Tana (1997) (Bach Marao (1997) (Bach

. . .

••••• • • • • •

In a food and a anglette galante a anglette land a saidhea anglette saidheach sgìrthacha 1 5 - John 25, 1951

, · · · · •

. . ,

and a second and a second a s

is and so that is in the information is correct, we have the second state of the second secon

Tincar ly.

clove 7. Maitchead

cc: NO Records ED Clubon GVTCOUT Subject File -- Navigation GVTCOUT Clubon File

19011:/bas/2-21-74



THE SECRETARY OF TRANSPORTATION WASHINGTON, D.C. 20590

April 12, 1974

Honorable Clay T. Whitehead Director Office of Telecommunications Policy Executive Office of the President Washington, D. C. 20504

Dear Mr. Whitehead:

I share your concern about the duplication of radio navigation systems and appreciate the opportunity to clarify the Department's position on the questions you addressed in your March 13, 1974, letter. Your information on the DOT proposal for radio navigation systems is correct. We are proposing Loran C as the system for the Coastal Confluence Region including harbor and estuary areas. This decision will be reflected in the revised National Plan for Navigation which is now being prepared. The Department of Defense has also concluded that OMEGA is essential for worldwide high seas navigation. These conclusions reached by DOT and DOD are reflected in a paper entitled, "DOT/DOD Recommendations for Radio Navigation Systems," a copy of which is enclosed for your information. A copy of this paper has also been made available to the cognizant Congressional Committees and the Office of Management and Budget. Second o

Our determination that Loran C could meet harbor and estuary requirements was based on recently completed measurements. After these data were reviewed, the research effort to develop a new system was terminated by the Coast Guard.

The Loran A system will be phased out after the OMEGA and Loran C systems become fully operational. Any phaseout schedule is contingent in large measure on obtaining the necessary resources to implement the OMEGA and Loran C systems on a timely basis. At the present time, it appears that the full OMEGA (except for the Australia station) will be operational in late 1976 or during 1977. If the OMEGA system can meet this schedule and if Loran C implementation begins in FY 1975, the following phaseout schedule is planned for Loran A:

Loran Chains

Phaseout Date

Iwo Jima-Gesashi, Okinawa Baffin Bay

Marshall Islands Marianas Hawaiian West Coast Alaska Gulf of Mexico East Coast/Caribbean Release to Japan, April 1, 1975 June 30, 1972 (DOD and Canada requirements end) December 31, 1977 December 31, 1977 July 1, 1979 July 1, 1979 July 1, 1979 July 1, 1980 July 1, 1980

We want to emphasize the point that we will not decommission Loran A facilities until the alternative facilities are in place and we have advised and consulted fully with the users on our plans. If the alternative systems are installed on an accelerated basis, it may be possible to decommission Loran A stations earlier than the dates indicated. On the other hand, if there is slippage for resource or technical reasons in implementing Loran C or OMEGA, it may be necessary to defer Loran A decommissionings beyond the dates specified. We believe, however, that for planning purposes the schedule we have presented is a realistic one.

I believe we have arrived at an effective and acceptable solution to a very complex problem. The cooperation of your staff has been of considerable assistance in reaching this result. Please let me know if we can provide any further information.

Sincerely,

- Charde S. Bringar

Enclosure

JOINT DOT/DOD RECOMMENDATION FOR RADIONAVIGATION SYSTEMS

The Coast Guard and the Navy have long been partners in the development of navigation facilities, with Navy establishing requirements for its special needs and the Coast Guard providing the aids to meet those needs. This has been particularly true in the field of radionavigation, where, except for radiobeacons, all radio aids heretofore have been provided initially to meet Navy needs, starting with LORAN-A in World War II, extending to LORAN-C in the last decade and now to OMEGA.

Although the partnership now is on the Departmental level, i.e., DOT and DOD, the relationship has remained largely the same. There has been one basic change in recent years-the private sector and civilian branches of the public sector have also entered the picture as major users of radionavigation signals. As a result, the DOD role shifted from sole customer to one of the major customers, and it became necessary to meld the DOD needs with those of other users. Also, it fell upon DOT to determine the most cost-effective way to meet the needs of all while insuring the safety of mariner and environment alike.

To insure that the needs of this conglomerate of users were properly considered and that users had full knowledge of systems to be provided, the DOT National Plan for Navigation was initially issued in 1970. It was the result of a team effort by DOT including the Coast Guard and the FAA. This plan was fully coordinated with and approved by DOD. At the same time, it was recognized that there remained specialized needs for DOD agencies. These were addressed in the Joint Chiefs of Staff Master Navigation Plan. The Coast Guard has participated regularly in the development of that Plan and has adjusted its long-range planning to support it.

Now we have come to a critical time of decision regarding United States Government provided radionavigation systems. LORAN-A, while still widely used, is clearly not adequate for the precision demanded for safety in our harbors and estuaries, shipping lanes, and coastal confluence region in general. Nor is it economically feasible to expect LORAN-A to provide worldwide, general purpose radionavigation service in the Oceanic areas. A replacement must be designated now to insure its availability in all necessary maritime areas involving the United States. This must be accomplished in time to keep pace with the rapidly increasing risks associated with the increase in shipping of potentially polluting or potentially devastating cargoes to our shores or to deepwater ports off our shores.

Drawing on the work done by and for DOD in developing aids for its navigators involved in both worldwide, general, and more concentrated precision needs, and recognizing that the DOD plans call for continued use of both LORAN-C and OMEGA for years to come, the Coast Guard has recommended--and the Secretary of Transportation has endorsed the use of these two primary navigation systems for at least the next decade. LORAN-C will provide the precision needs of civil users for coastal confluence, harbors, and estuaries, (and will serve as an adjunct to Vessel Traffic Systems being installed) while OMEGA will provide for worldwide en route general purpose use. In addition, Differential OMEGA might possibly serve as the DOD harbor approach system for their vessels in selected locations.

Since DOD has said it has no military requirement for expanding LORAN-C to cover the entire coastal confluence region of the United States, DOT/DOD discussions have been held to clarify the DOD position. These discussions have made it clear that the DOD statement was meant to convey that they are unable to justify the proposed expansion of LORAN-C for use by DOD. DOD does recognize the need for such an expansion for safety in the private sector and interposes no objection to the expansion of LORAN-C for that purpose by the Secretary of Transportation. DOD endorses the current OMEGA program as one essential part of the total system, while a precision global positioning system is being developed.

Having reached agreement that LORAN-C and OMEGA can provide for the United States Radionavigation needs the major remaining problem is that of an orderly phase-out of LORAN-A to give present users (including the DOD) reasonable time to amortize their investment in LORAN-A equipment and spread their investment in replacement equipment.

The DOT proposal for a minimum 5-year period before shutting down any LORAN-A facilities has also been discussed with DOD and, with certain adjustments for some overseas chains still to be fully resolved, it has been agreed upon.

In view of the foregoing, we jointly recommend approval of the DOT proposal that the radionavigation system provided by the United States Government for its maritime areas consist of LORAN-C and OMEGA.

FOR THE SECRETARY, DEPARTMENT OF TRANSPORTATION:

volar C.L.E.

Theodore C. Lutz Deputy Under Secretary for Budget and Program Review March 25, 1974 FOR THE SECRETARY, DEPARTMENT OF DEFENSE:

Aloman

D. L. Solomon Deputy Director Telecommunications and Command and Control Systems March 25, 1974

.

· .

•

es a constanta sub staticity of the second sec

Investigation and announced and the state of the second state of the seco

a. Discholue such at symbol for thrising in the state of a set with a later resource available is also store of my case, and

J. Primant : starts for independential of the cou-

and the second state

The bally nurshined bonds linetifield consists for and attach a digatessa, control curls act, to clovers an associate the first first constraint with a treat at a normal march, consistion a treatment watch with a most of the social march, consistion a treatment watch to the for this a submanager, to to the site of the two of the for this a within arch. To to the site of the timest

ar may ar stienshie

Automar point of debutch is now expendit a new upscalle grand for the Nubl Coostal Coufficience tria. From the unity with Postanian () is the the the intervention which souther is now vail of covination powerups of character burne is no time to whit for a core instally out powerse.



actions all here betweenedy catting the bill the have remains antis next sector. For why, takes are strongly (1) instructions that a sectrum system for the totechi Confluence

· · ·

.

.

-

Monday

4/22/74

HEARING 4/25/74 10:00

Mr. Whitehead will testify before the House Subcommittee on Coast Guard and Navigation of the House Merchant Marine and Fisheries Committee on Thursday, April 25, at 10:00, for the Coast Guard authorization bill for FY 75.

Rm. 1334 Longworth

X accordan

COUNSEL NED P. EVERETT LEN SUTTER FRANCIS D. HEYWARD MARY C. MC DONNELL

ERNEST J. CORRADO

MINORITY COUNSEL RICHARD N. SHAROOD CHARLES A. BEDELL

16 -Levy -

CLARK M. CLARK, PA. THOMAS L. ASHLEY, OHIO JOHN D. DINGELL, MICH. THOMAS N. DOWNING, VA. PAUL G. ROGERS, FLA. FRANK A. STUBBLEFIELD, KY. JOHN M. MURPHY, N.Y. WALTER B. JONES, N.C. NOULRT L. LEGGETT, CALIF. MARIO BIAGGI, N.Y. GLENN M. ANDERSON, CALIF. E (KIKA) DE LA GARZA, TEX. PETER N. KYROS, MAINE RALPH H. METCALFE, ILL. JOHN D. BREAUX, LA. FRED B. NOONEY, PA. BOB ECKHANDT, TEX. PAUL S, SARBANES. MD. BO GINN, GA. GERNY E. STUDDS, MASS. DAVID R, BOWEN, MISS. JAMES R. GROVER, JR., N.Y. WILLIAM S. MAILLIARD, CALIF. CHARLES A. MOSHER, OHIO PHILIP E. RUPPE, MICH. GEORGE A. GOODLING, PA. PAUL N. MCCLOSKEY, JR., CALIF. GENE SMYDER, KY. ROBERT H. STEELE. CONN. EDWIN B. FORSYTHE, N.J. PIERRE S. (PETE) DU PONT, DEL. WILLIAM S. COHEN, MAINE TRENT LOTT, MISS. DAVID C. TREEN, LA. JOEL PRITCHARD, WASH. ED YOUNG, S.C. DON YOUNG, ALASKA ROBERT E. BAUMAN, MD.

