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SUBJ: MAINTENANCE OF LORAN-C MONITOR EQUIPMENT

1. PURPOSE. This directive transmits revised pages to extend maximum allowable periodic maintenance intervals. Field offices will retain the control of determining their minimum maintenance intervals. This directive implements Configuration Control Decision (CCD) N17055, Extend Certification and Maintenance Intervals for Maintenance Handbooks.
2. DISTRIBUTION. This directive is distributed to selected offices and services within Washington headquarters, regional Airway Facilities divisions, the FAA Technical Center, the Mike Monroney Aeronautical Center, and Airway Facilities field offices having the following facilities/equipment: ARTCC, VOR, RMCF.
3. BACKGROUND. In January 1994, a National Quality Effectiveness Team (NQET) recommended to the Associate Administrator for Airway Facilities (AAF-1) that all national standard maintenance procedures and intervals be revalidated with the goal being a reduction in required maintenance activities and extending the periodicity of intervals. The team's recommendation was subsequently endorsed resulting in these changes.
4. DISPOSITION OF TRANSMITTAL. Retain this transmittal.

PAGE CONTROL CHART

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iii and iv	3/21/90	iii	3/21/90
23 and 24	3/21/90	iv	11/3/94
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		<u>Appendix 1</u>	
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CHAPTER 4. PERIODIC MAINTENANCE

70. GENERAL.

This chapter establishes all the maintenance activities that are required for the LORAN-C monitor facilities and equipment on a periodic basis, and the schedules for their accomplishment. This chapter is divided into two sections. The first section identifies the performance checks (i.e., tests, measurements, and observations) of normal operating controls and functions, which are necessary to determine whether operation is within established tolerances/limits. The second section identifies other tasks that are necessary to prevent deterioration and/or ensure reliable

operation. Refer to Order 6000.15B, General Maintenance Handbook for Airway Facilities for additional general guidance.

71. MAINTENANCE SCHEDULES.

The regions may shorten the time intervals, but may not lengthen them except on a test basis at a limited number of locations. Periodicity of all maintenance tasks not listed shall be established by the regions.

72. RESERVED.

Section 1. PERFORMANCE CHECKS

<i>Performance Checks</i>	<i>Reference Paragraph</i>	
	<i>Standards and Tolerances</i>	<i>Maintenance Procedures</i>
* 73. QUARTERLY. At the site, the remote monitor control (RMC) site, or other remote location, perform the following checks.		*
a. Perform monitor test procedure and analyze results	53b, c, d, e	91
b. Perform and verify certification test data	NA	92
c. Verify and record self-test data	53a	93
* 74. WITHDRAWN-CHG 5		*
75. ANNUALLY. At the site, perform the following checks.		
a. Verify system clock frequency	55a	95
b. Verify baud-rate clock frequency	55b	96
c. Verify LORAN-C clock frequency	55c	97
* d. Measure power supply voltage	54	94
76.-77. RESERVED.		

Section 2. OTHER PERFORMANCE CHECKS

<i>Maintenance Tasks</i>	<i>Reference Paragraph</i>	
	<i>Standards and Tolerances</i>	<i>Maintenance Procedures</i>
78. AS REQUIRED. Perform the following checks from the RMC or local terminal.		
a. Verify system status	NA	105
b. Analyze alarm history data	NA	106
c. Check monitor executive data and record	NA	107
d. Perform fault isolation test procedure and analyze results	NA	108
e. Perform seasonal variation time difference (TD) procedure per AVN-250 request.	NA	109
f. Perform future seasonal variation time difference (TD) procedure per AVN-250 request.	NA	110
79. RESERVED.		

APPENDIX 1. CERTIFICATION REQUIREMENTS**Table 1. LORAN-C MONITOR SYSTEM**

<i>Service</i>	<i>Certification Parameter</i>	<i>Reference Paragraph STDS and TOLS</i>	<i>Screen</i>
MONITOR	Master station signal-to-noise ratio (snr)	53b(1)	I;15
	Secondary station number 1 (snr)	53b(2)	I;15
	Secondary station number 2 (snr)	53b(2)	I;15
	Master station envelope cycle difference (ECD)	53c	I;15
	Secondary station number 1 (ECD)	53c	I;15
	Secondary station number 2 (ECD)	53c	I;15
	Position offset	53d	I;15
	Time difference (TD) (secondary stations 1 and 2 (TD) signal	53e	I;15

• **NORMAL CERTIFICATION INTERVAL:** Quarterly

MAXIMUM CERTIFICATION INTERVAL: Quarterly

PERSON RESPONSIBLE FOR CERTIFICATION: Person assigned the appropriate certification authority and responsibility

CERTIFICATION ENTRY IN FACILITY MAINTENANCE LOG: LORAN-C MONITOR certified

NOTE: Completion of these parameters certifies the capability of the monitor to detect out-of-tolerance signal in space conditions and does NOT certify the service (i.e., signal in space).

