1960
Legislation to give the FCC regulatory authority over cable is sent back to committee where the bill dies. (S. 2653, 86th Congress, 1st Session) The industry is divided on the issue, with a number of operators supporting FCC licensing and protection similar to that for broadcasters.

1962
The FCC rules that CATV systems could use microwave relay systems to bring broadcast signals from distant cities only by showing that there would be no economic impact to broadcasters. ((*Carter Mountain Transmission Corp.*, 32 FCC 459, *aff'd*, 341 F.2d 359 (D.C. Cir.). *cert. denied,* 375 U.S. 951 (1963)).

1963
The U.S. Court of Appeals affirms the FCC position in *Carter Mountain Transmission Corp. v. FCC.* The decision is the foundation of the FCC's "economic impact" rules that restrain cable's growth in the next decade. (321 F.2d 359 (D.C. Cir))

1965
The First Report and Order by the FCC, based on the *Carter Mountain* decision, begins regulation of all cable systems receiving distant broadcast signals by microwave, including must-carry and non-duplication requirements. (Dockets 14895 and 15233, 38 FCC 683).

1966
The FCC extends regulation to all cable systems and requires systems in the top 100 television markets to obtain FCC approval to import distant signals via microwave. (Second Report and Order in Dockets 14895, 15233 and 15971, 2 FCC 2d 725, *aff'd,* 399 F.2d 65 (8th Cir. 1968)).

The FCC grants the first Community Antenna Relay Service (CARS) license to Santa Maria Valley Cable TV.

1968
The U.S. Supreme Court in *Fortnightly Corp v. United Artists* upholds the master antenna concept. The ruling affirms that cable operators arenot responsible for paying copyright fees under the 1909 copyright law to producers, artists and actors for programming carried cable systems. (392 U.S.390)

In *United States v. Southwestern Cable Corporation,* the U.S. Supreme Court upholds the FCC's jurisdiction over cable television as being "reasonably ancillary to the effective performance of the Commission's" responsibility for regulating broadcasting. (392 U.S. 157)

1968
The FCC rules, under Section 214 of the Communications Act, that telephone companies must file for a Certificate of Public Convenience before building cable facilities, eliminating a strong competitive advantage of the telcos over cable companies. (13 FCC 2d 448)

The FCC freezes development of cable systems in the top 100 markets with an "anti-leapfrogging" notice that cable systems have to obtain permission of any distant station before importing it; cable systems in 35 mile radius of TV stations in smaller markets have to carry nearest network, independent and public stations; while it considers new rules for cable (Community Antenna Television Systems, Inc.,15 FCC 2d 417).

1969
The FCC requires cable systems with more than 3,500 subscribers to provide local origination programming. (First Report and Order in Docket 18397,20FCC 2d 201)

1969
The U.S. Supreme Court affirms the FCC "Section 214" ruling which requires telephone companies to file for Certificates of Public Convenience before building cable facilities. (396 U.S. 888)
The U.S. District Court in Nevada rules that Nevada can regulate cable through the Public Utilities Commission.

1970
FCC rules prohibit telco ownership of cable systems in their own service area. (21 FCC 2d 307, *aff'd,*I 449 FCC 2d 846 (5th Cir. 1971))

FCC prohibits cable systems ownership by national television networks or TV stations in the cable system's area. (23 FCC 2d 816)

The FCC adopts "anti-siphoning" rules to protect programming on broadcast TV (23 FCC 2d 825)

1971
The FCC preempts local authorities from regulating pay TV on cable systems.It also stays its local origination rule in response to a court decision that it did not have power to impose the requirement.

1971
The Eighth Circuit holds the FCC could not require local origination. *(United States v. Midwest Video Corp.*, 441 F.2d 1322 (8th Cir.))

1972
The FCC issues new and wide-ranging rules governing cable TV. Provisions include distant signal importation, program exclusivity, public access and technical requirements. (Cable Television Report and Order, 36 FCC 2d 143, *aff'd,* 523 F.2d 1244 (9th Cir. 1975))

1972
The U.S. Supreme Court overturns an appellate court ruling in favor of the FCC's local origination rules but reaffirms FCC authority overcable. *(United States v. Midwest Video Corp.* (Midwest Video I), 406 U.S. 649)

1973
The FCC approves applications to establish domestic communications satellites, a crucial link in cable program distribution.

1973
Congress passes anti-blackout legislation which requires that sold-out games in pro football, baseball, basketball and hockey be made available for over the air TV, rather than cable or pay TV.

1974
The FCC rescinds its local origination rule after continuing its stay of rule since 1971, despite the Supreme Court's 1972 decision giving the Commission the power to impose the rule, but requires operators to buy and maintain local origination equipment for community use. (49 FCC 2d 1090)

1976
FCC repeals distant signal "leapfrogging" rules, allowing cable systems to import signals as they choose. (Selection of Television Signals, 57 FCC 2d 625)

1976
The Copyright Revision Act is passed by Congress. It establishes a "compulsory license" allowing cable systems to retransmit broadcast stations and sets fee schedules for carrying distant signals for the first time. The cable operator is liable for copyright payments. (17 U.S.C. 101-118)

1977
The FCC approves the use of 4.5 meter earth station receivers. The ruling permits more cable systems to acquire the equipment necessary to receive nationally distributed programming via satellite. (American Broadcasting Inc., 62 FCC 2d 901)

1977
U.S. Court of Appeals strikes down FCC rules limiting pay TV, opening the way for expanded cable services. It also suggests that cable may have some First Amendment rights. (*Home Box Office v. FCC,* 567 F.2d (D.C. Cir.) *cert. denied,* 434 U.S. 329)

1978
Congress passes a Pole Attachment Act which establishes a national policy for attaching cable wires to poles owned by utility companies.

A federal appellate court affirms the FCC's preemption of local control over pay TV. (*Brookhaven Cable TV v. Kelly,* 573 F.2d 765 (2d Cir.), *cert. denied,* 441 U.S.924 (1979))

1978
The FCC institutes registration for cable systems and reaffirms EEO requirements. (69 FCC 2d 697, 69 FCC 2d 1324)

1979
The U.S. Supreme Court rejects PEG and local access requirements. (*United States v. Midwest Video Corp* (Midwest Video II), 440 U.S. 689)

1979
The FCC allows use of small earth stations without licenses, but also without protection from interference. (Regulation of Domestic Receive-Only Satellite Earth Stations, 74 FCC 2d 205)

1980
The FCC repeals rules which limit a cable systems' ability to import distant signals and the rules which require program exclusivity on localcable systems.

1981
In *Malrite v. FCC,* a federal appellate court upholds the FCC repeal of the distant signal and program exclusivity rules. (652 F.2d 1140 (2d Cir.1981), *cert. denied,* 454 U.S. 1143 (1982))

1982
State laws requiring cable access to apartment buildings constitute a fifth amendment "taking" and require just compensation, the U.S. SupremeCourt rules. (*Loretto v. TelePrompTer Manhattan,* 458 U.S. 418)

The U.S. Supreme Court restrict states' regulation of cable content. (*Capital Cities v. Crisp,* 467 U.S. 691)

The U.S. Supreme Court holds that cities are not necessarily protected from antitrust laws in the cable franchising process. (*Community Communications Co., Inc. v. City of Boulder,* 455 U.S. 40)

1982
In response to FCC lifting syndicated exclusivity and distant signal rules, the Copyright Royalty Tribunal sets a rate at 3.75% of gross basic subscriber revenue for each Distant Signal Equivalent. As an unintended consequence, this stimulates development of non-broadcast programming.

1984
U.S. District Court Judge Harold Greene approves the Modified Final Judgment (MFJ) consent decree which breaks up AT&T. The network distribution system is separated into seven regional bell operating companies (RBOCs). The long-distance carrier and the research businesses continue to be called AT&T.

The Cable Communications Policy Act--the first comprehensive legislation affecting the cable industry--is passed. It relaxes rate regulation, provides for orderly franchise renewals and stimulates programming development.

1985
The U.S. Court of Appeals strikes down FCC rules requiring cable operators to carry all local broadcast signals. The court holds the rules violate cable's First Amendment rights. (*Quincy Cable Television v. FCC,* 768 F.2d 1434 (D.C. Cir.))

1986
The U.S. Supreme Court, in *Preferred Communications v. Los Angeles*, holds that cable operators are entitled to some First Amendment protection, but declines to specify the extent of that protection. (476 U.S. 488)

Deregulation of basic rates for cable service takes effect under the 1984 Cable Act.

1986
The FCC adopts revised must carry rules in response to the 1985 *Quincy Cable Television v. FCC decision.*

1987
The U.S. Court of Appeals rejects the FCC's revised must carry rules on First Amendment grounds. (*Century Communications v. FCC,* 835 F.2d (D.C. Cir.1987), *cert. denied.,* 486 U.S. 1032 (1988))

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1991
The U.S. Supreme Court rules that taxes applicable to cable but not other media do not violate the First Amendment. (*Leathers v. Medlock,* 499 U.S.439)

1992
The 1992 Cable Consumer Protection Act is passed over a presidential veto. The law gives the FCC broad powers to re-regulate the industry. Among the provisions are stringent rate regulation and roll-backs, rules favoring broadcast stations, and items governing marketing tactics and technological requirements.

The FCC is tasked with implementing 13 different proceedings from the 1992 Cable Consumer Protection Act and freezes rates until it can address critical issues.

1993
Bell Atlantic successfully challenges the telco-cable cross-ownership ban specified in the 1984 Cable Act. A Federal court in Virginia rules the ban violates the First Amendment. The other six RBOCs file similar lawsuits. The U.S. Justice Department and the NCTA file appeals.

A special three-judge district court upholds the 1992 Cable Act's must carry provisions.

Congress introduces legislation to conditionally lift telco-cable cross-ownership bans. Other legislation removes state and local barriers to local telephony loop entry so cable operators can offer telephony services.

The FCC issues cable rate benchmarks in April and institutes a series of rate freezes. It requires systems to roll back customer rates,negotiate retransmission consent agreements with local broadcasters, rearrange channels to accommodate must carry signals, and add new satellite services required to reach FCC benchmark levels.

Must carry/retransmission consent negotiations begin. Network broadcasters demand cash payments from cable systems for carrying network stations. Cable systems agree to launch broadcaster-owned satellite networks in exchange for signal carriage. Unable to reach agreement, local broadcast stations in several markets force cable systems to drop their signals.

The Clinton Administration unveils its telecommunications policy and calls for fostering construction of a national "information superhighway" infrastructure. New FCC Chairman, Reed Hundt, makes stringent enforcement of the 1992 Cable Act a top priority.

The FCC plans to auction the personal communications services (PCS) spectrum which could result in as many as seven wireless operators in agiven market. License holders can team up to craft a nationwide wireless network.

1994
Federal courts allow telcos into the cable programming business.

The Supreme Court remands the must carry case back to the lower courts, while again stating that cable has certain First Amendment protection. (*Turner Broadcasting v. FCC,* 114 S. Ct. 2445) Suits challenging provisions of the 1992 Cable Consumer Protection Act provisions move forward.

Customer rates are rolled back a second time. The FCC is unable to respond to 4,500 of the 6,500 rate complaints filed during the year.

The FCC uses Section 214 to establish its oversight of "video dialtone" (VDT). Telcos file a number of applications to construct VDT systems instead of seeking cable franchises from local regulatory authorities.

The FCC establishes a Cable Bureau and releases its going-forward rules. Operators may collect 20 cents per month for each channel added to regulated tiers for up to six new basic channels over a three-year period. The rules also allow operators to create unregulated new product tiers for new niche services. Many planned network services are unable to get funding due to the FCC's restrictive regulation.

1995
A number of states repeal laws banning cable operators from offering telephony services.

In order to settle the outstanding number of rate complaints in a timely manner, the FCC enters into "social contracts" with major MSOs. In exchange for subscriber refunds, stable prices and commitments to rebuild systems and increase channel capacity, the FCC agrees to stop rate proceedings.Time Warner Cable and Continental Cablevision enter into such agreements. Comcast, Cablevision Industries, Tele-Communications, Inc., Cox and Cablevision Systems reach more limited settlements of rate complaints with the FCC.

The FCC begins auctioning the PCS spectrum. It also changes its cost-of-service rules which provide cable operators with an alternative to the benchmark formula for calculating their maximum permitted rates.

High Definition Television (HDTV) is subject to delays amid Congressional and industry debate on issues.

1996
The Telecommunications Act of 1996 passes Congress and is signed into law on February 8, signaling a new era in U.S. communications. It immediately deregulates rates for small cable systems. It removes entry barriers and requires RBOCs to open up their markets to competition. AT&T begins to offer local telephone serviceand the RBOCs prepare plans to offer long distance services.

U.S. District Judge Harold Greene officially terminates the consent decree which governed the 1984 breakup of the Bell System.

A federal appellate court upholds rate regulation under the 1992 Cable Act and finds that the Act did not violate cable's First Amendment rights. It holds that the FCC's rule making in certain instances under the 1992 Act was flawed. (*Time Warner Entertainment v. FCC,* 56 F.3d15 (D.C. Cir.) *cert. denied,* 116S. Ct. 911 (1996))

A Delaware state court judge finds against U S West in its suit to prevent Time Warner's purchase of Turner Broadcasting, Inc. FTC approves Time Warner's purchase of Turner Broadcasting.

The U.S. Supreme Court holds that the First Amendment is violated by sections of the 1996 Telecommunications Act--1) requiring operators to separate "patently offensive" material on one channel to block the channel and to unblock it within 30 days of a customer's written request and 2) allowing operators to ban pornographic material on public access channels. In the same case, the Court upholds a provision permitting operators to prohibit pornographic programming on leased access channels (*Denver Area Educational Telecommunications Consortium, Inc. v. FCC* 116 S. Ct. 2374.)

The FCC auctions MMDS licenses, PCS and DBS frequencies. At 136 days and 181 rounds from start to finish, the wireless cable auction was the longest in FCC history, raising$216.3 million for 493 Basic Trading Area (BTA) authorizations. The PCS auction raised $10.2 billion.

The FCC is tasked with implementing scores of different proceedings from the Telecommunications Act of 1996. In August, it approves an Interconnection Order to facilitate cable operator entry into telephony. However, in an appeal from the RBOCs, a three-judge panel of the U.S. Court of Appeals for the Eighth Circuit in St. Louis halts the FCC order that seeks to open RBOC telephone markets to competition.

In order to facilitate and accelerate the deployment of DBS, the FCC unanimously approves preemption of local zoning regulations that restrict dish placement. The FCC proposes to preempt private restrictions (i.e., condo associations, planned communities, covenant restrictions).

1997
The Supreme Court, in a unanimous decision, affirms a Wilmington, Del. court decision to deny a preliminary injunction of Section 505 of the 1996 Telecommunications Act. Playboy and Spice appealed the provision which

requires cable operators to fully scramble the video and audio signals of adult channels or offer the programming only between 10 p.m. and 6 a.m. (*Playboy Entertainment Corp v. United States,* 117 S. Ct. 1309)

In a 5-4 ruling that surprises the cable industry, the Supreme Court upholds must carry, in spite of swing vote Justice Stephen Breyer's note that it "extracts a serious First Amendment price." It also solidifies the broadcast industry's grip on one-third of cable's analog signal capacity. The implications for how the rules apply to digital services, especially DBS, are unclear. (*Turner Broadcasting System v. FCC,* 117 S. Ct. 1174)

A federal appellate court upholds a preliminary injunction that prevented New York City from using government access channels on Time Warner Cable systems to offer general news and business news cable networks. (*Time Warner Cable v. Bloomberg LP,* 1997 US App. Lexis 16283 (2d Cir.))

A federal court affirms the town of Sturgis, KY's decision not to renew the cable franchise with Union CATV, because the operator lacked the facilities to meet the community's needs. The decision solidifies cable's right to take franchise-renewal disputes to court. *(Union CATV, Inc. v. City of Sturgis,* 107 F.3d 434 (6th Cir. 1997))

The Clinton Administration plans to raise $26.1 billion from auctioning spectrum. The largest block, $14.8 billion, would come from broadcasters' analog channels that would be returned to the FCC once the transition to digital is complete.

Following a Supreme Court ruling, the FCC hands down an order implementing Section 505 of the Telecommunications Act which requires all cable operators to completely scramble adult programming or place it in the safe harbor hours (10 p.m. to 6 a.m.).

The FCC hands the industry a setback with a precedent-setting case in Troy, MI. Cable operators will be forced to obtain new franchise agreements for upgrading plant to offer telephony. However, the FCC also found the city of Troy violated federal law by trying to impose a telecommunications condition on cable construction.

The FCC approves the British Telcom/MCI $23.7 billion merger, giving PrimeStar access to key transponders enabling them to plan for launching a high-power DBS service.

The FCC forces Rainbow Programming Holdings, a subsidiary of Cablevision Systems Corp. to sell programming to Bell Atlantic Video Services Co. to settle a dispute over access to SportsChannel New York for Bell Atlantic's Tom's River, NJ system.

The FCC releases a new set of emergency alert system rules (EAS) which give operators more time to comply with the technical criteria for broadcasting emergency signals. Under the new regulations, operators must offer a visual emergency alert warning on at least one channel and an audio warning on all channels.

The FCC releases inside wiring rules which allow landlords and apartment building owners to manage the disposition of broadband wiring. The rules allow the operator to remove, abandon or sell the wiring to the new video service provider once a landlord terminates a contract with the cable operator.

1998

Broadcasters win over DBS interests on July 14, when a US District Court in Miami issues an injunction ordering PrimeTime 24, a wholesale distributor of satellite TV programming, to cut-off 1.2 million customers illegally receiving CBS and Fox network signals after March 11, 1999. If a household can get a Grade B off-air broadcast signal clearly at least 50% of the time, it is ineligible to receive network signals via satellite. In December, the Miami Court issues a permanent injunction against PrimeTime 24 from delivering illegal distant signals, ensuring that Congress must change the Satellite Home Viewer Act (SHVA) to avert DBS customer disruption caused by the loss of network signals. *(ABC, Inc. v. Primetime 24,* 1999 U.S. App. LEXIS 14979)

EchoStar Communications Corp. files a class-action suit in a Colorado federal court against ABC, CBS, NBC and Fox broadcast networks asking the court to declare its local and distant signals are legal under the SHVA. EchoStar also petitions the FCC, asking them to rewrite part of the SHVA. Broadcasters oppose the plan, fearing they would

lose advertising if DBS offers distant network signals in place of local network affiliates. The FCC declines to act, citing lack of statutory authority under the SHVA to prevent customers involved in the court cases from losing the services. The FCC does, however, revise its rules to simplify how Grade B contours are determined. *(DirecTV, Inc. v. FCC,* 110 F.3d 816 (D.C. Dir. 1997))

A panel of three federal judges in Delaware strikes down as unconstitutional Section 505 of the Communications Decency Act of 1996 which requires cable operators to fully block or scramble channels primarily dedicated to sexually explicit programming or carry such channels only during times when children are unlikely to view it. The Court holds Section 505 violates the First Amendment because a less restrictive alternative is available, namely Section 504, which requires systems to block channels for individual customers upon request. The government appeals the decision to the Supreme Court. *(Playboy Entertainment Group, Inc. v. United states of America,* 30 F. Supp. 2d 702 (D. Del. 1998))

The Iowa Supreme Court hands Tele-Communications, Inc. a temporary victory in the ongoing battle against municipal overbuilds. It rules that Section 23A.2 of the Iowa Code prohibits municipalities from operating telephone systems as public utilities, as a 1993 law allowing cities to offer telecommunications services, including cable, did not extend to telephone. The decision overturns a lower-court ruling, finding the town of Hawarden is precluded by statute from offering local telephone service to residents. *(Iowa Tel. Association v. City of Hawarden,* 589 N.W. 2d 245 (Iowa 1999))

Cablevision of Boston sues Boston Edison and RCN in Federal Court for building a commercial telecom network in Boston using electric utility regulations, but not fulfilling the same requirements and burdens as the City applies to cable operators. The suit charges the City approved retroactive permits for the initiative so Edison and RCN could avoid delays and costs, thus violating the Telcom Act's Section 253 which requires local authorities to be "competitively-neutral and non-discriminatory" in their rights-of-way policies. *(Cablevision of Boston, Inc. v. Public Improvement Comm'n of Boston,* 38 F. Supp. 2d 46 (D. Mass. 1999))

With the increase of copyright payments of $.27 per signal for DBS companies, up from $.06, the U.S. Copyright Office income from DBS providers for the first half of 1998 is $50 million, compared to $17 million in the same period in 1997.

In the first decision to test a U.S. Supreme Court ruling that lets operators ban indecent content on leased-access channels, a U.S. District Court rules that Time Warner didn't violate the first amendment when it banned three episodes of a leased-access program filmed at a Rochester strip club. *(Loce v. Time Warner Advance/Newhouse Pshp.,* 1999 U.S. App. LEXIS 13179))

The City of Austin, TX files a lawsuit against SBC's Southwestern Bell Video Services, alleging the company is a "cable operator" and therefore should pay franchise fees. *(City of Austin v. Southwestern Bell Video Services,* 1998 U.S. Dist. LEXIS 16332)

The 5th Circuit Court of Appeals rules in September the 1996 Telecom Act's special provisions that deny telco entry into long distance service are constitutional. *(City of Dallas v. FCC,* 165 F.3d 341 (5th Cir. 1998).

In July, the FCC rules Entertainment Connections, Inc. (ECI) a Michigan SMATV, does not have to have a franchise to interconnect apartment buildings separated by public streets in East Lansing, Mich. The company leases fiber optic cable lines owned by Ameritech Corp, the local phone provider.

In August, with a 5-0 vote, the FCC tightens existing program-access rules in an effort to help direct-broadcast satellite, wireless cable and private cable providers compete against franchise cable companies. Fines for violations are up to $75,000 for a single violation and victims can collect damages where programmers willfully violate the rules.

The FCC Cable Services Bureau reversed its previous order and extends U S West Media Group's waiver from federal cross-ownership, allowing the company to keep the Minneapolis Cable system. The ruling was based on U S West restructuring its U S West Communications and UMG subsidiaries into separate public companies that

abrogate the ban on telco-cable cross ownership.

In a groundbreaking decision, the Mt. Hood Cable Regulatory Commission recommends the city of Portland and Multnomah County, Oregon make ISP access a condition for transferring their TCI franchises to AT&T. TCI refuses to accept the provision. Internet Service Providers, including America Online Inc., and telcos also lobby the FCC and local regulators to block the merger unless AT&T agrees to unbundle TCI's @Home network.

In a pro-DBS decision, the FCC announced DBS providers will be allowed to set aside the minimum four percent of their channel capacity for non-profit educational programming, instead of the maximum seven percent allowed by the 1992 Cable Act.

The FCC rules that broadcast stations that use their digital-TV licenses for subscription services will have to pay fees equaling five percent of gross revenues. It is unclear whether revenues from programming tiers made of digital-TV signals and digital-cable networks would be considered retransmission payments or be subject to new fees.

On September 17, the FCC rules that Multipoint Multimedia Distribution Service (MMDS) wireless cable operators can transmit two-way, high-speed data services, generating more competition for wireline cable modems and digital subscriber link (DSL) technologies.

Citing "social contract" regulations the FCC orders eight separate Time Warner Cable systems in New York and Massachusetts and eight New York Cablevision Systems Corp. franchises to refund overcharges varying from $.36 to $1.37 each. Cablevision is also forced to refund $1.2 million to 300,000 subscribers in 60 communities in nine states. TCI agrees to refund $4.8 million, including $41.88 each to 61,000 subscribers in Oakland, CA. After March 31, 1999, the FCC regulation of expanded basic rates will sunset, as stated in the 1992 Cable Act.

The Michigan State PSC rules that Ameritech New Media must cease and desist offering coupons worth $120 for Ameritech cable customers to use for basic Ameritech telephone service. Ameritech must pay legal fees incurred by the Michigan Cable Telecommunications Association to bring the case to its attention. Though it is against state law to cross-subsidize regulated offerings, the Americhecks can still apply towards paging, cellular and security monitoring, Ameritech's unregulated services. Three months later, the Michigan PSC rules Ameritech again violates Michigan law by failing to report, in 1995, a $1.7 million transfer of assets to its cable affiliate, Ameritech New Media.

The FCC proposes easing regulations for telcos to build long-distance fiber networks as long as the new capacity is made available to competitors at cost. This is designed to allow telcos to better deploy their xDSL technology to individual homes and thus compete with cable modems.

In an attempt for private sector initiatives to campaign finance reform, Daniels Cablevision gets permission from the Federal Election Commission to offer free campaign ads to U.S. House and Senate candidates on its California systems. It voluntarily reserves 20% of its available advertising time for qualified candidates.

The Department of Justice claims PrimeStar's cable owners dismantled the first EchoStar/ASkyB deal and files an antitrust suit in May to prevent PrimeStar from gaining access to the 28 transponders in the third and final available full-CONUS direct-broadcast satellite slot (110 degrees west). This action dissolves the June 1997, $1.1 billion merger agreement with MCI Communications and News Corp because PrimeStar will not agree to the DOJ demand that the five cable owners divest their ownership interests for the transaction to continue. MCI purchased the transponders for $682.5 million in 1995.

The FCC's June 11 ruling allows set-top boxes to be available commercially at retail outlets. The move is mandated by the Telecommunications Act of 1996. The commission also rules MSOs must separate out security functions from boxes by July 1, 2000, in spite of industry lobbying to delay the date until September 1, 2000. (1998 FCC LEXIS 2778; FCC No. 98-116)

1999

As expected, regulation of the upper tier prices for major cable companies ceases on March 31 with little fanfare.

Retransmission consent negotiations again result in embittered battles. Among others, Fox Broadcasting demands Cox Communications distribute FX, Fox Family and Fox World Sports company-wide on its digital tiers. As a result, Fox's broadcast signal disappears from Cox's line-up for a week for 400,000 angry customers in Washington D. C., Cleveland, Dallas, Houston and Austin.

The $56.4 million MediaOne merger with AT&T stays in limbo until the FCC's cable-ownership-cap-and-attribution rules and the issue of "insulated limited partnerships" is resolved. Pushing AT&T over the 30 percent cap is MediaOne's 25.5% limited partnership in Time Warner Entertainment, making TWE's 9.7 million subscribers attributable to AT&T. Together, AT&T, MediaOne, and Time Warner would serve 42 percent of the nation's cable and satellite homes. (14 FCC Rcd 19014; FCC No. 99-904)

A crucial FCC decision December 22 opens the door for Bell Atlantic Crop. to offer long-distance service to New York residents, the first time since the AT&T breakup that an RBOC will be allowed to offer local and long-distance service. (15 FCC Rcd 3953; FCC No. 99-904)

The Connecticut Department of Public Utility Control votes August 25th to allow SNET, which was purchased by SBC Communications last year, to discontinue construction of its statewide HFC network. Through SBC was the first RBOC to jump into the video business in 1993, its operations never lived up to SBC's expectations. SBC absorbs Ameritech and halts the franchising efforts of Ameritech New Media, the nation's largest cable over-builder. Its cable/data networks pass 1.7 million homes and serve 200,000 subscribers in 114 communities in Illinois, Ohio and Michigan. (1999 Conn. PUC LEXIS 347; Docket No. 99-04-02)

The FCC approves the sale of Comcast Corp.'s cellular-telephone unit to SBC Communicaitons Inc. for $400 million in cash and $1.3 billion in assumed debt. Comcast Cellular serves approximately 800,000 customers, including the company's home market of Philadelphia. Bell Atlantic. (14 FCC Rcd 10604; FCC No. DA 99-1318)

The FCC rules November 18 that Incumbent Local Exchange Carriers (ILECs) must share their lines with high-speed Internet competitors. The ruling prohibits ILECs from requiring high-speed Internet competitors to buy a second line when hooking up a DSL or data customer. The average $20 monthly charge for second line is a disadvantage when the ILEC uses a single line to offer their own voice and DSL products. (1999 FCC LEXIS 5958; FCC No. 99-355)

The FCC imposes an array of conditions and noncompliance penalities in order to approve the $60 billion merger of SBC and Ameritech. (14 FCC Rcd 14712; FCC No. 99-279)

The FCC requests a federal appeals court in California overturn a federal district court order supporting open access to Internet service providers on cable systems in Portland, OR, maintaining the policy for the Internet regulation is national, not local. As the "open access" issue gets hotter, the OpenNet Coalition of Internet-related companies hires powerful lawyers and a politically well-connected public relations team to assist communities where the issue is raised. (AT&T v. City of Portland, 43 F. Supp. 2d 1146, 1151-district court order.)

The FCC's Fifth Annual Competition Report shows DBS grew 44% in one year (from 5 million to 7.2 million subscribers, or 9.4% of the market) while the cable industry grew two percent (three million customers reaching a total of 73.6 million households) from 1997 to 1998. Cable's market share, however, dropped to 85% of the multichannel video programming distributor (MVPD) market, down from 87% in 1997. The study also shows cable prices outpaced inflation: Cable prices rose 8.5% while the Consumer Price Index rose 2%, according to the Bureau of Labor statistics.

Legislation introduced to push back the March 31 deadline for FCC to cease regulating cable prices on expanded basic cable services fails to pass. Cities retain the right to regulate lifeline basic services.

The Iowa state Supreme Court withdraws its 1998 opinion and says it is appropriate for municipalities to operate telephone utilities. *(City of Hawarden v. U S West Communications, Inc.,* 590 N.W. 2d 504 (Iowa 1999))

Open access preoccupies the industry much the year. The U.S. District Court rules in June that the local regulators in Portland, OR can force AT&T Corp. to open its network as part of the franchise transfer process. The ruling immediately goes to the Ninth Circuit Court of Appeals. The core issue is whether high-speed Internet access is a cable or telecommunications service and whether a cable operator is a "telecommunications facility" or a provider of "telecommunications services". The NCTA argues services like Road Runner and Excite@Home are advanced cable services and should be regulated like plain old cable service. In response, AT&T files a lawsuit against Portland, OR challenging its authority to demand the company open its platform to competitors. Congress introduces several Open Access measures,including H.R. 1686, the Internet Freedom Act, which would allow unaffiliated ISPs denied cable access to file antitrust suits against cable operators. After defending its right to refuse to carry independent internet service providers for much of the year, AT&T smothers the rising public outcry and breaks ranks with other cable operators in a Decmember 6th agreement to provide Mindspring, the nation's second largest ISP, across its high-speed broadband network.(*AT&T v.City of Portland,* 43 F. Supp.2d 1146, 1151)

President Clinton signs the Satellite Home Viewer Improvement Act November 29 which grants DBS providers the opportunity to bring local broadcast signals into local markets.

On July 31, the U.S. District Court in Miami orders DirecTV and Prime Time 24 to discontinue distant network stations service to customers in Grade A and Grade B contours. Following th enactment of SHVIA, the Court rules in December that PrimeTime 24 can sell distant network signals to any C-band dish owner who subscribed before Oct 30, regardless of whether they disconnected or were terminated by court order. (*CBS v. PrimeTime 24,* 48 F.Supp.2d 1342, 1363, *ruling at* 1998 U.S. Dist. LEXIS 20488 (Dec. 30, 1998); *CBS v. DirecTV,* 1999 U.S. Dist. LEXIS 6503)

Late fee charges plaguing the industry for years took on a new level as the Maryland Appeals Court issues a July 26 ruling upholding a lower court's ruling in a class action lawsuit that AT&T must return about $7.5 million in illegal late fees and interest paryments to cable customers in Baltimore. Dozens of late fee lawsuits are pending around the country. *(United Cable v. Burch*, 732 A.2d 887, 901)

The U.S. Court of Appeals for the Fifth Circuit in Ne w Orleans holds that local governments have the authority to require open-video system operators to obtain franchises, even though Congress intended to lift that burden with the Telecommunications Act of 1966. *(City of Dallas v. FCC,* 165 F.3d 341, 360)

On February 17, The Iowa State Supreme Court withdraws its 1998 opinion and says it is appropriate for municipalities to operate telephone utilities. *(Iowa Telephone Ass'n v. City of Hawarden,* 589 N.W.2d 245, 255-256)

Woodrow Wilson

Monopoly, or Opportunity?

GENTLEMEN say, they have been saying for a long time, and, therefore, I assume that they believe, that trusts are inevitable. They don't say that big business is inevitable. They don't say merely that the elaboration of business upon a great co-operative scale is characteristic of our time and has come about by the natural operation of modern civilization. We would admit that. But they say that the particular kind of combinations that are now controlling our economic development came into existence naturally and were inevitable; and that, therefore, we have to accept them as unavoidable and administer our development through them. They take the analogy of the railways. The railways were clearly inevitable if we were to have transportation, but railways after they are once built stay put. You can't transfer a railroad at convenience; and you can't shut up one part of it and work another part. It is in the nature of what economists, those tedious persons, call natural monopolies; simply because the whole circumstances of their use are so stiff that you can't alter them. Such are the analogies which these gentlemen choose when they discuss the modern trust.

I admit the popularity of the theory that the trusts have come about through the natural development of business conditions in the United States, and that it is a mistake to try to oppose the processes by which they have been built up, because those processes belong to the very nature of business in our time, and that therefore the only thing we can do, and the only thing we ought to attempt to do, is to accept them as inevitable arrangements and make the best out of it that we can by regulation.

I answer, nevertheless, that this attitude rests upon a confusion of thought. Big business is no doubt to a large extent necessary and natural. The development of business upon a great scale, upon a great scale of cooperation, is inevitable, and, let me add, is probably desirable. But that is a very different matter from the development of trusts, because the trusts have not grown. They have been artificially created; they have been put together, not by natural processes, but by the will, the deliberate planning will, of men who were more powerful than their neighbors in the business world, and who wished to make their power secure against competition.

The trusts do not belong to the period of infant industries. They are not the products of the time, that old laborious time, when the great continent we live on was undeveloped, the young nation struggling to find itself and get upon its feet amidst older and more experienced competitors. They belong to a very recent and very sophisticated age, when men knew what they wanted and knew how to get it by the favor of the government.

Did you ever look into the way a trust was made? It is very natural, in one sense, in the same sense in which human greed is natural. If I haven't efficiency enough to beat my rivals, then the thing I am inclined to do is to get together with my rivals and say: "Don't let's cut each other's throats; let's combine and determine prices for ourselves; determine the output, and thereby determine the prices: and dominate and control the market." That is very natural. That has been done ever since freebooting was established. That has been done ever since power was used to establish control. The reason that the masters of combination have sought to shut out competition is that the basis of control under competition is brains and efficiency. I admit that any large corporation built up by the legitimate processes of business, by economy, by efficiency, is natural; and I am not afraid of it, no matter how big it grows. It can stay big only by doing its work more thoroughly than anybody else. And there is a point of bigness, as every business man in this country knows, though some of them will not admit it, where you pass the limit of efficiency and get into the region of clumsiness and unwieldiness. You can make your combine so extensive that you can't digest it into a single system; you can get so many parts that you can't assemble them as you would an effective piece of machinery. The point of efficiency is overstepped in the natural process of development oftentimes, and it has been overstepped many times

in the artificial and deliberate formation of trusts.

A trust is formed in this way: a few gentlemen "promote" it-that is to say, they get it up, being given enormous fees for their kindness, which fees are loaded on to the undertaking in the form of securities of one kind or another. The argument of the promoters is, not that every one who comes into the combination can carry on his business more efficiently than he did before; the argument is: we will assign to you as your share in the pool twice, three times, four times, or five times what you could have sold your business for to an individual competitor who would have to run it on an economic and competitive basis. We can afford to buy it at such a figure because we are shutting out competition. We can afford to make the stock of the combination half a dozen times what it naturally would be and pay dividends on it, because there will be nobody to dispute the prices we shall fix.

Talk of that as sound business? Talk of that as inevitable? It is based upon nothing except power. It is not based upon efficiency. It is no wonder that the big trusts are not prospering in proportion to such competitors as they still have in such parts of their business as competitors have access to; they are prospering freely only in those fields to which competition has no access. Read the statistics of the Steel Trust, if you don't believe it. Read the statistics of any trust. They are constantly nervous about competition, and they are constantly buying up new competitors in order to narrow the field. The United States Steel Corporation is gaining in its supremacy in the American market only with regard to the cruder manufactures of iron and steel, but wherever, as in the field of more advanced manufactures of iron and steel, it has important competitors, its portion of the product is not increasing, but is decreasing, and its competitors, where they have a foothold, are often more efficient than it is.

Why? Why, with unlimited capital and innumerable mines and plants everywhere in the United States, can't they beat the other fellows in the market? Partly because they are carrying too much. Partly because they are unwieldy. Their organization is imperfect. They bought up inefficient plants along with efficient, and they have got to carry what they have paid for, even if they have to shut some of the plants up in order to make any interest on their investments; or, rather, not interest on their investments, because that is an incorrect word,- on their alleged capitalization. Here we have a lot of giants staggering along under an almost intolerable weight of artificial burdens, which they have put on their own backs, and constantly looking about lest some little pygmy with a round stone in a sling may come out and stay them.

For my part, I want the pygmy to have a chance to come out. And I foresee a time when the pygmies will be so much more athletic, so much more astute, so much more active, than the giants, that it will be a case of Jack the giant-killer. Just let some of the youngsters I know have a chance and they'll give these gentlemen points. Lend them a little money. They can't get any now. See to it that when they have got a local market they can't be squeezed out of it. Give them a chance to capture that market and then see them capture another one and another one, until these men who are carrying an intolerable load of artificial securities find that they have got to get down to hard pan to keep their foothold at all. I am willing to let Jack come into the field with the giant, and if Jack has the brains that some Jacks that I know in America have, then Should like to see the giant get the better of him, with the load that he, the giant, has to carry,-the load of water. For I'll undertake to put a water-logged giant out of business any time, if you will give me a fair field and as much credit as I am entitled to, and let the law do what from time immemorial law has been expected to do,-see fair play.

As for watered stock, I know all the sophistical arguments, and they are many, for capitalizing earning capacity. It is a very attractive and interesting argument, and in some instances it is legitimately used. But there is a line you cross, above which you are not capitalizing your earning capacity, but capitalizing your control of the market, capitalizing the profits which you got by your control of the market, and didn't get by efficiency and economy. These things are not hidden even from the layman. These are not

half-hidden from college men. The college men's days of innocence have passed, and their days of sophistication have come. They know what is going on, because we live in a talkative world, full of statistics, full of congressional inquiries, full of trials of persons who have attempted to live independently of the statutes of the United States; and so a great many things have come to light under oath, which we must believe upon the credibility of the witnesses who are, indeed, in many instances very eminent and respectable witnesses.

I take my stand absolutely, where every progressive ought to take his stand, on the proposition that private monopoly is indefensible and intolerable. And there I will fight my battle. And I know how to fight it. Everybody who has even read the newspapers knows the means by which these men built up their power and created these monopolies. Any decently equipped lawyer can suggest to you statutes by which the whole business can be stopped. What these gentlemen do not want is this: they do not want to be compelled to meet all comers on equal terms. I am perfectly willing that they should beat any competitor by fair means; but I know the foul means they have adopted, and I know that they can be stopped by law. If they think that coming into the market upon the basis of mere efficiency, upon the mere basis of knowing how to manufacture goods better than anybody else and to sell them cheaper than anybody else, they can carry the immense amount of water that they have put into their enterprises in order to buy up rivals, then they are perfectly welcome to try it. But there must be no squeezing out of the beginner, no crippling his credit; no discrimination against retailers who buy from a rival; no threats against concerns who sell supplies to a rival; no holding back of raw material from him; no secret arrangements against him. All the fair competition you choose, but no unfair competition of any kind. And then when unfair competition is eliminated, let us see these gentlemen carry their tanks of water on their backs. All that I ask and all I shall fight for is that they shall come into the field .against merit and brains everywhere. If they can beat other American brains, then they have got the best brains.

But if you want to know how far brains go, as things now are, suppose you try to match your better wares against these gentlemen, and see them undersell you before your market is any bigger than the locality and make it absolutely impossible for you to get a fast foothold. If you want to know how brains count, originate some invention which will improve the kind of machinery they are using, and then see if you can borrow enough money to manufacture it. You may be offered something for your patent by the corporation,-which will perhaps lock it up in a safe and go on using the old machinery, but you will not be allowed to manufacture. I know men who have tried it, and they could not get the money, because the great money lenders of this country are in the arrangement with the great manufacturers of this country, and they do not propose to see their control of the market interfered with by outsiders. And who are outsiders? Why, all the rest of the people of the United States are outsiders.

They are rapidly making us outsiders with respect even of the things that come from the bosom of the earth, and which belong to us in a peculiar sense. Certain monopolies in this country have gained almost complete control of the raw material, chiefly in the mines, out of which the great body of manufactures are carried on, and they now discriminate, when they will, in the sale of that raw material between those who are rivals of the monopoly and those who submit to the monopoly. We must soon come to the point where we shall say to the men who own these essentials of industry that they have got to part with these essentials by sale to all citizens of the United States with the same readiness and upon the same terms. Or else we shall tie up the resources of this country under private control in such fashion as will make our independent development absolutely impossible.

There is another injustice that monopoly engages in. The trust that deals in the cruder products which are to be transformed into the more elaborate manufactures often will not sell these crude products except upon the terms of monopoly,-that is to say, the people that deal with them must buy exclusively from them. And so again you have the lines of development tied up and the connections of development knotted and fastened so that you cannot wrench them apart.

Again, the manufacturing monopolies are so interlaced in their personal relationships with the great shipping interests of this country, and with the great railroads, that they can often largely determine the rates of shipment. The people of this country are being very subtly dealt with. You know, of course, that, unless our Commerce Commissions are absolutely sleepless, you can get rebates without calling them such at all. The most complicated study I know of is the classification of freight by the railway company. If I wanted to make a special rate on a special thing, all I should have to do is to put it in a special class in the freight classification, and the trick is done. And when you reflect that the twenty-four men who control the United States Steel Corporation, for example, are either presidents or vice-presidents or directors in 55 per cent. of the railways of the United States, reckoning by the valuation of those railroads and the amount of their stock and bonds, you know just how close the whole thing is knitted together in our industrial system, and how great the temptation is. These twenty-four gentlemen administer that corporation as if it belonged to them. The amazing thing to me is that the people of the United States have not seen that the administration of a great business like that is not a private affair; it is a public affair.

I have been told by a great many men that the idea I have, that by restoring competition you can restore industrial freedom, is based upon a failure to observe the actual happenings of the last decades in this country; because, they say, it is just free competition that has made it possible for the big to crush the little.

I reply, it is not free competition that has done that; it is illicit competition. It is competition of the kind that the law ought to stop, and can stop,-this crushing of the little man.

You know, of course, how the little man is crushed by the trusts. He gets a local market. The big concerns come in and undersell him in his local market, and that is the only market he has; if he cannot make a profit there, he is killed. They can make a profit all through the rest of the Union, while they are underselling him in his locality, and recouping themselves by what they can earn elsewhere. Thus their competitors can be put out of business, one by one, wherever they dare to show a head. Inasmuch as they rise up only one by one, these big concerns can see to it that new competitors never come into the larger field. You have to begin somewhere. You can't begin in space. You can't begin in an airship. You have got to begin in some community. Your market has got to be your neighbors first and those who know you there. But unless you have unlimited capital (which of course you wouldn't have when you were beginning) or unlimited credit(which these gentlemen can see to it that you shan't get), they can kill you out in your local market any time they try, on the same basis exactly as that on which they beat organized labor; for they can sell at a loss in your market because they are selling at a profit everywhere else, and they can recoup the losses by which they beat you by the profits which they make infields where they have beaten other fellows and put them out. If ever a competitor who by good luck has plenty of money does break into the wider market, then the trust has to buy him out, paying three or four times what the business is worth. Following such a purchase it has got to pay the interest on the price it has paid for the business, and it has got to tax the whole people of the United States, in order to pay the interest on what it borrowed to do that, or on the stocks and bonds it issued to do it with. Therefore the big trusts, the big combinations, are the most wasteful, the most uneconomical, and, after they pass a certain size, the most inefficient, way of conducting the industries of this country.

A notable example is the way in which Mr. Carnegie was bought out of the steel business. Mr. Carnegie could build better mills and make better steel rails and make them cheaper than anybody else connected with what afterward became the United States Steel Corporation. They didn't dare leave him outside. He had so much more brains in finding out the best processes; he had so much more shrewdness in surrounding himself with the most successful assistants; he knew so well when a young man who came into his employ was fit for promotion and was ripe to put at the head of some branch of his business and was sure to make good, that he could undersell every mother's son of them in the market for steel rails.

And they bought him out at a price that amounted to three or four times,--I believe actually five times,--the estimated value of his properties and of his business, because they couldn't beat him in competition. And then in what they charged afterward for their product,-the product of his mills included,-they made us pay the interest on the four or five times the difference.

That is the difference between a big business and a trust. A trust is an arrangement to get rid of competition, and a big business is a business that has survived competition by conquering in the field of intelligence and economy. A trust does not bring efficiency to the aid of business; it buys efficiency out of business. I am for big business, and I am against the trusts. Any man who can survive by his brains, any man who can put the others out of the business by making the thing cheaper to the consumer at the same time that he is increasing its intrinsic value and quality, I take off my hat to, and I say: "You are the man who can build up the United States, and I wish there were more of you."

There will not be more, unless we find a way to prevent monopoly. You know perfectly well that a trust business staggering under a capitalization many times too big is not a business that can afford to admit competitors into the field; because the minute an economical business, a business with its capital down to hard pan, with every ounce of its capital working, comes into the field against such an overloaded corporation, it will inevitably beat it and undersell it; therefore it is to the interest of these gentlemen that monopoly be maintained. They cannot rule the markets of the world in any way but by monopoly. It is not surprising to find them helping to found a new party with a fine program of benevolence, but also with a tolerant acceptance of monopoly.

There is another matter to which we must direct our attention whether we like or not. I do not take these things into my mouth because they please my palate; I do not talk about them because I want to attack anybody or upset anything; I talk about them because only by open speech about them among ourselves shall we learn what the facts are.

You will notice from a recent investigation that things like this take place: A certain bank invests in certain securities. It appears from evidence that the handling of these securities was very intimately connected with the maintenance of the price of a particular commodity. Nobody ought, and in normal circumstances nobody would, for a moment think of suspecting the managers of a great bank of making such an investment in order to help those who were conducting a particular business in the United States Maintain the price of their commodity; but the circumstances are not normal. It is beginning to be believed that in the big business of this country nothing is disconnected from anything else. I do not mean in this particular instance to which I have referred, and I do not have in mind to draw any inference at all, for that would be unjust; but take any investment of an industrial character by a great bank. It is known that the directorate of that bank interlaces in personnel with ten, twenty, thirty, forty, fifty, sixty boards of directors of all sorts, of railroads which handle commodities, of great groups of manufacturers which manufacture commodities, and of great merchants who distribute commodities; and the result is that every great bank is under suspicion with regard to the motive of its investments. It is at least considered possible that it is playing the game of somebody who has nothing to do with banking, but with whom some of its directors are connected and joined in interest. The ground of unrest and uneasiness, in short, on the part of the public at large, is the growing knowledge that many large undertakings are interlaced with one another, are indistinguishable from one another in personnel.

Therefore, when a small group of men approach Congress in order to induce the committee concerned to concur in certain legislation, nobody knows the ramifications of the interests which those men represent; there seems no frank and open action of public opinion in public counsel, but every man is suspected of representing some other man and it is not known where his connections begin or end.

I am one of those who have been so fortunately circumstanced that I have had the opportunity to study

the way in which these things come about in complete disconnection from them, and I do not suspect that any man has deliberately planned the system. I am not so uninstructed and misinformed as to suppose that there is a deliberate and malevolent combination somewhere to dominate the government of the United States. I merely say that, by certain processes, now well known, and perhaps natural in themselves, there has come about an extraordinary and very sinister concentration in the control of business in the country.

However it has come about, it is more important still that the control of credit also has become dangerously centralized It is the mere truth to say that the financial resources of the country are not at the command of those who do not submit to the direction and domination of small groups of capitalists who wish to keep the economic development of the country under their own eye and guidance. The great monopoly in this country is the monopoly of big credits. So long as that exists, our old variety and freedom and individual energy of development are out of the question. A great industrial nation is controlled by its system of credit. Our system of credit is privately concentrated. The growth of the nation, therefore, and all our activities are in the hands of a few men who, even if their action be honest and intended for the public interest, are necessarily concentrated upon the great undertakings in which their own money is involved and who necessarily, by very reason of their own limitations, chill and check and destroy genuine economic freedom. This is the greatest question of all, and to this statesmen must address themselves with an earnest determination to serve the long future and the true liberties of men.

This money trust, or, as it should be more properly called, this credit trust, of which Congress has begun an investigation, is no myth; it is no imaginary thing. It is not an ordinary trust like another. It doesn't do business every day. It does business only when there is occasion to do business. You can sometimes do something large when it isn't watching, but when it is watching, you can't do much. And I have seen men squeezed by it; I have seen men who, as they themselves expressed it, were put "out of business by Wall Street, because Wall Street Found them inconvenient and didn't want their competition.

Let me say again that I am not impugning the motives of the men in Wall Street. They may think that that is the best way to create prosperity for the country. When you have got the market in your hand, does honesty oblige you to turn the palm upside down and empty it? If you have got the market in your hand and believe that you understand the interest of the country better than anybody else, is it patriotic to let it go? I can imagine them using this argument to themselves.

The dominating danger in this land is not the existence of great individual combinations, -that is dangerous enough in all conscience,- but the combination of the combinations,-of the railways, the manufacturing enterprises, the great mining projects, the great enterprises for the development of the natural water-powers of the country, threaded together in the personnel of a series of boards of directors into a "community of interest" more formidable than any conceivable single combination that dare appear in the open.

The organization of business has become more centralized, vastly more centralized, than the political organization of the country itself. Corporations have come to cover greater areas than states; have come to live under a greater variety of laws than the citizen himself, have excelled states in their budgets and loomed bigger than whole commonwealths in their influence over the lives and fortunes of entire communities of men. Centralized business has built up vast structures of organization and equipment which overtop all states and seem to have no match or competitor except the federal government itself.

What we have got to do,-and it is a colossal task not to be undertaken with a light head or without judgment,-what we have got to do is to disentangle this colossal " community of interest." No matter how we may purpose dealing with a single combination in restraint of trade, you will agree with me in

this, that no single, avowed, combination is big enough for the United States to be afraid of; but when all the combinations are combined and this final combination is not disclosed by any process of incorporation or law, but is merely an identity of personnel, or of interest, then there is something that even the government of the nation itself might come to fear,-something for the law to pull apart, and gently, but firmly and persistently, dissect.

You know that the chemist distinguishes between a chemical combination and an amalgam. A chemical combination has done something which I cannot scientifically describe, but its molecules have become intimate with one another and have practically united, whereas an amalgam has a mere physical union created by pressure from without. Now, you can destroy that mere physical contact without hurting the individual elements, and this community of interest is an amalgam; you can break it up without hurting any one of the single interests combined. Not that I am particularly delicate of some of the interests combined,-I am not under bonds to be unduly polite to them, | but I am interested in the business of the country, and believe its integrity depends upon this dissection. I do not believe any one group of men has vision enough or genius enough to determine what the development of opportunity and the accomplishment by achievement shall be in this country.

The facts of the situation amount to this: that a comparatively small number of men control the raw material of this country; that a comparatively small number of men control the water-powers that can be made useful for the economical production of the energy to drive our machinery; that that same number of men largely control the railroads; that by agreements handed around among themselves they control prices, and that that same group of men control the larger credits of the country.

When we undertake the strategy which is going to be necessary to overcome and destroy this far-reaching system of monopoly, we are rescuing the business of this country, we are not injuring it; and when we separate the interests from each other and dismember these communities of connection, we have in mind a greater community of interest, a vaster community of interest, the community of interest that binds the virtues of all men together, that community of mankind which is broad and catholic enough to take under the sweep of its comprehension all sorts and conditions of men; that vision which sees that no society is renewed from the top but that every society is renewed from the bottom. Limit opportunity, restrict the field of originative achievement, and you have cut out the heart and root of all prosperity.

The only thing that can ever make a free country is to keep a free and hopeful heart under every jacket in it. Honest American industry has always thriven, when it has thriven at all, on freedom; it has never thriven on monopoly. It is a great deal better to shift for yourselves than to be taken care of by a great combination of capital. I, for my part, do not want to be taken care of. I would rather starve a free man than be fed a mere thing at the caprice of those who are organizing American industry as they please to organize it. I know, and every man in his heart knows, that the only way to enrich America is to make it possible for any man who has the brains to get into the game. I am not jealous of the size of any business that has grown to that size. I am not jealous of any process of growth, no matter how huge the result, provided the result was indeed obtained by the processes of wholesome development, which are the processes of efficiency, of economy, of intelligence, and of invention.

Scanned from Woodrow Wilson, *The New Freedom* (New York: Doubleday, Page & Co., 1913): 163-191

Regulation
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A Historical Perspective on Electric Utility Regulation

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The traditional approach to regulating electric utilities, involving exclusive geographic franchises and state commission approval of rate changes and capacity additions, is increasingly coming under pressure brought about by several important economic forces. From the inception of regulation until the late 1960s, economic forces enhanced the workability of traditional regulation and created an age during which rate-of-return regulation worked smoothly. As a result of demand-side, technological and cost changes beginning in the late 1970s, however, the traditional framework was dealt several serious blows. That resulted in a reexamination of both the origins of that regulation and its underlying economic justification. In particular, the "natural monopoly" argument behind extensive price and entry regulation is undergoing reassessment.

The History of Regulation in the Electric Utility Industry

The relationship between the electric utility industry and state and local governments has been closer than that of other industries since its founding in 1879. In the earliest years that was due to the nature of electricity transmission, which required extensive use of public streets to distribute power to homes and businesses. In particular, U.S. law requires special permits or franchises, granted by state governments, to use public streets. By 1880 most states had conferred substantial powers on municipalities regarding the control of city streets. Therefore, in addition to state incorporation, all electric utilities required a special franchise from the affected city to operate. Cities often issued multiple franchises and allowed market forces to determine prices, outputs, capacity requirements, and firm survival. That is known as the period of "municipal regulation" of electric utilities, and it was radically different from the current system.

Municipal Regulation of Utilities. Municipal governments viewed franchises as a method of regulation via competition between utilities and often issued overlapping franchises. The consensus is that such a practice created vigorous competition. That practice was not limited to a few cities or to the electric utility industry Competition through overlapping franchise granting was practiced in the telephone and gas industries as well. The period of municipal

regulation by competitive franchises is generally considered to run from 1879 to 1907. It is generally acknowledged that 1907 was a landmark year for municipal regulation as a result of the passing of laws in Wisconsin and New York, which created powerful state commissions. The Wisconsin law, a model used by other states, gave its commission the power to convert existing franchises to "indeterminate franchises," whereby a municipality could terminate a franchise by buying the assets of the utility, to establish entry control through a "certificate of public convenience and necessity," to fix rates, and to regulate capacity additions and the issuance of securities by the utility. The passing of those two state laws was followed by a flurry of legislative activity between 1907 and 1914, in which twenty-seven other states passed similar laws. Subsequently almost all states passed such laws. The passing of those laws signaled the end of municipal regulation, as local ordinances and municipal authority to grant franchises were superseded by state regulatory commission authority

The Change to State Regulation. There are two conflicting views of the period of municipal regulation by competitive franchises and the following move to state regulation. The first view is that the period was, alternately one of destructive competition and abuse of consumers through unrestrained monopoly power-the result of the way municipal governments granted franchises. Some cities granted an excessive number of franchises, which resulted in torn-up streets, unused wires and poles, and bankrupt companies. Those municipalities may have protected consumers, but at the expense of wasteful competition. In contrast, other cities used franchises to protect producers from competition. That was often the charge in cities where utility mergers created large companies. The city officials, presumably captured by powerful utility interests, were bribed and corrupted in the free-wheeling environment of local politics. Thus, consumers were easily exploited by consolidating monopolies as local officials sat idly by, content with favors and graft. Some cities were guilty of both excesses at different times during the period. According to that view, municipalities were not up to the task of regulating utilities. Therefore, state regulation was necessary to distance the regulator from the local, corruption-prone level and to enforce uniform regulation throughout the jurisdiction.

That view holds that the move to state regulation was in the public interest because of the "natural monopoly" character of the electric utility industry-one firm can serve the market more cheaply than two or more firms and can keep out rival firms by expanding output and lowering price when threatened. That single, dominant firm is able to earn monopoly profits even while prohibiting entry. The most efficient market structure is one in which the firm is given a regional monopoly by the government with prices set so that the firm earns a "fair rate of return" on the "fair value" of the property used by the utility. Because all demand must be met at that price, the utility has the legal status of a common carrier. Such is the approach embodied in the Wisconsin legislation.

The public-interest theory implies that the move to state regulation was in the public interest. That is, state regulation made consumers better off and producers worse off by increasing the output of utilities and decreasing both prices and profits.

The second view of the period of municipal regulation holds that municipalities could effectively control the monopoly power of utilities through the threat of competition implied by duplicative franchises. Rivalry among firms for customers resulted in a highly competitive market for electricity, in which it was difficult to extract monopoly rents without inviting unwanted competitors, who quickly undercut exploitative prices. According to that view, state regulation was instituted not to correct private market failures

and to increase social welfare, but to provide firms with a way to insulate themselves from the discipline of competition.

That view is consistent with the "positive theory of regulation." Its main tenet is that economic regulation serves not the public interest but the private interests of the most politically effective pressure group or groups. Different groups demand regulation to obtain wealth transfers. Regulators use economic regulation to redistribute wealth to maximize political support. That theory relies on the fact that small pressure groups with large per capita stakes in the regulatory process are most effective in gaining political support for policies that enhance their wealth. The theory therefore predicts that electricity producers will be more effective in gaining support for policies that distribute wealth in their favor than will be consumers. If that is the case, the move to state regulation should have increased the prices and profits enjoyed by producers. Also, the demand by producers for state regulation should have been higher in those states that had the most competitive conditions under municipal regulation. Therefore, the positive theory predicts that regulation should have occurred first in states with intense competition. That is contrary to the prediction of the public-interest theory of regulation, which implies that state regulation should have been established earliest in cities where natural monopolies were most powerful, with state regulation's resulting in lower prices and profits.

Gregg A. Jarrell empirically tested those two propositions. He divided states into two groups-those that adopted state regulation during the early wave, between 1912 and 1917, and those that adopted state regulation after 1917. He found that the states that adopted regulation early had, on average, 45 percent lower prices, 30 percent lower profits, and 25 percent higher per capita output *before regulation* than the states that adopted regulation later. That was the case even after correcting for a number of demand and cost differences. Jarrell attributed those large differences in prices and profits to the effect of different municipal practices on market structure. His evidence contradicts the proposition of the public-interest theory that regulation should have been established first in states where electric utilities were most successful in exploiting their monopoly power. His evidence is, however, consistent with the positive theory of regulation. Municipal regulation through competition kept prices and profits low and caused producers to demand state regulation.

To further test those propositions, Jarrell examined how prices and profits changed after the move to state regulation in the early regulated states. He found that the change to state regulation was associated with a 25 percent increase in average price and a 40 percent increase in average profit. The public-interest theory predicts that both prices and profits should have fallen. There is thus substantial evidence that imposing state price and entry regulation was a proproducer move to insulate electric utilities from the competition fostered by the municipal regulation through competitive franchises. It appears that consumers pay more for electricity under a rate-of-return regime as a result of the absence of competition. Municipal regulation may not have been uniform, but it appears to have been more effective than state regulation in properly controlling utilities.

Recent Economic Changes and Their Consequences for Regulation

State and federal regulation of electricity has never been under more intense scrutiny than it now is. Regulation worked smoothly for fifty years because of relatively stable or improving cost conditions for utilities, coupled with steadily rising demand. Economic upheavals over the past two decades confronted the regulatory structure governing the electric utility industry with new challenges. Largely as a result of the increased

politicization of the process under state regulation, it is now widely acknowledged that regulation failed to deal adequately with those changes.

Economic Change and Industry Costs. The 1950s and 1960s were relatively uneventful for the electric utility industry The industry benefited from technological progress and economies of scale in generation, which led to falling nominal and real prices for electricity According to the Edison Electric Institute, nominal electricity prices declined continuously from about 1925-roughly the end of the wave of state commission regulation-until 1970. Demand for electricity grew rapidly throughout that period. Utilities performed well financially and rarely filed for rate increases, but instead often voluntarily decreased their rates. Therefore, the regulatory system of extensive price and entry control worked smoothly during that period. The regulatory system often worked in favor of utilities, since costs decreased before regulators decreased rates. The resulting "regulatory lag" allowed utilities to earn returns on investment greater than their cost of capital, while customers were heartened by falling real prices. Public involvement in the regulatory process was minimal.

