

**CHANGE**

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

6730.2  
CHG 9

4/27/2001

**SUBJ:** MAINTENANCE OF DISTANCE MEASURING EQUIPMENT (DME) FACILITIES

1. PURPOSE. This page change adds a shutdown tolerance for dual Distance Measuring Equipment (DME)'s FA-9783. This directive implements Configuration Control Decision (CCD) No. N12899, Order 6730.2 Maintenance of DME Facilities.

2. DISTRIBUTION.

a. This directive is distributed to selected offices and services within Washington headquarters, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, regional Airway Facilities divisions, and Airway Facilities field offices having the following facilities/equipment: DME.

b. An electronic version and distribution report of this directive is available on an Intranet site located at <http://aos-ext.amc.faa.gov/> under the "Technical Documentation" heading.

3. DISPOSITION OF TRANSMITTAL. Retain this transmittal.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
33	1/11/94	33	1/11/94
34	4/21/89	34	4/27/2001

Fri Apr 27 14:11:21 2001

Gregg W. Dvorak  
Program Director for Operational Support

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

**Initiated By:** AOS-240

Section 3. FA-9783 CARDION (Continued)

Parameter	Reference Paragraph	Standard	Tolerance/Limit	
			Initial	Operating
(d) Lower limit mountain top				
<u>1</u> X Channel.....		48.9µs	48.80 to 49.00µs	Same as initial
<u>2</u> Y Channel.....		54.9µs	54.80 to 55.00µs	Same as initial
→ (2) Pulse pair spacing				
(a) Upper limit				
<u>1</u> X Channel.....		12.4µs	12.30 to 12.50µs	Same as initial
<u>2</u> Y Channel.....		30.4µs	30.30 to 30.50µs	Same as initial
(b) Lower limit				
<u>1</u> X Channel.....		11.6µs	11.50 to 11.70µs	Same as initial
<u>2</u> Y Channel.....		29.6µs	29.50 to 29.70µs	Same as initial
→ (3) Power output fault				
(a) Terminal.....		55 watts	50 to 60 watts	Same as initial
(b) En route.....		500 watts or As established by Flight Inspection	Standard ±10%	Same as initial
(4) Identification fault.....		75 seconds	65 to 85 seconds	Same as initial
→ (5) Transmit rate fault.....		850 pulse pair per second	750 to 950 pulse pair per second	Same as initial
(6) Reply efficiency fault				
(a) Terminal.....		-79dBm	Not less than -79dBm	Same as initial

Section 3. FA-9783 CARDION (Continued)

Parameter	Reference Paragraph	Standard	Tolerance/Limit	
			Initial	Operating
(b) Low altitude ..... en route		-84dBm	Not less than -84dBm	Same as initial
(c) High altitude ..... en route		-86dBm	Not less than -86dBm	Same as initial
* →77. TRANSFER/SHUTDOWN .....	210			
<b>a. Single System</b>		10 seconds	9 to 11 seconds	Same as initial
<b>b. Dual System</b>		6 seconds	5 to 7 seconds	Same as initial
78. MONITOR INTERROGATION ..... SIGNAL CHARACTERISTICS.	221			
<b>a. Spacing</b>				
(1) X channel .....		12μs	11.8 to 12.2μs	Same as initial
(2) Y channel .....		36μs	35.8 to 36.2μs	Same as initial
<b>b. Width</b> .....		3.5μs	3.0 to 4.0μs	Same as initial
<b>c. Rise and Fall Time</b> .....		0.1μs	≤0.2μs	Same as initial
<b>d. Power Setting</b> <b>Radio Frequency Level ("RFL")</b>				
(1) Terminal .....		-79dBm	Same as standard	Same as standard
(2) Low altitude .....		-84dBm en route	Same as standard	Same as standard
(3) High altitude ..... en route		-86dBm	Same as standard	Same as standard
79. STATUS TONES .....	220			
<b>a. 2820Hz Tone</b>				
(1) Frequency .....		2820Hz	2819 to 2821Hz	Same as initial
(2) Power output .....		0 dBm (0.77V rms)	-1dBm to +1dBm (0.69 to 0.87V rms)	Same as initial

\*