

EXHIBIT 1

Although the band 5-20 GHz is requested, the experimental radio station requires 1 to 2 frequencies per 1 GHz, spaced somewhat evenly across the requested band. The large range of frequencies is necessary to evaluate the antenna across the entire operating band. The transmitter uses a multiple element electronically scanned, phased array antenna. Northrop Grumman Corporation ("NGC") is currently authorized to use the exact same frequency allocation under Call Sign WA2XOY (File No. 0022-EX-TC-2001, pending renewal under 0030-EX-RR-2002). NGC requests the same frequencies, power levels and bandwidths for the new experimental radio station. See below.

<u>Frequency</u>	<u>Station Class</u>	<u>Emission Designator</u>	<u>Authorized Power watts</u>	<u>Tolerance(+/-)</u>
5300 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
5750 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
6200 MHz	FX	5M66P0N	125 (ERP)	0.005 %
6700 MHz	FX	5M66P0N	125 (ERP)	0.005 %
7100 MHz	FX	5M66P0N	125 (ERP)	0.005 %
7800 MHz	FX	5M66P0N	125 (ERP)	0.005 %
8750 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
9400 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
9900 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
11000 MHz	FX	5M66P0N	125 (ERP)	0.005 %
11500 MHz	FX	5M66P0N	125 (ERP)	0.005 %
12000 MHz	FX	5M66P0N	125 (ERP)	0.005 %
12800 MHz	FX	5M66P0N	125 (ERP)	0.005 %
13500 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
13900 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
14600 MHz	FX	5M66P0N	125 (ERP)	0.005 %
15000 MHz	FX	5M66P0N	125 (ERP)	0.005 %
16300 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
16800 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
17250 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
17650 MHz	FX	5M66P0N	500 k (ERP)	0.005 %
18100 MHz	FX	5M66P0N	125 (ERP)	0.005 %
18700 MHz	FX	5M66P0N	125 (ERP)	0.005 %
19200 MHz	FX	5M66P0N	125 (ERP)	0.005 %

EXHIBIT 2

Northrop Grumman Corporation is required under Naval Research Laboratory ("NRL") contract N00173-01-2-C002 to develop an Advanced Multifunction Radio Frequency Concept High Multifunction Transmitter for shipboard use. The transmitter will allow the insertion of emerging technologies into other advanced Navy systems. The experimental radio station will be used for testing, which is essential to verify the operational effectiveness of the transmitter prior to acceptance by the NRL.