U.S. House of Representatives Committee on Merchant Marine and Fisheries Room 1334, Longworth House Office Building Washington, D.C. 20515

April 15, 1974

FRANCES STILL, CHIEF CLERK

LEONCR K. (MRS. JOHN B.) SULLIVAN, MO., CHAIRMAN

The Honorable Clay T. Whitehead, Director Office of Telecommunications Policy 1800 "G" Street, N. W. Washington, D. C. 20504

Ner-

Dear Mr. Whitehead:

As Chairman of the Subcommittee on Coast Guard and Navigation of the House Merchant Marine and Fisheries Committee, I have scheduled hearings on Thursday, April 25, 1974, to take testimony on the authorization bill for the Coast Guard for Fiscal Year 1975.

In that regard, I invite you to testify on the legislation and ask you to discuss, in some detail, the proposed Coast Guard West Coast navigation system expansion and the position of the Office of Telecommunications Policy on this issue.

I ask that you bring with you Dr. Max Polk and any other technicians who can provide the Committee with detailed information on the above areas.

You may recall that during hearings held in 1973 on the Coast Guard Fiscal Year 1974 budget, information was developed concerning the premature phase-out of the so-called Loran-A navigational system and the elimination of over \$21 million for a replacement of Loran-C equipment program in the Mediterranean and the increment of a Loran-C navigational aids program on the West Coast. There appeared to be at that time considerable disagreement among the several agencies and departments of government over the phase-out program of existing systems and the selection of new systems for the future.

CTU:/C

The Honorable Clay T. Whitehead Page Two April 15, 1974

During hearings held on this subject on March 26 and 28 of this year, it appears that the Department of Transportation has proposed certain phase-out plans for Loran-A and the utilization of Loran-C for the West Coast Coastal Confluence Region (see attachments).

In regard to the above, I ask you to present testimony on the Office of Telecommunications Policy's position regarding current phase-out plans of the Loran-A navigational program, and the Fiscal Year 1975 Coast Guard budget of monies for the Loran-C replacement program in the Mediterranean, in addition to the above-mentioned improvement of the radio navigation system in the Pacific Coastal Region. I would further ask that you discuss the authority, role or function the Office of Telecommunications Policy has in this process, and the extent to which such authority or role was carried out.

While under new rules of the Merchant Marine and Fisheries Committee, oral testimony is to be limited to approximately 20 minutes, please feel free to prepare a document of any length necessary to fully explain to the Subcommittee the position of the Office of Telecommunications Policy.

I have scheduled your testimony for 10:00 a.m., Thursday, April 25, 1974, in Room 1334 Longworth House Office Building, Washington, D. C. According to Subcommittee Rules, we must have copies of your testimony 48 hours in advance, and would appreciate 50 copies made available to the Subcommittee at that time.

If you have any questions regarding your appearance, please contact me at 225-3371, or Mr. Carl L. Perian at 225-6898. All correspondence should be directed to the Subcommittee Offices at Suite 2235 Rayburn House Office Building.

With kindest personal regards, I am

Sincerely,

John M. Murphy, Chairman Subcommittee on Coast Guard and Navigation · A.-

1 m 12

Sec. 2. 1

8.3.1

44.9 4

Department of Transportation U. S. Coast Guard

Introductory Statement of Admiral Chester R. Bender

For Presentation to Subcommittee on Coast Guard and Navigation, of the Committee on Merchant Marine and Fisheries House of Representatives

Mr. Chairman and Members of the Committee:

It is again my privilege to appear before you today for our authorization hearing. As in previous years, the authorization consists of four parts: Acquisition, Construction, and Improvements, which this year amounts to \$114.1 million; for the alteration of obstructive bridges, \$6.8 million; a military end-of-year strength for fiscal year 1975 of 37,748: and a fiscal year 1975 military training commitment totaling 5, 700 student man-years. The Acquisition, Construction, and Improvements request, which is our capital investment account, can be further subdivided into \$19,876,000 for the procurement of new and renovation of existing vessels and small boats, \$17,793,000 for the procurement of replacement aircraft; \$32, 250,000 for the establishment of new and renovation of existing shore facilities; \$27, 261,000 for aids to navigation, including \$16,900,000 for the improvement of radionavigation service in the Pacific coastal region; and \$16,920,000 for pollution control, public family housing, property acquisition, and administrative expenses.

In 1975, authorization is being sought for two important new initiatives

under the Acquisition, Construction and Improvements appropriation. I would like to make specific mention of them.

In my statement to the Committee last year, I indicated that we had temporarily interrupted our aircraft procurement program pending completion of an evaluation of potential replacements for our overaged medium-range, fixed-wing aircraft. We have made considerable progress in evaluating feasible alternatives during the intervening months and now recommend to the Committee that we begin a replacement program in fiscal year 1975. This represents an important start for the Coast Guard. The HU-16E aircraft, which we have operated since 1951, is reaching the end of its useable life--a life which cannot be further extended. Fixedwing search and surveillance capabilities, of which we are already short, will be further diminished unless we begin a replacement program. In fiscal year 1975, we are requesting authorization to procure eight medium-range, fixed-wing aircraft thereby initiating the replacement program.

The second new initiative involves surface radionavigation service in the Pacific coastal region for which authorization to construct \$16,900,000 in new facilities is being requested. Expansion of marine radionavigation service is urgently needed to insure the rapid and safe transit of vessels to and from the southern terminal of the trans-Alaskan pipeline. Considering the enormously increased potential for catastrophic accidents, with their unacceptable hazards to the marine environment of our West Coast, we feel that a major upgrading of radionavigation service in that

area is absolutely essential. There are serious fix-accuracy deficiencies and substantial gaps in the existing radionavigation coverage in this area which cannot be further tolerated. These deficiencies must be corrected before full operation of the trans-Alaskan pipeline begins, and that will be possible only if we initiate corrective action in fiscal year 1975.

How to solve these deficiencies involves a number of very complex considerations such as differing user requirements, the economic impact on users of the service currently provided, the cost of establishing a new system and the potential of alternative systems to meet fix-accuracy, reliability and repeatability requirements. There are several radionavigation systems which have been very carefully considered for selection. LORAN-C is particularly suited and, pending final decision on this matter, must be considered the most likely candidate for selection. I will be happy to develop more fully the factors which will bear on that decision and the feasible alternatives after presentation of my prepared statement.

Before turning to other portions of the 1975 program, I would like to clarify the future of LORAN-A, as we see it. First, we have no plans for any immediate reduction of LORAN-A service anywhere in 1975. With respect to overseas LORAN-A operations, it is our intention to continue service in the Baffin Bay, Marianas, and Marshall Island areas through fiscal year 1975. Working with Canada and DOD, we have already initiated steps to terminate Baffin Bay operations after fiscal year 1975, however.

Turning to other portions of the authorization request, last year I described changes which are occurring in our operations--changes which

were necessary to meet expanded responsibilities assigned by the Congress, changes due to increasingly sophisticated equipment the Coast Guard must operate, and changes in response to expectations of our traditional clientele. The program which we bring to you today continues the thrust begun last year.

The vessel and small-boat program concentrates particular attention on replacing or improving small-boat capabilities while continuing the extensive buoy tender renovation program already underway.

Planned shore unit activity involves three new aviation facilities at Sitka, Alaska; Arcata, California; and St. Petersburg, Florida. As you recall, the acquisition of the basic St. Petersburg facility was the subject of a special reprograming request in September 1973. Continuing projects at the Portsmouth, Virginia, and Kodiak, Alaska Bases, as well as 13 additional projects for new or renovated facilities at various locations, are included in fiscal year 1975 plans. Within this portion of the Acquisition, Construction, and Improvements appropriation, I would like to call your attention to the projects at Port Canaveral, Florida and Seattle, Washington. In each of these locations, the construction proposed will take place on leased property. Title to these properties will be acquired by the Federal Government; however, at this moment, we do not own either site.

A + 1/4

Multiple Contraction

In addition to the expansion of radionavigation service on the West Coast, the aids to navigation program in 1975 includes establishment of a vessel traffic system and port safety station at Valdez, Alaska, as well

as major equipment replacement for Mediterranean LORAN-C stations. The Valdez_vessel traffic control system was directed by Public Law 93-153 which amended the Mineral Leasing Act of 1920 by authorizing the trans-Alaskan oil pipeline.

In summary, the fiscal year 1975 program which we are presenting involves a comprehensive effort to move ahead in several important areas of our operation involving two important new starts.

In contrast to the substantial program reductions which I announced to the Committee last year, planned fiscal year 1975 program reductions are slight. The final two high endurance cutters associated with the ocean station weather program will be decommissioned. Three WIND-class polar icebreakers are also scheduled for decommissioning. The loss of these older icebreakers will be offset by the commissioning of the POLAR STAR, which will become the United States' most powerful icebreaker, and the recommissioning of a renovated WIND-class icebreaker. We have no plans to close any shore units in 1975.

Now, to the remaining portions of our authorization request. We are asking for \$6,800,000 to continue work on bridges at Norfolk, Virginia; Chicago, Illinois; and Beardstown, Illinois. These funds will also allow work to begin on bridges at Newark, New Jersey; Biloxi, Mississippi; Tice, Florida; and Kennewick, Washington.

The Armed Forces appropriation authorization for 1973 contained two

provisions with respect to military personnel. The first requires Congressional authorization of the strength as of the end of each fiscal year for active duty personnel. For 1975, the year-end strength authorization requested is 37,748. This compares to an authorized strength of 37,607 at the end of fiscal year 1974. The second requirement specifies that Congress shall authorize the average military student training load for each fiscal year. Student loads were defined as recruit and specialized training, flight training, professional training in military and civilian institutions, and officer acquisition training. For 1975, authorization for 5,700 student man-years of training is requested. This compares to an authorization of 5,531 in 1974.

Mr. Chairman, this authorization request provides for continuation of important efforts in ongoing programs as well as for significant new starts. It represents the Coast Guard's highest priority needs. I earnestly request that the Committee approve the request as submitted.