Several factors worked in concert during the early 1970s to change that placid situation. First, productivity gains slowed as a result of the exhaustion of scale economies in electricity generation and a slowdown in technological innovation. At the same time, coordination economies among different utility systems were fully exhausted. Second, the cost of inputs increased sharply owing to fossil-fuel price shocks in 1974 and 1975 and again in 1979 and 1980. Third, more extensive environmental regulation of electric generating plants, which began in the late 1960s, further intensified in the 1970s and markedly raised construction costs and increased construction times. At the same time, the rise of nominal interest rates increased the cost of capital and further raised construction costs. Both the real and the nominal costs of supplying electricity increased dramatically in a relatively short period of time. Demand growth slowed in response to the price increases that had occurred and further injured the financial health of utilities.

The Political Nature of the Regulatory Process. In response to those cost changes, utilities filed more frequently for larger rate increases. Initially, the regulatory systems accommodated those cost increases by allowing the requested rate hikes. Regulatory lag, however, began to work against utilities as costs increased faster than rates. Consumer groups, correctly viewing rate determination as the result of a political process, did not acquiesce to those hikes. Consumers soon formed effective pressure groups and attempted to insulate themselves from increases in the cost of supplying electricity. They used their elected representatives and the political forums created by regulation to vigorously oppose rate increases. Environmental groups provided additional opposition.

New ratepayer activism and the political nature of the process transformed the regulatory system. It became clear that the system was not so simple as the dispassionate "fair rate of return" or "costplus" criteria suggest. Commissions began to resist rate increases, although the proposed rates accurately reflected cost conditions and thus would have given utilities a constant rate of return. The old regulatory system was not able to deal with such dramatic economic change. As a result, many utilities came under increasing financial stress. Some new regulatory mechanisms were created to deal with the cost increases, such as the fuel adjustment mechanism, which automatically passed on higher fuel prices to consumers. By 1978, all but five states instituted some type of fuel adjustment mechanism. In general, however, rates were not keeping up with costs during that period.

Significant resistance by regulators also came in the form of opposition to new coal and nuclear generating plants' coming on line to replace inefficient oil and gas-turbine plants. Those plants were built under the assumption that the rapid demand growth of the 1950s and 1960s would continue. More important, demand slowed in response to the rate increases that had occurred. Electricity demand grew at a 7.3 percent annual rate from 1960 to 1973, but slowed to 2.5 percent a year from 1973 to 1985. Consequently construction projects undertaken with the expectation of rapid increases in demand created excess capacity. Many regulatory commissions responded to those pressures by creating new procedures that never had a place in the traditional "regulatory compact" or by greatly expanding old ones. Utility plants were subjected to "prudence reviews" under which the commission could disallow all or part of the plant from inclusion in the rate base if it was deemed an imprudent investment.

The financial impact of price inflexibility in the face of cost increases and disallowed capital investments was profound. After 1975, electric utility common stocks fell below their book values. Before 1968, earned rates of return on equity were consistently higher than the average cost of new debt. After approximate equality between 1968 and 1973, earned rates of return fell far below interest costs-reaching -3.91 percentage points by 1981. Utilities generally failed to earn their allowed rates of return. The financial performance of utilities did not improve until 1985, when fuel prices and interest rates declined.

The lesson of that experience was not lost on electric utility managers. They now fear that the cost of large (and efficient) new generating capacity might not be recovered through the regulatory process. New capacity might be disallowed from the rate base although its costs were justified and prudently incurred. The expected return on investment in new capacity must compensate for this "regulatory risk," and given the current low rate of investment in new capacity that return is apparently perceived to be below the cost of capital. Even in areas where there is a clear demand for additional capacity, utilities that are building plants are building much smaller ones. Although there is great hope that third-party nonutility generators, made up of independent power producers and cogenerators, will be able to fill the gap, they still face some regulatory barriers. Unless the system is changed, investment behavior will result in higher prices and less reliable power in the future.

The experience of the past twenty years has shown that the concept of a mutually beneficial regulatory compact between utilities and regulators is illusory. Such a compact would have kept utilities' earned rates of return constant at the allowed level throughout periods of economic turmoil, as long as utilities continued to meet the needs of their customers. It became clear that the political nature of the process profoundly affected its response to changing economic conditions. Only the relatively stable economic environment from the 1920s to the early 1970s that provided growing demand coupled with consistent technological and scale improvements allowed the system to work smoothly for so long. When economic conditions did change, the regulatory process often resisted politically unpopular price increases by changing the rules of the game. That regulatory resistance resulted in huge losses for electric utilities and drove the industry to its current point, where future reliability is in question.

Therefore, one of the fundamental questions about reform of electric utility regulation lies with the degree of politicization inherent in the process. An efficient reform would allow a less politicized, more market-oriented determination of prices and capacity investment. Such a reform would diminish the opportunities to distort pricing through the political control of rates and investment. In addition, consumers would view price increases as the

result of changes in underlying economic conditions rather than as a product of some political process.

The Natural Monopoly Model of Regulation

The failures of the regulatory system to deal with economic change led to increasing discontent with the tradition regulatory approach and the natural monopoly theory of market structure that underlies it. Many researchers have reexamined natural monopoly theory and have found fault with both the theoretical approach and the resulting policy prescriptions.

To recap, traditional natural monopoly theory focuses on the static cost structure of the industry-how per unit costs change as the firm's scale of operation increases when the technology of production is held constant. If the technology is such that larger operations result in more efficient production, then the industry is said to be characterized by economies of scale. Such a technology allows one firm to produce at lower cost than any combination of two or more firms. Thus, the "natural" form of market organization is monopoly.

More recent studies of natural monopoly have recognized the multiproduct nature of a firm's outputs. While the traditional model viewed the firm as producing a single output, electric utilities in reality have outputs that differ according to time of day, interruptability, and so forth. Thus, recent studies have defined an industry as a natural monopoly if a particular output combination can be produced more cheaply by a single firm than by any number of individual plants or firms.

Critiques of Natural Monopoly Theory. One of the most telling critiques of natural monopoly theory was presented by Harold Demsetz in 1968. He pointed out that although one firm may be the most efficient producer owing to economies of scale in a particular market, monopoly pricing does not necessarily result. The classical natural monopoly model focuses on "competition within the field" to the exclusion of "competition for the field:' Pricing will depend on the number of rival bidders for the market as well as on the cost and demand conditions in the market. If contracting costs are relatively low and there are no legal barriers to entry, competition from potential rivals for the customer base will drive prices down to competitive levels. If the incumbent firm tries to earn monopoly profits by increasing price, a rival firm will be able to bid customers away with more attractive long-term contracts. The cost structure of the industry need not determine the number of rival bidders, so that highly competitive prices may result.

A 1971 study of the market for municipal bond sales provides some evidence on the number of rival bidders required to bring prices down. In that market competing brokerage houses bid for the right to sell municipal bonds. Firms price their bids according to the "spread"-the dollars of profit they will take per $1,000 of bonds sold. The study showed that with only three rival bidders, the resulting price was two-thirds of the way to what could be characterized as a competitive price. Although the municipal bond market differs vastly from that for electric power, achieving a competitive price through bidding in electricity markets may not require the large number of bidders often assumed in simple models of competitive markets. Important advances in the use of competitive bidding in wholesale power markets have already been made by using the power grid to facilitate transactions-often over the lines of third parties, the so-called wheeling of power-and by purchasing more power from nonutility generators.

An important addendum to the Demsetz critique addresses the issue of the "wasteful duplication of facilities" that opponents claim is brought on by competition. Demsetz points out that such duplication stems not from competition, but from the mis-pricing of public lands and thoroughfares. Once a utility has been granted access to streets, the marginal cost of using that land is very low and leads to overutilization of the resource. The land's value in alternative uses, if properly priced in a market, would be higher. That is therefore not an argument for prohibiting competition but for properly pricing the use of public property-forcing firms to undertake a socially optimal amount of investment.

Natural Monopoly and Barriers to Entry. The Demsetz critique leads naturally to a question that has haunted natural monopoly theory for years. If a single dominant firm is the natural outcome in a market with those characteristics, why is it necessary to eliminate potential competition by granting a government-enforced monopoly to a firm? That question is crucial since the benefits of rivalry are stamped out by a legal prohibition against it. Incentives to minimize costs, to develop cost-saving technological improvements, or to implement those improvements are eliminated or greatly reduced.

The standard answer is that since costs are forever falling with firm size, one big firm will always be more efficient than two or more smaller ones. That result depends crucially on the fact that larger firm size always results in greater economies of scale-lower unit costs. If the market size grows over time, as electricity demand always has, or if firms grow large enough that they fully exploit available economies of scale, it may be equally efficient for two or more firms to serve the same market. If that occurs, the justification for state entry barriers is greatly weakened. Paul Joskow and Richard Schmalensee suggest that cost savings through scale economies at the plant, or generation, level were virtually exhausted by 1970. Thus, the justification for prohibiting competition at the plant level may have been rendered obsolete by industry growth since that time.

Important economies in transmission and the coordination of power production, which could be achieved by a smaller number of large, vertically integrated utilities, may still exist. The exploitation of those economies, however, is actually restricted by regulation. Granting exclusive monopoly territories does not assure that firms can operate at their optimal size. Firms might grow larger under a less restrictive regulatory framework and thus reap greater benefits from scale factors in both coordination of power production and transmission. Therefore, alternative regulatory arrangements would afford benefits of optimal firm size, while bringing prices closer to costs through bidding.

One important area of research examines the cost of entry barriers in the electric power industry. There are many potential effects of entry barriers on firm behavior, such as on the rate of innovation and the adoption of new technology. I focus on the effect of entry barriers on internal firm efficiency. Natural monopoly theory ignores those factors, which could shift a firm's cost curve down under competition, by focusing on the static cost curve.

Work by Walter J. Primeaux suggests that the costs of entry barriers associated with internal inefficiency are substantial. Primeaux examined the effect of direct rivalry on both the costs and prices of electricity. Although such direct competition is often overlooked by economists, Primeaux used data from 1963 to 1968 on forty-nine cities in which two electric utilities serve the same customer base. Customers in those cities were able to choose which utility they preferred. Since investor-owned utilities often operate in many cities and it is difficult to allocate costs to specific cities, his sample included only municipal utilities.

The crucial question for the assessment of costs is whether the scale benefits of having a single firm serve the market outweigh efficiency losses due to the lack of competition. After correcting for a number of economic variables that could affect costs, Primeaux compared the costs of firms subject to competition with those of regulated monopolists. He found that average costs were lower for small firms facing competition and calculated that competition lowered average costs by 10.75 percent. Those efficiency gains outweighed the scale losses of having two firms serve the market up to an annual output level of 222 million kilowatt-hours. That result implies that, in 1962, approximately 92 percent of all publicly owned systems would have operated at lower average costs if they had been subject to competition.

Primeaux conducted a similar study on the prices actually paid by customers of competing versus monopoly firms. He found that the impact of competition on prices was even more profound than that on costs. He attributed that difference to lower profit rates under competition. He found that competition lowered prices by 16 or 19 percent, depending on the quantity of electricity used. The average price (total sales revenue divided by quantity sold) decreased by 33 percent. Thus, the potential gains to consumers from competition, through greater internal efficiency and more favorable profit rates, appear to be substantial.

Conclusions

Demsetz's competitive-bidding approach to electric utility regulation may have been approximated under the period of municipal regulation through competitive franchises. Jarrell suggests that the institution of state rate and entry regulation was due not to the failure of competition to protect consumers, but to firms' seeking protection from competition.

The recent widespread failure of traditional regulation to deal with economic change in the 1970s and early 1980s led to several revelations. First, it became clear that the success of state regulation was due to historical accident, with politically palatable price decreases occurring as a result of exploiting economies of scale and consistent technological improvement. Second, the process was exposed as much different from what the textbook cost-plus approach suggests. Important political forces operate through the process to create regulatory resistance to price increases, even when they are justified by costs. The political nature of the process led to actual changes in procedure, such as the creation of "used and useful" and "prudent investment" tests for new plants, which resulted in The unexpected disallowance of many investments. Many firms now balk at adding capacity because they face political or regulatory risk. Commentators have suggested that one of the advantages of a Demsetz-style approach lies in the diminished role played by politics. Third, a critical assessment of the theory of natural monopoly underlying traditional forms of regulation has led to a reexamination of the role of competition in regulating the price, output, and investment decisions of utilities.

How far competition can go in improving on the traditional structure is currently the subject of widespread and vigorous debate. Any changes forthcoming are likely to represent important departures from the traditional electric utility regulation of the past seventy years.

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BILLING WORLD

PUBLISHER'S LETTER

By Dr. Jerry Lucas

Local Competition: Myth Vs. Reality

From reading the trade and general press, one could come to the conclusion that nothing much has happened in the way of local competition since the passage of the Telecommunications Act 19 months ago, except a lot of accusations on the part of ILECs and CLECs. This letter looks at my top 20 myths and realities of ILEC and CLEC claims and media hype in this new era of local competition.

1.

IXCs Losing Hundreds of Millions Due to ILECs Stonewalling Competition!

Legislators and regulators certainly take notice when large carriers such as AT&T, MCI and others announce big losses due to entering the local exchange business, and they can be swayed by arguments that the losses are due to ILECs stonewalling their competitive efforts.

The Reality: The big IXCs are investing billions in fiber optics, switches and infrastructure to bypass ILEC facilities in business districts of major U.S. cities. They plan to spend billions more on this class of competition. Even if the ILECs bent over backwards, the big IXCs would still be losing money. It's going to take five to 10 more years before these investments show profit.

2.

8th Circuit Court's Order: A Major Setback to Local Competition

The courts have sided with the states on who has local jurisdiction, and it would have been easier on ILEC competitors if the FCC could have taken a firm hand on establishing a common set of competitive rules for all 50 states.

The Reality: The courts didn't change the duties of the ILECs regarding resale, loop and OSS unbundling, number portability and so on. In fact, most of the states are using the FCC-proposed forward pricing model. In short, the effect of the 8th court on most local markets is negligible.

3.

ILECs Have Implemented Electronic Bonding with the CLECs

This past May, the major ILECs came to Washington, D.C., to demonstrate their present and future plans for electronic bonding options for CLECs for pre-ordering, ordering, provisioning, trouble management and billing required by the FCC to be in place by January 1997. This received a lot of attention from the trade press.

The Reality: Electronic bonding is not about ILEC computers sending data packets back and forth with CLEC computers. Yes, there are protocols such as EDI that connect computers from different companies to support electronic commerce providing interconnection. But electronic bonding is about interoperability. If I call Paris, France, and the person who picks up the phone doesn't speak English, and I don't speak French, we are connected but not interoperable. Technical interfacing can be achieved, but it is meaningless unless you can interface the business systems to do business electronically.

4.

There Are No Standards for OSS Unbundling

Nowhere on this planet except in the United States does the opening up (demonopolization) of the local market require the incumbent LEC to unbundle its operations support systems (OSS). As of yet, no international standards exist.

The Reality: A set of ITU standards called Telecommunications Management Network (TMN) is being developed to standardize operations in an inter-carrier environment. An industry forum known as NMF interprets those standards for the U.S. Standards work is meaningless unless product vendors see real customer interest. To date ILECs have shown little interest. The old saying, "You can lead a horse to water but you can't make him drink," applies here.

5.

RBOCs Are Using the Courts to Block Local Competition

Almost everything the FCC has done regarding local competition, the ILECs have taken their actions to one or more courts.

The Reality: They will not be the only ones. Just wait until the FCC approves the first RBOC's application to become an in-region IXC. Some CLECs today look more like law firms that just happen to have some resale and unbundling agreements with ILECs and loads of collected documentation on presumably ILEC noncompetitive behavior.

6.

ILECs Don't Want to Give CLECs Parity

The CLECs want parity when accessing ILEC's local service records for preordering, ordering, receiving confirmation of ordering and time of provisioning, order tracking, obtaining instant trouble reporting and accurate billing and more—just like the ILEC service representatives have access to today.

The Reality: The ILEC service representatives have to go through cascades of computer screens to do preordering, ordering and provisioning. They have a service provisioning error rate in the 5% range, and they can't receive customer service information instantly. Note: The second "S" in OSS stands for support. The legacy environment that the FCC ordered unbundled was built to support people, not computers, particularly non-ILEC computers.

7.

CLECs Can't Make Money with ILEC Resale

The ILECs typically offer a 20% discount off their retail rate to a wholesale or CLEC customer. The CLECs say that the discount is not enough to make a profit, and they are right in most cases. CLECs must offer the customer a 10% discount off the top, and the ILEC sends customers who don't pay their bills to CLECs (this is just the ILEC performing good customer service for the deadbeats). So the CLEC has a high debt rate costing another 5-10%, leaving nearly zero profit margin before it even considers its own billing, customer care and marketing costs.

The Reality: Congress never intended resale to be a stand-alone profit line, but just a way to jump start facility-based competition. On the other hand, never discount American ingenuity. There is a Texas-based reseller who is making money with resale to deadbeats who have lost ILEC phone service, with a debit billing system. There's no discount and all services, local and long distance, are prepaid up front.

8.

CLECs Can't Make Money with ILEC Local Loop Unbundling

For a CLEC to take advantage of an ILEC unbundled local loop, the CLECs must invest upward of $20 million per market to do it right. The CLEC investment would cover new switches, surrounding OSS and business support systems, the "cage" for ILEC's co-location, fiber connections to both wire centers and more. If the ILEC's interim price for unbundled loops without switching included is near the ILEC bundled retail price, CLECs can't make money.

The Reality: As with local service resale, Congress intended this to be a jump-start service to facilities based local competition (that is, CLECs build their own local distribution and not rely exclusively on ILEC loops).

9.

CLEC Competition Viable if ILECs Decrease Rates for Wholesale and Unbundled Loops

If the ILECs offered a 40% wholesale discount rate for unbundled loops and local switched access over retail, then CLECs could make money and service.

The Reality: Why would a small or large business be

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interested in service from a CLEC if the only advantage is 10% off local ILEC service? Take for example our own telecommunications monthly bill. TeleStrategies spends 15% on local, 35% on long distance and 50% on Internet services per month. If a CLEC knocks on our door and says it can save us 10% on local service by unbundling our "life line" loops—and that was the only form of savings—we would tell them, "Take a walk, that's only 1.5% savings on the overall telephone bill and for what?" CLECs must add value! A discount on local service alone won't fly with most business users.

10.

ILECs Are Stonewalling Loop Unbundling

The CLECs, who want unbundled ILEC loops, are willing to pay the interim rates but can't get them with the unbundled OSS elements to their performance satisfaction.

The Reality: ILEC loops were never designed or implemented to be unbundled. The entire ILEC OSS quandary revolves around the customer's telephone number associated with a switch. Once the telephone number is separated, it is disconnected to everything else at the ILEC—thus the OSS challenge. At the same time the ILECs must provide local number portability that quadruples the problem. The ILECs are still trying to figure out how to do unbundling.

11.

ILECs Are Unbundling Differently in Each State

The CLECs say their life trying to make a go with loop unbundling is further complicated by the fact that ILECs are doing things differently in each state they serve, thus creating 50 different approaches to unbundling, and hundreds more when you throw in the independents.

The Reality: The RBOCs were created into seven regions from 23 Bell Operating Companies (BOCs) 13 years ago at divestiture. First, they are still coping with divestiture regarding consolidated operating practices; second, each state regulatory commission requires different business support facilities; and finally, the demographics among the states are different. On this last point there are roughly 20,000 switches in the United States, depending how you count remote switching modules. I would be surprised if the large IXCs operating as CLECs would target more than 300 switches in the next two to three years for high-volume unbundling. The ILEC business case will differ depending on the market, and many switches will not see profitable demand for unbundled savings for years to come.

12.

Implementing Local Competition Shouldn't Be More Difficult than Implementing LD Competition

The Department of Justice and AT&T announced the agreement for the breakup of the Bell System in January 1982, and Judge Greene (remember him?) agreed and set the target date of two years for equal access long distance competition. Well, it took two and a half years, so it should take about the same with local competition.

The Reality: Implementation of long distance competition was a simple task compared with local competition. First, all parties wanted it. The ILECs saw profits, (remember the 6.5 cents per minute access charges on both the originating and terminating end of a switched call?) the other IXCs wanted it, and AT&T needed the other IXCs to survive and be competitive—otherwise the regulators were prepared to let the RBOCs in long distance. Also, technically nothing had to be built except a Carrier Access Billing System or CABS, a data base in the ILEC switch indicating which IXC was chosen, and LATA rate tables. This buildout was an order of magnitude simpler than OSS and loop unbundling. Besides, the ILECs and IXCs were business partners regarding access. In local competition they are "would-be" competitors and really don't want to do business with each other in the long run.

13.

Local Number Portability Shouldn't Be More Complex Than 800 Number Portability

Since May 1993, U.S. customers could port their 800 number from one carrier to another. The ILECs should be able to do the same with local number portability, with the only difference being the higher volume of traffic.

The Reality: Local number portability is far more complex and the business requirements and regulations are different. Again, all players wanted 800-number portability except AT&T, but it had no choice but to go along because Judge Greene was watching. Also, Bellcore spent seven years working with all the players on 800-number portability standards even before the first 800 number was ported and therefore the risk for highly visible failures was low. Everything about local number portability is more complex (see "The Effects of Number Portability on Billing Systems", page 20).

14.

The Telecommunications Act of 1996 Means More Competition and Less Regulation

Congress passed the Telecommunications Act to remove barriers to competition and to open up nearly every market to competition.

The Reality: Less regulation does not mean fewer lawyers. The president of a mid-sized IXC with a newly created CLEC division was asked after the Telecommunications Act was passed, "What are you going to do now?" The answer was, "Hire 50 lawyers." Case in point: Half of AT&T's and MCI's local interconnection agreements have gone to arbitration. The really tough stuff with "parity via electronic bonding" has yet to go into full swing, not to mention CLEC lawsuits after the ILEC's become IXCs (see myth #5). In the old days, lawyers for competition focused on one city, Washington. In this new era they are spread over 50 states.

15.

Once Allowed into Long Distance the ILECs Will Be Compensated for Their Efforts from Long Distance Profits

The ILECs are paying billions to open up their networks and at the same time see their future market share decreasing. But they will make up for all, and in the end, they will be better off because of the new profits from long distance. Right!

The Reality: There are two long distance markets: residential/small business and mid-to large-sized businesses. By the time the ILECs get into the residential/small business markets and the regulators slap on the likely separate subsidiary constraints, it's not clear where the windfall profits will come from, even if the ILEC assumes 30% or more of the in-region market share. Regarding the large business market—forget it, today's ILEC has no infrastructure to capture a big corporate fish for national service. The only way an ILEC could be a major player in the high-end mass market by the year 2000 is to buy Worldcom or Sprint.

16.

Small CLECs Can't Survive in the Long Run

With the large IXCs in the local market and the ILECs entering in-region long distance, the small CLEC does not have a chance to survive.

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subject to an outside auditor. No other RBOC has been given this requirement by the states.

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With the exception of SNET, no sizable ILEC has formed a unit to go after the CLEC business within their region and a wholesale division with its own profit and loss charter.

The Reality: The state regulators, FCC, mid-level RBOCs operations and network executives—and just about every major consulting firm advising the RBOCs—say creating a stand-alone wholesale division reporting to the board of directors is the way to go for the following reasons.

- An RBOC can focus on its undisputed expertise, such as providing topnotch switched voice and private-line service. If they neglect this market, the CLEC and cable companies will pursue facility-based competition and build broadband networks that could make ILEC copper obsolete.
- The RBOCs don't have special facilities and operations infrastructure to capture national Fortune 500 accounts like the big four IXCs have today.
- The RBOCs can pursue the CLEC market inside and outside their region via separate retail subsidiaries without betting the farm on their success.

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If AT&T and SBC believe they cannot compete in each other's market and the regulators seem ready to approve RBOC mergers and/or long distance company acquisitions, it's only a matter of time before one or two companies will emerge and resemble the old Bell System monopoly. Many are ready to believe this.

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Last but not least is my favorite myth, and that is that the public hasn't seen any benefits from the passage of the Telecommunications Act.

The Reality: There have already been many benefits and they all revolve around creating new jobs, services and products. Before the dust settles, ILECs will likely spend $50 billion with U.S. vendors to carry off local number portability, OSS unbundling and entry into long distance. This is money that would have likely been spent on foreign telco operations if not for the passage of the Telecommunications Act. Further, after this $50 billion has been spent, U.S. vendors will have world-class products and service for those foreign carriers who want to duplicate US carrier networks. In the end, the Telecommunications Act will save consumers money, but the real benefit is economic growth, and that's here today.

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BILLING WORLD
PUBLISHER'S LETTER

By Dr. Jerry Lucas

Local Competition: Myth Vs. Reality

From reading the trade and general press, one could come to the conclusion that nothing much has happened in the way of local competition since the passage of the Telecommunications Act 19 months ago, except a lot of accusations on the part of ILECs and CLECs. This letter looks at my top 20 myths and realities of ILEC and CLEC claims and media hype in this new era of local competition.

1.

IXCs Losing Hundreds of Millions Due to ILECs Stonewalling Competition!

Legislators and regulators certainly take notice when large carriers such as AT&T, MCI and others announce big losses due to entering the local exchange business, and they can be swayed by arguments that the losses are due to ILECs stonewalling their competitive efforts.

The Reality: The big IXCs are investing billions in fiber optics, switches and infrastructure to bypass ILEC facilities in business districts of major U.S. cities. They plan to spend billions more on this class of competition. Even if the ILECs bent over backwards, the big IXCs would still be losing money. It's going to take five to 10 more years before these investments show profit.

2.

8th Circuit Court's Order: A Major Setback to Local Competition

The courts have sided with the states on who has local jurisdiction, and it would have been easier on ILEC competitors if the FCC could have taken a firm hand on establishing a common set of competitive rules for all 50 states.

The Reality: The courts didn't change the duties of the ILECs regarding resale, loop and OSS unbundling, number portability and so on. In fact, most of the states are using the FCC-proposed forward pricing model. In short, the effect of the 8th court on most local markets is negligible.

3.

ILECs Have Implemented Electronic Bonding with the CLECs

This past May, the major ILECs came to Washington, D.C., to demonstrate their present and future plans for electronic bonding options for CLECs for pre-ordering, ordering, provisioning, trouble management and billing required by the FCC to be in place by January 1997. This received a lot of attention from the trade press.

The Reality: Electronic bonding is not about ILEC computers sending data packets back and forth with CLEC computers. Yes, there are protocols such as EDI that connect computers from different companies to support electronic commerce providing interconnection. But electronic bonding is about interoperability. If I call Paris, France, and the person who picks up the phone doesn't speak English, and I don't speak French, we are connected but not interoperable. Technical interfacing can be achieved, but it is meaningless unless you can interface the business systems to do business electronically.

Chances are, if she'd made that call today, it would be billed using our software

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4.

There Are No Standards for OSS Unbundling

Nowhere on this planet except in the United States does the opening up (demonopolization) of the local market require the incumbent LEC to unbundle its operations support systems (OSS). As of yet, no international standards exist.

The Reality: A set of ITU standards called Telecommunications Management Network (TMN) is being developed to standardize operations in an inter-carrier environment. An industry forum known as NMF interprets those standards for the U.S. Standards work is meaningless unless product vendors see real customer interest. To date ILECs have shown little interest. The old saying, "You can lead a horse to water but you can't make him drink," applies here.

5.

RBOCs Are Using the Courts to Block Local Competition

Almost everything the FCC has done regarding local competition, the ILECs have taken their actions to one or more courts.

The Reality: They will not be the only ones. Just wait until the FCC approves the first RBOC's application to become an in-region IXC. Some CLECs today look more like law firms that just happen to have some resale and unbundling agreements with ILECs and loads of collected documentation on presumably ILEC noncompetitive behavior.

6.

ILECs Don't Want to Give CLECs Parity

The CLECs want parity when accessing ILEC's local service records for preordering, ordering, receiving confirmation of ordering and time of provisioning, order tracking, obtaining instant trouble reporting and accurate billing and more—just like the ILEC service representatives have access to today.

The Reality: The ILEC service representatives have to go through cascades of computer screens to do preordering, ordering and provisioning. They have a service provisioning error rate in the 5% range, and they can't receive customer service information instantly. Note: The second "S" in OSS stands for support. The legacy environment that the FCC ordered unbundled was built to support people, not computers, particularly non-ILEC computers.

7.

CLECs Can't Make Money with ILEC Resale

The ILECs typically offer a 20% discount off their retail rate to a wholesale or CLEC customer. The CLECs say that the discount is not enough to make a profit, and they are right in most cases. CLECs must offer the customer a 10% discount off the top, and the ILEC sends customers who don't pay their bills to CLECs (this is just the ILEC performing good customer service for the deadbeats). So the CLEC has a high debt rate costing another 5-10%, leaving nearly zero profit margin before it even considers its own billing, customer care and marketing costs.

The Reality: Congress never intended resale to be a stand-alone profit line, but just a way to jump start facility-based competition. On the other hand, never discount American ingenuity. There is a Texas-based reseller who is making money with resale to deadbeats who have lost ILEC phone service, with a debit billing system. There's no discount and all services, local and long distance, are prepaid up front.

8.

CLECs Can't Make Money with ILEC Local Loop Unbundling

For a CLEC to take advantage of an ILEC unbundled local loop, the CLECs must invest upward of $20 million per market to do it right. The CLEC investment would cover new switches, surrounding OSS and business support systems, the "cage" for ILEC's co-location, fiber connections to both wire centers and more. If the ILEC's interim price for unbundled loops without switching included is near the ILEC bundled retail price, CLECs can't make money.

The Reality: As with local service resale, Congress intended this to be a jump-start service to facilities based local competition (that is, CLECs build their own local distribution and not rely exclusively on ILEC loops).

9.

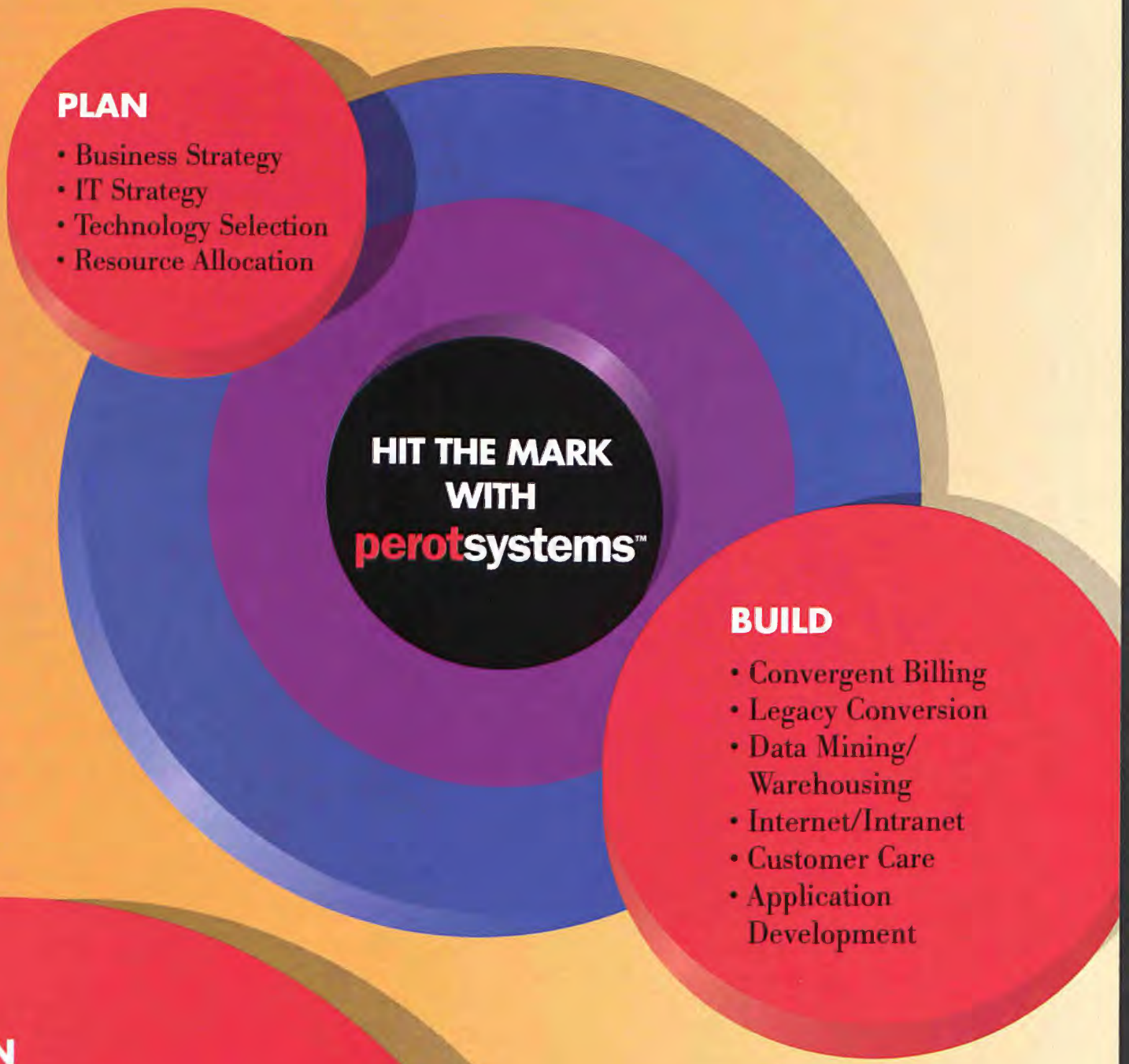
CLEC Competition Viable if ILECs Decrease Rates for Wholesale and Unbundled Loops

If the ILECs offered a 40% wholesale discount rate for unbundled loops and local switched access over retail, then CLECs could make money and service.

The Reality: Why would a small or large business be

continued on page 40

Successful Telecommunication Solutions Are An Elusive Target. . .



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continued from page 6

interested in service from a CLEC if the only advantage is 10% off local ILEC service? Take for example our own telecommunications monthly bill. TeleStrategies spends 15% on local, 35% on long distance and 50% on Internet services per month. If a CLEC knocks on our door and says it can save us 10% on local service by unbundling our "life line" loops—and that was the only form of savings—we would tell them, "Take a walk, that's only 1.5% savings on the overall telephone bill and for what?" CLECs must add value! A discount on local service alone won't fly with most business users.

10.

ILECs Are Stonewalling Loop Unbundling

The CLECs, who want unbundled ILEC loops, are willing to pay the interim rates but can't get them with the unbundled OSS elements to their performance satisfaction.

The Reality: ILEC loops were never designed or implemented to be unbundled. The entire ILEC OSS quandary revolves around the customer's telephone number associated with a switch. Once the telephone number is separated, it is disconnected to everything else at the ILEC—thus the OSS challenge. At the same time the ILECs must provide local number portability that quadruples the problem. The ILECs are still trying to figure out how to do unbundling.

11.

ILECs Are Unbundling Differently in Each State

The CLECs say their life trying to make a go with loop unbundling is further complicated by the fact that ILECs are doing things differently in each state they serve, thus creating 50 different approaches to unbundling, and hundreds more when you throw in the independents.

The Reality: The RBOCs were created into seven regions from 23 Bell Operating Companies (BOCs) 13 years ago at divestiture. First, they are still coping with divestiture regarding consolidated operating practices; second, each state regulatory commission requires different business support facilities; and finally, the demographics among the states are different. On this last point there are roughly 20,000 switches in the United States, depending how you count remote switching modules. I would be surprised if the large IXCs operating as CLECs would target more than 300 switches in the next two to three years for high-volume unbundling. The ILEC business case will differ depending on the market, and many switches will not see profitable demand for unbundled savings for years to come.

12.

Implementing Local Competition Shouldn't Be More Difficult than Implementing LD Competition

The Department of Justice and AT&T announced the agreement for the breakup of the Bell System in January 1982, and Judge Greene (remember him?) agreed and set the target date of two years for equal access long distance competition. Well, it took two and a half years, so it should take about the same with local competition.

The Reality: Implementation of long distance competition was a simple task compared with local competition. First, all parties wanted it. The ILECs saw profits, (remember the 6.5 cents per minute access charges on both the originating and terminating end of a switched call?) the other IXCs wanted it, and AT&T needed the other IXCs to survive and be competitive—otherwise the regulators were prepared to let the RBOCs in long distance. Also, technically nothing had to be built except a Carrier Access Billing System or CABS, a data base in the ILEC switch indicating which IXC was chosen, and LATA rate tables. This buildout was an order of magnitude simpler than OSS and loop unbundling. Besides, the ILECs and IXCs were business partners regarding access. In local competition they are "would-be" competitors and really don't want to do business with each other in the long run.

13.

Local Number Portability Shouldn't Be More Complex Than 800 Number Portability

Since May 1993, U.S. customers could port their 800 number from one carrier to another. The ILECs should be able to do the same with local number portability, with the only difference being the higher volume of traffic.

The Reality: Local number portability is far more complex and the business requirements and regulations are different. Again, all players wanted 800-number portability except AT&T, but it had no choice but to go along because Judge Greene was watching. Also, Bellcore spent seven years working with all the players on 800-number portability standards even before the first 800 number was ported and therefore the risk for highly visible failures was low. Everything about local number portability is more complex (see 'The Effects of Number Portability on Billing Systems", page 20).

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14.

The Telecommunications Act of 1996 Means More Competition and Less Regulation

Congress passed the Telecommunications Act to remove barriers to competition and to open up nearly every market to competition.

The Reality: Less regulation does not mean fewer lawyers. The president of a mid-sized IXC with a newly created CLEC division was asked after the Telecommunications Act was passed, "What are you going to do now?" The answer was, "Hire 50 lawyers." Case in point: Half of AT&T's and MCI's local interconnection agreements have gone to arbitration. The really tough stuff with "parity via electronic bonding" has yet to go into full swing, not to mention CLEC lawsuits after the ILEC's become IXCs (see myth #5). In the old days, lawyers for competition focused on one city, Washington. In this new era they are spread over 50 states.

15.

Once Allowed into Long Distance the ILECs Will Be Compensated for Their Efforts from Long Distance Profits

The ILECs are paying billions to open up their networks and at the same time see their future market share decreasing. But they will make up for all, and in the end, they will be better off because of the new profits from long distance. Right!

The Reality: There are two long distance markets: residential/small business and mid-to large-sized businesses. By the time the ILECs get into the residential/small business markets and the regulators slap on the likely separate subsidiary constraints, it's not clear where the windfall profits will come from, even if the ILEC assumes 30% or more of the in-region market share. Regarding the large business market—forget it, today's ILEC has no infrastructure to capture a big corporate fish for national service. The only way an ILEC could be a major player in the high-end mass market by the year 2000 is to buy Worldcom or Sprint.

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The Wall Street Journal Interactive Edition -- August 6, 1998

FCC Proposal Encourages Bells To Build High-Speed Net Links

An INTERACTIVE JOURNAL News Roundup

Internet users frustrated by long waits to visit their favorite Web sites could get some relief under a government proposal to encourage the rollout of high-speed data connections for homes.

On Thursday, the Federal **Communications** Commission proposed giving incentives to local phone companies to encourage them to build the expensive infrastructure needed for such connections. The final plan could be adopted by year's end.

"Most Americans ... are getting very used to high-speed Internet access in the office. They go home and it's the World Wide Wait and it's very frustrating," said FCC Chairman Bill Kennard. "We want to bring that same high-bandwidth capacity into every home in America."

Local, long-distance, **satellite**, cable and wireless companies are in a race to create lucrative high-speed connections to homes. The FCC will be exploring ways to give other companies incentives to build fast connections into the home, too.

Bell Atlantic Corp., for instance, plans to offer in some markets this fall a connection, digital subscriber line, that is 250 times faster than is offered by a typical modem. Consumers would be charged an installation fee and would have to buy a special modem, and would also pay a monthly fee for various packages of service.

The lack of fast connections to the home is only part of the problem. Much Internet traffic flows over phone-company networks that were designed for voice calls, not data, and are much less efficient in dealing with the latter.

But regional telephone companies Bell Atlantic, U S West Inc., Ameritech Corp. and SBC **Communications** Inc. say current regulations discourage them from building networks designed for data inside their own local phone regions. They want the FCC to use its powers under a 1996 law to remove regulatory barriers hindering development of these advanced networks.

The FCC proposed giving the Bell companies and other major local phone providers, such as GTE Corp., some regulatory relief in the delivery of high-speed data services -- but with certain conditions.

Under the proposal, the local companies wouldn't have to discount new high-speed services to rivals, as they are required to do with other services. They would, however, still be required to lease these

services to competitors.

And the phone companies would be free to set consumer prices for interstate data services without first filing price information with the FCC. State authorities, however, would decide whether to regulate consumer prices of data services offered in their states.

In exchange for these changes, the local companies would have to lease crucial pieces of their networks so other companies could provide competing high-speed data services.

The local companies also would have to provide their data services through a separate affiliate. The FCC believes this is crucial to ensure that the Bells and other entrenched local phone companies don't use their monopoly power to block rivals from offering competing services.

The affiliate would be required to provide the same services at the same terms to rivals as it receives from its parent.

The FCC isn't expected to grant the Bells' request to let them directly offer data services across local calling boundaries, which would constitute a "long-distance" service, something they are currently forbidden from offering.

In other action, the FCC is expected to:

- Beef up enforcement of rules requiring cable programmers to make shows available to **satellite** TV companies and other cable competitors.
- Propose giving U.S. phone companies more flexibility in cutting deals with foreign carriers to terminate calls in countries that don't have much competition. Regulators hope this will make it cheaper for U.S. customers to call most Latin American countries.
- Adopt rules for public-safety groups to eventually get more slices of the public airwaves to coordinate **communications**, and to provide services such as wireless transmission of fingerprints and mug shots to and from police cars.

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Up Front

EDITED BY JOAN OLECK

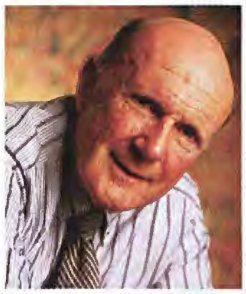
TALK SHOW "I don't think there is a fancy way to say that I have sinned."

—President Clinton at a White House prayer meeting

THE FUND FRONT

A HEDGE FUND GETS CLIPPED

IT'S A DOUBLE whammy for Julian Robertson Jr. and his $22 billion hedge-fund group, Tiger Management Corp.: Robertson recently told investors that the funds lost $600 million in August from Russian-denominated debt. But September's news is worse: Tiger lost 12.6%, or about $2 billion, between Aug. 28 and Sept. 8, according to performance figures for the offshore Jaguar fund, which mirrors the performance of all Tiger funds. It was one of the worst short-term declines in hedge fund history, dwarfing even the 9.7%—or $1 billion—George Soros' Quantum fund lost in August.



ROBERTSON

A Robertson spokesman declined to comment publicly on the reason for the drop. However sources close to the fund blamed a good part of the plunge on a bet on the dollar vs. the yen; the yen has climbed against the dollar in recent weeks. Most of the loss took place in early September.

The Tiger funds are down 9% this month, through Sept. 15. Despite the recent losses, Tiger is up 15.9% this year, after fees. It is now the largest hedge fund group, surpassing Soros' Quantum group. *Gary Weiss*

THE DEAL MILL

COMPAQ STRIKES AN ALTA 'TUDE

COMPAQ COMPUTER MAY HAVE hit on a way to use the Internet to sell more PCs: Sources say the company is negotiating with Yahoo! and Time-Warner on a possible joint venture involving Compaq's search engine, AltaVista. Compaq acquired AltaVista with Digital Equipment in February.

Sources close to the negotiations say Compaq wants to trade equity in AltaVista for Internet content it could feed to Compaq PC customers. An alternative trade would be broadband services, like the Internet and cable, for PC customers. Compaq's board may be asked to approve a partner in October, sources say. Compaq has already invested $200 million in RoadRunner, Time-Warner's high-speed Internet service.

All three companies declined comment. But Compaq Chief Financial Officer Earl Mason this week told analysts of "negotiations with a couple of different partners" concerning AltaVista. Web researcher Relevant-Knowledge calls AltaVista the 10th most-visited site on the Internet. This, plus its powerful Internet search technology, gives it a valuation of roughly $400 million. Sounds big enough to cut a lot of deals. *Paul Judge*

AFTERLIVES

MAKING TECHNOLOGY IDIOT-PROOF

FOR ALL THE ADVANCES OF late, computers and most high-tech gadgets are as frustrating as ever to use. Donald Norman, an ease-of-use expert who in the mid-1990s helped make Apple Computer's Macintosh line simpler to operate, understands this point. No device, he says, becomes ubiquitous until it's idiot-proof. The computer, now five decades old, is hardly that. Norman calls the computer "a 50-year-old teenager."

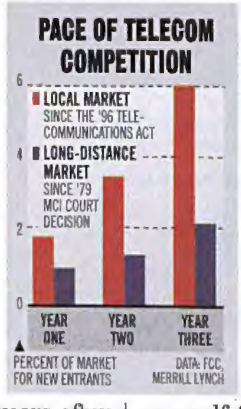
Now, Norman wants to spur the maturation process by teaming with Jakob Nielsen, a former Sun Microsystems Distinguished Engineer. Their Nielsen Norman Group will help companies make technology less complex—from "information appliances" that need no booting to improved E-commerce Web sites.

Norman hopes to have more impact than he did at Hewlett-Packard—which he left after just one year. Indeed, his new book, *The Invisible Computer*, due in October, ends with his view of why big companies are so bad at innovation. "My goal at HP was to bring out products that hide the technology and bring out the benefits," he says. "I'll have bigger impact doing this as a consultant." *Peter Burrows*

DEREG DIARY

YES, VIRGINIA, THERE IS PHONE COMPETITION

MAYBE THERE IS SUCH A thing as local telephone competition after all. These days, the Federal Communications Commission is waving around a Merrill Lynch study that disputes the pundits who declare the 1996 Telecommunications Act an abject failure. With so many phone-company megamergers, the prevailing wisdom has been that the effort to spur competition has led merely to consolidation.



Not true, counters the FCC: Competition in the local calling market is moving faster than the 1980s battle over long distance. Two years after the act, rivals have captured 3.5% of local-phone revenues from the Baby Bells, says Merrill. In contrast, two years after the 1979 court decision letting MCI sell long-distance services, carriers had won only 1.4% of that market from AT&T, the FCC notes.

For next year, the third since deregulation, Merrill predicts that local competitors will control 6% of the market, mostly corporate business in metropolitan areas. The lesson? "It takes patience and persistence to move a market from monopoly to competition," says FCC Chairman William Kennard. Rivals needed 10 years to cut AT&T's market share to 75%. So brace yourself for another round of those dinner-time telemarketing calls. *Catherine Yang*

FOOTNOTES Institutional investors' stake in the 1,000 largest U.S. corporations: 1987, **46.6%**; 1997, **59.9%**

DATA: THE CONFERENCE BOARD

(CLOCKWISE FROM BOTTOM RIGHT) CHART BY RAY VELLA/BW; ILLUSTRATION BY MILAN TRENC; PHOTOGRAPH BY GRAHM TROTT

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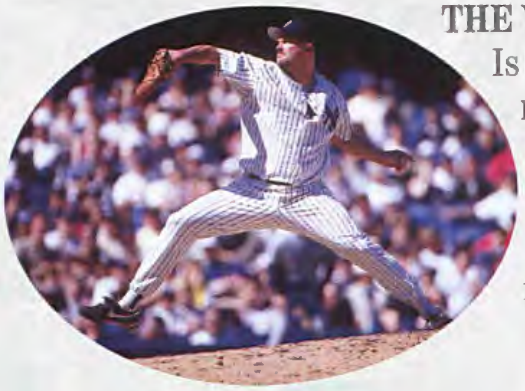

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Computer TELEPHONY
The Magazine for Computer and Telephone Integration

-----Original Message-----
From: David S. Isenberg [SMTP:isen@research.att.com]
Sent: Wednesday, June 25, 1997 5:48 PM
Subject: Rise of the Stupid Network

Here is my attempt at entropy gradient reversal at AT&T. Of course, everybody knows that reversing the entropy gradient is absolutely impossible, and that if you show even the vaguest threat of succeeding, the threatened world throws you out on your ear. Well, they haven't done that to me at AT&T as I write.

This article was approved for public release by AT&T, so if you want EXPLICIT frontal exposure of the Critical Issues, or language that is commensurate with my thinking, you'll have to read between the bits.

David I
David Isenberg
****
Note new coordinates, effective 6/1:
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973-360-8225 office
973-360-8855 fax
isen@research.att.com
****

RISE OF THE STUPID NETWORK:

Why the Intelligent Network was once a good idea, but isn't anymore. One telephone company nerd's odd perspective on the changing value proposition.

by David Isenberg - isen@research.att.com - (973)360-8225
Opportunity Discovery Department, AT&T Labs - Research
June 4, 1997

OBSOLETE ASSUMPTIONS & ENDURING MENTAL MODELS

Design-by-assumption works as long as assumptions hold. Assumptions are shortcuts to useful efficiencies, provided they are not violated. The classic telephone company value proposition, embodied in today's telephone network, holds:

* that expensive, scarce infrastructure can be shared to offer premium priced services,

* that talk - the human voice - generates most of the traffic,

* that circuit-switched calls are the "communications technologies" that matter, and

* that the telephone company is in control of its network.

* Telephone companies still behave as if these assumptions hold despite:

* up to several thousand-fold declines in key infrastructure costs over the last two decades,

* a 20 year double-digit annual growth rate in the volume of data traffic, so that the volume of data traffic is now overtaking the (also growing, but more slowly) volume of voice traffic,

* the many different data types that now travel over the telephone network (despite the fact that the network is not optimized for all these data types),

* the many different types of "communications technologies," from television to Ethernet, that are not part of telephone network architecture, and

* the Internet, which, because it makes the details of network operation irrelevant, is shifting control to the end user.

The Intelligent Network is a straight-line extension of the four assumptions above -- scarcity, voice, circuit switching, and control. Its primary design impetus was not customer service. Rather, the Intelligent Network was a telephone company attempt to engineer vendor independence, more automatic operation, and some "intelligent" new services into existing network architecture. However, even as it rolls out and matures, the Intelligent Network is being superseded by a Stupid Network, with nothing but dumb transport in the middle, and intelligent user-controlled endpoints, whose design is guided by plenty, not scarcity, where transport is guided by the needs of the data, not the design assumptions of the network.

The Stupid Network is not all here yet. It is in its infancy. It needs to get stronger and, well, a bit more coordinated.

Some telephone company people realize that things are changing, and must change. But they are hemmed in by conscious, deliberate, long established telephone company practices. Many are also hobbled by less conscious telephone company mental models of "communications," "technology," and "customer needs."

While these people may realize that the old ways are becoming obsolete, they live in a world conditioned by an encompassing, arcane legacy that only remembers "rational," incremental change. (Note: here "telephone company" refers to large companies whose main business is to provide circuit switched voice calling service. In the United States, most of these are the heirs of the Bell System legacy -- but Sprint, MCI, GTE, SNET, and others might also try on this shoe, and if it fits . . .)

COMPUTERS AS SCARCE RESOURCES

It used to be more expensive to complete telephone calls than it is today. The operator-completed call gave way to call completion by electro-mechanical switch. Then, in the late 70s, the era of computer controlled electronic switching made placing calls even cheaper and more reliable.

In those days, computers, including those that controlled switching, were still considered expensive, scarce resources. When I worked in the nascent electronic toy industry in 1979, a single insight that eliminated six transistors paid my way.

And the same factor -- the need to save two expensive bytes of memory -- laid the basis in this era for the Year 2000 Problem (stay tuned to the eleventh hour news for more on THIS story!).

Now computer circuits are thousands of times cheaper. Moore's Law is what we call the ongoing improvement in computing cost and power. But in the 70s it was not generally known to be a `law' - to most telecommunications engineers (and to humanity in general), it has become the most game-changing wild card played in recent times.

Telephone networks have been designed for optimal use of scarce resources. The local exchange in your city, which handles the last four digits of your telephone number, theoretically could handle up to 10,000 telephones, e.g., with numbers 510-547-0000, 0001, 0002, et cetera through 510-547-9999.

But the switching office is not designed to handle 10,000 simultaneous calls. It is designed to handle far fewer, maybe one tenth of that, based on the assumption that even in the busiest time of the day, only a fraction of its telephones will be active at any one time.

The network works as long as engineering assumptions (e.g., the length of a call, the number of call attempts, etc.) do not change. But let the assumptions change episodically (e.g., Rolling Stones tickets go on sale), or structurally (calls to Internet service providers last several times longer than voice calls), and the network hits its design limits - completing a call becomes a matter of try, try again.

What if network design were based on another assumption - that computation and bandwidth were cheap and plentiful?

DOING "INTELLIGENT" THINGS WITH PHONE CALLS

Once the telephone companies began doing digital switching, the idea that you could do "intelligent" things with calls was not far behind. The concept of network control was extended to let various centralized resources - digital switches, databases (Service Control Points) and signal processing systems (Intelligent Peripherals) - communicate among each other by extending the telephone network's control protocol (SS7).

As noted above, the main force motivating the Intelligent Network was a telephone company attempt at "vendor independence" so telephone companies could get better deals from their suppliers. Thus, Intelligent Network specs were meant to encourage vendors to design their equipment to work in a multi-vendor environment - to interoperate.

As a side benefit, almost an afterthought, some of the newly specified equipment could also interoperate with the business systems of certain customers - but only via limited, cautiously designed interfaces. Virtually all of these services center around call completion, automation, and billing.

This, in a nutshell, is the concept marketed as the Intelligent Network. Some Intelligent Network service examples include:

* Routing calls to different numbers than the one that the caller originally dialed (this is the basis of e.g., 800 service).

* Giving caller choices before the call is completed ("push one for domestic reservations," etc.).

* Saying, "Calling Card, Collect, Third-Party, or Operator" to control payment options.

* Verifying that the calling card number is valid in "real time."

* Supplying calling party numbers directly to customers for database lookup (which is why I must verify from my home phone that I got my Citibank card in the mail).

Expensive computers, intertwined in central network operations, do this. Belief becomes reality. But wait! The telephone companies are now losing design hegemony - the news that "The Internet is here!" is beginning to penetrate the telephone company inner sanctum.

MEETING CUSTOMER NEEDS

The astute reader might by now suspect that the main beneficiaries of the Intelligent Network are the telephone companies themselves. Nevertheless, telephone companies propound a "philosophy" that the Intelligent Network makes it easy to introduce new services and new technologies, and to meet new customer needs. New customer needs, when they are detected, filter into the telephone company slowly. Some needs, the ones with big, obvious, immediate payoffs, get attention from decision makers, who then request a business case, which must then get approved.

The next step is the development plan, followed by the Operations, Administration, Maintenance, and Provisioning Plans. Then if all goes well, the telephone company might begin the process of implementation. This can take years, or even decades (witness ISDN).

If you hate hanging on hold, you are part of a huge latent market - do you know anybody who doesn't? Yet, telephone companies have yet to use Intelligent Network capabilities to effectively ameliorate this problem.

Now, suppose Internet Telephony gets as good as telephone company telephony (see below), and some enterprising independent programmer wants to make a product that solves the problem of being on hold. They would simply write an end-user application and sell it from their web site. If it works, and people like it, they will sell lots of it. If not, they might try again.

But they don't have to go through any long, bureaucratic economic justification, business planning, and technical development processes - they just do it. Internet Telephony, because the Internet Protocol works at the level that user software manages the session, takes the telephone company out of the value equation.

THE INTERNET DIS-INTERMEDIATES THE TELEPHONE NETWORK

The Internet breaks the telephone company model by passing control to the end user. It does this by taking the underlying network details out of the picture.

Let's look at how this works in the case of voice. To the telephone company, there is one main way of transmitting voice - sampled in 8 bit bytes, 8000 times a second, for an aggregate rate of 64 kbit/s. The entire telephone network is designed around this rate.

But if you want to send voice on the Internet, you can encode it at any rate you want, and send it at any rate up to the one that the slowest underlying network link supports. The recipient must have the right decoder running in her intelligent terminal, too.

The very name, Internet, denotes that it is designed to network networks. You can use Internet Protocol on an Ethernet to communicate with an X.25 network, an FDDI network, or a modem. Lower layer protocols are submerged, made irrelevant. So if you are on an (e.g., 10Mbit/s) Ethernet, and your endpoint application wants to send better quality 256 kbit/s voice, no problem.

You can't do that with the telephone network.

Or, with a different application (on the same endpoint and network) you can send six different interwoven 10 kbit/s voice streams to six different destinations at the same time. And you don't have to tell your Stupid Network provider anything about it, or pay a premium to install anything special. The network provider becomes virtually irrelevant - the user controls the relevant capabilities.

TRUE VOICE, FALSE START

I contrast the flexibility of a Stupid Network with my experience as a member of AT&T's True Voice technical team. AT&T True Voice was a valiant attempt to improve circuit switched voice quality as much as possible in the context of current network architecture. If we had not been constrained by network architecture, the easiest way would have been to increase the sampling rate or change the coding algorithm. But to actually do this, we would have had to change every piece of the telephone network except the wires. So we had to work within the designed 64 kbit/s data rate.

An astute AT&T perceptual psychophysicist (and a friend of mine) determined that voice quality could be substantially improved by boosting the bass part of the signal, that part of the audio spectrum between 100 and 300 cycles per second.

But as we set out to implement this conceptually simple improvement, we kept running into the problem that there were too many places in the network that had built in "intelligent" assumptions about the voice signal - echo cancellers, conference bridges, voice messaging systems, etc. - and too many devices that depended on these acoustic assumptions for their correct operation - modems, fax machines, and a surprising number of strange devices with proprietary analog protocols.

After about two years of intense effort, we made a noticeable difference, one that most listeners preferred (if asked explicitly), but it was not as large as it could have been. There was too much "intelligence" intertwined with the basic transport.

The True Voice experience led me to see the advantages of a network - a Stupid Network - that would let you stuff bits in one end and get them out the other without getting tangled up in cobwebs of legacy assumptions. Want a different voice quality? With a Stupid Network, you'd get a different program, install it in your intelligent end user device and run it.

A NETWORK ENGINEERED FOR USE

There is no longer first-order economic justification for a telephone company to engineer and control scarce, expensive, network resources. The basic conditions no longer obtain. The age of plentiful computing is here. I have a multi-color, three dimensional screen saver that uses the entire capacity of my 200 MHz Pentium.

The designers of the Intelligent Network never imagined such "wasteful" use of processing "intelligence." The age of plentiful bandwidth is just around the corner, as several families of technologies (fiber, satellite, cable modems, xDSL, LMDS, and low power TV, to name just six) line up to break

the local bandwidth bottleneck, and as the capacity of backbone fiber has risen from 2 to 6 to 10, 20 and 40 Gbit/s over just the last few years.

The age of centralized control is ending too, with the rise of the next generation of Internet - and especially the appearance of circuit-like Internet mechanisms, such as those in the latest version of Internet Protocol (IPv6), designed to tame delay and improve real-time two-way Internet voice.

JUST DELIVER THE BITS, STUPID

A new network "philosophy and architecture," is replacing the vision of an Intelligent Network. The vision is one in which the public communications network would be engineered for "always-on" use, not intermittence and scarcity. It would be engineered for intelligence at the end-user's device, not in the network. And the network would be engineered simply to "Deliver the Bits, Stupid," not for fancy network routing or "smart" number translation.

Fundamentally, it would be a Stupid Network.

In the Stupid Network, the data would tell the network where it needs to go. (In contrast, in a circuit network, the network tells the data where to go.) In a Stupid Network, the data on it would be the boss.

Instead of fancy "intelligent" network routing translation, in a Stupid Network end-user devices would be connected to one or more high speed access networks - always listening for relevant information, for data addressed to their owner.

Sometimes a "communication" might be a few bits, perhaps a short, pager-type message. Other times, it might be longer, like email. In the event of the need for two-way voice communication, an initial message might state the identity of the "caller," and/or inquire of the whereabouts of the owner.

The intelligent end-user device could apply its knowledge of where its "owner" was, and who the caller was. Then, if it were programmed to do so, it could launch a message to its owner, telling of the call, the caller's identity, location, and any other information. It could also forward as much information as practical.

End user devices would be free to behave flexibly because, in the Stupid Network the data is boss, bits are essentially free, and there is no assumption that the data is of a single data rate or data type.

IDIOT SAVANT BEHAVIORS FOR DIFFERENT DATA TYPES

In the current telephone network, voice is the assumed data type, unless specially ordered, high cost services are ordered. But in the Stupid Network, because the data is the boss, it can tell the network, in real time, what kind of service it needs. And the Stupid Network would have a small repertoire of idiot-savant behaviors to treat different data types appropriately.

If the data identified itself as financial data, the Stupid Network would deliver it accurately, no matter how many milliseconds of delay the error checking would take. If the data were two-way voice or video, the Stupid Network would provide low delay, even at the price of an occasional flipped bit.

