

BAE SYSTEMS
P.O. Box 868
Nashua, NH 03061-0868
November 29, 2000

Federal Communications Commission
Experimental Radio Services
P.O. Box 358320
Pittsburgh, PA 15251-5320

Gentlemen:

This is a request for a Special Temporary Authority to permit operation of an experimental radio facility within the next eight months. Here are the 14 items of information required by the WTB:

Name and address of applicant:

BAE SYSTEMS
P.O. Box 868
Nashua, NH 03061-0868

Description of need:

Demonstration of an experimental radio system to satisfy a quick reaction contract. Knowledge of contract award was not available until one month ago.

Type of operation:

Field-testing to determine antenna deployment effectiveness and data retransmission capability over a 12-mile path.

Facility Usage:

Site 'A' will have an experimentally deployed antenna and two radios. Site 'B' will have one radio. Data will be generated at site 'A' by the first radio and transmitted to site 'B' where it will be relayed back to site 'A' and received by its second radio. Sites 'A' and 'B' are fixed and separated by 6 miles, more or less. Operation will be short and burst-like, followed by data analysis.

Times and dates of operation:

Times: 7:00a.m. - 9:00p.m., 1-2 days/week.
RF environment and path loss testing: Nov. '00- Feb. '01.
Antenna deployment and link testing: March '01- June '01.

Class of station and radio service:

Experimental contract developmental (XC).

Location of transmitters:

Site 'A': 65 River Rd., Hudson, NH 03051 (42.69° N. Lat, 71.42° W. Long.).
Site 'B': 130 DW Highway, Merrimack, NH (42.84° N. Lat, 71.49° W. Long.).
Site 'A' may additionally be variable within 10km of Site 'B.'

Number of fixed transmitters: 2.

Operating frequencies: 30-88MHz.

Output power of transmitters: 5 Watts, maximum.

Proposed type of emission: BFSK

(continued)

Antennae (both sites):

Equivalent to vertical dipoles, less than 100 ft above ground level, gain less than 0dBi. Feedline losses will be approximately 5dB at 60MHz. The net antenna system gain will be less than -5dBi.

Business Activity of Applicant:

As part of the second largest defense company in the world -- BAE SYSTEMS -- the North America group is a leading transnational aerospace, defense electronics and information systems organization. With over 20,000 employees, BAE SYSTEMS North America designs, develops, manufactures, sells and supports a wide range of advanced products and intelligent electronics systems in Information Systems, Electronic Warfare Defense Aids, Communications and Data Links, Avionics and Navigation, Combat Systems, Aeronautics Products, System Technical Support and Training and Simulation Systems.

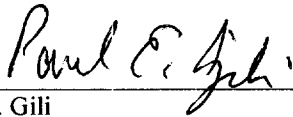
Certification:

No party to this application is subject to a denial of federal benefits pursuant to Section 5301 of the Ant-Drug Abuse Act of 1988, U.S.C. 862.

A completed FCC form 159 is enclosed. If there are any questions regarding this application, please contact the undersigned at 603-885-3938 (voice) or 603-885-1005 (FAX).

Your earliest attention to this application is appreciated.

Sincerely,



Paul E. Gili
Senior Principal Electrical Engineer
Antenna and Receiver Department
Advanced Systems and Technology Division
BAE SYSTEMS