Before making myself and my staff available for your questions, please allow me to add the observation that this is very likely to be my last appearance before this Committee. I will retire on June 1. I sincerely appreciate the consideration that has always been shown to the Coast Guard by the Committee. The continuing interest of Committee and staff members in improving our facilities has manifested itself in substantial changes during my term as Commandant. The challenge of balancing service to the public and reasonable expense has not been an easy one. However, the Committee's interest and cooperation have made it less difficult

than it might otherwise have been.

Thank you.

^

.

. ...

-

FISCAL YEAR 1975		PROJECT TITLE							
BUDGET ITEM NO. DID	T.V.	IMPROVE RADIONAVIGATION SYSTEM IN PACIFIC	C COASTAL REGION				NEAREST CITY & CONGRESSIONAL DIST		
			488800801171011				Various		
adio Aids to Navigation				AFFAUFI	CATION HIS	STORY			
			PROGRAM					YEAR	PPROPRIATED
EASON FOR REQUEST AND PHYSICAL DESCRIPTION OF EXISTING FACILITY:									
increasing number of	[large:	r, faster vessels of all classes, particular-							-
t the presidion real	ing in	the Pacific coastal confluence region with-							
ssels and the environment. The development of moure the safety of the									
tablishment of a net	ork of	the development of more accurate charts and							
initiated because of the inherently less accurate operatoriation of		_		PERSON	NEL CTOFA				
ie radionavigation system available today. The existing radionation			OFFICER WARRANT			TEL STREP	UIH	-	
stem cannot provide the precision information required.		CURRENT			ENLIST	TED	CIVILIAN	TOTAL	
			PLANNED						*
pending on the system	select	PACILITY:							*
ately 20 new stations appropriately located in the Decision			ALAL PROPERTY SUMM				Y (\$000)		
d Nevada. Station si	tes wil	1 range from 210 acres to less than one serve		ACRES	LAND C	COST	VALUE OF	TOTAL	
		the store and acres to ress than one acre.	IAI OWNED					IMPROVEMENTS	TOTAL
			B) BEING ACQUIR	ED		3			5 -
			CI LEASES AND EN	ASEMENTS					
			IDI TOTAL AVAILA	BLE OR FUNDED					*
				THIS REQUEST					
				ENTURE CORTE TOTAL					\$ 16,900
			TOTORE COSTS - 1	OTAL NEXT 4 YEA	RS			>	s 0
.		COST ESTIMAT	E OF WORK						
PROJECT ELEMENT				U	UNITOF		ESTIMATED		
				h					(\$000)
Construct neces	sary fa	cilities to achieve needed improvements							
				*********	•••••	stat	tions	5 to approx. 20	16,900
*The specific pr radionavigation	*The specific project elements, real property needed, and personnel requirements will depend on the radionavigation system finally selected.								
DEPARTMENT OF TRANSPOR	TATION, U.	. S. COAST GUARD	. *						

P-0- No. AC-43

		ACQUISITION, CONSTRUCTION,	AND IMPROVE	mentro		N	EAREST CIT	Y & CONGRESSI	I I				
	T	PROJECT TITLE			APPROPRIA	TION HISTO	DRY	1000	OPRIATED				
AL YEAR	1975	MEDITERRANEAN LORAN-C EQUIPMENT REFLICED						YEAR	AMOUNT ISOOOI				
ETITEM	NO.D2C		PROGRAM					s					
ON OR FU	NCTION OF FACILITY												
io Aid	s to Navigation/Loran-												
	and Child	ATION OF EXISTING FACILITY:											
SON FOR	REQUEST AND PHYSICAL DESCRIPTIONS	s are operated by the Goast Guard In orre						1					
esently, all Loran-C stations are operated with any one of an Loran-C DOD requirements. These stations are operated with any one of an Loran-C nerations of electronic equipment. However, the Mediterranean Loran-C ent is obsolete; it is providing degraded performance; climatological ent is obsolete; it is providing degraded performance; climatological opditions have affected wiring; and spare parts are difficult to find.						EL STREN	GTH	1					
					PERSON	ENLIS	TED	CIVILIAN					
				OFFICER	WARRANT	0.6		0	105				
				4	5	90							
			CURRENT		5	72		0	81				
			PLANNED	4		TOTA SUMMERY ISO							
				REAL PROPERTY		T SUMMA	1	VALUE OF	TOTAL				
	IN ACCHENT		ACRES	LAND	ID COST IN	MPROVEMENTS							
APPATIVE	DESCRIPTION OF REPLACE	be installed at the Mediterranean modular				5	5		15				
cuer L	oran-C equipmente ased u	ise of solid state technology higher signal	A) OWNED	250		1		1. 540	4,540				
tation	s. inrough will provide	improved periormance, The	B) BEING ACOUT	EASEMENTS				4,5.0					
availability, more precise control and improved operational techniques, availability, more precise control and improved operational techniques, higher reliability of this equipment and improved operations. The will ultimately permit reduced numbers of personnel on stations. The will ultimately permit reduced numbers of personnel on stations.			IDI TOTAL AVAL	LABLE OR FUNDED	1				\$ 6,000				
			THIS REQUEST										
									s 640				
presen	C Durranna-		FUTURE COSTS	- TOTAL NEXT 4	EARS -								
		COST ESTI	MATE OF WORK						ESTIMAT				
							UNIT OF	QUANTIT	15000				
							MENJO						
		THE REPORT		PROJECT ELEMENT									
17.5.14		PROJECT ELEMENT			anaineering	1	contion (electronics equipment and spares, civil engineering						
		PROJECT ELEMENT	ipment and sp	pares, civil	engineering				1.3/4				
17E4	Taroaharun, Turkey, J	PROJECT ELEMENT	ipment and sp	pares, civil	engineering				1,432				
1.	Targabarun, Turkey, I	PROJECT ELEMENT Loran-C Transmitting Station (electronics equi- elivery/installation)	above)	pares, civil	engineering			=	1,432				
ттем NO. 1.	Targabarun, Turkey, I modifications and de Estartit, Spain, Lor	PROJECT ELEMENT Loran-C Transmitting Station (electronics equ: elivery/installation) an-C Transmitting Station (equipment as in 1 Loran-C. Transmitting Station (equipment as	ipment and sp above) in 1 above). above)	pares, civil	engineering				1,374 1,432 1,440 <u>322</u>				
1. 2. 3.	Targabarun, Turkey, I modifications and de Estartit, Spain, Lor Simeri Crichi, Italy	PROJECT ELEMENT Loran-C Transmitting Station (electronics equ: elivery/installation) an-C Transmitting Station (equipment as in 1 , Loran-C Transmitting Station (equipment as in 1 ran-C Transmitting Station (equipment as in 1	ipment and sp above) in 1 above). .above)	pares, civil	engineering				1,374 1,432 1,440 <u>322</u> 6,000				
1. 2. 3. 4.	Targabarun, Turkey, I modifications and de Estartit, Spain, Lor Simeri Grichi, Italy Lampedusa, Italy, Kon	PROJECT ELEMENT Loran-C Transmitting Station (electronics equi an-C Transmitting Station (equipment as in 1 , Loran-C Transmitting Station (equipment as in 1 ran-C Transmitting Station (equipment as in 1 itor Station (monitor equipment and spares on	ipment and sp above) in 1 above). . above) ily)	pares, civil	engineering			=	1,374 1,432 1,440 322 6,000				
1. No. 1. 2. 3. 4. 5.	Targabarun, Turkey, J modifications and di Estartit, Spain, Lor Simeri Crichi, Italy Lampedusa, Italy, Lo Sardinia, Italy, Mon TOTAL	PROJECT ELEMENT Loran-C Transmitting Station (electronics equ: elivery/installation) an-C Transmitting Station (equipment as in 1 Ioran-C Transmitting Station (equipment as in 1 itor Station (monitor equipment and spares on	ipment and sp above) in 1 above). above) ily)	pares, civil	engineering			=	1,374 1,432 1,440 <u>322</u> 6,000				
1. No. 1. 2. 3. 4. 5.	Targabarun, Turkey, J modifications and d Estartit, Spain, Lor Simeri Crichi, Italy Lampedusa, Italy, Lo Sardinia, Italy, Non TOTAL	PROJECT ELEMENT Loran-C Transmitting Station (electronics equi an-C Transmitting Station (equipment as in 1 Loran-C Transmitting Station (equipment as iran-C Transmitting Station (equipment as in 1 itor Station (monitor equipment and spares on	ipment and sp above) in 1 above). above) ily)	pares, civil	engineering				1,374 1,432 1,440 322 6,000				
1. 2. 3. 4. 5.	Targabarun, Turkey, J modifications and d Estartit, Spain, Lor Simeri Grichi, Italy Lampedusa, Italy, Lo Sardinia, Italy, Mon TOTAL	PROJECT ELEMENT Loran-C Transmitting Station (electronics equi an-C Transmitting Station (equipment as in 1 Loran-C Transmitting Station (equipment as iran-C Transmitting Station (equipment as in 1 itor Station (monitor equipment and spares on	ipment and sp above) in 1 above). above)	pares, civil	engineering				1,374 1,432 1,440 322 6,000				
1. 1. 2. 3. 4. 5.	Targabarun, Turkey, I modifications and de Estartit, Spain, Lor Simeri Grichi, Italy Lampedusa, Italy, Lo Sardinia, Italy, Mon TOTAL	PROJECT ELEMENT Loran-C Transmitting Station (electronics equi an-C Transmitting Station (equipment as in 1 Loran-C Transmitting Station (equipment as iran-C Transmitting Station (equipment as in 1 nitor Station (monitor equipment and spares on	ipment and sp above) in 1 above). . above) ily)	pares, civil	engineering				1,374 1,432 1,440 322 6,000				
1. 2. 3. 4. 5.	Targabarun, Turkey, I modifications and dd Estartit, Spain, Lor Simeri Grichi, Italy Lampedusa, Italy, Lo Sardinia, Italy, Mon TOTAL	PROJECT ELEMENT Loran-C Transmitting Station (electronics equ. elivery/installation)	ipment and sp above) in 1 above). . above) ily)	pares, civil	engineering				1,374 1,432 1,440 322 6,000				

....