If the data were entertainment audio or video, the Stupid Network would provide wider bandwidth, but would not necessarily give low delay or absolute accuracy. And if there were a need for unique transmission

characteristics, the data would tell the Stupid Network in more detail how to treat it, and the Stupid Network would do what it was told.

The Stupid Network would let you send mixed data types at will - limited only by the knowledge and imagination of the application programmer community. One way voice messages, multi-way voice conferences, two-way video, email, documents, audio and/or video entertainment, whatever, could be mixed and interspersed at will, within and between sessions. You would not have to ask your Stupid Network provider for any special network modifications - its only function would be to, "Deliver the Bits, Stupid."

One thing about the Stupid Network is clear - the physical elements that comprise the network would be neither expensive nor scarce. There would be little profit margin in shipping dumb bits. There would be lots of high value Business Ideas supported by the Stupid Network, above and beyond transport.

LEADING INDICATORS

A rudimentary form of the Stupid Network - the Internet - is here today. The telephone companies are beginning to realize this. Fearing erosion of their control and, more importantly, their revenue stream, they have been quick to call for the banning of Internet Telephony, quick to call for the federal imposition of charges on Internet access, and slow to implement widely available, reasonably priced broadband services. This creates a chicken and egg problem - while the hungry wait for dinner and breakfast.

A powerful leading indicator of the Stupid Network will arrive when entrepreneurs who have no vested interest in maintaining telephone company assumptions begin to offer profitable, affordable, widely available data services. Watch Metricom's Ricochet modem service, an early entry in this market. Will entrepreneurial broadband service follow?

There are several early efforts, for example, Sky Station International, which plans to launch self-propelled balloon-based transceivers over major cities to deliver personal 1.5 Mbit/s service. Meanwhile, we will see how advances in Internet Technology (such as IPv6 and the Internet II initiative of leading universities) evolve - here the ability of the Internet to offer low delay services, such as two-way voice, is the key indicator.

To counter these threats, the telephone companies are now speeding deployment of Intelligent Network services, much like sailing merchants responded to the threat of steam by inventing faster sailing ships in the mid 1800s.

The beneficiaries of this accelerated Intelligent Network deployment are big businesses - who can offer cheaper help-desk type services with lower human labor costs. Nevertheless, despite this current Intelligent Network buy-in, if big business finds that it is better served by the Stupid Network and premises based intelligence, it will not hesitate to switch.

The Telecom Act of 1996 and the World Trade Organization telecom agreement of 1997 can be seen as attempts to preserve oligopolistic hegemony of the telephone companies. The thrust of both is to allow big companies to band together to create a marketplace dominated by a few large players in place of government control. Will there be unintended consequences of these agreements? Count on it! Will they hasten or impede the advent of the Stupid Network? Hmmm.

THE STUPID NETWORK'S NEW VALUE PROPOSITION

The shift from scarcity to plenty is often the harbinger of new value propositions. For example, as computer power got cheaper and cheaper in

the 1980s, there was much talk of a shift in value from hardware to software, but it was not easy to see how the shift would unfold. In fact, it appears that only one person (Bill Gates) understood it fully. The changes that now portend the Stupid Network are likely to shift the telecommunications value proposition from "network services" to something else. If I knew what it was, I would not be wasting my time writing these words. Given that disclaimer, I have three brief observations:

1. It is rare that a market is completely killed by the next generation of technology. Neither TV nor the VCR killed the movies. Neither the minicomputer (alas, remember them?) nor the PC killed the Mainframe. We still have ships and railroads, though their markets are both diminished and changed by the car and airplane.

The "paperless office" exists - but mine is cluttered with books, memos and magazines that are printed on paper. So it is likely that the Stupid Network and the Intelligent Network will exist side by side for some time, or even share merged definitions, functions, and value. It is also likely that "deliver the bits" companies will exist in a Stupid Network world, but given much lower profit margins, they will not look much like telephone companies.

2. Telephone companies themselves could cannibalize their own product. Smarter companies often field new products that replaces current profitable product.

Sony does this several times a year - it tries to learn from its own mistakes faster than its competition, fielding new products that improve on its old before such improvements become obvious to their foe.

Boeing does it - the 757 and 767 cut into the top of its 727 market and the bottom of its 747 market with fuel efficient, and crew efficient new designs - we can only hope that Boeing does not become complacent now that it is has beat out its strongest competitors.

Intel does it - having been the first to articulate Moore's Law, it now drives it with a new, more powerful chip every 18 months or so, long before the old chip is obsolete - it realizes that if it stops, there are other chip makers that would be glad to take leadership of that market.

Telephone companies could do it too, but it is unlikely as long as their senior managers prefer to talk with lawyers, regulators, consultants and financiers more than with experts in their own employ.

3. Telephone companies could reinvent a place for themselves as purveyors of new values propositions brought by the Stupid Network. They will have to, because their old value proposition will erode as the Stupid Network grows. In a "deliver the bits" world, so much information, and so many courses of action, will be available, that there will be a great need for known, trusted authorities.

Businesses with brand reputation and staying power will be guarantors of transactions, holders of critical information, organizers and filters of information, and even voices of reason, leadership, and "objectivity." (Of course, they will need to HAVE reason, leadership, and objectivity to do this.)

There will be other roles for big companies in the world of the Stupid Network, and "forgetting organizations," who are able to abandon old models when new ways no longer support old assumptions, will find them.

THE CHOICE BETWEEN LIVING AND DYING

Former Shell Group Planning Head, Arie deGeus, in his master work, "The Living Company" (Harvard, Boston, 1997), examined thousands of companies to try to discover what it takes to adapt to changing conditions.

He found that the life expectancy of the average company was only 40 years - this means that telephone company culture is in advanced old age.

De Geus also studied 27 companies that had been able to survive over 100 years. He concluded that managing for longevity - to maximize the chances that a company will adapt to changes in the business climate - is very different than managing for profit.

For example, in the former, employees are part of a larger, cohesive whole, a work community. In the latter, employees are "resources" to be deployed or downsized as business dictates. As the Stupid Network arrives, as the business idea shifts from scarce physical infrastructure to something more knowledge based, company culture will need to adapt to the truth that, "Nobody knows as much as all of us." Whatever we discover to be the new Stupid Network value proposition, my working hypothesis is that it will be based on intelligent end user devices, intelligent customers, employees whose intelligence is valued as a corporate asset, and companies that can learn.

Bill's Passage Represents Will Of Both Parties

THE WALL STREET JOURNAL FRIDAY, FEBRUARY 2, 1996

By Bryan Gruley
And Albert R. Karr
Staff Reporters of The Wall Street Journal

Congress overwhelmingly passed a sweeping overhaul of communications law that will touch every telephone customer and television viewer by letting phone, cable and TV businesses compete and combine more freely.

The bill passed on back-to-back votes, with the House clearing the measure 414-16 and the Senate, 91-5. It now goes to President Clinton, who has said he will sign it.

The legislation is expected to bring lower rates for long-distance calls, possibly higher prices for local phone and cable TV service, and a profusion of new TV programs. It razes regulatory barriers and is certain to accelerate the convergence of local and long-distance phone businesses with cable operators, cellular companies, broadcast concerns, computer makers and others.

The bill lets long-distance carriers, local phone companies and cable concerns into each other's markets. It eliminates within three years most regulation of cable rates, lifts the ban on cross-ownership between cable and phone companies in small communities and frees media companies to buy more TV and radio stations.

"We've been moving toward the sunny seas of competition for some time," said Reed Hundt, chairman of the Federal Communications Commission. "This bill puts an engine on the boat."

The impact, however, isn't likely to be felt immediately. The FCC and state regulators must decide precisely how Congress's instructions will be carried out. But after a year or so, "It's going to be great for consumers because they're going to get more competition, lower prices, more choice and better technology," said Scott Cleland, a Washington telecommunications-industry analyst with the brokerage firm Lynch, Jones & Ryan.

Others are less enthusiastic. Gene Kimmelman, co-director of Consumers Union's Washington office, said the legislation "allows mergers and corporate combinations that will drive up cable rates and undercut competition." Such alliances "may slam the door shut long before competition has a chance to develop," he said.

Democratic Rep. John Conyers of Michigan, who voted against the bill, agreed. He accused lawmakers of deciding that "consumer protection must take a back seat to industry demand."

The bill stretches beyond the federal government, pre-empting scores of state and local communications rules, "so we don't have to fight a crazy patchwork quilt of rules all over the country," said Gerald Taylor, president of MCI Communications Corp., the nation's second-largest long-distance phone company.

Although the bill is largely deregulatory, it does contain some new regulation. For example, it prohibits Internet service providers and users from sending indecent material to minors and requires that new television sets be built with devices to block violent and sexual programs.

The bill represents a significant bipartisan effort by a Congress that is locked in a bitter stalemate over the federal budget. Republican efforts to write an even more deregulatory bill were tempered by Democrats, such as South Carolina Sen. Ernest F. Hollings, who argued against moving too fast. Ultimately both parties decided that updating a Depression-era law woefully out of touch with today's high-tech communications industries merited a compromise.

The final bill was agreed to by House and Senate conferees in December. But lawmakers earlier this week said they would revisit a contentious provision that gives TV-station owners a lucrative chunk of the airwaves for free. Republican Senate Majority Leader Robert Dole of Kansas had held up the bill while arguing that the spectrum – earmarked for advanced, digital TV – should be auctioned and that broadcasters were getting a multibillion-dollar "giveaway." The bill says TV stations should get the spectrum, but the FCC, at the request of congressional leaders, has agreed not to distribute licenses until Congress decides whether to auction them.

The legislation leaves it up to the FCC to write more than 80 rules—many within six months. The agency will decide issues as vital as how new rivals for local phone service will pay local phone companies to use their networks, and as mundane as how much the rivals will pay to use telephone poles.

With the help of the Justice Department, the FCC will decide when the seven regional Bell giants can enter the long-distance business, based on whether they have opened their local markets to competition. The bill also guarantees phone service to anyone who wants it, but lets the FCC and state regulators decide which industries would absorb the multibillion-dollar cost of ensuring "universal service."

Businesses already are gearing up to deluge the agency with lawyers and lobbyists. Many of the FCC's decisions are certain to be challenged in court. "Everything is in the FCC's hands now," Mr. Cleland, the Lynch Jones analyst, said. "They're the ones who will determine winners and losers."

Passage of the telecommunications bill caps a decade-long effort that became earnest a few years ago. Despite strong bipartisan support for overhauling the 1934 Communications Act, past attempts failed mainly because of disputes over how much to deregulate local phone and cable monopolies.

The agreement was nearly upended five days before Christmas – just after top Senate-House conferees reached a compromise on the last remaining major issues. Vice President Al Gore picked up the phone and gleefully called newspapers and TV networks to boast that the Clinton administration had gotten all it wanted.

As Republican House Commerce Committee Chairman Thomas Bliley of Virginia was briefing other conferees on the compromise, an aide interrupted with an urgent note saying Mr. Gore was, at that moment, on NBC-TV's evening news, having called anchorman Tom Brokaw to proclaim the good news.

Republican conferees, already piqued that Mr. Bliley had allowed Democrats to roll back too much of the GOP's deregulatory thrust, were angry. If Mr. Gore loved it, they figured, the deal was even worse than they understood it to be.

Showing more restraint, congressional Democrats decided they would stay in the race when the new Republican Congress picked up the telecom bill last year. Their efforts to help the bill were crucial to its success. For his part, Vice President Gore called the bill a "great bipartisan effort," noting wryly that, "I predicted in December it would pass without any changes and it has."

Republicans and Democrats alike still regard the bill's deregulatory thrust as considerable, and don't rule out further legislation to deregulate the communications sector. "We pushed Democrats far beyond what they thought they would ever agree to," said Republican Rep. Jack Fields of Texas, the House telecommunications subcommittee chairman.

Topping Rep. Field's list: shrinking the FCC. "As a Republican majority, we do not want bureaucrats making marketplace decisions," he said.

FCC Chairman Hundt countered: "I've been reforming the FCC for two years and I'm happy to keep doing it, but we need the tools, we need money and we need CEO-type flexibility."

CONGRESS VOTES TO RESHAPE COMMUNICATIONS INDUSTRY, ENDING A 4-YEAR STRUGGLE

Gauging the Effect on Consumers

Here are some of the ways the public will be most directly affected by the communications bill passed yesterday by the House and Senate.

CABLE TV Most limits on cable rates will end after three years, but for small systems the bulk of rate regulation will end immediately. Prices are likely to rise in markets that would-be competitors consider too small to enter.

PHONE SERVICE Long-distance rates are likely to continue falling, and local rates might also fall where competitors decide to take on the Bell companies. In less competitive local markets, rates may actually rise.

TV VIOLENCE Makers of television sets will be required to include a feature to block out material rated as offensively violent or sexual.

NEW TV SERVICES A portion of the airwaves will be earmarked for digital television services.

INTERNET The bill bans pornography over computer networks, and sets penalties for those convicted of distributing "indecent" sexual material to minors.

SWEEPING IMPACT

Clinton Set to Sign Bill That Is Expected to Spur Competition

By EDMUND L. ANDREWS

WASHINGTON, Feb. 1 — After four years of struggle and gridlock, Congress rewrote the nation's communications laws today, passing a bill that would transform television, telephones and the emerging frontiers of computer networks.

Voting within two hours of each other, both the House and Senate approved a final version of a bill that is broadly intended to promote a free-for-all rivalry between local telephone companies, long-distance carriers, cable television operators and even electric utilities.

The House approved the bill first, by a vote of 414 to 16; the Senate's vote was 91 to 5. The bill now moves directly to President Clinton, who strongly supports it and has said he will sign it.

"Today, we have broken up two of the biggest government monopolies left: the monopolies in local telephone service and in cable television," said the bill's primary author in the House, Representative Thomas J. Bliley Jr., Republican of Virginia, the chairman of the Commerce Committee. "For the first time ever, Americans will be given choices. Besides lower rates and better service, the result will be innovative new products and services that will create thousands of new American jobs."

Whether or not the bill lives up to the superlatives heaped on it today by its supporters, few dispute the sweeping impact of the new legislation, which leaves no corner of the industry unchanged.

It would replace the historic antitrust consent decree that broke up the Bell telephone system in 1984, freeing the seven regional Baby Bell companies to offer long-distance services while forcing them to open the local telephone business to new rivals.

The bill lets cable television and telephone companies attack each other's markets, as each industry races to offer a full menu of telephone, video and high-speed data communications. The bill also relaxes ownership restrictions in broadcasting, allowing companies to greatly increase the number of radio and television stations a single company can own.

And it contains provisions that make it a crime to transmit indecent sexual material over computer networks, and require television manufacturers to begin including the so-called V-chip to allow parents to block undesirable programming.

Today's vote came after Senator Bob Dole of Kansas, the majority leader, dropped his objections to a provision that he attacked as a multibillion-dollar giveaway for television broadcasters. That provision essentially reserves a segment of the nation's airwaves, estimated to be worth as much as $70 billion, for television broadcasters to start new digital television services.

Mr. Dole effectively blocked the bill several weeks ago, arguing that the provision amounted to corporate welfare for media companies at a time when Congress was cutting funds for social welfare programs.

But today he let the bill proceed unchanged — though not without being blasted by numerous Democrats for capitulating — after he obtained assurances from Republicans and from the Federal Communications Commission that no licenses would be given until after Congress revisits the issue in a separate bill.

Over all, however, today's votes drew a chorus of praise from almost every segment of the communications industry. But consumer groups complained that the measure would lead to higher prices for telephone and cable customers, and civil liberties groups were furious about provisions aimed at blocking sexual material on computer networks.

In industry, the biggest winners today were the seven regional Bell companies that have been prohibited from entering the $70 billion long-distance market since they were created 12 years ago.

It remains unclear how quickly this will take place, but executives at AT&T predicted today that head-to-head rivalry from the Bells could arrive within two years. Under the new law, the Bell companies must open their local networks to competition by satisfying a detailed checklist of requirements that aspiring rivals have said are essential for entering the local phone business.

"This bill is a blueprint for the 21st century," said Representative Edward J. Markey, Democrat of Massachusetts. "It breaks down all the old models of one cable company and one telephone company. It is not perfect, but it is the best overall blueprint that any country in the world has ever come up with."

A chorus of praise, but also boos from consumer groups.

Vice President Al Gore, who has spearheaded the Clinton Administration's efforts on communication issues, effusively praised today's votes.

"It's a bipartisan victory, a textbook example of how the White House and Congress can work together," he said tonight. "Creativity that has been bottled up for decades will be let out in a very constructive way."

Despite the turmoil, virtually every segment of the communications industry has been pleading with Congressional leaders for weeks to simply pass the bill and be done with it.

Gerald M. Levin, chairman and chief executive of Time Warner Inc., phoned Republican lawmakers to beg for an end to the bickering. Time Warner, the nation's second-largest cable television operator, will benefit from both cable price deregulation and from rules to ease its entry into the telephone business. Cable companies were so eager for the bill, in fact, that they agreed to delay full price deregulation for three more years — a retreat from the bills passed last summer.

Consumer advocates continued to criticize the bill, particularly provisions that would immediately end most cable television price regulations in small markets and permit cable television and telephone companies to merge in markets with fewer than 50,000 people.

"Cable rates are going to go up in small towns immediately and could rise significantly in three years across the country," said Gene Kimmelman, co-director of the Consumers Union's Washington office.

Civil liberties groups quickly vowed a court battle over provisions that would block the transmission of smut over computer networks. "The Internet has been give second-class speech rights, and we are going to take them to court over it," said Jerry Berman, director of the Center for Democracy and Technology, a nonprofit group in Washington focused on Internet issues.

Numerous Democratic lawmakers took potshots over the provision that would reserve part of the airwaves for digital television. "It is a huge charitable corporate gift," thundered Representative John Conyers Jr., Democrat of Michigan.

But Mr. Dole, citing assurances from the F.C.C. that it would take no action until Congress revisits the issue in a separate bill, said broadcasters would not get the valuable television frequencies without a fight in the months ahead.

"I am determined to turn the F.C.C.'s commitment to us into a victory for the American taxpayer," he said in a written statement today. "For those who think this is an idle threat, guess again."

Competition – With a Few Caveats

The communications bill gives new competitive freedoms to telecommunications and media companies, but in some cases also imposes significant new regulations

◀ **TELEVISION** Cable operators will see an end to most forms of rate regulation after three years. Broadcasters, meanwhile, will have an opportunity to use a portion of the airwaves being set aside for new digital services — although Congressional leaders have pledged to consider whether licenses for these services should be auctioned to the highest bidders. Makers of television sets will be required to include a feature that would let viewers block access to material rated as offensively violent or sexual; it would be up to television programmers to devise a rating system.

▲ **TELEPHONES** The bill would allow long-distance carriers, cable companies and others to compete with local phone companies and allow Bell companies to offer long-distance service if they meet certain criteria.

▲ **MEDIA OWNERSHIP** The bill allows companies to own television stations covering 35 percent of the national population, up from the current 25 percent limit. It also raises the limits on the number of local radio stations a single owner may operate, while removing all limits on the number of radio stations that can be owned nationwide.

▲ **COMPUTING** The bill outlaws pornography over computer networks and sets fines and prison terms for people convicted of distributing "indecent" sexual material to minors. Network access providers have warned that the Internet's free-flow design could make this part of the law difficult to enforce, while civil-liberties groups predict that the measure will be challenged as unconstitutional.

What the Bill Already Did

By EDMUND L. ANDREWS

WASHINGTON, Feb. 1 — Even the politicians who wrote the communications law stumble as they try to explain just what it will actually do, reverting to clichés about the "information superhighway" and the 21st century.

News Analysis

But the most concrete measure of its impact is to look at what the bill has already done, long before it was passed by Congress:

¶It has prompted the AT&T Corporation to voluntarily split into three separate companies, plan to cut 40,000 jobs and write off billions of dollars in failed business — all in anticipation of competing against the regional Bell companies in both local and long-distance telephone service.

¶Persuaded two of the nation's four commercial television networks to merge with other media companies, with CBS being acquired by the Westinghouse Corporation, and Capital Cities/ABC about to complete its sale to the Walt Disney Company.

¶Incited anxious merger talks between two of the seven giant Bell companies — Nynex and Bell Atlantic — to create a single company that would control local telephone and cellular systems from Virginia to Maine.

¶Fostered a bewildering range of new media alliances and joint ventures — among long-distance carriers, cable television companies, software companies like Microsoft and satellite television operators.

In theory, at least, consumers will benefit from the variety of new choices that communications competition is supposed to bring. In reality, no one, not even the shrewdest and most powerful media moguls, knows exactly what to expect next. But all of these moves were, in large part, pre-emptive strikes in anticipation of free-market warfare that will result from the communications bill.

At its simplest, the bill's core purpose is to unleash a "digital free-for-all," in the words of Representative Edward J. Markey, the Massachusetts Democrat who has been one of the lawmakers pushing for a communications overhaul since the late 1980's. It would knock down decades of regulatory barriers that have prevented local telephone companies, long-distance carriers and cable television companies from attacking each other's markets — and even allow electric utilities to seek ways to use their networks of wires and right-of-ways to carry communications traffic.

The bill will not, as many Republicans have maintained, simply "deregulate" the communications industry. So complex is this legislation that it will actually spawn a mountain of new regulations and lucrative fees for lawyers.

Nor is it clear, despite the repeated promises of lawmakers today, that the bill will generate tens of thousands of new jobs. It may well have that effect eventually, but its most immediate impact has been to prompt telephone companies — both the Bells and AT&T — to slash their well-paid work forces.

And for all the forecasts of bare-knuckles competition, it also seems clear that the bill has ushered in a new era of industry consolidation, with huge media mergers and "full-service" conglomerates unlike any that have come before.

Will ordinary people be the only ones not to benefit?

Not necessarily. Recent history has shown that most predictions about the course of communications and media turn out to be wrong. The giant Bell companies have stumbled repeatedly in attempts to offer interactive video services over telephone networks, and have now retreated to cautious attempts at mimicking plain-vanilla cable television programming, transmitted over wireless networks.

Similarly, conventional wisdom on Wall Street is that the Bells will now snatch billions of dollars in business away from long-distance carriers. But some analysts argue that any revenue gains the Bells find in long distance may be more than offset by the money that their new rivals will siphon off in the local market.

"The Bells will be facing competition from all sides, and I'm just not convinced they are up to it," said Michael J. Mahoney, portfolio manager for the GT Global Telecommunications Fund, a mutual fund in San Francisco. "I wouldn't buy stock in those companies."

One who takes the long-term view is Vice President Al Gore, who when he was a Senate Democrat from Tennessee was one of the leading Congressional champions of tough cable television price regulations. He now argues that the long-term public benefits of untangling the regulatory thicket will vastly outweigh the disruption caused by new competition.

"If you look at new jobs, in the industries that make up this sector of the economy, the cumulative additions far outnumber the layoffs," he said tonight. "The large layoffs represent a tragedy for those involved, but there is no question that in this sector as a whole many more new jobs are being added than lost."

Although the bill has been a favorite item of business's agenda, it has drawn the support of many liberals as well, including Representative Markey, who said the coming turbulence is worth the price.

"Some companies will be winners and some companies will be losers, but there will be many more winners than losers," he said on the House floor today. "The country will be the big winner."

Telecom Vote Signals Competitive Free-for-All

Likely Mergers Herald an Era Of Megacarriers

THE WALL STREET JOURNAL FRIDAY, FEBRUARY 2, 1996

A WALL STREET JOURNAL *News Roundup*

Let the telecom wars begin.

Broad changes in telecommunications law approved by Congress yesterday could eradicate 60 years of sclerotic federal and state regulation. They may also set the stage for a tumultuous new era of competition, mergers and other deal-making that could fundamentally change the way consumers and businesses get communication services.

By the dawn of the 21st century, some experts expect fewer than a dozen megacarriers will be providing everything from local phone to entertainment and information services via one line or satellite link. "It'll be sort of like several Bell systems competing, each with huge service portfolios," says Brian Adamik, an analyst at Boston research firm Yankee Group.

Here is a look at the industries affected:

LONG-DISTANCE PHONE SERVICE

Welcome to the past. Before the breakup of AT&T in 1984, consumers got phone service from a single provider. Now a variety of companies will try to be your sole provider once again.

If you're tired of dinnertime sales calls from **AT&T Corp.**, **MCI Communications** Corp. and other long-distance carriers, you'd better brace yourself for even more. Seven new giants—the Baby Bells—plan to jump into the long-distance marketing war over the next few years, roughing up an industry dominated by just three big rivals and hundreds of far-smaller players.

The Bells will offer "bundled" services—local, long-distance and wireless—with the possibility of an Internet connection or entertainment service thrown in. Not to be outdone, AT&T and others will try to do the same. AT&T already has the nation's biggest cellular business. It has also begun combining wireless service with long-distance and is looking to get into local. **Sprint** Corp. has teamed up with three big cable companies to do much the same.

Pricing schemes may change drastically. It will be easier for a caller to figure out how much each call costs once arcane rules and government-mandated calling boundaries expire. Sprint and **LCI International** are already offering flat-rate plans, and the trend is bound to grow.

The telecommunications bill "tears down the 10-foot-high walls that have separated the industry," says James G. Cullen, vice chairman of **Bell Atlantic Corp.** The bill initially lets a Baby Bell offer long-distance only outside its own service region, and Bell Atlantic vows to do that in at least five states "within a week of the president's signing the bill." Mr. Cullen says it targets 15 more states six months later.

A year from now, Bell Atlantic hopes to be offering long-distance service in at least one of the seven states it covers, but it must wait for the Federal Communications Commission to write enforcement rules and decide that it has adequately opened its local market.

LOCAL PHONE SERVICE

In exchange for new freedoms, the Baby Bells would pay a hefty price: They would lose control of their monopoly over local phone customers, and AT&T and others are likely to try to move in. "I'm looking at a $90 billion market that's been barred to us and is now being opened up," says Joseph Nacchio, an AT&T executive vice president.

The local companies have warned that their residential phone rates, held down artificially for years and subsidized by "access fees" they've collected from long-distance services, may have to rise.

Why would local rates rise if monopolies crumble and new rivals come in? For one thing, newcomers probably won't be able to challenge the Bells immediately. They won't want to spend billions to build networks from scratch, so they'll lease Bell lines and resell service instead.

But state regulatory bodies will govern how new competition takes shape, and the Bells are especially effective at local lobbying. While most states have called for competition in local phone services, it could be a couple of years before AT&T, MCI and others get favorable terms for reselling Bell connections as their own services.

Still, by wiping out the old consent decree, the bill would free the Bells to merge with one another or with long-distance rivals. **Bell Atlantic Corp.** and **Nynex Corp.** have broached the idea of combining and now could move ahead quickly. **Pacific Telesis Group**, weakened after selling off its cellular arm last year, has been talking to several companies about a possible merger. **GTE Corp.** could also become an attractive partner.

Despite the threat to their local monopolies, don't be surprised to hear some Bell executives chant "Free at last!" Since their birth, the Baby Bells have been governed by U.S. District Judge Harold H. Greene, the principal watchdog of the 1984 breakup. No more. If the bill is signed, as expected, a federal law, not a federal judge, will hold sway.

BROADCAST

Broadcasters have been constrained for decades, limited most recently to owning just 12 TV stations reaching 25% of the country or, in radio, 20 AM and 20 FM stations with no more than two of each in the largest markets. Now there will be no limits on how many television stations companies can own, as long as the stations don't reach more than 35% of the U.S.

Some big deals have already gone ahead in a gamble that the bill would pass, including **Westinghouse Electric** Corp.'s $5.4 billion acquisition of CBS Inc., which created a group of 15 TV stations reaching 33% of the U.S. Companies such as **Capital Cities/ABC** Inc., which are already approaching current limits, are likely candidates for expansion. But with station prices already soaring in the last year, buyers will be paying dearly, analysts caution.

Also, look for a flurry of activity among small-market broadcasters, which will be able to assemble vast station groups without nearing the new 35% mark. Late last year, Rockford, Ill.-based **Benedek Broadcasting** Corp. struck two deals to buy a total of 13 stations for a combined $330 million. That will bring its holdings to 22 stations, reaching just 2.7% of the country.

Radio owners also won't have national limits any more, and the ownership restrictions in individual markets will be greatly relaxed. Analysts expect a wave of mergers and acquisitions involving the nation's key radio groups.

Unless an expected court fight is successful, viewers will eventually be able to block violent fare from their TV sets using a so-called V-chip. The bill mandates that the computer chip be included in all new TV sets: It will screen out material based on ratings provided by the TV industry.

TV and radio station owners will no longer have to face the prospect of lengthy and costly challenges to their licenses from outsiders, unless they are first found unfit by the FCC. And the length of licenses will be extended to eight years from the current five for TV stations and to seven for radio owners.

CABLE

Cable-TV rates may rise, even as cable operators try to sell you new phone service.

Four years ago the FCC ordered cable rate cuts of up to 17%, and the industry howled. Under the new bill, cable rate regulation for service beyond a basic "broadcast tier" would phase out entirely after 1999. With their fatter cash flow, cable companies may be able to fund new forays into phone service. **Time Warner** Inc. and others have begun trials around the country.

Even as they look to challenge the Bells, some cable companies may align with them. Consumer advocates fear the bill's provisions allowing cable and phone companies to own up to 10% of each other. And in smaller towns, the bill allows outright mergers.

The cable industry is pouring billions of dollars into upgrading cable systems, and it continues to consolidate into a handful of giants whose geographical footprints more closely resemble those of telephone companies. "We need the ability to compete across the full spectrum of services—cable TV, high-speed data services, local and wireless telephone, and interactive TV," says Mike Luftman a spokesman for Time Warner Cable. "This bill gives that to us."

INTERNET

Deregulating phone companies could spur competition and thus lower on-line prices. But some civil-liberties groups are alarmed at provisions that would make a person who provides "indecent" material to minors over on-line networks subject to up to two years in prison and a $100,000 fine.

Already, the American Civil Liberties Union and others are preparing lawsuits to challenge the bill. "It's a significant blow to free speech and the free flow of information in cyberspace," says Jerry Berman, executive director of the Center for Democracy and Technology, one of the groups planning to file suit.

But the bill protects on-line providers such as **America Online** Inc., which would be required only to make a "good-faith effort" to provide users with controls to screen out adult-oriented fare.

TELECOMMUNICATIONS

What the Telecommunications Bill Will Do

Long-Distance Phone Service	Allows the seven regional Bell phone companies into the long-distance phone business after proving they've opened their local phone networks to new rivals. This could lead to lower long-distance rates.
Local Phone Service	Opens local phone markets to new competitors such as AT&T, MCI and cable TV companies without specifying how much they'll have to pay local phone companies to connect into existing networks. Local rates could rise.
Broadcast	Raises the national TV-station ownership cap to stations covering 35% of the population from 25%. Requires TV sets to be equipped with a device to block violent or sexual programs.
Cable	Lifts all rate regulations in three years for big cable systems. Rate regulations eliminated immediately on systems with less than 1% of the nation's subscribers. Rates likely to rise.
Video by Phone	Lets phone companies sell television service via phone lines or other means, such as satellite. Could put downward pressure on cable rates, if true competition develops.
Cross-Ownership	Lifts ban on cross-ownership between cable and telephone companies in small communities. Likely to spur new alliances.
Internet	Makes it a crime for on-line computer services or users to transmit indecent material without restricting minors' access.
Universal Service	Guarantees phone service everywhere, including remote rural areas, but lets states and the Federal Communications Commission decide how to pay for it.
Spectrum	Says TV stations should get valuable new broadcast spectrum for advanced TV free of charge. But lawmakers have agreed to revisit this controversial provision later.

TELECOSM

ANGST AND AWE ON THE INTERNET

BY GEORGE GILDER

IN 1995, INTERNET STORIES TRUMPED EVEN O.J. THE NET WILL HAVE A FAR HAPPIER ENDING.

Well, it had to happen. As the Internet emerges as the central nervous system of global capitalism, the Luddite left is bursting into "flames" against the microcosm and telecosm, against interlinked computers and the global radiance of electromagnetic communications.

This rising resistance resonates with the press coverage that has long lavished attention on the excesses of the Net. Richard Shaffer of the *Computer Letter* counts 39,158 Internet stories during the first three quarters of 1995, beating O.J. by some 15,000 citations. Much of the coverage has been lurid. For psychedelic visions of virtual reality, the media have exalted Jaron Lanier in dreadlocks and bankruptcy above Bob Metcalfe, creator of Ethernet, or Gordon Moore, inventor of IC processing, or Charles Kao, father of fiber optics, all of whom reshaped the boundaries of human possibility. Computer viruses and Net porn win headlines and magazine covers that elude the creators of vast new computer powers, such as RSA encryption or the World Wide Web or new tools of chip fabrication at the quarter-micron level. Last August, Windows 95, a modest advance in operating systems, exploded across the press and the airwaves as if the entire media had been preempted for a Microsoft infomercial. No wonder befuddled academics, politicians and book publishers gain a grotesquely distorted view of the industry.

In Tom Peters's first *Forbes ASAP* interview (March 29, 1993), he predicted that the '90s would see a fabulous unfolding of new technology, accompanied with increasing outbreaks of technophobia, Luddism and Marxism. Alvin Toffler greeted the initial readers of *Wired* with a similar dual prophecy of networked marvels, foiled by a multifront war against the Third Wave. Once again, Peters and Toffler may well be right, as from Hollywood to Harvard, America's brainlords rebel against computer technology.

In his pungent new book *War of the Worlds*, Mark Slouka joins the rising chorus of resistance. Slouka finds it all a "kind of lie." Like a "speech of Ronald Reagan" or a spiritual vision from the "religious right," the virtual world is increasingly usurping reality and identity itself. "Rather than doing away with the couch potato, the telecomputer has actually created a new, more tenacious variety of tuber: the individual who swivels from the television screen to computer monitor without missing a beat...."

Today, Sandra Bullock writhes in anguish in the sinister clutches of *The Net*, with a blond, predatory, arachnoid Bill Gates (using "Gateway" software) masterminding the Web. Similar chimeras recur in antitech crusades. Bathed in the ultraviolet frequencies of sunlight, humans throughout the history of the species have raced through a planetary magnetic field of half a gauss in power on a terrestrial sphere charged by worldwide lightning strikes a hundred times a second to a capacitive level of 100 volts per meter of height. Yet Paul Brodeur and other electrophobes panic at power lines, power plants, cathode-ray tubes, microprocessors, cellular antennas and other high-tech oscillators with an impact on humans measurable only in millionths of a gauss. They defy the fact that around the world use of electricity correlates almost perfectly with greater longevity.

Meanwhile, despite the higher longevity and the globally spreading jobs and riches springing from high technology, pseudoeconomists prattle endlessly about the growing gap between the "information rich" and the "information poor." Publishers sign up other disgruntled

D.W. Mellor

nerds to write hymns to noble savagery and gardening. And from the fever swamps, a Marxist *enrage* posts bombs through the mail and addled editors detonate them in the pages of the *Washington Post.*

SUCH FEARS AND FANTASIES have always afflicted the course of human innovation and progress. With life expectancies rising eight years in the developed countries and 22 years in the Third World since 1950, people have more time to lash out at industrial benefactors who gain wealth and create it from sources hard to comprehend.

Misconceptions about the Internet, however, also abound in more savvy circles. From Stewart Alsop's Agenda conference to the Internet Society, serious critics are emerging to predict that the network itself will bog down and degrade, jammed by traffic and trivia. Often unconsciously, these critics feed upon a spurious vision of capitalist ecology. Constantly recycling Garrett Hardin's "The Tragedy of the Commons" as a theory of the Internet, writers such as Clifford Stoll in *Silicon Snake Oil*, and others from publications such as the *New York Times* to the *National Review* and the *Atlantic*, predict that the Web, as a public good, will be overgrazed, like the commonly owned fields of feudal Britain. Each herdsman or entrepreneur gains from adding to his herd or bandwidth, beating rivals to the remaining grass or spectrum, until congestion ruins the common space.

Actress Sandra Bullock writhes in anguish in the sinister clutches of *The Net*. Digital technology fares no better in academia, where writers like UC San Diego professor Mark Slouka label it "a kind of lie."

As the epitome of a capitalist commons, the Internet, according to the critics' predictions, will collapse under the impact of this law, clogged with traffic and polluted with porn and violence. As a precursor, the same writers cite citizens band radio, an earlier fad that rose meteorically and collapsed ignominiously when, as they see it, millions of middle- and lower-class hoi polloi rushed in and polluted the bandwidth without renewing it.

Overall, the resistance converges many streams of reaction. In general, the "humanist" opponents mistake the Internet for a continuation of television technology. Thus they ascribe to the Internet the very flaws that they find in TV—crudeness, violence, porn, entertainment for "diverting ourselves to death"—and extend to the computer the old and mostly valid arguments of Neil Postman and Jerry Mander against the idiot box. Some of the other critics of the Internet benefit from TV and fear the Web will replace their familiar tube. The executives of media companies are mostly baffled by the new technology. Paralyzed by market research, as Jim Barksdale, CEO of Netscape puts it, "They are trying to build bridges by counting the swimmers." A Washington lobbyist for a long-distance carrier wonders poignantly if "America is ready for all this bandwidth." Baby Bells spurn the Internet to fund Hollywood films and TV.

Blinded by the robber-baron image assigned in U.S. history courses to the heroic builders of American capitalism, many critics see Bill Gates as a menacing monopolist. They mistake for greed the gargantuan tenacity of Microsoft as it struggles to assure the compatibility of its standard with tens of thousands of applications and peripherals over generations of dynamically changing technology (avoiding the dialectical babel of the more open Unix, for example). They see the Internet as another arena likely to be dominated by Microsoft and a few giant media companies, increasing the wealth of Wall Street at the expense of the stultified masses of consumers and opening an ever-greater gap between the "information rich" and the "information poor."

Focused on the summits of the industry—CEO séances among media conglomerates and software kings—all the critics can foster the impression that the Internet is a questionable, unpromising venue, vulnerable to monopoly and trash, thereby vindicating the Luddites and the Cassandras. From the beginning of its civilian eruption, however (see *Forbes ASAP*, "The Issaquah Miracle," June 7, 1993), the Net has risen from the bottom up rather than from the top down; by nature, it is a heterarchy rather than a hierarchy.

To get a view of the future of the Net, let us turn aside from Herb Allen's golfing groves and Bill Gates's mansion and Louis Gerstner's "net-centric" revelation, and visit some of the fertile bottomlands where the Web is growing fastest. Here no robber barons or monopolists come into view and there are no signs at all of an impending slide toward tragedy and decline. Here the negative externalities of the degraded commons fall before the huge positive externalities of Moore's Law and Metcalfe's Law, the microcosm and the telecosm, where smaller transistors yield exponentially more efficient machines and the value of networks rises by the square of the power of all the computers attached to them. Governing the positive externalities of the Internet is the convergence of these forces, compounded by the creativity of entrepreneurs.

PERHAPS SUCH a combinatorial explosion explains the mind of Avi Freedman of Net Access. Among the vanguard of the armies of the Internet, Freedman is a classic American entrepreneur, entirely alien to the megalithic

Left: AP/Wide World. Right: Leslie Gollin-Slouka.

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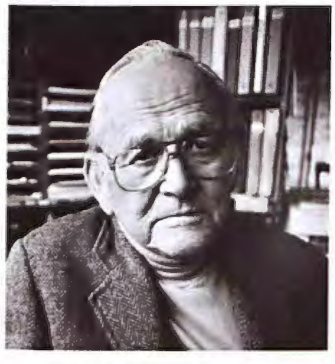
visions of the critics. As an Internet service provider (ISP), Freedman supplies the Philadelphia area with access to the goods and services of this global ganglion of networks at a flat rate of between $12.50 and $20 per month, depending on the services chosen.

Net Access still operates chiefly out of his cellar in a marginally middle-class suburb of Wyndmoor. The street bristles with wires, transformer nodes, terminal boxes and power lines, many of them converging on the duplex red-brick bungalow where Freedman lives with his wife in an apartment, above a basement crammed floor-to-ceiling with multiplying racks of electromagnetic conversion and processing gear for computers and telecom. These technologies are all oscillating and radiating like crazy in the spirit of their hyperkinetic owner, who is multiplexing Internet insights between his cellular phone and an attentive audience of aspiring ISPs from western Pennsylvania and geek students visiting from the University of Pennsylvania, gathered at his door next to the power-line link.



Garrett Hardin (left) wrote "The Tragedy of the Commons" in 1968. Today, Clifford Stoll similarly argues that the Net, as a public good, soon will be overgrazed, like the commonly owned fields of feudal Britain.

Is this an entrepreneurial dream, or a carcinogenic nightmare out of the muddled pages of Paul Brodeur? Avi is too busy to give the issue much thought. Extending business service to New York City, Washington, D.C., and Chicago, overflowing his basement, he is now moving his operations to a collocation cage at the Philadelphia central office of MFS (Metropolitan Fiber Systems) where he has just turned up a T-3 fiber circuit (45 megabits per second) direct to MAE East, the major East Coast Internet exchange point. From Seattle to San Jose, top companies are besieging him with multimillion-dollar buyout offers, but looking to the future and its promise, Freedman calculates that he can't afford to sell.

With only 4,000 customers, however, Net Access hardly seems to pose a threat to such local colossi as Bell Atlantic and Comcast, now searching the world for "content" opportunities and looming ever larger on Rodeo Drive. Yet Ray Smith and Brian Roberts should pay attention to what is going on in Freedman's teeming mind and basement. Millions of PC owners may well become part-time Internet service providers in the future—as their home and small-business PCs supply content for others, perhaps beginning with teleconferencing and telecommuting activities that will soon dwarf Hollywood in volume.

One of the students hanging on Freedman's words, for example, is Meng-Weng Wong, whose personal Web page at Penn attracts some 35,000 hits a week with its restaurant reviews, film criticisms, Philadelphia maps, technology insights and other delectations. Drawing wide media attention, from *Forbes ASAP* to Scandinavian TV (a crew is visiting this very day from the Netherlands), Wong has now established a server at Net Access, pobox.com, which supplies his clients with a permanent Internet address wherever they may go, and he is developing a Web-page design business.

Responding to the onrush of innovative customers like Wong, the configuration of Freedman's bottom-up operations offers clues to the future shape of the industry. A portly, perspiring, blond, balding geek-genius bursting with monologic humor and street smarts—hardly full-duplex (scant signs of upstream flow)—Freedman has just hustled past his 26th birthday. He has been deep in computers since age eight, when a prescient uncle gave him a book on the Basic programming language at a Seder. Within months he was entrenched among the information rich, opening an unbridgeable gap in computer savvy between himself and nearly all of the other five billion inhabitants of the planet. If you think you are going to catch up, forget it. By the age of 12, in 1982, he was an active user of e-mail and Usenet news and familiar with the abstruse command codes of the Unix operating system that ran on his father's DEC PDP-11. Freedman senior, a pulmonary physician, inherited the machine indirectly from Bell Labs, where it had been employed as a Usenet news hub until displaced by a VAX.

In 1986, still a teenager, Freedman began exploring the uses of Unix machines for commercial databases and discovered to his surprise that serious businessmen would give him gouts of money to get help with their computers. Eventually, he was earning "lawyers' rates" (his mother is a Philadelphia tax attorney) for work he found "amazingly routine" and "even fun." Nonetheless, after high school, his parents sent him off to college in Massachusetts, where his computer skills were underappreciated. He returned after a few weeks to get a job at the National Software Testing Labs in the Philadelphia suburb of Conshohocken before enlisting at nearby Temple University, which he chose because it offered more freedom for computer experiments and consulting work than the more prestigious Penn a few miles away.

After arriving, he discovered that Temple's computer lab also commanded a superb resource: bandwidth, in the form of a nearly empty T-1 line linking to the Internet at 1.544 megabits per second. Already computer rich, he was becoming communications rich as well. In Avi Freedman,

Left: University of California, Santa Barbara. Right: AP/Wide World.

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Temple's department of computer science got rather more than it bargained for. Realizing that the available PCs were network hostile and the lab's MicroVAXes ran VMS rather than Unix, Freedman used his savings to buy five secondhand Sun 3 workstations for $600 apiece.

In short order, Freedman began his career as an Internet service provider and "professional geek," albeit unpaid. Soon he had some 100 students as users, mostly cavorting through games of Multiuser Dungeons (MUD). Temple's address, supplied by Freedman—bigboy.cis.temple.edu—became known far and wide as a hive of MUD activity. Temple's computer science professors began to rebel at this untoward distinction, particularly when they found that lost in the crypts and catacombs of the Net, their charges were virtually unreachable for assignments in higher-level languages. Freedman was forced to close down local access to the game portions of the server during daytime hours.

Freedman has given some thought to the problem of "how to civilize young, intelligent teenage males." He concludes, "You have got to get them interested." He says the students playing MUD at least were learning Unix commands, "a better way to get a job than mastering the Pascal programming language," which was then being taught in the regular classes.

As a student, working with Prof. Yuan Shi and other Temple professors, Freedman developed a toolkit for distributed processing on Suns and presented a paper in London in 1989 at a conference on computer-aided software engineering. As his time at Temple drew to a close, he began contemplating graduate school. "Everyone was very surprised that anyone who could do anything on the outside was going to graduate school," he says, "but Stony Brook on Long Island offered me a nice job as a research assistant in the lab and I went up there."

After graduating from Temple, Freedman also encountered the harsh facts of life in the world beyond college computer laboratories. With their local-area networks and T-1 links to the Internet, universities offered a revel for budding cybernauts. Marc Andreessen of Netscape discovered a similar disjunction between college lab and residential communications. At LAN's end was a communications cliff and a bandwidth scandal. Most homes and offices connected to the world only through twisted-pair, four-kilohertz, copper telephone wires.

In his basement, Avi Freedman manages the floods of bits engulfing his armies of secondhand Sun servers. He began his ISP career as an unpaid "geek," attending to college kids. This year he'll pocket about $3 million.

In October of 1992, Freedman became an ISP chiefly to continue his college revels by chasing bandwidth. Twenty-three at the time and engaged, he could still recall his days in high school and remembered how much he had learned from the Internet through his father's PDP-11. He began to fill up his basement with secondhand Suns. Since that time, Freedman has purchased scores of Sun machines, mostly at prices well below new Pentium levels, all using Berkeley Unix, equipped by Bill Joy with fast TCP/IP (Transmission Control Protocol/Internet Protocol) for Internet access.

Beginning with 40 customers from local bulletin board systems, Freedman provided access through the serial ports of a single SPARCstation IPC with a 200-megabyte hard drive and 12 megabytes of memory that he purchased secondhand for $1,500. The serial ports ran up to 38.4 kilobits per second, linked to 14.4-kilobit-per-second Zoom and Supra modems connected to POTS (plain old telephone service) outside lines running from the phone company's central office. Costing a total of some $4,000, the system worked well enough until his clientele began to multiply and the modems balked at continual resetting. In April 1992, he bought a 16-port Iolan terminal server that answered the phones and connected subscribers to the Sun servers, which supplied e-mail, Usenet news, Gopher searches, Telnet and file-transfer services in a Unix environment.

In June of 1992 emerged the menace of competition. A local entrepreneur launched Voicenet by simply linking a 386 PC with a modem to each phone line through a terminal server. Charging fees several times higher than Net Access's, Voicenet thrived through the device of hiring two full-time people to scan in pictures from porno magazines for what Freedman describes as the "sticky keyboard set." Eventually the "adult" bulletin board service enlisted some 5,000 members paying $4 per hour to peruse images. Nonetheless, Voicenet protested what it called Net Access's predatory low pricing, a $12.50 to $20 flat rate per month with no full-time employees to pay.

IN THE EARLY YEARS of the Net's development, the late '80s, the Internet business outside campuses and corporations was a small-time and sometimes tacky trade. In 1992, the entire Net comprised a million linked comput-

D.W. Mellor

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ers, many of them in university and government labs. It wasn't until November 1993 that Net Access acquired a dedicated 56-kilobit line for direct connection to an official network access point. Costing $400 per month, it multiplexed 22 dial-up modems among 250 users. With the Mosaic World Wide Web browser yet to catch on outside the universities, Net Access did not even have to supply SLIP (serial line interface protocol) or PPP (point-to-point protocol) accounts, which shield the user from the details of Unix.

Freedman, however, saw the need for new technology to link people to the full resources of the Net without having to know abstruse Unix commands. "As a professional geek, writing code is my true calling," he says, adding that he threw himself into this work. Although the program was eclipsed by Mosaic, Lynx and other approaches, he still believes that his software provided easier access to the Internet, complete with the ability to trace routes and "ping" remote machines. Enabling users to log in to the program in 1992, he put Net Access on the technological forefront of ISPs.

Leading the way are mostly small companies led by young entrepreneurs fighting for their lives in the most intensely competitive arena of the world economy.

The largest challenge for an ISP, then and now, is managing the floods of bits engulfing a Usenet news server at a rate of some 500 megabytes per day, five news articles per second, each with a unique identification that has to be scanned to assure that the news is fresh and not duplicated. The heart of the Internet until the arrival of the World Wide Web—and still cherished more than the Web by many Internet veterans—Usenet is the huge collection of textual bulletin boards and other information troves and exchanges from which the communities of the Net exfoliate. As Steve Willens of Livingston Enterprises puts it: "This is the real source of the Internet as we know it and the challenge that forced the development of technology specialized for the Net"—notably Livingston communications servers that linked modems to the Net through fast comports functioning with compression at 115.2 kilobits per second.

In 1994, Freedman recognized he had a major business on his hands. He decided to lease a T-1 line from PREPNET (Pennsylvania Research and Economic Partnership Network), which required a prepayment of $1,000 per month. With 50 phone lines and modems and 500 users, he broke all ties with Stony Brook and began hiring people to handle a rising tide of traffic and a surging demand for technical support.

That summer, he had three full-time people: "Myself, my wife, Gail, and my 20-year-old brother, Noam. Working with him made me realize why people pay me so much money as a consultant [up to $150 an hour]. He served as a kind of Avi echo, intuitively knowing what I wanted and when." A student in computer science at the University of Chicago, Noam is in the process of extending the business to that city, while Avi has established points of presence in New York and Washington, D.C. He has hired five Net Access customers, none with college degrees, to provide technical support full time as the number of users has climbed at a pace of some 15% per month since the end of 1994.

For the links to other cities, Freedman relied on advice from telecommunications consultant Gordon Jacobson, a Penn alumnus who maintains close links to the Penn school of engineering, where his father graduated. With Jacobson's help, Freedman is ending 1995 with a fiber circuit connecting him to MAE East at 45 megabits a second, a 10-megabit-per-second link to Sprint's network-access point, and more than half a dozen point-to-point T-1 lines, all for well under half of the normally tariffed prices for these services. With increasing broadband connectivity, Net Access commands more than half as much bandwidth at the nerve centers of the Net as Netcom, which has 50 times more customers.

Though indispensable, technology alone cannot sustain a successful ISP. It is people that make the vital difference. If Freedman had originally hired people to perform the work that he did himself part-time—"keeping the machines running, maintaining software, recovering from disasters, installing and tuning equipment and circuits"—he would have incurred expenses of some $100,000 per year and his financial model would have collapsed. The reason many corporations are so slow to develop Internet programs is not the lack of equipment but the dearth of personnel. The large companies pursuing Net Access did not care about Freedman's rooms full of gear. They were after Freedman himself.

FREEDMAN'S ENTREPRENEURSHIP and technology ride on a tide of other enterprise by the suppliers of Internet gear. These, too, are not huge telephone company equipment manufacturers or rising software monopolists but mostly small or medium-size companies, led by young entrepreneurs, fighting to survive in the most intensely competitive arena of the world economy.

An Internet service provider must begin by supplying modems through which the outside world can connect to his offerings. With millions of home customers who dwarf the ISP modem volumes, U.S. Robotics is currently ascendant in most ISPs, but Freedman spurns them for cheaper devices from Multi-Tech. These modems connect to a Xylogics terminal server that authenticates the name and

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password combination entered by the user and validates the caller as legitimate. Then the customer enters Net Access's local-area network linking a set of Sun Microsystems servers that supply World Wide Web, Gopher, Usenet, e-mail, file transfer, Telnet and other Internet services.

Net Access is unusual for an ISP, since few use Xylogics equipment. Recently bought out by Bay Networks, Xylogics supplied nearly all the terminal servers for the university market, and it still shies away from the tumultuous world of ISPs. These customers mostly use Livingston products that run a security protocol named Radius (remote authentication dial-in user services). Channeling the bits around the ISP's internal net and on to other networks are banks of routers, also often built by Cisco or Livingston (although Freedman originally chose Morningstar because it was cheaper). Linking a particular ISP to other ISPs and network access points are T-1 cables running at 1.544 megabits per second through multiplexing and demultiplexing and conditioning equipment. These functions are performed by DSU-CSUs (data service units-channel service units) made by such companies as TxPort, Adtran, General DataComm and ADC Kentrox.

Freedman insists on the Law of the Microcosm in choosing all his equipment and in making all his projects for expansion. Since his study of distributed computing at Temple, he has everywhere cherished duplication and redundancy and cheap components over centralization and scale economies. He at first bought a nine-gigabyte drive from Micropolis. Now he regrets the decision and is replacing it with five two-gigabyte drives (more I/O [input/output], redundancy and reliability). "The more spindles the better," he says. He buys lots of cheap secondhand Suns rather than one powerful server. He criticizes some of the larger ISPs, such as Netcom, for centralizing their servers and technical support. It causes bottlenecks and delays, he says, and opens the system to crashes if any of the communication lines go down.

Freedman's rule is to provide service as locally as possible. He believes ISPs with fully equipped local network sites, rather than mere communications nodes like Netcom's, will prevail. Like most small ISPs, Freedman is wedded to flat-rate pricing, though his accounts of altercations with customers who want to resell or overgraze his commons may undermine confidence that this pricing regime can survive into the future. But managing flat-rate prices is a core competence of the ISPs. Believing that bits will flee toward flat rates, Freedman says MCI will fail in its plans to transform Internet pricing models by adding some as yet unannounced scale of measured usage based on time, packets or both.

Stop the world! Ned Ludd (bottom) led a violent uprising of loom smashers in early 19th-century England. Today's most famous Luddite, the Unabomber, posts bombs through the mail.

Is Freedman's model scalable, or is it doomed as he grows? Could Freedman be displaced by MCI or Sprint-Comcast or Bell Atlantic or Microsoft-UUNet or AT&T in a siege of merger-monopolization? He believes that up until a threshold of some 25,000 to 50,000 customers, meaning revenues of between $5 million and $10 million net of more lucrative business clients, his economic and technical model can trump all comers. At that point, he will face the usual entrepreneurial crisis of transition: Freedman will need business partners, routinized technology management schemes and expensive accounting to maintain operations as Net Access spreads across the country.

But he does not fear competition. His problems, he says, are servicing the flood of new customers and anticipating the depredations of "Congresscritters" who want to make him liable for any vagrant flasher who strays onto one of his hard drives.

Still a small force in the global matrix of telecommunications, Freedman now dreams of exploiting available resources of fiber, dark and lit, to acquire major new bandwidth, linking cities up and down the East Coast and across the U.S. Helping Freedman move this project toward reality is his telecom guru Jacobson, an entrepreneurial dervish from Portman Communications. With

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financiers on the line to supply some $5 million in startup capital, Jacobson is planning to launch a national IRamp network. The service will ultimately open fully staffed Internet access facilities in 30 cities nationwide, linked everywhere by fiber, at a cost of some $1 million per site.

Such investment looms large compared to the rock-bottom base of Freedman's operation, and easily eclipses a national ISP's point-of-presence facility that can cost upwards of $70,000. But David Farber, gigabit-testbed guru, recently told a New York audience at the Penn Club that, spurred by business needs, the marketplace is seeking higher-end, stable-broadband ISP services that can handle millions of hits a day at a Web site with no access delays or congestion and that provide local access and custom software configuration. For these high-end customers, the SPARC 20 servers and T-1 and 56-kilobit links of the many small ISPs will no longer suffice.

Pioneering the kind of broadband channels that will eventually become ubiquitous on the Net, IRamp's planned facilities will command OC-3 fiber (155 megabits per second) links to a national network of both dark and lit fiber, available from utilities, pipelines and other unusual sources. Such bypass strategies will become increasingly common in coming years. The 10 million miles of fiber currently installed in the U.S., after all, is exploited to approximately one-millionth of its potential capacity—and much of it is unused "dark fiber."

For key ISP server and security functions, Jacobson plans to use fully fault-tolerant Tandem S4000 servers running the new ServerNet multibus scheme. It was conceived by venerable Tandem designer Robert Horst as a new-generation architecture explicitly optimized to substitute bandwidth for switching speeds. Fully scalable, ServerNet was licensed in October by Compaq, yet it commands a theoretical throughput limit of an unprecedented petabit per second (a million billion bits). For graphics-intensive applications, Jacobson envisages Silicon Graphics WebForce Challenge S servers using Irix software. Even with as few as 5,000 subscribers per site paying a competitive nonusage-based rate, Jacobson projects a high rate of return.

Meanwhile, at Netcom, the nation's largest ISP, David Garrison, the CEO, is undergoing the stresses that Freedman foresees for himself as he expands his business. During his previous stint at the helm of the meteoric paging company, SkyTel, Garrison, a rangy dark-haired entrepreneur with a slight uneasiness in his ready smile of prosperity, thought he had approached the ultimate in entrepreneurial excitement. But nothing in his career in the wireless industry prepared him for his first nine months as head of Netcom.

Here is a company that during the last three quarters grew from 400 to 1,200 employees, from 58 to 201 points of presence, from 72,000 to more than 200,000 customers, and from revenues of $12.4 million in 1994 to a $50 million run rate in 1995 and to a market cap of some $400 million, while the traffic in bits grows at an even faster pace—impelled by the graphic demands of the World Wide Web, itself expanding at the rate of more than 1,000 new servers per week.

At Netcom, CEO David Garrison is enjoying life at the higher end of the Internet food chain. Revenues and employees will quadruple in 1995. Garrison admits the big telcos could wipe him out, but claims they lack focus.

Netcom pares down its points of presence to simple communications nodes and handles all the technical support and Internet services for them at the company's headquarters. This operation fills up a high-rise in San Jose. Some floors teem with desks manned by earnest engineers in jeans, many of them Asian, working the phones. Other floors are replete with row upon row of racks filled wall-to-wall with Cisco routers, Sun servers, Livingston PortMasters, Ascend ISDN pipelines, Cascade edge switches and U.S. Robotics modems. Walking through these ever-expanding mazes of machinery, Garrison's entrepreneurial smile at times moves from the ready to the giddy.

IN THIS ENVIRONMENT OF RIOTOUS GROWTH, the telcos move their slow thighs like trolls under the bridges and routers of the Internet. Currently commanding perhaps 2% of the traffic, AT&T, for example, has declared its ambition to capture 60% of the Internet business over the next two years. But Garrison demurs: "From the Olympian perspective of a McKinsey & Co. consultant, AT&T could take over any business. They have one of the greatest brand names in the world, they've got more money than God, a billing relationship with some 40 million people, a global network and alliances and consortia, Internet pioneer Bolt, Beranek & Newman in their fold, and they have perhaps the world's largest internal World Wide Web on their own Unix servers among their 300,000 employees."

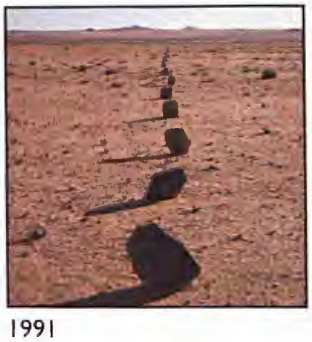
But like most of the telcos, AT&T lacks focus. As Net-

Penny Wolin


1988


1989


1990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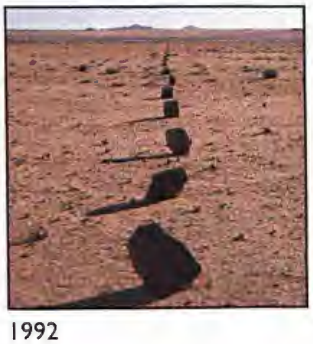
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com marketing chief John Zeisler explains: "Phone companies have their 700 numbers, 800 numbers, corporate customers, their Hollywood links, their leased lines, their frame relay, their ADSL (asymmetric digital subscriber line), their cable aspirations, their huge wireless opportunities, their bureaucracy, their regulatory tariffs, their pricing confusions. Should voice be priced as data or should data be priced as voice? They are great at laying fiber and wire, connecting it to switches and bringing signals to the central office and to the curb. But the Internet is a second thought, just another business to them."

As in the PC industry, focus and agility are crucial. In an arena where the technologies ride a remorseless onrush of exponential changes, no prolonged bureaucratic process can succeed. Even the maps and schematics of rapid convergence among media industries miss the point. Dominating this arena is the computer industry—with its millions of piranha processors and entrepreneurs—and it doesn't converge with anything; it eats everything in its path.

