

Exhibit 1

1. Introduction

By the instant application ("Application"), General Dynamics Armament and Technical Products, Inc. (GDATP) requests that the Commission grant an experimental license to permit GDATP to operate the facilities (the "Facilities") specified in the instant Form 442.

In addition to including the same frequency specifications previously granted at this range under STA pursuant to File No. 0840-EX-ST-2006 (9-10 GHz; 12.7-13 GHz; 14-14.46 GHz; 14.5-15.34 GHz; 15.41-17 GHz), this Application requests authority for a somewhat broader frequency set, including but not limited to those frequencies that were granted to GDATP at an adjacent range under File No. 0697-EX-ST-2006 (8-10.6 GHz; 10.7-14.47 GHz; 14.5-15.35 GHz; 15.4-18 GHz), as well as an additional band of 6-8 GHz.

2. Purpose of the Operation

The testing specified in this Application will be conducted by General Dynamics Armament and Technical Products (GDATP), a business unit of General Dynamics. GDATP, a major producer of radomes for the Armed Forces of the United States, manufactures radomes for varied customers.

In general, the testing performed at the Marion Test Range Facilities in Marion, VA will involve active, radiating testing related to GDATP's contracts with various defense contractors and the United States Government for the development, manufacture, characterization, and acceptance testing of military and commercial radomes. The testing at the Marion Test Facilities is a critical part of the development and manufacture of military radomes supplied to the Armed Forces of the United States.

This specific Application applies to:

(i) the manufacture of F-18 SHARP Pod radomes, pursuant to the following contract:

Customer Name:	US Navy/Raytheon
Customer Contact	Mike Hagerty 317-306-3499
Contract Number	Prime: N00019-05-C-0009 ¹
Contract DPAS Rating:	DOA1

¹ Authority is requested to operate under this Prime Contract in connection with Subcontract 4500212772 (for which authority was granted to GDATP under STA File No. 0840-EX-ST-2006) as well as any other subcontracts that may be awarded under this Prime.

(ii) characterization and acceptance testing of radomes for the F-5 aircraft, pursuant to the following contract:

Customer/Agency: Galileo Avionica/Brazil Air Force
Point of Contact: Mario Zucchelli (39 02 357901)
P.O. Number: 4521000052

and;

(iii) internal range development and characterization, and Independent Research and Development (IRAD) activities. Although such internal range development and characterization, and IRAD activities are not associated with any particular contract, such internal experimental use at this range is essential to demonstrate and verify our ability to meet the needs required of our customers.

3. Blanking Capabilities

Military systems operate over wide bands and GDATP needs the ability to evaluate and characterize our range through as much of the requested frequency ranges as possible in order to be able to support our customers' testing. GDATP wishes to obtain permission to operate over as much of the requested frequency ranges as possible while minimizing difficulties in obtaining authorization. Notwithstanding this, GDATP is aware that the Commission and/or other stakeholders may identify carve out frequencies and bands within the requested bands or that certain limited azimuth and/or elevation blanking may be required in order to ensure that the Facilities do not pose a threat of interference to adjacent emitters. This is to confirm that this license application does not seek authorization to radiate in restricted areas and that the subject system has such blanking capabilities and that GDATP stands ready to work with the Commission to identify and implement any reasonable restrictions that may be required.

4. Other Issues

A. Transmitting Equipment

Manufacturer	Model	Frequency Band	Quantity	Experimental
Microwave Power, Inc.	L0618-32	6.0 to 18 GHz	1	Yes
Agilent	E8257D Analog Signal Generator	6.0 to 18 GHz	1	No

B. Directionality/Orientation of Antenna

Frequency Band	Elevation (Vertical)	Azimuth (Horizontal)
6.0 to 18 GHz	0°	40° NE

3dB Beamwidth of Antenna (widest beam/worst case)

Frequency Band	3dB BW E (Vertical)	3dB BW H (Horizontal)
6.0 to 18 GHz	4.5°	4.5°
6.0 to 18 GHz	8.0°	8.0°

C. Prevention of Interference

GDATP hereby advises the Commission that the tests to be conducted under the requested Commission authorization are to be conducted on GDATP's Marion, Virginia facilities. The test range is designed such that the transmitting antenna is pointed directly at the radome under test which is located 180 feet away on an elevated roofed porch with three walls. The walls have 6 inch broadband pyramidal RF absorber on them to absorb the RF energy from the transmitting antenna. Additional RF absorber covered panels will be used to further absorb the RF energy. The majority of the 3 dB beamwidth of the transmit antenna is contained within the porch area over most of the requested frequency ranges. The range is located in a low area surrounded mostly by hills and trees. The range configuration is designed to minimize RF energy propagation outside of the actual test area. Please refer to the attached diagram of the range (Figure 1).

In addition it is noted that although the ERP specified in the instant Application gives the impression of high power, the actual power into the transmit antenna is about 1 watt (less than many walkie-talkies). The stated ERP, therefore, is deceptive because GDATP employs an antenna with a very narrow beamwidth (35 dBi gain at 18 GHz). The ERP is the Equivalent or Effective Radiated Power. It is how much power would have to be input into a dipole antenna (very broad beamwidth) to equal the power density in the peak of the beam of the applicant's very narrow beam antenna. 1600 watts into a dipole would melt most dipoles. By using such a narrow beam antenna, GDATP is greatly reducing the emissions in all directions except where we it is measuring. Additionally, as explained above, GDATP's receive area contains large amounts of RF absorber with over 35 dB of attenuation. The narrow beam of our antenna and the absorber in the receive area reduce GDATP's stray emissions greatly. GDATP's test range is a very contained environment, and probably has significantly lower stray emission levels than if the applicant connected its 1 Watt transmitter to a dipole and had an ERP of 1 Watt. It should be noted also that the ERP entered in our submission is for the worst case of the highest frequency/narrowest beamwidth.