CGHQ-4265 (REV. 12-71)

DEC 3 1973

nargetin

Honorable Roy L. Ash Director Office of Management and Budget Washington, D.C. 20503

Dear Mr. Ash:

The Office of Telecommunications Policy has been concerned for sometime with duplication of facilities in the area of radio navigation systems, much of which occurs from piecemeal decisions on navigation programs rather than the development of an overall, comprehensive navigation program. Your letter of April 17, 1973, to the Secretary of Transportation reflected the same concern. Unfortunately the Department's study, "Meeting the Priority Radio Davigation Meeds of the United States," which was submitted in an answer to your letter, is not responsive to that concern.

The study I refer to does not attampt to identify the overall set of radio navigation systems which can most economically provide all the services needed. Eather it singles out a supposedly high priority need -- navigation in the Coastal Confluence Sone -- and proposes an \$82 million program to meet that need. It ignores the relationship of this program to two overlapping programs -- long-range navigation and rivers and harbors navigation. There has been little consideration of input from the users who must bear the cost of receivers for each of the systems the Government operates. The technical and economic study which is the basis for the selection of LORAN C for the Coastal Confluence Region is incomplete. Finally, the urgency of making a decision is questionable as most of the users seem to feel that the existing LORAN A system is providing satisfactory coverage in the Coastal Confluence Zone.

I believe that we can afford to wait a year before deciding whether to accept the LORAN C program proposed by the Coast Guard. By that time, we should have the results of several studies which were initiated by the users as a result of OMB's proposed budget action last Spring to terminate certain LORAN A stations. There are indications that these studies will reveal much less costly alternatives than the one proposed by the Coast Guard. In the meantime, OTP will renew our efforts to get the Department of Transportation to undertake a more comprehensive assessment of the radio navigation area, in line with their responsibilities under the recently issued OTP Circular 12.

Additional information supporting the above views is enclosed.

I recommend that no budgetary or other approval of the LORAN C proposal for the Coastal Confluence Zone be given at this time.

sincerely,

Clay T. Whitehead

Enclosure

cc: DO Record DO Chron GVTCOMM Subj GVTCOMM Chron Mr. Whitehead

Dr.MXPOLK/CCJoyce/njb/11-28-73

Comments on the DOT Study -- Meeting the Priority Radio Navigation Needs of the United States

Responsiveness of Study

The DOT Study "Meeting the Priority Radio Navigation Needs of the United States" was submitted as an answer to OMB's request of April 17, 1973 for a joint DOT/DOD study to:

Select a single National Navigation System which is capable of meeting the requirements of military and civilian users for long-range general purpose navigation.

Provide justification for continued Government support of all systems other than the selected National System. If unique requirements determine the need for continuation of a system, the originator of the requirement should be prepared to fund the system.

The study was not responsive to OMB's request, was not a joint DOT/DOD effort, and is inconsistent with the DOD position outlined in the June 6, 1973 letter from the Secretary of Defense to the Secretary of Transportation.

The study instead establishes a different set of terms of reference which were to:

a. Determine the civilian navigation requirements for which the Department of Transportation is responsible,

b. Investigate to what extent these requirements are not satisfied,

c. Determine the best system for satisfying the requirements, taking into account avoiding of duplication of systems, and

d. Present a program for implementation of the new system, including phase-out of any replaced systems.

Lack of Overall Plan

The study recognizes three identifiable regions for navigation -- high seas, coastal confluence, and rivers and harbors. Then it defines the Coastal Confluence Region as a problem area, establishes requirements for this area and proposes a unique system to provide navigation coverage for this specific area. It does not address the impact which systems or requirements for high seas and for rivers and harbors areas may have on the need for, or choice of a system for Coastal Confluence Zone. This approach is not consistent with the overall goal that OMB and OTP have both been trying to attain -- that of an overall Navigation Program rather than a collection of individual and unrelated pieces.

User Input not Adequately Considered

From the study, it appears that the Government has defined the user needs and is providing a system without really considering the economic impact upon, and acceptance by, the affected user community. The American Institute of Merchant Shipping stated that Polhemus didn't seek sufficient industry input and even those interviewed by Polhemus were not made fully aware of the study's importance.

The main purpose of the proposed system as stated in the study is to serve the safety and economic needs of the civil users. The costs of receivers for the users will far exceed the Government's cost to implement and operate the system. For these reasons, user input is considered to be of prime importance.

Coast Guard Contract Study - The Polhemus Report - Questioned

Another deficiency of the study is the questionable validity of the basic report upon which the study is based -- the Polhemus Report. Even though the DOT National Plan had stated LORAN A was one of the candidates being considered for the Coastal Confluence Zone, the study didn't address LORAN A. The differential OMEGA system configuration used in the Polhemus study appears to provide less accuracy and greater cost and frequency usage than could be achieved with a more expertly designed configuration. All of these factors, including the tightening of the accuracy requirements by a factor of two over the published DOT National Plan, had a direct bearing on the conclusions of the report.

Urgency Questionable

Another point of concern is how urgently a new system is needed for the U.S. Coastal Confluence Sone. From the study and forwarding letter, one gets the impression that this region is now void of navigation coverage and therefore there is no time to wait for a more intelligent assessment - 5 -

of the situation. In fact this area is presently one of the best served areas of the world as to navigation. It is covered by LORAN A, Beacons, VOR, and partially by the Military LORAN C, TRANSIT, and OMEGA. Most maritime users are now using LORAN A and are satisfied. In fact, as expressed during the Murphy Hearings at a recent Institute of Navigation symposium and through various letter contacts, there is widespread user opposition to replacing LORAN A with LORAN C. Therefore, we do not have a lack of coverage for the Coastal confluence Zone but a question of the most effective and economical means of providing coverage in the long run. (The Maritime Industry, as represented by the American Institute of Merchant Shipping have also questioned why a hasty decision is required and have expressed their desire for more valid technical/economic justification before a decision is made.) It appears the sense of urgency is being generated not by the potential users of the system but by the Coast Guard and the equipment manufacturers. Since the only justification for having a system is to serve the user and since the user will bear the major cost impact of any decision it doesn't appear the urgency attributed by the study is valid.

Present Activities

Although the DOT National Plan for Navigation had stated for several years that efforts were underway to select a navigation system for the Coastal Confluence Zone, very little emphasis had been placed on this problem other than by the Coast Guard and equipment manufacturers until OMB actions earlier this year. The OMB proposal to discontinue funding of certain LORAN A stations and the subsequent congressional hearings provided the first real visibility of this pending decision to the majority of users. As a result many efforts have been undertaken to evaluate the need for a unique system.

The FAA working with user representatives is presently evaluating LORAN C, OMEGA, and differential OMEGA as replacements for LORAN A. The Navy is performing the technical development work necessary to define the most effective differential OMEGA system. The Air Transport Association is evaluating inertial, LORAN C and OMEGA as replacements for LORAN A. The American Institute of Merchant Shipping is attempting to assess the user acceptability of LORAN C and OMEGA in the face of the shippers' tradditional preference for DECCA and LORAN A. In addition, the Coast Guard is evaluating differential LORAN C, RCA and TRACOR systems for use as the rivers and harbors navigation aid. Since these actions all have been recently initiated we will not have results until next summer. However, there are already (1) indications that a separate system for the Coastal Confluence Zone may not be needed in addition to the rivers and harbors and high seas system, (2) questions as to the validity of portions of the Polhemus Report which was used as background, and (3) indications of dissatisfaction from the user community. (In this latter respect users are questioning the phase-out

of LORAN A by the implementation of a more expensive system which they allege is not needed.)

Thus the dilemma -- must a decision be made now in regard to the Coastal Confluence Zone or can we wait a year until we have the benefit of the above listed actions.

We presently have LORAN A and the military version of LORAN C available in most areas of the Confluence Region. Most users are using LORAN A at present and are satisfied. Therefore, we do not have a question of lack of coverage for the Coastal Confluence Zone but a question of the most effective and economical means of providing coverage in the long run. The risks involved in waiting appear minimal. The risks involved in not waiting are that it would in effect ignore all the efforts now being pursued in helping shape the decisions and lay the Administration open to additional criticism such as those expressed at the Murphy Hearings in March of this year. Unless there are other considerations which were not brought out in either the Polhemus Report or the DOT Study we should wait to allow the results of the present user evaluations to be considered in the decision.

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, D.C. 20503

APR 1 7 1973

Reportable Claude S. Brinesar Secretary of Transportation Washington, D. C. 20500

Bear Mr. Secretary:

1.8

As you know, persisting inflationary pressures dictated the very stringent approach is policics soverning the breading levels set forth is the President's 1974 subjet. Achieving these levels recessitated a very searching look at all rederal progress in an effort to identify and eliminate those no longer absolutely

From information available at the time, it soughted that the Const Suard operated LOUNED system has been overtaken by meter, more accurate, longer range systems and thus could be in to be plassed out 'in areas more quak_coverage exists of there it has been determined that boxf of it to low or absolutely a mesoary," despite the fact that willtary confirments one net scheduled to end until facts are continuing LOUATER technics from both civil and willtary a ers, in the pear term. Therefore, we have asled that you

reprogram funds for VY 1974 to enable continued operation of those LAMALA chains schemaled to be missed out in the coning fiecal year.

In our view, there is a lenger range problem which needs to be resolved. There appears to be unnecessary overlap area, the coverages provided by IDAL-A, IOTAR-C, dFCA, differential OVDA, and Transit. We crefurther concurved that total resultances as expressed by all the present where isaly continued operation of all LORAN and DESCA systems for rest of the next ton years.

In view of the serve, the least out of Transportation should take the lead in provering a juict well DD study with the following edjectives:

. Select a simila debienal davidation dyname which is capable of section the requirements of military and civilian users for long-range meneral purpose neveration.

COPY FOR DIRECTOR, OFFICE OF TELECOMMUNICATIONS POLICY

Provide funct institut for continued severalent encort of all spateau after two her schertes detional System. If makes scalarcould detendue the area for cortinuation of a spate , the scherter of the regularcout should be prepared to dest the scales.

The study should does not all requirements and chould present all of the options confidered in solcatio, a sincle National Hyston. Associtie place down place der these systems not selected for retention de ald be included. The study should size incluse the views of the of the of Telecommutantions fully which is currently reviewing defourt. Noviention Policy.

the joint 1677/0600 study should be added then to did not be deter three didy 1, 1975 so that the results are be incorporated in 10 1975 a ency believe requests and chail uncon an be shown sufficient notice as to the selection of the single s.S. system.

