Exhibit 1

In connection with the renewal application for Station WJ2XVH, the following is noted:

- The current US Government Contract associated with this license is:

Agency:	Office of Naval Research (BD251)
Contract No.:	N00014-20-C-1052
Government POC:	Tommy Willis PhD Program Officer Positioning, Navigation and Timing Code 31, Office of Naval Research richard.t.willis@navy.mil Office: (703) 696-4214

Accordingly, it is requested that upon grant of renewal, Special Condition 7 be updated as follows:

(7) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the U.S. Government; contract number ~~s~~ **N00014-20-C-1052** ~~**W909MY-12-D-0008 and W15QKN-14-9-1001**~~. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.

NOTE: The frequencies 1575.42 MHz and 1176.45 MHz will continue to support IR&D experiments – Accordingly, Special Condition 13 should be retained.

- Attached is the licensee's updated "Compliance with NTIA GPS Re-Radiation Criteria Section 8.3.27 of NTIA Regulations Maximum Equivalent Isotropically Radiated Power"

Compliance with NTIA GPS Re-Radiation Criteria
Section 8.3.27 of NTIA Regulations Maximum Equivalent Isotropically Radiated Power
(May 2013 Edition Rev 9/2015)

•.... = •. + 20•••..• + 20•••..(30 + •) • 27.55

Where:
•.... is the maximum permissible EIRP in dBm
•. is the power received at 30 meters from the building (i.e. -140 dBm/24 MHz)
• is the frequency in MHz (i.e. 1575.42 for L1, 1227.60 for L2, 1176.45 for L5)
• is the distance between the radiator and the closest exterior wall of the building in meters

•.... can then be converted to picowatts by using the formula: •....(..) = 10•(•..../••)•••

•. = •. + •....... • •. + •....... + •...... • •.
•. is the re-radiated signal strength 30m outside the building
•. is the received power from GPS satellites (-130 dBm)
•....... is the gain from the rooftop active antenna
•. is the attenuation due to cable length from the rooftop antenna to the re-radiating amplifier
•...... is the gain from the re-radiating amplifier
•...... is the gain from the re-radiating antenna
•. is the free space loss

•. = 36.6 + 20•••.. •(•/••••) • 1575• free space loss for L1
•. = 36.6 + 20•••.. •(•/••••) • 1227• free space loss for L2
•. = 36.6 + 20•••.. •(•/••••) • 1176• free space loss for L5
•. = 36.6 + 20•••.. •(•/••••) • 1602• free space loss for Glonass
• is the distance from antenna to outer wall in meters+30m

Free space loss from Odyssey Drive research lab:

D = 12.5m + 30m = 42.5m

•. = 36.6 + 20•••.. •(••.•/••••) • 1575• = 68.98 ••• free space loss for L1
•. = 36.6 + 20•••.. •(••.•/••••) • 1227• = 66.81 ••• free space loss for L2
•. = 36.6 + 20•••.. •(••.•/••••) • 1176• = 66.44 ••• free space loss for L5
•. = 36.6 + 20•••.. •(••.•/••••) • 1602• = 69.13 ••• free space loss for Glonass

Cable length attenuation from Odyssey Drive research lab:

GPS L1 (1575.42 MHz) : •. = 61 • • $\frac{\text{•••}}{\text{•••}}$ = 10.55 • •

GPS L2 (1227.60 MHz) : •. = 61 • • $\frac{\text{•••}}{\text{•••}}$ = 9.15 • •

GPS L5 (1176.45 MHz) : •. = 61 • • $\frac{\text{•••}}{\text{•••}}$ = 8.91 • •

GLONASS (1602 MHz) : •. = 61 • • $\frac{\text{•••}}{\text{•••}}$ = 10.61 • •

Re-radiating gain:

•.••… + •…… = 30 • •

Component	Signal Level L1 (1575.42 MHz)	Signal Level L2 (1227.60 MHz)	Signal Level L5 (1176.45 MHz)	Signal Glonass (1602 MHz)	units	
GPS Signal Input (•.)	-130	-130	-130	-130	dBm	
Antenna Gain [Element + LNA] (•…..)	33	33	33	33	dB	http://www.blueplanetgeomatics.com/product/gps-source-l1l2g3a-gps-l1l2-glonass-active-antenna/
Lightning Protection	0.15	0.15	0.15	0.15	dB	https://www.timesmicrowave.com/documents/resources/LP-18-400.pdf
Cable Loss, 200 feet (•.)	10.55	9.15	8.91	10.61	dB	LMR-400 https://www.timesmicrowave.com/documents/resources/LMR-400.pdf
Re-Radiating Amplifier+Antenna (•.••… + •…..)	30	30	30	30	dB	http://www.terrisgps.com/product/gpsrkl12g-l1l2-glonass-repeater-kit/
GPS Transmit Power	-77.7	-76.3	-76.06	-77.76	dBm	
GPS Transmit Power	16.98	23.44	24.77	16.75	pW	
Path Loss at 30 m	68.98	66.81	66.44	69.13	dB	Antenna located 4.5 meters inside building from exterior wall for a total distance of 34.5 meters
EIRP @ 30 m from Building	-146.68	-143.11	-142.50	-146.89	dBm/24 MHz	