D. GDATP has confirmed that the proposed experiment is in compliance with the Commission's RF exposure limits. As such, the preparation of an environmental assessment in this context is not required.

E. Stop Buzzer

The range shift supervisor, Gerald Hicks, will be personally supervising the testing and will be available by telephone at (276) 783-3121 x 1392. Mr. Hicks will act as a "stop buzzer" if any issues regarding interference arise during testing. The range operator will also be available by telephone at (276) 783-3121 x 1393 if Mr. Hicks cannot be reached.

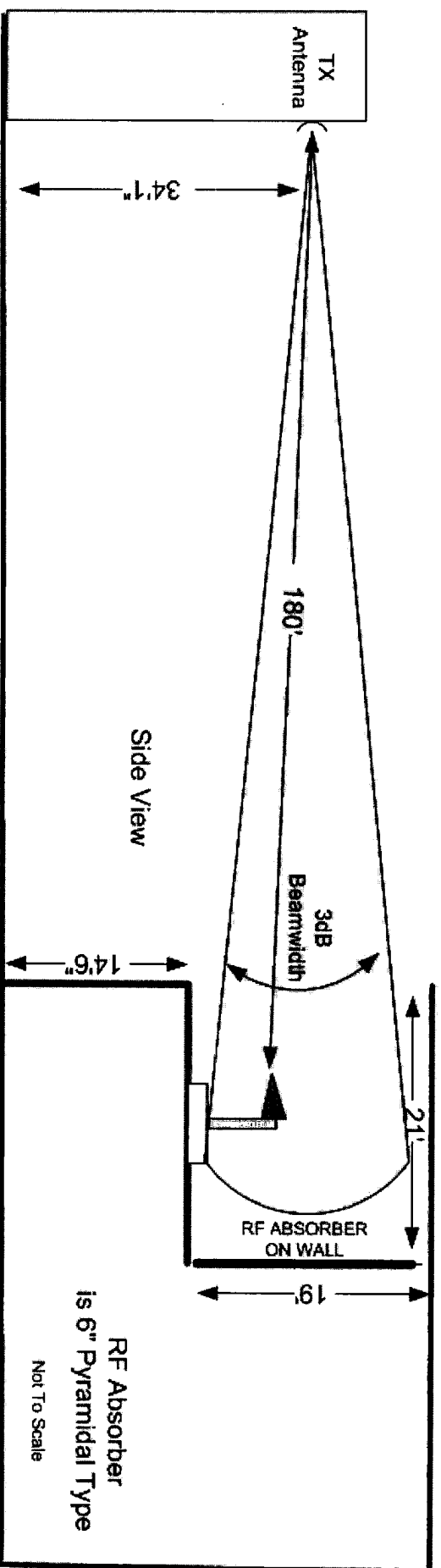
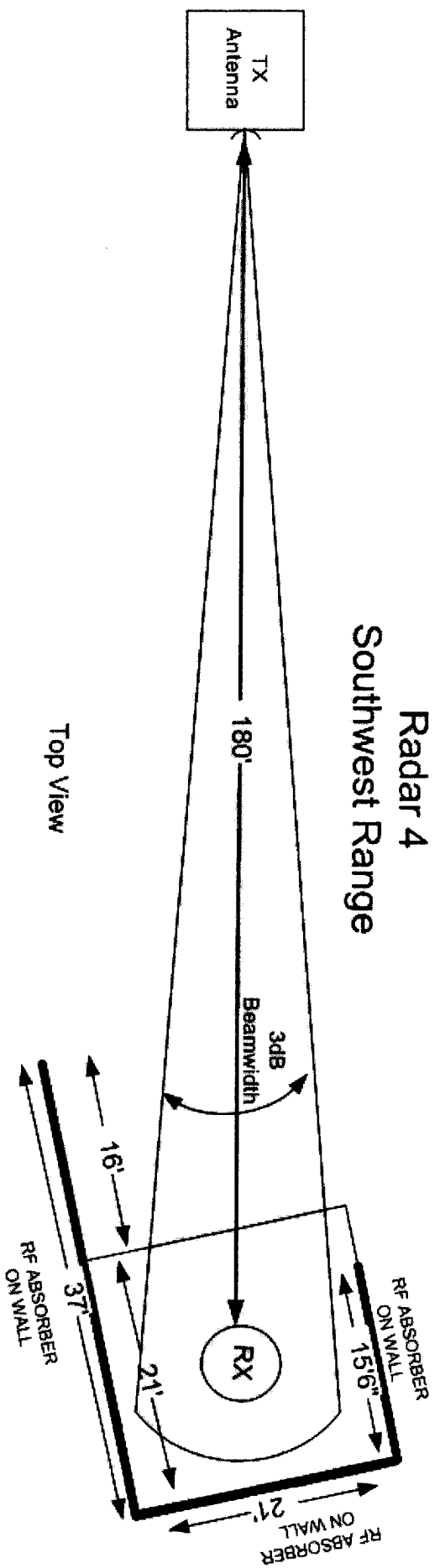


Figure 1