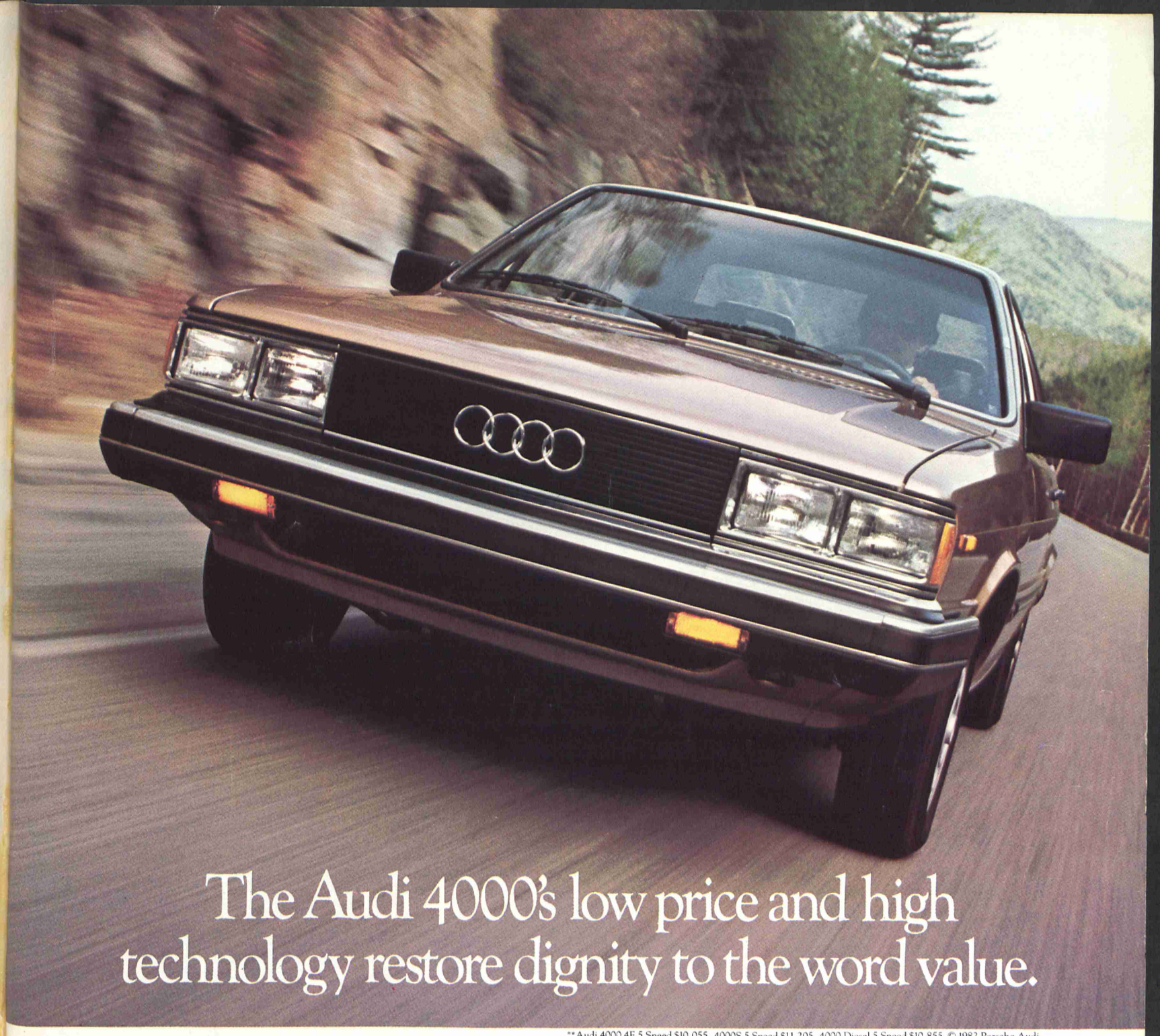

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