

Exhibit 1

1. Introduction

By the instant application (“Application”), General Dynamics Armament and Technical Products, Inc. (GDATP) requests that the Commission grant a two-year experimental license to permit GDATP to operate the facilities (the “Facilities”) specified in the instant Application.

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 involves 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 the manufacture of radomes for the EA-6B aircraft, as well as internal range development and characterization, and Independent Research and Development (IR&D). Although the internal range development and characterization, and IR&D activities are not associated with any particular contract, such internal experimental use is essential to demonstrate and verify our ability to meet the needs required of our customers. It is critical for GDATP that this range be granted a license to radiate on this basis. As to the manufacture of radomes for the EA-6B aircraft, the contract pursuant to which these experiments will be conducted is as follows:

Aircraft:	EA-6B
Customer Name:	US Navy - NAVICP
Customer Contact	Debra Zaslow 215-697-2564
Contract Number	Prime: N00383-02-G-010F Delivery Order: 7000
Contract DPAS Rating:	DOX7

GDATP is aware that the Commission and/or other stakeholders are likely to identify carve out frequencies and bands within the requested bands; this license application does not seek authorization to radiate in those restricted areas. **GDATP wishes to obtain permission to operate over as much of the requested frequency ranges as possible while minimizing difficulties in obtaining authorization.** Military systems operate over wide bands and GDATP needs the ability to evaluate and characterize our range through as much of the requested frequency range as possible in order to be able to support our customers' testing.

3. Blanking Capabilities

GDATP understands that FAA or other stakeholders may require certain frequency blanking, or certain limited azimuth and/or elevation blanking in order to ensure that the Facilities do not pose a threat of interference to adjacent emitters. This is to confirm 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	Band	Frequency Band	Quantity	Experimental
Microwave Power, Inc.	L0618-32	1	6.0 to 18 GHz	1	Yes
Agilent	E8257D Analog Signal Generator	1	6.0 to 18 GHz	1	No

B. Directionality/Orientation of Antenna

Transmitting Location	Frequency Band	Elevation (Vertical)	Azimuth (Horizontal)
Subtower TX	12 to 18 GHz	0°	207° SSW
Radome TX	12 to 18 GHz	0°	27° NNE

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

Frequency Band	3dB BW E (Vertical)	3dB BW H (Horizontal)
12 to 18 GHz	4°	4°

C. Prevention of Interference

GDATEP hereby advises the Commission that the tests to be conducted under the requested Commission authorization are to be conducted on GDATEP'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 300 feet away on an elevated roofed porch with three walls. The radiated 3 dB beamwidth of the subtower transmit antenna is contained within the porch area for most of the operating band. Part of the radome testing requires transmitting through the radome under test and receiving from the normal transmit site at the subtower. In this case the same transmitting equipment is used; it is just moved to the other end of the test range. The range is located in a low area surrounded mostly by hills and trees. Please refer to the attached diagrams (Figures 1 and 2) for the two range configurations.

