

**Panasonic Avionics Corporation
Modification of Call Sign WG2XRN
T-PED Interference Ground Testing at
George Bush Intercontinental Airport, Houston, Texas
May 12, 2015**

MODIFICATION NARRATIVE

Panasonic Avionics Corporation (“Panasonic”) respectfully requests a modification of its existing two-year experimental license (Call Sign WG2XRN) to add five frequency bands at the authorized test site where Panasonic will conduct ground testing in support of Panasonic’s Global Communications Suite (“GCS”) featuring the “eXconnect” Ku-band aeronautical mobile-satellite service (“AMSS”) off-board link and onboard connectivity for transmit portable devices (“T-PEDs”).

Panasonic has sought and received FCC authorization for other STAs to conduct T-PED interference testing at airfields using the same test frequency bands that are proposed in the amendment. Most recently, the FCC authorized Panasonic to conduct testing under Call Sign WI9XHC (File No. 0079-EX-ST-2015), an experimental STA at the Sussex County Airport in Georgetown, Delaware.

Attached is Table 1, which lists the amended test frequency bands. Also listed are the proposed wireless standards and associated technical information for each test band: modulation (pulse or continuous wave), maximum EIRP, maximum ERP, emission designator, among others. A single 1 MHz test frequency in each uplink band, also identified, will be used for testing. Specifically, Panasonic seeks to add the following frequency bands:

- 614-698 MHz: 656 MHz
- 1427.9-1447.9 MHz: 1438 MHz
- 1447.9-1462.9 MHz: 1455 MHz
- 1626.5-1660.5 MHz: 1644 MHz
- 2300-2400 MHz: 2350 MHz

The modification to the two-year experimental license does not make any changes to the test site or other information included in the application.

Please direct any questions regarding this submission to:

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Table 1 - T-PED EMI Test Frequencies / Transmit Power Requirements

Wireless Standard	Frequency start of band (MHz)	Frequency end of band (MHz)	Test Frequency (MHz)	Modulation	Test Waveform	Target EIRP (dBm)	Target EIRP (W)	Target ERP (W) ②	Emissio Code
CDMA 2000	410	420	415	CW	2	42.0	15.8	13.7	N0N
GSM 400	450.4	457.6	454	Pulse	1	45.0	31.7	29.5	P0N
CDMA 2000	450	460	455	CW	2	42.0	15.8	13.7	N0N
CDMA 2000	479	484	482	CW	2	42.0	15.8	13.7	N0N
600 MHz Band	614.0	698.0	656	CW	2	45.0	31.7	29.6	N0N
600 MHz Band	614.0	698.0	656	Pulse	1	45.0	31.7	29.6	P0N
CDMA 2000	776	794	785	CW	2	42.0	15.8	13.7	N0N
CDMA 2000	806	849	828	CW	2	42.0	15.8	13.7	N0N
CDMAone	824	849	828	CW	2	42.0	15.8	13.7	N0N
UMTS FDD	824	849	828	CW	2	42.0	15.8	13.7	N0N
GSM 850	824	849	828	Pulse	1	45.0	31.7	29.5	P0N
IS-136	824	849	828	Pulse	1	45.0	31.7	29.5	P0N
UMTS TDD	824	849	828	Pulse	1	45.0	31.7	29.5	P0N
CDMA 2000	870	925	898	CW	2	42.0	15.8	13.7	N0N
GSM 900	876	915	913	Pulse	1	45.0	31.7	29.5	P0N
LTE E-UTRA Band 11	1427.9	1447.9	1438	CW	2	35.0	3.16	1.06	N0N
LTE E-UTRA Band 11	1427.9	1447.9	1438	Pulse	1	35.0	3.16	1.06	P0N
LTE E-UTRA Band 21	1447.9	1462.9	1455	CW	2	35.0	3.16	1.06	N0N
LTE E-UTRA Band 21	1447.9	1462.9	1455	Pulse	1	35.0	3.16	1.06	P0N
Mobile Sat	1613.8	1626.5	1626	Pulse	1	42.0	15.8	13.7	P0N
LTE E-UTRA Band 24	1626.5	1660.5	1644	CW	2	35.0	3.16	1.06	N0N
LTE E-UTRA Band 24	1626.5	1660.5	1644	Pulse	1	35.0	3.16	1.06	P0N

CDMA 2000 DCS 1800	1710 1710	1785 1785	1748 1748	CW Pulse	2 1	42.0 42.0	15.8 15.8	13.7 13.7	N0N P0N
CDMA 2000 UMTS FDD CDMAone UMTS TDD PCS 1900 IS-136	1850 1850 1850 1850 1850 1850	1910 1910 1910 1910 1910 1910	1884 1884 1884 1884 1884 1884	CW CW CW Pulse Pulse Pulse	2 2 2 1 1 1	42.0 42.0 42.0 42.0 42.0 42.0	15.8 15.8 15.8 15.8 15.8 15.8	13.7 13.7 13.7 13.7 13.7 13.7	N0N N0N N0N P0N P0N P0N
UMTS TDD	1900	1920	1910	Pulse	1	36.0	4.0	1.8	P0N
CDMA 2000 UMTS FDD	1920 1920	1980 1980	1949 1949	CW CW	2 2	42.0 42.0	15.8 15.8	13.7 13.7	N0N N0N
UMTS TDD	2010	2025	2018	Pulse	1	36.0	4.0	1.8	P0N
UMTS/3G/PCN	2110	2170	2140	CW	2	36.0	4.0	1.8	N0N
LTE E-UTRA Band 40 LTE E-UTRA Band 40	2300 2300	2400 2400	2350 2350	CW Pulse	2 1	35.0 35.0	3.16 3.16	1.06 1.06	N0N P0N
802.11b/g 802.11b/g 802.11b/g	2400	2497	2412 2437 2462	Pulse Pulse Pulse	1 1 1	37.0 37.0 37.0	5.0 5.0 5.0	2.9 2.9 2.9	P0N P0N P0N
FDD LTE	2500	2685	2595	Pulse	2	42.0	15.8	13.7	P0N
FDD LTE	2500	2685	2595	CW	1	42.0	15.8	13.7	N0N
Wi-Max	3400	3600	3450	Pulse	2	42.0	15.8	13.7	P0N
Wi-Max	3400	3600	3450	CW	1	42.0	15.8	13.7	N0N
802.11a/n	5150	5250	5170	Pulse	1	37.0	5.0	2.9	P0N
802.11a/n	5250	5350	5300	Pulse	1	37.0	5.0	2.9	P0N
802.11a	5470	5725	5580	Pulse	1	37.0	5.0	2.9	P0N
802/11a/n	5725	5825	5825	Pulse	1	37.0	5.0	2.9	P0N