Mr. H. Copies sent to eee c, eev, f, p



DEPARTMENT OF TRANSPORTATION UNITED STATES COAST GUARD

MAILING ADDRESS:

Commanding Officer USCG LCRSTA Sitkinak FPC Seattle, Wa. 98794

• 3262 3 January 1974

From: Commanding Officer, USCG Loran Station Sitkinak To: Commander, Seventeenth Coast Guard District (c)

Subj: Bi-monthly report of Loran-C Operations

- 1. Status reports indicate that two 5597 tubes have been shipped via air express but have not been received. Ten other tubes were back ordered with no delivery date indicated. Apparently a critical supply shortage of these tubes has developed, as these tubes are vital to the transmitter all pressure available should be exerted to ensure the supply source prevents such a situation from occurring again in the future.
- 2. CB601 in the number one communications transmitter recently failed. This is a non ERPAL item hence no spare was on board. The transmitter is wired direct to permit operation until a new unit is received.
- 3. The AM-VHF transceiver has been received and installed. The antenna was broken in transit however a locally fabricated one is giving satisfactory results.
- 4. The AN/FPN-54 timers arrived on 18 December.
- 5. ETC ASCHENBRENNER arrived 28 December and has relieved ETC BAKER. Chief ASCHENBRENNER has had no prior loran experience. He however displays a high level of competence and dedication and his past record indicates he will be a definate asset to this station's operation.
- 6. ET3 PAINTING has had his orders modified to report to ICRCTA ATTU. This will leave this unit one short in the ET complement after ENET VANDEBERGH arrives in mid-January, no orders have been received to fill the vacancy left by amending ET3 PAINTING's orders.
- 7. The station electric sets are all operable now. Turning of the slip ring on number two was delayed until number one was operable so that there would be a standby engine while working on number two. The only remaining repairs at this time are those to the radiator and fan of number one. Number one has been placed on the line and carried a full station load without overheating by coupling it to the cooling systems of number two and three.
- 8. It is imperative that the resurfacing of the station roofs be accomplished this coming summer as planned. Various leaks continue to reoccur and patching by station personnel has not proved to be a satisfactory solution.

At Plake



Address reply to:

Commanding Officer USCG LORSTA Sitkinak FPO Seattle, Wa. 98794

3262 14 January 1974

From: Commanding Officer, Coast Guard Loran Station Sitkinak

To: Commander, Seventeenth Coast Guard District (o)

Subj: Bi-monthly report of Loran-C Operations

- 1. Two of sixteen 8597 (PA) tubes ordered have been recieved. This station is still critically short of PA tubes and will continue to be critically short until tubes on order are supplied.
- 2. In the past few months this station has had very few periods in which it could get reliable tracks on X-Ray. This is due, in part to poor signal propagation over a very long distance, but this station's participation in the skywave monitor program limits tracking capabilities to only one timer. Movement of X-Ray's sampling point brought no success and tracking probably will not improve until after the installation of the AN/FPN-54. This will free our now operate FPN-41 for monitoring exclusively.
- 3. It is anticipated that, as a result of the recent EMC conference in Anchorage, that this station will delete some items from its PMEL schedule and lengthen the calibration interval on the equipment. This should result in a monetary savings and at the same time it is felt that it will not reduce operational capabilities.
- 4. The EMO conference is felt to have been successful and much information that would have been hard to obtain from technical literature was exchanged. The only short coming would seem to be that all EMO's could not be present due to weather and that the conference was, somewhat, abbreviated for the same reason. Possibly scheduling during the summer months would be more advantageous.
- 5. Amendment of ET3 PAINTING's orders to ATTU leaves this station one ET short. With consideration to the severe underbilleting it is essential that we have at least sufficient manpower in number to accomplish our mission. We request that at the first available opportunity we be supplied a replacement for ET3 PAINTING.

D. E. PLAKE

THE DE LOVE



Address reply to:

Commanding Officer USCG Loran Station Sitkinak FPO Seattle, Wa., 98794

3262 16 February 1974

.From: Commanding Officer, Coast Guard Loran Station Sitkinak Island.

To: Commander, Seventeenth Coast Guard District (o)

Subj: Bi - monthly report of Loran-C operations.