Shicozely.

(Signed) Roy

Roy L. Ash Munctor

doug to.

.

. .

Separty Recretary of Deserve Streater, Office of Telecomputentions Policy . ~ THE UNDER SECRETARY OF TRANSPORTATION



WASHINGTON, D.C. 20590

October 30, 1973

Honorable Roy L. Ash Director, Office of Management and Budget Washington, D.C. 20503

Dear Roy:

Attached are five copies of the Navigation Systems Study you requested in your letter of April 17, 1973. The study utilized Defense Department plans and correspondence as inputs, reinforced by staff level coordination. Defense requirements were accepted as stated, and the study concentrated on an analysis of civil requirements and their relationship to Defense requirements. Overlaps and unfilled needs were identified and priorities were assigned to unmet requirements. The study concluded that no single system can meet all civil and military requirements in a cost/effective manner. A program is recommended to provide adequately for the navigation needs of civil users at minimum cost.

We fully concur with your interest in avoiding unnecessary overlap among the coverages provided by Loran A, Loran C, Omega, differential Omega (if implemented) and Transit. DOT policy in the National Plan for Navigation (April, 1972) states as an objective:

. "To promote, as a continuing goal, national and international standardization of a minimum number of station-referenced aids to meet the needs of the various users, air and marine, military and civil."

The DOT recommendation, adopted as a U. S. position for the ICAO PACRAN conference this past September, states that U. S. federal funding for the overseas Loran A chains is uncertain after December, 1974. The conference recommended that ICAO request the governments furnishing Loran A services to continue Loran operation for five more years (as far ahead as ICAO projects requirements). We believe that the program recommended by the study will provide a reasonable alternative and rationalize the orderly phaseout of U. S. Government funding for Loran A.

In the course of the study, it became apparent that considerable confusion exists as to the U. S. responsibilities for Navigation Systems. The statutory responsibility of the U. S. other than electronic aids is limited to the U. S. waters and air space. However, in practice a similar limitation has been in existence for electronic aids. The U. S. does not have any formal treaty obligations to provide commercial navigation aids. By subscribing to certain conventions such as those of ICAO and IMCO and accepting their assignment of responsibility for specific non-contiguous areas, the U. S. has assumed an

obligation to provide certain navigation aids for civil use. The latter practice has led to a widely held, but unfounded, assumption that the U.S. has responsibilities worldwide to provide navigation aids for civil use.

We find that the primary deficiency in Navigation Systems is in our area of statutory responsibility, namely, the Coastal Confluence Region ("CCR"), defined as the 100 fathom line or 50 miles offshore, whichever is the furthest. The region in question is now serviced with inadequate coverage and accuracy by Loran A. The deficiency is becoming progressively more acute due to the changes in the makeup and type of shipping.

Higher speeds, larger ships, deeper drafts and the rapid increase of oil and hazardous cargos all contribute to an increasingly serious potential problem of collision and grounding. Concurrently the general public has become the primary beneficiary of an adequate navigation system in the CCR. In the past the public has had only limited interest in the performance of any transportation navigation system. In fact, while there have been inputs from numerous user groups in past navigation system decisions, the public interest has been considered only indirectly in terms of the effects which a new system may have for a particular mode. The increased public awareness of the potential for marine environmental damage from the expanding tanker trade has completely changed this picture.

In this connection the President's energy message, advocating early passage of offshore terminal legislation, will further focus public concern on the potential for marine envyronmental damage. We believe that the selection of Loran C as the Coastal Confluence Region Navigation System to counter this concern is soundly justified by the study as a matter of priority and will, in addition, weaken the position of the opposition to the offshore terminal legislation.

We fully support the conclusions and recommendations of the study and urge your favorable consideration. We have submitted in the FY 1975 budget for the Coast Guard a request for funds to initiate implementation of Loran C for the Coastal Confluence Region.

Copies of the study are being furnished to the Department of Defense and the Office of Telecommunications Policy.

Sincerely,

Ehr La Sam

John W. Barnum

Enclosure



ASSISTANT SECRETARY OF DEFENSE WASHINGTON, D. C. 20301

TELECOMMUNICATIONS

6 JUN 1973

Honorable Claude S. Brinegar Secretary of Transportation Washington, D. C. 20590

Dear Mr. Secretary:

The letter from the Director of the Office of Management and Budget (OMB), dated April 17, 1973, wherein the Department of Transportation (DoT) has been asked to take the lead in conducting a joint DoT/DoD study leading to agreement on the selection of a single National Navigation System has been referred to my office for appropriate action. To assist you in the preparation of the initial phase of the requested study, I want to convey to you the DoD views and positions on the subject in question.

Incidentally, the Director of the Office of Telecommunications Policy (OTP) has similarly proposed that a single general purpose navigation system be selected from LORAN-A, LORAN-C, OMEGA, and TRANSIT • and designated as the approved U.S. system. This proposal was contained in OTP letters to our respective departments, dated February 4, 1972. Since this time, OTP has been actively pursuing essentially the same objectives outlined in Mr. Ash's letter. Several staff meetings of representatives of interested agencies of the Executive Branch, including DoT and DoD, have been held for the purpose of implementing such an undertaking. The attached draft OTP Bulletin on the subject of "Planning for Long Range Navigation Systems" has been circulated for preliminary comments.

Long range, general purpose navigation (referred to in DoD plans) is defined by us as consisting of en route navigation capabilities for which the majority of air and maritime users have a common need and which generally provide reliable, worldwide and continuous position accuracy of some one to two nautical miles.

The LORAN-A Navigation System does not possess all of the features now needed for a general purpose navigation aid; nevertheless, it has served this purpose in the DoD since 1946. An evaluation of cost effectiveness, coverage, capabilities, and performance indicated that + LORAN-A is not an effective means for meeting DoD general purpose navigation needs. The evolution of general purpose radio navigation aids in DoD has been, therefore, characterized by the development of systems and aids to compensate for specific deficiencies in the performance of LORAN-A.

OMEGA was originally developed for and is now being implemented to fulfill both military and civil global, general purpose navigation requirements which cannot be accommodated by LORAN-A or current special purpose navigation systems for economic, site availability, and geopolitical reasons. OMEGA will serve a major part of the DoD and civil community. It is anticipated that OMEGA will be fully deployed and available with worldwide coverage during CY-1975 if geopolitical problems, such as that which presently involves the Government of Australia, can be resolved. Specifically, the question of Australian participation in the OMEGA network is now the subject of a Parliamentary committee inquiry which is likely to focus on certain aspects of military use of OMEGA. Coverage of the entire Northern Hemisphere will be realized in January or February 1974.

Differential OMEGA is a user technique for obtaining improved accuracy from the OMEGA Navigation System; in fact, it is a localized calibration of the worldwide OMEGA Navigation System for special areas, with the "calibration" communicated to only the interested users. Differential OMEGA may become a part of the OMEGA Navigation System; however, it is not in competition with it. Geodetic position accuracies of better than one-half nautical mile have been demonstrated, utilizing differential OMEGA stations with two widely spaced receivers. However, these demonstrations have been conducted with highly skilled personnel under ideal propagation conditions, and with a highly reliable communications link between the user and OMEGA monitor receivers. A decision on the use of the differential OMEGA technique for fulfillment of the more accurate needs of military users must await further investigation of a suitable means for providing a communications link between the user and monitor receiver sites, and operational evaluation when OMEGA stations are operating on the full radiated power for which they were designed.

The DoD also employs special purpose navigation systems to satisfy specific military requirements. LORAN-C and TRANSIT were developed for and are utilized to meet unique and essential needs for high precision navigation information necessary to support high priority military weapons systems. These systems provide high position accuracy and provide certain

other than navigation capabilities which will be addressed in a separate letter; however, they lack the characteristics of a general purpose system. LORAN-C provides a relatively small area of coverage and TRANSIT provides intermittent coverage (every 26 to 120 minutes) only. Consequently, these systems are not being considered by DoD as candidates for general purpose application. For the present, and at least the next ten years, they will continue to serve as special purpose, high accuracy systems for the military user community which requires high precision position fixing accuracy. However, DoD cannot provide assurance of their availability for any specific period of time or for any but their specifically approved DoD use.

The DoD has now also under consideration proposals for an advanced navigation system, the Defense Navigation Satellite System, which might provide high accuracy navigation capability needed by military users on a worldwide and continuous basis. Such a system may, therefore, be able to both satisfy the unique military needs and serve as a long range, general purpose navigation system. In addition a navigation satellite system would minimize requirements for foreign territory and may, therefore, offer a solution to the kind of geopolitical problems encountered with LORAN-A, LORAN-C, and OMEGA. A system could be operationally available in mid 1980s and be a potential candidate for selection as the National Navigation System of the future.

In summary, the DoD has been in the process of replacing LORAN-A with the OME GA Navigation System. DoD requirements for LORAN-A service are expected to terminate as of December 31, 1974. There is no single radio navigation system now deployed, or likely to be fully deployed and operational before the mid 1980s, which would fulfill the civil and military needs now provided by LORAN-A, LORAN-C, TRANSIT, and OMEGA. The DoD believes that the OMEGA Navigation System will best satisfy most of the long distance, general purpose, en route navigation needs of the vast majority of civil and military users. However, as stated in our letter of June 2, 1972 to the Director of the Office of Telecommunications Policy, we still consider it premature to designate a single National Navigation System for fulfillment of long distance, general purpose navigation needs at this time. We would prefer to delay designation of a National Navigation System until further implementation of OMEGA is achieved, and its capabilities are verified by broader operational experience. It is estimated this could be achieved not later than the end of CY-1974. On the other hand, if a single National Navigation System must be selected at this time, the DoD recommends selection of the OMEGA Navigation System with the understanding that the existing

LORAN-C and TRANSIT navigation facilities are required by the DoD to fulfill unique and essential military operational requirements for at least the next ten years.

U.S. owned OMEGA stations are now in the process of being placed under the operational control of the U.S. Coast Guard and will be operated and maintained by that organization. It is recommended that these agreements be finalized as soon as practicable.

