

Exhibit 1
FCC Form 442
for AN/APX-113

4. Particulars of Operation

Frequency	Power			Emission	Modulating Signal	Bandwidth
A	B	C	D	E	F	G
1030 MHz	2500W	23.4KW	PEAK	6M00M1D	pulse duration 0.8us; repetition rate 300-1200 pps	8.1 MHz OC BW measured
1030 MHz	2500W	23.4KW	PEAK	7M50M1D	pulse duration 0.5us; repetition rate 1800-7200 pps	10.4 MHz OC BW measured
1090MHz	500W	355W	PEAK	7M00M1D	pulse duration 0.45us; repetition rate 900pps-18kpps	10.1 MHz OC BW measured
1090MHz	500W	355W	PEAK	6M90M1D	pulse duration 0.5 - 1.0 us; repetition rate 1.7-7 kpps	9.8 MHz OC BW measured

REMARKS:

1. 6M00M1D is for SIF Modes 1, 2, 3/A, and C interrogations (0.8 us pulsewidth).
7M50M1D is for Mode 4 interrogations (0.5 us pulsewidth).
2. SIF maximum mode rate of 1200 pps sets the maximum interrogations per second at 400.
The Mode 4 maximum rate of 7200 pps allows up to 200 interrogations per second.
3. 3.6 Kpps is max pulse rate for IFF Mode 4 replies.
7.0 pps is max pulse rate for IFF Mode S replies.
18 Kpps is max pulse rate for IFF Modes 1, 2, 3/A, C replies.
4. 7M00M1D is for SIF Modes 1, 2, 3/A, C, and Mode 4 replies.
6M90M1D is for Mode S replies.

IR peak power = 34.0 dBw - 1.3 dB cable loss + 11.0 dBi antenna gain = 43.7 dBW = 23.4 KW
XP peak power = 27.0 dBw - 1.5 dB cable loss + 0 dBi antenna gain = 25.5 dBW = 355 W