- 1. On 14 February the CO2 fire protection system in the loran transmitting building discharged into the storeroom and input power transformer area. The discharge was due to snow blowing on the ionic sensor in the area immediately inside the main door. Weather at the time was blowing snow and 60 knot winds from the NW. Both inside and outside doors were completely closed at the time. Station response to the fire alarm was satisfactory. Efforts were hampered by the -53 degree chill factor and 60 knot winds. No damage was incurred by the discharge. Investigation of the sensor involved reveals that air movement of as little as 25 ft./min. may activate the sensor. With this being the case, the present entrance to the loran transmitter building is totally inadequate and this station requests immediate consideration be given to unit SSMR, 02-73 dated 5/15/73.
- 2. This station has recieved 4 ea. 8597 PA tubes of fifteen on order since October 73. Receipt of these four in the last two months has prolonged our status but does not aleviate our critical shortage. District notification, with referal to Supply Center Brocklyn's Newsletter of December 73, that these tubes would not be available until after 1 May 1974 causes us to request 6 ea. of these tubes be transferred from any station having adequate spares. With consideration to the condition of present in use 8597 tubes and projected replacement we should be without a standby transmitter by approximately 1 May 74. Our present low inventory of spare tubes has made FPN-42 transmitter balancing extremely difficult.
- 3. We are concerned about Zulu's delay as seen by our timers. This delay has been steadily decreasing over the past two months. Our assigned delay for Zulu's cycle is 42004.77 microsec. Generally we have never tracked this high a number and we have averaged 42004.7 during late summer and fall. As winter has advanced our number has steadily decreased to a point presently about 42004.45. Numerous phase calibrations have confirmed this decrease and with the exception of a faulty delay in the phase calibrator it is not understood. Research into past seasonal trends through historical charts has brought no confirming information, but we are somewhat skeptical of past numbers. Any information on annual propagation changes would be appeciated.

my Report of Loran-6 Operations. (continued)

4. During our semi-annual ERPAL inventory it was discovered that many used and broken parts, especially those of high monetary value, had been placed in stock and previously counted as on board spares. An effort has been and is being made to replace all defective spare parts.

D.E. PIAKE, LTJG, USCG Commanding Officer

Address reply to:



UNITED STATES COAST GUARD Commanding Officer
RECEIVEUSCG Loran Station Sitkinak
13 Mar 74 20 | 5262
OPERATIONS BRANCH 1974
17TH C.G. DISTRICT

From: Commanding Officer, USCG Loran Station Sitkinak To: Commander, Seventeenth Coast Guard District (o)

Subj: Bi-monthly Report of Loran-C Operations

- 1. The low inventory we have presently of 8597 tubes continues to be a critical problem. Maintaining transmitter balance in both operate and standby transmitters is becoming an impossible task. Our present status is 2 ea. new and 4 ea. high time but usable for balancing. Considering a normal inventory of 20 ea. new and approximately 10 ea. used for balancing this greatly handicaps our balancing efforts.
- 2. The last week in February has been devoted to the installation of a new communications console and installation of the FPN-54. The communications console although sorely needed does not relieve our communications problems as new transmitters were not supplied, as was anticipated. The present transmitters are fourteen years old and require an inordinate amout of time to maintain as well as being completely manually tuned. An average of 6 frequency changes aday occur and demand approximately one half man/day to accomplish. Beside the man-power requirement the URT 17's are not presently relliable enough for this critical link in operations.
- 3. Although most supplies ordered directly from GSA were delivered on the quarterly log flight some requests submitted to Base Kodiak in September 73, remain undelivered with no status provided. A letter request for information concerning these requests has been sent to Base Kodiak, with a copy to CCGD17 (f).
- 4. The International tractor parts needed to commence repairs have arrived. After starting on the project it was found that more parts will be needed. The tractor and backhoe unit will require a major overhaul due to the excessive use made of the tractor without proper maintenance during the past summer. Should the Sitkinak backhoe be used again this summer as last it is recommended that it either be assigned to a more central location for use throughout the North Pacific Ioran-C chain or that it at least be properly cared for and overhauled before returning it to an isolated loran station.
- 5. Severe weather during mid-February caused considerable problems with the sewage treatment plant. Water supplies to the building froze, snow blew in under the open eaves and filled the building, access from the main building was hazardous due to winds and ice, samples froze before tests were completed, the plant temperature was below the minimum operating temperature, and the sludge became thick. With the abatement of severe weather and the ability to get water to the sewage plant for washdowns its operation has returned to normal.

