

0325-EX-ST-1999

October 12, 1999

Federal Communications Commission
Experimental Radio Service
P.O. Box 35830
Pittsburgh, PA 15251-5320
ATTN: Mr Carl Huie
(202) 418-2430

Request for Special Temporary Authorization

Dear Mr Huie:

I am faxing this application to secure a special temporary authorization (STA) for the purpose of testing a noise correlation radar system for Defense Advanced Research Program Agency (DARPA). I am also sending a paper copy of this application, attachments, a completed form 159 and a \$45 check to your mailing address in Pittsburgh, PA.

Background:

The Raytheon Company has a contract with DARPA/STO-Arlington, VA for the development and testing of a noise correlation radar system. The contract number for this program is N66857-98-C-1613. The Program Manager is Lt Col. Ed Gjermundsen (703) 516-7361. This is not a classified program.

Purpose:

This STA will be used to support the development and integration of a noise correlation radar system, and its subsequent testing and validation. This liscense is necessary for the Raytheon Company to meet its government contract requirements, and to develop future systems for this customer.

Specifics:

Locations of Operation:

Raytheon AET Center

10606 7th Street, Rancho Cucamonga California, 91730

34 Deg, 5.330 Min. North Latitude

117 Deg, 34.414 Min. West Longitude

We would like the STA for operations at this site as well as within a 10 nautical mile radius of this site including Ontario International Airport.

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Van Nuys Airport

34 Deg, 12.300 Min North Latitude

118 Deg, 28.800 Min West Longitude

We would like the STA for operations at this site as well as within a 3 nautical mile radius of this site.

Malibu Research Laboratories

Malibu Canyon Road

Malibu, CA 90265

34 Deg, 3.000 Min North Latitude

118 Deg, 41.250 Min West Longitude

We would like the STA for operations at this site as well as within a 5 nautical mile radius of this site.

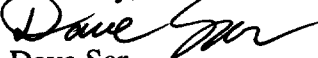
Any other locations will be in government controlled areas and frequency use will be coordinated through them.

Duration of test: It is anticipated that the design and test of this system will span a two year period. This request for STA will be renewed as necessary every six months unless a permit for the full duration can be issued.

Frequency of Operation:	35 GHz
Maximum ERP:	65 dBw
Modulation Type:	Random Noise, Pulsed 100 ns pulse width, 1 MHz pulse repetition Freq.
Calculated Bandwidth:	1 GHz
Antenna Polarization:	
Both antennas	Random
Antenna Gain:	
Antenna #1	32 dB
Antenna #2	38 dB
Beam Width	
Antenna #1	4 Deg.
Antenna #2	2 Deg.

Mr Tim Kirchhoff can answer any questions that you may have regarding this application. He may be reached at (909) 483-4051 9AM-5PM PDT Mon-Fri . If unable to reach Tim, please feel free to contact me at (909) 483-4036

Sincerely,



Dave Sar

Physicist, Raytheon Company

10606 7th Street

Rancho Cucamonga, CA 91730