Now ascendant is the Internet computer industry. Most of these new companies, from Livingston to Netscape, focus on the Internet. Using personal computer components to reduce the price of ISP infrastructure far below the price of telco installations, these companies endow the ISPs with a further advantage in a dynamic industry.

Livingston Enterprises epitomizes the success of new companies creating this new industry. From the start, CEO Steve Willens has focused his company on cheap, low-end routers beloved by scrappy Internet service providers.

Livingston Enterprises epitomizes the success of the new companies creating this new industry. Secreted in Pleasanton, Calif., and financed by corporate cash flow, Livingston has grown up with the Internet at a pace not far in the wake of its more illustrious rival, Cisco Systems. Livingston PortMasters crowd Netcom's headquarters, as they do most of the other ISPs.

Launched in 1989 under the leadership of Steven Willens, then a manager of multiprocessors at Sun Microsystems, Livingston's networking drive began by creating a cheap router and communications server based on a new operating system, ComOS, specifically developed to help ISPs meet their Usenet burdens. Livingston quickly became a dominant force in Internet terminal servers and routers, and grew at a pace of more than 50% per year until engulfed by an explosion of demand in 1995. In August of this year, Livingston launched cheap low-end routers to serve both ends of an Internet connection: a $1,395 two-port PortMaster to link small offices to the Net at up to 230.4 kilobits per second and a sleek space-saving $3,495 PortMaster with 24 ports for ISPs. In October, Livingston announced a series of ISDN remote-access machines that will compete with the currently dominant Ascend ISDN pipeline system, if ISDN becomes the preferred mode of Internet access.

Now everywhere in the Internet industry companies are resigning themselves to ISDN as the next "modem" (though, in fact it just brings into home and office the 64Kbps digital channels long used by the telcos between central offices). The scandal of U.S. telecom, however, is that the telcos could just as easily be bringing video capable T-1 service (1.544 megabits per second of bandwidth, equivalent to CD-ROMs) to homes if regulations permitted a reasonable tariff structure.

Moreover, new access technologies are emerging, such as cable modems and AT&T's new SDSL (symmetrical digital subscriber loop). Available this year and under test by Bell Atlantic, SDSL modems promise to bring T-1-line capability to homes on twisted-pair copper wires for about $10 a month. SDSL follows many such copper prosthetics announced over the years (notably HDSL [high bit rate digital subscriber line] from Level One, PairGain, Brooktree and others), all largely spurned by the telcos on pricing grounds, but capable of transforming the entire world of Internet access before ISDN's niggardly pipes catch on with the public.

While Internet hardware rushes ahead, Netscape, Sun and other providers of Internet software make the ISP a fast and elusively moving target for the telcos that wish to compete. With eight million browsers in the field, all upgradeable to the new 2.0 system—with the Java interpreter and Java multimedia programming language and toolkit—Netscape expects to attract some 100,000 software developers to its platform over the next year. There are already some 400 Java applications available, including word processors, spreadsheets and games that can play on any machine with a browser running a Java interpreter, regardless of operating system or microprocessor instruction set.

Netscape's expected army of 100,000 developers compares with some 10,000 developers for Apple's Macintosh and perhaps 3,000 for Microsoft's network, MSN. Emerging from a company that did not even exist two years ago, such a juggernaut will further empower the ISPs in their competition with the large invaders of the territory—not only the telcos but also the on-line services such as Amer-

Penny Wolin

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The ISPs, however, are not usually in direct competition with the large phone companies. ISPs bring them new customers and new business users, and the ISPs also depend on them for home connections and for potential fiber-trunking services. The American telcos are currently laying some 1,300 miles of fiber-optic line every day. Moreover, beginning with TCI's and Kleiner Perkins' @home system, which functions with cable modems and new software from Netscape, the ISPs also may end up using cable plant. As cable modems become available, cable companies will likely turn to the ISPs to supply Internet services, local content, technical support and point-of-presence technology.

In the midst of these whitewater torrents of change, the some 4,000 ISPs and their increasing armies of supporters represent a serious threat to many of the established empires of telecom. Not only can they move much faster and more resourcefully, but they also have the key advantage of having bet exclusively on the PC and the Internet as the platforms of the future. However smart and powerful, Ray Smith, Mike Ovitz of Disney, Gerald Levin and Ted Turner, Sumner Redstone and other aspiring Kings of the Road still entertain crippling visions of set-top boxes and interactive TV sets.

Analysts complain of excessive valuations for ISPs such as Netcom. Not only traffic but also investment flow to the least regulated and most entrepreneurial arena.

Andrew Grove of Intel had the last word for these efforts when he told *Forbes ASAP* last year: "By the time the set-top people reach the price points and form factors of consumer electronics and penetrate 30% of homes, the personal computer will be everywhere, controlling the TV like a minor peripheral." Bill Joy elaborated on this point in the October issue of *Red Herring*: "By the time [they] bring digital TV to the home, you will be able to take your Super Netscape version 4.0 Web browser with Super-Ultra-HotJava-Burners, and that will be your animated user interface. [The TV people tried, but] it's like the Internet happened in the meantime. Right?"

Distracting most of the large companies (seen by the Internet's critics as impending monopolists), the pursuit of the set-top not only misses the point and begs the question but it also blows the key new hardware opportunity of the epoch. Although the PC will not be dislodged for most office applications, there is a real and rare chance today to create a new home architecture and software optimized for bandwidth rather than for installed base. Together with the Java language, the Web browser breakthrough allows creation of new network PC and software architectures at price points that take advantage of the "hollowing out of the computer" caused by the impact of the Internet. Sun, Apple, Oracle and Jean-Louis Gassée's BeBox are all focusing on this target today. All are trying to take advantage of the elusive opportunity of creating cheap machines optimized for bandwidth and graphics rather than for legacy software baggage (the storage can be supplied on the Net). That opportunity follows the PC and Internet model—the microcosm and the telecosm—into the cornucopian digital future of the information age, with the old analog TV and telephone left far behind.

AMID ALL THESE TORRENTS of futuristic technology and prophecies of a tragic denouement in a wasted commons, it is comforting to return to the man who began it all, Vinton Cerf of MCI. Coinventor of the Internet protocol TCP/IP, developer of the once-pioneering MCI Mail service, and both a poet and a philosopher of the Net, he is now in charge of MCI's data network, which includes MCI's Internet backbone network. A rare combination of technical grit and visionary enthusiasm, he faces resistance from forces within the company that still lust for the glamour of Hollywood and see the Internet as the CB radio of the 1990s. Nonetheless, Cerf at 52 is leading MCI toward a new Internet-centric strategy that is more likely than the MCI lobbyists to save the company from the grave perils of long-distance deregulation. The company is already creating a new backbone for the National Science Foundation part of the Internet, connecting supercomputer centers and other high-bandwidth applications at speeds of up to 622 megabits per second. MCI also is a major supplier of Internet bandwidth. Its network connects to all six NAPs (national access points) through which the ISPs link to one another.

Cerf observes that the national phone network grew at a similar pace through much of its history and regularly met every challenge. The telcos, for instance, surmounted the predicted crisis of the NAPs early this year, when—following the withdrawal of government funds—the network was expected to collapse under galloping increases in traffic. But the NAPs, despite unsuccessful struggles with the remaining instabilities of ATM (asynchronous transfer mode), ultimately rose to the challenge, saving the Net by using fiber optics and digitization, as well as transparent silicon and opaque silicon.

Today, new entrepreneurs are rising up to shape the future of broadband networks and possibly seize the market from the incumbent backbone suppliers. Silicon, both see-through and solid, remains at the heart of the solution. One of the ways MCI is meeting the challenge of the future is by purchasing eight "gigarouters" from NetStar, a startup in Minneapolis that is exploiting Moore's Law to bring IP (Internet Protocol) switching and router technol-

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ogy into the microcosm.

Launched five years ago by a group of veterans of the Minneapolis supercomputer scene—Lee Data, Cray and other companies—NetStar went public this fall at a $83 million valuation. It is pioneering an elegant routing architecture that gets eight times the throughput of a Cisco 7500 at a 20% lower price. While existing routers run bits down shared backplane buses, NetStar's IP router reserves a full one gigabit per each of up to 16 media cards attached to a single-chip TriQuint 16 gigabit-crossbar switch.

Ubiquitous on the Internet, Cisco remains an imperial force. But as the microcosm advances, it too faces threats. Not only can it not compete with NetStar at the top of the line but it also faces Livingston, Ascend and possibly even Compaq at the bottom.

Critics of the Internet have long predicted that as evermore-turbulent floods of broadband data and Web images crowd the commons, the Net will no longer be able to bear the load. The routers in the NAPs and other critical paths will jam up and crash. But the microcosm enables a constant stream of exponentially more powerful new architectures as functions that were once spread out across entire boards collapse into single chips and multichip modules.

MCI is meeting the challenge of the future by purchasing eight "gigarouters" from a startup in Minneapolis called NetStar, whose chief, Doug Pihl, hopes to cut off market leader Cisco Systems at the high-bandwidth pass.

For 1995 and beyond, MCI has bet on NetStar's feats of microchip integration to countervail every population explosion across the network commons. Following the laws of the telecosm rather than the megalithic visions of the critics, the fast new networks are becoming constantly dumber and more entrepreneurial. Ciena Corp., a small, venture-funded vendor of optical networks, is now supplying the next generation of backbone gear, a system that can carry 16 separate bitstreams on every fiber thread. The first application of the new all-optical technology in public networks, Ciena's innovation is a precursor of the terabit (trillion-bit throughput) networks that will be filled with video teleconferencing, video on demand, virtual reality, and other bit-thronging and polygon-shuffling applications of the future.

Only one competitor, Northern Telecom, might challenge NetStar and the others providing the new superswitches dumb enough to prevail at the top of the line. In early October, Northern's BNR lab exhibited a terabit-switch architecture at the Telecom 95 show in Geneva. This machine, once again, illustrates the triumph of dumb networks. The dumb terminals of the past, whether POTS phones or mainframe 3270 panels, required smart networks, with central-office switches from Northern and AT&T containing no fewer than 26 million lines of software code. But the new Northern terabit uses passive optical components and virtually no software at all. It points to the evolution of a fibersphere for broadband wire traffic that will function like the atmosphere for wireless traffic. (See *Forbes ASAP*, "Into the Fibersphere," December 7, 1992.)

While the critics of the new technology fix on the foibles of television and the monolithic aggregations of old media, the Internet is emerging as an entrepreneurial efflorescence. Comparing the Net to the decline of CB radio and the tragedy of the commons misses the providential convergence of the laws espoused by Moore and Metcalfe, with thousands of entrepreneurs in tow, exponentially expanding the commons with streams of new invention in a creative spiral of growth and opportunity. In seeing the technology as a killer of jobs and family life and a polarizer of opportunities between rich and poor, they miss the most radically egalitarian force in the history of the world economy.

The critics seem oblivious to the most basic realities of the U.S. job miracle. While the U.S. deployed three times as much computer power per capita as any other industrial region, this country created some 45 million jobs in 25 years at rising, real incomes. Not only was the U.S. a world leader in the proportion of its working-age population with jobs, but it also created employment for some 12 million immigrants, while its corporations endowed new work for people around the globe.

At the same time, a billion people, mostly Third World Asians, used the technology to leap into Third Wave riches without ever having to endure a heavy industrial phase. Gaps between the rich and the poor collapsed everywhere that the networks reached, as former peasants around the world—from Bangalore to Los Angeles—gained new freedom and opportunity from the information economy.

The Internet creates jobs by making workers more productive, and thus more employable, regardless of where they live. By engendering more investable wealth, it endows new work, providing the key remedy for the job displacement entailed by all human progress. By aggregat-

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FUELING THE TRANSFORMATION are the laws of the telecosm. They begin with Metcalfe's Law: The power of computers on a network rises with the square of the total power of computers attached to it. Every new computer, therefore, both uses the Net as a resource and adds resources to the Net in a spiral of increasing value and choice. This means that any limited, exclusive or proprietary network will tend to lose business to a more open, accessible and widely connected network. Metcalfe's Law dooms all the dreams of the Time Warners of the world to create exclusive and proprietary combinations of content and conduit.

As a further rule, networks prevail to the extent that they feed on the invention and creativity of their users, since the power of the computers on the edge of the network will increasingly dwarf the intelligence of the network fabric itself. For example, a 5ESS central-office switch from AT&T, commanding some 10 MIPS (millions of instructions per second) and linking some 110,000 lines, once represented the most powerful computer in a local phone network. Today those 10 MIPS are infinitesimal compared to the collective computer power of the tens of thousands of personal computers, each commanding 20 to 100 MIPS, linked by modems to the switch.

Lacking an entrepreneurial environment of inventive users, the government-run PTTs (Post Telegraph and Telephone) of Europe have been rapidly losing ground to the U.S.'s more rivalrous RBOCs (regional Bell operating companies) and long-distance carriers, and all have been losing ground to the explosion of interconnected private nets. The U.S. has some 700,000 private networks compared to just 14,000 in Europe and some 75,000 in Japan. Private nets that feed on the creativity of their users will always tend to prevail over public nets, such as France's Minitel or America's interactive TV projects, that try to supply their entire system from a central office.

Eric Schmidt of Sun offers a true parable of the Net. Back when the Internet was the Arpanet, two routers were added to the system, but the routers' hopping ratio (the number of hops to any destination) got stuck at zero. Because traffic always seeks out the optimal path, most of the traffic on the Net rushed to these two machines, since they promised instant transmission. Until the settings were corrected, the system was swamped.

On the Net, traffic will always gravitate to the most efficient broadband channels. If the telcos and software monopolists attempt to gouge customers in a badly designed and costly "top-down" network, traffic will migrate rapidly toward the freedom and bandwidth of a bottom-up solution. In the emerging global Internet, these channels could emerge among bypass suppliers using dark fiber; among low-earth-orbit satellite systems, such as Teledesic and GlobalStar; among cable companies and renegade long-distance suppliers; or among companies as yet unknown.

Guided by the valuations of the market, capital follows a similar rule: It is routed rapidly to the channels where it can be used most productively. At present, afflicted by perverse regulations that bar phone and cable companies from collaborating in the same region, valuations of these companies are low. Meanwhile, analysts complain of the excessive valuations for ISPs, such as Netcom, and their suppliers, such as Cisco, 3Com and Netscape. Not only traffic but also investment flows to the least regulated and most entrepreneurial arena.

A further law of the telecosm ordains that, in an age of dumb terminals and phones, traffic flows to smart networks full of intricate software. In an age of ever-multiplying computer power, impelled by Metcalfe's Law, traffic flows to the dumbest networks that gain their intelligence from the variety of powerful machines attached to them. A corollary is that, along with traffic, capital flows to the dumbest and most broadband nets with the most computer intelligence on their edges.

Perhaps most important of all is the cultural law of the telecosm. Networks promote choice, choice enhances quality and quality favors morality. Television is culturally erosive because its small range of offerings requires a broad, lowest-common-denominator appeal. Linking to millions of cultural sources, global networks provide a cornucopia of choices, like a Library of Congress at your fingertips. On the Net, as at a giant bookstore, you always get your first choice rather than a lowest-common-denominator choice. A culture of first choices creates a bias toward excellence and virtue.

The critics of the Internet are mostly skeptical about the value of choice. But choice validates freedom and substantiates individuality. Choice accords with the inexorable genetic diversity of humans. It makes possible individual aspiration and creativity. It is the lowest-common-denominator offerings of mass-broadcast media that lower humans to the animal level, eclipsing the differences that make us human, cutting off the higher aspirations and inspirations that elevate us beyond our appetites, reducing us to an impressionable crowd, zapping through the channels looking for a splash of blood or flash of nudity or demagogic spiel of hate.

In prophesying centralization and tyranny, the Cassandras miss the centrifugal force of the Law of the Microcosm, overthrowing all monopolies, hierarchies, pyramids and power grids of established industrial society and endowing individuals with the power to be transcendent and free. ■

George Gilder's previous Telecosm installment was "The Coming Software Shift" (August 28, 1995). For that and previous installments, visit the Gilder Telecosm Archives at ***http://www.seas.upenn.edu/~gaj1/ggindex.html*** *or at the Discovery Institute at* ***http://www.discovery.org.***

AT&T, 2 Baby Bells Trade Accusations As Senate Is Set to Consider Deregulation

By Leslie Cauley
Staff Reporter of The Wall Street Journal

NEW YORK – Three telecommunications companies escalated a war of words in the fight over deregulation yesterday, maneuvering in court and perhaps posturing a bit for Congress.

The Senate is preparing to take up a landmark deregulation bill that would let the Baby Bells into the lucrative long-distance market and let rivals invade the local phone monopoly. Yesterday, **AT&T** Corp. and two Baby Bells—**SBC Communications** Inc. and **Bell Atlantic** Corp. – took off the gloves and started swinging.

SBC, formerly Southwestern Bell Corp., filed a motion in federal court charging AT&T "stifles competition" and urging the court to rein in its former parent.

AT&T, for its part, yesterday filed an antitrust lawsuit against Bell Atlantic, charging the Baby Bell with "engaging in a pattern of actions designed to stifle competition" in the market for middle-distance "toll calls." Bell Atlantic immediately returned fire, publicly accusing the long-distance giant of "trying to circumvent the role of Congress and the regulators in setting telecommunication policy."

AT&T's lawsuit was in itself a countersuit to a previous lawsuit by Bell Atlantic, which had accused AT&T of misrepresenting its prices for competing services to consumers. Bell Atlantic said the AT&T suit was an attempt to "disguise" its advertising missteps. "AT&T hoodwinked us all in their ads. Now they're at it again in this lawsuit," Bell Atlantic sniped.

All three companies' broadsides appeared to be aimed as much at shaping opinions in the Capitol as winning points in the courtroom. The telecommunication giants have been on tenterhooks as Congress debates their competitive futures, and words such as "antitrust" and "stifle competition" have become particularly inflammatory.

The lawsuits "are being driven in part by the frustration and uncertainty about whether Congress will act or not. This is a great piece of evidence that people feel they have to go on multiple tracks," said Ronald F. Stowe, a vice president of **Pacific Telesis Group**. The San Francisco-based Bell itself recently settled a legal spat with AT&T over the same "toll call" issue that AT&T and Bell Atlantic are now feuding about.

In the SBC case, the San Antonio, Texas-based Bell asked the U.S. District Court in Washington to take away the power AT&T wields in thwarting the Bells when they must ask the court for special permission to take on new activities.

The Bells are governed by the consent decree that broke up the old AT&T empire in 1984 and still bars them from the long-distance business. They must get "waivers" to sidestep decree restrictions, but AT&T can oppose the waiver requests and make it far more difficult for the Bells to gain approval. And AT&T – which helped create the decree's terms – has opposed virtually every waiver request by the Bells to enter the long-distance market since they were spun off 11 years ago.

AT&T is "the principal beneficiary every time they oppose" a Bell request, said James Ellis, SBC's general counsel. The legal motion he filed yesterday asks the court to remove AT&T's special status, and a second motion seeks to let the Bells approach the court directly for waiver requests instead of having to first go to the Justice Department.

AT&T countered that its role in the waiver process has been upheld by previous court decisions, and asserted it hasn't abused its status.

In AT&T's countersuit against Bell Atlantic, also filed in U.S. District Court in Washington, AT&T said Bell Atlantic should be forced to charge its rivals the same "access" fees it charges itself for completing calls to local customers. It also wants Bell Atlantic to make it easier for consumers to use AT&T for some local calling; currently Bell Atlantic's customers must dial extra digits to do so.

Both issues are the subject of vigorous debate in Congress, by the Federal Communications Commission, and by state regulators. Though AT&T has been an active participant in those discussions, "we're looking to use every forum we can to push our procompetitive agenda," an AT&T spokesman said.

Senate GOP Delays on TV Deregulation

By Daniel Pearl
Staff Reporter of The Wall Street Journal

WASHINGTON – Following objections from the White House, Senate Republicans are expected to defer action until next month on a sweeping bill to deregulate telecommunications.

Vice president Al Gore, in a telephone call to Sen. Larry Pressler, the South Dakota Republican who heads the Senate Commerce Committee, said the Clinton administration couldn't support the measure, in part because it deregulates certain cable-television rates.

Although industry lobbyists earlier had expressed doubt that the Senate could find time to deal with the bill this week, Sen. Pressler blamed the White House for keeping it from reaching the Senate floor yesterday.Sen. Pressler said he's concerned that delay will give lobbyists a chance to push for changes that could destroy industry compromises already made. He also said in a floor speech that Republicans could marshal sufficient votes to override any presidential veto.

Gore Sends Fax to Pressler

Vice president Gore faxed Sen. Pressler a letter saying it was too early to talk about a veto but that the White House was concerned that certain provisions in the bill could raise rates for cable and telephone customers.

Greg Simon, an aide to Mr. Gore, acknowledged that the White House has discussed possible amendments with Senate Democrats but denied it is blocking the bill. He said the telephone conversation originated with a call from Mr. Pressler asking for the vice president's support. The committee passed the bill last month 17-2, with all nine Democrats voting in favor.

The legislation would weaken the 1992 cable-regulation law that Mr. Gore sponsored as a senator, by eliminating rate regulation on commercial channels such as MTV and CNN unless the cable operator was charging "substantially" more than the national average. The White House is also objecting to the fact that the bill would allow telephone companies to buy out local cable operators, and that it would keep the Justice Department out of the review of applications by regional Bell telephone companies to provide long-distance service.

GOP to Hold Fast

In an interview late yesterday,Sen. Pressler said Republicans haven't any intention of yielding on those points. "We cannot change the bill in those areas. People can offer amendments, but they'll lose," he said. He added that the limits on cable deregulation "drive Republicans mad." Some, including Senate Majority Leader Robert Dole, have been pushing for more complete deregulation, and the Kansas Republican may offer changes to the bill.

Sen. Dole could try to rush the measure through the Senate today over Democrats' objections. It's more likely, though, that Republicans will wait until after the Easter recess. Because of other legislation, that probably would push the telecommunications debate into May.

That could expose the measure to further lobbying. Bell companies have been circulating language that would make it harder for the Federal Communications Commission to delay their entry into long distance and make it easier to raise local rates. Long-distance companies are pushing for an amendment that would require the Baby Bells to get approval from the Justice Department to enter that market.

AM

HURRY!
ONLY 6 DAYS
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BETWEEN:

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Boston. . . . . .
Chicago . . . . . .
Chicago . . . . . .
Dallas/Ft. Worth . . . .
Dallas/Ft. Worth . . . .

NET GAINS

INFORMATION, TECHNOLOGY & CULTURE

Breaking the Box

GEORGE GILDER

WHEN Bill Gates, chairman of Microsoft, declared on live TV this March that he did "not have to take any more of this," got up, and strode away from Connie Chung's cameras, he was symbolically crashing through the media mirror and stepping into a new historic era. A man without a television in his home, Gates in his defiance was offering an omen of an America free of TV within the next five years.

Yes, TV's reign can end that soon. Without giving up any current pleasure or service, all Americans can be emancipated like the Microsoft liberator to spurn the tyranny of the tube. The computer industry is already three times the size of the TV industry and growing ten times as fast. Current projections show that American companies will sell more than 50 million personal computers in 1994, about half of them in the U.S. and some 60 per cent for residences and home offices. Over the last five years the share of computers in the U.S. linked to networks rose from under 10 per cent to over 60 per cent. During the next five years, the capacity of those connections can rise at least a thousandfold, allowing PCs to summon digital films and files of news, art, and multimedia from around the world. The television cable can become a computer connection. The personal computer can rule American culture as decisively as broadcast TV has ruled it for the last forty years.

The downfall of the liberal media, the rout of the rodent kings of the networks, the overthrow of Ken Auletta's "three blind mice" gnawing at the pillars of civilized life in America—what, one might wonder, could be sweeter news for conservatives?

Yet many conservatives are strangely ambivalent. They share the view of the existing broadcasters that the more power wielded by customers over what they can see the worse the programming will be. In this view, the boob tube will give way to what H. L. Mencken might have termed a new Boobissimus, as the liberated children rush away from the network nurse, chasing Pied Piper pederasts, snuff-film sadists, and other trolls of cyberspace.

Affirming these fears, NBC's prime panderer, Phil Donahue, asserts with relish: "The information highway will have a lot of sex." In late January he presented James Erlich of ICFX, the developer of Penthouse Interactive, showing off a future technology in which a viewer with a click of the remote could capture himself on screen jousting with the virtual software of a Penthouse "pet."

Is this the future of mass media—more brutal and banal and salacious TV? Or is it Bill Gates's vision of arts and letters and encyclopedias and empowered citizens visiting the wonders of the world without leaving their homes? The issue will be vital to the prospects for capitalism, for we live and work in our technologies, in our phones and TVs and computers, as much as we do in our homes and schools and neighborhoods.

On both the Left and the Right, television culture has long been the main exhibit for the case against capitalism. John Kenneth Galbraith, E. J. Mishan, Christopher Lasch, Barbara Ehrenreich, and Robert Bellah on the Left all land their most crushing blows merely by pointing to the obvious crudeness of mass advertising and entertainment. Pope John Paul II, Aleksandr Solzhenitsyn, and other titans of the age point to the crass pandering of broadcasters and the commercials that sustain them and the consumer culture that feeds them as the supreme evidence for the essential vanity of a Western "cult" of individual freedom. Indeed, even the most fervent supporter of enterprise may well blanch before the sort of entrepreneurial mind that capped this spring's Nielsen-ratings race with a contest of Can You Top This? in which one network responded to the Menendez brothers on Court TV by offering up an interview with Charles Manson posing as a born-again Barabbas, and another countered with Jeffrey Dahmer, poignantly pondering his troubled childhood.

SUPPORTERS of capitalism must come to terms with the essential truth of the case against U.S. commercial TV—and even acknowledge the obvious superiority of public programming in both the U.S. and Europe. Under the sway of television, democratic capitalism enshrines a Gresham's law: bad culture drives out good, and ultimately porn and pruriency, violence and blasphemy, prevail everywhere from the dimwitted "news" shows to the lugubrious movies. As can be seen by anyone unblinded by libertarian dogma, no culture can long endure if its average citizen spends between four and seven hours a day

Mr. Gilder, the guest editor of this special section, is a fellow of the Discovery Institute in Seattle and the author of Life After Television *(revised paperback edition, Norton, 1994).*

gripped in passive contemplation of such stuff.

Boobissimus has already laid waste a generation of American youth, who have slipped to the very rear ranks of the industrial world in academic and intellectual achievement and leapt into the lead in violence and bastardy. Now, impelled by the still more far-reaching Kultursmog of direct broadcast satellite technology, Boobissimus is preparing to lay waste the rest of civilization as well.

Like Randall Jarrell, many a conservative thus finds himself with a "Sad Heart in the Supermarket." Soon after writing that lamentation, Jarrell stepped out on one of the superhighways financed by Albert Gore Sr.'s National Defense Highway Act and was run over by a truck. Many of us bear similarly sad hearts before the new information superhighway being rhetorically promoted by Al Gore Jr. We fear Boobissimus will rule the superhighway as it rules the mass media.

These fears, however, feed on a mistaken notion of the nature of mass man and mass culture. The information superhighway in fact is nearly a perfect antidote for Boobissimus. It promises to revitalize capitalism and culture in the U.S. and around the globe and to retrieve the hopes of a conservative era in politics.

TV is a boob tube not because the people are boobs but because it is a broadcast technology. Any broadcast medium, by definition, concentrates intelligence and control at the center. The nature of the technology dictates that the receivers be dumb terminals, or even idiot boxes, that make no demands on the user and that restrict him to a small selection of programs. As Nicholas Negroponte of MIT's Media Lab has pointed out, despite all the talk of interactivity and digital intelligence today's TV is still dumber than an airport urinal that can detect your presence at the stall.

The personal computer championed by Bill Gates is the opposite of this reductionist broadcast technology. Where television technology is essentially centralized—a tool of tyrants—computer technology amplifies both the intelligence of its owners and their power to choose and create.

Impelling the expansion of computer and networking technology are two exponential laws. Microchip technology is ruled by the law of the microcosm: Take any number n transistors and put them on a single sliver of silicon, and you get n^2 performance and value. Over the last thirty years, the number of transistors on a chip has doubled every eighteen months, yielding a millionfold rise in cost-effectiveness. Today's multimillion-dollar supercomputers inexorably become the pocket appliances of tomorrow.

This computer technology is now converging with communications technology. Networks feed on the law of the telecosm: Take any number n of computers and connect them in networks, and you get n^2 performance and value. The advance of networks is now even faster than the onrush of computing power.

Over the last five years, the network of networks known as the Internet has grown at a pace of 15 per cent a month; it now reaches some 20 million computers. The spearhead of the new era is electronic mail, on the verge of expanding to video or multimedia mail. When last estimated, there were 42 million active users of electronic mail around the globe, including nearly 30 million in the U.S., but the numbers were rising too fast to trust.

Within the next ten years, this explosive technological advance in both networks and processors virtually guarantees that the personal-computer model of distributed intelligence and control will unseat the emperors of the mass media and blow away the TV model of centralization. The teleputer—a revolutionary PC of the next decade—will give every household hacker the productive potential of a factory czar of the industrial era and the communications power of a broadcast tycoon of the television age. Broadcasting hierarchies will give way to computer heterarchies—peer networks in which the terminals are essentially equal in power and there is no center at all.

WHEN the center cannot hold, one might wonder, with Yeats, "what rough beast . . . shuffling its slow thighs . . . slouches toward Bethlehem to be born." It is centralization, however, that feeds the monsters of mobocracy and the mobcult of television.

Disguising this tendency for many years was the persistent influence of TV's sources in the more local and specialized culture of books and theater and the moral capital of an era before

Encounters in Cyberspace

A sampler of postings from the NR/*Heritage network Town Hall, selected by Brenda Becker.*

From BBECKER
04/10/92

Mike reports having been dubbed by a college professor as "to the right of Heinrich Himmler." I was dubbed by a former boss as "to the right of Genghis Khan."

So, an informal survey: Whom have you been placed by ideological adversaries to the right of?? The answers may make an interesting rogues' gallery, not to mention a curious collage of what liberals picture as "conservative" . . .

From KKUSHNER
04/10/92

When I was in graduate school in Texas, I was described as "to the right of Mengele"; I was also described as a "self-hating traitor to the gender" because I refused to acknowledge that George Gilder was the Anti-Christ for writing (I think) *Sexual Suicide.*

From GHOPP
04/11/92

How about "to the right of Attila the Hun"? I still think the best thing that happened to the Anglos was an influx of moderate Saxons in circa 450. (grin)

From BSARACINO
04/12/92

My two proudest have been Torquemada and Pius XII . . . and well, if I am, someone's got to be . . . right?

From BBECKER
04/12/92

I suggest we start a line of T-shirts depicting all our "to the right of" candidates . . . printed on the left side of the shirt so that the wearer would literally appear to be to the right of the nefarious character. Surely the hottest selling item since the Adam Smith necktie!


Have you ever studied with a classmate thousands of miles away?
YOU WILL
In the near future you'll share your classroom with students thousands of miles away.
Using powerful, two-way sound and video hook-ups. That will let you study with anyone who shares your interests. No matter where they are.
The world-wide classroom.
The company that will bring it to you is AT&T.
AT&T
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mass media. Nonetheless, any broadcast medium, appealing to miscellaneous crowds at a single time, ultimately must reduce its audience members to their lowest common denominator of tastes and responses.

What do we have in common? Well, we share a number of ideals and aspirations. But we share them in different idioms and accents. A richer and easier target by far beckons to the programming entrepreneur in our prurient interests, our morbid fears and anxieties, our ambivalent dread of violence and suppressed longings for it, our hunger for sexual images and fantasies, all the undertow of lusts and rages and derangements that it is the prime goal and glory of civilization to overcome.

This means commercial television is necessarily the enemy of civilization. If it tries to target special human interests and aspirations, TV must ultimately fail. In any particular crowd of viewers, there are not enough high-church Catholics, or ham-radio hobbyists, or quantum physicists, or rose gardeners, or libertarian intellectuals to sustain a program. To reach an adequate market, mass broadcasts almost necessarily must pander to prurient interests and morbid fears and anxieties.

Check into a hotel in America today. There on the bureau is the inevitable TV and the nearly inescapable Spectravision box. Some 37 channels of miscellaneous midden, 6 "blockbuster" movies, and 2 offerings of hard- or soft-core porn beckon the tired traveler. The Hollywood hits begin at inconvenient times and end deep into the night. The 37 channels are all in progress and none are just what you want. Zapping through the gauntlet, you tend to stop at the most arresting images—the smoking gun, the hurtling car, the nude breast, the crashing fist, the splash of blood. Even the eloquent Republican congressman on C-SPAN discussing the flaws in the financing scheme for Clinton's health-care plan may well not suffice to pull you away from the arms of Miss April on the beach in Aruba.

Any mass-media or broadcasting regime rides an inexorable gradient toward the gutter. But by changing radically the balance of power between the distributors of culture and the receivers of culture, the teleputer will forever break the broadcast bottleneck. Potentially there will be as many "channels" as there are computers connected to the global network. In essence, this means one channel for each person, which he himself programs and controls and which always offers his very first choice. The creator of a program on a specialized subject—from Canaletto's art to chaos theory, from GM car transmission repair to cowboy poetry, from Szechuan restaurant finance to C++ computer codes—will be able to reach everyone in the industrialized world who shares the interest. Artists will be able to command a large audience without catering to lowest-common-denominator tastes.

People in a crowd, as Ortega y Gasset explained in his masterpiece, *The Revolt of the Masses*, are mostly boobs. But in their first choices—in their individual tastes, hobbies, career aspirations, educational goals—people show huge diversity and higher refinement. Of course, individual tastes and interests can also veer toward the depraved and self-destructive. There is no doubt that this fare will thrive on computer networks as it does in today's mass media; sin and perversion we will always have with us. But the key to the culture is not its perversions but its aspirations and opportunities for distinction. By refracting the mass media into myriad media, the teleputer will open the way to floods of new programming.

Those who think that there are too many channels already should imagine entering a bookstore with just 37 or 50 or even 500 books and magazines. In a bookstore, in contrast to a TV, you do not expect to settle for what is on the counter; you expect to get your first choice. Not only would the sparse bookstore normally fail to give you your first choice, it would offer an extremely misleading notion of American print culture.

To understand the future of computer culture, one need only contemplate one of the new super-bookstores such as Books-A-Million, Borders, or Barnes & Noble, which are rapidly gaining market share in the book trade. Or as Bill Gates has suggested, imagine "a Library of Congress" where all the publications are instantly and randomly reachable from your desk.

In variety, morality, and substance, the first-choice arena of text culture differs radically from reductionist broadcast culture. Some 55,000 new trade books are published every year, together with many thousands of magazines and other publications. About half the trade-book market is religious books, a $2.5-billion business. Over the last several years, for example, some 1.3 million copies of the Christian novels of the nineteenth-century Scots novelist George Macdonald, who inspired C. S. Lewis, were sold in America. Beyond religious and inspirational literature, science tomes, technical manuals, career education, and a variety of literature—from porn to piety—also sell heavily.

The best-seller list is not a good index of the real book culture of America. Much of it is an offshoot of Boobissimus. Half the nonfiction best-sellers are written by or for TV and movie stars who gain monopoly rents because of the capital costs and distribution bottlenecks of old media technology. Moreover, the best-seller lists entirely omit the religious books that account for half the market.

THE NEW multimedia culture will afford a huge new range of variety. Teleputers will allow many of the fifty thousand screenwriters who now queue up before the Hollywood bottleneck instead to reach substantial audiences around the world not by pandering to mobs but by appealing to special interests and passions.

Providing a harbinger of the change is talk radio. The most important development in politics since the retirement of Ronald Reagan has been the rise of Rush Limbaugh, whose heroic energy and forensic flair have transformed AM radio into a counterforce to the monolithic liberal dominance of TV. In a primitive form, talk radio has three of the features that the teleputer will soon lend to multimedia and video: interactivity, low costs, and numerous local outlets.

The impact of information super-

A HEALTH CARE REFORM PROPOSAL

If the time has come for a federal health care program, why not pattern it after Social Security? It is far and away our most popular government program. To emphasize the similarity to Social Security we could even name the new program Medical Security.

Social Security is really a very simple program. Congress sets the amount of the old age pension and levies a payroll tax just sufficient to pay for the pensions. The Social Security Administration keeps the records and sends out the pension checks. I propose that Medical Security be handled the same way. Congress sets the medical benefit, levies a payroll tax to pay for it and the Social Security Administration sends a check to every American (man, woman and child), on his birthday. It is very convenient that Social Security already has the name, address and date of birth of most citizens.

Before considering the Medical Security program in more detail, let us reflect on what people want from health care reform. Many people in Washington think we want the government to manage our health care. What we really want is to divorce our medical care from our jobs and give all Americans access to complete medical care. These politicians have forgotten that Social Security does not spend our old age pensions. They simply mail the checks; and since our senior citizens paid the Social Security tax all their working lives, they do not think of their pensions as government charity. Under Medical Security we can do for medical care what Social Security has done for old age pensions.

Setting the amount of the Medical Security benefit is a political decision to be made by Congress. We can, however, make a reasonable estimate of the amount of the benefit. The cost of medical care is strongly dependent on age and the amount of the benefit would have to vary with age. For people over 65, we have firm data, since the 1995 budget allocates $152 billion for Medicare. This comes to $4200 for each person over 65. Younger people have lower medical costs but exactly how much lower is difficult to assess. One clue is that Tennessee pays $1300 per person to insure Medicaid patients with private insurance companies. I suggest that for our example we choose the more conservative estimate of $1700 per person under 65. This would result in a national average benefit of $2000 per person.

Based on this average cost of $2000 per person, the total cost of Medical Security would be $480 billion. Fortunately, we can start with the $242 billion in the 1995 budget for Medicare and Medicaid. These programs will be terminated with the beginning of Medical Security. The remaining $237 billion can be raised by increasing the payroll tax on employees from 7.65% to 11.4%. Employers will have an identical increase in their payroll tax. The net effect on labor cost will be an increase for employers who do not furnish a health care benefit. Those who do give health care will have a lower labor cost because health care can cost as much as 12% of payroll. It is clear that Medical Security will level the playing field for employers in the area of health care.

In summary, Medical Security will provide an annual check to every American on his birthday. The amount of the check will vary with age, but will average about $2000. This should be sufficient to purchase medical insurance coverage at least as complete as Medicare plus prescription drugs. The Social Security Administration will mail the benefit checks so no new government department will be needed for Medical Security.

The Medical Security program includes the things people want most from health care reform while it avoids the disadvantages that seem to be inherent in all socialized medicine programs.

1. It is universal. Every American will receive enough money to purchase first class medical care.

2. It is portable. Medical care will no longer be dependent on where we work or where we live.

3. It allows freedom of choice. Each individual can choose his doctor, hospital, pharmacist and insurance plan. Those who object to medical care on religious grounds will not be forced to pay for it.

4. It avoids the rationing and delay of medical care that are found in Canada and England.

5. It avoids having the government mess with the best medical care in the world.

Leo B. Clougherty
Box 36
Harbor Beach, MI 48441

highways will be vastly more powerful. Within the next five years the entire American economy is going to be reshaped around these new digital networks. Telecommuting, teleconferencing, telemedicine, teleputing will change from buzzwords into the basic fabric of business and life.

In politics, the teleputer will break the bondage of public opinion. As Walter Lippmann showed some sixty years ago, public opinion is mostly a myth. People do not truly hold enduring opinions on most of the subjects on which they are surveyed. Unlike votes, opinions are not even remotely equal, as polls assume. Knowledgeable views are incomparably more significant than the statistical figments of bogus majorities. On most issues, the public en masse possesses not opinions but impressions. Evoked by the media in league with politicians, these impressions are echoed by the pollsters' questions, which therefore tend to trigger the desired response. Ross Perot's instant-TV interactive-town-hall concept was a virtual parody of existing mass politics, keeping the most crucial power—the definition and framing of the issues—in the hands of the czar of the net.

Encounters in Cyberspace

These postings were made during the L.A. riots.

From JMAYER
05/01/92

It is starting to look like Beirut here tonight. Non-stop TV news coverage . . . Seems like the looters are driving around with TVs in their cars, and when Channel 2, 4, 5, 7, 11, or 13 calls out another location, boom! the place becomes a circus. . . . The City of L.A. is under a dusk to dawn curfew, but the newscopters show lots of cars driving around, and looters everywhere.

From DSKINNER
05/01/92

Tonight's *MacNeil/Lehrer* was a dilly. Their conclusion was basically the country is a fragmented mess—mostly the fault of white intransigence.

From the reactions I experienced at work, I think people are not going to buy the old '60s line of collective responsibility. Most seemed to clearly identify the actors in this morality play and their roles. Most seemed to understand the nature of the violence and its total disjunction from "oppression." But when I got home and flipped on the tube, there was Jim Lehrer, still peddling the old wares . .

From KKUSHNER
05/01/92

Nothing justifies what has happened in L.A. . . . But as conservatives, we have to take a good hard look at WHY there is so little regard for the rule of law, WHY it is widely assumed by so many that trial by jury will not result in justice, and WHY a large segment of the urban population seems to feel that the authorities to whom the monopoly use of force has been granted fail to exercise the responsibility that should accompany such a monumental grant. Pointing fingers at posturing clowns does not get us out of this one.

From BBECKER
05/01/92

King's a sleazeball, and as Terminator says, "He'll live." But the IMAGE OF COPS BEATING A PRONE BLACK, IN A LEISURELY MANNER, is as charged as pinning a yellow star on a Jew. It is electric with painful resonance. But not, of course, for the looting a**holes, who probably couldn't spell "Martin Luther King Jr.," much less quote him.

From DGILMORE
05/02/02

My feelings on the black anger and resentment?

They really rage at that which they cannot reach—our hard hearts. It isn't the govt's indifference to them, it's our own (personal) indifference that should be assailed. Most of us who have ideas and resources which could be used to help make a difference simply do not have them and their misery on our list of priorities. They cry racism but could rightly use the words selfishness and indifference.

TV will soon expire and transpire into a new realm of real communities rather than reductionist masses and majorities. Using the on-line services that link to the increasingly global Internet, people no longer have to look for love, affinity, or political allies in all the wrong places. Perhaps as an omen, Limbaugh is said to have found his new wife on Compuserve. On the *NR*/Heritage Town Hall, conservatives can communicate with others across the country and around the world. They need restrict themselves no longer to the group at the pub or the park or the families at a local church.

The Internet has already made this era a golden age of letters. The future of media will see the further ascendancy of the word. As screens improve their resolution they will increasingly compete with paper as a high-contrast, flicker-free vessel for text. Great cities will hollow out, as the best and brightest in them retreat to rural redoubts and reach out to global markets and communities. The most deprived ghetto child in the most blighted project can escape the local demagogues who hold him down and can gain educational opportunities exceeding those of a suburban preppie today. Families will regroup around the evolving silicon hearths of a new cottage economy.

Contrary to reductionist polls and media, conservatives already dominate the real culture of the society. Conservatives account for some 80 per cent of the entrepreneurs who generate the overwhelming bulk of the nation's wealth and pay the huge majority of taxes. Conservatives account for perhaps two-thirds of the married men whose labors in the provider role are the productive heart of the national economy. Liberals dominate the parasite classes—the broken families, the litigious Left, the hedonist criminals and pushers, the educationist child abusers, the Planned Parenthood condom hawkers, the guilt-ridden heirs, the bureaucracy pimps, the foundation flakes, the mush peddlers of the academy and the welfare state, and the pied pipers of the mass media.

TV has substituted the values and visions of Washington and Hollywood for the real facts and faiths of America. Intellectuals have so forgotten how real cultures and communities work that they often confuse the passive experience of being in a mass audience with the active experience of partici-

pating in a real community. Thus, on the basis of evidence from the tyranny of television, they sink into pessimism about the future of democracy.

Ken Auletta declares that the networks are all we have as a "national church." In a sense he may be right. But it is a bogus church that reduces its worshippers to boobs. As Richard Vigilante answers, conservatives should "thank God" for the chance to disestablish this false church and restore the real life of Americans. Participation in a community is not a passive posture; it is an active commitment. The computer culture will blow away the façade of TV and allow the conservative Americans who sustain the economy once again to realize that their private lives make up the real culture of an America that can survive and prosper. □

Traffic Jam

WILLIAM LETWIN

WHEN Vice President Gore unveiled his scheme for an Information Superhighway, to be built with aid from the Federal Government, applause broke out all over. Everybody likes information and superhighways, so what could be better than a combination of the two? Since its birth in January, Gore's scheme, charmingly described as a "new policy vision," has attracted less criticism than any of the Administration's big initiatives, and much less than it deserves.

For one thing, the scheme silently and wrongly assumes that the U.S. as yet lacks an information superhighway. In fact the country is already covered by a network of information superhighways that carry great volumes of sound, data, and images from anywhere you can mention to anywhere else. The core of that network is made of optical fiber (which transmits information by pulses of light), augmented by co-axial cable, radio links, and satellite links. It belongs to private companies, which built it without government subsidies. So two questions spring to mind: Why should the existing information superhighways be upgraded to super-superhighways? And why, if upgrading is desirable, should the government invest taxpayers' money in it?

The argument in favor of upgrading is that the new network will be able to move information faster and more widely. Moving information faster presents no technological problem. Optical fiber is like a pipeline: the broader it is, the faster stuff will flow through it. But the problem with a speedy information superhighway is just like the problem with a real superhighway: your car belts along the beltway until it hits the inevitable traffic jam on the side streets.

In the information network, the crowded side streets are the so-called local loops, the pairs of thin copper wires that connect the phones in most homes and workplaces to the telecom superhighways. Local loops can carry voice and digital data but cannot carry information that comes in larger lumps, such as television or high-resolution images. The obvious way to cure that difficulty is to replace the copper-wire pairs with optical fiber. That is quite a project for a country with a hundred million or so residential units and another hundred million offices, factories, and places where people work or gather. At a conservative esti-

Mr. Letwin is the author of The Origins of Scientific Economics.

mate, laying fiber to all those places would cost about $50 billion. The less obvious cure is to attach a clever computer to each copper-wire pair; this solution is in the experimental phase and nobody yet knows whether it will cost any less than installing cable to the house. Be that as it may, widening the main pipelines will be largely wasted if in the end the flow is blocked by tiny funnels.

Now, assuming as I do that suppliers of information services will make the necessary investment if they believe that users will pay the cost, why should the government invest large sums to subsidize research and development? The clear answer is that it should not. When a government provides R&D grants, it cannot avoid choosing among competing applications. But there is no reason to suppose that government officials are especially skilled at "picking winners," and there is solid evidence that they often pick big losers. The British government's enormous investment in the supersonic airliner, Concorde, is one example; the Japanese government's investment in developing bigger mainframe computers just when they were being driven into extinction by minicomputers and personal computers is another [see "Let Freedom Ring," p.45]. In the absence of government intervention by selective funding, competition among companies filters out the less satisfactory solutions, and the cost of failure does not fall massively on taxpayers. The sweetener of public investment in the Gore package should be rejected as worse than useless.

GORE'S superhighway would be able to deliver to every American something like a million times more information than she or he gets now. That would certainly solve the Freedom of Information problem. Every evening every citizen could get a copy of every piece of paper generated that day in every government office. In a flood like that, people would drown. Being informed is a matter not of having loads of information but of getting just the relatively few bits one wants; quality rather than quantity is what counts. Even with the data banks that are easily accessible today, the art of constructing them and using them is the art of selection, or, as the experts say, of "retrieval." Roughly speaking, the more information you get, the harder it is to use. Besides, a lot of what passes for information is either misinformation or disinformation. So Gore's package should carry a surgeon general's warning: "Excessive information can injure your brain."

But, of course, Gore's package is not really about information. It is really intended to usher in the brave new age of "interactive multimedia services." Described pedantically, a multimedia facility can transmit sound or pictures or text, or any combination of them, down the same line into a television receiver or computer. Described poetically, multimedia will mean videophones, shopping by phone (with the TV screen showing you models wearing the clothes or sitting on the chairs you're thinking of buying), and any number of similar marvels. Of course multimedia is really a new name for products as old and common as talking pictures (formerly "talkies," now "movies") or television.

More novel and exciting is the notion of interactive multimedia services. This means simply that the person receiving a multimedia service, no longer a passive spectator, can answer back or even take charge of the performance. In one unsophisticated version, the "computerized corner shop," the screen shows pictures of today's fruits and vegetables, and the customer places an order by touching the right parts of the screen. In a more sophisticated version, Sega's "Double Switch," a film starts and the viewer is then able to alter the plot to get the desired outcome. Many more applications of interactive multimedia services are being devised, and some of them will inform, amuse, or educate enough willing buyers to become commercially successful. But that is still a long way off. Because it is, the Gore super-super is a highway too early.

Yet there is one part of the Gore package that is well worth endorsing: the part that will remove the present legal and regulatory barriers to open competition in telecom markets. Those barriers, some erected by the Federal

Encounters in Cyberspace

From GBOYLE
07/08/94

The advantage Jack Kemp holds over his rivals for 1996 is his undeniable capacity to reach and deliver constituencies that vote Democrat, but receive little in turn. His combination of market-oriented social policies and growth-oriented fiscal policies is what keeps him a contender.

But it seems he does suffer from a public perception that persists over eight years. In works in two ways: Either Kemp is a highly intelligent and informed candidate who overwhelms voters with his detailed policy proposals and intense sense of the positive role government can play; or he is (as some Town Hallers put it) "soulless" . . .

Speaking for myself, I find it odd that Kemp has never understood or grappled with the distrust many conservatives have for him. I suppose it is significant that he is never aggressively critical of his conservative fellows. But some observers worry that because he doesn't resolve these persisting public perceptions, he lacks sufficient resolve to be a successful candidate.

From: GGILDER
07/08/94

Kemp believes Republicans can retrieve a number of blacks from the liberal plantation (95 per cent Democratic vote) by the ingenious use of government programs to give them a sense of property and responsibility, as Margaret Thatcher did in Britain, turning a nation of public dependents and Labourites into homeowners and stockholders.

Like most government programs, Kemp's were mostly debauched in the effort to get them passed, so virtually none of them work even to the small degree they might have. But Kemp has managed the amazing effect of generating high enthusiasm among blacks, to the extent that he might achieve a dramatic raid on the Democratic base while dissolving some of the racist bitterness and paranoia that now afflicts so many blacks, even in the middle class. This campaign has driven Kemp to some rhetoric and programs that are offensive to me, and to other conservatives, but his overall purpose and philosophy are resolutely on the Right.

John C. Dvorak

The Information Cow Path

Yellow Brick Road

I've been running around the country doing radio talk shows to plug my book, *Dvorak Predicts* (gratuitous plug intended), and what do you suppose is the most commonly asked question? "What the heck is the so-called information superhighway?"

I tell them it's a crock of bull cheese dreamed up by the vice president that has somehow become synonymous with the Internet. The result has been a lot of confusion, a booming Internet, and an even more booming business in books about the Internet. If the Internet is the information superhighway, then we're all in trouble. By allowing every Tom, Dick, and Harry access, the Internet will become the central clearinghouse for hate groups, neo-Nazis, Communist wanna-bes, sick cults, spies, and kiddie-porn activists. It's not close to being out of control. It *is* out of control. But golly, information should be free, so I guess it's okay, huh?

We have no information superhighway because the phone companies have been sitting on the technology needed to digitize the phone network: ISDN (Integrated Services Digital Network). Thanks to a curious antidigital mentality in this country (has anyone but me noticed this?), we have yet to see digital phones, television, or radio.

So recently I was sitting down with some executives from Pacific Bell who were pooh-poohing ISDN. "It's not what you want; you want broadband!" "You mean broadband ISDN?" "No, just broadband." "You mean ATM, the asynchronous transfer thingamajig technology that's the rage?" "You got it!"

Oh, right. When will I get broadband at my home? In the year 2150? My account representative tells me, "Your area is scheduled to get ISDN in the fourth quarter of 1996." I'm smack-dab in the middle of the San Francisco Bay Area, 2 miles from one of the largest universities in the world, and I'll get ISDN at the end of 1996? I can't imagine when it's scheduled for the outskirts of Bakersfield, California. Oh, I'm looking forward to getting broadband. Yeah, maybe my grandchildren will get it.

Pacific Bell execs tell me I can't get ISDN until the end of 1996. Are they nuts?

Folks, the experiment to deregulate the phone companies is over! The idea was to create competition through deregulation. What competition? Where can I get ISDN other than from Pacific Bell? I can call U.S. West to ask for ISDN in California. But in my experience, those people have never heard of ISDN.

These systems should have been in place countrywide by now. Pacific Bell is working on all sorts of multimedia projects and trying to find a way to compete with cable TV. It's spending money on a zillion non-phone-related projects such as electronic delivery of video games and movies. I want ISDN. Phone companies weren't deregulated so that they could open up supermarkets and shoe stores. They were deregulated so we'd get better service.

I subscribed to the deregulation philosophies of the last decade. And I think they taught us all a lesson. Public utilities have to be regulated by smart committees with foresight. Maybe over time these committees get filled with lackeys and stooges and degenerate into flocks of yes-men. Maybe it's good that deregulation breaks up this parasitic relationship. But now we can regulate anew with fresh blood.

ISDN implementation is the key to the information superhighway, and the current implementation is pathetic. If the phone companies were told to do it (or else!), we'd all be linked digitally already. This would give us a competitive edge over the rest of the world. Instead, we have a mess. Phone companies are experimenting with electronic delivery of games. Communication is more important than games. Somebody better tell them soon.

Illustration by Joe VanDerBos

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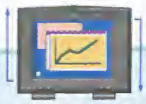

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Modem Operandi: Info Highway Gets Heavy Traffic in Right Lane

Continued From First Page

cept in which computers were used to build vast mailing lists of sympathetic citizens, generate regular letters to them and rouse them to donate money to causes.

Just as that high-tech light was going on over conservatives' heads, another new technology offered them a way to address their longstanding complaints that TV-network news has a liberal bias. That technology was cable. Pat Robertson and Jerry Falwell launched shows and eventually an entire network carrying a political as well as a religious message. And conservative commentators such as Robert Novak and Patrick Buchanan established early homes on cable.

"By and large conservatives have been cut out of mainstream TV," argues Burt Pines, a former journalist who is vice chairman of National Empowerment Television. "Conservatives . . . had to find other ways of communicating."

That need became more compelling in 1993, when Republicans lost the White House bully pulpit. That's when National Empowerment Television began taking shape. Mr. Weyrich, head of an advocacy group called the Free Congress Foundation, had a small-scale operation to produce periodic TV programs for satellite broadcast. In March 1993, he summoned his small staff and announced: "We're going to turn this foundation into a TV network, and each of you is going to have your own program."

Mr. Weyrich, who keeps a model of Genghis Khan's sword on his office wall so he can tell visitors he sits "to the right of Genghis Khan," reasoned that the C-Span public-affairs network had shown there is an audience for political programming. And in the coming world of innumerable cable channels, he thought, operators would be eager for political programming with a sharper edge.

Many were skeptical. Mr. Weyrich went to 63 conservative organizations, inviting them to sign on as "associates," meaning they would produce their own daily hour-long programs and pay a fee to have them carried on NET. Only nine groups, including the National Rifle Association and the U.S. Business Industrial Council, signed up.

Still, with the help of a $1 million grant from a committed follower, Mr. Weyrich radically expanded his television studio. He pieced together a lineup of original programming, including a weekly show with House Minority Whip Newt Gingrich as host, began selling conventional TV ads and hour-long "infomercials," and in December managed to begin a 24-hour-a-day schedule. Now NET estimates it is reaching 3.6 million households by satellite dish, and four to five million more by cable. The operation isn't making money, but Mr. Weyrich thinks it will eventually.

At the same time, Mr. Alexander was moving to launch his monthly satellite program, which takes the form of a televised town hall in which followers linked up by satellite dishes watch an hour-long discussion of some hot topic. Mr. Alexander admits he hopes the forum will help him launch a presidential bid in 1996.

Others are moving aggressively into computer networking. The joint Heritage Foundation-National Review computer forum, after a trial run as a free-standing service, is being reorganized and beefed up for launch on CompuServe in April.

And new conservative computer entrepreneurs are moving into the political world as well. One is 31-year-old Mark Shorman, an engineer and consultant who was looking for a way to "combine my two loves, computers and politics." He recently formed a company to produce the Conservative Daily, a computerized daily planner. Each day, it gives subscribers a conservative commentary and related cartoon, along with a more conventional daily calendar. It also contains an encyclopedia of statistics "that reveal conservatives are right" on a host of issues. Mr. Shorman plans to send subscribers new computer disks quarterly to update the calendar.

It is unclear how much effect all this information-age politicking will have. Some Democrats suggest that Republican and conservative TV shows amount to little more than expensive preaching to the choir. "As a priority in an election year, should you put that money into talking to people who are already for you?" asks Catherine Moore, spokeswoman for the Democratic National Committee. Still, Democrats are considering starting their own shows.

And in any case, there's no doubt that a lot more conservative messages are zipping around the country. Here are some images from just one day's stroll through the land of high-tech conservatism:

On the Republican Party's computer forum, an inquisitive GOPer trying to weigh in on the health-care debate pleads for help in finding the text of Sen. Dole's response to President Clinton's State of the Union speech. His query is promptly answered by a GOP staffer, who directs him to the forum's computerized library.

On the Rush Limbaugh computer forum, Rush's troops are egging on one another about the evils of gun-control laws. "How many more laws do we need?" fumes John, a Limbaugh fan. "Eventually we will have so many ineffective laws that the gun-control crusaders can push for a complete ban as the only solution."

On "Rising Tide," the weekly Republican Party program, GOP politicians are talking health care. Over on NET, the co-anchors of the nightly "American Family" show are bashing the Clinton administration for the way it has implemented Congress's instructions on gays in the military.

And Mr. Weyrich himself, the network founder and a onetime Milwaukee television reporter, hosts a viewer call-in program with guests including Vic Gold, biographer of former President Bush. Mr. Gold gets in a few shots at the "liberal media," and a caller from Syracuse, N.Y., allows that when President Bush raised taxes "I got so mad, I tell you I cried."

But the spirit of the technologically empowered conservatives seemed to be summarized best by a caller from Clarksville, Ark., who proclaims: "I thank God every day for NET."

Fire at Pacific Bell Center Halts Los Angeles Service

By a WALL STREET JOURNAL *Staff Reporter*

LOS ANGELES — An early morning fire in a Pacific Bell switching center disrupted telephone service yesterday in the downtown area and some suburban neighborhoods. Pacific Bell is a unit of **Pacific Telesis Group**, San Francisco.

The blaze, which took firefighters more than an hour to control, affected some long-distance calls as well as emergency calls to police and fire departments. As a precaution, helicopters flew over some suburban neighborhoods and fire engines patrolled streets to check for potential emergencies. Nearly all telephone service was reported back to normal by the afternoon.

The fire on the 13th floor of a downtown office building forced the evacuation of 50 people. Trading on the Pacific Stock Exchange wasn't affected.

Adobe to Acquire Aldus in Stock Swap For $515.8 Million

Continued From Page A3

all types of multimedia information.

"We looked at the fit, and the fit was perfect," said Mr. Warnock, who will lead the merged companies.

Charles Bigelow, a professor of digital typography at Stanford University, agreed that the two companies' product lines and technical teams should mesh well. "In terms of product array, it makes a really well-integrated company," he said.

Chuck Geschke, Adobe's president, will be president of the combined companies. Mr. Brainerd, who announced plans last year to relinquish the president's title at Aldus, will have no operating role, but he will join the combined companies' board. He also granted Adobe an irrevocable proxy for all of his shares, which total about 22% of Aldus's stock.

Mr. Warnock said the companies see several areas where they can cut costs, including operations in Japan, though he wouldn't disclose further details. The companies, which have 2,100 total employees, plan to keep separate facilities in California and Washington.

In Adobe's fiscal year ended Nov. 26, the company had net income of $57 million, or $1.22 a share, on revenue of $313.4 million. In 1993, Aldus earned $9.5 million, or 70 cents a share, on revenue of $206.7 million.

The merger will be put to shareholders of both companies at separate meetings in July, and is also subject to regulatory approval, the companies said.

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Trade Surplus Of Japan Widened During February

By JATHON SAPSFORD
Staff Reporter of THE WALL STREET JOURNAL

TOKYO – Japan's mammoth trade surplus widened in February, but economists say the news may not be as politically troublesome for Tokyo as it first seems.

For February, Japan's global trade surplus totaled $10.91 billion, 3.3% more than the year-earlier surplus of $10.57 billion. The imbalance, however, was smaller than the $11 billion or more that many private economists had forecast.

