

EXHIBIT 1
FCC FORM 442
ITEM 4f

ASR-9 PRF CHART

The ASR-9 radar has 16 selectable average PRFs. Each consists of two PRFs. The radar transmits 10 pulses at the high PRF followed by 8 pulses at the low PRF. PRF #1 can be automatically invoked by the system in the case of wind loading of the antenna. The PRFs are as follows:

No.	High		Low		Avg	
	(Hz)	(TS)	(Hz)	(TS)	(Hz)	(TS)
1	1321.1	756.94	1027.5	973.24	1172	853.24
2	1311.7	762.37	1020.2	980.20	1164	859.11
3	1302.5	767.75	1013	987.17	1156	865.05
4	1293.4	773.16	1006	994.04	1148	871.08
5	1284.4	778.57	999	1001.00	1140	877.19
6	1275.5	784.01	992.1	1007.96	1132	883.39
7	1266.8	789.39	985.3	1014.92	1124	889.68
8	1258.2	794.49	978.6	1021.87	1116	896.06
9	1249.7	800.19	972	1028.81	1109	901.71
10	1241.3	805.61	965.4	1035.84	1101	908.27
11	1233	811.03	969	1031.99	1094	914.08
12	1224.8	816.46	952.71	1049.64	1087	919.96
13	1216.8	821.83	946.4	1056.64	1080	925.93
14	1208.8	827.27	940.2	1063.60	1073	931.97
15	1201	832.64	934.1	1070.55	1066	938.09
16	1193.2	838.08	928.1	1077.47	1059	944.29

SCSAT RADAR EMISSION BANDWIDTH APPROX (MASON ZIMMERMANN FUNCTION)

FULL EMISSION BANDWIDTH

- 3 dB	750.63 kHz
-20 dB	5.31 MHz
-40 dB	16.93 MHz
-60 dB	53.54 MHz

NECESSARY BANDWIDTH: 5.01 MHz

NOTE: The above Necessary Bandwidth is calculated using equations provided by NTIA Manual of Radio Regulations, Annex J. However, as per DoD requirements, the Necessary Bandwidth for a radar should be determined at the -20 dB level.

USER'S INPUT DATA

PULSE WIDTH: 1.08 usec
RISE TIME: .12 usec
TYPE OF RADAR: NON-FM PULSE

COMP. RATIO: 0
FALL TIME: .12 usec

EXHIBIT 2
FCC FORM 442
ITEM 10

Northrop Grumman Corporation is developing a Weather Systems Processor to upgrade the ASR-9 radar system. The purpose of this site is to test and evaluate the WSP and other service life extension programs. Future use of the site includes system demonstrations to potential customers and operator training classes.

EXHIBIT 3
FCC FORM 442
ITEM 15e

Vertical Profile