D. B. PLAKE



Address reply to:

Commanding Officer USCG LORSTA Sitkinak FPO Seattle, Wa. 98794

.18 March 1974 3262

From: Commanding Officer, USCG LORAN STATION, SITKINAK To: Commander, Seventeenth Coast Guard District (o)

Subj: Loran-C Operation, Bi-monthly report

- 1. The installation of the FPN-54 Loran Timer has greatly reduced our operational burden. All loran watchstanders have been thoroughly trained in its operation and no difficulty has been encountered. The release of one FPN-41 Timer from an operational status to a moniter status has greatly increased the confidence of all operations personnel. At present emphasis is being placed on operational procedures and transmitter maintenance as these areas are considered to be the most likely to effect reliability in the future.
- 2. This station is still in dire need of new communications transmitting equipment. Due to its non-replac ment as was anticipated with the arrival of the new communications console, we have embarked on a program to refurbish the existing URT-17A transmitters, but due to their age and deteriorated condition, it is doubtful that satisfactory results can be realized.
- 3. Ioran chain communications in general continue to be unsatisfactory. Although control and organization are contributing factors, equipment failures, often for extended periods, are common among the majority of stations. Again replacement of existing communications transmitters is considered essential.
- 4. Our situation with regard to PA tubes type 8597 is still critical, but delivery of six from other stations in the chain as per CCGD17 (e) instructions should insure continued operation until early summer when these tubes are scheduled to become available.
- 5. Under present operating procedures Lorsta Sarichef acts as relay landline terminal for the bulk of administrative and operational loran traffic for the North Pacific Ioran-C Chain. Due to equipment malfunctions Sarichef is often not available as this vital link. This station seeks authority to utilize CG Radsta Kodiak for a landline terminal when Serichef is unavailable.

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Address reply to:

Commanding Officer USCG LORSTA Sitkinak FPO Seattle, Wa. 98794

3262 20 May 1974

From: Commanding Officer, USCG LORSTA Sitkinak

To: Commander, Seventeenth Coast Guard District (o)

Subj: Loran-C Operations, bi-monthly report of

- 1. On 1 May the exciter motor for No. 2 Main engine-generator began arcing and vibrating excessively. Upon inspection, the brushes were worn and pitted and the bearings appeared in need of replacement. A new exciter motor was requested. At present the exciter is undelivered though a follow up indicates the replacement is in Kodiak to be delivered with the quarterly logistics flight.
- 2. On 2 May the CO2 fire protection system was discharged into the standby FPN-42 transmitter by the technician in attendance. The transmitter was undergoing maintenance and due to a loss of 600 volt bias, rapidly overheated. The presence of smoke after power was secured to the transmitter induced the technician to activate the CO2 protection. No physical damage was incurred by the discharge although extensive cleanup was required due to condensate which rapidly wet down the entire transmitter. Failure to overload due to the bias loss was traced to a defective relay and has been repaired.
- 3. Due to our shortage of PA tubes (type 8597) FPN-42 transmitter balancing is extremely difficult and at present requires almost a constant effort by station electronics personnel. Results at present are only generally marginal.
- 4. Inspection of the transmitter building CO2 fire protection system was accomplished on 15 May by Mr. MONTOURE and station personnel were briefed on the operation and maintenance of the system. A battery charging system which was inoperative was repaired and burned autindicator lamps were placed on order, as no spares were available.
- 5. On 10 May failure of FPN-41 timer Ser. No. three required replacement of four chopper relays FSN-R5945-LO2-2780. A subsequent failure on 15 May required replacement of 2 more depleting station spares. Requisition of 2 choppers on priority 03 was necessary. This units ERPAL shows a normal inventory of two. This is the number which normally requires replacement during a 30 day period. Due to increased procurement costs these relays now cost \$67.31 each and represent a substantial portion of our maintenence funds.
- 6. Mail service by Kodiak Western Airlines has shown a significant improvement during the past several weeks. A new pilot on the route appears to be the prime reason. His efforts such as landing the Cessna mailplane in fifty knot winds has certainly been a positive morale factor at the station.