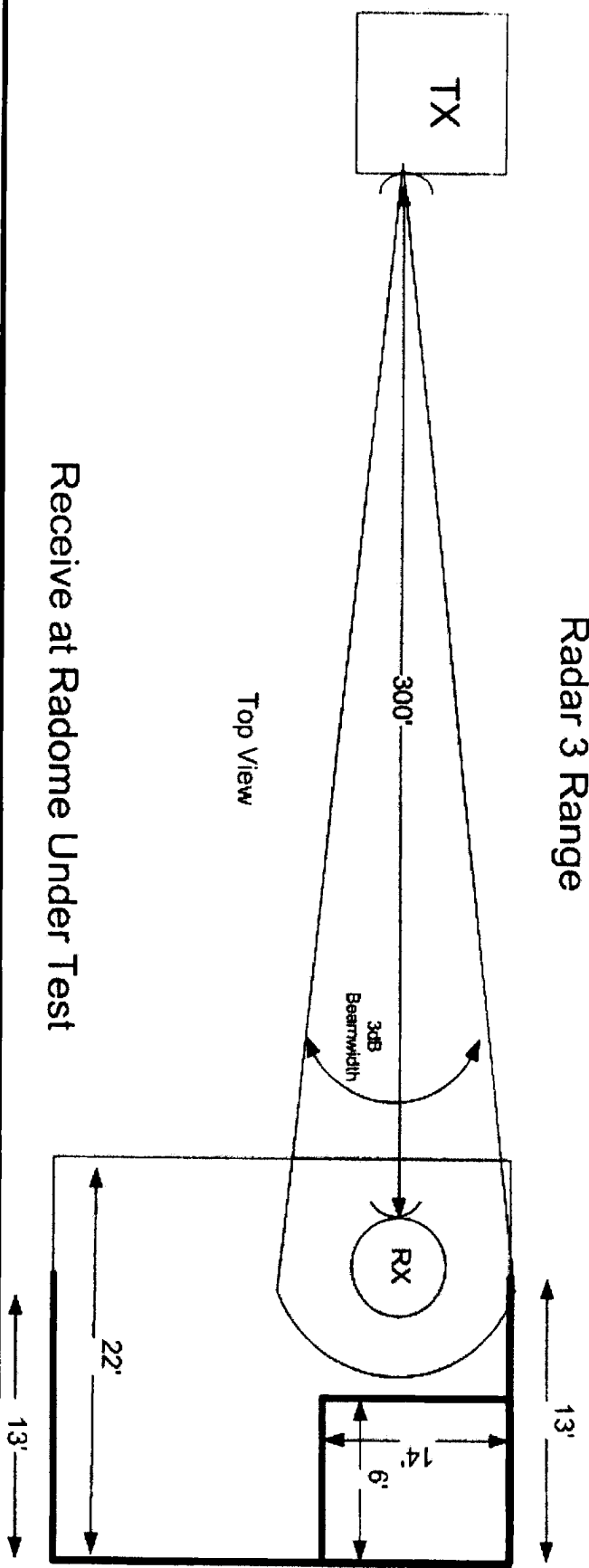
Although the ERP entered in our application gives the impression of higher power, the actual power into the transmit antenna is only about 1 watt (less than many walkie-talkies). The ERP is deceptive because we are using an antenna with a very narrow beamwidth (~35 dBi gain at 18 GHz). The ERP is the 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 our very narrow beam antenna. 1700 watts into a dipole would melt most dipoles. By using such a narrow beam antenna, we are greatly reducing the emissions in all directions except where we are measuring. The narrow beam of our antenna reduces our stray emissions greatly. Our test range is a very contained environment, and probably has significantly lower stray emission levels than if we hooked up our 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. Stop Buzzer

