

EXHIBIT 1
FCC FORM 442
ITEMS 4f, 4g

UHF Demonstration Radar
Pulse Characteristics

Radar Transmitter:

Tx Frequency	420 to 450 MHz, 2 MHz LFM
Pulse rise time	0.1 μ Sec
Pulse widths	60 μ Sec
Pulse fall time	0.1 μ Sec
Compression ratio	120:1
Pulse Repetition Frequency	1 kHz

Using the Mason-Zimmerman approximation with the above data, the -20dB bandwidth was determined to be 2.95 MHz.

**EXHIBIT 2
FCC FORM 442
ITEM 5c**

This experimental transmitter will be mounted on a test aircraft. The initial area of operation beginning approximately 7/1/00 will be a 370 km radius centered around NAD 27 coordinates 39-11-01 N, 076-41-09 W. Within this area are the following sites of interest: Northrop Grumman Corporation Friendship site, Patuxent River Naval Air Station, and Maryland's Eastern shore. Later flights (after 1/1/01) may also include a 180 km radius of Rome, NY.

**EXHIBIT 3
FCC FORM 442
ITEM 10**

Northrop Grumman Corporation is developing an experimental radar transmitter capable of foliage penetration. The purpose of this experiment is to test and evaluate the new transmitter and collect target data. Information gained from these tests will be applied in pursuit of future DARPA contracts