Exhibit 3

Discussion Regarding Antenna Registration #1

Ground-Based Transmissions
Originating From Litchfield Antenna Range

The frequencies specified at Antenna Registration #1 relate to BAE Systems' proposed ground-based transmissions to be initiated from BAE Systems' Merrimack Antenna Test Range.

As explained at Exhibit 1, for internal business and operational reasons, the fixed ground-based facilities associated with this experiment are being relocated from the company's Litchfield Antenna Test Range to the company's Merrimack Antenna Test Range. Accordingly, as discussed with Commission staff, this application requests authority for virtually the same exact experimental facilities that were granted by the Commission to BAE Systems pursuant to File No. 0593-EX-ST-2005, for operations at Litchfield, NH. Once the instant STA Request is granted by the Commission, the company will transfer the fixed facilities from the Litchfield Range to the Merrimack Range, and operation of the fixed facilities will commence from Merrimack at that point

With respect to these ground-based transmissions, the following is noted:

I. Requested Area of Operation for Ground-Based Transmissions

Although the instant experiment is expected to be conducted primarily at the specific location identified in the attached form (42-48-41 N.Lat.; 071-29-10 W.Long. [NAD 83]), the Merrimack Antenna Test Range is comprised of multiple separate testing locations at which the subject experiment may be conducted from time to time. In addition, depending on the particular requirements of the experiment (i.e., when generating signals at zero degree elevation), it may be necessary to move a given antenna along the bore site line on the range up to a distance of 100 feet.

Accordingly, in order to accommodate these requirements, by this STA Request, BAE SYSTEMS is requesting authority to operate all of the specified ground-based transmissions within a 1,500 foot radius from the centerpoint geographic coordinates identified in the STA Request (i.e., 42-48-41 N.Lat.; 071-29-10 W.Long. [NAD 83]).

Commission approval of such area of operation will provide BAE SYSTEMS with the flexibility it requires to move the specified test equipment to any appropriate testing location on the Merrimack Antenna Test Range during the authorized term of operation, in response to the requirements of the experiment.

II. Categories of Ground-Based Transmissions

As discussed below, these ground-based transmissions are comprised of:

- "Ground-Based CW Transmissions"
- "Ground-Based FM Data Transmissions"
- "Ground-Based Data-Link (Uplink) Transmissions"

A. Ground-Based CW Transmissions

1. Ground-Based CW Transmissions Directed At Target Aircraft

a. The first type of Ground-Based CW Transmissions are ground-based CW transmissions that will be initiated at BAE Systems' Merrimack Antenna Range and directed at target aircraft. The flight paths of the target aircraft are specified at Exhibit 4.

b. The Output Power and ERP for these transmissions are proposed to be 5W, reported as a "Mean" value. In this regard, the transmitter will cycle through the frequency list in groups of 10 frequencies and be turned on for 100 msec per frequency (with a peak power of 50 W per frequency when turned on) with a duty cycle per frequency of 10%. Because the transmit power will be reduced to zero when not turned on, mean power is therefore a more accurate representation of the applicant's proposed activity.

c. Emissions designator is "NON" for these transmissions.

2. Ground-Based CW Transmissions Directed at Full-Scale Models

a. The second type of Ground-Based CW Transmissions are ground-based CW transmissions that will be initiated at BAE Systems' Merrimack Antenna Range and be directed at full-scale model aircraft also located at the Merrimack Antenna Range.

b. The purpose of these transmissions is to measure individually the performance of full-scale antennas of various types (i.e., loop, monopole, dipole), and measure the performance of the antennas on a full-scale aircraft replica. The target model aircraft may be utilized while resting at ground level or resting on a platform raised no higher than 12.5 feet above ground level, with a transmit distance of no more than 100 feet (see figure attached hereto).

c. The Output Power and ERP for these transmissions are proposed to be .007W, reported as a "Mean" value. The transmitter will not be left on continuously due to the nature of the experiment and the need to physically reposition the model under test between measurements, cycle through frequencies, change elevation angles of the transmit antenna, etc. where the transmit power is reduced to zero. The actual duty cycle of the transmit system is approximately 7%. Mean power is therefore a more accurate representation of the applicant's proposed activity.

d. Emissions designator is "NON" for these transmissions.

B. Ground-Based FM Data Transmissions

Each of the FM Data Transmissions to be utilized in this experiment will involve ground-based FM Data transmissions initiated at BAE Systems' Merrimack Antenna Range and directed at target aircraft. The flight paths of the target aircraft are specified at Exhibit 4. The difference between the types of FM Data Transmissions to be utilized is the length of time that the frequencies will be turned on, as described below.

