

**EXHIBIT 1  
FCC FORM 442  
ITEMS 4f, 4g**

**UHF Demonstration Radar  
Pulse Characteristics**

**Radar Transmitter:**

<b>Tx Frequency</b>	<b>420 to 450 MHz, 2 and 4 MHz LFM</b>
<b>Pulse rise time</b>	<b>0.1 <math>\mu</math>Sec</b>
<b>Pulse widths</b>	<b>60 <math>\mu</math>Sec</b>
<b>Pulse fall time</b>	<b>0.1 <math>\mu</math>Sec</b>
<b>Compression ratio</b>	<b>120:1 and 240:1</b>
<b>Pulse Repetition Frequency</b>	<b>1 kHz</b>

**Using the Mason-Zimmerman approximation with the above data, the -20dB bandwidths were determined to be 2.95 and 5.53 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. A recent contract awarded by DARPA (F30602-00-C-0096) requires data collection operations up to 5500m AMSL. Mr. Paul Gilgallon of USAF Rome Labs is the program manager. We request that the current XD station class be retained because R&D efforts will continue in parallel and after this contract expires information gained from these tests will be applied in the development future radars that may be able to locate targets in vegetation presently not visible to current systems.