Moreover, Japan's politically sensitive surplus with the U.S.—the most vocal critic of Japanese trade policies – shrank for the first time in nine months. The trade imbalance with the U.S. narrowed 0.9% to $4.34 billion mostly because of a 15% jump in Japanese imports of U.S. goods. The performance was paced by a 24% increase in semiconductor imports, a nearly 10% surge for food products and a strong performance for airplanes.

Economists say the Clinton administration's backing of a weak dollar and strong yen policy has made it cheaper for Japanese consumers to buy foreign goods. "Japanese imports are soaring," said Michael Hartnett, an economist at Schroders Securities. "And that is exactly what the U.S. wants."

Japan's trade surplus with the U.S. accounts for roughly 40% of its total global surplus. But economists warned that the decrease in the trade imbalance with the U.S. provides little evidence that Japan's overall trade surplus is going to decrease anytime soon.

Indeed, Japan's surplus with the booming economies of Asia is growing sharply because of strong demand for Japanese goods, particularly construction equipment and plant machinery. Japan's surplus with Asia in February reached $4.7 billion, up nearly 11% from a year earlier.

And while Japan's imports may be growing quickly, they are still overwhelmed by the level of products shipped by the Japanese export machine. Japan imported $18.6 billion worth of goods during February, a 7% increase on the year. But Japan's exports totaled $29.5 billion in February, up 5.6% from a year earlier.

Many economists say a drastic narrowing of the global surplus will require a turnaround in Japan's slumping economy. Recent increases in imports notwithstanding, "domestic demand is still too weak to bring about a sharp surplus reduction," said Satoshi Shimamoto, senior economist at MMS International, a market-research firm.

Still, the narrower trade imbalance with the U.S. is the latest good news on the trade front, after policymakers successfully resolved a dispute over U.S. access to Japan's cellular-telephone market. The developments have Japan's stock market at a six-month high, and foreign-exchange traders have bid yen lower against the dollar by a full yen over the past two days.

Recent news suggests that a long-awaited economic recovery may finally be brewing. After a steady drumbeat of grim economic news over the past two years, agencies have released a few upbeat statistics in recent weeks showing factory output edging higher and strong housing starts. Meanwhile, Japan's Economic Planning Agency said that machinery orders in January rose 3.3% from a year earlier.

EU Clears Media Acquisition

BRUSSELS – The European Union Commission approved the joint acquisition of **British Newspaper Publishing** PLC by Spanish media group **Promotora de Informaciones** S.A., or Prisa, **Italy's Editoriale l'Espresso** SpA and U.K. newspaper group **Mirror Group Newspapers** PLC.

In a statement, the commission said the acquisition doesn't create competition worries because the Spanish and Italian companies operate on different markets to their acquisition, while the Mirror Group operates in a different part of the U.K. newspaper market from Newspaper Publishing.

THE

VOL. CCXXIII NO. 52 ★★★ EASTERN

Modem Operandi

As Politics Go Digital, Info Highway Traffic Is Heavy in Right Lane

Computer Forums, Satellites Air Conservative Agenda; Liberals Try to Catch Up

Software That Plays Hardball

By GERALD F. SEIB
Staff Reporter of THE WALL STREET JOURNAL

WASHINGTON — It's early morning, and you're a new-wave conservative girding for battle.

You flip on your personal computer and call up the Conservative Daily, a computerized daily planner that today offers a pithy antiabortion commentary and a cartoon to punctuate it. To get ready for the debate on the Clinton health plan, you cruise into the Town Hall computer forum for conservatives and pluck out the latest think-tank talking points trashing the administration's program.

For an invigorating lunch, it's over to the Rush Room in the Palm Restaurant in downtown Washington to listen to radio firebrand Rush Limbaugh and fax in a comment. Later, you share computerized post-show chatter on CompuServe's Rush Limbaugh Forum. After work, you relax at home by tuning your TV to National Empowerment Television, the new 24-hour conservative cable-television network.

This isn't a fantasy: It's the way conservatives are operating in 1994. Political operatives are rapidly discovering that the information superhighway carries big potential for power, both by making it easier for activists to link up and by allowing leaders to send them messages with electrifying speed. And it is conservatives who have begun moving onto the highway the fastest, well ahead of their liberal foes.

Hooked Up

"All this technology has been around for a while, but only now are people starting to use it effectively politically," says Lamar Alexander, a former Tennessee governor and Bush education secretary who now produces his own TV program. In Teddy Roosevelt's day, Republicans organized through community clubs, Mr. Alexander adds, but in the 1990s they will be doing it "in their neighborhoods hooked up by cable television."

And not just by cable TV but also by modem, satellite dish and interactive video. Michigan Gov. John Engler, an ambitious young conservative, has just started his own computerized forum on America Online. The Heritage Foundation and National Review magazine are launching the joint Town Hall computer network, where enthusiasts can talk and retrieve background papers and articles.

Interactive Dole?

The Republican National Committee last month started both its own computer forum and a weekly, hour-long TV show broadcast by satellite to 4,000 local GOP organizations. National Empowerment Television, which was started by activist Paul Weyrich, hopes to go interactive on an experimental basis within two years. If, for example, Senate GOP Leader Robert Dole were on discussing tax cuts, viewers could instantly vote on whether he should run for president, and also pull up a background paper on low tax rates.

"We don't even know what we've got," says Republican National Chairman Haley Barbour. "We're just starting to use technology in the way a lot of businesses and industries have been using it."

Of course, Democrats and liberals also are discovering this, too. The Democratic Party started a computer forum to dispense information before the GOP did, and faxes out 2,700 copies of Democratic talking points every day to followers. The Clinton White House uses computer networks to send out word of its policies and views and to take in mail from the public.

On-Line Pressure

Environmentalists and gay and lesbian activists have been particularly active. Gay-rights advocates are organized in a computer network called Digital Queers. And the National Gay and Lesbian Task Force just discovered the power of its forum on America Online. When First Interstate Bancorp in Los Angeles drafted a personnel policy that didn't specifically ban discrimination based on sexual orientation, the Task Force put out a computerized call to write and phone the company. Last month, First Interstate altered its policy. (A spokesman says the dispute arose when First Interstate, which had in practice banned discrimination, drafted a corporatewide policy based on federal antidiscrimination guidelines that don't specifically include language regarding sexual orientation.)

But overall, conservatives are "definitely" ahead of liberal groups, says Steve Barr, a 34-year-old California Democratic activist. He recently ran unsuccessfully for state party chairman by preaching a need to catch up. Now he is trying to do it on his own; he will be host of a Los Angeles TV show slated to be "an urban, progressive version of what Rush Limbaugh does, with an interactive element to it."

Conservatives are out front in this race largely because a combination of forces pushed them to the leading edge of technology in the 1970s and 1980s. Lacking the Democrats' advantage of a sympathetic labor movement with a national network of local branches, Republicans had long cast about for a similar organizing tool. In the 1970s, Richard Viguerie discovered one. It was direct mail, then a revolutionary con-

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Don't 'Protect' Telecommunications

By Thomas J. Duesterberg

The House Energy and Commerce Committee yesterday approved two key bills that, sponsors claim, will pave the way to the mythic information superhighway. The legislation, generally supported by the Clinton administration, is supposed to enable American business to stay ahead of the rest of the world in the products and services that will define the information age. As Vice President Al Gore said in his Jan. 11 speech before the Television Academy in Los Angeles: "By taking the lead in quickly employing these new information technologies, America's businesses will gain enormous advantage in the worldwide marketplace."

Unfortunately, a major provision of the legislation shows that some members of Congress are too busy looking in the rearview mirror to see the road ahead. By requiring telephone companies to produce their equipment domestically, Congress is succumbing to its propensity to protect existing jobs while neglecting the prospect of creating new ones.

U.S. Takes Technology Lead

U.S. business is already using newer information and communication technologies to solidify its world-wide lead in manufacturing and service productivity. We have, for instance, more than twice as many personal computers in use per worker as Germany and almost four times as many as Japan. The deployment of the latest technologies, including computer networking, broader access to data bases, more mobility in personal communications, and new interactive information services—which the legislation in Congress promotes—will enhance the overall productivity advantages of our economy even further.

As Mr. Gore reported in Los Angeles, we also have a lead in producing the equipment and services of the new information age—a lead that is translating into a rapid growth in our exports. Even before the entry of potential manufacturing powers like the Bell operating companies, American producers of cellular equipment, satelite systems, sophisticated switching and transmission equipment, and mobile personal communicators have pioneered world-wide production of these new technologies. We have, for example, increased our foreign sales of telephone equipment by 210% since 1989. U.S. companies now account for 90% of the world market in video conferencing equipment, and sell about 70% of all their microwave radio systems in international markets.

The bills now making their way through Congress would advance the deregulation of the telephone industry even further by allowing the regional Bell operating companies to compete in areas like long-distance service and equipment manufacturing—and newer services like video on demand and mobile personal communications. The legislation would also allow cable and broadcast companies to offer more services to the home. According to most knowledgeable observers, this would create more efficient companies, lower prices for the consumer, and facilitate quicker entry into the new age of the information economy.

Many in Congress simplistically see legislation designed to create the 'information superhighway' as yet another means of reducing the merchandise trade deficit.

Many in Congress, however, simplistically see telecommunications legislation as yet another means of reducing the merchandise trade deficit. A bill changing the regulatory structure of a giant industry provides an ideal opportunity for trade hawks fired up by the continuing dispute with Japan. So the leaders of the congressional effort to deregulate the telephone companies, most notably stalwart protectionists such as Rep. John Dingell and Sen. Ernest Hollings, have inserted a provision in their bills that would require the regional telephone companies to produce their products in the U.S. Foreign parts would be limited to 40%.

A close look at the data in the telecommunications field shows that Congress's concerns are misplaced and that the proposed solution would likely backfire by closing off opportunities for export expansion in the most dynamic parts of the industry. It would also undermine the substantial benefits of other parts of the bill.

In 1993, the U.S. had an overall trade deficit of about $1.6 billion in "customer premises" equipment, such as telephone receivers and fax machines. These are low-value-added and low-technology products. On the other hand, we have a trade surplus in most of the high-technology products and services. We had a trade surplus in 1993 in network equipment, such as central switches and multiplexing equipment. We also had a surplus in cellular systems, microwave systems and transmission equipment. We have about 70% of the world market in satellite communications equipment and 50% of the world market in ground systems to connect with satellites.

In other words, U.S. manufacturers are the technological leaders and suppliers of choice in the fastest-growing, best-paying and most-profitable sectors of the telecommunications market.

The problem with the protectionist provisions in the House and Senate bills is that they violate the rules of the General Agreement on Tariffs and Trade and the North American Free Trade Agreement. If they are enacted, as congressional leaders insist, the U.S. will be subject to retaliation under the rules of these agreements. The most likely targets of retaliation are the higher-technology segments of the industry, where the U.S. has superior products and significant market share.

Growth in the high-technology products and services is estimated by the Commerce Department at 15% or more per year, while shipments of customer premises equipment are declining by more than 2% per year. Undermining telecommunications liberalization is particularly unfortunate because the privatization of foreign telephone monopolies is providing an unprecedented opportunity for competitive U.S. suppliers. It would be counterproductive in the extreme to give Japan, the European Union and literally dozens of developing countries an excuse to shut U.S. exporters of high-technology products out of their markets.

This story, unfolding as we try to facilitate the birth of the information age, is reminiscent of the industrial era. Whenever politicians try to implement an industrial policy, they aid declining sectors.

Germany, often viewed as an exemplar for a new industrial policy, gives most of its subsidies to the steel, shipbuilding, railroad and coal industries, which is one reason the German economy is in such deep trouble. Japan, too, has bet wrong in areas like high-definition TV and the early introduction of digital standards in telecommunications, and consequently lags behind U.S. producers in those areas.

The Same Trap

Congressional advocates of the domestic telecommunications industry fall into the same trap by trying to rectify a trade imbalance stemming from the production of telephone receivers by endangering an incredible export growth opportunity in the more advanced segments of the industry.

To his credit, Trade Representative Mickey Kantor has signaled opposition to this provision in the Dingell and Hollings bills, even though the administration is often guilty of promoting protectionist industrial policy.

A more credible position would be for the White House to threaten a veto of this legislation if the protectionist elements remain. Otherwise, the bills will undermine the efficiency gains of deregulating the telephone industry and undo the considerable progress of Nafta and the Uruguay Round agreements.

Mr. Duesterberg is director of the Competitiveness Center at the Hudson Institute in Washington. He was assistant secretary of commerce for international economic policy from 1989 to 1993.

Aftershocks Jar Santa Monica's Rent Controllers

By Harold Johnson

SANTA MONICA—Two months have passed since the Southern California earthquake, but in this seaside suburb of Los Angeles, famed for a yuppie brand of collectivism that has earned it the nickname The People's Republic of Santa Monica, the political aftershocks show no sign of letup. The quake opened potentially crippling fissures in the system [illegible] which the ruling "progressive" [illegible] nize their power: [illegible] than draconian rent [illegible] years ha[illegible] cal ba[illegible] in a replacement structure: Between 15% and 30% of new units must go to low-income renters.

More than a few apartment owners are talking about collecting what insurance they can and throwing in the towel. Others aren't that lucky. "I've been ruined," a tea[illegible] Tabatabai said at a City [illegible] e other night. Before [illegible] migrant lived in [illegible]ing. Now it worst damage was to decades-old frame-and-stucco buildings that would have been replaced in the '80s had it not been for regulatory roadblocks.

Rents are based on the levels of April 1978—one year before the law took effect—with only slight annual adjustments that have kept prices at times 30% to 50% below market levels as reflected, say, in neighboring Brentwood. Landlords have found it next to impossible to win special increases to finance maintenance, so roof repairs, termite fumigation, and plumbing and wiring over[illegible] been widely de-1986); but landlords have to collect it—and carry the costs if a renter is late anteing up.

The establishment isn't going to let all this go without a struggle, and a determined effort is on to limit the number of rent-controlled apartments lost to the quake. Some landlords charged that in its desperation to shore up its electoral base, the city hierarchy was disturbingly eag[illegible] to get tenants back into buildings [illegible] questionable soundness. Officials [illegible] they're taking every precaution, [illegible] ney Carl Lambert, for one, sti[illegible] concern[illegible]

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Commentary/by John Carey

BIG BROTHER COULD HOBBLE HIGH TECH

Like some techno-Santa, President Clinton swept into office laden with promises for America's high-tech industries—and delivered on many of them. The White House boosted technology funding, eased export controls on computers, and laid out a vision for a national Information Highway.

But a funny thing is happening on the way to high-tech nirvana. Government defenders of law and national security are warning that the world is still too dangerous to give techies free rein. The Pentagon, which supported relaxation of export controls last year, has shifted back to a cold-war-like stance. The FBI, fretting that the Digital Age makes it harder to spy on criminals, wants expanded powers to patrol the Info Highway. And the National Security Agency is trying to suppress the use of virtually unbreakable codes by foreign terrorists.

These are all legitimate concerns. The problem is that the spooks, G-men, and generals have persuaded the White House to back initiatives in the name of law enforcement and national security that range from unfortunate to seriously misguided—and could hamstring the advancement of technology.

MONKEY WRENCH. Consider the latest scheme, the so-called digital telephony bill, an FBI proposal embraced by the Administration in early March. It would require that any new technology installed by communications common carriers permit the nation's watchdogs to eavesdrop on calls and electronic mail. It would also require phone companies to collect "setup" information—basically who is calling whom—on connections as they are made. As a result, agents could watch every move suspects make on-line, from shopping for clothes to breaking into data bases. "We're all for the Information Superhighway," explains FBI Director Louis J. Freeh. "We just don't want a superhighway without a cop on it."

But the current proposal goes too far. "It turns a system of communication into something whose purpose is surveillance," says David Banisar, policy analyst with Computer Professionals for Social Responsibility, an advocacy group. The FBI's past record of illegal wiretaps makes it hard to assume that the power won't be abused.

YESTERDAY'S ARMY SIGNAL CORPS: SPOOKS FEAR OBSOLESCENCE

What's more, the measure might even throw a wrench into the development of the Infobahn. Communications industry officials say that portable personal phone numbers are one innovation that could be stymied by the proposed rules. When the numbers are used on the road, the call can't be picked up by standard wiretaps on home exchanges. So phone companies would have to install cumbersome technology to reroute calls back to the home switch—or not offer the service at all. "The thrust of the bill is: If we can't tap it, you can't do it,'" complains David J. Markey, vice-president for government affairs at BellSouth Corp. "That will interfere with our ability to modernize the network."

Just as ill-advised are attempts to control encryption technology. Pushed by the NSA, the White House wants companies to adopt the "Clipper chip," a device that turns communications and files into nearly unbreakable code. The catch is that the feds can open a "trap door" and listen in. To encourage use of the chip, the Administration is blocking export of rival encryption systems. The net effect could be disastrous. The law-enforcement benefits are minuscule, since terrorists wouldn't code messages with the Clipper chip. And with equally secure systems available around the world, the export controls could end up costing U. S. companies up to $6 billion a year in sales, estimates the Business Software Alliance.

So why is the White House pushing the retrograde notions? One reason is the Clintonites' fear of appearing soft on crime and terrorism. "No one wants the head of the FBI walking around saying: 'I don't have what I need to do my job,'" says BellSouth's Markey.

Things aren't entirely bleak. The Administration, taken aback by vehement opposition from industry, Congress, and civil libertarians, is suggesting it may back off. "People are willing to work things out," says White House Staff Secretary John D. Podesta, who is involved in technology issues. FBI Director Freeh says he's willing to accept higher hurdles to get court approval for surveillance. And there are tantalizing hints that the White House is reconsidering its hard line on the Clipper chip. Such policy shifts would go a long way toward avoiding some serious bumps on the Information Superhighway—and restore Clinton to the techie's pantheon.

John Carey covers technology policy in BW's Washington bureau.

RESURGENCE OF THE SPOOKS

EXPORT CONTROLS President Clinton didn't relax export controls as much as computer companies had hoped, largely because of Pentagon fears that "dual-use" technologies could fall into the wrong hands

TELEPHONE PRIVACY Worried about crime, the FBI and the Justice Dept. are pushing legislation giving them unprecedented power to monitor private communications

ENCRYPTION TECHNOLOGY The White House wants industry to adopt a cryptography chip that would enable Uncle Sam to break coded messages, and it is blocking exports of competing systems

DATA: BUSINESS WEEK

PHOTOGRAPH BY THE BETTMAN ARCHIVE; ILLUSTRATION BY ALBERTO MENA/BW

AIRLINES

SKY ANXIETY

Faltering partners are shaking British Airways' strategy of global alliances

We're not your sugar daddy. That was the message British Airways PLC had for its U. S. partner, USAir Group, on Mar. 7. The British carrier, which has invested $400 million in USAir since last year, decided it wouldn't pay another farthing of a promised $450 million until the American carrier reversed its losses, which could total more than $350 million for 1994. Joint marketing and purchasing will continue, says BA Director of Strategy Roger Maynard, "but we're not sure we want any further investment."

Things do look grim for USAir, which suffers from high costs, fierce competition, and a total of $2.4 billion in losses since 1989. But overlooked in the turmoil is equally troubling news for British Airways. That carrier's network of global alliances, which have cost the carrier $1 billion so far, has gone awry. Each of its partners is weighed down by difficult labor negotiations, overcapacity, and unprofitable routes. The stalled strategy, forcing capital injections and write-offs, is already hurting BA profits. And BA's struggles offer a warning to other carriers bent on foreign romances of their own.

"CODE-SHARING." Under Chairman Colin Marshall, the $9.2 billion British carrier has concluded a clutch of deals since 1992 (table). Besides the USAir deal, BA has bought 49.9% of TAT European Airlines, France's largest independent carrier, and launched a low-cost German carrier, Deutsche BA. To serve the Pacific, it bought 25% of Qantas in Australia.

The big payoff is supposed to come through coordinating schedules and other tactics—especially "code-sharing." That's where a computer reservation system lists, say, a single BA flight from Cleveland to Rome but automatically books a passenger on USAir for the first leg of the trip, from Cleveland to a BA gate in Pittsburgh.

BA'S BRITAIN-TO-ASIA BOOKINGS ARE SOLID

So far, the costs to BA have far outweighed the benefits. Take France's TAT, a $330 million carrier. BA's stake cost it only $22 million last year. Yet TAT expects to lose $60 million in 1994. Part of the problem lies in a canceled contract between TAT and Air France, which resents BA's incursion. Worse, BA has had to inject $103 million in new capital this year to cover the losses and help TAT restructure.

The other legs in BA's global stool are shaky as well. Deutsche BA is losing money; BA won't say how much. Qantas lost $260 million in the year ending June 30, though BA expects it to show a profit this year. Air Russia, a venture between BA and some Aeroflot veterans, "has no immediate prospect of starting up," says Maynard, adding that BA's investment has been minimal.

It's good for BA that its core operations remain relatively strong. Thanks in part to healthy bookings on its flights from Britain to Asia, profits for the nine months ended Dec. 31 increased 31%, to $657 million. Revenues rose 13%.

Yet since early February, BA's stock, a winner in 1993, has dropped 14%, to some $6.18 a share. The market jitters reflect the tough stretch the carrier now faces in the U. S. Especially worrisome are government talks over the Britain-U. S. air-services treaty. BA's code-sharing rights with USAir expire Mar. 17., and both carriers are pressing for an extension. But U. S. Transportation Secretary Federico Peña is holding the extension hostage until Britain frees up more space at London's Heathrow Airport for U. S. carriers. And American Airlines Inc. Chairman Robert L. Crandall is lobbying the U. S. to scrap all talks and code-sharing extensions and start all over again.

EQUITY LOSS. Then there is the crisis at USAir. BA's toughness could shock the USAir unions into concessions. "If I were USAir, I would not be upset at all with BA's announcement," says Duff & Phelps Corp. analyst Robert Decker. "USAir can use it as a bargaining chip with labor." Perhaps so—but restive unions have been known to wreak havoc on U. S. carriers.

Such labor turmoil, as well as a loss of code-sharing, would seriously undermine the value of BA's USAir link. For now, executives at both airlines are confident this won't happen and that BA's vision of *ententes mondiales* will prevail. Says Maynard: "This is a long-term strategy. The whole purpose of the global alliance was to secure BA's future by the year 2000."

The pressing question is whether global alliances, anchored by equity stakes, can offer security in a turbulent industry. SAS lost its equity in Continental Airlines Inc. when the U. S. carrier filed for bankruptcy, while KLM wrote down its investment in Northwest Airlines Inc. A proposed alliance of KLM, SAS, and two other carriers never even got done. BA has plenty to do before it shows this much-battered strategy is a winner.

By Paula Dwyer in London, with Keith L. Alexander in Pittsburgh and bureau reports

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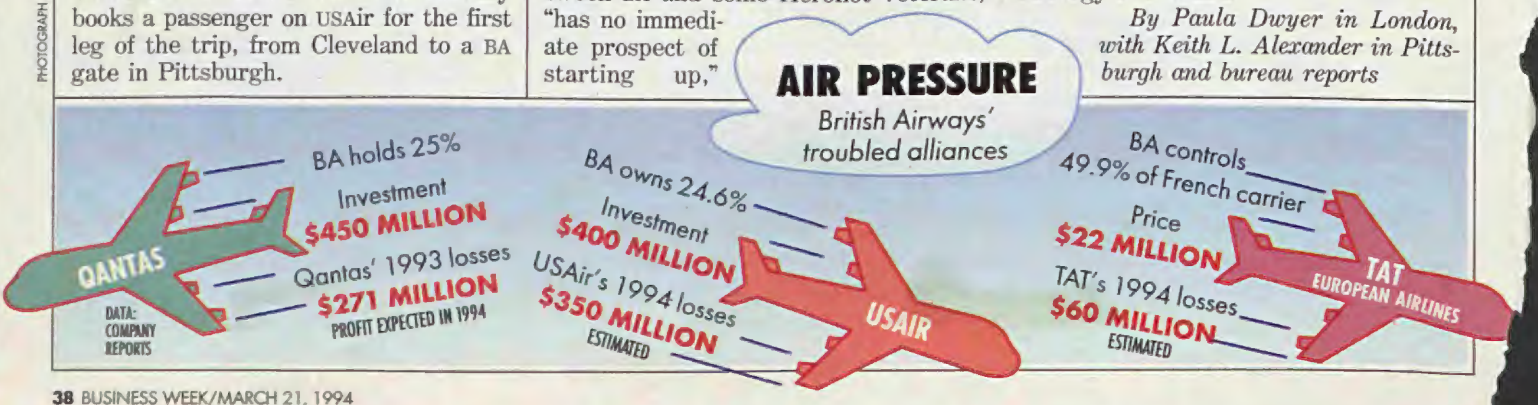

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TECHNOLOGY

THIS RECEPTION IS GREAT, BUT . . .

The U.S. edge in HDTV doesn't guarantee it a windfall

Americans are hepped up about high-definition TV. Zenith Electronics Corp.'s stock jumped 25% in the week after Feb. 16, when its transmission scheme was recommended as the new standard for HDTV. On Feb. 23, U.S. newspapers blared news that Japan's rival standard was faltering. Pundits cite HDTV as evidence that U.S. technology is staging a comeback.

But Americans are far from achieving a rout in the HDTV wars. To be sure, the technology, when it arrives in about three years, will offer crystal-clear pictures and sound. And the U.S. is the only country nearing completion of a system that sends signals in digital code for error-free manipulation and transmission. Europeans, in a nod to the U.S. lead, dropped work on an analog HDTV system last year. On Feb. 22, a senior Japanese official said the government was considering abandoning its analog system. That rattled buyers, though he moderated his comments the next day.

DOWN, NOT OUT: AN HDTV SHOWROOM IN JAPAN

TOUGH SELL. Setbacks abroad, though, don't add up to American dominance. The cable TV industry doesn't support the selection of Zenith's scheme, threatening a split in the standard. Besides, many of the profits from HDTV will go to foreign companies that build gear to the U.S. standard—among them, Sony, Philips, and Thomson, whose brands include GE and RCA. Japanese companies lead Americans in such critical parts as image-sensing chips for cameras and tubes for sets. Says Judson Rosebush, a New York producer of multimedia software who served on a Federal Communications Commission advisory panel on HDTV: "Americans should face up to the fact that the Japanese have them licked in many areas."

American HDTV, moreover, is likely to be a tough sell. The first sets will cost several thousand dollars. And if their screens aren't big, the improvement over today's better sets will scarcely be noticeable. Also, backers haven't spread the message about HDTV's advantages, such as the way it assembles digital data into packets. For instance, some packets could contain an auto ad, with others holding print data on the car, which a viewer could delve into with a click of the remote control.

The U.S. system of digital HDTV does have promise. But sales won't amount to much until the turn of the century, and even when they do, U.S.-based manufacturers aren't likely to be the big winners. Perhaps the corks should go back in the champagne bottles.

By Peter Coy in New York and Neil Gross in Tokyo

SPORTS BUSINESS

A TRIPLE AXEL FOR CBS SPORTS

A smash Olympics and coups in college football. What's the NFL?

The gloom is suddenly lifting a bit at Black Rock, the New York headquarters of CBS Inc. That's because even before Tonya and Nancy hit the ice on Feb. 23, CBS's broadcasts of the Winter Olympics were clearly a smash hit. Through the first 10 days, the Lillehammer Olympics averaged a Nielsen rating of 25—meaning that nearly 24 million homes tuned in each night. That's way above the 18.6 rating the network had promised big Olympics advertisers such as Campbell Soup, Chrysler, and Coca-Cola—to say nothing of outpacing the 18.7 rating CBS earned at the '92 Albertville games and ABC's 19.3 for Calgary in '88.

Surprise, surprise. Sports are far from dead at the Tiffany network. In January, after CBS lost its treasured share of the National Football League schedule to upstart Fox Broadcasting Co., the CBS Sports Div. seemed destined to shrink in every way: personnel, prestige, and revenue. Now, things are looking up—at least a bit. On top of its Olympics triumph, CBS Sports President Neal H. Pilson announced on Feb. 4 that college football would return to the network after a five-year absence. For a combined $150 million over five seasons beginning in 1996, CBS landed the Southeastern and Big East Conferences, which boast such prominent members of the crumbling College Football Assn. as Alabama, Florida State, Miami, and Syracuse.

SPEED SKATER BLAIR ADDED GLITTER TO THE TELECASTS

It's all part of a new, boost-the-bottom-line attitude at CBS Sports. During the go-go 1980s, when the network ranked third in the ratings, Chief Executive Laurence A. Tisch paid out billions for hot sports properties. Lately, though, such tactics threatened to cost too much: Given its higher overhead, CBS would have lost $200 million a year on the contract had it matched Fox's $1.6 billion bid for the National Football Conference, analysts figure.

And for now, the Winter Olympics' high ratings are giving the whole network a boost. With the Tonya Harding/Nancy Kerrigan saga and crowd-pleasing performances by skaters Bonnie Blair and Dan Jansen drawing viewers, CBS beat archrival ABC by 3.8 rating points during the games' first week. And CBS used the Olympics to plug its other programs with a vengeance.

Still, the network faces major challenges. The loss of the NFL will hurt. And, though CBS is still No. 1 in the overall ratings, its lead is slipping and it lacks hit shows. With luck, though, the network may soon manage something in sports programming that it couldn't while airing pro football: a profit.

By Keith Dunnavant in Atlanta and Ronald Grover in Los Angeles

(TOP TO BOTTOM) PHOTOGRAPHS BY CHARLIE COLE/SIPA; SIMON BRUTY/ALLSPORT

COLLAPSE ON THE INFO HIGHWAY

THE TCI-BELL ATLANTIC DEAL COMES APART ON A ROAD THAT SUDDENLY SEEMS PAVED WITH PITFALLS

Optimism. Just a month ago, when more than 2,000 media, cable, and telephone executives gathered at the University of California at Los Angeles for the immodestly labeled "Superhighway Summit," the optimism was as naked and unbridled as it gets. "This is no field of dreams," said John C. Malone, chief executive of cable giant Tele-Communications Inc.

MALONE: DID HE GET COLD FEET?

Or is it? Suddenly, everything has turned topsy-turvy. On Feb. 23, TCI and Bell Atlantic Corp. announced they had called off their $21.4 billion merger, potentially, the largest in U. S. corporate history.

After months of tense negotiations, the two companies say they were unable to hammer out a price for TCI. "New uncertainties in the industry made it clear to both of us that it was just impossible to come up with a final, fair value," says James G. Cullen, president of Bell Atlantic.

Chief among those uncertainties is the impact of a second round of cable rate cuts that the Federal Communications Commission passed on Feb. 22. The FCC voted to cut cable rates by 7%, atop a 10% reduction last year. TCI sources say the two cuts could cost it upward of $225 million a year in cash flow. That immediately cast doubt on the value Bell Atlantic originally placed on TCI—11.75 times projected cash flow—throwing the talks into chaos.

Just as the Bell Atlantic and TCI announcement galvanized Wall Street to the possibilities of the Information Superhighway last October, its collapse may chill investors on an infant industry that has generated huge excitement but has so far been more hype than substance. "It certainly raises questions about all the other deals," says John Tinker, a media analyst at Furman Selz. Observes Forrest Miller, vice-president for corporate development at Pacific Telesis Corp.: "The level of uncertainty got lifted a notch."

Well before Bell Atlantic's stunning announcement, investors were cooling on two other big deals involving cable-TV, telephone, and entertainment companies: Viacom Inc.'s acquisition of Blockbuster Entertainment Corp. and American Telephone & Telegraph Co.'s $12.6 billion purchase of McCaw Cellular Communications Inc. (table). Their fears have been stoked by everything from delays in interactive technology to increasingly prickly federal regulators.

Bell Atlantic and TCI are blaming their failure on the new government regulations. Despite rumors that TCI President Malone was simply holding out for a better deal, Cullen insists the talks broke down only because the companies couldn't project how the rate cuts would affect TCI's cash flow. "We were in agreement on virtually every single issue, except the final price," he says. Bell Atlantic Chairman Raymond W. Smith and Malone pulled the plug after six hours of talks in New York City on Feb. 22 and Feb. 23 that Cullen describes as "very positive" though "frustrating."

GOOD DEALS?

Even before the TCI-Bell Atlantic bust-up, the value of telecommunications mergers was plummeting

	AT&T-McCAW
DATE ANNOUNCED	AUGUST 16
VALUE OF STOCK DEAL	$12.6 BILLION
ACQUIRER'S STOCK DECLINE AS OF FEB. 22	14.2%
DEAL'S VALUE LOST	$1.8 BILLION

*CLASS B
**TOTAL OF CLASS A & CLASS B
DATA: BRIDGE INFORMATION SYSTEMS INC., GERARD KLAUER MATTISON & CO., BW

Behind the scenes, though, media executives say Malone and Smith were not seeing eye to eye on several issues prior to the FCC's announcement. According to one cable executive, Smith was far leerier than Malone about Bell Atlantic's ability to pay down the $9.6 billion in debt from TCI and its sister company, Liberty Media Corp., that Bell Atlantic would assume as part of the deal. Malone, this executive says, was more bullish than Smith about how much incremental revenue would come from the interactive-TV services that the merger was designed to promote.

Now, Bell Atlantic and TCI executives say it is unlikely they will return to the

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bargaining table. Instead, Cullen says Bell Atlantic will focus on upgrading its networks to handle video services. He says Bell may still team up with TCI to develop interactive services outside its home base. For its part, TCI says it's not interested in linking up with another Baby Bell. It will slash 1994 capital spending by $500 million, or 50%, because of the FCC rate rollback.

Such retrenchment doesn't bode well for Viacom, which hopes to merge with Blockbuster in a stock deal similar to the Bell Atlantic-TCI linkup. "We're reasonably confident that the merger is going to go through," says Viacom Chairman Sumner M. Redstone. He has a good reason to be cautious.

Blockbuster shareholders, who are being paid for their company in Viacom shares, are threatening to vote against the deal following a 39.9% drop in the price of the stock. And Blockbuster Chairman H. Wayne Huizenga hints that the terms may have to be revised, perhaps by issuing more Viacom stock. Wall Street has pummeled Viacom because of fears it is shouldering too much debt from its $10 billion acquisition of Paramount Communications Inc.

Viacom can argue that the merger would make it less dependent on cable revenue. But it must also battle a perception that the technology for interactive TV is further away than many first assumed. Last October, TCI fueled expectations by ordering 1 million state-of-the-art cable converter boxes from General Instrument Corp. Three months later, Malone pushed back the order by up to a year. TCI attributes the delay to difficulty in setting industry standards for such equipment.

Time Warner Inc. still hopes to offer similar interactive services to 4,000 customers in its Orlando cable system by the end of 1994. But outside experts say the project has also been hampered by an overly expensive converter box. Lynn Yaeger, a senior vice-president of Time Warner Cable, won't comment on specifics. But she acknowledges the project hasn't been trouble-free: "Anytime you use new technology, there are hurdles to jump."

Even after the technology wrinkles are ironed out, companies will have to contend with a Clinton Administration that—well before the FCC decision—had not lived up to its promise as the facilitator of America's Superhighway future. Take AT&T, which has been struggling for six months to complete its proposed $12.6 billion acquisition of McCaw. The U. S. Justice Dept. has asked a federal court to deny a legal waiver that would expedite the deal. Without the waiver, McCaw would have to sever ties with companies in lucrative cellular-phone markets that compete with AT&T.

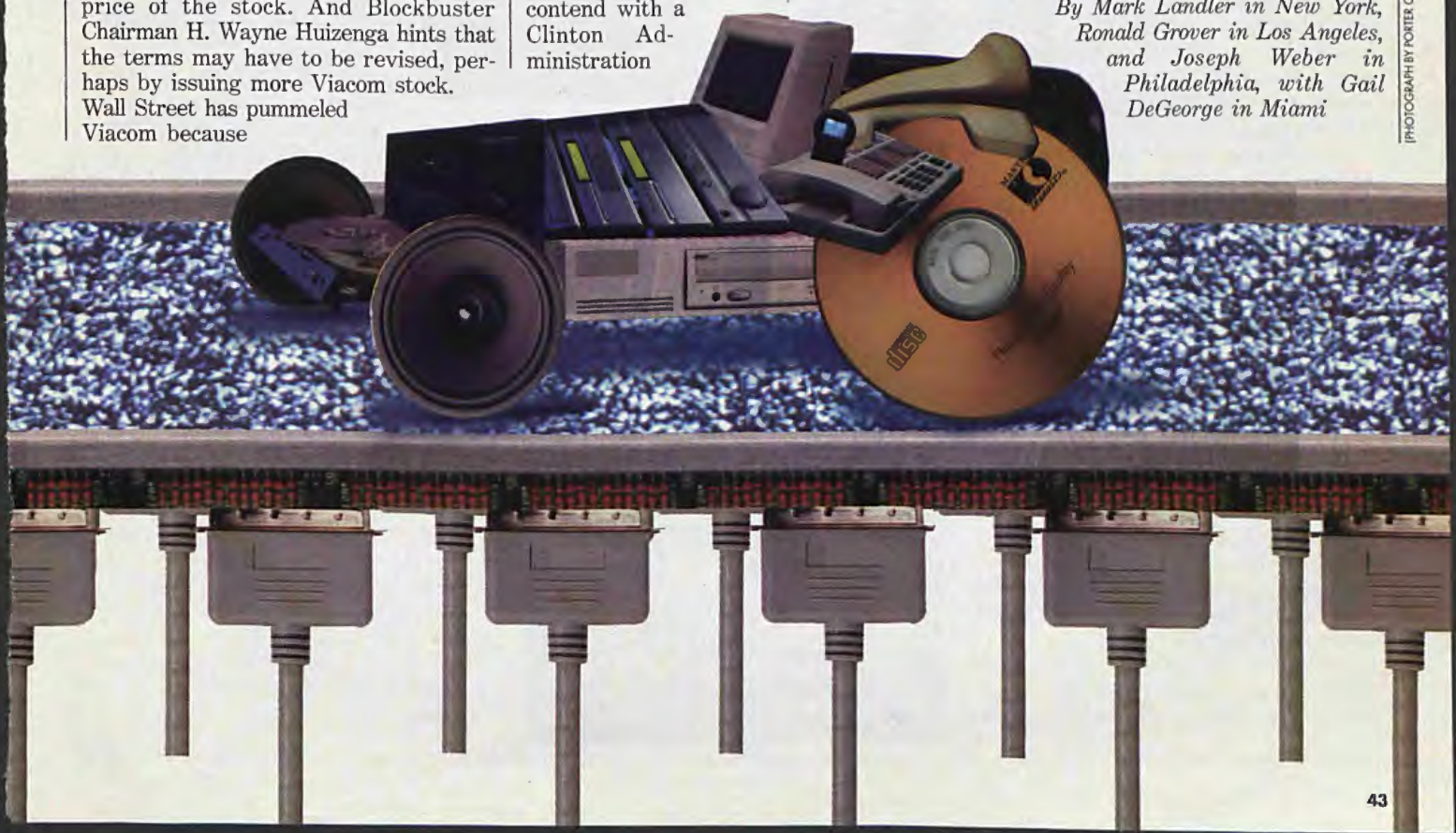
BELL ATLANTIC-TCI	VIACOM-BLOCKBUSTER
OCTOBER 13	JANUARY 7
$13.2 BILLION	$8.4 BILLION
11.2%	39.9%*
$1.5 BILLION	$2.8 BILLION**

SLOWER PACE. AT&T stock has dropped 14.2% since last August, reducing the value of the deal to McCaw by $1.8 billion. Analysts say Ma Bell has been hurt by fears of stock dilution and by Congress' considering rules that would allow Baby Bells into long distance.

Prior to the TCI bombshell, some analysts were saying that the drop in stock prices simply reflected a much-needed correction after months of overheated speculation about the Information Superhighway. "The fact is," says Robertson, Stephens & Co. analyst Keith E. Benjamin, "that many of these companies were bid up to impossible levels in the first place."

Now, though, the industry has to consider a darker possibility: that the unraveling of the Bell Atlantic-TCI deal will dramatically slow the pace of Superhighway construction. If so, Wall Street's recent skittishness may soon seem like a happy memory.

By Mark Landler in New York, Ronald Grover in Los Angeles, and Joseph Weber in Philadelphia, with Gail DeGeorge in Miami



[PHOTOGRAPH BY PORTER GIFFORD/GAMMA LIAISON; ILLUSTRATION BY RICCO LINS STUDIO]

Commentary/by Owen Ullmann

WHY GREENSPAN HAS A TOUCH OF GOLD FEVER

Ever since Richard Nixon severed the last links between the dollar and gold in 1971, the Federal Reserve has scarcely given a thought to the precious metal. So what was Fed Chairman Alan Greenspan doing on Feb. 22, when he told a House banking subcommittee that gold prices have become an important factor in setting short-term interest rates?

Greenspan took care to stress that gold is just one of several measures that are used to guide the central bank's inflation watchers. Still, his remarks raised eyebrows and brought to center stage a debate that has been carried out mainly in the wings of economic policy for the past two decades: Would the U. S. economy be better off now if the dollar had remained linked to gold? "I happen to be one of those who believe things were a lot better in many respects back when we had stable gold prices," Greenspan said.

Somewhere, Ronald Reagan's heart was racing. But the Gipper and other gold bugs shouldn't get their hopes too high. Greenspan wasn't signaling a return to the gold standard, even though his elevation of the metal as a monetary tool is significant. Money-supply growth, the beacon of Fed policy for most of the '80s, is no longer a good predictor of economic activity, and no other benchmark has emerged. Greenspan's message to the markets: Watch metals for clues of what the Fed will do on interest rates.

SCOUTING OUT. The theory behind the Fed's back-to-the-future move is simple: The central bank is more worried about inflationary expectations than actual inflation, which remains in check. Since gold is a classic hedge against inflation, its price is a sensitive indicator of expectations. So if prices are headed up, the Fed may boost short-term interest rates.

Of course, Greenspan is trying to scout any other hints he can find of accelerating inflation, too. In addition to gold, he is eyeing commodity prices, the spread between long-term and short-term rates, and the movement of the dollar on currency markets. With current inflation, as measured by the consumer price index, slowing to just 2.5% over the past year—and with the CPI dead flat in January—there was no justification in actual price movements for the Fed's Feb. 4 decision to boost short-term rates a quarter-point. But Greenspan wants to be at the ready.

That's where gold comes in. After falling to below $350 an ounce in mid-September, the metal has been trading between $380 and $390 for the past three months. Greenspan sees this as a signal of market fears that the Fed hasn't been moving aggressively enough against the inflationary potential of the current economic expansion. That, he thinks, is why stock and bond prices have fallen recently. "[Gold] is not a perfect indicator, but it is a very good indicator," he told Congress.

That's music to the ears of gold bugs, who contend that the key to price stability is tying the dollar to gold prices. Former Governor Wayne D. Angell, who left the Fed on Feb. 10, has long advocated a gold-price rule, and he smiled in the audience as Greenspan testified. Angell predicts the comments will trigger a drop in gold prices and a bond-market rally in coming weeks.

Do rising gold prices signal the market's inflation fears? The Fed chief thinks so—or he may be using gold to justify doing what his gut tells him: Nudge up rates

PHOTOGRAPH BY STEVE WINTER/BLACK STAR

BONE-SURE. That seems a little too pat, though. If gold is such a great predictor, then why has the Fed eschewed it for years in favor of other indicators? Indeed, gold speculators, along with gold producers such as Russia and South Africa in need of hard currency, can create huge swings in gold's price. If the Fed had focused on gold last summer, for instance, the run-up in the market (chart) could have prompted tightening—just as the economy was gaining a bit of speed. "Gold ought to be put into the mix, but it can be very misleading over long periods of time," says former Fed Vice-Chairman Manuel H. Johnson.

Surely Greenspan knows that. But he is convinced in his bones that the Fed needs to nudge up interest rates again to keep inflation in check. And he knows that folks on Wall Street, on Main Street, and at both ends of Pennsylvania Avenue aren't going to buy a policy based on the Fed Chairman's hunches.

His predecessor, Paul A. Volcker, used rigid money-growth targets to rationalize his squeeze on inflation. And before Volcker, Arthur F. Burns pulled a new money-supply measure out of his pipe to justify Fed policy. Now, Greenspan may likewise use gold as cover for his actions. If he's right, he may look like a genius for whipping out his gold card.

Ullmann follows the Federal Reserve in Washington

Commentary/by Mark Landler

ARE WE HAVING FUN YET? MAYBE TOO MUCH

If you got all the way through the preceding article, congratulations. Millions of Americans—particularly young ones—probably couldn't. And besides, who has time for some treatise on the entertainment economy when Sonic the Hedgehog and *Beavis & Butt-head* are beckoning?

Grant us another couple of minutes, though, to ponder the social implications of an economy dominated by fun. Casinos, theme parks, sports stadiums, and newfangled cable-TV systems are popping up all across the land. But how is this entertainment boom reshaping our spiritual landscape?

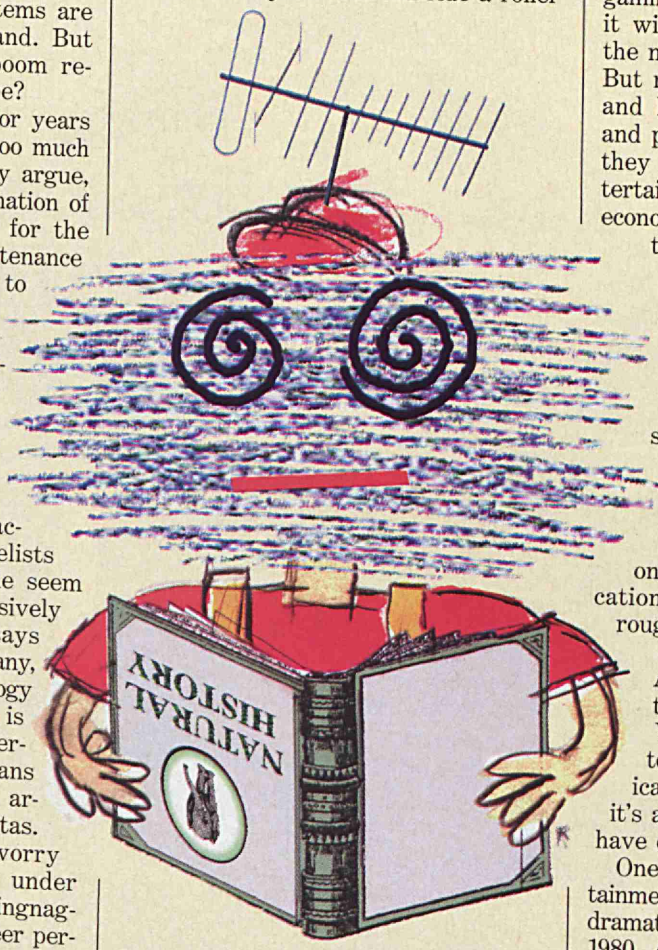
Social critics have fretted for years about the corrosive effect of too much entertainment. Television, they argue, has already turned us into a nation of empty vessels—reliant on TV for the emotional and intellectual sustenance that families and society used to provide. Now comes a new generation of televised experiences, not to mention out-of-home amusements that repackage reality in ever more stimulating ways. Will entertainment rob us of whatever imagination we have left?

"KIND OF ADDICTING." Not according to multimedia evangelists such as Trip Hawkins. "People seem to think we prefer sitting passively in front of the television," says Hawkins, whose software company, 3DO Co., has developed technology for interactive TV. "My opinion is we simply haven't had the alternative." Give viewers the means to interact with the tube, he argues, and you open up new vistas.

Other observers, though, worry that entertainment is coming under the domination of a few Brobdingnagian companies, who by their sheer pervasiveness will smother other voices and turn fun into a homogenized experience. "As long as the system is dominated by a handful of major players, the schlock will vastly outweigh the good stuff," says Mark Crispin Miller, a professor of media studies at Johns Hopkins University.

That doesn't mean entertainment will stop being seductive. Quite the contrary. Miller says more and more movies and TV shows are relying on the kind of thrilling but unchallenging effects that make roller coasters popular. "Look at the very phrase Information Highway," says Miller. "Being on a highway is a mindless experience. You're usually hurtling home from work."

Other, more insidious, forms of entertainment are using similar thrills to lure new customers. Big casinos, for example, are now styling themselves as exciting family resorts. Visit Circus Circus, and your kids can ride a roller coaster while you ride a roulette wheel. Investor Richard E. Rainwater says gambling is so successful because "it's kind of addicting." No kidding. But will the family that does Vegas together eventually do Gamblers Anonymous together, too?



If that's not worrisome enough, gaming could someday link up with interactive TV in what would truly be an unholy alliance. Your local cable company would transmit sports scores, statistics, and games to your TV on demand. And you would place your bet either by phone or by pressing keys on a remote control. Home gambling makes even entertainment executives queasy. But they acknowledge it could be one of the major new businesses created by the Information Highway.

JURASSIC LANDSLIDE. Such chilling prospects aren't the only reasons to question an entertainment economy. The gaming industry likes to point out that it will generate 500,000 new jobs in the next decade. That's no small feat. But many of these jobs are unskilled and low-paying—cocktail waitresses and parking valets, for example. And they don't come without a price: Entertainment is further tilting the U. S. economic base away from investments that enhance productivity.

There's a certain futility in worrying about what entertainment will do to America. Consumers have already voted with their pocketbooks, and *Jurassic Park* is the winner by a landslide. Americans spent about $340 billion on entertainment and recreation in 1993. That compares with $270 billion in spending—public and private—on elementary and secondary education. In 1980, those figures were roughly equal.

It's not necessarily a crime that America spends more on fun than on educating its children. Years of well-intentioned failure tell us that dollars don't automatically translate into scholars. But it's a sure sign of how our priorities have changed.

One more sign: The rise in entertainment spending has coincided with a dramatic decline in personal savings. In 1980, Americans saved an average of 7.9% of their disposable personal income. In 1993, they saved just 4%. Social critic Neil Postman asked in his 1985 book whether, as a nation, we were *Amusing Ourselves to Death*. Nine years later, the surging entertainment economy is proof that we're very much alive. The more pertinent question is: Are we laughing our way into an economic and spiritual poorhouse?

Mark Landler covers the media.

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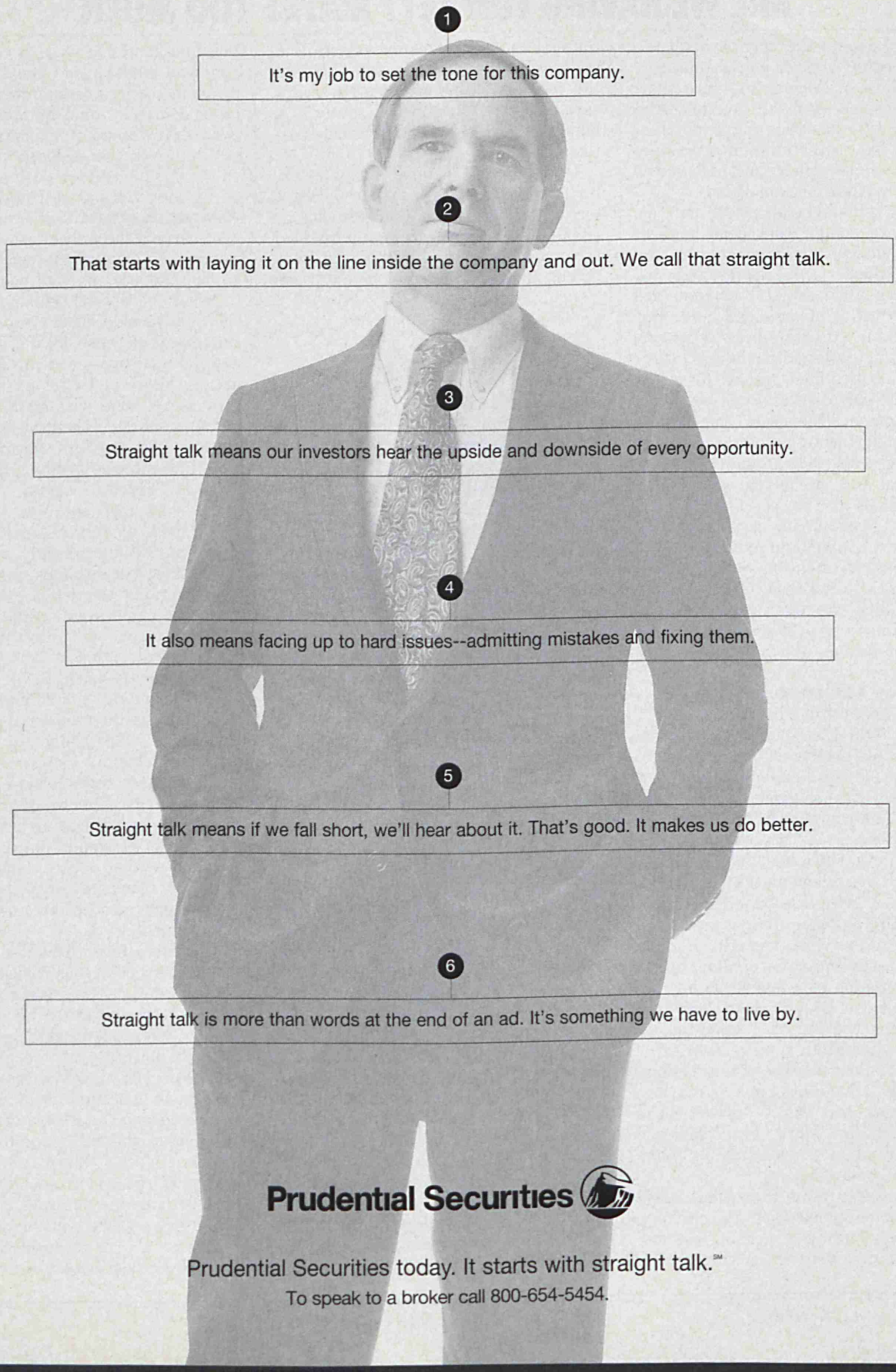

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WEDNESDAY, DECEMBER 22, 1993 VOL. 13, NO. 245

Today:

GORE CALLS FOR OPEN COMMUNICATIONS MARKETS: Speech outlines policy positions Administration has offered in past papers. Reaction favorable from most quarters. (P. 1)

PUBLIC INTEREST GROUPS WANT STUDY OF TV COMMERCIAL PRACTICES, charging that repeal of time standards in 1984 opened 'floodgates' to overcommercialization. Broadcasters oppose reimposition of restrictions, say it would be unconstitutional, that agency should rely on market forces. (P. 3)

DBS OPERATORS USSB AND HUGHES ENTER FINAL STRETCH: After successful launch of satellite, companies turn to issues on ground including development of decoders, programming, marketing. (P. 4)

Reaction Generally Favorable

GORE OUTLINES CLINTON'S TELECOMMUNICATIONS GOALS

Vice President Gore opened Administration's campaign for changes in telecommunications regulation Tues. by announcing that President Clinton "will support removal over time and under appropriate conditions of judicial restrictions on all types of telecommunications companies -- cable, telephone, utilities, television and satellites." At same time, however, Gore said that Administration would "steer a course between the shoals of suffocating regulation on one side and the rocks of unfettered monopolies on the other."

In address at National Press Club in Washington, Gore stayed generally at broad policy level, saying more details would be revealed in speech he will make Jan. 11 in L.A. and in Administration legislative package promised for end of Jan. Press Club speech wrapped up many themes Administration has expressed in last few months in variety of position papers on high-technology and in comments by policy-makers at assorted conventions, panels, workshops.

Gore also reached out to key congressional leaders, making specific note of bills: (1) HR-3626, introduced by House Judiciary Committee Chmn. Brooks (D-Tex.) and Commerce Committee Chmn. Dingell (D-Mich.) to set conditions on lifting of MFJ rules. (2) HR-3636, by House Telecom Subcommittee Chmn. Markey (D-Mass.) and Rep. Fields (R-Tex.), along with Reps. Boucher (D-Va.) and Oxley (R-O.) to open local competition and lift cable-telco cross-ownership ban. (3) S-1086, by Sens. Danforth (R-Mo.) and Inouye (D-Hawaii), that combines elements of both House bills. Gore said Administration already has started talks with lawmakers on bills and will continue to do so.

Goal is to create widely accessible national network in which consumers would be sources of information as well as receivers, Gore said. He said that could be achieved through lifting of many legal restrictions and imposition of tight rules allowing access to whatever networks information suppliers choose at affordable rates. Problem with today's system, Gore said, is that "the 2-lane information roads built for telephone service are no longer adequate."

"Fast and flexible" information network is needed for U.S. to have continued economic growth, Gore said: "There are obstacles that lie in our path. Many of them are there in the system we have created over the last 60 years. Systems of regulation that made sense when telephones were one thing and cable another may simply limit competition in a world in which all information can flow interchangeably over the same conduits."

New network of highways that Administration envisions would be governed by 5 principles, Gore said: (1) It would be financed by private investment, point that Administration has made before. (2) Network will "promote and protect competition," making certain there are no bottlenecks or "unfair cross-subsidies" in system that could lead to expansion of monopoly control. That standard applies to RHCs as well as to cable companies, Gore said. (3) Open access to network would be provided at "fair and equitable price." Without open access provisions, Gore said:

"Companies that own the networks could use their control of the networks to ensure that their customers only have access to their programming. We have already seen cases where cable company owners have used their monopoly control over their networks to exclude programming that competes with their own programming. Our legislation will contain strong safeguards against such behavior." He endorsed concept of "open platform" for network advocated by Electronic Frontier Foundation.

(4) There would be no division of information "have's" and "have-nots." Gore said competition should lower price for services while expanding availablility of new services, although "regulatory safety net" still would be needed. In particular, he said, schools shouldn't be "most impoverished institution" in society when it comes to access to information technology. "We cannot relax restrictions from legislation and judicial decisions without strong commitments and safeguards that there will be a public right of way on the information highway." (5) Network should "encourage flexibility" in provision of services and in structure of new regulation.

Gore declined to reply to question from audience on Bell Atlantic/TCI merger, saying Administration wouldn't interfere with analysis of deal conducted by Justice Dept.'s Antitrust Div.

In reacting to speech, Nynex Vp Thomas Tauke said it generally reflected industry consensus that has emerged over last 18 months on issues such as opening local loop. Although some telcos still object, most believe that path will have to be taken, he said. Tauke said that beyond general principles Gore outlined, key issues yet to be decided are timing of transition from current regulatory structure, expansion of universal service concept to include broadband technology and public interest considerations (and who will pay for it), move to regulatory parity.

AT&T said it supported principles outlined by Gore. Company was "pleased" that Administration "sees private industry, and not the government, as the catalyst for ensuring" that benefits of advanced services reach public. Fact that telecommunications industry "is still operating under policies that in many ways look backward rather than forward" must change, as Gore commented, AT&T said. Administration can ensure that public gets full benefit of advanced services by "eliminating existing subsidies and directing explicit subsidies only to those who need them" to gain access to new services, company said.

Boucher also praised Gore's speech, saying he was "gratified" Vice President was supportive of his legislation. He said recent increases in cable rates had had "a great effect on lawmakers" and Administration. "The conduct of many cable companies has been outrageous," Boucher said. Cable companies "have shamefully raised their rates, gouged customers by restructuring their service offerings and then blamed it all on the federal government," he said. "These practices are clearly unacceptable, and our legislation is the proper response."

BellSouth Exec. Vp R.L. (Mickey) McGuire, chmn. of MFJ Task Force, said Gore "painted an accurate picture" of how technology is changing and how business relationships are changing and maturing. "We hope they [Congress] not only change the rules but change them now, effective immediately, so we can start delivering" advanced services to public. Nation should be concerned about "protecting and enhancing competition" by immediately abandoning idea "that any American company should be prohibited from delivering... benefits of the Information Age" to public, McGuire said. NCTA Acting Pres. Decker Anstrom hailed Gore's comments as "solid, comprehensive principles" that should help "pave the way" for national information infrastructure. He said cable systems "hope to be a major component" of that infrastructure.

USTA Vp-Govt. & Public Relations Ward White said Administration "obviously understands the changing nature of the telecommunications marketplace." Any legislative or regulatory initiatives "must take into account the impact of competition on universal service," he said. White also said he was sending letter to FCC Chmn. Hundt "urging him to act on a long-pending proposal" that would allow rural telephone companies to offer cable. Acceptance of that proposal would be "a great opportunity to highlight and implement the Administration's commitment to our nation's telecommunications infrastructure," he said.

CATA Pres. Stephen Effros reacted positively to Gore's speech but said that "apparently the Vice President wasn't briefed" on cable industry's actions in providing free service to schools when he discussed role of telecommunications in education. Effros cited industry's "Cable in the Classroom" that he said has wired more than 62,000 schools with "commercial-free, copyright-cleared educational programming," and he invited competitors, including telcos, "to join us in similar efforts." He said CATA applauds Administration's focus on telecommunications policy, but "we would hope this could be achieved, as the Vice President suggested, with a minimum of official micromanagement and with some assurances that new services will be driven not by government theory, but by consumer demand."