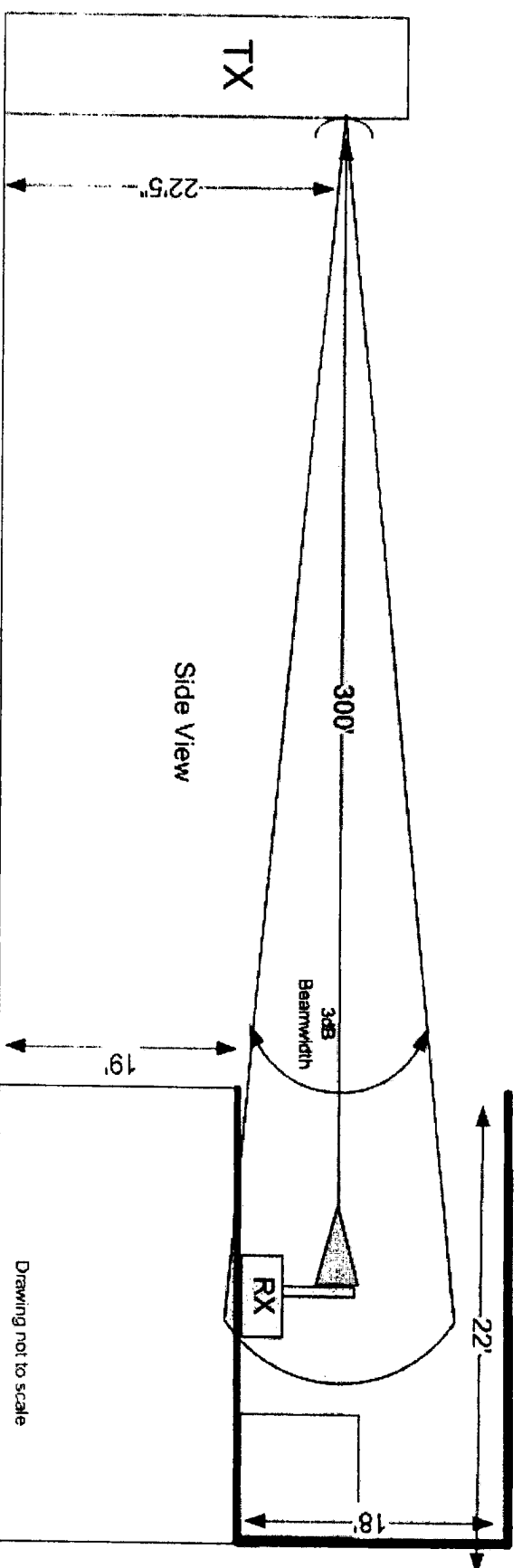
The range shift supervisor, Gerald Hicks, will be personally supervising the testing and will be available by telephone at (276) 783-3121 x 1392. Mr. Hicks will act as a "stop buzzer" if any issues regarding interference arise during testing. The range operator will also be available by telephone at (276) 783-3121 x 1395 if Mr. Hicks cannot be reached.

For the foregoing reasons, review and approval of this Application are in the public interest, convenience, and necessity.

