

MARTIN MULTIFREQUENCY RADAR ANTENNA ASSEMBLY

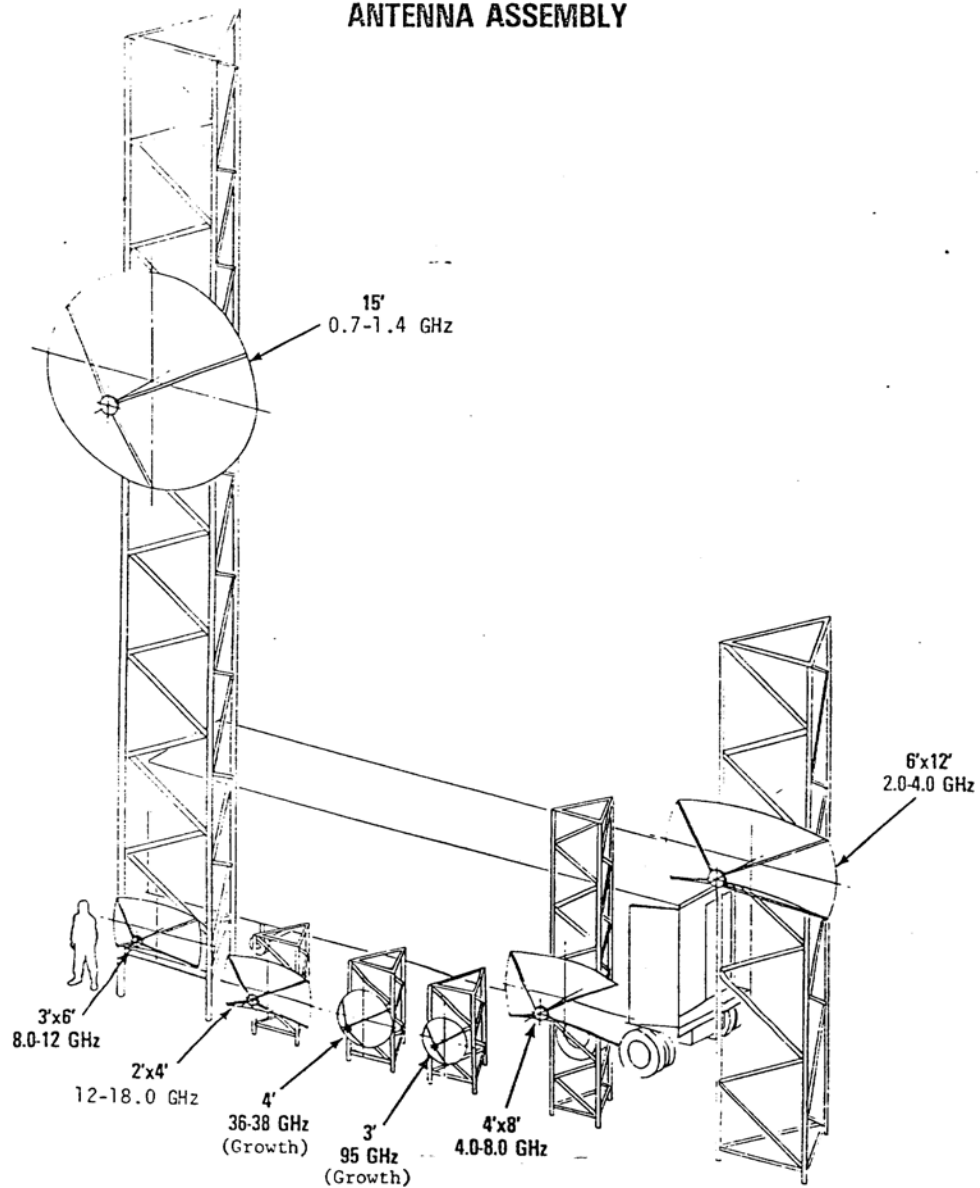


EXHIBIT VI

EXHIBIT VII

MARTIN MULTIFREQUENCY RADAR SYSTEM SPECIFICATIONS

Spectrum Coverage (GHz)	0.7-1.4	2-4	4-8	8-12	12-18.0	35*	95*		
Antenna Size (ft)	15	6x12	4x8	3x6	2x4	4	3		
Antenna Gain (min, dB)	26.5	31.6	34.1	37.6	37.8				
Peak Power (kW)	1	1	1	1	1				
Step Frequency Range (MHz)	500	2000	4000	4000	4500	2000	-		
Instantaneous Bandwidth (MHz)	50	200	400	400	400	400	-		
Minimum Pulsewidth (ns)	20	5	5	5	5	5	-		
Range Resolution (ft)									
Single Pulse Mode	10	2.5	2.5	2.5	2.5	2.5	-		
Stepped Frequency Mode	1.5	0.5	0.5	0.5	0.5	0.5	-		
LNA Noise Figure (dB)	2	3	4	4	6	-	-		
Two-Way System Losses (dB)	7.5	7.8	5.1	3.6	5	-	-		

Integration Gain

Coherent Integration (8000 Pulses): 39 dB

Step Chirp (120): 42 dB

Maximum PRF: 40 kHz

Frequency Stability: 1×10^{-9} Per Day

Multiple Band Operation: 1, 2, or 4 Radar Frequencies Interleaved

*Growth