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Mr. Rummel:

Subject: Response for request of FAA Coordination BAE Systems FCC File No.0014-EX-PL-2006.

The FAA concurs with your proposed experimental application provided:

1. The station class on the license is changed from FX to XT.
2. Under no circumstances is the ERP to exceed 0.007 Watts.
3. The applicant strictly adheres to ALL restrictions in the attached spreadsheet that identifies what frequencies are **prohibited to transmit on**, including bandwidth listed in +/- kHz or MHz around each frequency where there are to be no emissions.
4. The applicant agrees to accept and implement any future modifications to their operation as directed by the FAA to include ceasing operations, or adding additional frequency restrictions so that future FAA operational requirements can be supported.
5. These conditions must be listed in the license issued by the FCC

Failure to comply with any of these conditions will render a non-concur by the FAA to the issuance of the requested experimental license. Provided that the applicant can and agrees to adhering to the above conditions, please provide the FAA coordination number NG T070158 along with these conditions and the attached spreadsheet to the FCC for them to include in the application that goes to NTIA.

David Harris
Technical Operations, Eastern Service Area
Spectrum Policy & Management
FAA / ANE- 474 / FMO
11 Murphy Dr. Nashua, NH 03062

Reponse to BAE Systems FCC File No.0014-EX-PL-2006
Frequency Restrictions with Bandwidths

ANALYSIS OF BAE SYSTEMS REQUEST TO TRANSMIT 0.007 WATTS ACROSS LARGE PORTIONS OF THE SPECTRUM BETWEEN 15 MHZ AND 1200 MHZ

LOCATION: LITCHFIELD, NH 424822N 712533W

REQUESTED BAND 15MHZ TO 29.9 MHZ

CRITERIA: RLOS BETWEEN 36 FOOT BAE ANTENNA AND 100 FOOT HF ANTENNA TIMES 3 TO ACCOUNT FOR GROUND WAVE PROPAGATION.

RLOS (IN NM):	19.68
PROTECTION CRITERIA (IN NM):	59.04

NO TRANSMISSIONS WITHIN +/- 3 KHZ OF THE FOLLOWING FREQUENCIES (ALL IN KHZ)

3242.5000K	5321.5000K	11029.5000K
3332.4000K	5515.4000K	11635.6000K
3411.4000K	5861.4000K	11638.4000K
4056.4000K	5861.5000K	13455.6000K
4056.5000K	7375.0000K	13458.4000K
4473.5000K	7476.5000K	13628.4000K
4476.4000K	7476.5000K	13631.4000K
4476.5000K	7609.6000K	13631.5000K
4623.6000K	7612.4000K	15849.6000K
4626.4000K	8121.5000K	15852.4000K
5321.5000K	8123.5000K	16346.4000K
5515.4000K	8126.5000K	16349.4000K
5861.4000K	9076.0000K	19408.6000K
4623.6000K	9912.6000K	19411.4000K
4626.4000K	9915.4000K	20853.5000K

REQUESTED BAND 108.5 MHZ TO 118.4 MHZ

CRITERIA: RADIUS OF THE VOR OR LOCALIZER SERVICE VOLUME PLUS 5 NM. REASON IS TO PROTECT AN AIRCRAFT AT THE EDGE OF IT'S SERVICE VOLUME AND IT TAKES 5 NM FOR THE SIGNAL TO DROP BELOW -84 dBm. FOR THOSE FREQUENCIES THAT FALL INTO THE VHF COMM BAND ABOUT 118 MHZ, THE CRITERIA IS THE SERVICE VOLUME PLUS 4 NM PLUS 10 NM. THIS IS TO PROTECT AN AIRCRAFT RECEIVER AT THE EDGE OF IT'S SERVICE VOLUME AND IT TAKES 4NM FOR THE SIGNAL TO DROP BELOW -82 dBm, PLUS AN ADDITIONAL 10 NM TO ALLOW ATC TO HAND OFF THE AIRCRAFT.