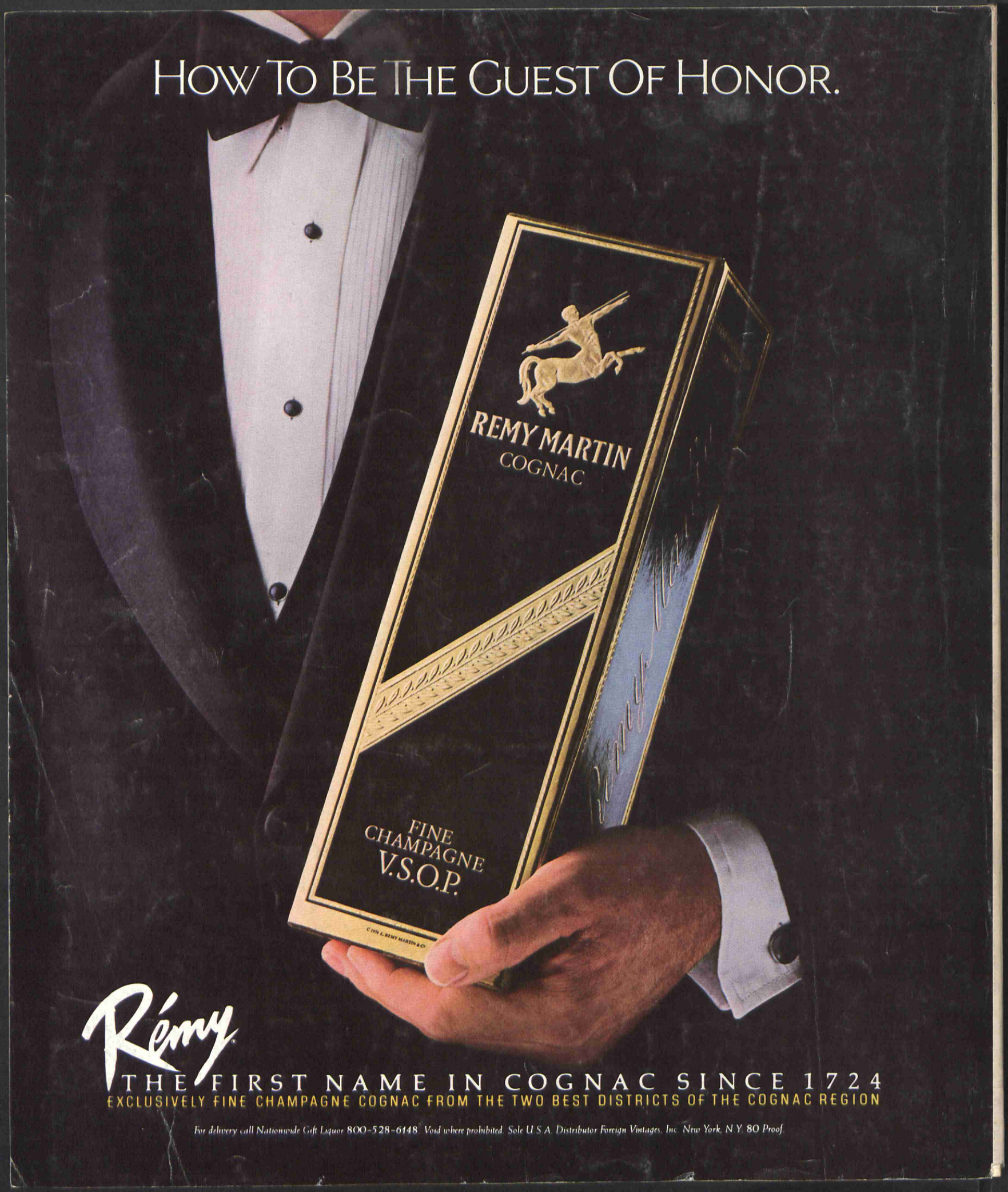

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