I wish to offer our full cooperation in jointly conducting the DoT/DoD study which I hope will be mutually beneficial to radio navigation planning in our respective departments and to others of the radio navigation aid/ user community as well. Mr. David L. Solomon, Deputy Assistant Secretary of Defense (Operations and Engineering) of my office will serve as the point of contact for DoD participation in the study. His telephone number is 695-3136.

Sincerely,

E. Rechtin

Attachment

cc: Dir. OMB Dir. OTP

bafore the

-

Eucocondition on Const Guard and Havigation The Honorable John M. Murphy, Chairson Condition on Horobant Marine and Misheries Honse of Copresentatives

Apr:1 25, 1974

Mr. Chairman obi hay a contract of the little

I am pleased to have whit operations to discuss the role of the Office of Telecont Detactions Policy in the field of nevigation and to present OPP's views on the Coast Guard's navigation program.

OTP's responsibilities and authorities are set forth in Executive Order 11556. As Director of CTP, I as responsible for coordinating all of the telecommunications activities of the Executive branch. This responsibility requires OTP to identify competing, overlapping, duplicative or inefficient programs; review telecommunication research and development, system improvement and expansion programs, operations, and use of telecommunication systems. In conjunction with these activities, it is also my responsibility to make recommendations to appropriate agency officials and to the Director of the Office of Management and Budget concerning the scope of funding of telecommunications programs, and to establish plans and programs that promote effective use of telecommunications technology, resources and services.

In 1971, OTP conducted a review of government navigation programs which revealed that there was no real coordination among government agencies with regard to such programs. We also discovered that there was no readily available listing of special purpose navigation and positioning systems that could be used to evaluate and compare various systems. The alley also should that there had redundancy among the longremut systems and the short-range or special purpose systems, and indicated that unwarranted accuracy requirements were being pleased on the long-range systems.

Becol on the results of this study, in February 1972, OTP initiated discussions with DOD, DOT, NASA, and the Department of Commerce to establish a comprehensive National Navigation Plan. The participants in these discussions felt that such an overall plan should consider the total navigation picture to determine the mix of systems that could most effectively satisfy the various requirements of both air and surface long-range, short-range and terminal navigation, rather than address any one specific area or one specific system as a separate program. The development of the plan was also to include an assessment of the effect of navigation decisions on the total user population, both civil and government, and the impact that U.S. decisions will have on other countries and international organizations such as ICAO and IMCO.

This interagency navigation plan is scheduled to be presented to OTP in August of this year. It will be supplemented annually, and will be used as the basis for future navigation planning. It will be published as a navigation guide for both government and civilian users, and will identify

- 2 ---

for civilian use.

In late 1972, OTP was asked by OMM to commut on the Count Guard's request to implement LONES C as the Coastal Confluence Navigation System. Briefings by the Coast Guard and discursions with DOD, FAA, Commerce, and civil user organization convinced OTP that the Coast Guard proposal had not been adequately examined nor well coordinated. The DOT National Plan for Navigation of April, 1972, had stated that the Coast Guard's research and development plans anticipated the selection of a Civil Maritime/Confluence Navigation System in 1972. However, the navigation community had not been apprised early enough of the system selection, not to mention the broader implications involving air and military use, in order to evaluate the Coast Guard's proposal before the program was in the budgetary cycle. In addition, there was no indication that the relationship of the proposed Coastal Confluence System to two overlapping programs -- long-range navigation and rivers and harbors navigation -- had been evaluated. As a result of these factors, OTP recommended that the system not be approved for implementation until its real worth could be verified and the affected users, i.e., civil maritime, FAA and DOD, has an opportunity to adequately examine the Coast Guard proposal.

- 1 +

The confocion will wident lock of communication among the government agencies involved in navigation and between government and civilian users, as brought out in your hearings in March, 1973, has strengthened our resolve to establish a coordinated National Navigation Plan and to attempt to resolve the LORAN issue.

OTP's work in the field of navigation has concentrated on two areas during the past year -- achieving an overall coordinated national navigation program and monitoring the activities of the various agencies and civilian groups in evaluating the Coast Guard LORAN C program.

In working toward an overall navigation program, we have 1) continued to work with the agencies towards establishing a better exhange of information, 2) engaged a contractor to assist in consolidating and analyzing the different sets of requirements -- civil, military, land, sea and air and matching these against existing and/or proposed system performance and 3) established the interagency coordination groups referred to in the GAO testimony earlier in these hearings.

Mr. Chairman, the foregoing statement in general outlines OTP's responsibilities in the field of navigation. I would now like to present OTP's views on the Coast Guard's Fiscal 75 budget request regarding (a) the Mediterranean LORAN C, (b) improved navigation system for the Pacific Coastal Region, and (c) the current phase-out plans for LORAN A. The Mediterranean LOORE C is a existing system codes. to support military operations in that area. The Court Guard has requested \$6 million for Fiscal 75 to modernize the station equipment of this system in order to decrease operational expenses and permit manpower savings. This redernization will not affect user equipment or use of the system. I see this as a justified management decision to trade equipment dollars for manpower, and I support this request.

The Coast Guard proposal to provide additional navigation coverage on the West Coast of the United States entails new installations designed primarily for civil maritime navigation. This was previously proposed as the first step in the implementation of a new LORAN C navigation system for the entire coastal area of the United States.

As I indicated earlier, OTP was opposed to the nationwide implementation of LORAN C for the entire U.S. coastal area. In fact, as recently as December 1973, we were opposed to the Coast Guard proposal. The reason for our oppositon was twofold: first, the Coast Guard appeared to have overlooked the navigational needs of the rivers and harbors area, and the proposal would have resulted in three separate systems, one for high seas navigation, one for the coastal area, and one for the rivers and harbors area; second, the users of the system had not been adequately identified.

- 5 -

Since last door bet, however, the Court Guard retualited its surface paying tion place and non-proposes that a single system he used too both the cluster erea and the rivers and harbors area in the Paulkin region. This settisfies one of our conserva.

The question of who will use the system also appears to be resolved. The only segment of the navigation user community that needs the accuracy of the proposed LOBAN C System is the civil maritime fleet, including fishing and survey vessels. The DOD and air navigation requirements in the Pacific coastal region are less stringent than those proposed by the Coast Guard, and can be met adequately by existing or proposed navigational facilities which are more cost effective. The LORAN C system in the Pacific coastal area will be used for these purposes as a matter of convenience only.

The principal concerns of OTP have thus been met -the Coast Guard is now proposing only <u>two systems</u> for surface navigation instead of the three previously proposed and the primary system users have been better identified. Although the system selections -- OMEGA for high-seas navigation and LORAN C for the coastal and rivers and harbors areas -- are still being questioned by proponents of other systems, the time necessary to develop and evaluate alternative proposals

- 6

Thus for, OT supports the DOT pressure for ADDAN C expansion nativity a civilian modified system for both coastal and rives and hardons navigation.

OTP is in general agricult with the current DOT plan to phose out LOVAN A. LOVAN A is being superseded by other systems that are more cost offective. The phase-out over a period of approximately five years should give users sufficient time to make adequate and economical transfers to other systems. I do feel, however, that the government must insure that the total user population is made aware of these plans as soon as possible.

Mr. Chairman, I welcome any questions that you or other members of the Subcommittee might have at this time.

· / -

May 1, 1974

Ms. Frances Still Committee on Merchant Marine and Fisheries Room 1334, Longworth House Office Building Washington, D.C. 20515

Dear Mr. Still:

-

Enclosed is Mr. Whitehead's testimony before the Subcommittee on Coast Guard and Navigation on April 25. We have made a few minor editorial changes in the testimony.

Sincerely,

Brian P. Lamb Assistant to the Director

trafic

Enclosure

HCH:as:5-1-74 DO Records DO CHron HCH Chron Judy provioualy.

0

S

53

4 14 2 14

81 B 100 B

ting

And that certain types of cotions, discussions. Moteninus conducted concerning this procursiont were unversariable and unvaual, to say the locat.

Mr. Murphy. I have additional questions which I am going to submit in writing to you and your panel and you will receive those today.

They are generally engineering and technical.

Mr. Studds.

Mr. Studes. No questions.

Mr. Murphy. You ray be excused.

We will be hearing more testimony in the procurement of the replacement aircraft.

The remainder of this morning's testimony will be devoted to the AC&I budget request.

We have also heard testimony from several manufacturars and asvigation and both in favor and in opposition of the LOAAD and us will hear from Clay T. Whitehead, Director of the Office of Telecommunications Folicy.

Hr. Shitehead, it is a placaura to have you before the Committee today.

Mr. Whitehead. Thank you.

I have with me Hr. Charles Joyce on my right and Dr. Max Polk who works in the Office of Tolocommunications, in the area of navigation.

STATEMENT OF MA. CLAY T. WHINEHEAD, DIRICTOR OF THE OFFICE OF TELECONFUNICATIONS POLICY; ACCOMPANIED BY MR. CHARLES JOYCE AND MR. MAX

POLK, OFFICE OF RELEGOMUNICATIONS FOLION

sing

*2

g

11

- 2

1

11

Mr. Whitehead, Mr. Chairman and members of the Subcommittee, I am pleased to have this opportunity to discuss the role of the Office of Telecommunications Policy in the field of navigation and to present CTP's views on the Coast Guard's pavigation program.

OTP's responsibilities and authorities are set forth in Executive Order 11556. As Director of OTF, I am responsible for coordinating all of the telecommunications activities of the executive branch. This responsibility requires OTF to identify compating, overlapping, duplicative, or inefficient programs, Traviet telecommunication research and development, system improvement and empendies programs, operations, and use of telecommunication systems. In conjunction with these activities, it is also my responsibility to make recommendetions to appropriate agercy officials and to the Director of the Office of Henegement and Eudget concerning the scope of funding of telecommunications programs, and to establish plans and programs that promote effective use of telecommunications technology, resources and services.

In 1971, OTP conducted a review of government navigation programs which revealed that there was no real coordination

bing

Š.

15

22

33

36

÷...

13

15

10

- 11

6.2

among government agencies with regard to such programs. We also discovered that there was no randily evaluable listing of special purpose nevigation and positioning systems that could be used to evaluate and compare various systems. The study also showed that there was reductably among the lingrange systems and the short-range or special purpose systems, and indicated that unwarranted accuracy requirements were being placed on the long-range systems.