UNITED STATES COAST GUARD

Address reply to:



Commanding Officer USCG LORSTA Sitkinak FPO Seattle, Wa. 98794

•3262 5 AUgust 1974

From: Commanding Officer, USCG LORSTA Sitkinak

To: Commander, Seventeenth Coast Guard District (o)

Subj: Loran C Operations, bimonthly report of

- 1. Loran operations have been routine with no unusual incidents arising.
- 2. Routine PM revealed overheating bearings in the fan portion (5ABL1) of the AN-FPN 42 transmitter S/N 4. The bearings had apparently never been changed and though lubricated regularly, the balls and races had "welded" together. Approximately five hours was required to remove the old bearings from the shaft using gear pullers and carefully applied heat. No damage was done to the shaft and the blower is again operating normally.
- 3. The UNINTERUPTIBLE POWER SOURCE CDLX-UPS-501 Cesium standby power supply which failed 14 hours after reciept has been restored to normal operation. The inverter board had failed and a replacement was installed. The original board was returned to RADSTA WASHINGTON.
- 4. Chopper relays are becoming a critical shortage item. No spares are held on board and AN-FPN 41 timer S/N 3 is beginning to operate erratically due to bad choppers. Requisitions for eight choppers submitted in March and April are still outstanding though message traffic with SUPCEN BROOKLYN and SUPANNEX SEATTLE indicate they were shipped by Sealand van from Seattle on 7 June 74. First quarter FY-75 requisition for four choppers has been upgraded to priority three. Extreme delay on shipment may be due to the Sealand strike which was just resolved last week.
- 5. Representatives from Innersea Research Inc. scheduled to arrive on 11 July 74 to install data buoy monitoring equipment have not arrived nor has any amplifying information been received from them.
- 6. Station small arms training is in progress with M-16 rifle qualifications having been completed. Eighteen men participated in rifle training with three qualifying expert, three sharpshooter and seven marksman.



Address reply to:
Commanding Officer
USCG LORSTA Sitkinak
FPO Seattle, Wa. 98794

3262 4 September 1974

From: Commanding Officer, USCG LORSTA Sitkinak

SEP 9 1974

To: Commander, Seventeenth Coast Guard District (o)

Subj: Loran C Operations, bimonthly report of

1. A normal power switch on 2 September revealed no problems with the recently reset droop adjustment on the main engine generators. Two previous switches had caused power flucuations. However no similar problems should occur in the future.

- 2. The standby COLAC Power Supply CDED-312-D is still being used as a backup system by periodically using the fast change circuit to keep the batteries charged. All indications are that the replacement unit is in Kodiak awaiting transportation to Sitkinak.
- 3. Many wiring errors have been discovered in the loran transmitters AN-FPN-42. Most of the errors are in conjunction with field changes which were either installed or removed. For example, K-38, which was installed as part of FC 14, will not work if it is installed as per the directions. It will never be energized when the remote B-plus switch is closed. Since it is never energized, the overload protection relay for the high voltage circuit, K-12, will never actuate should an overload occur on the 15 KV line. K-38 should be connected to lATB5 terminal 10, not terminal 9. All protection circuits are being checked for similar discrepancies.
- 4. On 1 September ETC WEAVER reported on board this unit. He is apparently the replacement for ETC ASCHENBRENNER who departs 29 December 1974. ETC WEAVER's rotation date will be 31 August 1975 a mere 14 days after the EMO is due for rotation. This is an extremely bad situation. Should either the ETC or EMO, who will arrive in 1975, be other than an experienced loran man, this station will be in very serious condition. Two electronics technicians rotate within this 14 day period also. In the engineering division, the MKC and the MK1 rotate 11 days apart (March) and administratively the Commanding Officer and the BMC rotate two days apart (April). In order to promote smooth transfers at isolated units where the personnel turnover is high, it is imperative that senior people in eachdivision are spaced apart sufficiently to allow a smooth break in of new personnel. The next Commanding Officer would be in a very difficult situation operationally in July-August 1975.
- 5. A follow up from CCGD17 (f) concerning the runnway strobe light parts indicated that the parts were requisitioned on 17 July with a delivery time of three weeks. As of this date , no parts or amplifying

3262 4 September 1974

Subj: Loran C Operations, bi-monthly report of

information has been received.

