

JUSTIFICATION FOR THE RELOCATION OF SPRUCE CAPE, KODIAK LORAN-A STATION TO THE SITE OF THE SITKINAK LORAN-C STATION

Description of Unit or Project

OAN

31 JAN 1963

1. The LORAN-A Transmitting Station Spruce Cape, Kodiak, Alaska, will be abandoned and the services provided by it will be furnished from an alternate site. Compatible LORAN-A coverage in the Gulf of Alaska will be provided by the addition of a LORAN-A rate from the site of the Sitkinak LORAN-C Station.

From: Commandant, Kodiak Coast Guard Station, Kodiak, Alaska  
To: Commander, Seventeenth Coast Guard District

Subj: Relocation of Spruce Cape LORAN-A Station to Sitkinak LORAN-C Station

Ref: (a) Coast Guard Loran Planning Study, 1960

1. The Coast Guard Planning Study 1960 showed how it was possible to so control the Loran program that the maximum number of Loran stations could be kept to a minimum and still provide the necessary navigational coverage. It recommended that wherever possible LORAN-A and C stations be integrated into one unit in order to effect savings in personnel and operating expenses. Such collocations were to be accomplished as replacement of existing stations became necessary due to new requirements, modernization programs, or destruction of stations by natural forces.

2. All existing LORAN-A stations were examined to see if they could meet these criteria, wholly or in part. Due to your Operational Planning Proposal, Ser: 17-62-14 dated 31 January 1962, the collocation of Spruce Cape LORAN-A Station at the Sitkinak LORAN-C Station was approved and is included in the FY 1964 AC&I Budget.

3. Enclosed for your information is a copy of the justification for the proposed relocation which contains sufficient guidelines to assist in your planning. It is requested that a complete AC&I project report for the relocation of Spruce Cape LORAN-A Station to Sitkinak LORAN-C Station be prepared and forwarded to Headquarters.

2. The rehabilitation of this station can best be accomplished by relocating it to the site of the Sitkinak LORAN-C Station. The savings in AC&I funds realized will be approximately \$300,000. Cost of the LORAN-A equipment installation are \$250,000 (SEE-2 Memo, Chief of Staff, 15 December 1962). In addition the Coast Guard will be implementing our further phase of the U.S.C.G. Loran Planning Study, 1960.

Encl: (1) Justification for the Relocation of Spruce Cape, Kodiak LORAN-A Station to the site of the Sitkinak LORAN-C Station (Budget and Coast analysis Memo 15 December 1962).

4. A detailed cost breakdown for this AC&I program is attached.

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JUSTIFICATION FOR THE RELOCATION OF SPRUCE CAPE, KODIAK LORAN-A STATION TO  
THE SITE OF THE SITKINAK LORAN-C STATION

AC&I PROGRAM FY 1964

Description of Unit or Project

1. The LORAN-A Transmitting Station Spruce Cape, Kodiak, Alaska will be abandoned and the services provided by it will be furnished from an alternate site. Compatible LORAN-A coverage in the Gulf of Alaska will be provided by the addition of a LORAN-A rate from the site of the Sitkinak LORAN-C Station to Ocean Cape, Alaska.
2. This project will be accomplished in one phase.
  - a. Construct additional spaces of approximately 1800 square feet at the LORAN-C Transmitting Station, Sitkinak to house the electronic equipment. Design to be similar to the LORAN-C power and signal building at Sitkinak Island. Procure and install the electronic equipment comprising a single pulsed high powered LORAN-A Station. Construct a standard LORAN-A antenna system. Detailed engineering specifications and costs to be developed.
  - b. System accuracy check the new LORAN-A rate in accordance with CG-281.
  - c. Disestablish LORAN-A Transmitting Station, Spruce Cape, Kodiak, Alaska.

Justification of the Project

1. The Spruce Cape, Kodiak LORAN-A Transmitting Station was declared operational in March 1952. When constructed economy measure were used and the personnel and equipment were housed in Quonset huts. Within the next few years maintenance will become more difficult and expensive. Present generators are in need of replacement. The present electronic equipment has been operating for ten years and is nearing the end of its useful life. Cost estimates for the rehabilitation of this station have been submitted by Commander, Seventeenth District and are \$850,000 (CCGM17 Operational Planning Proposal - Ser: 17-62-14, dated 31 January 1962.)
2. The rehabilitation of this station can best be accomplished by relocating it to the site of the Sitkinak LORAN-C Station. The savings in AC&I funds realized will be approximately \$300,000. Cost estimates for the LORAN-A equipment installation are \$230,000 (SEE-2 Memo, 6 April 1962). In addition the Coast Guard will be implementing one further phase of the U.S.C.G. Loran Planning Study, 1960.
3. The relocation of Spruce Cape, Kodiak LORAN-A Station will effect an estimated annual O&M savings of approximately \$80,000 (\$96,734 less 2 ET's, 1 GS3 and additional maintenance at Sitkinak) (Budget and Coast Analysis Memo 15 December 1961).
4. A detailed cost breakdown for this AC&I program is attached.

TOTAL PROJECT COST \$ 500,000

## AC&amp;I PROGRAM FY 1964

## Cost Estimate

## SHORE STATIONS AND NAVIGATIONAL AIDS

## SITKINAK LORAN STATION, ALASKA

Relocation Spruce Cape LORAN-A Station to site of Sitkinak  
 LORAN-C Station----- \$ 569,000

Assumption: Four additional personnel to be housed in existing quarters  
 with no added support facilities. No added generating  
 capacity. Cost Factor 2.50

	GONUS	ALASKA
Timer Room 350 SF )		
Equip. Room 750 SF ) 1700 SF @ \$20 -----	\$ 34,000	\$ 85,000
Parts Storage 200 SF )		
Corridors and Misc. 400 SF )		
Added power distribution -----	5,000	12,500
Added air conditioning -----	15,000	37,500
Transportation -----	20,000	20,000
Assemble Screen Room and Bin Storage -----	2,000	5,000
Install electronics -----	5,000	12,500
Allowance to make junction to existing building ---	6,000	15,000
Install 125' antenna and ground system -----	8,000	20,000
Install vertical receiving antenna -----	3,000	7,500
Burial and cables -----	4,000	10,000
Outfit, general -----	4,000	4,000
Major electronics equip (EEE) -----		197,000
Test equip (EEE) -----		2,000
Non-technical items (EEE) -----		4,000
1 Year ERPAL (EEE) -----		15,000
I.C. equip (EEE) -----		1,500
System check (EEE) -----		8,000
Disestablish Spruce Cape LORSTA -----		15,000
Construction Contingencies -----		60,000
Total Construction Cost -----		\$931,500

## Administrative Expenses:

Supervisory and Engineering Personnel -----	\$ 25,000
Administrative Travel -----	10,000
Administrative Supplies -----	2,500

Total Administrative Expenses ----- \$ 37,500

TOTAL PROJECT COST ----- \$ 569,000