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1876# U.S. NEWSWIRE GENERAL DIRECTORY
Senior Administration Background Briefing on the Information Superhighway
To: National Desk
Contact: White House Press Office, 202-456-2100

WASHINGTON, Dec. 20 /U.S. Newswire/ -- The following is a background briefing by senior administration officials on the Information Superhighway:

The Briefing Room

3:17 P.M. EST

SENIOR ADMINISTRATION OFFICIAL: Good afternoon. Vice President Gore will deliver the luncheon address tomorrow afternoon at the National Press Club to do one of two major speeches that he will present on telecommunications policy and reform that the administration will be pursuing in 1994 with both legislative and administrative actions.

In between the Vice President's speeches, Secretary Ron Brown will deliver a speech also in early January regarding the implications of telecommunications reform for the economy. The second speech the Vice President will deliver will be in California, in Los Angeles, on January 11th at an all-day summit hosted by the Television Academy of Arts and Sciences on the superhighway -- information superhighway. I believe they put out a press release about 10 days ago on that and are finalizing the agenda and the participants. But that will have representatives from all of the information industry -- cable, television, telephone, movies, energy industry, education community -- at which point the Vice President will lay out the blueprint for the administration's proposed reform of both those aspects of the Telecommunications Act of 1934 and the modified final judgment from the AT&T divestiture judicial restrictions on communications industry in the January speech, followed by legislation at the beginning of the next session.

Tomorrow afternoon, the Vice President will lay out several principles that he thinks should guide the administration and the Congress's reform of the telecommunications laws and the creation of the marketplace of the future in information. As part of that he will also discuss some of the processes that we have been going through in the administration both interagency and between the White House and the Congress to communicate with and respond to the many bills that have been introduced on the Hill regarding telecommunications reform.

With the confirmation of Reed Hundt now as the Chairman

of the FCC and the team in place at the Department of Commerce and the Department of Justice, there are all the people in place to take responsibilities for different aspects of the decisions that would have to be made for a transition from the Telecommunications Act of '34 and the system that both legislative and administrative changes would set up.

Let me introduce my colleague in just a moment to talk about some of the process we've through as well as the implications.

SENIOR ADMINISTRATION OFFICIAL: What I thought I'd do is just give you a sense of what's the desired end point, what is the nature of the phase we're in now, and what's the nature of -- what are in broad terms the kinds of issues that we have to deal with. And I'll stay with the sort of -- the most fundamental information industry kinds of questions.

What the changes in technology to which the Vice President's speeches and Secretary Brown's speeches will basically be responsive to really mean is that for the first time since we've had a telecommunications -- since telecommunications has been a central part of the economy is that -- is the possibility for absolutely pervasive competition in every single line of business of telecommunications. And therefore the desired end point is to move to -- is to move to a point ultimately where any company can offer any services through any network to any set of consumers. That's the desired end you'd like to reach to, and where all of the facets of the industry are competitive.

Obviously, the period that we're in at the moment is a period -- and it'll probably be a long period -- of transition between a telecommunications and an information environment that was characterized really quite differently, when technologies were very different and when there were lines of business, when particular technologies offered particular lines of business and there was really no merging between the two. And the best way, I think, to think of the issues that are going to be on the Hill next year and to which the Vice President and Secretary Brown will be referring and responding in the course of their speeches is the following: There are a whole set of problems which derive from what are the kinds of services that a company can offer. Can it offer local competitive services -- i.e., in the local loop where telecommunications go to the home? Can a company offer long distance services? Can a company engage in manufacturing? Can a company engage in what are called "information services," which is the offer to the home or to a business of particular information.

So one area in which legislation is being considered and upon which the Vice President will comment will be the loosening of restrictions which affect what services a company can offer.

Another whole area derives from the fact that because of the history of telecommunications and the different history of companies, companies with different kinds of history now offer different kinds of services and are restricted in that way. So a cable company offers one kind of services, broadcast television offers another kind, now convergent mostly with cable television, telephone companies offer another kind. And, again, another set of legislation is increasingly -- moves in the direction of saying that the past history matters less and less, and as long as there is competition, companies can -- irrespective of their past history -- can offer competing services. Both are responding to the basic fact

that the technology has changed fundamentally and that all of these things are now convergent.

The end result of all of that I stated in one way, which is -- is the capability to offer any set of services to any consumer through any network at any time. Another way, though, of thinking about that is the enormous changes and advantages as we begin -- as that begins to be put in place nationally for our economy. Not only is it in itself -- do those changes involve an enormous amount of investment, and therefore jobs, but they also increase radically the flexibility of our economy, its capability to deal with change, the capability to offer new and different services, the capability of companies to work with each other so that you can see a merging out of the information infrastructure an economy that functions in quite significantly different ways. And that's the end result, is a much freer, much more competitive telecommunications and information marketplace that, because it is that way, changes in quite fundamental ways the nature of the economy.

My colleague and I are available for questions if there are any.

Q How does this affect the average person? Is this -- it sounds wonderful, but I'm not sure how it affects them and when it will affect them.

SENIOR ADMINISTRATION OFFICIAL: I think that the first way it affects them is going to be lower prices for telecommunications and information services. I think that the second way that it will affect them will be the increased investment, the increased number of jobs that the information industry change means. The third way it's going to affect them is it's going to change the very nature of their work. I mean, just as an example, video conferencing is on an almost vertical rise up within companies as the price has come down. You're going to see much more of that. You're going to see a very large number of people working in companies who can now spend more of their time at home as telecommuting replaces vehicle commuting.

Now, timelines for those -- the first couple of changes that I announced -- that I mentioned -- price changes, investment changes, probably over the next very few years. The longer changes of lifestyle -- end of the century, seven years, eight years.

Q Would this be happening without what you're doing? Because I've heard about this for quite a while. What is the White House doing with this legislation that wouldn't happen otherwise?

SENIOR ADMINISTRATION OFFICIAL: Regulation -- let me make one point about laws and regulations and my colleague can make another. The technology that changes that are occurring are going to change and the changes are going to occur irrespective of what anybody does. And to suggest that they wouldn't is a little bit like pretending you're King Knute. Technology has historically shown a tendency to move much more rapidly than regulation. And what this does is catch regulation up with where technology is and give it -- and provide a capacity so it can change much more flexibly.

Q Except that how do you define competition? This is a tough thing to get your arms around because nobody knows yet where the market's going or what the mergers are going to end up being.

SENIOR ADMINISTRATION OFFICIAL: That's right.

Q So you must have, in whatever proposals you have that you're sending to the Hill some kind of definitions for what you would consider competition. Is it two companies, side by side? Must it be three? And then, before you get to that competition, you must also be thinking of some kind of regulations that protect the people from a monopoly developing.

SENIOR ADMINISTRATION OFFICIAL: Let me make one point on this, and then my colleague should speak. My colleague made the point that no one can predict the shape and appearance of markets that are changing this rapidly and their shape and appearance in the future. But what we can do is try to build certain values into the system. And one of those values has got to be a competitive environment and a competitive marketplace.

And, therefore, what the regulatory system has to do as it ushers us through a transition like this, is provide for checks along the way so that one can ask the question, is there, in fact, competition.

SENIOR ADMINISTRATION OFFICIAL: And we're not saying that these models will be developed overnight or even be clear and accepted by everybody when the proposals are introduced by the administration in January and early February. But already, on the Hill, you see people who are providing models that, as in the Dingell-Brooks bill, that for certain changes in the law, there have to be reviews by the Justice Department and the FCC in their areas of jurisdiction and in antitrust considerations regarding what is competition.

Now, the challenge is that the Telecommunications Act of '34 dealt with a much different world. We have now had the challenge of coming up with models that define competition in the modern world where you don't have competition that's based just on how many wires go into your house, but what your access is to wireless technology. The fact that we're going to be talking to our televisions and watching our telephones means that we have to redefine what competition means because we're going to be getting information from every source imaginable. And as one person put it, everything we do now through wires in the ground we're going to do in the air; and everything we do now in the air we're going to do through wires in the ground. So we have to rethink the models at the same time that we're rethinking the technology.

If I could go back quickly to the question about what does this mean for the average American and how soon will it mean it, we're already seeing a situation in which education is reversed in the home. Parents are learning computers from their children. Parents are learning how to program their VCRs and their cell phones

from their children. The technology revolution is occurring more quickly than the education system can handle it or the regulatory system. And as a result, all of these changes that we read about everyday in the paper are occurring -- they're running into the wall of regulations and judicial restrictions, and they're all finding little fish ladders around the dam so to speak. We're got to start dealing with how to open up the dam in a controlled way to let these technologies flow in a way that still protects universal service, competition, open access and privacy.

Q You talked about removing barriers between various industries. And right now the FCC licenses services for very specific -- gives licenses for the airwaves for very specific purposes like broadcast tv or cellular phones. Could you ever foresee, say, a television station being allowed to use maybe a portion of its spectrum for another kind of service or cellular phone system -- using it for some other thing?

SENIOR ADMINISTRATION OFFICIAL: I could foresee it. I don't think that's something that we're going to have to deal with in this initial proposal that deals with the legislative angle. But let me say, if you look at the companies who are now making a living by gathering taxi cab radio frequencies and bundling them together for cell networks. There's a great opportunity here to convert one form of use of the frequency into another form that has a much better economic potential.

Q One of the reasons the local phone companies have been kept out of long distance, and it's obvious they're a monopoly, how much of their monopoly do they have to lose in order for them to be allowed into this new area? I mean, is it 90, 80, 70, 60?

SENIOR ADMINISTRATION OFFICIAL: That's the same question we got just a second ago. The Justice Department will have to be setting up those kinds of models. The important thing is, are we going to start the process of addressing that question and dealing with proposals like Ameritech's and others who have said, we'll let you into our area if you'll let us into yours. And we have to decide, what do we mean by effective competition before we let the regional companies into other areas and prevent monopolies.

SENIOR ADMINISTRATION OFFICIAL: Let me give you another perspective on your point. I said that we're in a period of transition that'll last a decade or more. After all, the Communications Act of '34 is now 50 years old -- 60 years old. And we're not in the legislation that will be considered this next year, going to get to the point that you've stated. But very, very respectable people in the business and in the academic fields that look at it, say that we're getting to the point where you really ought to think of these different kinds of companies as bit companies -- they're as bits companies. And some of them sell them by over-the-air broadcast, and some of them sell them by other kinds of wireless technologies, and some of them sell them through wires under

the ground. And that, ultimately, the point is that they're all going to be selling bits, and they ought to all be regulated in a way that recognizes it in certain fundamental ways that are in the same business.

Q Is that going to affect newspapers having restrictions on TV stations they can own and vice-versa, in the same market --

SENIOR ADMINISTRATION OFFICIAL: Not the current legislation. The current legislation does not, and largely, I think, because the system can only accommodate so much at any given time. We really are in a period of transition. But if you follow the logic of what I just said, yes, ultimately.

Remember, the fundamental switch that is occurring here is from scarcity to plenty; that the reason why most of the regulation has been in effect for so long is the basic underlying assumption that the ways to the consumer were limited; and therefore control over them was antithetical, both to the nature to our economy and also to a democracy.

If you've reached a point where spectrum space, because of the many different ways of using over the air and also fiberoptics, coaxial cable is essentially unlimited, then you begin to reach a point where you care less about the nature of regulation as it is now and you begin to look for a change.

Q Are there some companies -- I'm not an expert in this -- but are there some companies like an AT&T or whatever that are not going to care for this kind of change that you're talking about?

SENIOR ADMINISTRATION OFFICIAL: The devil's in the details -- if you went around to the industry and you said do you subscribe to the -- any company through any network, any information service to any set of consumers, everyone would agree. It's in the answering of the specific questions, like how do you judge competition, what particular rules do you have in effect where people are going to -- out.

Q Well, on that note, what specific provisions in bills on the Hill do you like? And could you talk about what you're looking at as far as some of the subsidiary guidelines, pricing things -- what do you see up there that you like, and what might the Vice President be endorsing?

SENIOR ADMINISTRATION OFFICIAL: Well, first of all, all of the bills that are currently introduced on the Hill are a step in the right direction. They tend to compliment each other -- there's some overlap. There's very little contradiction. You'd have to get into the details to see some areas where there would be some real disagreements.

In his speech tomorrow, the Vice President -- well,

first off, the Vice President has spoken with the spoken with the sponsors of all of the bills that are on the Hill in the last month or two and has met with many of them personally, and has had an interagency group that has been reviewing all of that. Tomorrow in his talk he will address where he would like to go with some of those bills, although the administration proposal and which of the bills we will incorporate and which provisions will be announced in the January speech in Los Angeles.

Q That hasn't been decided yet then?

SENIOR ADMINISTRATION OFFICIAL: Some of the basic principles -- let me put it this way -- the basic principle that we are going to change our regulatory system to allow for -- to decrease the restrictions on the cable companies, the telephone companies, the information services provided by telephones and to provide for easing of the MFJ, modified final judgment restrictions. That decision is clearly made. The details of the architecture of how you do that and the timetable under which you do that and the tests, both entry and post-entry that you use to guard that, is still under discussion.

Q To what extent are you worried that deregulation might have the same effect on the telecommunications industry that it did on the airline industry or the breakup of the phone companies?

SENIOR ADMINISTRATION OFFICIAL: Well, first off, we're not talking about instant deregulation; we're talking about a transition period from a system that is well-known but not well-working and a system that is not yet in place which we think will provide much better market measures -- or market incentives for competition and for in investment. The difficult time is the transition.

And in that transition, you will still need to have government regulation; you will always need to have anti-trust review of the market as it exists to prevent monopoly advantage. So, we are not talking about a black or white situation. We are talking about walking a line between the current antiquated system and a system in which market principles would apply except in those areas where either geography or economic benefits create a monopoly that we find unacceptable based on the values that the Vice President is going to talk about tomorrow.

Q When you talk about easing the MFJ, are you talking about letting the regional phone companies get into long distance -- because you know the fights that exist between the long distance companies and the regional phone companies about crossing into each other's territory? So, are you just going to -- are you going to open that up and say let's get rid of the MFJ, or are you talking about contingent on something else you can get rid of this part of the MFJ?

SENIOR ADMINISTRATION OFFICIAL: Well, remember we're not operating in a vacuum. The Dingell-Brooks bill lays out, for instance, a timetable for the regional companies to get in on the long distance going through certain entry barriers and Department of Justice and FCC reviews. We are -- we think that that provides a very good model. We are looking at how that could be incorporated. We have some issues that we still need to understand about the bill.

But we're not talking about just taking two opposing groups and throwing them in the same room together. We're talking about coming up with rules of the road when we get to this intersection. And even today, AT&T said that although they had been skeptical, historically, of this kind of relaxation, they now see some good things about it. So we think there's a way to work this out.

Q To borrow a phrase from health care, is this sort of like "managed deregulation"? Is that what you're talking about?

SENIOR ADMINISTRATION OFFICIAL: Well, any kind of deregulation is going to be managed. And somehow I don't think that I -- it's a nice term, but I don't think it's a appropriate analogy. We face next year -- have the opportunity of seeing next year the largest single change in telecommunications regulation and law that's occurred since 1934. And the changes are really absolutely substantial.

There is, I think, with respect to the kinds of values that my colleague underlined, which is to say, privacy, competition, access, there is a responsibility to make certain that certain kinds of values get built into the system. But if by "managed," you mean, do we think that we have some sense that we can make this a careful, stately kind of transition irrespective of the way the technology is flowing, no. Technology is occurring extremely rapidly, and government doesn't affect that rate of change much.

Q Would the administration's bill include some provision on these mergers -- like, for instance, TCI-Bell Atlantic -- AT&T? Did you all address those issues --

SENIOR ADMINISTRATION OFFICIAL: No. The administration's bill -- when those mergers were announced, the White House statement on those was that we favor competition, we favor improved opportunities for information provision to all sectors of society, and that there are formal reviews going on on all of those mergers, and we let those processes run. We are not going to try and pick and choose among all the mergers in the legislation.

We are trying to, in the proposals we will put forward -- and the Vice President speaks tomorrow -- talk about the market

that's out there, how the market is changing, and how the technology improves communication. This isn't so much about technology, although that's what we read about every day, as it is about technology's effects on the way we communicate and the way we're going to communicate, and who will have information and who will not. And the provision of information to the public, to schools, hospitals, libraries, as well as to the economically well-off sectors of society is a crucial point that we want to make sure is included in any reforms that happen.

Q Well, you mean, he won't outline what his plan is; he'll just do an overview of --

SENIOR ADMINISTRATION OFFICIAL: He will do an overview of some of the questions we're going to address as well as the principles he thinks need to be incorporated in the blueprint, as well as principles that we anticipate, or that we would like to see in the marketplace that the private sector creates as well, because there are many responsibilities we think the private sector should take on that relate to the values of universal service and open access, some of which are governed by anti-trust principles, others are governed by the value we put on information's importance to any democracy.

Q I missed who the Vice President is going to talk to tomorrow.

SENIOR ADMINISTRATION OFFICIAL: The National Press Club.

Q What the difference between the January 4th and the January 11th speech?

SENIOR ADMINISTRATION OFFICIAL: Ron Brown will do the January 4th speech, primarily on the economic aspects of the --

Q And what -- the January 11th speech is going to be about?

SENIOR ADMINISTRATION OFFICIAL: Is the Vice President's blueprint in Los Angeles.

Q public institution, so is there going to be a universal access for poor people so they can get phones, and are they considering television and cable television now, something that that should also be available no matter how --

SENIOR ADMINISTRATION OFFICIAL: The extent of how we

define universal service is actively under discussion. And the question of subsidies or rate subsidies is also a very difficult one. As you know, the definition of universal service has gone to having a party line phone to having an individual line. Is call-waiting part of universal service? Is a modem hook-up part of universal service? Those are some of the questions that we have to answer. We don't expect to have all of the answers, because the market will surprise us down the road in terms of what's available.

One of the issues we want to propose to deal with that question is how to make the regulatory system more responsive more quickly to technology changes. We can't wait 60 years at a pop to catch up with technology. So that's one of the problems we're going to reach is, how can we make the regulatory system more responsive to the technological opportunities.

THE PRESS: Thank you.

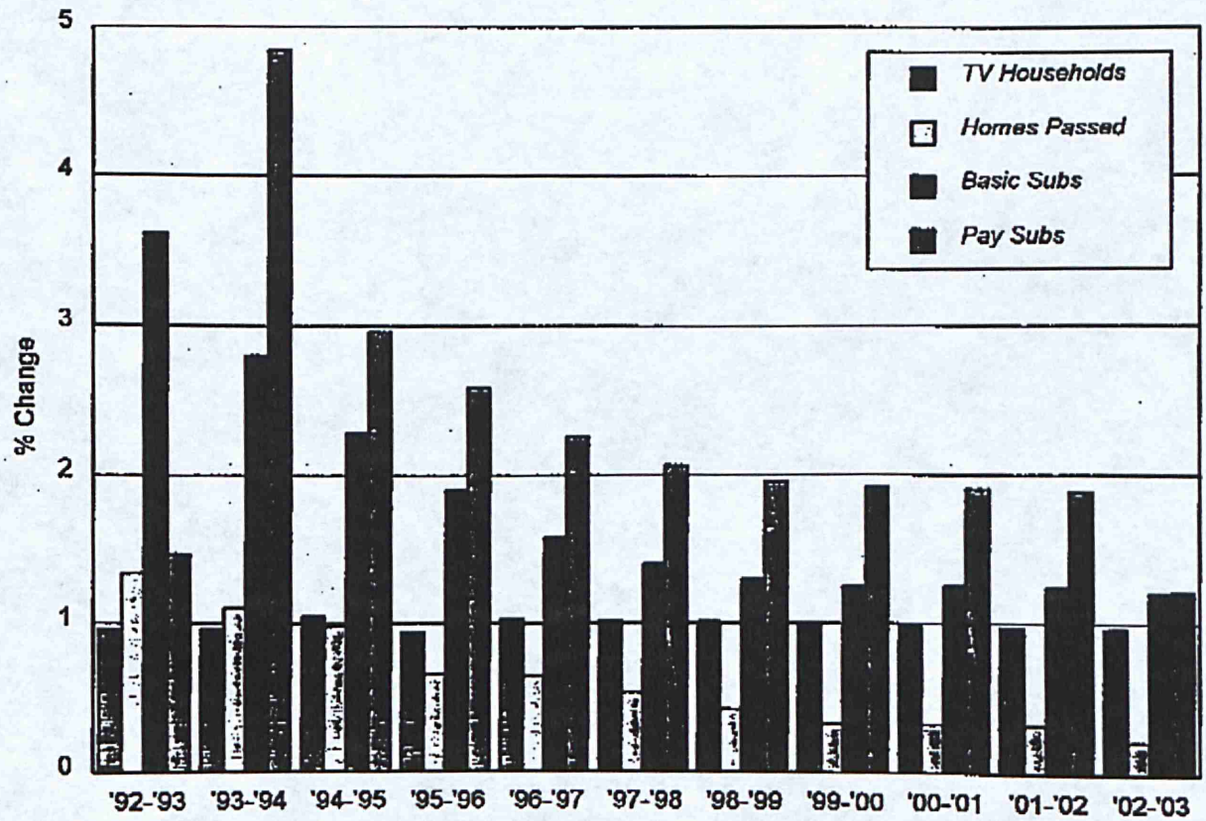
END3:43 P.M. EST

HISTORY OF CABLE TV SUBSCRIBERS AND REVENUES

Year	Avg. Basic Subs (mil.)	Avg. Monthly Basic Rate	Basic Revenue	Basic Install Revenue	Avg. Pay Units	Avg. Mini-Pay Units	Avg. Monthly Pay Rate	Avg. Monthly Mini-Pay Rate	Total Pay Rev.	Pay Install Revenue	Expanded Basic Revenue	Total Rev. *	% Change
	(mil.)		(mil.)						(mil.)				
1955	0.25	$ 5.00	$ 15	$ 5	—	—	—	—	—	—	—	$ 20	—
1960	0.75	5.00	45	5	—	—	—	—	—	—	—	50	150.0%
1965	1.50	5.00	90	5	—	—	—	—	—	—	—	95	90.0
1970	5.10	5.50	? 337	8	—	—	—	—	—	—	—	345	263.2
1975	9.80	6.50	764	10	0.305	—	$ 7.85	—	$ 29	$ 1	—	804	133.0
1976	11.00	6.45	851	14	0.724	—	7.71	—	65	1	—	932	15.9
1977	12.20	6.86	1,004	18	1.310	—	7.92	—	124	2	—	1,200	28.8
1978	13.40	7.13	1,147	23	2.466	—	8.01	—	240	4	—	1,476	23.0
1979	15.00	7.40	1,332	30	4.295	—	8.27	—	427	8	—	1,875	27.0
1980	17.50	7.69	1,615	39	7.438	—	8.62	—	765	13	—	2,549	35.9
1981	21.50	7.99	2,061	53	12.330	—	8.92	—	1,317	22	$ 21	3,656	43.4
1982	25.40	8.30	2,530	70	18.140	—	9.30	—	2,020	32	75	4,984	36.3
1983	29.45	8.61	3,048	88	23.600	—	9.70	—	2,747	41	170	6,425	28.9
1984	32.85	8.98	3,545	106	28.192	—	9.96	—	3,370	49	255	7,774	21.0
1985	35.50	9.73	4,145	124	30.283	—	10.25	—	3,727	53	298	8,938	15.0
1986	38.20	10.67	4,891	143	31.330	—	10.31	—	3,872	55	403	10,144	13.5
1987	41.20	12.18	6,014	164	33.532	—	10.23	—	4,112	59	377	11,765	16.0
1988	44.20	13.86	7,351	187	36.800	—	10.17	—	4,491	64	271	13,595	15.6
1989	47.50	15.21	8,670	213	40.000	—	10.20	—	4,896	70	267	15,678	15.3
1990	50.52	16.78	10,169	239	41.300	—	10.30	—	5,105	72	495	17,855	13.9
1991	52.60	18.10	11,414	262	39.700	2.8	10.27	$ 1.50	4,943	69	706	19,463	9.0
1992	54.30	19.08	12,433	271	40.300	3.5	10.17	1.50	4,980	71	1,003	21,045	8.1
1993	56.20	20.06	13,528	281	41.100	4.3	9.11	2.75	4,633	72	1,642	22,706	7.9

* *Total revenue includes ancillary revenues (advertising, second sets, PPV, remotes, etc.) not reflected in average rates and therefore is greater than the sum of the revenues listed in this table.*

Cable TV Industry Growth Forecast



TOP 50 MSOs
RANKED BY NUMBER OF SUBSCRIBERS

	MSO (Multiple System Operator)	Basic Subscribers
1.	Tele-Communications, Inc. (TCI)	10,604,000*
2.	Time Warner Cable	7,278,000
3.	Continental Cablevision, Inc.	2,949,000
4.	Comcast Corporation	2,679,000
5.	Cablevision Systems Corporation	2,293,000
6.	Cox Cable Communications, Inc.	1,807,000
7.	Newhouse Broadcasting Corporation	1,398,000†
8.	Cablevision Industries, Inc.	1,354,000*
9.	Adelphia Communications	1,310,000
10.	Times Mirror Cable Television	1,293,000
11.	Jones Intercable, Inc.	1,292,000*
12.	Viacom Cable	1,116,000
13.	Falcon Cable TV	1,114,000
14.	Sammons Communications, Inc.	1,087,000
15.	Century Communications Corp.	975,000*
16.	Crown Media, Inc.	872,000
17.	Colony Communications, Inc.	792,000
18.	TeleCable Corporation	737,000
19.	Scripps Howard Cable	712,000
20.	Lenfest Group	674,000
21.	InterMedia Partners	644,000
22.	KBLCOM, Inc. (Houston Industries)	614,000
23.	TKR Cable	609,000
24.	Prime Cable	571,000
25.	Post-Newsweek Cable, Inc.	488,000
26.	TCA Cable TV, Inc.	486,000
27.	Wometco Cable Corp.	462,000
28.	Maclean Hunter Cable TV	433,000
29.	Tele-Media Corporation	424,000
30.	Multimedia Cablevision, Inc.	421,000
31.	Rifkin & Associates, Inc.	386,000
32.	Triax Communications Corp.	367,000
33.	Western Communications	320,000
34.	C-TEC Cable	268,000
35.	Columbia International, Inc.	254,000
36.	Service Electric Cable TV, Inc.	243,000
37.	SBC Media Ventures (SW Bell)	236,000*
38.	Greater Media, Inc.	230,000
39.	Harron Communications Corp.	227,000
40.	Media General Cable	222,000
41.	US Cable Corp.	212,000*
42.	MultiVision Cable TV Corp.	211,000
43.	Garden State Cable TV	194,000
44.	Sutton Capital Associates, Inc.	191,000‡
45.	Armstrong Utilities, Inc.	184,000
46.	Bresnan Communications Company	178,000
47.	Northland Communications Corporation	163,000
48.	Simmons Communications (American Cable Ent.)	160,000
49.	Summit Communications Group, Inc.	159,000
50.	United Video Cablevision, Inc.	154,000

*Paul Kagan Associates, Inc. estimate.

†Includes MetroVision, Inc., NewChannels Corporation, and Vision Cable Communications, Inc.

‡Sale of Sutton Capital Associates properties to Cablevision Systems Corporation completed August 1994.

SOURCE: Subscriber data from Paul Kagan Associates, Inc., *Cable TV Investor*, July 25, 1994, Supplement. Data as of April 30, 1994. Reprinted with permission.

TOP 50 CABLE SYSTEMS
RANKED BY NUMBER OF SUBSCRIBERS

	System Location	Operator	Basic Subscribers (Date of Data)
1.	New York NY	Time Warner	950,036 (1/94)
2.	Long Island NY	Cablevision Systems	610,717 (3/94)
3.	Orlando FL	Time Warner	475,684 (1/94)
4.	Puget Sound WA	Viacom	400,500 (1/94)
5.	Phoenix AZ	Times Mirror	353,000 (1/94)
6.	Tampa/St. Petersburg FL	Paragon	327,954 (1/94)
7.	San Diego CA	Cox Cable	326,571 (1/94)
8.	San Antonio TX	KBLCOM	248,980 (1/94)
9.	Houston TX	Time Warner	240,390 (1/94)
10.	Denver CO suburbs	TCI	240,000 (4/94)
11.	East Orange NJ	Maclean Hunter	238,007 (4/94)
12.	The Bronx/Brooklyn NY	Cablevision Systems	234,076 (3/94)
13.	Honolulu HI	Time Warner	228,573 (1/94)
14.	Chicago IL suburbs	Continental	223,334 (1/94)
15.	Sacramento CA	Scripps Howard	210,570 (4/94)
16.	Fairfax VA	Media General	206,228 (1/94)
17.	Las Vegas NV	Prime Cable	202,461 (1/94)
18.	Chicago IL	TCI	200,922 (4/94)
19.	Cleveland OH	Cablevision Systems	198,849 (3/94)
20.	Chicago IL suburbs	Jones Intercable	197,293 (1/94)
21.	Wayne NJ	TCI	196,686 (1/94)
22.	Rochester NY	Time Warner	195,998 (3/94)
23.	Jacksonville FL	Continental	193,085 (1/94)
24.	Los Angeles CA	Continental	192,838 (1/94)
25.	Hampton Roads VA	Cox Cable	192,189 (1/94)
24.	Cherry Hill NJ	Garden State Cable	192,000 (4/94)
27.	Atlanta GA	Wometco	191,157 (1/94)
28.	Kansas City MO	Time Warner	190,896 (4/94)
29.	Fairfield County CT	Cablevision Systems	186,799 (3/94)
30.	Cincinnati OH	Time Warner	185,329 (1/94)
31.	Milwaukee WI	Time Warner	185,310 (1/94)
32.	Louisville/Jefferson Co. KY	TKR	183,537 (1/94)
33.	Montgomery County MD	SBC Media (SW Bell)	180,000 (1/94)
34.	Memphis TN	Time Warner	176,112 (1/94)
35.	Baltimore County MD	Comcast	170,000 (4/94)
36.	Columbus OH	Time Warner	169,735 (3/94)
37.	Austin TX	Time Warner	164,681 (1/94)
38.	San Jose CA	TCI	164,000 (1/94)
39.	San Francisco CA	Viacom	160,600 (4/94)
40.	Buffalo NY	Adelphia	160,000 (1/94)
	Tulsa OK	TCI	160,000 (4/94)
42.	Dayton OH	Continental	159,445 (1/94)
43.	Pompano Beach FL	Continental	157,946 (1/94)
44.	Philadelphia PA	Comcast	157,000 (4/94)
45.	San Diego CA	Time Warner	154,127 (1/94)
46.	St. Louis MO	Crown Media	150,602 (1/94)
47.	Charlotte NC	Time Warner	150,525 (1/94)
48.	Los Angeles CA suburbs	Crown Media	150,068 (1/94)
49.	Raleigh/Durham NC	Time Warner	149,700 (1/94)
50.	Hartford CT	TCI	148,794 (1/94)

NOTE: Entries include clustered systems.

SOURCE: Subscriber data from *Cablevision*, May 23, 1994, p. 125. Reprinted with permission.

Top 50 Cable System Operators**

With breakdown of Top 25 and Second 25 status of December 31, 1977. Data obtained directly from company officials.

Rank	System Operator	Number of Subscribers
1.	Teleprompter	1,111,529
2.	American TV & Communications Corp. (TW Cable)	690,000
3.	Tele-Communications Inc.	575,500
4.	Warner Cable Corp. (TW Cable)	570,000
5.	Cox Cable Communications Inc.	504,000
6.	Viacom International Inc.	362,875
7.	Sammons Communications Inc.	309,033
8.	Communications Properties Inc.	293,000
9.	UA-Columbia Cablevision Inc.	238,000
10.	United Cable TV Corp.	207,002
11.	Continental Cablevision Inc.	201,745
12.	Storer Cable TV Inc.	198,724
13.	Cablecom-General Inc.	190,106
14.	Service Electric Cable TV Inc.	188,150
15.	TeleCable Corp.	162,000
16.	Midwest Video Corp.	159,674
17.	General Electric Cablevision Corp.	156,000
18.	NewChannels Corp.	147,466
19.	Daniels & Associates	145,092
20.	Liberty Communications Inc.	139,784
21.	Western Communications Inc.	109,000
22.	Texas Community Antennas Group	101,400
23.	Manhattan Cable TV Inc.	95,400
24.	Century Communications Corp.	91,486
25.	Times Mirror Co.	88,100
	TOTAL—Top 25	**7,035,066**

Rank	System Operator	Number of Subscribers
26.	Comcast Corp.	87,200
27.	Telesis Corp.	86,162
28.	Karnack Corp. (LBJ Co.)	84,210
29.	Athena Communications Corp.	84,000
30.	Cablevision Systems Development Co.	81,000
31.	Tele-Media Corp.	80,926
32.	Communications Services Inc.	80,530
33.	Colony Communications Inc.	79,577
34.	Vision Cable Communications Inc.	75,321
35.	Harron Communications Corp.	72,000
36.	Acton Corp.	69,550
37.	Rollins Inc.	69,240
38.	Harris Cable Corp.	68,500
39.	Gill Cable Inc.	68,327
40.	Wometco Communications Inc.	66,885
41.	Heritage Communications Inc.	63,987
42.	Westinghouse Bcstg. Co. Inc.	61,969
43.	Plains TV Corp.	60,155
44.	Multi-Channel TV Cable Co.	58,318
45.	Twin County Trans-Video Inc.	58,000
46.	King Videocable Co.	56,000
47.	Palmer Bcstg. Co.	54,150
48.	Toledo Blade Co.	52,000
49.	Televents Inc.	51,975
50.	Omega Communications Inc.	48,000
	TOTAL—2nd 25	**1,717,982**
	GRAND TOTAL—TOP 50	**8,753,048**

4,860,939

Updated • September 1978 • ncta

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OF COUNSEL

February 15, 1979

Mr. Ward White
Senate Commerce Committee
5102 Dirksen Senate Office
Building
Washington, D.C. 20510

Dear Ward:

Enclosed for your information is the portion of the old OTP draft cable legislation (section 303(d)) that would have prohibited the vertical integration of ownership of a cable system, interconnection facilities serving that cable system, and program supply services for that system. Also contained is the explanation of section 303(d) contained in the January 10, 1975, memorandum to OMB.

Sincerely,

Henry Goldberg

/ccd

Enclosures

including those subject areas not referred to specifically in sections 303 and 401. Sections 303 and 401 provide Federal guidelines for the exercise of authority by licensing authorities with respect to particular subjects whenever a Federal interest exists. It is not necessary for these sections to describe explicitly and enumerate each regulatory responsibility that the non-Federal authority may exercise.

Section 303(c) (former §708(b))

This section forbids the award of exclusive licenses, and limits the license period to a period of between five to twenty years. The earlier draft limited the period to five to fifteen years. This extended period should be long enough to allow adequate opportunity for the amortization of capital costs. At the same time, the cable system operator has additional incentives to insure continuation of good service and the initiation of new services and technological improvements to forestall the potential competition, which the requirement for nonexclusive licenses makes possible.

Section 303(d) (former §708(c))

This section would prohibit, inter alia, vertical integration of ownership of a cable system, interconnection facilities serving that cable system, and a program supply service in which programs are furnished the channel programmer on that system. This provision was criticized by the Commission for preventing continuation of presently acceptable activities such as the simultaneous employment of Cable Television Relay Services and program originations or syndications by a commonly-owned cable system.

The Cabinet Committee was aware of the problems posed by the Commission in its criticism. It concluded, however, that if vertical integration of all three of these functions were permitted, the development of any realistic competition among channel programmers would be impossible. The alternative to the Committee's approach, which regulates the structure of the industry in order to assure public interest goals of free competition, access, and maximization of services, would require extensive governmental enforcement of the anti-trust laws to prevent the emergence of regional or national cable monopolies. It is doubtful whether ad hoc enforcement of the anti-trust laws could regulate effectively such monopolies. In these circumstances a per se approach is justified.

It should be noted, however, that the section has been modified to make clear that only the ownership of, or control of access to, interconnection facilities is covered within the prohibition.

If the interconnection facilities are leased and there is no excess interconnection capacity available for "resale" by the carrier's customer, then the prohibition would not apply.

Section 303(e) (former §708(e))

The former section has been revised to apply only to cable systems constructed or substantially modified after the effective date of the Act. "Substantially modified" means that the system has been rebuilt to add channel capacity, as through the addition of converters or a "shadow" cable. An operator to whom this section applies would be required to construct the system with one channel available for lease to independent channel programmers for every channel intended to be used in the system for the retransmission of broadcast television signals or for program originations by the operator. Thus, an operator who intends to retransmit six off-air television signals and originate on an additional four, must construct a system with the capacity to transmit at least twenty television signals. This means only that the system must have the capability of providing the requisite number of leased channels. It does not mean that such channels must be "energized" at the outset and kept in reserve. This requirement is intended to insure that adequate channel capacity will be available to all who might seek access to the system. The proviso of the former section, which empowered the licensing authority to increase the proportion of channels leased to independent channel programmers during the term of the license, has been moved to section 303(g) to make clear that it is only the requirement to construct systems with adequate channel capacity for channel leasing activities that has been "grandfathered."

Section 303(f)

Since section 303(e) deals only with the construction of cable systems with adequate leased channel capacity, this new section is included to make clear that a cable licensing authority must insure a cable operator makes available the excess channel capacity of the system for lease to channel programmers, including those affiliated with the operator. "Excess capacity" for this purpose is defined, by reference to subsection 303(g)(2), as all channels in addition to (1) the capacity needed to retransmit the number of radio and television broadcast signals required for carriage by the FCC; (2) one public access channel; and (3) two channels for program originations by the cable operator (i.e., a channel programmer having an ownership affiliation with the cable operator).

proceedings incidental thereto, including but not limited to, procedures providing for adequate public notice of any such proceeding, and providing for public hearing, including the opportunity to submit written comments, prior to disposition of any such proceeding;

(b) adopt procedures providing for the imposition of sanctions upon a finding that the terms and conditions of the cable license have been violated;

(c) grant or renew licenses that are non-exclusive and issued for limited periods of time of no less than five years and no more than twenty years;

(d) assure that a licensee is qualified to construct and operate a cable system; provided, that a licensing authority shall not grant a license to any person, including entities under common control, who either directly or indirectly owns or controls access to interconnection facilities serving cable systems, and also supplies programming to channel programmers; unless such person certifies that either interconnection services or programming supply services will not be provided to the cable system for which such person seeks a license;

(e) assure that cable systems constructed or substantially modified after the effective date of this Act are

MEMORANDUM

November 3, 1975

TO: Robert Ross

FROM: Terrance Sandalow

RE: Constitutionality of "Cable Communication Act of 1975" (8-8-75 draft)

No serious constitutional questions are raised by the draft legislation. In stating that conclusion, I begin with the conclusions reached in my March 26, 1974, memorandum to Henry Goldberg concerning constitutional issues raised by an earlier draft of the proposed legislation. Specifically, that memorandum, so far as relevant, concluded:

1. Congressional power under the "commerce clause" is ample to warrant federal regulation of cable television.

2. In establishing a system of regulation for cable television Congress may limit state regulations that would otherwise be permissible.

3. Congressional power to limit state regulation of cable T.V. does not depend upon whether the state bases its regulation upon the police power or upon the use of state property by cable systems.

Subject to the caveats noted below, each of these principles is well established. In combination, they provide ample constitutional authority for the draft bill.

I.

Section 301 of the draft legislation provides, in effect, that a "cable licensing authority" must have exclusive jurisdiction over cable systems. States would be free to vest such jurisdiction in a state agency or in local governments, but could not empower a state agency to regulate some aspects of the operation of cable systems and empower local governments to regulate others.* The first question raised in your letter

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* As I read the draft legislation, however, it would be permissible for the state to provide that in some areas of the state cable systems are to be regulated by a state agency, while in other areas they are to be regulated by local governments. A state might, for example, authorize cities

of September 30 is whether Congress may, in this fashion, limit non-federal regulations to a single licensing authority.

As noted in my earlier memorandum, once it is established that a particular subject comes within Congressional power under the commerce clause, the power of Congress is plenary. Congress is free to establish national policy as it sees fit, subject only to the limits imposed upon its power by the Bill of Rights and other provisions of the Constitution. The question, thus, is whether in exercising the commerce power Congress may limit the prerogative of the States to distribute governmental authority between state and local governments. Although there is not, to my knowledge, a judicial decision squarely on point, a long line of cases in the Supreme Court strongly suggests that an affirmative answer to that question is appropriate. In Maryland v. Wirtz, 392 U. S. 123, 195, for example, the Court laid it down broadly that "the Federal government, when acting within a delegated power, may override countervailing

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* (continued)

with a population in excess of 250,000 to regulate cable systems operating within their boundaries, while empowering a state agency to regulate cable systems in all other areas of the state.

The requirement of exclusive authority appears to pose a serious obstacle to local regulations in one common situation. If a cable system is to operate within several municipalities, as I assume will frequently occur in metropolitan areas, it would appear from the draft legislation that not each of the municipalities may be a licensing authority. Either the state would have to establish a state agency to act as a licensing authority or the affected local governments would be required to join together to create a single "metropolitan" licensing authority. (Local governments have such power in some but not all states.) Such a requirement accords with what I take to be the policy underlying §301, that a cable system should not be required to deal with multiple licensors, but it does run counter to another of the policies of the draft, that the choice between state and local regulation should be left to the states.

state interests...." See, generally, cases cited in my March 26, 1974 memorandum.

It is not, however, necessary to go so far to sustain the constitutionality of §301, for that section would not unconditionally limit the states' prerogative in distributing power away to agencies of state government. Rather, when read together with other sections of the draft bill, §301 provides only that if a state undertakes to regulate cable, it must do so through a single licensing authority. The federal government would not, then, dictate to the state the organization of state government; it would interfere with the organization of state government only to the extent that the state wished to regulate in an area over which Congress has plenary control. The distinction is, potentially, of crucial importance, as demonstrated by the recent decision of the Court of Appeals for the Ninth Circuit in Brown v. Environmental Protection Agency, 8 ERC 1053 (August 15, 1975). In that case, the court refused to construe the Clean Air Amendments of 1970, 42 U.S.C. §1857, as authorizing the EPA to require a state to adopt and enforce air pollution controls necessary to meet federal air quality standards. The court's refusal to read the statute as authorizing such action by EPA was grounded largely upon the conclusion that Congress could not constitutionally, even in the exercise of its commerce power, require the states to enact legislation or to employ their administrative personnel to enforce federal policy.* But in stating this conclusion the court was careful to say its constitutional concern should not

> "be interpreted as disfavoring a determination by Congress that the state may regulate certain aspects of commerce which have an effect on interstate commerce only in certain ways if a state chooses to regulate that aspect of commerce at all." (8 ERC at 1062. Emphasis in original.)

The draft cable television legislation does no more than what the Ninth Circuit thought clearly permissible, i.e., it

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* The Court of Appeals for the Third Circuit has reached a contrary conclusion on both the statutory and the constitutional issues, 500 F. 2d 246 (1974). Presumably, the Supreme Court will soon be asked to resolve the conflict. See discussion at closing pages of this memorandum.

interferes with what would otherwise be state prerogative only if a state wishes to regulate an area of commerce subject to federal control. Viewed in this way, there is nothing novel in §301. Congress has frequently conditioned state power to regulate subjects affecting commerce upon compliance with standards laid down by the federal government. See, e.g., Federal Water Pollution Control Act 33 U.S.C. §§1251, 1316(c) (state may enforce pollution controls if federal administrator finds that procedures and law of state require application and enforcement of standard of performance to at least the same extent as required by federal law); Atomic Energy Act, 42 U.S.C. §§2011, 2021 (federal administrator may cede to a state power to regulate for control of radiation hazards if state program is adequate to protect public health and safety). More directly in point are the Wholesome Meat Act, 21 U.S.C. §§601, 661 and the Wholesome Poultry Products Act, 21 U.S.C. §453, 454, which permit meat and poultry inspection by the states if the states meet the requirements of federal law, including a requirement that the inspection program be administered by a single state agency. The constitutionality of such legislation has not, to my knowledge, ever been questioned.

Each of the statutes cited in the preceding paragraph might be distinguished from the draft legislation on the ground that, unlike the latter, each provides for a "back-up" system of federal regulation if the states choose not to regulate in accordance with federal standards. Under the Wholesome Meat Act, for example, if the state will not confer inspection authority on a single state agency, the federal government will operate a meat inspection program. Under the draft cable legislation, however, a refusal by the state to comply with federal standards means that cable television cannot exist in the state.* Although I have some doubts about the wisdom of such a policy, I see no reason to doubt its constitutionality. The failure of Congress to enact a "back-up" program would represent a determination that federal administrative control over cable systems is sufficiently undesirable that if the states are unwilling to adopt appropriate regulations, cable systems ought not to exist. Such a determination seems well within the discretion of Congress.

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* This follows from §302 which provides that no person shall construct or operate a cable system unless such person is issued a license by a cable licensing authority pursuant to the standards and requirements of the Title.

Precisely because cable systems will not be permitted unless the states adopt appropriate schemes of regulation, it must be recognized that the pressure upon the states to conform their laws to federal requirements will be greater under the cable legislation than under the meat and poultry acts. A failure by the states to meet federal requirements will not deprive its citizens of meat and poultry, but it will deprive them of cable television. Steward Machine Co. v. Davis, 301 U. S. 548, is strong authority for the proposition that even such pressure does not justify a conclusion that state autonomy has been infringed. In that case, Congress had enacted a tax upon certain employers, and had provided a credit of up to 90% upon contributions to an unemployment fund created under state law if the state law satisfied standards established by the Act, including standards relating to the internal operations of state government. The Court rejected an argument that the statute was an impermissible infringement upon the autonomy of the state, concluding that the state's decision to participate must be deemed involuntary. See 301 U. S. at 588-91. Similar reasoning has been followed in sustaining conditions imposed by Congress upon federal grants-in-aid, including conditions relating to the internal operations of state government. Oklahoma v. Civil Service Commission, 330 U. S. 127.* The pressure upon the states to conform their law, including their administrative structure, is no doubt great, but the law now seems settled that such pressure is permissible if the federal standards are reasonably related to a legitimate purpose.

II.

Your letter also asks that I consider whether any other provisions of Titles III and IV raise constitutional problems. In my judgment, the answer is that none do, for the reasons that are set out in Part I above. Congress clearly has the power to regulate the terms upon which states may regulate subjects affecting interstate commerce if the terms laid down by Congress serve a legitimate national objective and if they do not violate a limitation upon Congressional power. Without bothering to undertake an entailed analysis, all of the provisions of Titles III and IV seem to meet the standard with no

* Many federal grant statutes contain a requirement that state programs be administered by a "single state agency." See Michelman and Sandalow, Government in Urban Areas 1049-54 (1970).

difficulty.

III.

A few words of caution are probably necessary. Although the conclusions stated above, and in my earlier memorandum, are clearly supported by existing Supreme Court decisions, there is a possibility that the Court may in the near future hand down several decisions that will require some reconsideration of the issues. Last Term, the Court heard arguments in National League of Cities v. Dunlop, involving the constitutionality of an amendment to the Fair Labor Standards Act which extended the coverage of that Act to most state and local employees. Although Dunlop is not squarely controlled by Maryland v. Wirtz, which sustained application of the Act to a narrower class of state-local employees, a decision sustaining the amendments involved would not have involved a major extension of Wirtz and would, on the principles set forth in this and my preceding memorandum, have seemed relatively routine. There may, therefore, be some significance in the fact that Dunlop was set over for reargument this Term together with a group of cases in which there is reason to believe that the Court was closely divided. Significantly, three members of the Court are on record as disagreeing with Wirtz (Stewart and Douglas who dissented, and Rehnquist who last Term indicated that he would overrule Wirtz).

The Supreme Court is also likely in the near future to consider the conflict that has developed among the circuits concerning the Clean Air Amendments of 1970. The extreme inroads which that legislation may be seen as making upon state sovereignty may produce a reaction in the Supreme Court, leading the Court to announce new principles that will provide greater autonomy for the states than has been provided by decisions to date.

Although Dunlop and the Clean Air cases involve issues which are easily distinguished from those presented by the draft legislation, it is possible that decisions handed down in those cases, if they go in favor of the states, will require a reconsideration of the arguments made in this and my earlier memorandum. I do not anticipate that result, but it is possible.

TS:w

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

October 29, 1971

FEDERAL INITIATIVES

(1) Establish cooperative government/industry broadband demonstration programs in several urban and rural areas.

(2) Expand HEW activities in software development for education and health services.

(3) Disseminate information and assistance on broadband services through the SBA and National League of Cities.

(4) Encourage NBS to mount a cooperative program to establish technical standards for broadband systems.

(5) Establish a rural broadband development program under DOA.

(6) Underwrite some R&D costs for private sector development of terminal devices, and other peripheral equipment, as part of demonstration programs.

HANK Goldberg

OFFICE OF TELECOMMUNICATIONS POLICY
WASHINGTON

Hank –

Latest options.

Bruce

2. Services

(a) Each broadband system should offer all local broadcast television signals as a prerequisite to leasing or otherwise employing any remaining transmission capacity.

(b) The rates charged to subscribers and/or sponsors by program originators or suppliers (channel lessees) should not be regulated.

3. Copyright

(a) Program originators, suppliers, or creators, being channel lessees, should have full copyright liability.

(b) Broadband system operators should have no copyright liability, except in their temporary role as a channel lessees and originators under the five-year grandfather privileges suggested above.

4. Rural and Low-Income Viewers

(a) The Congress should establish a rural television program which should seek to preserve rural television service by whatever means of transmission is most effective and economical.

(b) The Department of Health, Education, and Welfare should be authorized to establish such programs as may be necessary and appropriate to enable impoverished persons in urban areas to have access to broadband services.

5. Broadcast and Newspaper Ownership

(a) Broadcasters, newspapers, and networks should be permitted to lease reasonable numbers of channels on any broadband system, and to own broadband systems not in their own markets.

(b) Broadcast stations and newspapers should be able to own broadband transmission facilities in their own markets only under the following conditions: The system should carry all local signals; all nonbroadcast capacity should be leased to others; the local franchise must be

5. Broadcast and Newspaper Ownership (con't)

nonexclusive and the system must expand capacity upon reasonable demand.

(c) Broadband systems owned by broadcasters or newspapers should be required to complete construction of the plant within a reasonable time after grant of the franchise.

6. Telephone Companies

(a) Exclusive franchise for telephone service should not be construed to extend to the provision of two-way services via broadband systems.

(b) Telephone companies should be permitted to provide broadband distribution service, provided that their franchise to do so is not exclusive, and there is no cross subsidization.

(c) Telephone companies should in any case offer pole or conduit space to all applicants on equal and nondiscriminatory terms without restriction on use.

7. Regulatory Authority

(a) The FCC should have the power to issue cease and desist orders and to levy fines with respect to any broadband distribution system found to be not in compliance with these policies, but not to exercise any power to prior licensing.

(b) The States should retain their power to grant cable system franchises.

(c) The enforcement of the separation of function requirements and resolution of "access" disputes should be left to court adjudication of claims raised by parties asserting violation of such requirements.

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

October 29, 1971

INDUSTRY STRUCTURE AND REGULATION

Intermediate (2-5 years)

(1) Allow importation of distant signals under FCC proposed formulas, with compulsory licensing.

(2) Allow cable operators to provide additional programming at their discretion.

(3) Require that cable operators lease excess channels to other program suppliers without discrimination.

(4) Relieve cable operators of all uneconomic burdens (free channels, excess capacity, two-way capability, etc.)

Permanent

Stevens objections

(1) Require that broadband system operators lease all channels to other program suppliers without discrimination, and increase capacity on reasonable demand.

(2) Require that broadband operators connect all who wish to subscribe within their franchise area, at nondiscriminatory rates.

(3) Impose full copyright liability on all channel lessees ~~[except as provided under grandfathered FCC package].~~

(4) Impose no content regulation on channel lessees, and enforce existing obscenity, libel, slander laws through the courts.

(5) Impose no regulation of rates charged by program suppliers or other channel lessees to their customers.

(6) Leave to the States the right to regulate franchise terms, basic subscriber fees, and channel access fees.

(7) Provide broadcast stations and newspapers the option within their market area of:

(a) owning broadband systems subject to the programming restrictions and other obligations noted above; or

(b) programming any number of channels leased from a nonaffiliated broadband operator.

(8) Encourage the ~~continued~~ availability of ~~existing levels of~~ rural and low-income ~~service via one or both of the following means:~~

~~(a) require broadband operators to continue existing service levels within the area affected by their operators, via whatever means they choose;~~

~~(b)~~ provide Federal subsidies for rural and low-income viewers, as for telephone service.

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

DRAFT
September 9, 1971

Long-Range Cable Policy

The following policy outline is meant to be effective for roughly the 1973-1985 time frame.

Summary

This policy statement is based on the following assumptions.

First, we assume that cable transmission service is likely to contain substantial elements of natural monopoly. We regard the presence of private monopoly control of access to the mass media, and the Federal intervention which results from that presence, as dangers to be avoided. In this case, monopoly control of access and Federal countervailing power can be substantially avoided by vertical disintegration of the transmission function from the program creation, origination, and supply function.

Second, we regard present institutional mechanisms for regulating natural monopoly to be so imperfect as to be avoided, or at least made very diffuse. Accordingly, we resist the temptation to give the FCC authority to license and regulate local transmission systems. The States are left free to do so if they wish, within fairly narrow limits. We have attempted to formulate an industry structure which will minimize the social and economic consequences of unregulated monopoly in transmission.

Third, we recognize the need to preserve and protect free television service for the foreseeable future, not because broadcasters should be protected from fair competition but because viewers should be protected from losing essential services. With this goal in mind, we propose methods for preserving free service on the cable as well as methods of subsidizing special consumer groups who might be denied free service as a result of cable.

Finally, we recognize the desirability of allowing existing media interests to participate in the new technology as a hedge against gradual obsolescence of their own technologies. We therefore include provisions which would allow such participation, without however giving the existing interests power to delay inordinately the diffusion of the new medium.

Policy to be Embodied in Legislation

1. Structure

(a) Ownership and control of the broadband transmission medium shall be separate from that of the origination-creation and program supply function. Except as provided below, the owner of the transmission facility shall only lease channels, and shall not control programming. Existing systems shall be permitted to continue for not more than five years such program supply functions (including distant signal importation) as they may lawfully be engaged in at the time of enactment of this legislation.

(b) There shall be no government regulation of program content (e.g., fairness doctrine, program mix standards, or licensing of program suppliers and channel lessees) or other restrictions on use of any leased channel. (Exceptions: libel, obscenity, etc.) Civil and criminal liability and responsibility for content shall rest exclusively upon the channel lessee.

(c) Access to the transmission medium shall be open to all at nondiscriminatory published rates for any lawful purpose. There shall be no special rates for special groups, and no reserved channels.

(d) Broadband communications operators shall be required to add channel capacity upon reasonable demand, to serve all persons in their franchise areas, and to comply with minimum technical standards established through industry-wide participation and certified by the FCC.

(e) Nothing here shall prohibit the joint ownership of program supply and interconnection facilities (used for distribution of program material to cable systems) or the joint ownership of broadband systems and interconnection facilities, except that interconnection facilities may not be jointly owned by both program suppliers and broadband system operators.

(f) Broadband systems which provide only antenna service for local signals shall not be subject to these rules.

2. Free and Public Service Television will be dropped

(a) Each broadband system shall provide all local broadcast television signals as a prerequisite to leasing or otherwise employing any remaining transmission capacity.

(b) Systems which carry only local broadcast TV signals may charge fees for this service without restriction.

(c) Broadband systems which provide both antenna services and leased channel service shall offer antenna service to subscribers on a per-channel basis with respect to monthly fees. Such systems must also provide subscribers with a switch which allows use of a rooftop antenna.

(d) Notwithstanding any of the above, broadband operators shall be permitted to charge initial installation fees as set forth in their franchise agreement.

(e) The rates charged to subscribers and/or sponsors by program originators or suppliers (channel lessees) shall not be regulated.

3. Copyright

(a) Program originators, suppliers, or creators, being cable channel lessees, shall have full copyright liability.

(b) Cable operators shall have no copyright liability, except as to distant signals which they are temporarily permitted to continue to import and in their limited role as channel lessees and originators.

4. Rural and Low-Income Viewers

(a) There shall be established a rural television program which shall seek, as the Congress may hereafter provide, to preserve existing rural television service by whatever means of transmission shall be most effective and economical.

(b) The Department of Health, Education, and Welfare shall be authorized to establish such programs as may be necessary and appropriate to enable impoverished persons in urban areas to have access to cable television service.

5. Broadcasters and Newspapers

(a) No restrictions shall be placed on the right of broadcasters, newspapers, or networks to lease reasonable numbers of channels on any cable system, or to own cable systems not in their own markets.

(b) Broadcast stations and newspapers may own cable transmission systems in their own markets, provided that they carry the broadcast signals required under 2(a), and provide additional channel capacity equivalent to at least the combined capacity required to satisfy 2 (a), and lease the remainder of the channel capacity of their systems without themselves supplying program services except as necessary to comply with 2(a) above.

(c) Cable systems owned by broadcasters or newspapers shall be required to complete construction of the cable plant within a reasonable time after grant of the franchise.

6. Telephone Companies

(a) Exclusive franchises for telephone service shall not be construed to extend to the provision of two-way services via local broadband systems.

(b) Telephone companies may provide local broadband distribution service, provided that: their franchise to do so is not exclusive; any such system is two-way; the requirements of 5(b) and 5(c) above are satisfied; and there is no cross-subsidization.

(c) Telephone companies must in any case offer pole or conduit space to all applicants on equal and nondiscriminatory terms without restriction on use.

7. Regulatory Authority

(a) The FCC shall have the power to issue cease and desist orders and to levy fines with respect to any cable system found to be not in compliance with these policies.

(b) The States shall retain their power to grant cable system franchises.

(c) The enforcement of the separation of function requirements of 1(a) and resolution of "access" disputes arising under the requirement of 1(c) shall be left to court adjudication of the claims raised by parties asserting violation of such requirements.

Mr. President:

It has been reported that the White House is considering a transfer of the Office of Telecommunications Policy out of the Executive Office of the President. In my view, this would be a most unfortunate occurrence, and I am therefore introducing a bill that would prevent such action.

The Office of Telecommunications Policy was established by Reorganization Plan No. 1 of 1970. This reorganization was the culmination of many years of study and analysis by the Congress and the Executive Branch, all of which resulted in consistent recommendations to establish a strong, visible telecommunications policy entity that would be capable of playing a leadership role in solving the complex problems posed by the rapid growth of communications technology. The Subcommittee on Communications of the Senate Commerce Committee, particularly through its distinguished chairman, has long supported a strengthened Executive Branch capability for the formulation of a comprehensive national and international telecommunications policy.

Underlying our support for a strong telecommunications capability, closely associated with the President, was the recognition that communications has assumed vastly increased importance to our society and to the Federal Government.

Communications services are a vital resource, enabling the smooth functioning of government, business and industry, tying people together instantaneously over long distances, and assisting in the promotion of international understanding and good will. Reliable and efficient communications are of critical importance for national security and foreign policy purposes. In addition, the widespread proliferation of expensive communications systems within the Federal Government created a need for effective, high-level coordination and management in order to eliminate duplication and avoid unnecessary expenditures. Thus, the Federal Government's interest in communications is major and fundamental, and has become increasingly so as a result of technological advances which have revolutionized our methods of communicating with one another.

All of this was recognized in 1970 when OTP was created. The Office was designed to serve as the President's expert advisor and principal spokesman on telecommunications matters, to coordinate the Federal Government's own telecommunications systems, and to work with the Congress and the FCC in formulating an overall telecommunications policy for our Nation. If anything, the role that telecommunications plays in our society has become more important since the creation of OTP

in 1970. Issues concerning the use of satellite technology, coordination of government communications systems, public broadcasting, the growing scarcity of radio frequencies, and privacy of communications are getting more attention now than ever before. The Office of Telecommunications Policy has made significant contributions to our national policies in these matters. The Office has been an effective partner of the Congress in dealing with these difficult issues, and, in my experience as a member of the Communications Subcommittee, has provide invaluable service to the President, to the Congress and to the Nation.

It is my sincere conviction, Mr. President, that removal of the functions performed by the Office of Telecommunications Policy from the Executive Office of the President would be a major step backward. Prior to the Office of Telecommunications Policy's creation, telecommunications matters were handled by a Director of Telecommunications Management located in the old Office of Emergency Planning. It was widely recognized that a principal factor contributing to the inadequacy of that arrangement was that the function was buried within another agency, and that what we needed was a separate entity with the visibility and stature commensurate with the growing importance of telecommunications.

