

## FCC Correspondence Item

1.) Why was G7W selected? Please use guidelines under Section 2.201. Please supply emission designator for both A-BPSK and A-QPSK modulations.

2.) We did not receive the information for question number 2 the first time dated 11/26/01.

*Question number 2 from 11/26/01 is restated below for reference purposes.*

Please submit only SDU output power measurement. Your data shows the SDU output power with 20W and 40W HPA's.

3.) For question number 6 dated 11/26/01 Part 87 is needed. Please refer to Section 87.139(i) and Section 2.1053 radiated spurious emissions.

4.) For question number 7 dated 11/26/01 please submit 10 harmonic measurement for Radiated Spurious Emissions.

5.) Please submit schematics for question number 11 dated 11/26/01. The schematic has not been uploaded.

6.) We still need a reply letter copy from FAA. This may be a copy of a FAA letter sent to the FCC.

## Honeywell Response and/or reconciliation plan

Emission designation G7W was in fact based on the guidelines under section 2.201. Specifically, the SD-700 utilizes phase modulation per 2.201(c)(3), hence the first designator is G. For the nature of signal(s) modulating the main carrier per 2.201(d), the SD-700 corresponds to type (5) having two or more channels containing quantized or digital information, hence the second designator is 7. Finally, the type of information per 2.201(e) provided by the SD-700 is a combination of the applicable types. Hence the last designator is W.

Note: the emission designator G7W applies to both the A-BPSK and A-QPSK modulation schemes.

Output power of the SD-700 was not taken during FCC testing because the SD-700 will never operate without being connected to either the 20W or 40W HPA (High Power Amplifier). Only the power of the output stage (HPA output) is available.

However, the output power of the SD-700 is by design 31.6 mW. This is stated in the introductory paragraph of the test report.

The FCC is requested to accept this test configuration showing the output power of the system in lieu of direct measurement of the SD-700 output.

Question #6 pertained to spurious radiated emission levels from an unintentional radiator, and using the substitution method. Part 87 pertains to the emissions characteristics of the transmitter at the antenna port, i.e. transmitted spurs and harmonics, inter-modulation products, transmit mask. Part 15 (15.109) specifies the limits for radiated emissions from an unintentional radiator, and, as pointed out in the previous response to question 6, the SD-700 is well within the limits for a Class A device. As for the substitution method, the SD-700 was tested before that method of measurement had been incorporated into the rules.

Measurements of spurs and harmonics were made out to 18 GHz. The 10<sup>th</sup> harmonic for this system is 16.05 GHz when transmitting at the upper edge of the transmit band. Spectrum analyzer plots contained in the report show these results.

The referenced schematic has been uploaded. The corresponding file description is "MCA SDU Input/Output Module Schematic".

A reply letter from the FAA has been uploaded. The corresponding file description is "FAA Letter of Intent Approval".