Based on the results of this study, in February 1972, CEP initiated discussions with DOD, DOT, MASE, and the Department of Commerce to establish a comprehensive National Navigation Plan. The participants in these discussions felt that such an overall plan should consider the total navigation picture to determine the mix of systems that could most effectively satisfy the various requirements of both air and surface long-range, short-range and terminal nevigation, rather than aldress any one specific area or one specific system as a separate program. The development of the plan was also to include an essessment of the efficat of newspetien desicions on the total user population, both civilian and military, and the impact that U.S. decisions will have on other countries and international organizations such as ICAO and INCO.

The confusion and evident lack of communication among the government agencies involved in navigation and between

government and civilian users, as brought out in your hearings in March, 1973, has attengthened our resolve to establish a coordinated National Navigation Plan and to attempt to resolve the LORAN issue.

375

OTP's work in the field of navigation has concentrated on two areas during the past year -- achieving an overall coordinated national navigation program and monitoring the activities of the various agencies and civilian groups in evaluating the Coast Guard LORAN C program.

In working toward an overall navigation program, we have (1) continued to work with the agencies towards the establishing of a better exchange of information; (2) engaged a contractor to assist in consolidating and analyzing the different sets of requirements -- civil, military, land, soa and air and matching these against existing and/or proposed system performance; and (3) established the interagency coordination group referred to in the GAC testimony earlier in these hearings. This interspancy group is preparing a navigation plan to be presented to CTP in Juguar of this year. It will be supplemented annually and will be used as the basis for future navigation planning. It will be published as a navigation guide for both government and divilian upers and will identify those government operated systems that are considered appropriate for civilian use.

Mr. Chairman, the foregoing statement, in general,

bing

€

2

C

32

33

343 11

17.

10

 $\mathcal{D}_{1} \subset \mathcal{D}_{2}$

outlines CTP's responsibilities in the field of navigation. I would now like to present OTP's views on the Coast Guard's Fiscal 1975 budget request regarding (a) the Mediterranean LORAN C; (b) improved accluation system for the Pacific Constal Region; and (c) the current phase-out plate for LORAN A.

15

2

 $\epsilon_{\rm e}$

10

ŝ

21 - 1 10

25.

٤£

ية م ما أحد

31

1

bing

The Mediterranean LORAN C is an existing system designed to support military operations in that area. The Coast Guard has requested \$6 million for fiscal 1975 to modernize the station equipment of this system in order to decrease operational expenses and permit manpower savings. This modernization will not affect user equipment or use of the system.

The Coast Guard proposal to provide improved navigation coverage for the Pacific Coastal Region entails new LORAN C 1 installations designed primarily for civil maritime navigation. This was previously proposed as the first step in the 1 implementation of a new LORAN C navigation system for the entive coastal area of the United States (the Coastal Con-fluence Navigation System) and, in late 1972, CPP was asked by ONE to comment on that proposal. Briefings by the Coast Cuard and discussions with DOD, PAA, Commerce, and civil user organizations convinced GTP that the Coast Guard proposal had not been adequately examined nor well coordinated. The DOP National Plan for Mavigation of April, 1972, had stated that the Coast Guard's research and development plans anticipated the selection of a Civil Maritime/Confluence Navigation

System in 1972. However, the anvigation constraity had not been apprised early enough of the system selection, not to reaction the broader implications involving air and military use, in order to evaluate the Coast Cuard's proposal before the program was in the budgetery cycle. In addition, there was no indicetion that the relationship of the proposed Coastel Confluence System to two overlapping programs -- long-range nevigation and rivers and harbors navigation -- had been evaluated. As a result of these factors, GTP recommended that the system not be approved for implementation until its real worth could be verified and the affected users, i. e. civil maritime, FAA and DCD, had an opportunity to exemine the Coast Guard proposel.

ling

7

6

311

. č

ĊĽ

3.2

As recently as December 1973, we still had reservations concerning the Coast Guard proposal. The reason was twofold: First, the proposal still would have resulted in three superate systems, one for high seas novigation, one for the coastal area, and one for the rivers and harbors area; second, the users of the system had not been adequately identified.

Since last December, however, the Coast Guard has reevaluated its surface navigation plans and now proposes that a single system be used for both the coastel area and the rivers and herbors area in the Pacific region. This satisfies one of our concerns.

The question of who will use the system alto appears to

bing

1

3

8

1.2

92

33

5.5

÷.,

242

20

67 67 24 4 be recolved. The only segment of the navigation user community that needs the securacy of the proposed LORAN C system is the civil maritime fleet, including fishing and survey vessels. The DOD and air navigation requirements in the Preific constriregion are less stringent than those proposed by the Coast Cuard, and can be mat adequately by existing or proposed navigational facilities which are more cost effective. The LORAN C system in the Preific coastal area will be used for those purposes as a matter of convenience only.

The principal concerns of CTP neve thus been met -- the Coast Guard is now proposing only two systems for surface navigation instead of the three previously proposed and the primary system users have been better identified. Although the system selections -- CMECA for high-seas navigation and LORAN C for the coastel and rivers and herbors areas -- ave still being questioned by proponents of other systems, the time necessary to develop and evolvate alternative proposals would delay any system implementation for at least two years. Therefore, CTP supports the LOS proposal for LORAN C supersisted and as primarily a civil maritime system for both constal and rivers and harbors nevigation.

CTP is in general agreement with the current DCT plan to phase our LORAN 1. LORAN A is being supercoded by other systems that are more cost effective. The phase-out over a period of approximately five years should give users sufficient

time to make adoquate and unconsideal transform to other systems. I do feel, however, that the government must incura that the total user population is made aware of these plans as soon as possible.

Mr. Chairman, I walcome any questions that you or other nembers of the Subcommittee might have at this time.

Mr. Murphy. Thank you, Mr. Whitehead.

Who is the gentleman with you?

bing

F

с з

5.5

9 / 3

Mr. Whitehead. This is Charles Joyce and Dr. Max Polk who works with Mr. Joyce.

Mr. Murphy. What do you mean when you say on page 2, "The study also showed that there was a redundancy among the long-range systems and the short-range or special purpose systems, and indicated that unworranted accuracy requirements were being placed on the long-range systems," what do you mean?

Mr. Unitsheed. I think I will ask Mr. Felk to answer that question. Mr. Felk. Kell (1) have a long-range or so-called general purpose system and also have special purpose, - unique system, tactical system, and operating in the same areas. There have been cases that we identified -- and mainly the Department of Defense in the test of mainly the of long-range system was being tagged to provide the same accuracy that they unique system was providing and the long-range -

ing

2

5

ŝ

12

2.5

20

25

system did not have to be that good.

We did not have to pay for that accuracy because something else was doing the job for them.

Mr. Murphy. You sold that GTP is working toward on overall navigation program and you have continued to work with the agencies towards establishing a better euchonge of information, and engaged a contractor to assist in consolidating and analyzing the different sets of requirements -- civil, Military, land, see and eir, and matching these against existing and/or proposed system parformance and established the interagency coordination group referred to in the GAO testimony earlier in these hearings.

How are you accomplishing this and what agencies are you referring to?

Mr. Whitehead. This coordination, Mr. Chairman, is a part of a much broader in the we have initiated at GTP. GTP circular number 12 concerning the communications of all activities in the executive branch. To go into more detail I would like Mr. Guges to ensure that question, is specifically, how we are the novigational is of that

Hr. Joyce. Under our coordination program we have into five areas divided, all of the contunications and radio communication activities, and One of the flve areas is the area of transportation and this involves aviation and maritime communications and radio mangation.

in the transportation area.

oing

14

.5

1

53

The transportation area is coordinated by what we call a area ' mission group and the Department of Transportation is the lead agency.

The sub-area The subject area, of navigation has been designated by with -DOT Sector area, to lead the group with the Department of Defense, the Department of Commerce, and NASA participating as members of that group.

We expect to get, from the transportation community, what are doing comprehensive plans indicating the various departments, in the communications and navigation areas and how they fit use hope together and who is going to be using which systems, to eliminate in that coordination as much as possible any duplication in the future plans.

We hope to review the plans annually, and hope under the leadership of the Popertment.

Commerce Mr. Murphy. How about Geogrees, and the Interior and we have 3,000 drilling rigs and carefully divided shipping lenes and now commercial fish requirements as much as qualifications. Mr. Joyce. I think I indicated that Commerce was involved.

Hr. Folk. May I comment?

There are other agencies flaterior, Treasury, Agriculture, an addition to the Department of Transportation, the

suchas

(commerce (MAPAD) Department of Defense, 1917, 5 118A. Cas of the first troks that 👺 group was asked to attack was to identify any other government agency that should be participants. You must realize this is only in the Computation shote articipation by other agencie and there have been indications about Mr. Whitehead. I might say that we found that the across communication activity in the Sederal government outs the eve Departments Li Ain a complex way, and each of the five areas I have discussed we have placed area have identified the major agency in each mission and

382

Mr. a.

However, where there are agencies with minor roles, they 11 participate on an ad hoc basis. 12

Mr. Murphy. On page 5 you say that as recently as December of 1973, you still had reservations concerning the Coast Guard proposal.

Are they outlined in the December 3, 1973, letter, bnd are those letters a part of our records?

Mr. Whitehead. Yes, they are.

An. Humphy. Not say that the outline in the Dicht out 5 letter has been taken care of?

Mr. Mhitehead. Correct.

Mr. Murphy. And you any you reverse your politions with respect to the coastal confluence system?

Mr. Whitehead. That is correct.

Mr. Murphy. On page 6, "The phace out over a period of

2

100

5

9

ିତ

13

3,5

57

<u>î:</u>]

200

en m Gene

z. La wharge.

over approximately five years should give upers sufficient the to made adequate and economical transfors to other systems.

rin.t

3 1

7. ja

1

- .---. t

~ · · •

Ē :333

"I do feel, however, that the government must insure that the total user populowion is made surve of these plane of soon as cossible."

Who has this responsibility in the government?

Mr. Joyce. I think basically that we feel that the Department of Transportation should take appropriate action to make sure that the users are aware of this.

We hope in the long run that the planning process will 12 11 make this public but at this point in time DOF should take 12日間 special action.

Mr. Whitehead. We recognize that a number of users in the 7. S. 15 [private sector have extensive investments and if the government is going to make a change, these people should know about it as soon as possible.