1. "Short-Burst" Ground-Based FM Data Transmissions

a. The first type of Ground-Based FM Data Transmissions are ground-based FM Data transmissions that will involve the transmitter cycling through the frequency list in groups of 10 frequencies and being turned on for *100 msec* per frequency (with a peak power of 50 W per frequency when turned on) with a duty cycle per frequency of 10%. Because the transmit power will be reduced to zero when not turned on, mean power is therefore a more accurate representation of the applicant's proposed activity. The Output Power and ERP for these transmissions are proposed to be 5W, reported as a "Mean" value.

b. Emissions designator is "25K0F3D" for these transmissions, with a 6 kHz modulating frequency.

2. "Sustained Burst" Ground-Based FM Data Transmissions

a. The second type of Ground-Based FM Data Transmissions are ground-based FM Data transmissions that will involve the transmitter cycling through the frequency list in groups of 10 frequencies and being turned on for *1 minute* per frequency (with a peak power of 50 W per frequency when turned on) with a duty cycle per frequency of 10%. Because the transmit power will be reduced to zero when not turned on, mean power is therefore a more accurate representation of the applicant's proposed activity. The Output Power and ERP for these transmissions are proposed to be 5W, reported as a "Mean" value.

b. Emissions designator is "25K0F3D" for these transmissions, with a 6 kHz modulating frequency.

C. Ground-Based Data Link Transmissions Directed at Target Aircraft

1. These ground-based transmissions will be initiated at BAE Systems' Merrimack Antenna Range and be directed at target aircraft within the flight area of operation specified at Exhibit 4. These "uplink" transmissions are for the purpose of determining and monitoring the aircrafts' position, velocity, altitude and other flight information. The TDLC dish can be steered 360° in azimuth and -5° to +85° in elevation.

2. Amplifier output will be 5W and antenna gain will be 26dBic - therefore the output power is reported as 50W "Peak". Emissions designators are "21M4G7D" and "64M0G7D" for these transmissions.

III. Frequency Requirements for Ground-Based Transmissions

The particular frequency requirements of BAE Systems with respect to the proposed Ground-Based Transmissions are set forth below.

This application requests authority for virtually the same exact experimental facilities that were granted by the Commission to BAE Systems pursuant to File No. 0593-EX-ST-2005, for operations at Litchfield, NH, and related filings (see, e.g., e-mail dated 10/14/2005 ("0221 Overlap E-Mail") from Jeffrey Rummel, Esq., to the Commission's Anthony Serafini and James Burtle notifying the Commission of facilities for this experiment which overlap with a prior grant to BAE Systems under File No. 0221-EX-ST-2005.

A. Frequencies Matching the Grant Under File No. 0593-EX-ST-2005

Except as specified at Sections B and C below, the frequencies requested on the attached form are precisely the same as those granted by the Commission under File No. 0593-EX-ST-2005. BAE Systems notes the following specific points regarding these matching frequency requests:

Frequency Band	Note
108.5-118.4 MHz	As the Commission is aware, in "Special Condition 1" under File No. 0593-EX-ST-2005, the Commission authorized only the specific frequencies 109.375 MHz, 111.575 MHz, 113.825 MHz, 114.950 MHz, 116.100 MHz and 117.275 MHz. Accordingly, in the attached form, BAE Systems has deleted its prior request for the entire band, and has instead simply requested only the above-referenced approved frequencies.
120.10-129.20 MHz	As the Commission is aware, in "Special Condition 5" under File No. 0593-EX-ST-2005, the Commission authorized only the specific frequencies 120.825, 122.025, 123.250, 124.475, 125.725 and 126.975 MHz. Accordingly, in the attached form, BAE Systems has deleted its prior request for the entire band, and has instead simply requested only the above-referenced approved frequencies.
129.5-135.20 MHz	As the Commission is aware, in "Special Condition 6" under File No. 0593-EX-ST-2005, the Commission authorized only the specific frequencies 129.550, 130.825, 133.475, 134.800 MHz, and required ARINC coordination for the