Radar 3 Range



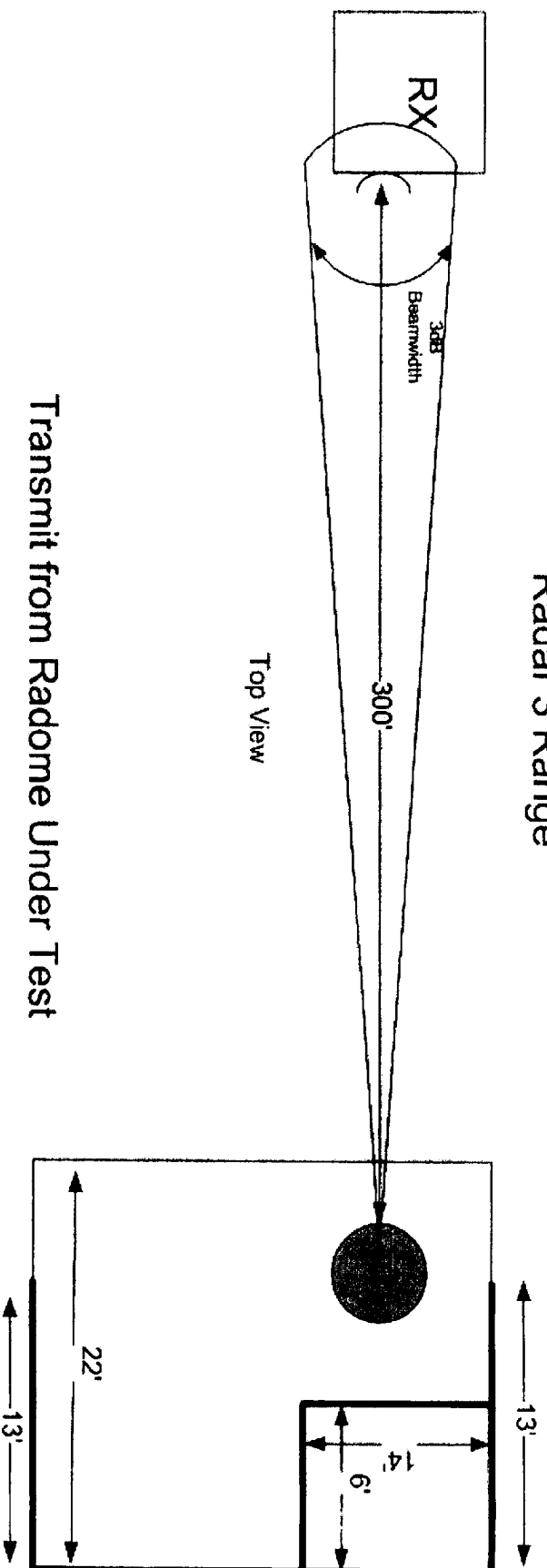
Receive at Radome Under Test



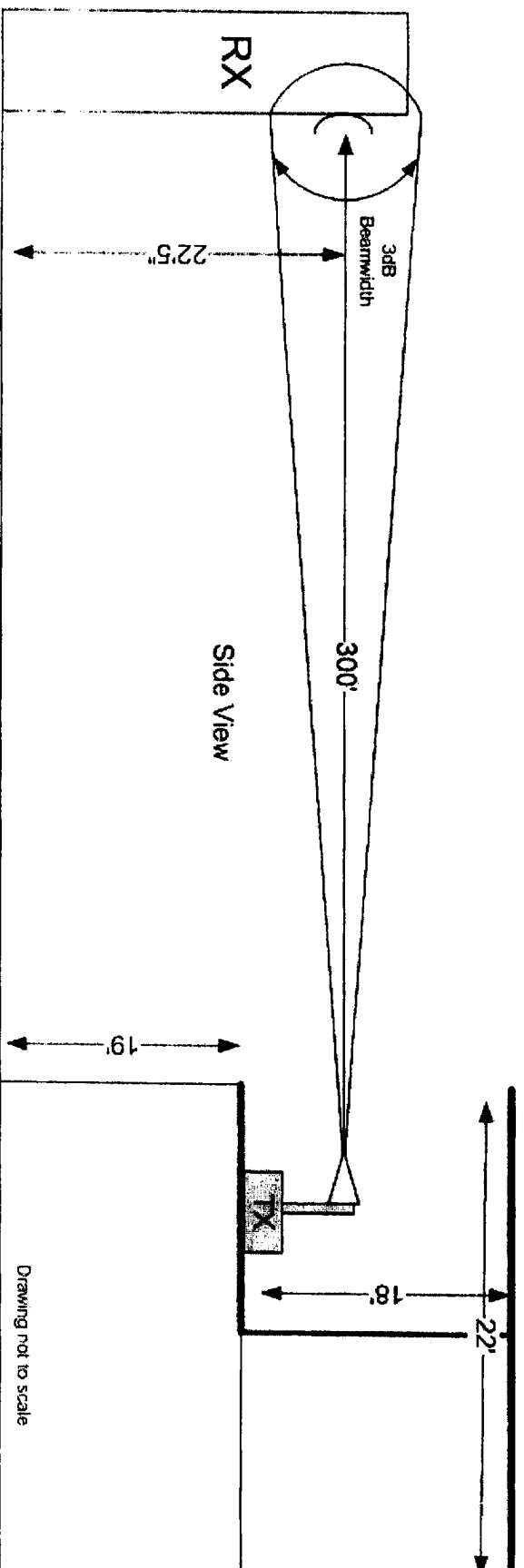
Drawing not to scale

Figure 1

Radar 3 Range



Transmit from Radome Under Test



Drawing not to scale

Figure 2