CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

6860.2
CHG 1

6/18/90

SUBJ: MAINTENANCE OF LORAN-C MONITOR EQUIPMENT

1. PURPOSE. This change provides a correction to the standards and tolerances for the baud-rate clock frequency. This change implements Configuration Control Decision (CCD) No. N12016, Provides Maintenance Handbook for LORAN-C Monitor.

2. DISPOSITION OF TRANSMITTAL. Retain this transmittal

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
19 and 20 (thru 22)	3/21/90	19 20 (thru 22)	3/21/90 6/18/90

Charles E. Page for
W. Peter Kochis
Director, Systems Maintenance Service

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

Initiated By: ASM-640

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 6000.15A, 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	100 percent modular acceptance	Same as standard	Same as standard	I;14
→ **b. Signal-To-Noise Ratio (SNR)**	91				I;15
(1) Master (snr)		10dB	Lower limit 3dB	Same as initial	
(2) Secondary stations 1 and 2 (snr)		10dB	Lower limit 5dB	Same as initial	
→ **c. Envelope Carrier Difference (ECD) (Master and Secondary Station 1 and 2)**	91	0.0μs	-4.0μs to +4.0μs	Same as initial	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					NA
a. Unregulated Voltage DC (Test Point 1)	94d(4)(a)	+28.0V dc	+25V dc to +32V dc	+22V dc to +33V dc	
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)	20V 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	
h. Battery Float Voltage	94d(6)	+27.6V dc	Recommended float voltage as required by batteries	Same as initial	
i. Charge Current	94d(7)	50mA max	<60mA	≤60mA	
j. Deep Discharge Dropout Voltage . (Test Point 3)	94d(8)	+21.6V dc	+21.2V dc to +22.0V dc	Same as initial	
55. CENTRAL PROCESSING UNIT .... (CPU)					NA
→ 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 ..... U16 Pin 9)	97	8.0MHz	Within 10 ppm of standard	Same as initial	
56.-69. RESERVED.					