NO TRANSMISSIONS WITHIN +/- 25 KHZ OF THE FOLLOWING FREQUENCIES (ALL IN MHZ):

109.1	114.4
109.7	114.7
109.95	115.6
110.6	116.2
111.15	116.5
111.7	117.1
112.7	117.4
112.9	118.025
113.6	

REQUESTED BANDS 125.6 MHZ TO 129.2 MHZ AND 129.5 MHZ TO 135.2 MHZ

CRITERIA: RADIUS OF THE VHF COMM SERVICE VOLUME PLUS 4 NM PLUS 10NM. THIS IS TO PROTECT AN AIRCRAFT AT THE EDGE OF IT'S SERVICE VOLUME AND IT TAKES 4NM FOR THE SIGNAL TO DROP BELOW -82 dBm, PLUS AN ADDITIONAL 10NM TO ALLOW ATC TO HAND OFF THE AIRCRAFT.

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NO TRANSMISSIONS WITHIN +/- 25 KHZ OF THE FOLLOWING FREQUENCIES (ALL IN MHZ):

125.825	132.4
125.925	132.725
126	132.9
126.5	133
126.75	133.2
127.2	133.325
127.35	133.425
127.825	133.45
128.2	133.925
128.325	134.7
128.4	134.75
132.05	134.95
	135

REQUESTED BAND 164.0 MHZ TO 173.60 MHZ

CRITERIA: RADIUS OF THE LAND MOBILE RADIO OPERATION PLUS 2NM. IT TAKES 2 NM FOR THE SIGNAL TO DROP BELOW -80 dBm.

NO TRANSMISSIONS WITHIN +/- 25 KHZ OF THE FOLLOWING FREQUENCIES (ALL IN MHZ):

169.3	172.9
169.325	172.9125
169.35	172.925
	172.95

REQUESTED BANDS 228.8 MHZ TO 328.6 MHZ AND 336.8 MHZ TO 452.0 MHZ

CRITERIA: RADIUS OF THE VHF COMM SERVICE VOLUME PLUS 4 NM PLUS 10NM. THIS IS TO PROTECT AN AIRCRAFT AT THE EDGE OF IT'S SERVICE VOLUME AND IT TAKES 4NM FOR THE SIGNAL TO DROP BELOW -82 dBm, PLUS AN ADDITIONAL 10NM TO ALLOW ATC TO HAND OFF THE AIRCRAFT.

NO TRANSMISSIONS WITHIN +/- 25 KHZ OF THE FOLLOWING FREQUENCIES (ALL IN MHZ):

228.9	263.05	284.75	360.6
233.7	264.2	290.3	370.9
239.025	269.225	307.9	377.15
243	269.225	321.3	380.15
251.075	269.3	338.2	381.4
253.5	269.4	341.7	381.4
254.25	273.45	343.6	381.65
254.3	277.4	346.4	382
255.4	279.6	348.7	385.45
260.9	282.2	353.7	408.425

REQUESTED BAND 940.4 MHZ TO 1200.0 MHZ

CRITERIA: RADIUS OF THE DME/TACAN'S SERVICE VOLUME PLUS 1 NM. THIS IS TO PROTECT AN AIRCRAFT AT THE EDGE OF IT'S SERVICE VOLUME AND IT TAKES 1 NM FOR THE SIGNAL TO DROP BELOW -83 dBm. A SEPARATE SYSTEM WITHIN THIS BAND IS THE ATCRB SYSTEM THAT OPERATES ON 1030 MHZ AND 1090 MHZ. THESE TWO FREQUENCIES NEED PROTECTED WITH +/- 10 MHZ.

NO TRANSMISSIONS WITHIN +/- 1 MHZ OF THE FOLLOWING FREQUENCIES

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**WITH EXCEPTION OF 1030 MHZ AND 1090 MHZ WHERE THERE ARE TO BE NO
TRANSMISSIONS WITHIN +/- 10 MHZ OF THOSE TWO FREQUENCIES (ALL IN MHZ):**

962	1135
979	1156
984	1159
989	1161
992	1163
1004	1170
1030	1178
1055	1181
1079	1190
1090	1196
1114	1199
1134	