



DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD

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Commanding Officer  
USCG LORSTA Sitkinak  
FPO Seattle, 98794

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AIDS TO NAVIGATION  
17th CG DISTRICT

3260  
24 February 1971

From: Commanding Officer, USCG LORSTA Sitkinak  
To: Commander, Seventeenth Coast Guard District (o)  
Subj: Primary Power Failure of 22 JAN 71  
Ref: (a) CCGD17 (o) ltr 3260 of 5 FEB 71

1. In accordance with reference (a) the following is a chronological outline of events concerning the subject power failure:

- (a) 0735- Station power suddenly dropped to 150 Volts at 58 CPS. LORAN Timer ceased operation. Comms gear ceased operation. LORAN Transmitters jumped from 14 KV to 18.5 KV on amplifier high voltage circuits. Most remaining machinery remained in normal operation.
- (b) Attempts to raise the generator's speed through use of the governor controls were unsuccessful.
- (c) 0737- Number 3 main engine was started. Transmitter high voltage circuitry disabled.
- (d) 0738- Number 3 main engine shut down tripped, (Apparently due to insufficient prelubing).
- (e) 0740- Number 2 engine was started.
- (f) 0745- Number 2 Generator set placed on the line. Station power normal, however both LORAN Timers remained inoperative.
- (g) 0814- LORAN Timer S/N 4 returned to normal operation.
- (h) 1220- LORAN Timer S/N 3 returned to normal operation.

2. The following Timer components failed as a result of the low voltage condition:


- (a) S/N 4: No output triggers due to failure of BST and BST driver in the time sharing chassis.
- (b) S/N 3: Voltage regulator tube in the 150 volt power supply failed causing a high voltage power spike which blew 13 fuses in the Timer. Three tubes within the amplifier Detector also required replacement and the oscilloscope required considerable adjustment.

3. Although the station was never without power, and although the low power condition existed for only ten minutes the SH7-Z rate was unusable for 40 minutes due to equipment failures.

CO Sitkinak ltr 3260 of 24 February 1971

With the exception of the hasty prelubing of number 3 Main engine, personnel responded rapidly and correctly to the situation.

4. To minimize LORAN equipment damage in the future, the engineering watchstanders have been instructed to cut off power to the LORAN transmitters and timers immediately upon learning of any off air condition caused by power irregularities.

  
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