

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

WF2XMD

(Call Sign)

XD MO

(Class of Station)

0210-EX-RR-2013

(File Number)

NAME Panasonic Avionics Corporation

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(d) of the Commission's Rules

Station Locations

(1) MOBILE: CONUS

Frequency Information

MOBILE: CONUS

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14000-14470 MHz	MO		38.5 kW (ERP)	
		160KG7D		
		5M12G7D		
		2M56G7D		

Special Conditions:

- (1) Licensee shall restrict operations from operating below 14050 MHz in the area of White Sands Missile Range, NM, (410 KM surrounding 323240N 1063648W)
- (2) Panasonic Avionics Corporation's operations under this grant of experimental special temporary authority are limited to communications with the following satellites, for which operators of Ku-band satellites within six longitudinal degrees of the target satellite have declared that they have no objection to the requested experimental operations: Horizons-1 at 127° West Longitude (W.L.); Galaxy 17 at 91° W.L.; Galaxy 19 at 97° W.L. and Telstar 14 satellite at 63° W.L

This authorization effective July 01, 2013 and
will expire 3:00 A.M. EST July 01, 2015

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COMMISSION**

Special Conditions:

- (3) Panasonic Avionics Corporation's testing of the Mitsubishi Electronics Company (MELCO) reflector under this grant of experimental special temporary authority is authorized using a maximum input power density at the antenna waveguide flange of -21.6 dBW/4 kHz employing BPSK modulation. Testing of the EMS Technologies Aura LE antenna is authorized using a maximum input power density at the antenna waveguide flange of -15.1 dBW/4 kHz employing BPSK modulation.
- (4) Aircraft earth stations shall not be operated while aircraft are on the ground unless appropriate safety protocols are in place to ensure that persons having access to areas within 19.5 meters of the MELCO reflector, and access to areas within 22.0 meters of the EMS Aura LE antenna, are not exposed to radiofrequency energy in excess of the maximum permissible limits specified in 47 C.F.R. Section 1.1310. The exterior surface of the aircraft earth station antenna shall be prominently marked with a warning of the potential for exposure to high levels of radiofrequency energy.
- (5) The aircraft earth station equipment authorized herein (i.e., Panasonic Avionics Corporation's Aura LE phased array terminal and MELCO terminal) shall be compliant and shall operate in compliance with Recommendation ITU-R M.1643. The aircraft earth station equipment authorized herein shall also operate in compliance with other international regulatory requirements that may be applicable to such equipment or operations.
- (6) This authorization and all conditions contained herein are subject to the final outcome of the Commission's rulemaking in IB Docket No. 05-20 and the aircraft earth station equipment shall operate in compliance with any pertinent rule requirements subsequently adopted by the Commission.