The bill I submit today, Mr. President, would prohibit the transfer of OTP's functions to another department or agency without express Congressional approval. In view of the continuing Congressional involvement in communications through our oversight of the FCC, our involvement in such matters as public broadcasting financing, and our concerns regarding foreign policy and national security, I believe that the Congress should have the opportunity to take a good, hard look before a fundamental reorganization of such an important function takes place.

The issue is censorship

The federal government is proposing one more step toward filtering the news that reaches the public and the public should keep a vigilant eye on the scheme.

Clay T. Whitehead, director of the White House Office of Telecommunications Policy, has unveiled a proposed bill to hold individual television stations accountable for balance and taste of all their programs — news, entertainment and advertising — and to strip them of their licenses if they fail to shape up.

Now, there is a great deal of dereliction on the part of some broadcasters. There have been demonstrable instances of ideological bias in news presentation. Some commercials and some entertainment programs have violated common norms of good taste. On the theory that the public owns the airways the government asserts the right to license (and unlicense) electronic broadcasters, who are to that extent in a different category from the print media.

But the broadcasters are likewise an essential and inseparable part of the press in their role as dispensers of news. Any encroachment upon their freedom to select and edit and broadcast the news is a threat to the people's right to know. And that threat is being widely and, we fear, correctly read into Whitehead's proposal.

With his references to "ideological plugola" and such, Whitehead constructed quite a plausible case.

"When there are only a few sources of national news on television, as we now have," he said, "editorial responsibility must be exercised more effectively by local broadcasters and by network management."

Well and good. But it skirts the point. The all-important point is: Who should enforce that responsibility? In the case of the print media it is the readers, with their ultimate power to give or withhold their custom. To be sure there are laws providing redress to persons who may be harmed by slander or libel. But the First Amendment of the Constitution powerfully protects the editor's right to print what he pleases, and under that strong shield no politician has ever been able to impose a censorship that couldn't be successfully defied.

Now the Nixon administration, through Whitehead, proposes to convert the government's licensing power over local stations into a club with which the whole industry could be whipped into acquiescence with the administration's own definition of "tasteful" or "suitable" presentation of the news.

A Phoenix television executive, Tom Chauncey, is precisely right in saying: "If Whitehead really means this, we might as well be living in the Soviet Union. This would mean censorship of news and entertainment, the government telling us what to broadcast and telling the people what they should see or hear."

That this may indeed be the administration's intention has been disconcertingly hinted by Vice President Agnew's repeated attacks on the networks and by a long if sporadic history of administration efforts to throttle antagonistic television newscasting.

Providentially the American system of checks and balances gives Congress the responsibility for making laws and the Supreme Court the responsibility for testing their validity.

We trust that this effort at censorship will not get beyond the congressional hurdle. Meanwhile, the television stations and networks can rest assured that the newspapers of America stand solidly with them in this struggle.

Feedback: The Press Jawbones Mr. Whitehead

What are the press, the public and practitioners saying about public broadcasting, and about the issues that bear upon its development? Beginning with this edition of the *Newsletter*, we'll try to answer that question in a regular section called "Feedback." Its approach will be to present a sampler of comment about one current issue of interest to public broadcasters. Its aim will be to hold up a small but useful mirror for the system.

For this first edition of "Feedback" we have chosen an issue that involves not just public broadcasting, but all of broadcasting. Late last month Clay T. Whitehead, director of the Office of Telecommunications Policy, unveiled proposed legislation that would give stations longer license periods and greater protection from license challenges. At the same time, he indicated in a speech that those same stations would be expected to diagnose and counteract 'bias' in all programs they carry, including network news broadcasts. (For a more detailed analysis, see the story on page 2).

Reaction came from all geographical and ideological corners, but it tended overwhelmingly in one direction—negative. Some examples:

The New York Times: "In both commercial and public broadcasting, locally originated programs are of great value to communities. But it is impossible for local stations to produce the major national and international news programs vital for an informed public and electorate .... By striking at the networks, the Office of Telecommunications Policy—and the Corporation for Public Broadcasting—are striking at the heart of news and public-affairs programs.... The voices of Congress and the public will have to be heard if broadcasting is not to be turned into a counterpart of the domestic United States Information Agency."

The Chicago Tribune: "Bias, like beauty, is in the eye of the beholder. For government to make a determination of bias, particularly in the media, is tantamount to censorship, especially if government threatens TV or radio stations with the loss of their licenses."

Broadcasting Magazine: "The bill that has been drafted by the White House deserves to be considered, and indeed endorsed, for what it is—a reasoned measure to correct inequities that have crept into the renewal process through regulatory and judicial excess. The Whitehead jawboning on network bias may be taken for what *it* is—another outburst of Nixon-administration outrage against that familiar ogre, the Eastern liberal establishment.... The broadcasters would be well advised to forget the Whitehead jawboning and get down to legislative business."

Columnist Tom Wicker: "Even accepting for purposes of argument—and it is intellectually painful to do so—the ludicrous proposition that the networks do dispense 'elitist gossip' instead of news and 'sensationalism' rather than 'sense,' does it follow that the remedy for such villainy should be government regulation of the content of news broadcasts? Of course not; that would be to set a goat to guard the cabbage patch; nevertheless, no mistake should be made but that that is precisely what this autocratic administration is proposing."

Columnist James J. Kilpatrick: "As a practical matter, network TV programs, fed through local stations, cannot be equated with Associated Press wire copy, printed in local papers. Well before deadline, a newspaper editor has his hands on the available wire copy. He has read it. He can weigh it against other available copy. He can exercise his own professional judgment in terms of the news and interests of his community. Obviously no such flexibility attaches to the national output of network TV .... This troublesome problem of bias doesn't reside in 'ideological plugola.' It is a human problem: Human beings make human judgments. They err and none of Dr. Whitehead's remedies will cure the ill."

The Freedom and Responsibility Committee, Association for Education in Journalism: "The White House is trying, through the promise of concessions in licensing, to bribe the station owners."

The Minneapolis Tribune: "Inevitably, the proposal would make many local affiliates fearful of jeopardizing their licenses by airing any network offering that could be considered controversial. And, with equal inevitability, it would cause the networks to tone down their reportage and commentary for fear of being blacked out by, or losing, their affiliates."

The Atlanta Journal: "The move is a threat of plain, unadulterated, un-American censorship, a reflection of an imperial attitude around the White House which is disquieting. The move is a reflection on the native good sense of the American people. Television, radio and the press have their sinners to be sure, but their sins find them out thanks to the ability of the citizens of this country to spot a phony whether he be high in the councils of government, a fatuous peddler of printed opinion or a big bag of warm wind on the television screen."

The Washington Post: "Under the pretext of eliminating bias and in the guise of protecting our First Amendment rights, the administration is proposing to set the local affiliates, or, failing that, itself up as the ultimate arbiter of the truth to which the public is to be exposed. ... In its efforts to eliminate the healthy tension between the press and the government—by which truth is more surely pursued than by any other device we have—the administration is endangering not simply the independence of network news organizations, but the fundamental liberties of the citizens of this country as well."

Behind the Lines, produced at WNET(TV) New York and distributed by the Public Broadcasting Service: "There is no longer much question that shackling the American press is a major goal of the Nixon administration."

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.... from NEW YORK TIMES, Monday 12 March 1973 - page 29

TV's Top Anchormen Assess White House Policy Toward Network News

Network television's four leading anchormen—John Chancellor of the National Broadcasting Company, Walter Cronkite of the Columbia Broadcasting System and Harry Reasoner and Howard K. Smith of the American Broadcasting Company—were invited by The New York Times to participate in a round-table discussion last week to explore the relationship between the Nixon Administration and the television news medium.

The newsmen assessed proposed changes in Government policy and responded to charges by Clay T. Whitehead, director of the White House Office of Telecommunications Policy, of "ideological plugola" and "elitist gossip" on network newscasts. They also examined the ramifications of such criticism on television news and described their roles in shaping the nightly reports seen by millions of Americans.

All appeared at the informal meeting with editors and reporters of The Times much as they do on the home screen —tanned, relaxed, urbane, witty and articulate.

Mr. Chancellor and Mr. Cronkite characterized Mr. Whitehead's condemnation of network news as a "colder wind" or "escalation" of Administration attacks that began in the fall of 1969 with criticism of the media by Vice President Agnew. They contended that there had been clear knowledge at the higher levels of the White House of the Whitehead proposals and their implications.

Mr. Reasoner said he did not think of a "conspiracy in terms of the government planning step by step what they're doing against the press"—a view shared by Mr. Smith, his colleague at A.B.C. Mr. Smith emphasized that he did not disagree with Vice President Agnew's original criticisms, but thought that Dr. Whitehead's proposals, because they sought structural changes in the broadcasting industry, should be viewed in a different light.

All four newsmen said the criticism had not affected the networks' "courage" to tackle the Administration; indeed, they offered evidence to indicate that the criticism had made television newsmen even more determined to do a better job.

But Mr. Smith predicted a harder road for news documentaries. Mr. Reasoner deplored "a feeling among a certain segment of the audience that the networks are either their adversaries or their friends." And Mr. Chancellor and Mr. Cronkite were critical of what they viewed as an increasing "politicization" of the issue of the media vs. the Administration.

Opinion was divided on the need for Federal legislation to give journalists the privilege to withhold from grand juries either confidential information obtained during newsgathering activities or the source of that information.

Excerpts from the discussion, in which the newscasters said they expressed their own opinions, follow:

Q.: We'd like to start off by asking you about Clay T. Whitehead and the great deal of comment generated by his Indianapolis speech. What do you think his essential purpose was in combining the promise of a liberalized license-renewal bill for station owners with an attack on "ideological plugola" and "elitist gossip" on network news?

CHANCELLOR: When he made that speech, a lot of people reacted very strongly. There were people saying, "The sky is falling! The sky is falling!" In looking into it, there are a couple of things we have to keep in mind. One is that the people in charge of writing up this legislation —and I believe it has not arrived at the Congress yet— don't see how any proposals can be made to get machinery that would effectively monitor news programs before they come out. And they told us that's not their intent.

The second thing is that the threat to the local station owner has to be thought out. And my view of that is if the F.C.C. should ever decide to take a license away from a station owner because the station carried the wrong kind of news, the chances are very much that it would be overturned in the courts.

And I think we're talking about, from the station owner's point of view, a very remote possibility. What we're left with is another example of the Administration issuing vague threats about us and using some of those speeches as a platform for code words like "plugola" and "gossip."

But as far as the broadcasting industry is concerned, I don't see an awful lot in this practically. I do sense a kind of a colder wind, but we've had a lot of that.

CRONKITE: I don't think it's just enough to dismiss it as a colder wind, John, inasmuch as it is an escalation of the continuing attacks against us. I'd agree with you on the technical aspects of it—the problem of drawing legislation that could do the job that Dr. Whitehead suggested, he wanted done. I think that's probably why the bill is still kicking around the halls in Washington. They're trying to find a formula under which they can make this thing work in some practical way.

I think far more important is what it indicates—that there's no retreat on the part of the Administration from what I believe to be its firm intent to drag down the press and all of us in broadcast journalism as well. And this is another step to attempt to build a backwash of protest from our affiliate stations to our operations in the network and thus create an added area of influence and pressure against us.

REASONER: I don't know what he [Whitehead] meant and I don't know that he did. I don't think of a conspiracy in terms of the Government planning step by step what they're doing against the press, any more than we have a regular meeting to plan what we'll lead with that night among the three networks, The New York Times and The Washington Post.

But I think [there] is an atmosphere within the Administration in which this kind of thing is encouraged by anybody who has a bent for it and has a role. In other words, I don't think President Nixon or anybody talked to Dr. Whitehead ahead of time. I suspect that the proposal for the new legislation grew up in a very bureaucratic way, but nobody who had anything to do with it is unconscious of the general Administration attitude.

SMITH: I think, with Walter, that it is to be taken seriously. I think, with Harry, that Mr. Whitehead didn't know fully what he was talking about—as Senator [John O.] Pastore [Democrat of Rhode Island] proved when he dismantled him in public at the hearings [last month on the license-renewal bill].

But it's a quantum jump. I did not disagree or oppose Agnew's original speech [in November, 1969, assailing "bias" in some newspapers and networks] as much as I think Walter did. It seems to me that if we give them hell they've got the right to give us hell. And he proposed no structural changes in the broadcasting-industry part. But Whitehead did. And they're going to have one definite effect. Getting local stations to take documentaries in the United States is extremely hard. In Britain they have mass audiences for documentaries. We have to fight our way.

He will give an excuse to many local stations who didn't want to take documentaries in the first place, not to take documentaries they would like to replace with reruns of "I Love Lucy." I think they can't do much about the evening news, because if Harry Reasoner is about to utter a piece of elitist gossip, they will never know until he's done it. It's too late to turn him off.

CRONKITE: Sometimes

Harry doesn't know it, too.

CHANCELLOR: I'd like to disagree with Reasoner. I do think that at the higher levels of the White House there was a clear knowledge of what the Whitehead proposal was. I can't really quite believe that an Administration so sophisticated in the mechanics of American media would not realize the implications of that speech and discuss it at a very high level.

I don't know if the President had anything to do with it personally. But certainly he bears a very strong responsibility for what his man said.

CRONKITE: I go along with that, too. I also wouldn't use the word "conspiracy." I used it once and I'm sorry I did.

But I believe that certainly this is all part of a basic plan. And if the plan isn't laid out on paper, step by step, item by item and time by time, at least the philosophy runs through the Administration. And I cannot believe that this isn't part of the general movement in that direction.

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Q.: *Starting with Vice President Agnew, have the attacks by the Administration affected TV coverage in any way?*

CHANCELLOR: I saw a certain drawing back, I think, in being more careful on the part of journalism in America generally, after the Agnew attacks.

I think people in our business, before they use a certain word or phrase, ought to think twice about it. And I think for a period there people were thinking three times. I don't personally, in my own work and in the network's work, see that there have been any serious changes of any kind.

SMITH: It has no effect whatever. If it does make people think three times instead of twice I think that's good. In fact, I think five times before I say something.

CRONKITE: I don't think one time frequently before saying something, I'd have to admit. But that's not good journalism. We should be very, very careful. And I think that probably these attacks have helped us pull up our boots a little bit and practice our profession with a little more expertise than we applied before, perhaps. And I think that that's probably a good effect.

But it's a side effect from what the intent was, and I cannot agree in any way with the intent. But to answer your question more directly, has it affected us as to the courage with which we tackle the Administration? I think that the clear indications are that that is not the case. And we're in trouble because of it. Watergate and the grain-scandals stories particularly, during the campaign, show that we have not been intimidated to that extent.

Now I would not say, however, that it has not had a subconscious effect, and that worries me a great deal. I try to analyze my own emotions about these things when a matter comes up to us for decision. The first indication to me is that I think I want to pull back a little bit, kind of throw up my dukes and take a quick step back before I launch out again. And that worries me, that reflex action. It indicates that something subconsciously is going on.

REASONER: I think there's another effect which has been very real, and which I think may have been in the minds of some of the people before Mr. Agnew made his speech —How much time have we spent since November, 1969, in just this kind of a meeting? Or in various kinds of introspection? I don't know what per cent of our total energies—but 10 per cent maybe, or 20 per cent, that should be occupied in more direct responsibilities.

CHANCELLOR: There's something that needs to be added here, and that is that we are living in a slightly different climate for journalism in America today than we did before the Vice President and this Administration made their attacks on us.

One of the changes that I

perceive is that we may all be doing our jobs better because the Administration has accused us of being biased against them. And, therefore, I think a lot of editors all over the country—people who have a professional conscience—are going to make sure that their reputations remain intact in this period. I think that there are probably more column inches on Watergate than there might have been otherwise.

But there is more attention paid to the Administration because we are trying to answer to our own ethical standards—those standards having been brought into question by the Administration. It was, in fact, more relaxed in previous Administrations, and I think in some ways we may be doing a better job.

SMITH: One of the points Agnew made was "instant commentary." I was delighted in talking with Eric Sevareid the day before yesterday to find out he agreed with me—he hates to do instant commentary on something that's just broken, of which we have no warning. And I would rather have to dispense with instant commentaries and have a little while to think and then give a sensible commentary. So I think it might have helped in that respect.

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Q: *Even though they may not have changed the way you present things, to what extent have the Agnew and Whitehead speeches damaged the credibility of network news among your listeners?*

CHANCELLOR: The mail that came to us in large amounts after the first Agnew speech was about half for us and half against us. Since then there has been a change. And the change is that the Vice President and this Administration have given a sort of legitimacy to views that millions of Americans held and had not articulated before they came out in the open with it.

For a long time in the country, people got their news about the country from newspapers, and not all the newspapers were as good as The New York Times. And not all those papers had readers like The New York Times. So that when I was a young man, people read the sports pages and the comics and occasionally looked at the front page and the editorial page, but got the information they wanted to get when they wanted to get it about their society.

Television came along and changed all that. Now, after network television news began to be a real mechanism in the country, it was serious news put out by serious men. And for the first time the American people were systematically exposed every night to news that comes in a brutal way. On television you can't switch around. If you don't want to read about the ax murders you don't have to in a newspaper. On television you take it or you leave it off completely.

This made a lot of people unhappy with the news they got. The news hadn't changed all that much, although the society was changing, but it was the manner in which they got it. And there were vague and unspecified feelings about the news, and people didn't much like it.

I remember we all then began to get, "Why don't you put a little more good news on, it's too bad." And into that attitude came this Administration, the President and the Vice President, saying that the news isn't any good because those people aren't any good.

And this is the change that has come about. They now have for their fears, for their dissatisfaction about the news—they now can look to the White House, which says, "Yes, you're right, and it's those bad people who are doing it." And that's been serious.

SMITH: May I say that I think that if we give them hell they're entitled to give us hell, as long as they don't suggest restrictions on freedom.

CRONKITE: But unfortunately they have coupled this with suggestions and restrictions on freedom.

SMITH: The last batch of subpoenas [from a variety of sources against newspapermen around the country] worries me more than anything.

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Q.: *Have the latest attacks been possible only because Spiro Agnew planted the seeds of doubt about the credibility of the press, particularly the Establishment press, in the minds of the American people years before?*

SMITH: May I observe that we've planted seeds of doubt in the public's mind about the credibility of people in government. And I don't think it's bad if they criticize us. I don't think we're above criticism, as long as there are no specific restrictions on freedom of the press, which I think was basically the position of Agnew.

But I think we're in a new phase here now, which is worrisome. I don't think that was. There should be doubts about The New York Times and there should be doubts about us.

REASONER: I think that what goes to your question is: Has there been a kind of an adversary attitude in audiences that was not there before? A lot of the mail would say "I'm leaving you and going back to Cronkite because you're a liar," or the other way around—whether one network is more fair than the other.

There's a feeling among a certain segment of the audience that the networks are either their adversaries or their friends in American social life. It's a point which even Senator Pastore misses. In his dialogue with Dr. Whitehead he talked about the right of reporters to give their "plugola" just as much as the President. And neither he nor Dr. Whitehead conceded the possibility, or apparently recognized the possibility, that we aren't plugola-ing anything.

CRONKITE: What I object to in the criticism from the White House is not the fact that there is criticism, not even the fact that they would try to raise their own credibility by attacking ours. But what has happened is that this Administration, through what I believe to be a considered and concerted campaign, has managed to politicize the issue of the press vs. the Administration to the point that now we come to the real crunch, which is the matter of our actual freedoms to operate, our freedom to criticize, our right to do that. Our ability to function as journalists without harassment by an offended grand jury, whether it be county, state or Federal, or an investigative unit of the Federal Government.

We've come to that dangerous state now with the press in a position that to defend the right of the people to know—that is, to defend freedom of speech and

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Anchormen Assess White House TV Policy

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press — is to somehow or other be anti-Administration.

Thus politicizing the issue, they have again proved to be highly divisive in this society, and have created two Americas—one that believes in freedom of speech and press and one that doesn't.

That's a vast oversimplification, of course, but still, when you get to the heart of it, we're down to that kind of a basic, and that is what concerns me today—the trend in this direction.

CHANCELLOR: I support Walter in this because the subpoenas have gone mainly to reporters for organizations that have been critical of the Nixon Administration. I don't see them going after reporters who've worked on stories the Administration regards as favorable.

Going beyond that, I think that there is a feeling, perhaps on the part of the President, surely on some of his senior aides, that centrally produced information in the American society is somehow wrong. That The New York Times, which runs a large supplementary wire service; The Los Angeles Times and The Washington Post, which run a large wire service; that the networks which produce for the country's centrally produced news, are somehow wrong for the country.

I think that there are people in the White House who would like to see a fragmentation of the way in which we get news in America, that they would be more comfortable with that news, and that this is not necessarily just being a Republican or a Democrat, but that this would suit their attitudes about the country. I think they'd like to have revenue sharing in information. They'd like to put the money on the stump and have a lot of small localized operations telling the American people what's going on.

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Q: *To pursue that point about fragmentation of news, what's wrong with that?*

SMITH: It's only not wrong, it's happening. In this city you have three network news programs per evening, but you have many more non-network news programs. It's true in Washington and most big cities. So there's not just three sources of information on television. And local programs often have higher ratings in their locality than network programs can.

CHANCELLOR: I don't see how, in a country this size with problems of Federal and state relationships, with an Executive growing more powerful every day, with foreign relations taking place at sometimes blinding speed and in great secrecy, that you can get along in a society based on an informed public without having centrally—somebody has to produce it centrally. Every other country does it.

CRONKITE: I would suggest that we would be well off in this country if we had a good A.P. or U.P.I. of television news, if there were a way that a local station could indeed produce its newspaper of the air.

I don't think, however, that even with that service, that this would mean that television network news should not continue to function. Unfortunately, they [local stations] cannot do the job today and they're not very likely to be willing to pay the price to organize and to provide a service adequate to putting out a full broadcast with all of the national and international news included, on a daily basis.

REASONER: With all due respect to The Times, this is the first time in history that we've had the equivalent of national newspapers — the three network news broadcasts. A client paper for The Times or The Post or any body else can pick and choose. But an affiliate carries A.B.C., C.B.S or N.B.C—and in most American cities that's the only alternative to the paper.

SMITH: A main source of information and opinion for upper-middle-class Americans is news magazines. There are only three of those. There have been no complaints of them.

●

Q: *What do you see as the most severe limitations on what you're doing? And* how would you remedy them?

CRONKITE: I think it's a combination of things. You have to bring what the limitations are into focus. And the severe one, to my mind, is the limitation of time. Now I do not think that you can expand television-network news indefinitely, or any other news. I can't expect people to sit there four or five hours a night to get all the news they need. They're never going to get all the news they need by television. They're going to have to go to print for the bulk of the information each day.

But if we could expand to an hour, my format for that would be to take most of the items we do—not the film pieces necessarily, but the pieces that I do in just the 20-second version of something that happened in a

Washington hearing—and I'd expand it to 40 seconds, to get a couple of parenthetical phrases in there, a couple of hanging participial clauses in there, that might explain that story just a little bit better than I'm able to explain it in 20 seconds.

If we could do that, we would find a great deal of the problems that we have in being misunderstood by the public—the fact that we seem to be writing headlines, and we're only getting headlines—and we all know that headlines can be misinterpreted—we'd at least get the second deck of the headline into that story. And I think that would help.

Now, what we're never going to have, I'm afraid, is our own news-gathering staff to the depth that I would like to see it, to make us reasonably independent of the press services. And, as a consequence, we have to go on the air with a lot of material that is handed to us by a press agency. I wish that were not so.

●

Q.: Why can't you have a staff to do that?

CRONKITE: Because the outlet, the half-hour, the limited time, makes it totally uneconomic to have a staffer in Kansas City, for instance, when we get one story in two years from Kansas City. That's just not the best way to use your resources. And we don't have the resources.

●

Q.: Couldn't you have a special staff to do investigative reporting?

CRONKITE: We do have that. I'd definitely like to have more.

REASONER: This is partly psychological, isn't it, Walter? I remember the last scoop I got as a reporter was in 1959. And I discussed it with the executive producer of the C.B.S. evening news and he said it's a hell of a story. He said, "Let's leak it to the paper and we'll use it tomorrow night." We didn't want to go with it at that point, we were still digesting and editing and repeating the newspapers. This, I think, has changed very greatly.

●

Q.: Isn't it true that when network news was expanded from 15 minutes to a half hour, the extra 15 minutes was largely taken up with feature-type of stuff?

CRONKITE: No. I think that's absolutely false.

CHANCELLOR: People used to say to me, "What will you do at N.B.C. if C.B.S. goes to an hour?" And my answer was always, "Go to 15 minutes." I think that the half-hour news program has a sort of proper shape. I'm not sure that people in the United States will spend an hour looking at serious news every night. But I subscribe absolutely to what Walter says about more staff and better facilities with which to do our work.

●

Q.: Do you feel that some of the attacks by the Government might be occasioned by the fact that you are stars and personalities to the public?

SMITH: My guess would be that to some extent that's true, that if we were anonymous people who change as the B.B.C. announcers do—every program you have a different man, and you don't announce his name anymore—that would probably get less resentment. But they have people to fixate on with us there, and I think that probably adds a little.

REASONER: Surveys keep showing that with all of the stirring-up of people, that still if you go out and ask people who they believe, Walter would rate substantially ahead of the Vice President or any politician.

CRONKITE: I also noticed in the same poll they threw out a name—Joe Smith or something—of a nonexistent individual, and he came in higher than a lot of Senators. It shows the validity is questionable.

But I think I agree that this is a factor unquestionably. If you can focus the attack on individuals it helps. Now they haven't done that to this extent in broadcasting. I think that in the public statements they haven't come down to aiming at Walter Cronkite or Harry Reasoner, John Chancellor or Howard Smith.

CHANCELLOR: I really think that we're talking about something that goes beyond personalities and goes into an institutional dispute. It's two institutions—the Administration and the national press in this country. And I think if we were all automatons, if you had robots giving the news, they would then be attacking the writers of that news, the producers and editors of that news.

●

Q.: To what extent are the four of you responsible for the selection of stories?

CHANCELLOR: I work with an executive producer and he and his staff have a lot to do with choosing the stories that go on the air. Where I come into it is in the organization of that, an occasional suggestion, which I hope is followed through, and in pretty much the layout of the program during a particular day. And also the copy that goes into it as

opposed to the filmed stories and features we have.

CRONKITE: I think the only place that I do not have a direct element of control is in the actual editing of film. That's because of the time problem. It's something one man simply can't do and also handle the flow of the news during the day.

REASONER: It would be fairly rare that I would make up the line-up. I don't know how Howard works it in Washington, but I'm there, I read the wires, I read the transcript of what film is in and available, and I would assume I have substantial influence, although I don't, for instance, participate in the 11 o'clock meeting that says what's going to happen.

SMITH: I probably have less influence, Harry, because of geography and difficulty of communicating. But whenever I object strongly to something I make that known to our producer, who can stay close to things.

REASONER: Also it's a big news organization. I think it would be pretentious. We've gone past the "I'm so-and-so and here's the news I covered today."

CRONKITE: For every person who thinks that there's the cab driver who, when you're going to work at 9:30 in the morning, says, "What are you doing going in now? You're not on till 7 o'clock," there are just as many people who believe we do nothing, that we're news readers. And I'm terribly interested in disabusing them of that fact.

Q.: What's the case either for or against TV newsmen getting exactly the same First Amendment privileges as print newsmen?

REASONER: The case is all for it. There is no case against it.

CHANCELLOR: We feel it goes down to anybody who has anything to do with getting the news on the air.

CRONKITE: I think the phoniest argument in the world is that because we are regulated, therefore we do not have First Amendment rights. I just can't follow the legal labyrinth that comes to that conclusion. It makes no sense to me.

Q.: Are you doing anything about fighting for this?

CHANCELLOR: I think most of our bosses have testified for the most complete kind of embracing shield law. And if asked I'll spare no effort. I really feel very strongly about this because it applies to us as well as to newspapermen. What we seem to be getting to in the country now is that if I want to talk to somebody privately and confidentially I have to say, "Anything that you may say to me may be used in evidence against you."

SMITH: Or, "I may be willing to go to jail." You could say that, you know. Let's have some dissent in this. I'm against the shield law. Unless things get a lot worse than they are, I don't want a shield law for anybody. I think it involves too many complexities that haven't been thought out.

For one thing, you've got to define who a reporter is. The so-called underground press, some newsletters. If you said that anybody who gives news out, what's to prevent a mobster from writing a newsletter and saying, "I'm a journalist; I can't testify"?

I think ambiguity has its value. The British have been ambiguous about a Constitution all their history and it's worked. And I think we should leave the First Amendment there and fight each case one by one. We're not alone. Fifty bills have been introduced in Congress on our behalf.

CRONKITE: I'm opposed to any shield law that has conditions. I'm an absolutist in this regard and I take a little different position than Howard here. I believe that anything short of an absolute privilege is dangerous—very dangerous. It hands the Congress, it would seem, the right to pass laws regarding freedoms of speech and press. I don't like that part of the absolute law. But the Supreme Court in the Caldwell case invited the legislation, it seems, and perhaps that's the way to do it—with an absolute privilege. But anything short of that is highly dangerous.

REASONER: I was going to say that any law except unconditionally — and you aren't going to get an unconditional law—any other law is limiting.

SMITH: I think an absolute law is bad, too, if I can continue this dissent. It means, theoretically, that you can be a witness to a murder and you could not be required to testify. You may be the only witness to a murder. It means an experience like I had in Birmingham.

When I left C.B.S. we were doing a documentary on Birmingham. And I was tipped off that they were going to beat the hell out of the First Freedom Riders. I went to the bus station and I watched this phenomenon of the police leaving the streets, all the patrol cars leaving the streets, and these hoodlums taking over. The buses arrived. They climbed in. They beat these people.

I met one of them in Flint, Mich., the other day. He's hospitalized for life. He's paralyzed. Another had 26 stitches taken in his face.

I knew who was behind it. Now I think I should have been subpoenaed. Well, I didn't wait. I volunteered.

CRONKITE: That's the point, Howard. I think that the number of cases where you would have abuse of an absolute privilege would be very rare compared to the freedom to report, which would be granted by absolute privilege.

I would rather have the people protected by freedom to report and accept a few abuses where somebody would not volunteer the information, because I would assume in almost 99 cases out of 100, a reporter is going to cooperate to the extent of giving information.

DRAFT
October 12, 1971

POLICY OPTIONS -- CABLE TELEVISION

OUTLINE

Option 1

Accept the present integrated control of content and distribution facilities, characteristic of the broadcast industry, as the basis for cable television development. Expand present regulatory controls on program content, service standards, and rates as a means of ensuring balanced programming, equitable treatment, and increased public services despite the increased concentration of medium and message control which multi-channel cables threaten to provide.

Option 2

Prohibit the ownership and control of multi-channel distribution systems by entities engaged in programming or other use of such facilities, in order to avoid excessive concentration of media control. Require nondiscriminatory access to the distribution channels to ensure First Amendment privileges, subject only to established statutes governing libel, obscenity, etc. Regulate none of the programming supply functions, and only carefully selected aspects of the distribution function.

Option 3

Separate the ownership and control of programming and distribution functions as in Option 2, and impose full public utility/common carrier regulation on the distribution function along the lines of telephone regulation, with substantial State control.

Option 4

Place no restrictions on the organization and development of the cable industry except those statutory restrictions which now govern copyright liability, antitrust considerations, and content (libel, obscenity, etc.).

* * *

Under any of these options, there exists the opportunity for government agencies to subsidize cable development or to make use of its capabilities to achieve important social objectives. The extent to which this opportunity can be exercised, and the resultant effect on industry development and social objectives, are discussed in the following detailed analysis.

Option 1

Policy alternative 1 is to accept the organization of the cable television industry as it develops under present and proposed FCC rules. The principal implications of these rules are:

(1) Cable operators can control content and access for all channels not reserved by the FCC for broadcasting or special purposes;

(2) Free dedicated channels are required for public access, governmental, and educational uses;

(3) The FCC determines capacity, service, and technical standards for cable systems;

(4) The FCC regulates the importation of distant signals by cable systems, with the objective of preventing economic harm to existing television stations;

(5) Potential competitors to cable systems -- such as television stations, networks, telephone companies, and perhaps newspapers -- are prohibited from owning cable systems;

(6) The FCC retains the right to regulate program content on cable systems;

(7) Local government entities grant cable franchises and regulate subscriber fees.

Option 2

Policy alternative 2 is to organize the broadband communications industry in such a way as to eliminate the control of program content by both system operators and government. The essential aspects of this policy are:

(1) Ownership and control of broadband communication systems is separate from that of the program supply function;

(2) Access to the broadband system for transmission purposes is open to all on a nondiscriminatory basis; there is no preferred class of users;

(3) Channel lessees have full copyright liability for the material they present;

(4) Broadband system operators are required to serve all within their franchise area at nondiscriminatory (not necessarily equal) rates, and to expand both capacity and coverage upon demand under the same conditions. Systems which provide only improved reception of local broadcast signals are relieved of the latter obligation, but are required to carry all local broadcast signals.

(5) There is no government regulation of content on leased channels.

(6) Broadcast stations and newspapers owning broadband systems in their own markets may not originate programming on them.

(7) Local government entities grant cable franchises.

Option 3

Option 3 is to designate cable television firms as public utility/common carriers and to regulate them in the same manner as telephone companies and other utilities are presently regulated. The essential structural aspects of this policy are:

(1) Cable service for reception purposes is available to all residents of a franchise area;

(2) Access to the cable system for transmission purposes is available to all;

(3) Access charges and subscriber fees are directly regulated to provide a fair rate of return to cable system operators;

(4) For rate-making and other purposes, the separation of cable system investments between intrastate service (primarily local distribution) and interstate service (principally system interconnection) is accomplished by negotiation between State regulatory agencies and the FCC;

(5) Investments, operations, and other actions of the cable operator are regulated in detail by State and/or Federal regulatory authorities;

(6) Federal licensing and regulation of program content through channel lessees, along the lines of present broadcast regulation, continue.

Option 4

Policy alternative 4 is to permit unrestricted development of the cable television industry, except to the extent required to prevent abuses of market power. The essential features of this option are:

(1) Cable operators provide to their subscribers such local broadcast signals as they may desire and all additional signals for which they seek and obtain copyright permission;

(2) Channels which the cable operators may decide to lease are open to all users without discrimination;

(3) Program content is controlled by such statutory restrictions as those pertaining to libel, slander, obscenity, provision of gambling information, incitement to the commission of a crime, and false, misleading, and deceptive advertising.

Hank Goldberg

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

DRAFT #47
October 12, 1971

Long-Range Cable Policy

The following policy outline is meant to be effective for roughly the 1973-1985 time frame.

Summary

This policy statement is based on the following premises.

First, cable transmission service is likely to contain substantial elements of natural monopoly . The presence of private monopoly control of access to the mass media and the Federal intervention which results from that presence are dangers to be avoided. In this case, monopoly control of access and Federal countervailing power can be substantially avoived by separating the transmission function from the program creation, origination, and supply function.

Second, there is a need to preserve and protect over-the-air television service for the foreseeable future, not because broadcasters should be protected from fair competition, but because viewers should be protected from losing essential services. With this goal in mind, we propose methods for preserving broadcast services now available as well as methods of subsidizing special consumer groups who might be denied service as a result of cable.

Finally, it is desirable to allow existing media interests to participate in the new technology as a hedge against possible obsolescence of their own technologies. We therefore include provisions which would allow such participation, but without giving existing interests power to delay the diffusion of the new medium.

Policy to be Embodied in Legislation

1. Structure

(a) Ownership and control of the broadband transmission medium should be separate from that of the origination-creation and program supply function. With minor exceptions, the owner of the transmission facility should only provide transmission capacity for lease, and not control the selection or content of information carried on these facilities. Existing systems should, however, be permitted to continue for not more than five years such program supply functions (including distant signal importation) as they may lawfully be engaged in at the time of enactment of the legislation required to implement this policy.

(b) Access to the transmission medium should be open to all at nondiscriminatory published rates for any lawful purpose. There should be no special rates for special groups, and no reserved channels.

(c) Broadband transmission operators should be required to add channel capacity upon reasonable demand to serve all persons in their franchise areas at non-discriminatory (not necessarily equal) rates, and to comply with minimum engineering standards established by the Federal Government with industry wide participation.

(d) Broadband systems which provide only antenna service for local over-the-air signals should not be subject to these conditions.

(e) Government regulation of program content should be limited to those legal constraints (libel, obscenity, etc.) applicable to all communications media and enforced through the judicial process. There should be no government licensing of program suppliers and channel lessees, and no application of program mix standards, fairness doctrine, or other restrictions on use of any leased channel. Civil and criminal liability and responsibility for content should rest exclusively upon the channel lessee.

The Shift from Monopoly to Competition in Telecommunications and Broadcasting

Remarks by Clay T. Whitehead at GMU 3/23/04

At the change of administrations in 1969, many big issues were taking shape:

- The Johnson administration had largely ignored telecommunications and broadcasting
- Serious new firms were serious about competing with AT&T
- Data communications was growing rapidly, but ATT was overwhelmingly committed to analog
- International conflicts were growing over the US role in international communications
- New technologies like satellites, cellular, and digital networks were blocked
- The newly-formed CPB was seeking to become the fourth network funded by the US govt
- Cable TV becoming a real industry reaching a significant % of TVHH
- Copyright battles among the networks, local stations, cable TV, and Hollywood had grown more heated
- Pent-up spectrum conflicts between commercial and Federal government uses were coming to a head
- There were calls to reorganize the Executive Branch to deal with multiplying communications issues
- And, there were obvious hostilities between the Nixon political camp and the 3 TV networks

Against this tableau of issues, we were faced by the industry as it was:

- Telecommunications was the fastest growing industry in the country, but was monopolized by AT&T, which already took up 25% or more of corporate debt nationwide.
- The three TV networks controlled 90-95% of television viewing.
- A presumption of monopoly had become entrenched in industry and regulatory structure over the course of decades.
- Outside the United States, essentially all of telecommunications and all broadcasting was owned by governments.

Why was the old structure so enduring and so entrenched?

- It gave regulators leverage to impose public interest obligations on both telecom and broadcasting.
- There was a powerful symbiosis between ATT and the government; DoD and the CIA were highly dependent on AT&T and were opposed to the entry new, unfamiliar firms.
- The FCC was interested in telecommunications competition mainly to provide a benchmark for gauging AT&T prices, not as a serious alternative to AT&T or to the established regulatory regime.
- Spectrum assignments for television channels meant that a fourth TV network could reach less than half the country.

- AT&T microwave connections were too expensive for a TV network that could not cover a large percentage of the country's TV households.
- Copyright rules favoring Hollywood and the networks blocked the expansion of new cable channels.
- Antitrust interest was focused on AT&T's manufacturing monopoly, not its monopoly over the provision of telecommunications services.
- Regulators and Congress dealt with issues incrementally, but the issues were no longer incremental.

So where do we go from there?

- OTP came to a set of conclusions that we pushed with industry, FCC, and Congress.
- Competition and open entry had to become the new paradigm in both telecom and TV because technology and service needs were moving faster than the established industry participants and regulators could (or wanted to) adapt.
- Satellite technology had to be introduced into the U.S. domestic market on an open-entry, unregulated basis or there was no hope of serious competition in telecom broadly.
- The monopoly of the 3 TV networks had to be broken to give viewers more choice and to reduce the need and excuse for the government to enact content controls and all the political meddling that invited.
- Expanded choice in TV viewing would be better achieved by large numbers of new TV channels than by the expensive creation of a big new fourth TV network funded by the government.
- Cable TV was the only way a large number of TV channels could be gotten into the home.
- Satellites were the only way to provide affordable distribution of new TV channels to cable systems nationwide, and copyright rules had to be changed to permit the new channels to emerge.
- The heart of the ATT monopoly was its monopoly over telecom services [Vail], not manufacturing.
- Antitrust is a sledgehammer, not well suited to rapidly evolving technology-intensive industries, but the ATT/FCC/DoD/Congressional monopoly mindset was so dominant and so entrenched that nothing short of a sledgehammer seemed likely to work.
- Once we persuaded Justice to support the breakup of the Bell System as a remedy, not just splitting off manufacturing, we supported the filing of the antitrust suit.
- So, that became our agenda at OTP, which we pushed vigorously with industry, the FCC, and the Congress. We had some successes, a few 2x4s upside our head, and not all of our agenda was adopted. But we did have some success in beginning the change from the long-entrenched paradigm of monopoly and incremental change toward one of open entry, competition, and innovation in both telecommunications and broadcasting.

After my run at policy

- (And a year at Harvard to get my head together), I got interested in creating some of the competition we had preached.

- I started Hughes Communications where we created the first non-common carrier satellite service and aggregated a number of new cable networks to distribute their channels to all the cable systems across the country. HC later bought and now is known as PanAmSat.
- I started the first direct-to-home satellite television broadcast service, now called SES Astra. Astra bypassed the government-owned TV stations in Europe to bring large numbers of commercial channels to homes and provide real choice in television viewing.
- Now, having seen telecommunications and television from the inside, in both policy-making and in business, and having some distance now from the heat of the battles, I plan to do some reflection, research, and writing on some aspects of electronic communications that I think are particularly interesting as that field proliferates.
- Some of those topics include:
  - The difficulties and uncertainties faced by those in the early creation of those industries, the cleverness of some and the unwittingness of others in their consolidation, and the awkward coexistence we have now forced on innovation and regulation
  - How the chaos and competition in the creation of these industries got funneled into such extreme concentration and regulation; why the monopoly structure of industry and regulation persisted as long as it did; how we have emerged from that concentration back toward competition and innovation.
  - How the many threads of many current issues can be traced from the creative chaos of the beginning of electronic communications through the monopolistic consolidation, the reintroduction of competition, and the creative chaos of the industry today.
  - Notwithstanding how complex the technology, economics, law, business strategies, and market structure have become, many common threads from the past persist today:
    - Who sets the standards for interconnecting networks, who pays the costs, who gets the revenue?
    - Separation of cost and pricing by business and regulation
    - Privacy expectations and responsibilities
    - The need for standards vs the need for innovation
    - The pressure for regulation before we see how technology will evolve and be used.
    - The tension in regulation between what is "needed", "wanted", or just inherited.
    - The constant erosion of technical, economic, and regulatory distinctions
      - ~ As between broadcasting, cable TV, pay-per-view, and streaming video
      - ~ Or telegraph, telephone, cellular, e-mail, instant messaging, and voice over the internet
      - ~ Or books, newspapers, magazines, web pages, and blogs under the First Amendment
  - How technology, economics, markets, law, business strategies, and public perceptions intertwine to determine what communications capabilities become real businesses, how they get regulated, how they impact us as consumers and our politics, and what that portends for the future.

- So many of you here know so much about the diverse aspects of this fascinating field of electronic communications, and I look forward to exchanging ideas and perspectives with you.

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            - ~ Or books, newspapers, magazines, web pages, and blogs under the First Amendment
    - How technology, economics, markets, law, business strategies, and public perceptions intertwine to determine what communications capabilities become real businesses, how they get regulated, how they impact us as consumers and our politics, and what that portends for the future.

- So many of you here know so much about the diverse aspects of this fascinating field of electronic communications, and I look forward to exchanging ideas and perspectives with you.

Future directions of the government's communications policy

The general counsel for the embattled technocrats of President Nixon's Office of Telecommunications Policy spells out (again) the OTP mission

Henry Goldberg

THE WORDS "future," "policy," and "communications," included in the title above, to me define the territory that the Congress and the President staked out as the "turf" of the Office of Telecommunications Policy (OTP). These words and their relationship to OTP are my theme here.

In recent months, some scholars have given us a glimpse of the future as they see it. For example, Daniel Bell, the Harvard sociologist, in his new book, "The Coming of Post-Industrial Society," pictures an America transformed by powerful new technological, economic and social forces.

We started as a manufacturing or industrial society that put a premium on individual entrepreneurship and practical inventiveness. The entrepreneurs of the late 19th and early 20th centuries used their specialists—their engineers and lawyers and the like—in supporting roles. There was no question who constituted the hired help.

Enter the technocrat

But the industrial economy evolved into a service economy, and modern industry itself, whether electronics, chemicals, computers or communications, became very complex, because they depend upon a high degree of technological knowledge. Indeed, Professor Bell calls the post-industrial society a knowledge society, in which specialized and theoretical knowledge provide a new basis of power and status.

The fear is that the former hired hands—the engineers, scientists, technicians, lawyers, academics and others comfortable with theories and concepts that underlie the new technology—will take over the reins of our economy, whether they operate in the private or public sectors. J. K. Galbraith, for example, refers to a "technostructure" of specialists who manage the government and the giant corporations according to their personal interests and not according to the "public interest" or the impersonal forces of the marketplace.

In short, the entrepreneur and the bureaucrat have given way, in both commerce and government, to the technocrat. The term "technocrat" has all sorts of bad connotations, but these are in the eyes of the beholder. One man's technocrat is another man's skilled professional. But in any event, let's use the term—"technocrat"—whatever its limitations, because it is, at least, commonly accepted.

The technocrat deals with a mysterious body of knowledge and, therefore, he seems to be the fearful minion of a new order. Even worse, the technocrat engages in an activity that is virtually un-American—he plans. The technology that is grist for the technocrat's intellectual mill lends itself to forecasting and measuring its impact and thus to planning its directions. More importantly, given the economic and social implications of the development of new technologies, he knows that the alternative to intelligent planning is chaos.

The beasts that roam

I can think of few industries in which technology is as essential to growth and innovation as the electronic communications industries. As the beasts that roam the world of communications, we—I literally mean you and me—are technocrats; and we are distrusted. The view seems to be that communications is much too important to be left to the specialists, so we must be kept in our place, that is, in a supporting role. There's no point in overstating this desire to put limits on the technocrat's sphere. But, I can't help thinking that at least some of OTP's present difficulties stem from a lack of understanding of what that sphere should be.

First, last and, perhaps, always, OTP practically reeks of "technostructure," and its present and future status have to be viewed against the biases that this raises.

A look at the pre-history of

HENRY GOLDBERG is general counsel of the White House's Office of Telecommunications Policy. *This article is adapted from an address given at a joint meeting of the Institute of Electrical & Electronic Engineers and the Assn. of Federal Communication Consulting Engineers.*

...P will help to define the tech ...ostructure clearly. The effort to add a technocratic dimension to the government's frequency assignment functions began in 1951 with a recommendation from President Truman's Communications Policy Board to create the position of Telecommunications Advisor to the President. The first advisor was Haraden Pratt, incidentally a communications consultant. The Office of Telecommunications Advisor did not last long, having met its demise in 1953.

From 1953 to 1970, the duties of the former Telecommunications Advisor were performed by various Executive Office entities concerned primarily with civil defense and emergency preparedness. However, beginning in 1964, various proposals were made by congressional committees, by executive branch study groups and by groups outside the government to create a separate office for telecommunications research, policy planning and formulation, and for coordination of government's own communications activities. The Rostow Task Force in 1968 referred to the need for a "communications promoter" for the executive branch. Some of the language of the recommendations is interesting in light of subsequent developments:

> "The overall need, then, is for a long-range planning, policy-formulating and coordinating, and mission-support capability which can serve to integrate the various roles in which the Executive Branch is presently engaged.
>
> To its tasks, the proposed entity would bring the skills of engineers and scientists capable of analyzing the applicability of technological developments in terms of both component performance and system design; and of lawyers, economists and statisticians capable of engaging in, in cooperation with technical personnel, long-range technological, cost and demand forecasting. As these programs began to be implemented, one could expect a constant flow of such personnel to other communications-related government activities, including the FCC."

'The job of coordinating the communications activities and policies of other government agencies has proven to be more difficult than originally anticipated. Furthermore, our research and analysis do not always overwhelm everyone.'

Clearly, the Rostow group wanted the technocrats to bring their skills to bear on communications issues and even foresaw some of the player trades that have taken place between OTP and the FCC.

A new decade, a new group

In February, 1970, President Nixon proposed and the Congress supported the Reorganization Plan which created OTP. The functions assigned the new office were essentially those recommended by the Rostow Task Force. The Office was deliberately kept small, with most research and analysis to be performed by OTP support groups in the Department of Commerce's Office of Telecommunications. The President's message to the Congress outlined three essential roles for OTP:

1. To be principal advisor to the President on telecommunications policy to "enable the President and all government officials to share more fully in the experience, the insights, and the forecasts of government and non-government experts." (Our old friends the technocrats coming to the fore again.)
2. To formulate policies and coordinate operations in the realm of the government's own use of communications.
3. To enable the Executive Branch "to speak with a clearer voice and to act as a more effective partner in discussion of communications policy with both the Congress and the Federal Communications Commission."

Clay Whitehead was nominated and confirmed as director of OTP and today marks the third year of his tenure in that position.

In technocratic terms, Dr. Whitehead was a natural to head the Office: he's an MIT graduate, a Rand Corporation "think tank" occupant, and a former member of IEEE.

A kindly axe for OTP?

But what in the world happened to OTP? If you read the trade press, you are expected to believe that the bright promise of OTP has tarnished, that OTP is battered, and that Whitehead is beleaguered. I get the image of Dr. Whitehead sitting in a decaying and crumbling office, deprived of belt and shoelaces by a kindly retainer who does not want to see him do anything drastic, and waiting for a merciful Congress to put him out of his misery.

You shouldn't believe this image; just as you had no reason to believe the articles of a year ago that pictured Whitehead as a young czar of the communications world, riding the crest of power, and stuffing his policies down the throats of un-

Continued on page 158

...inued from page 154

...iling FCC commissioners and members of Congress.

I'm not, however, going to tell you that OTP doesn't have some new difficulties. When Congress gives every indication of lopping off half of OTP's 1974 budget request, which totalled only $3.2 million to begin with, we're not exactly flying high. We lose some issues at the FCC; we lose some in the Congress; and we even lose some at the White House. The job of coordinating the communications activities and policies of other government agencies has proven to be more difficult than originally anticipated. Furthermore, our research and analysis do not always overwhelm everyone. And, with our record out there in full view for anyone to see, I can't claim that we haven't made mistakes.

But we are doing what we are supposed to do, even though we could do it better. OTP has been brought up short, however, when it has spoken out forthrightly on the broad issues that affect the electronic mass media and its relation to the government through the regulatory process. In effect, OTP's critics are saying "technocrat stick to your last"; don't get involved in these broader questions that needn't concern you. But what is needed from OTP is not only specialized expertise. We also need the ability to take a broader view, a broader perspective on the close and complex interrelationships that abound in telecommunications.

Hamstrung by Congress?

It would be useless, and even risky, to attempt to confine an entity such as OTP to narrow considerations of technical matters. If this is the intent of the Congress in slashing the OTP budget, they are going about it in the wrong way. The budget cuts will hurt the very aspect of OTP activities that everyone finds least offensive, that is, the solid technical and economic research that must be done and that OTP is well-qualified to do.

Right now, the Congress quite properly provides the broader perspective that is and will continue to be needed in communications policy-making. But this shouldn't be a closed shop. The FCC should perform a broader policy-making function too, and so should OTP. You can't be principal advisor to the President on telecommunications issues or an effective partner in the policy dialog if you've suffered a pre-frontal lobotomy. We should be able to think about and state opinions on the social, philosophical and even political issues and considerations that, as technocrats, we know must ultimately control in the future of communications policy-making.

For example, the principal challenge of cable television to public policy and to the existing broadcast industry arises from its multi-channel capacity. Cable offers an abundance of channels in place of TV broadcasting's scarcity.

Cable's channels could be used to increase the variety and diversity of entertainment, information, and opinion available to the viewer, *if* the policy-makers can devise ways to increase access to those channels free of regulatory bottlenecks and excessive private monopoly controls.

But that's a big "if" and and development of broadband technology itself will not dictate the adoption of a policy that takes full advantage of the opportunities presented by cable.

Look what has happened in television broadcasting. There is no engineering reason why it has to be as scarce a medium as it now is.

If policy-makers were to change a few non-technical, but socially and politically critical assumptions, we could have many more TV channels and stations; both the low-power kind and the wide-area service VHF kind. It's not technology that has dictated the choice to keep TV broadcast channels a scarce resource. But I'm not criticizing this choice.

My point is that the same thing could happen to cable technology, if care isn't exercised. If we do not tailor a new public policy for cable, it is likely that cable will continue to develop and be regulated in the policy mold created for broadcasting by the 1927 Radio Act. This could result in the creation of an artificial scarcity of channels. Cable could be seen simply as an extension of and a supplement to the TV broadcast industry. It could be treated as a secondary service that could engulf the primary broadcast service if cable's many channels are used to their full capacity. This perception of cable's channel abundance as a threat could retard cable growth and even limit full use and expansion

'. . . what is needed from OTP is not only specialized expertise. We also need the ability to take a broader view, a broader perspective on the close and complex interrelationships that abound in telecommunications.'

of its channel capacity.

It is OTP's responsibility to anticipate these kinds of risks and, as experts acting with other experts in and out of government, make the policy choices and their consequences explicit. But we must take into account a full range of considerations, not simply the technical considerations, and we must be free to speak out on these issues.

The real role of OTP

OTP doesn't want, and must not have, primacy in communications policy-making. But we do want to be the effective partner of entities that perhaps do not want partners. The policy-making process, however, must of necessity include the executive branch, whether or not there is an OTP. What president could or should ignore the issues posed by the rapid and varied development of communications technology and its impact upon the fabric of our society?

The question answers itself. Without an OTP, this president and every future president would still have a responsibility to deal with these issues; but the technocrats, skilled professionals, or what have you, would be driven underground or scattered among other departments and agencies. They would be effectively cut off from the President and he would find it difficult to have the benefit of a full-range of their insights and perspectives.

The communications industries are too technologically advanced and growing too rapidly to accept this return to a fragmentation in policy planning and a hidden agenda in policy formulation. This points up the need for an OTP that is out in the open and visible to the public, to the Congress and to the FCC; an OTP that is accountable to the President, the Congress and the courts for the conduct of its activities.

Being visible and accountable, we should be challenged, disputed, debated and even, from time to time, denounced; just as OTP should be allowed the same freedom to inquire, question and challenge others in the field. But we should and must continue to forge ahead and percolate with new ideas, new concepts, and different perspectives, if policy-making in the vital communications area is to be a dynamic process from which all can benefit.

Despite ruffled feathers, does anyone think that the Congress will not benefit in its deliberations of a renewal bill from the clash of FCC and OTP views on the issue of program percentages in the license renewal process? Who doesn't believe that the public broadcast system will not be a healthier one for all the debate regarding its fundamental goals and objectives; or that commercial broadcasting cannot withstand careful analysis of its economic imperatives and their regulatory consequences? Are the Congress and the FCC the only ones to be allowed to judge the future policies for cable development or the roles of competition and monopoly in the telephone industry? Are the only advocates to be the industry interests and an *ad hoc* assortment of consumer or viewer groups? I certainly hope not.

There is no place for the closed shop or the closed mind in communications policy-making. OTP should not be confined to the role of technocratic waterboy while the other players are on the field. I don't think that professional communications engineers would want to be confined to that kind of a role either. There's more at stake than requiring one FCC commissioner to be an engineer or appointing someone with an engineering background to head OTP; all such professionals should be participating in the policy process on a much wider scale and to a much greater degree. The public will be shortchanged if the professionals settle for anything

The common thread running through all discussions of communications in the next decade is technological change and the impact of that change on our social institutions, our economy, and our cultural values. It is impossible, in one broad stroke of the brush, to impose a logical order on the situation that goes beyond generalities or cliches.

To avoid this course, and yet at the same time to avoid becoming bogged down in specifics, I would like to focus on two prominent areas of change--cable TV, in the domestic field, and satellite communications, in the international. A brief review of likely (indeed almost certain) technological developments leads naturally to a discussion of the issues that decision-makers will have to face and resolve (if only by default) in the coming decade. Naturally, the two areas do not cover all the changes or issues in communications in the decade to come. However, they are representative and instructive in approaching the problem, and give something of a "handle" on its complexity.

Cable Television

Originally conceived as a device to improve broadcast television reception in mountain or fringe reception areas, cable television now has the technical potential to become within the next 5-10 years an economic local distribution service for TV and various other forms of communication. The elements of this potential are channel abundance and inexpensiveness, as compared to the present scarcity and cost of over-the-air television; capability for return signalling ("two-way" features) and for geographical localization; and the possibility of integration with computers and associated "information technology" devices.

The issues likely to arise from improved cable television technology and increased numbers of customers are:

-- Should government
  -- adopt a laissez-faire attitude, impose no rules on entry, services or industry structure and allow the marketplace to determine development?
  -- adopt minimum ground rules such as franchising plans, required services and nondiscriminatory treatment, but rely predominantly on normal market and political forces?
  -- develop a single coordinated "master plan" to guide development and heavily regulate the cable industry in order to fulfill its goals?

-- What division of authority and responsibility between local, state, and federal jurisdictions should there be?

-- What kinds of services should be emphasized?

  -- TV program services only, including programs of broadcast stations, the cable system itself, and third parties?

  -- minimal two-way services, such as remote utility meter reading, subscription TV (pay TV) on a viewer selected basis and simple Yes-No polling?

  -- fully developed multi-directional switched communications services including "information services" made available by utilization of computers, such as telepurchasing, videophone, message switching and data processing.

  -- Should the choice of priorities be made by government or by the marketplace?

-- How should the industry be structured?

  -- Should ownership and control of transmission facilities be joined with that of program content, as is the case with over-the-air television? Should such control be separated, as is the case with common carriers? Or should there be a mixture of the two?

  -- Should controls be imposed on multiple ownership or on cross-ownership (print or electronic)?

If "concentration" is a danger, how should it be defined?

-- What funding mechanisms or mix of mechanisms should be utilized? How much and for what should the subscriber pay for--the service as a whole, individual channels, or individual programs? How much programming should be advertiser-supported? What services, if any, should be noncommercially supported, either by private contribution or by public subsidy? Should rates or services be regulated?

-- How will cable be integrated with the present broadcasting industry?

  -- Should pay-TV be allowed?

  -- How will fractionalization of audiences affect programming quality and diversity and the provision of news and public affairs programs? Is there an overriding public interest in prohibiting fractionalization?

  -- What rules pertaining to copyright, mandatory and permissive carriage, and distant signal importation will be adopted in order to assure that cable is enabled to develop, but to do so without destroying the resources on which it draws?

-- Are there "public interest" needs which should be taken into account, such as the provision of services in rural areas (where adverse cost and geographical conditions prevail), nondiscriminatory treatment of customers, access to the media for the presentation of individual views, channels dedicated to public affairs or local community interests, and minimum service requirements or technical standards? Does this require regulation?

-- What effect will cable development have on educational and public television? Will the present mechanism for these services be appropriate and effective, or will another one be called for? In particular, will the abundance of channels satisfy minority and specialized tastes, including foreign language, "cultural," non-mass appeal, and local interest programs--thus relieving the pressure on public television to accomplish this? Will this channel abundance, along with differing funding mechanisms for programs and for interconnection of systems (networking) require a change in the way these separate functions--public or educational program production, local distribution and networking--are handled now?

-- What effect will there be on national and local politics, and on the political process as a whole? Will cable

be a force of national cohesiveness, or will it tend to balkanize separate regions and communities, moving them farther apart?

International Satellite Communications

Within the decade, satellite technology will develop in a number of ways that will greatly enchance its capability for entirely new services, many at relatively low cost. Major developments in the capability of antennas to focus beams and of the system to allocate channels among different routes according to demand, when coupled with reduced launch and earth station costs and greater applications of computers in the control process, will enable satellites to compete favorably with almost all of the services now offered by terrestrial carriers. Additionally, foreseeable developments in space power systems will enable satellites to transmit broadcast quality television signals directly from one nation to the other. It is unlikely that innovation will proceed rapidly enough to permit direct reception by a home receiver (at acceptable costs) before the end of the century. However, reception by community earth stations for retransmission to local distributions systems (such as cable TV systems or local broadcaster outlets) is well within reasonable expectations for the next ten years.

These developments raise a number of social, economic, and political issues:

-- Will a new "world market" and sensibility emerge, based on the commonality of information of a global mass media? Or will access to different cultures shock and disrupt national societies? Should these phenomena be accepted as inevitable, or should they be resisted and avoided? If so, how?

-- What effect will direct and extensive contact with the cultures of developed nations have on underdeveloped nations? Will have-nots become more "restless," developing rising expectations which their own leaders, even with the cooperation of the haves cannot meet? Will fear of this instability, or of intrusion by alien life-styles or political ideologies, cause underdeveloped nations to impede development of international communications by burdening it with unreasonable constraints? Conversely, what impact will contact with primitive cultures, or with the relative suffering and misery of the poor countries, have on the rich? What should be the role of international organizations such as the U.N. or the media itself in these developments?

-- What institutional arrangements can be devised to contain and channel these tensions, as well as to realize potential of the new technology? Is our First Amendment controlling, or are there other additional considerations when foreign affairs come into play? What principles should be adopted to recognize the aspirations of the underdeveloped countries, but adequately and equitably recognize the interests of the developed ones as well? Is one-nation one-vote appropriate, as is currently the case in the U.N. General Assembly? Are present U.N. organs, such as UNESCO or the ITU, proper vehicles for resolving international conflicts?