	frequencies 129.550 and 130.825. Accordingly, in the attached form, BAE Systems has deleted its prior request for the entire band, and has instead simply requested only the above-referenced approved frequencies
174-228.6 MHz	As the Commission is aware, in "Special Condition 2" under File No. 0593-EX-ST-2005, the Commission authorized the following specific frequencies within this band: 174.600, 176.350, 178.100, 179.875, 181.675, 183.500, 185.325, 187.175, 189.050, 190.950, 192.850, 194.775, 196.725, 198.700, 200.700, 202.700, 204.725, 206.775, 208.825, 210.925, 213.025, 215.175, 217.325, 219.500, 221.675, 223.900, 226.150, 228.400 MHz. Although the whole band is still listed on the attached form, BAE Systems hereby consents to the same restriction – namely that it be permitted to operate only on these frequencies within this band.
228.8-328.6 MHz	As the Commission is aware, in "Special Condition 3" under File No. 0593-EX-ST-2005, the Commission authorized the following specific frequencies within this band: 230.675, 233.000, 235.325, 237.675, 240.050, 242.450, 247.325, 249.800, 252.300, 253.900, 254.825, 257.175, 257.375, 259.950, 262.550, 265.175, 267.825, 270.500, 271.175, 273.200, 275.925, 278.700, 284.300, 287.125, 290.000, 292.900, 295.825, 298.800, 301.775, 304.800, 307.850, 310.618, 310.925, 314.025, 317.175, 320.350, 323.550, 326.775 MHz. Although the whole band is still listed on the attached form, BAE Systems hereby consents to the same restriction – namely that it be permitted to operate only on these frequencies within this band.
335.4-454 MHz	As the Commission is aware, in "Special Condition 4" under File No. 0593-EX-ST-2005, the Commission authorized the following specific frequencies within this band: 336.675, 340.050, 343.450, 346.618, 346.875, 357.400, 360.975, 364.575, 368.225, 371.900, 375.625, 379.375, 383.175, 387.175, 390.875, 391.175, 394.775, 398.725, 402.725, 406.750, 410.825, 414.925, 419.075, 423.275, 427.500, 431.775, 436.100, 440.450, 444.850, 449.300, 453.800 MHz. Although the whole band is still listed on the attached form, BAE Systems hereby consents to the

same restriction – namely that it be permitted to operate only on these frequencies within this band.

940.4-1200 MHz	As the Commission is aware, in "Special Condition 7" under File No. 0593-EX-ST-2005, the Commission authorized the following specific frequencies within this band: 942.275, 961.125, 980.350, 999.950, 1019.950, 1040.350, 1061.150, 1104.025, 1126.125, 1148.625, 1171.600, 1195.050 MHz. Although the whole band is still listed on the attached form, BAE Systems hereby consents to the same restriction – namely that it be permitted to operate only on these frequencies within this band.

B. Additional Frequencies Not Referenced Under the Grant for File No. 0593-EX-ST-2005, But Which Were Identified in the 0221 Overlap E-Mail

30-74.8 MHz – at .007 Output Power/ERP, NON emissions designator
75.2-108 MHz - at .007 Output Power/ERP, NON emissions designator
137-152.885 MHz -at .007 Output Power/ERP, NON emissions designator
154-156.515 MHz -at .007 Output Power/ERP, NON emissions designator
156.81-161.625 MHz-at .007 Output Pwr/ERP, NON emissions designator
174-228.6 MHz -at .007 Output Power/ERP, NON emissions designator
228.8-328.6 MHz -at .007 Output Power/ERP, NON emissions designator
335.4-454 MHz -at .007 Output Power/ERP, NON emissions designator
456-470 MHz -at .007 Output Power/ERP, NON emissions designator
508-614 MHz -at .007 Output Power/ERP, NON emissions designator
809-928 MHz -at .007 Output Power/ERP, NON emissions designator
1251-1850 MHz -at .007 Output Power/ERP, NON emissions designator
2200-2450 MHz -at .007 Output Power/ERP, NON emissions designator
2655-2700 MHz -at .007 Output Power/ERP, NON emissions designator
2900-4200 MHz -at .007 Output Power/ERP, NON emissions designator

C. Additional Emissions/Power Levels for Granted Frequencies Which Were Not Specifically Referenced Under the Grant for File No. 0593-EX-ST-2005, but Which Commission Staff Has Indicated Such Grant Erroneously Ommitted

- .007 Output Power/ERP and NON emissions designator for:

  109.375 MHz, 111.575 MHz, 113.825 MHz, 114.950 MHz, 116.100 MHz and 117.275 MHz.

- .007 Output Power/ERP and NON emissions designator for:

  659.750 MHz