

CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

6860.2
CHG 3

8/12/93

SUBJ: MAINTENANCE OF LORAN-C MONITOR EQUIPMENT

1. PURPOSE. This change provides revised standard requirements for the baud-rate clock frequency and monitor snr. This change implements Configuration Control Decision (CCD) No. N16105, Revise standard requirement for baud-rate clock.
2. DISTRIBUTION. This directive is distributed to selected offices and services within Washington headquarters, the FAA Technical Center, the Mike Monroney Aeronautical Center, regional Airway Facilities divisions, and to Airway Facilities field offices having the following facilities/equipment: Solid-state ARTCC, VOR, and RMCF.
3. DISPOSITION OF TRANSMITTAL. Retain this transmittal.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
19 and 20 (thru 22)	7/15/91	19 and 20 (thru 22)	8/12/93

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Distribution: Selected Airway Facilities Field
and Regional Offices, ZAF-601

Initiated By: AOS-240

CHAPTER 3. STANDARDS AND TOLERANCES

50. GENERAL.

This chapter prescribes the standards and tolerances for the LORAN-C monitor facilities and equipment as defined and described in Order 6000.15B, General Maintenance *

Handbook for Airway Facilities. Key performance parameters and/or key inspection elements are identified by an arrow (→) placed to the left of the applicable item.

51.-52. RESERVED.

Parameter	Reference Paragraph	Standard	Tolerance/Limit		Screen
			Initial	Operating	
53. MONITOR.					
→ a. Monitor Diagnosis	93	No faults	Same as standard	Same as standard	I;14
→ b. Signal-To-Noise Ratio (SNR)	91				I;15
* (1) Master (snr)		No faults	Lower limit -10dB	Same as standard	
(2) Secondary stations		No faults	Lower limit -10dB	Same as standard	
→ c. Envelope Carrier Difference (ECD) (Master and Secondary Station 1 and 2)	91	No faults	-4.0μs to +4.0μs	Same as standard	I;15 *
→ d. Position Offset	91	0.1 nautical miles (nm)	Upper limit 0.3 nm	Same as initial	I;15
→ e. Time Difference (TD) (Secondary Stations 1 and 2 (TD) Signal)	91	TD setting for any given station	Mean error and standard deviation within 0.02μs	Same as initial	I;15
54. POWER SUPPLY					
a. Unregulated Voltage DC (Test Point 1)	94d(4)(a)	+28.0V dc	+25V dc to +32V dc	+22V dc to +33V dc	NA
b. +5V DC (VCC) (Test Point 6)	94d(4)(b)	+5.1V dc	+5.05V dc to +5.15V dc	+5.05V dc to +5.2V dc	
c. +15V DC (Test Point 7)	94d(4)(c)	+15.0V dc	+15V dc to +17V dc	Same as initial	
d. -15V DC (Test Point 8)	94d(4)(d)	-15V dc	-15V dc to -17V dc	Same as initial	
e. +5V DC (VCC) Ripple Voltage ...	94d(5)(a)	10mV rms	Same as standard	Same as standard	
f. +15V DC Ripple Voltage	95d(5)(b)	20mV rms	Same as standard	Same as standard	

Parameter	Reference Paragraph	Standard	Tolerance/Limit		Screen
			Initial	Operating	
g. Comparator Reference Voltage ... (Test Point 11)	94d(4)(e)	+4.3V dc	+4.25V dc to +4.35V dc	Same as initial	NA
h. Battery Float Voltage	94d(6)	+27.6V dc	+27.36V dc to +27.84V dc	Same as initial	
i. Charge Current	94d(8)	50mA max	<60mA	≤60mA	
j. Deep Discharge Dropout Voltage ... (Test Point 3)	94d(7)	+21.6V dc	+18.0V dc to +22.0V dc	Same as initial	
55. CENTRAL PROCESSING UNIT (CPU)					
→ a. System Clock (Test Point 5)	95	5.0MHz	Within 100 pulses per million (ppm) of standard	Same as initial	
* → b. Baud-Rate Clock (Test Point 6) ...	96	2.4576MHz	Within 100 ppm of standard	Same as initial	*
→ c. LORAN Clock (Test Point	97	8.0MHz	Within 10 ppm of standard	Same as initial	
56.-69. RESERVED.					