- 6. MKC BOWMAN was sent to Base Kodiak for a reenlistment physical nine days ago. He failed his hearing test and is presently in Kodiak awaiting a reply on a waiver request from COMDT. Our present engineering compliment is fully qualifited to handle any situation until his return. Should he be forced to retire, MK1 HENIZE is fully qualified to assume the responsibilities as division petty officer and replacement with an MK2, MK1 or MKC would be acceptible.
- 7. CASREPT procedures have presented some questions lately. Massages have been sent for electronics casrepts according to CG-222 and CGD17 radio men have advised as they are improperly written. We send routine casrepts to COCO, information to CCD17 if advice or requisition information is needed. A clarification on casrept procedure would be appreciated.
- 8. The Satellite Exchange Program is viewed with a very negative attitude at this unit. The idea of a localized purchaser for small units is a good one, but not when it involves doubling the item markup across the board. The system requires good support from the Parent Exchange which has been anything but the case at this and all other loran stations in this area. More correspondence will follow from many Kodiak Satellites.



Address reply to:

Commanding Officer USCG LORSTA Sitkinak FPO Seattle, WA. 98794

.3262 2 2 October 1974

From: Commanding Officer, USCG LORSTA Sitkinak

To: Commander, Seventeenth Coast Guard District (o)

Subj: Loran-C Operations, Bimonthly Report of

- 1. The standby power supply CDED-312D has arrived and has been installed. The power supply is operating normally and no damage has been done to the battery pack due to the continual use of the fast change circuit on the old power supply.
- 2. The new AN-URT-23 radio transmitters are operating normally. They have given much more versatility to our radios because of the ability to change frequencies rapidly.
- 3. The modified radio console has been operating properly, however the amount of noise fed into the receivers from the teletype keying contacts is excessive. All the teletypes have arc supressers installed across their contacts but only a slight increase in the noise level is noticed when the suppressers are removed. We are checking to see if it can be determined exactly where the interference is entering the receivers.
- 4. At the present time we have 13 new 8597 PA tubes on board with 5 on order. We may be able to purchase one more with the remainder of first quarter electronic funds on hand. We have had very little trouble with the loran transmitters. The total balance between banks of PA tubes has been maintained at less than 10 mA as read on the current meter of the transmitter. The balance of the tubes operating from a single filament is also maintained to very close values. By using the above procedure and due to the reduced output power, no new PA tubes have been installed in the last ten weeks.
- 5. The runway strobe light situation is unknown at present. Casreps have been discontinued since they only state, "awaiting parts" though the district procured parts should have been onboard this unit at least one month ago. CWO GAY, on his electronics visit, indicated he thought replacement parts were not available and new strobe light sets were being purchased. Amplifying information would be appreciated.
- 6. All seven station 32000 gallon fuel storage tanks have had the temperature sensitive fuel spill values installed. It was necessary to siphon fuel from one tank to another then taking suction on the remainder in each tank in order to empty the

3262 2 October 1974

Loran C Operations, bi-monthly report of

tanks since no portable fuel transfer equipment is onboard this unit. The tanks are now ready for the installation of the liquid level measuring equipment scheduled to be completed by an M and R party at an unknown date.