-- How will communications technology be used to meet problems of world illiteracy, and the demand for industrialization and a rise in the quality of life?

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

November 15, 1971

DIRECTOR

Honorable John O. Pastore
United States Senate
Washington, D.C. 20515

Dear Senator Pastore:

You have asked me to provide you with the Administration's views on the FCC's cable television proposals, as well as Administration recommendations resulting from the work of the special Cabinet Committee on broadband cable. Since the Committee will not address specifically the FCC's proposed conditions of distant-signal carriage, and since it will in any event not complete its work for several more weeks, I am replying separately to your first request.

The Administration's views on the FCC proposals can be summarized as follows:

(1) It is highly desirable that the "freeze" on cable development in the major markets be eliminated, and that the new medium be permitted to proceed with its growth as soon as possible in an atmosphere conducive to stability and cooperation among the various interests involved in providing program services to the public.

(2) Those matters pertaining to cable retransmission of broadcast television signals which the FCC has addres: (i.e., permissible distant signals, definition of local signals and "anti-leapfrogging") involve the type of substantive determination which, within broad limits, is best resolved by an administrative agency. Those proposals should be supplemented, however, with provisions applicable to radio signals and with restr tions upon importation of copyrighted programming.

(3) The balance of the proposals, including the division of federal-state authority over broadband cable servi are predicated on unclear authority and address issue of major national concern which will ultimately deter mine the form and structure of the new industry. Implementation of these proposals should not be allow to preclude thorough Congressional review of the fundamental policy questions which the Cabinet Committee is considering.

The Supreme Court has affirmed the FCC's authority to impose those regulatory requirements on cable television that are "reasonably ancillary to the effective performance of the Commission's various responsibilities for the regulation of television broadcasting." The FCC's proposals dealing with carriage of television broadcast signals clearly fall within this authority. Accordingly, there is no question of the FCC's power to resolve such issues as the definition of "local" signals, the appropriate number of distant signals to be carried by cable systems, and restrictions on the points of origin of distant signals (i.e., "anti-leapfrogging").

We have no substantive comments on these aspects of the proposed rules. These provisions are intended to provide cable with an opportunity for immediate growth, while protecting the economic viability of our "over-the-air" television broadcast system. They involve judgmental determinations of the type which, within broad limits, Congress must of necessity leave to the discretion of its regulatory agencies. What is essential, as far as the broadcast-carriage proposals are concerned, is that there be prompt adoption of a regulatory approach which will receive general acceptance, thereby enabling the sound growth of the industry to proceed.

There are, however, several problems which these broadcast-related proposals leave unresolved: first, there is the problem of the importation of distant radio signals, and second, the problem of exclusivity protection for copyrighted television programming.

Leaders of the affected industries have recently reached an agreement regarding provisions that deal with these concerns and also involve minor modifications of some broadcast-related items already included in the Commission's proposals. If reflected in the Commission's final rules, this agreement would fully meet our concerns regarding radio and copyright. Absent this accord on the final rules, there is serious risk that an end to the freeze will be delayed by challenges in the courts and Congressional hearings on these matters. We believe the public interest would not be served by such developments.

Turning now to those aspects of the proposals which go beyond the conditions of cable retransmission of over-the-air signals, relating to broadband cable as a communications medium in its own right: These aspects of the proposed rules (together with existing rules and further contemplated rulemakings) involve such matters as Federal preemption of state and local control, the extent of FCC supervision of programming, limitations on numbers of channels, flexibility with respect to new services, and prescribed channel usage. These and other matters of like

importance will shape the economic structure, and indeed the character, of the new medium. They are the subject of the Cabinet Committee's work and will ultimately require careful Congressional consideration. The Commission itself has noted that the recent Midwest Video case casts doubt upon the legality of this type of regulation, and it has requested Congressional clarification. Similarly, we believe the 1934 Communications Act provides inadequate guidance for the regulation of broadband cable communications. Therefore, while we favor immediate implementation of the proposed rules in order to permit the growth of cable television, our recommendation is based upon the hope and expectation that Congress will address these fundamental aspects of broadband cable policy at an appropriate time, before the economics of the industry and the character of the medium have become irreversibly set in the mold contemplated by the Commission.

As you have stated, cable television involves many fundamental and complex policy matters of national importance. Until they can be resolved by due Congressional deliberation, we believe the public interest will best be served by ending the cable "freeze" through adoption of the FCC proposals. This course of action will enable the Congress to give its full attention at a later time to the major issues involved in the future of broadband communications services without further delaying the expansion of cable television service for the American people.

Sincerely,

Clay T. Whitehead

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

October 29, 1971

FEDERAL INITIATIVES

(1) Establish cooperative government/industry broadband demonstration programs in several urban and rural areas.

(2) Expand HEW activities in software development for education and health services.

(3) Disseminate information and assistance on broadband services through the SBA and National League of Cities.

(4) Encourage NBS to mount a cooperative program to establish technical standards for broadband systems.

(5) Establish a rural broadband development program under DOA.

(6) Underwrite some R&D costs for private sector development of terminal devices, and other peripheral equipment, as part of demonstration programs.

Outline of Issues OTP Initiatives Summer 1972

International Communications coordinated at the Government level

- "There is growing dissatisfaction with the existing procedures whereby the FCC is in position to unilaterally impinge upon the freedom of US carriers and foreign administration with regard to deployment of new transmission facilities"

Broadcast License Bill Issues

- Radio De-regulation
- Product Ads
- "Fairness" and Access
- An Information Act
- Renewal Problem

Emergency Telephone Number 911

CPB

Funding and content disputes

Satellite Communications Policy

- SAT COM/DoD relationships
- "a bill should explicitly state under executive order that all proposals should be submitted for coordination prior to the commitment of any budgetary funds"
- Government purchasing policy
- Electromagnetic Pulse Policy
- Secure Voice System Planning

Airwaves

Reallocation of Spectrum Rights
Government Use

Proposed Revisions of 1934 Communications Act

- Definitional distinction between monopoly and competitive carrier services
- Definitional distinctions between common carrier operating functions
- Local (analog, digital)
- End and toll switching
- Long Haul transmission (networking)
- Terminal Functions (multiplexing)
- Unbundle rates
- Common carrier would be required to sell services on a non discriminatory basis
- Elimination of existing ban against resale of common carrier services
- Redraw regulatory jurisdictions
- Responsibility for performance of common carriers

- Separation of the FCC into broadcast and common carrier commissions
- Forced Interconnection, competitive guidelines to common carriers
- Address Cross-subsidization and definition of markets
- Elimination of rate based inflationary provisions
- Modifictaion to the Uniform System of Accounts
- The FCC will have no authority to extend its jurisdiction to major new technologies

Formation of Cable Commission

Jurisdiction
Copyright policy
Program orgination
Equiptment standards
Common Carrier status

Commission on the Mass Media

Executive Order

Land Mobile Communications Policy

- 4 major players;
    1) Radio common carriers
    2) AT&T
    3) Mobile equipment manufacturers
    4) UHF Television broadcasters
- OTP proposes:
    1) national set of standards
    2) competition
    3) frequency allocation
    4) pilot program

Industry Reaction to OTP Proposals

- Broadcasters object to provisions for freer importation of distant signals
- Cable operators object to being subjected to regulation as common carriers, and to programming origination restriction
- Copyright holders and program originators thought favorably of the OTP stance on the copyright question
- Telephone companies objected to anti-monopoly language in proposals and to prohibition from entry into cable
- Motion Picture/Theatre Industry object to pay TV aspects of cable

[Executive Orders]

Executive Order 12046--Relating to the transfer of telecommunications functions

Source: The provisions of Executive Order 12046 of Mar. 27, 1978, appear at 43 FR 13349, 3 CFR, 1978 Comp., p. 158, unless otherwise noted.

By virtue of the authority vested in me by the Constitution and laws of the United States of America, including Section 7 of Reorganization Plan No. 1 of 1977 (42 FR 56101 (October 21, 1977)), the authority and control vested in the President by Section 2 of Executive Order No. 11556, as amended, Section 202 of the Budget and Accounting Procedures Act of 1950 (31 U.S.C. 581c), and Section 301 of Title 3 of the United States Code, and as President of the United States of America, in order to provide for the transfer of certain telecommunications functions, it is hereby ordered as follows:

Section 1

Reorganization Plan

1-1. *Implementation of Reorganization Plan.*

1-101. The transfer of all the functions of the Office of Telecommunications Policy and of its Director, as provided by Section 5B of Reorganization Plan No. 1 of 1977 (42 FR 56101), is hereby effective.

1-102. The abolition of the Office of Telecommunications Policy, as provided by Section 3C of Reorganization Plan No. 1 of 1977, is hereby effective.

1-103. The establishment of an Assistant Secretary for Communications and Information, Department of Commerce, as provided by Section 4 of Reorganization Plan No. 1 of 1977, is hereby effective.

1-2. *Telecommunications Function.*

1-201. Prior to the effective date of Reorganization Plan No. 1 of 1977, the Office of Telecommunications Policy and its Director had the functions set forth or referenced by: (1) Section 1 of Reorganization Plan No. 1 of 1970 (5 U.S.C. App. II), (2) Executive Order No. 11556 of September 4, 1970, as amended (47 U.S.C. 305 note), (3) Executive Order No. 11191 of January 4, 1965, as amended (47 U.S.C. 721 note), (4) Executive Order No. 10705 of April 17, 1957, as amended (47 U.S.C. 606 note), and (5) Presidential Memorandum of August 21, 1963, as amended by Executive Order No. 11556 and entitled "Establishment of the National Communications System."

1-202. So much of those functions which relate to the preparation of Presidential telecommunications policy options or to the disposition of appeals from assignments of radio frequencies to stations of the United States Government were transferred to the

President. These functions may be delegated within the Executive Office of the President and the delegations are set forth in this Order at Sections 3-1 through 4-3.

1-203. Those telecommunications functions which were not transferred to the President were transferred to the Secretary of Commerce. Functions transferred to the Secretary are set forth in this Order at Sections 2-1 through 2-5.

Section 2

Functions Transferred to Commerce

2-1. *Radio Frequencies.*

2-101. The authority of the President to assign frequencies to radio stations or to classes of radio stations belonging to and operated by the United States, including the authority to amend, modify, or revoke such assignments, was transferred to the Secretary of Commerce.

2-102. This authority, which was originally vested in the President by Section 305(a) of the Communications Act of 1934, as amended (47 U.S.C. 305(a)), was transferred and assigned to the Director of the Office of Telecommunications Policy by Section 1 of Reorganization Plan No. 1 of 1970 and Section 3 of Executive Order No. 11556.

2-103. The authority to assign frequencies to radio stations is subject to the authority to dispose of appeals from frequency assignments as set forth in Section 3-2 of this Order.

2-2. *Construction of Radio Stations.*

2-201. The authority to authorize a foreign government to construct and operate a radio station at the seat of government of the United States was transferred to the Secretary of Commerce. Authorization for the construction and operation of a radio station pursuant to this authority and the assignment of a frequency for its use can be made only upon recommendation of the Secretary of State and after consultation with the Attorney General and the Chairman of the Federal Communications Commission.

2-202. This authority, which was originally vested in the President by Section 305(d) of the Communications Act of 1934, as amended (47 U.S.C. 305), was delegated to the Director of the Office of Telecommunications Policy by Section 5 of Executive Order No. 11556.

2-3. *Communications Satellite System.*

2-301. Certain functions relating to the communications satellite system were transferred to the Secretary of Commerce. Those functions were delegated or assigned to the Director of the Office of Telecommunications Policy by Executive Order No. 11191, as amended by Executive Order No. 11556. The functions include authority vested in the President by Section 201(a) of the Communications Satellite Act of 1962 (76 Stat. 421, 47 U.S.C. 721 (a)). These functions are specifically set forth in the following provisions of this Section.
(a) Aid in the planning and development of the commercial communications satellite system and aid in the execution of a national program for the operation of such a system.
(b) Conduct a continuous review of all phases of the development and operation of such system, including the activities of the Corporation.

(c) Coordinate, in consultation with the Secretary of State, the activities of governmental agencies with responsibilities in the field of telecommunications, so as to insure that there is full and effective compliance at all times with the policies set forth in the Act.
(d) Make recommendations to the President and others as appropriate, with respect to all steps necessary to insure the availability and appropriate utilization of the communications satellite system for general government purposes in consonance with Section 201(a)(6) of the Act.
(e) Help attain coordinated and efficient use of the electromagnetic spectrum and the technical compatibility of the communications satellite system with existing communications facilities both in the United States and abroad.
(f) Assist in the preparation of Presidential action documents for consideration by the President as may be appropriate under Section 201(a) of the Act, make necessary recommendations to the President in connection therewith, and keep the President currently informed with respect to the carrying out of the Act.
(g) Serve as the chief point of liaison between the President and the Corporation.
(h) The Secretary of Commerce shall timely submit to the President each year the report (including evaluations and recommendations) provided for in Section 404(a) of the Act (47 U.S.C. 744(a)).
(i) The Secretary of Commerce shall coordinate the performance of these functions with the Secretary of State. The Corporation and other concerned Executive agencies shall provide the Secretary of Commerce with such assistance, documents, and other cooperation as will enable the Secretary to carry out these functions.

2-4. *Other Telecommunications Functions.*

Certain functions assigned, subject to the authority and control of the President to the Director of the Office of Telecommunications Policy by Section 2 of Executive Order No. 11556 were transferred to the Secretary of Commerce. These functions, subject to the authority and control of the President, are set forth in the following subsections.

2-401. The Secretary of Commerce shall serve as the President's principal adviser on telecommunications policies pertaining to the Nation's economic and technological advancement and to the regulation of the telecommunications industry.

2-402. The Secretary of Commerce shall advise the Director of the Office of Management and Budget on the development of policies relating to the procurement and management of Federal telecommunications systems.

2-403. The Secretary of Commerce shall conduct studies and evaluations concerning telecommunications research and development, and concerning the initiation, improvement, expansion, testing, operation, and use of Federal telecommunications systems. The Secretary shall advise appropriate agencies, including the Office of Management and Budget, of the recommendations which result from such studies and evaluations.

2-404. The Secretary of Commerce shall develop and set forth, in coordination with the Secretary of State and other interested agencies, plans, policies, and programs which relate to international telecommunications issues, conferences, and negotiations. The Secretary of Commerce shall coordinate economic, technical, operational and related preparations for United States participation in international telecommunications conferences and negotiations. The Secretary shall provide advice and assistance to the Secretary of State on international telecommunications policies to strengthen the position and serve the best

interests of the United States, in support of the Secretary of State's responsibility for the conduct of foreign affairs.

2-405. The Secretary of Commerce shall provide for the coordination of the telecommunications activities of the Executive Branch, and shall assist in the formulation of policies and standards for those activities, including but not limited to considerations of interoperability, privacy, security, spectrum use and emergency readiness.

2-406. The Secretary of Commerce shall develop and set forth telecommunications policies pertaining to the Nation's economic and technological advancement and to the regulation of the telecommunications industry.

2-407. The Secretary of Commerce shall ensure that the Executive Branch views on telecommunications matters are effectively presented to the Federal Communications Commission and, in coordination with the Director of the Office of Management and Budget, to the Congress.

2-408. The Secretary of Commerce shall establish policies concerning spectrum assignments and use by radio stations belonging to and operated by the United States. Agencies shall consult with the Secretary of Commerce to ensure that their conduct of telecommunications activities is consistent with those policies.

2-409. The Secretary of Commerce shall develop, in cooperation with the Federal Communications Commission, a comprehensive long-range plan for improved management of all electromagnetic spectrum resources.

2-410. The Secretary of Commerce shall conduct studies and make recommendations concerning the impact of the convergence of computer and communications technology.

2-411. The Secretary of Commerce shall coordinate Federal telecommunications assistance to State and local governments, except as otherwise provided by Executive Order No. 12472.

[Sec. 2-411 amended by Executive Order 12472 of Apr. 3, 1984, 49 FR 13471, 3 CFR, 1984 Comp., p. 193]

2-412. The Secretary of Commerce shall conduct and coordinate economic and technical analyses of telecommunications policies, activities, and opportunities in support of assigned responsibilities.

2-413. The Secretary of Commerce shall contract for studies and reports related to any aspect of assigned responsibilities.

2-414. [Revoked]

[Sec. 2-414 revoked by Executive Order 12472 of Apr. 3, 1984, 49 FR 13471, 3 CFR, 1984 Comp., p. 193]

2-5. *Consultation Responsibilities.*

2-501. The authority to establish coordinating committees, as assigned to the Director of the Office of Telecommunications Policy by Section 10 of Executive Order No. 11556, was

transferred to the Secretary of Commerce.

2-502. As permitted by law, the Secretary of Commerce shall establish such interagency committees and working groups composed of representatives of interested agencies, and shall consult with such departments and agencies as may be necessary for the most effective performance of his functions. To the extent he deems it necessary to continue the Interdepartment Radio Advisory Committee, that Committee shall serve in an advisory capacity to the Secretary. As permitted by law, the Secretary also shall establish one or more telecommunications advisory committees composed of experts in the telecommunications area outside the Government.

Section 3

Functions Assigned to the Office of Management and Budget

3-1. *Telecommunications Procurement and Management.*

3-101. The responsibility for serving as the President's principal adviser on procurement and management of Federal telecommunications systems and the responsibility for developing and establishing policies for procurement and management of such systems, which responsibilities were assigned to the Director of the Office of Telecommunications Policy subject to the authority and control of the President by Section 2(b) of Executive Order No. 11556, were transferred to the President.

3-102. These functions are delegated to the Director of the Office of Management and Budget.

3-2. *Radio Frequency Appeals.*

3-201. The authority to make final disposition of appeals from frequency assignments by the Secretary of Commerce for radio stations belonging to and operated by the United States, which authority was vested in the President by Section 305(a) of the Communications Act of 1934 (47 U.S.C. 305(a)) and transferred to the Director of the Office of Telecommunications Policy by Reorganization Plan No. 1 of 1970 (5 U.S.C. App. II), was transferred to the President.

3-202. This function is delegated to the Director of the Office of Management and Budget.

Section 4

Functions Assigned to the National Security Council and the Office of Science and Technology Policy

4-1. *Emergency Functions.*

4-101. The war power functions of the President under Section 606 of the Communications Act of 1934, as amended (47 U.S.C. 606), which were delegated to the Director of the Office of Telecommunications Policy by the Provisions of Section 4 of Executive Order No. 10705, were transferred to the President.

4-102. [Revoked]

[Sec. 4-102 revoked by Executive Order 12472 of Apr. 3, 1984, 49 FR 13471, 3 CFR, 1984 Comp., p. 193]

4-103. [Revoked]

[Sec. 4-103 revoked by Executive Order 12472 of Apr. 3, 1984, 49 FR 13471, 3 CFR, 1984 Comp., p. 193]

4-2. *National Communications System.*

4-201. The responsibility for policy direction of the development and operation of a National Communications System, which was assigned to the Director of the Office of Telecommunications Policy by the Presidential Memorandum of August 21, 1963, as amended by Executive Order No. 11556, was transferred to the President.

4-202. [Revoked]

[Sec. 4-202 revoked by Executive Order 12472 of Apr. 3, 1984, 49 FR 13471, 3 CFR, 1984 Comp., p. 193]

4-3. *Planning Functions.*

4-301. The function of coordinating the development of policy, plans, programs, and standards for the mobilization and use of the Nation's telecommunications resources in any emergency, which function was assigned to the Director of the Office of Telecommunications Policy subject to the authority and control of the President by Section 2(h) of the Executive Order No. 11556, was transferred to the President.

4-302. [Revoked]

[Sec. 4-302 revoked by Executive Order 12472 of Apr. 3, 1984, 49 FR 13471, 3 CFR, 1984 Comp., p. 193]

Section 5

Related Telecommunications Functions

5-1. *The Department of Commerce.*

5-101. The Secretary of Commerce shall continue to perform the following functions previously assigned by Section 13 of Executive Order No. 11556:
(a) Perform analysis, engineering, and administrative functions, including the maintenance of necessary files and data bases, as necessary in the performance of assigned responsibilities for the management of electromagnetic spectrum.
(b) Conduct research and analysis of electromagnetic propagation, radio systems characteristics, and operating techniques affecting the utilization of the electromagnetic spectrum in coordination with specialized, related research and analysis performed by other Federal agencies in their areas of responsibility.
(c) Conduct research and analysis in the general field of telecommunications sciences in support of assigned functions and in support of other Government agencies.

5-102. The Secretary of Commerce shall participate, as appropriate, in evaluating the

capability of telecommunications resources, in recommending remedial actions, and in developing policy options.

5-2. *Department of State.*

5-201. With respect to telecommunications, the Secretary of State shall exercise primary authority for the conduct of foreign policy, including the determination of United States positions and the conduct of United States participation in negotiations with foreign governments and international bodies. In exercising this responsibility the Secretary of State shall coordinate with other agencies as appropriate, and, in particular, shall give full consideration to the Federal Communications Commission's regulatory and policy responsibility in this area.

5-202. The Secretary of State shall continue to perform the following functions previously assigned by Executive Order No. 11191, as amended:
(a) Exercise the supervision provided for in Section 201(a)(4) of the Communications Satellite Act of 1962, as amended (47 U.S.C. 721(a)(4)); be responsible, although the Secretary of Commerce is the chief point of liaison, for instructing the Communications Satellite Corporation in its role as the designated United States representative to the International Telecommunications Satellite Organizations; and direct the foreign relations of the United States with respect to actions under the Communications Satellite Act of 1962, as amended.
(b) Coordinate, in accordance with the applicable interagency agreements, the performance of these functions with the Secretary of Commerce, the Federal Communications Commission, other concerned Executive agencies, and the Communications Satellite Corporation (see 47 U.S.C. 731-735). The Corporation and other concerned Executive agencies shall provide the Secretary of State with such assistance, documents, and other cooperation as will enable the Secretary to carry out these functions.

5-3. *Federal Emergency Management Agency.* [Revoked]

[Sec. 5-3 revoked by Executive Order 12472 of Apr. 3, 1984, 49 FR 13471, 3 CFR, 1984 Comp., p. 193]

Section 6

General Provisions

6-1. *Transfer Provisions.*

6-101. [Deleted]

[Sec. 6-101 amended Presidential Memorandum of Aug. 21, 1963, which was superseded by Executive Order 12472 of Apr. 3, 1984.]

6-102. The primary responsibility for performing all administrative support and service functions that are related to functions transferred from the Office of Telecommunications Policy and its Director to the President, including those functions delegated or assigned within the Executive Office of the President, are transferred to the Office of Administration. The Domestic Policy Staff[1] shall perform such functions related to the preparation of Presidential telecommunications policy options as the President may from time to time

direct.

6-103. The records, property, personnel, and unexpended balances of appropriations, available or to be made available, which relate to the functions transferred, assigned, or delegated as provided in this Order are hereby transferred as appropriate.

6-104. The Director of the Office of Management and Budget shall make such determinations, issue such orders, and take all actions necessary or appropriate to effectuate the transfers or reassignments provided in this Order, including the transfer to funds, records, property, and personnel.

6-2. *Amendments.* In order to reflect the transfers provided by this Order, the following conforming amendments and revocations are ordered:

6-201. [Deleted]

[Sec. 6-201 amended Executive Order 11051 of Sept. 27, 1962, which was revoked by Executive Order 12148 of July 20, 1979.]

6-202. [Deleted]

[Sec. 6-202 amended Executive Order 11490 of Oct. 28, 1969, which was revoked by Executive Order 12656 of Nov. 18, 1988.]

6-203. [Deleted]

[Sec. 6-203 amended Executive Order 11725 of June 27, 1973, which was revoked by Executive Order 12148 of July 20, 1979.]

6-204. Executive Orders No. 10705, as amended, No. 11191, as amended, and No. 11556, as amended, are revoked.

6-3. *General.*

6-301. All Executive agencies to which functions are assigned pursuant to this Order shall issue such rules and regulations as may be necessary to carry them out.

6-302. All Executive agencies are authorized and directed to cooperate with the departments and agencies to which functions are assigned pursuant to this Order and to furnish them such information, support and assistance, not inconsistent with law, as they may require in the performance of those functions.

6-303. (a) Nothing in this Order reassigns any functions assigned any agency under the Federal Property and Administrative Services Act of 1949, as amended, nor does anything in this Order impair the existing authority of the Administrator of General Services to provide and operate telecommunications services and to prescribe policies and methods of procurement, or impair the policy and oversight roles of the Office of Management and Budget.
(b) In carrying out the functions in this Order, the Secretary of Commerce shall coordinate activities as appropriate with the Federal Communications Commission and make appropriate recommendations to it as the regulator of the private sector. Nothing in this

DAMATA, JASON

From: DAMATA, JASON
Sent: Tuesday, July 06, 2004 8:39 AM
To: 'tom@cwx.com'
Cc: DAMATA, JASON
Subject: Article 01/23/1974 on OTP/you and Cable Television

PAGE 4 WEDNESDAY, JANUARY23,1974 THE TECH Government cable report isses

By Michael D. McNamee

Cable television - for a long time the poor step-child of the communications industry with recognized promise but little developed talent - finally received its birth certificate last week when a government committee chaired by Clay T. Whitehead '60, head of the Office of Telecommunications Policy, released a long-awaited study of cable and its fu- ture. The committee, made up of seven Cabinet and sub-Cabinet members, (five of' whom have since left the Adminis- tration, with Whitehead scheduled to leave OTP soon), recommended that cable, which has up to this point been treated under Federal Communications Commission's regulations as an extension of regular broadcasting, be given treat- ment similar to that enjoyed by print media. This analogy implies that there would be very little regulation of the medium or of its ownership; the fairness doctrine and equal-time rules developed for television would not apply to com- mercial cable broadcasting. Coincidentally (at least as far as I could tell), Whitehead was at MIT on January 8, almost exactly one week before the report was released._to address a seminar on telecommunications policy. Although he refused to answer questions on the substance of the report before it was issued, he expressed several opinions that were substantially identical to those reportedly expressed in the report. These views raised serious questions in my mind about the impact of the new report. I discussed them with several MIT experts on telecommunications and media over the last week. The proposals The analogy of the print mnedia, used throughout the report as a model for cable, depends on the differing govern- ment attitudes towards print and media that have prevailed since the I930's. The By Michael D. McNamee The Kendall Square project -- redevel- opment of the 13-acre "triangle" at Broadway and Main and the l -acre site left by NASA on Main Street -- came into public prominence last spring when plans designcd by thie Cambridge Redevel- opment Authority were being presented for City Council approval. At that time. co (mmunity reaction to the plans, which called for development of the area with a high-rise minotel and office space, caused the formation of a Task Force to get community input into the development of a new set of plans. The City Council, in response to pressure for blue-collar job development, instructed the Task Force to especially consider developing "light id ust ry and non-professional white- collar jobs" in the area. MIT's involvement in the Kendall Square project stems not only from the physical proximity of the area to MIT, but from financial concerns. Due to a section in the federal Urban-Development Code, institutions like MIT which remove land from the tax rolls can "certify" funds used to purchase land within a redevelop- ment zone with the Department of Htousing and Urban Development, and give the city credit with the federal agency for the amount used t.o buy the land and prepare the sites for develop- nment. The Institute has already certified approximately S6 million in the Kendall Square area; for the project, and is sup- posed to be planning to certify at least S3.5 million more in the near future. THE WIZARD OF ID The Wizard of Id appears daily and Sunday in the Boston Globe. Clay T. Whitehead '60 Photo courtesy Peter Buttner First Amendment - which has always been used to limit government encroachment on newspapers, magazines, and books - has never been applied as vigorously to television and radio for two reasons. The first, which is the rationale behind the report, was stated by Dr. Carroll Bowren at the Center for Advanced Engi- neering Study, who told me, "A printing press will work foi anyone - a ightwing paper, a liberal paper, a daily, a weekly - anything. But you only have 13 VHF TV channels to assign in an area and a limited number of radio stations, so you are in effect granting a near-monopoly to anyone who gets a broadcast license." This monopoly effect, in turn, creates the "big-money"

aspect of the television and, to a lesser extent, radio businesses; it also contributes to the dominance of a few large networks in both fields. The monopoly aspects of broadcasting have led to government regulation: first for simplificatidn of the airwave situation and to permit the granting of licenses; Although the certification process in- volves no monetary transactions (it merely establishes credit for the city with IHUD), the code which establishes it specifies that the development must be complementary to the institution's plans; thus, MIT haIs some financial clout in the planning for Kendall Square. The planning for the project was recently thrown into high gear by a deadline set by ltUD, which requires the city to have "detailed" plans of the redevelopment ready by February 15, 1974, or risk losing continued federal funding in the area. CRA spokesman Robert Remer told The Tech that, although the Task Force has yet to report with its proposals, the city will be able to make the deadlines. "We will have a report ready for them," Remer said. "It will be a detailed report, but it will not be final - we can't say anything certain until the Task Force reports." Institute officials are not quite as optimistic about the city's ability to come up with a report that will satisfy HUD in the time-span allowed. Special Assistant to the President for Urban relations Walter Milne told The Tech, "There's very little chance of them having a report ready -- if they put every person with technical expertise in the city loose on this, they couldn't have a tdetailed report ready by mid-February." MIT's interests Even if the CRA can come up with the report in the time alloted, MIT officials see another problem caused by the dead- and increasingly to modify and minimize the political advantages of owning a television and/or radio station. The- fair- ness doctrine and equal-time rule were created in hope of allowing access to broadcasting facilities for all views, espe- cially those of minorities. Cable television, however, does not have the severe physical restrictions that broadcasting faces. Twenty, thirty, or even forty channels are easily available to the cable operator for broadcasting, so that a license to broadcast does not result in the near-monopolistic power that the FCC has always feared (never mind the governmental monopoly that the FCC has always had in the granting of licenses, and which has been used for political ends by this and other Administrations). It was this consideration that led to the White- head committee, and Whitehead himself. to recommend that FCC restrictions be removed from cable television. There is another reason for regulation, however, that the Whitehead committee seemed to miss in its recommendations, and which Whitehead personally did not seem at all eager to recognize: that is that cable is essentially television, and is not directly comparable to the print media. Research into the effects of electronic communications on life-styles, attitudes, and politics is still being done, but it seems fair to say that there is a significant difference in the impact of TV news show or TV advertising versus similar presen- tations in print. This distinction - the one that Whitehead fails to make- is probably the second major reason that the FCC regulates access to the airwaves, and insists on equal time for political candidates. The analogy between print and cable, which misses this distinction, and White- head's backing of the removal of equal time rules are both signs of an attitude that could have profound impact on access to public opinion in the future. line HlUD has imposed - the problenm of representing MIT's interest in the process. The Institute has financial power in the planning through the funds it has certi- fied, and Milne has stated that he feeis that the city "would not develop any- thing in the area antithetical to the Institute's interests;" but MIT officials have had difficulty getting input fronm the Institute community on what they feel should be developed at the Kendall Square site. "We have a general feeling that people want more shops and stores and restau- rants near MIT," said O. Robert Simha, Director of the MIT IPlanning Office and a member of the Task Force, "but no one has come up and told us this." MIT's stance on the process is important, according to Simnha, for many physical reasons as well as financial, but the Institute community has not expressed much real interest in the area. There is a feeling now, since the creation of the Task Force and its City Council mandate to concentrate on blue- collar and non-professional development in Kendall Square, that the city might go ahead with plans along these lines instead of considering alternatives. Along with not having inputs from MIT, Simha pointed out that there is data on Cam-bridge that is not known, such as whether or not the city could support a blue-collar development. "We need to know the situation in the city today and to predict what it will be in the future," Simniha siad. "We don't want to lock into a pattern that will be obsolete before the re-devel- opmnient is even completed." Although studies done by cable experts, among them one done by Political Sci- ence Professor Ithiel Do Sola Poole, show that time on a cable station could be available at $20 to $60 per hour after the systems are fully developed, no regulation of rates are planned in the recom- mendations of the report - it would be up to the operator to set his own rates. Robert Maynard - who, as ombuds- man for the Washington Post (see story, pg 1) deals with many

access problems in the print media - dismissed the report as an instance of "Whitehead elitism," and stated that the print press was a poor model to follow on access problems. "The press in this country has done such a poor job of allowing access for minority opinions," he said in a seminar last week at MIT, "that I sometimes wonder if we aren't protecting the First Amendmetat rights of the newspapers over the First Amendment rights of the people." Cable, he felt, would probably go the same way, although he saw more problems with local control of the medium than federal control. Implementation Most of the telecommunications experts I spoke with were in fundamental agreement with the Whitehead report, even on the issue of minority access; but, almost unanimously, they doubted that the report would be implemented. Whece- head, in an interview with the New York Times, pointed out the "reverse Midas touch" of the Nixon Administration "in matters of media;" there is a widespread feeling that the suggestions may not matter at all because there is little possi- bility of legislation based on them passing through Congress. Edwin Diamond, visiting lecturer in Political Science, summed it up when he said: "When the report caine out, I felt no compelling reason to read it quickly. There was a feeling of 'What does it matter'?' It's a terrible thing - but that's the feeling about the Administration right now."

To the Congress of the United States:

We live in a time when the technology of telecommunications is undergoing rapid change which will dramatically affect the whole of our society. It has long been recognized that the executive branch of the Federal government should be better equipped to deal with the issues which arise from telecommunications growth. As the largest single user of the nation's telecommunications facilities, the Federal government must also manage its internal communications operations in the most effective manner possible.

Accordingly, I am today transmitting to the Congress Reorganization Plan No. 1 of 1970, prepared in accordance with chapter 9 of title 5 of the United States Code.

That plan would establish a new Office of Telecommunications Policy in the Executive Office of the President. The new unit would be headed by a Director and a Deputy Director who would be appointed by the President with the advice and consent of the Senate. The existing office held by the Director of Telecommunications Management in the Office of Emergency Preparedness would be abolished.

In addition to the functions which are transferred to it by the reorganization plan, the new Office would perform certain other duties which I intend to assign to it by Executive order as soon as the reorganization plan takes effect. That order would delegate to the new Office essentially those functions which are now assigned to the Director of Telecommunications Management. The Office of Telecommunications Policy would be assisted in its research and analysis responsibilities by the agencies and departments of the Executive Branch including another new office, located in the Department of Commerce.

The new Office of Telecommunications Policy would play three essential roles:

1. It would serve as the President's principal adviser on telecommunications policy, helping to formulate government policies concerning a wide range of domestic and international telecommunications issues and helping to develop plans and programs which take full advantage of the nation's technological capabilities. The speed of economic and technological advance in our time means that new questions concerning communications are constantly arising, questions on which the government must be well informed and well advised. The new Office will enable the President and all government officials to share more fully in the experience, the insights, and the forecasts of government and non-government experts.

2. The Office of Telecommunications Policy would help formulate policies and coordinate operations for the Federal government's own vast communications systems. It would, for example, set guidelines for the various departments and agencies concerning their communications equipment and services. It would regularly review the ability of government communications systems to meet the security needs of the nation and to perform effectively

in time of emergency. The Office would direct the assignment of those portions of the radio spectrum which are reserved for government use, carry out responsibilities conferred on the President by the Communications Satellite Act, advise State and local governments, and provide policy direction for the National Communications System.

3. Finally, the new Office would enable the executive branch to speak with a clearer voice and to act as a more effective partner in discussions of communications policy with both the Congress and the Federal Communications Commission. This action would take away none of the prerogatives or functions assigned to the Federal Communications Commission by the Congress. It is my hope, however, that the new Office and the Federal Communications Commission would cooperate in achieving certain reforms in telecommunications policy, especially in their procedures for allocating portions of the radio spectrum for government and civilian use. Our current procedures must be more flexible if they are to deal adequately with problems such as the worsening spectrum shortage.

Each reorganization included in the plan which accompanies this message is necessary to accomplish one or more of the purposes set forth in section 901(a) of title 5 of the United States Code. In particular, the plan is responsive to section 901(a)(1), "to promote the better execution of the laws, the more effective management of the executive branch and of its agencies and functions, and the expeditious administration of the public business;" and section 901(a)(3), "to increase the efficiency of the operations of the government to the fullest extent practicable."

The reorganizations provided for in this plan make necessary the appointment and compensation of new officers, as specified in sections 3(a) and 3(b) of the plan. The rates of compensation fixed for these officers are comparable to those fixed for other officers in the executive branch who have similar responsibilities.

This plan should result in the more efficient operation of the government. It is not practical, however, to itemize or aggregate the exact expenditure reductions which will result from this action.

The public interest requires that government policies concerning telecommunications be formulated with as much sophistication and vision as possible. This reorganization plan--and the executive order which would follow it--are necessary instruments if the government is to respond adequately to the challenges and opportunities presented by the rapid pace of change in communications. I urge that the Congress allow this plan to become effective so that these necessary reforms can be accomplished.

Richard Nixon.
The White House, February 9, 1970.

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(Last updated January 21, 2004)

- TITLE 5--APPENDIX
  - REORGANIZATION PLANS
    - REORGANIZATION PLAN NO. 1 OF 1970
      - **OFFICE OF TELECOMMUNICATIONS POLICY**

Section 1. Transfer of Functions

The functions relating to assigning frequencies to radio stations belonging to and operated by the United States, or to classes thereof, conferred upon the President by the provisions of section 305(a) of the Communications Act of 1934, 47 U.S.C. 305(a), are hereby transferred to the Director of the Office of Telecommunications Policy hereinafter provided for.

Sec. 2. Establishment of Office

There is hereby established in the Executive Office of the President the Office of Telecommunications Policy, hereinafter referred to as the Office.

Sec. 3. Director and Deputy

(a) There shall be at the head of the Office the Director of the Office of Telecommunications Policy, hereinafter referred to as the Director. The Director shall be appointed by the President by and with the advice and consent of the Senate and shall be compensated at the rate now or hereafter provided for Level III of the Executive Schedule Pay Rates (5 U.S.C. 5314).

(b) There shall be in the Office a Deputy Director of the Office of Telecommunications Policy who shall be appointed by the President by and with the advice and consent of the Senate and shall be compensated at the rate now or hereafter provided for Level IV of the Executive Schedule Pay Rates (5 U.S.C. 5315). The Deputy Director shall perform such functions as the Director may from time to time prescribe and, unless the President shall designate another person to so act, shall act as Director during the absence or disability of the Director or in the event of vacancy in the office of Director.

(c) No person shall while holding office as Director or Deputy Director engage in any other business, vocation, or employment.

Sec. 4. Performance of Functions of Director

(a) The Director may appoint employees necessary for the work of the Office under the classified civil service and fix their compensation in accordance with the classification laws.

(b) The Director may from time to time make such provisions as he shall deem appropriate authorizing the performance of any function transferred to him hereunder by any other officer, or by any organizational entity or employee, of the Office.

Sec. 5. Abolition of Office

That office of Assistant Director of the Office of Emergency Preparedness held by the Director of Telecommunications Management under Executive Order No. 10995 of February 16, 1962, as amended, is abolished. The Director of the Office of Emergency Preparedness shall make such provisions as he may deem to be necessary with respect to winding up any outstanding affairs of the office abolished by the foregoing provisions of this section.

Sec. 6. Incidental Transfers

(a) So much of the personnel, property, records, and unexpended balances of appropriations, allocations, and other funds employed, held, or used by, or available or to be made available to, the Office of Emergency Preparedness in connection with functions affected by the provisions of this reorganization plan as the Director of the Bureau of the Budget shall determine shall be transferred to the Office of Telecommunications Policy at such time or times as he shall direct.

(b) Such further measures and dispositions as the Director of the Bureau of the Budget shall deem necessary in order to effectuate the transfers provided for in subsection (a) of this section shall be carried out in such manner as he shall direct and by such agencies as he shall designate.

Sec. 7. Interim Director

The President may authorize any person who immediately prior to the effective date of this reorganization plan holds a position in the Executive Office of the President to act as Director of the Office of Telecommunications Policy until the office of Director is for the first time filled pursuant to the provisions of section 3 of this reorganization plan or by recess appointment, as the case may be. The President may authorize any person who serves in an acting capacity under the foregoing provisions of this section to receive the compensation attached to the office of Director. Such compensation, if authorized, shall be in lieu of, but not in addition to, other compensation from the United States to which such person may be entitled.

[The Office of Telecommunications Policy was abolished and its functions transferred to the President and the Secretary of Commerce by secs. 3 and 5 of Reorg. Plan No. 1 of 1977.]

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REMARKS OF

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before the

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Six months ago, here in Indianapolis, I spoke on the subject of broadcaster responsibility and the web of relationships linking the broadcaster, his community, the TV networks, and the government. It's a little early, but Indianapolis evokes memories, and today I'll attempt Phase I of what will have to be a continuing evaluation.

First of all, the speech didn't just happen; it had a context. To understand the speech you have to understand the context — ~~That is,~~ the history of regulatory and legal decisions that have affected broadcasting during the past ten years. Let me review some of the highlights of that history to show you what I mean.

- In 1962, ~~He~~ FCC Chairman Minow complained about the "vast wasteland," and President Kennedy stated that this was an attempt to persuade the networks "to put on better children's programs, more public service."

- In 1963, the FCC placed a new burden on stations, forcing them to program "Fairness Doctrine" responses to their own programs at their own expense.

- In 1964, the FCC set an uncontested TV application for hearing, because, in effect, the applicant hadn't proposed programs of a type the Commission favors.

- In 1968, cigarette commercials were held subject to the Fairness Doctrine and broadcasters (not advertisers) were forced to program information the government thought the people should have.

- In 1969, the WHDH case shattered the broadcaster's belief that he knew what renewal factors he would be judged upon by the FCC.

- And the 1970's opened with the FCC considering proposals to force broadcasters to carry counteradvertising, to take away the broadcasters right to choose what paid messages he should carry, and to prescribe how children's programs should be improved, and to set mandatory percentages of various types of TV programming.

During the same time, the courts were expanding the role of the Federal Government, requiring the FCC to monitor what broadcasters are programming and to correct what the courts considered to be defects. In the 1969 Red Lion case, the Supreme Court blessed the vague, yet sweeping,

power of the Fairness Doctrine; other courts went even further in expansive decisions ~~in fairness and access cases and in license renewal decisions~~ to diminish the editorial judgment and responsibility of the broadcasters. The trend is clear and it reached its peak when the FCC and the courts deprived Reverend Carl McIntire of a radio station license, essentially for violations of the Fairness Doctrine. Reverend McIntire now thinks his only option is to move his station to a ship and continue broadcasting "outside the domain of the United States." Think of it; with close to 7,000 radio stations in this country, we may be treated to the spectacle of a broadcaster being forced to resort to an off-shore radio station to air his views.

From time to time the Congress has also gotten involved in broadcast program content.

- In 1968 hearings were held on news staging allegations arising out of network coverage of the Democratic Party convention.

- In the summer of 1971 a confrontation was precipitated over ~~the~~ CBS's editorial judgment in its documentary, "The Selling of the Pentagon," and Dr. Stanton

narrowly avoided being cited for contempt of Congress for refusing to hand over all the unedited film shot for the program.

- Hearings on violent television programs, children's programs, and sports programs, were also a common occurence in the Congress; the object being to get the networks to change their ~~ways in~~ programming.

Of course, the FCC, the courts and the Congress haven't had this territory entirely to themselves. Executive Branch officials have also expressed their concerns about broadcast program content; most notably Vice President Agnew's expressions of concern. But the Executive Branch has no life and death control over broadcasters, as do the other branches of government, so broadcasters can pay the Executive Branch less heed. But, given the trend of increasing government controls, it's easy to see why broadcasters might get edgy when any official makes a critical comment.

* * *

This, then, was the clear trend of regulatory history when I spoke here last December. But before I get too deeply involved in evaluating that speech, there's one

other bit of background information that you should have; and that is how we at OTP viewed the trends in broadcasting's regulatory history.

It is the function of OTP to back off from the day-to-day happenings in telecommunications. When we did this in broadcasting, it took no great discernment on my part to see that something was fundamentally wrong in the relationship between the broadcast media and the government. The media, especially television, seem so powerful, so influential, and so licensed by the government that many people, including government officials, find it almost an irresistible temptation to grab hold of television by the license and shake it a bit to achieve some goal that they view to be in the "public interest." Do you think deceptive advertising is a problem? It's easier to force the broadcaster to offset it in counterads than to prove a case at the Federal Trade Commission. Do you think discrimination in hiring would be reduced? The broadcaster is more vulnerable to equal opportunity enforcement by the FCC than the EEOC. Are drugs, violence, and sexual permissiveness problems? It's easier for the Congress and others to resort to the license renewal threat implicit in the so-called raised eyebrow approach than to come to grips with these problems in a substantive way.

The list could go on, but there are enough examples to make the point. ~~And~~ The point is not that it is bad to find easier ways to solve real problems. The point is that none of us would think it proper ~~to force~~ for government to push newspapers or magazines ~~to do things~~ editors around like this.) And we simply cannot have an important medium of expression, such as broadcasting, subject to government control of its content, no matter how good the short-run goal, without doing serious damage to the spirit of free thought and expression, which is, after all, the goal of the First Amendment.

Realizing this fundamental point, OTP began to speak out. We criticized the intrusive manner in which the broadcasters fairness obligation was being enforced by the government; we said that the First Amendment was a better guarantee of freedom of expression in broadcasting than the Fairness Doctrine. We called for a substantial lessening of regulation in radio, where a multiplicity of competitive outlets has obviated the need for detailed government control over programs. We stressed the need for more diligent exercise of the broadcaster's private judgment and responsibility, so that government exercise of responsibility may be decreased. We called for changes in the license renewal process so that broadcasters would be less vulnerable to government control

for either good or bad ends, the definition of which depends, of course, on who's controlling what. At the same time some elements of the working press were involved in a counter-convention, I spoke to the newspaper publisher's association and ~~urged~~ told them ~~to realize~~ that they were in the same boat with the broadcasters; that government intrusion in broadcasting was also a threat to newspapers.

* * * * *

This, then, is the full background of the speech; the historical trends and OTP's position on broadcast regulation. There were opposing positions before I came to this city six months ago; there were opposing positions when I spoke; and there are opposing positions today. But the broadcaster's speech means more than a reiteration of former positions.

For the first time a government entity seriously proposed a concrete piece of legislation to lessen governmental power over broadcasting. In the speech, I unveiled an Administration license renewal bill, which would affect a real change in the decade-old trend of increasing government controls over broadcast program content.

But the speech was a cause celebré and the bill that bears my name has ~~almost no chance of~~ strong odds against its passage, simply

because it bears my name. Did I fail, and, in failing, damage the cause of increased freedom from government control of broadcasting?

I can't answer that question yet. It's too soon to tell. I'm sure that cooler rhetoric and a clearer description of our proposal might have helped get my message across. Perhaps less attention would have been devoted to my speech writing ability and more to my legislative drafting ability. But its too late for these "might have beens." For now, I'd like to explain what I hoped to accomplish last December, what I learned, and what, if anything, was accomplished.

What we hoped to accomplish was a rational debate on some very fundamental questions regarding the government's legal relationship with the only medium of expression it licenses.

One question was: Who should exercise responsibility for program content -- broadcasters or the government? The answer that I suggested is that, contrary to the trend, this should be the broadcaster's responsibility and very little of the government's business. The Communications Act

places this responsibility and power in the hands of hundreds of private broadcasters and not government officials, or even a handful of network officials. Government does, and under the Communications Act must, establish the broad outer limits of broadcaster performance, but within what must be broad limits, the broadcaster must determine what programs will best serve his community.

whether the concern is children, or racism, or "ideological playola,"

Another question was: When there are abuses in this system of private responsibility, who should correct them -- broadcasters or the government? Here again, the answer must be the broadcaster, (and not government power.) for better or worse, under the constitutional protection of free speech and free press, we must take our chances with the (private) broadcaster, if the concept of private licensee responsibility is not to degenerate into a smoke screen for indirect government censorship.

The last question was: Where should responsibility and power over program content go when they are relinquished by the government, as they would be under our renewal bill? I answered that the responsibility and power should be exercised by the broadcasters (themselves) who, under present law, are

directly responsive to the needs and interests of TV viewers and radio listeners throughout the country. These local stations acting as responsible community leaders and as responsible affiliates of the three national networks. Government can relinquish its power and still assure that the public interest will be served only when program judgments are shared among many diverse broadcasters, responsive to their varying constituencies. This is the rationale of our broadcast system, the rationale of my speech last December, and the rationale of the license renewal bill we sent to the Congress. In expressing this rationale, I learned a number of things. I learned that a communications policymaking office associated with this Administration invariably has its motives questioned and its intentions distorted. The "leads" on news coverage of the speech said that, "White House drafts tough new legislation making stations responsible for network programs." Broadcasters, who should know better, were quoted as saying that this signalled government censorship of news and entertainment and we might as well be living in the Soviet Union.

Within two or three days the nation's editorial writers and columnists were unlimbering their rhetoric and decrying what they viewed as a White House attempt to shackle the press and increase government regulation. ~~I agreed with~~ The Chicago Tribune ~~when it~~ stated that:

> "Bias, like beauty, is in the eye of the beholder. For government to make a determination of bias, particularly in the media, is tantamount to censorship, especially if government threatens TV or radio stations with the loss of their licenses."

I agreed; I thought that was what I said.

~~I agreed with~~ The Washington Post editorial ~~that~~ said:

> "It is clear that the press does not always live up to the standard which editorial writers sometimes are tempted to ascribe to it. But it is also clear that one man's bias is another man's ultimate truth and that the founding fathers never trusted the government -- any American government -- to be the arbiter between the two as far as speech is concerned. The essence of press freedom is that professional discipline and consumer pressures constitute the safest corrective devices. The antithesis of press freedom is for those correctives to be supplied by the government."

I agreed; I thought that was what I said.

I even said amen to Tom Wicker's New York Times column, pointing out that the remedy for journalistic abuses should not be government regulation of the content of news broadcasts.

But where we parted company was that

Virtually everyone in the print media thought that the point I was making about the station's responsibility for its programming was a new legal obligation that we had put in our renewal bill. The fact that this responsibility (this is not even mentioned in our bill, and that) is already the law, shows that the publishers and the press have not been paying attention to the vital issue of how ~~our society as the manner in which~~ broadcast stations are regulated. In short, their first reaction was automatic; ~~disbelief~~; (For years they had seen govt power being brought to bear on broadcasting.) they couldn't believe that we would move to lessen government control of the electronic press. When they finally read the bill and saw that this was in fact the case, their second reaction was one of mistrust. They suspected a deal: the proverbial carrot and stick approach -- the carrot of renewal security and the stick to beat the networks into submission to this Administration. There is no "stick" and the charge is ludicrous but the analogy should tell broadcasters something about the esteem in which they are held by those making the charge. They think that broadcasters would willingly give up their First Amendment rights and the audience's crucial interest in a free flow of information, which the broadcasters' rights are intended to serve. They think broadcasters would do this solely to protect ~~their financial interests~~.

I have more faith in broadcasters and more respect for their integrity than to believe that they would ever fall for any carrot and stick strategem, whether they think the deal is being offered by the White House or by anyone offering renewal security in exchange for government censorship.

* * * *

It's time now to assess what we have accomplished in our effort to ~~decelerate~~ reverse the trend of government's censorial power over the broadcast media.

First of all, we ~~started~~ finally got the debate on the government's role in regulating broadcasting by focusing public attention on the present degree of control over programs. ~~Right now~~ There is now a greatly heightened awareness of the problems and risks of such regulation. It is ironic that most of this awareness is due to the fact that I have been painted in the press as the principal proponent of the government censorship I oppose. But the important thing ~~however~~ is that the awareness exists now and, if it can

lead to constructive action to increase freedom of speech in broadcasting, my major goal will have been achieved.

But even short of attaining this major goal, there are a number of hopeful signs. One is that the congressional discussion of our renewal bill's prohibition on FCC-established quotas and percentages of TV programs may well preclude the adoption of the Commission's proposal to this effect. On the Fairness Doctrine aspect, the decision to take away Reverend McIntire's broadcast license proved to be the last straw for Chief Judge Bazelon of the District of Columbia Court of Appeals, who had earlier been a staunch supporter of the Doctrine. In his dissent to the Court's action, he said:

> "In silencing WXUR, the Commission has dealt a death blow to the licensee's freedoms of speech and press. Furthermore, it has denied the listening public access to the expression of many controversial views . . . . if we are to go after gnats with a sledgehammer like the Fairness Doctrine, we ought at least to look at what else is being smashed beneath our blow."

Another very hopeful sign is the Supreme Court's recent decision in the BEM case, which draws an important line against ~~further~~ undue government encroachments on the broadcasters' First Amendment rights and editorial responsibility.

Most importantly, we also have an intelligent and comprehensive approach to license renewals being actively considered by the Congress. ~~It is a~~ bill that does not simply give broadcasters more license security, important as that is in reducing the broadcaster's vulnerability to the government. The bill also would prevent the government from exacting a high price in exchange for license security, ~~in that~~ broadcasters would not have to surrender their responsibility for program judgments to the government in order to obtain a reasonable assurance of renewal. I said before that our bill ~~probably will~~ not be enacted by the Congress. But unless its key provisions ~~which would prevent the surrender of program judgments by the government~~ are reflected in some license renewal legislation, broadcasters will eventually succumb to the government, and the hopeful signs that I have noted will prove to be nothing but illusions. That's why this Administration will continue in its efforts to have the Congress enact a comprehensive renewal bill that strengthens the broadcasters' First Amendment rights.

Unless the Congress passes such a bill, the only standard that will guide broadcast regulation will be the double

It's time to start calling this approach by its ancient + dishonorable name -- censorship

There are many people, in and out of government, who really do not want to diminish government power over broadcast content. They would rather use the tools of government content control to achieve ends that they believe are good. They would expand the power of government over broadcasting to achieve ~~those~~ their ends and deny that power to those with whom they disagree.

~~We are trying~~ The answer is to take the censorship tools from government's hands, in order to make government power a neutral factor in broadcast regulation, with an absolute minimum of content controls. And this is our goal. ~~Right now this power is the prize in~~ A using govt power over the media is not the answer. continuing tug-of-war between competing philosophies ~~of broadcast regulation~~. Some fear that conservatives will capture the power to bend broadcasting to their will. Others fear just the opposite. ~~It~~ But shouldn't matter to broadcasters in doing their job who is in power in the White House or the Congress any more than it should ~~to~~ matter to newspaper or magazine publishers. We simply have to take our chances with a free press, which hopefully will be a constructive + responsible institution. A truly free society has no other choice.

PROGRAM CONTENT REGULATION: FCC AND THE COURTS

FAIRNESS/COUNTER ADS

- Cullman Broadcasting Co. 40 F.C.C. 576, 25 P.& F. 895 (1963) - free-for-paid, deep pocket.
- Banzhaf (cigaret advertising raises Fairness questions), 9 F.C.C. 2d 921 (1967), aff'd, 405 F.2d 1082 (D. C. Cir. 1968).
- Red Lion (Fairness; personal attack), 395 U.S. 367 (1969).
- Brandywine-Main Line-WXUR, (Fairness; personal attack), 25 R.R.2d 2010 (D. C. Cir. 1972).
- KAYE-Puyallup (Fairness; personal attack), 24 R.R.2d 772 (1972).

- Gasoline ads (Chevron-F310)
- Military recruitment -- no fairness issue -- Green v. FCC, 447 F.2d 323 (D. C. Cir. 1971).
- Toy ads; Liquid Drano, Johnny Lightning, Veg-O-Matic, Dancerina Doll, Miracle Brush, Anacin, Ajax, Fab, Axion, Oxydol, Gain, LaFrance, Goodyear Polyglas tires, Listerine, Ultrabright, Geritol, Chux Diapers -- TUBE petition, FCC 71-1099 (November 1, 1971).
- Dog food ("NBC has misled the public into thinking that dogs are man's best friend, when, in fact dogs and other animals carry many diseases harmful to man." Lee petition, FCC Rpt. No. 10959 (September 27, 1972).

FAIRNESS/POLITICAL

- Letter to Mr. Nicholas Zapple, 23 F.C.C. 2d 708 (1970).
- The Republican National Committee, 25 F.C.C. 2d 283 (1970).

  Both cases held that if a licensee sells or gives time to one political party, it should sell or give comparable time to the rival party -- Cullman principle is inapplicable.

- Complaint of Committee to the Fair Broadcasting of Controversial Issues, 25 F.C.C. 2d. Declined to extend above equal opportunities concept to such appearances by public officials as Presidential Reports to the Nation.

OBSCENITY

- Mile High Stations (1960): cease and desist order against, e.g.,

  -- "I wonder where she puts KIMN radio when she takes a bath -- I may peek -- watch yourself Charlotte."

  -- sound effect of toilet flushing.

  (28 F.C.C. 795 (1960))

- Palmetto Broadcasting Co. (1962): DJ's remarks "coarse, vulgar, suggestive, and susceptible to indecent, double meaning." Renewal denial aff'd (Robinson v. FCC, 334 F.2d 534 cert. denied, 379 U.S. 843 (1964)) but on grounds licensee had deceived FCC. (33 F.C.C. 250).

- KPFA, Berkeley (Pacifica)(1964): 1-year renewal granted after examination of programs on homosexual's problems, performance of Albee's The Zoo Story, etc. (36 F.C.C. 147, 2 F.C.C. 2d 1066 (1965)).

- Pacifica (Houston CP) (1969): Renewal designated for hearing over reading of "Jehovah's Child".

- WUHY-FM (Eastern Educational Radio)(1970) - fine for various 4-plus-letter-type broadcasting remarks by Jerry Garcia of the Grateful Dead. (24 F.C.C. 2d 408 (1970).

- KRAB-Jack Straw Memorial (1970) - 1-year renewal because of various programs (21 F.C.C. 2d 833, aff'd on reconsid., 24 F.C.C. 2d 266 (1970).

- Sonderling Broadcasting, 1973.

FORMAT

- Radio Station formats, 1 F.C.C. 2d 439 (1965): need FCC approval for "substantial changes, such as departures from programming and commercial proposals...."

- KSOL-AM, KEST-AM - approving soul-to-MOR changes.

MISCELLANEOUS

- Drug-oriented song lyrics (upheld, Yale Broadcasting Co. v. FCC, 41 U.S.L.W. 2353 (D.C. Cir. January 5, 1973).

- WBBM ("pot party"), 16 R.R. 2d 207 (1967).

- CBS's

  -- "Hunger in America," 17 R.R. 2d 674 (1969)

  -- "Project Nassau"

  -- "Selling of the Pentagon," 21 R.R. 2d 912

PRIME TIME ACCESS

- Waivers granted:

  -- NCAA football, baseball playoffs and World Series (25 R.R. 2d 221, 228)(September 6, 1972).

  -- Wild Kingdom

  -- "Six Wives of Henry VIII"

- Waivers denied:

  -- 1972 Olympics

  -- Lassie

  -- National Geographic programs

- "'Propaganda stations' are not consistent with the most beneficial sort of discussion of public questions." Great Lakes Broadcasting Co., FRC, 17 December 1928, rev'd on other grounds, 59 U.S. App. D. C. 197, 37 F.2d 993 (1928).

- Government regulation of broadcasting constitutionally justifiable because government was the inevitable regulator of a limited access media. National Broadcasting Co. v. United States (S. Ct. 1941).

- Mayflower Broadcasting (1938) - licensees may not editorialize over their own facilities.

- 1949 Editorializing Report (D. 8516) - licensees have an affirmative obligation to editorialize over their own facilities.

- FCC v. ABC (S. Ct. 1954) - reversed FCC's effort to ban "Stop the Music" (ABC), "What's My Name" (NBC), and "Sing It Again" (CBS) as lotteries.

- Farmers Coop v. WDAY, 360 U.S. 527, 527 (S. Ct. 1960) (equal-time): "Any examination of thought or expression in order to prevent publication of 'objectionable material' is censorship." (emphasis by the Court).

- In re "The Untouchables," 21 P.& F. 121 (1961) - FCC admonished ABC to be more accurate in portraying prison guards, Al Capone escapes, etc., in response to a complaint from the Director of the Bureau of Prisons.

- "Program Policy Statement," 20 P.& F. Radio Reg. 1901 (1960): "The major elements usually necessary to meet the public interest, needs and desires of the community in which the station is located as developed by the industry, and recognized by the Commission have included: (1) Opportunity for Local Self-Expression, (2) The Development and Use of Local Talent, (3) Programs for Children, (4) Religious Programs, (5) Educational Programs, (6) Public Affairs Programs, (7) Editorializing by Licensees, (8) Political Broadcasts, (9) Agricultural Programs, (10) News Programs, (11) Weather and Market Reports, (12) Sports Programs, (13) Service to Minority Groups, (14) Entertainment Programming."