> Ye feel it would be the appropriate thing to notify them. Mr. Murphy. That is one of the concerns of the Committee, WALL DOT repurt to you?

Mr. Whitehead. I would assume that they agree with us that this notification --

Mr. Murphy. They might syrae with you and not notify anybody.

Mr. Whitehead. We will follow up and watch it.

Mr. Murphy. I would appreciate notification as to that

bing

۰.,

5

2

÷

2.4

12

1.14 1.12

13

13 9

۳p.

20

type of program that they carry on, to notify people.

I would like to thank you, Dr. Folk, for the costatecco 1 4 you have given to this Committee.

314

It makes it difficult to get responsive detailed ensures $\{ f_i \}_{i \in I}$ 3 4 in the navigational area and you have been very deeperstary in answering questions that we have had and in the field that we 3 1 have been working in.

Mr. Whitehead. I am glad to hear that.

One of purposes is to make better information available to the Congress and I am pleased to hear you reflect that view of Mr. Polk. 1 8

Mr. Murphy. Our next witness will be William T. Hardaber. Mr. Hardaker, I am accompanied this morning by Mr. Frank White, a member of my staff, and Director of the Avionids.

Statement of William T. Hardaker Assistant Vice President Air Navigation/Traffic Control Air Transport Association of America before the House Subcommittee on Coast Guard and Navigation on H. R. 13595 - a Bill to Authorize Appropriations for Coast Guard Acquisition, Construction and Improvement for Fiscal Year 1975, April 25, 1974

My name is William T. Hardaker. I am Assistant Vice President, Air Navigation and Traffic Control, of the Air Transport Association of America, the trade and service organization representing virtually all of the scheduled airlines of the United States. We appreciate this opportunity to offer the views of the scheduled airlines on one particular aspect of the U. S. Coast Guard Authorization Bill for FY-1975, as it affects the airlines, the LORAN-A and LORAN-C navigation facilities.

Whereas last year we found ourselves having to oppose the Government's proposals for initiating phase down of LORAN-A navigation facilities, this year we are pleased to support the Government's proposal which requests funds to continue the operation of all USCG funded and operated LORAN-A through FY-1975.

We also wish to report that we have had meaningful dialogue with both the Department of Transportation (DOT) and the USCG during the past year and there is a much better understanding among us, regarding the airlines' needs for long distance navigation aids.

It should be noted that the airlines' requirement for long distance navigation service is quite similar to that of the Department of Defense (DOD) as expressed in the joint DOD/DOT statement dated March 25, 1974, which was read into the record of your Committee, on March 28, 1974. Briefly stated, the airlines also advocate the continued operation of LORAN-A until it can be replaced by an alternative that will provide world-wide coverage; OMEGA is the preeminent candidate.

Like the DOD, the airlines currently have no requirement for the LORAN-C system proposed to be initiated for coastal confluence navigation for maritime interests. This applies both to the LORAN-C installations on the West Coast of the United States as well as the LORAN-C improvement programs for the Mediterranean area. Accordingly, we would oppose any attempt to fund the operation of these facilities from Airport/Airway Trust Fund monies or by the imposition of user charges on the airlines for that purpose.

However, we have indicated to the Department of Transportation and the Federal Aviation Administration that a few airlines have indicated a willingness to evaluate the possible use of LORAN-C to replace LORAN-A as an aid in navigating scheduled flights between the U. S. mainland and areas in the Caribbean. Presently, the LORAN-C service provided on the East Coast of the U. S. is of low power and does not fully cover the airline routes to the Caribbean. The airlines possibly interested in this capability would be only those having aircraft which are dedicated to those routes and do not also operate overseas in other areas.

- 2 -

In this regard, two U. S. airlines having some aircraft in this category are Eastern Air Lines and American Airlines. Pan American World Airways and Trans World Airways have indicated that LORAN-C is not expected to be of value to them since, as we have just indicated, they must replace LORAN-A with a navigation system providing world-wide coverage. This position is the same as that taken by DOD.

We indicated in our testimony last year that we would periodically make an assessment of airline requirements for LORAN-A service so that any unneeded facilities could be declared surplus to airline requirements. We have done some preliminary planning in this regard. We have indicated to the USCG and DOT that we will meet with them, as soon as they are prepared for such discussions, to consider declaring as surplus or excess to airline requirements certain LORAN-A facilities currently operating on the East Coast of the United States.

I would like to take this opportunity to express our appreciation to this Committee for their efforts last year in helping to resolve the problem of premature decommissioning of certain LORAN-A facilities. We believe the subsequent discussions between the users and the government on a suitable replacement for LORAN-A including a possible schedule for orderly phase-out, have been productive.

Thank you Mr. Chairman.

- 3 -

· · · ·

THE GLARIES OF OT TEVE SUBMITION WAS INTERNED. DOI: 201001

April 12, 1974

H Lorable Clay T. Unitehead Director Office of Telecommunications Policy Executive Office of the President Hashington, D. C. 20504

Dear Hr. Whitehead:

I share your concern about the duplication of radio navigation systems and appreciate the opportunity to clarify the Department's position on the questions you addrested in your March 13, 1974, letter. Your information on the DOT proposal for radio navigation systems is correct. We are proposing Loran C as the system for the Coastal Confluence Region including harbor and estuary areas. This decision will be reflected in the revised Mational Plan for Mavigation which is now being prepared. The Department of Defense has also concluded that OMEGA is essential for worldwide high seas navigation. These conclusions reached by DOT and DOD are reflected in a paper entitled, "DOT/DOD Recommendations for Radio Mavigation Systems," a copy of which is enclosed for your information. A copy of this paper has also been made available to the cognizant Congressional Committees and the Office of Management and Budget.

Our determination that Loran C could meet harbor and estuary requirements was based on recently completed measurements. After these data were reviewed, the research effort to develop a new system was terminated by the Coast Guard.

The Loran A system will be phased out after the OHEGA and Loran C systems become fully operational. Any phaseout schedule is contingent in large measure on obtaining the necessary resources to implement the OMEGA and Loran C systems on a timely basis. At the present time, it appears that the full OMEGA (except for the Australia station) will be operational in late 1976 or during 1977. If the OMEGA system can meet this schedule and if Loran C implementation begins in FY 1975, the following phaseout schedule is planned for Loran A:

1 *** . (1)

Two an eu sa li cultura. Na inia 600

Para di Isla.'s Hardino Masi Const Altin Gult of Mixico Fast Coast/Caribbeau Le vant to emphasize the print that we will not decommission Loran A facilities until the alternative facilities are in place and we have advised and consulted fully with the users on our plans. If the alternative systems are installed on an accelerated basis, it may be possible to decommission Loran A stations earlier than the dates indicated. On the other hand, if there is slippage for resource or technical reasons in implementing Loran C or OHEGA, it may be necessary to defer Loran A decommissionings beyond the dates specified. We believe, however, that for planning purposes the schedule we have presented is a realistic one.

I believe we have arrived at an effective and acceptable solution to a very complex problem. The cooperation of your staff has been of considerable assistance in reaching this result. Please let me know if we can provide any further information.

Sincerely,

- Chardel Bringan Claude S. Brinegar

Enclosure

If the factor of the second second second providing of the Crast Guard providing during the second second providing the second second second providing the second second second second second second the second second second second second second the second second second second second second second to 1000 be the second second second second second to 1000 be the second second second second second second to 1000 be the second seco

Although the optimization is on the Departmental level, i.e., Job and DOP, the relationship has remained largely the same. There has been one basic change in recent years-the private sector and civilian branches of the public sector have also entered the picture as major users of radionavigation signals. As a result, the DOD role shifted from sole customer to one of the major customers, and it became necessary to meld the DOD needs with close of other users. Also, it fell upon por to determine the most cost-effective way to meet the needs of all while insuring the safety of mariner and environnert alike.

To insure that the needs of this conglomerate of users were properly considered and that users had full knowledge of systems to be provided, the DOT National Plan for Navigation was initially issued in 1970. It was the result of a team effort by DOT including the Coast Guard and the FAA. This plan was fully coordinated with and approved by DOD. At the same time, it was recognized that there remained specialized needs for DOD agencies. These were addressed in the Joint Chiefs of Staff Master Kavigation Plan. The Coast Guard has participated regularly in the development of that Plan and has adjusted its long-range planning to support it.

Now we have come to a critical time of decision regarding United States Government provided radionavigation systems. LURAN-A, while still widely used, is clearly not adequate for the precision demanded for safety in our harbors and estuaries, shipping lanes, and coastal confluence region in general. Nor is it economically feasible to expect LORAN-A to provide worldwide, general purpose radionavigation service in the Oceanic areas. A replacement must be designated now to insure its availability in all necessary maritime areas involving the United States. This must be accomplished in time to keep pace in shine ne of para dia to patient to the promotion of the second s

Driving bails work when he by and for the increase minimum for its no inference include in help work of the data in the propulate cell to contribute the terms of the data in the Socretic of Transport the help more all of the data in primes invitation systers for all terms of civil uses for constal confluence, harbors, and estuarius, (and will serve as an adjunct to Veusel Traffic Systems being installed) while OMEGA will provide for worldwide an route of hereal while in addition, Differential OMEGA might possibly serve as the DOD harbor approach system for their vessels in selected locations.

Since DOD has said it has no military requirement for expanding LORAN-C to cover the entire coastal confluence region of the United States, DOT/DOD discussions have been held to clarify the DOD position. These discussions have made it clear that the DOD statement was meant to convey that they are unable to justily the proposed expansion of LORAN-C for use by DOD. DOD does recognize the need for such an expansion for safety in the private sector and interposes no objection to the expansion of LORAN-C for that purpose by the Secretary of Transportation. DOD endorses the current OAEGA program as one essential part of the total system, while a precision global positioning system is being developed.

Having reached agreement that LORAN-C and OMEGA can provide for the United States Radionavigation needs the major remaining problem is that of an orderly phase-out of LORAN-A to give present users (including the DOD) reasonable time to amortize their investment in LORAN-A equipment and spread their investment in replacement equipment.

The DOT proposal for a minimum 5-year period-before shutting down any LORAN-A facilities has also been discussed with DOD and, with certain adjustments for some overseas chains still to be fully resolved, it has been agreed upon.