- 7. Two sheets of 3/4 inch plywood were received as part of the replacement for the XMTR building inner entrance doors (SSMR 02-73). These sheets of plywood are to be used inplace of the present transom panels. The cost of this installation is \$139.00 for the plywood and the new doors. This is felt to be a less than first class method of replacement. For \$180.00 full height solid wood doors could have been procured as indicated on previous PO's which were cancelled because of their, "excessive cost".
- 8. This unit has been without a licensed ham operator since April. Expediting delivery of at least three tests and a qualified examiner would be appreciated. An operational ham station is especially valuable to the morale during the winter months when mail flights are infrequent.
- 9. A third MK3 appears about to have his orders to Sitkinak cancelled due to a car accident while on leave. No hardship is being felt because FA BUCHSTEINER, a transferee from LTSTA Cape Hinchinbrook is onboard until mid-December and will adequately fill the vacant MK3 billet. A reporting date on a new MK of 1-15 December would be desirable. Any attempt by COMDT to reassign MK3 K. J. RILEY who was previously ordered in and went AWOL rather than report here would be strongly opposed by this command.
- 10. Additional information concerning proper identification of classified documents with the GDS caveat and procurement of the applicable rubber stamps, which is forthcoming from CGD17 (oil), is the only district inspection discrepancy not acted on to date.
- 11. Mr MOODY, tower technician relamped the entire tower on 25 September 74. He appears well acquainted with the large antennas and performed the entire relamping job, from mount to dismount of the tower, in less than one hour. He noted a bent tension member at the 500-525 foot level and he was shown the backed off turnbuckles on the southeast side of the tower.



Address reply to:

Commanding Officer USCG LORSTA Sitkinak FPO Seattle, WA 98794

3262 V 3 November 1974

From: Commanding Officer, USCG LORSTA Sitkinak

To: Commander, Seventeenth Coast Guard District (o)

Subj: Loran-C Operations, bimonthly report of

- 1. On 20 October Sitkinak was off air from 210142Z to 210226Z due to a broken transmission line leading from the transmitter building to the Loran tower. Winds in excess of 50 knots had caused the line to vibrate hard enough to break the line just as it entered the transmitter building. The line was repaired by using a copper sleeve which was soldered over the broken ends of the transmitter line.
- 2. The new ERPAL is approximately one half completed. Numerous identical items with different stock numbers have been found in the storage bins, indicating that the stock number changes have not been put on stored items in the past.
- 3. A continuing problem is the excessive voltage drop in the filament leads to the 8597 PA tubes. The original PA tubes, 7800/7899, had a filament current of about 135 A. The new 8597 tubes have a filament current of approximately 150 A. Carolina Beach LORSTA replaced the leads on one filament transformer with welding cable. This reduced the voltage drop from transformer to the tube to approximately 0.1 V. Due to the cost and short supply of PA tubes, an increased in the wire size for filament leads could possibly give us many more hours of PA tube life.
- 4. Paragraph 2-4H-2a (1) of CG-222-4 gives detailed instructions for the operations of the CDED-888A phase recorder for stations with only anloperate and secondary cesium, however no instructions are available telling how or when measurements are to be made between the operate and tertiary cesiums. Both phase differences are required on the Werkly report page CCGD17-2-45B. No specific instructions in writing are available at this station.
- 5. Fuel transfer from the North Beach Storage tank was completed on 16-18 October. Within the first hour of pumping the timing gear cover cracked on one pump. The entire refueling was completed using only one pump giving a pumping capacity of 6200 gallons per hour. All seven station tanks were topped off with a total of 180,916 gallons being transferred. Both pumps are being torn down and inspected. A requisition for needed repair parts will be submitted within the next week.

3262 3 November 1974

woran-C Operations, bimonthly report of

front wheel bearing. Parts have been requisitioned and should arrive within a few weeks. The lack of one vehicle has caused no problems as the two other vehicles are fully operational.

- 7. The runway strobe lights were returned to operating condition last week after a four month wait for parts requisitioned priority 3.
- 8. MKC J. O. BOWMAN who was sent to Kodiak TAD from 26 Aug to 9 Sep for a re-enlistment physical. At present SNM service record is still at CGD17 personnel office being reviewed. It is requested that SNM service record be returned to this unit as soon as possible so as it does not get "misplaced".
- 9. One man, DC3 J. E. ROTH 404 333 () USCG has requested an early release from the Coast Guard as per COMDT NOTE 1910 dated 18 Oct 74. Present station force is sufficient to allow him to leave at any time desired. Though a replacement DC would be desirable, several non rated men are interested in striking for DC and could take over the billet in the interim. The engineering department has plenty of experience to provide the required supervision and training.

nely walnessed by the column dealers, however or instructions are