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REF NO. L1142

RAYTHEON COMPANY

EL SEGUNDO, CALIFORNIA

FIREFINDER BLOCK II

CONTRACT NO. DAAB07-98-C-S018
CLIN 0004AF

FREQUENCY ALLOCATION DATA

CDRL
C006-003

01 March 2000

Distribution Statement F: As of 1 July 1998, Dissemination of Firefinder AN/TPQ-47 technical documentation and software source code will be only as directed by the Product Manager Firefinder; ATTN: AMSEL-DSA-FF, Ft. Monmouth, NJ 07703-5404 or higher DA authority.

DD FORM 1494, AUG 96 (EG)

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CLASSIFICATION UNCLASSIFIED				PAGE 3	
RECEIVER EQUIPMENT CHARACTERISTICS					
1. NOMENCLATURE, MANUFACTURER'S MODEL NO. (U) AN/TPQ-47 Artillery Locating Radar			2. MANUFACTURER'S NAME (U) Raytheon Systems Company		
3. RECEIVER INSTALLATION (U) AN/TPQ-47 Mobile Radar Trailer			4. RECEIVER TYPE (U) Triple Conversion Super Heterodyne		
5. TUNING RANGE 3104.9 - 3394.9 MHz			6. METHOD OF TUNING (U) Fixed frequency oscillator, mix and multiply		
7. RF CHANNELING CAPABILITY (U) 3254.9 MHz			8. EMISSION DESIGNATOR(S) (U) 10M0L2N		
9. FREQUENCY TOLERANCE					
10. IF SELECTIVITY	1ST	2ND	3RD	11. RF SELECTIVITY (X and complete as applicable)	
a. -3 dB			Z	☒ CALCULATED ☐ MEASURED	
b. -20 dB	---	---	---	a. -3 dB	
c. -60 dB	---	---	---	b. -20 dB	
				c. -60 dB	
				d. PRESELECTION TYPE	
12. IF FREQUENCY			13. MAXIMUM POST DETECTION FREQUENCY (U) NA		
a. 1ST					
b. 2ND			14. MINIMUM POST DETECTION FREQUENCY (U) NA		
c. 3RD					
15. OSCILLATOR TUNED	1ST	2ND	3RD	16. MAXIMUM BIT RATE (U) NA	
a. ABOVE TUNED FREQUENCY				17. SENSITIVITY	
b. BELOW TUNED FREQUENCY				a. SENSITIVITY dBm	
c. EITHER ABOVE OR BELOW TUNED FREQUENCY				b. CRITERIA (U))	
18. DE-EMPHASIS (X one)			c. NOISE FIG (U) 2 dB		
☐ a. YES (U) ☒ b. NO			d. NOISE TEMP (U) NA Kelvin		
19. IMAGE REJECTION			20. SPURIOUS REJECTION		
21. REMARKS					
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CLASSIFICATION UNCLASSIFIED					

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APPLICATION FOR SPECTRUM REVIEW	CLASSIFICATION UNCLASSIFIED	PAGE 5
NTIA GENERAL INFORMATION		
1. APPLICATION TITLE (U) AN/TPQ-47 Artillery Locating Radar; Contract Number: DAAB07-98-C-S018		
2. SYSTEM NOMENCLATURE (U) AN/TPQ-47 Artillery Locating Radar		
3. STAGE OF ALLOCATION (X one) ☐ a. STAGE 1 - CONCEPTUAL ☐ b. STAGE 2 - EXPERIMENTAL ☒ c. STAGE 3 - DEVELOPMENTAL ☐ d. STAGE 4 - OPERATIONAL		
4. FREQUENCY REQUIREMENTS a. FREQUENCY(IES) (U) 3104.9 - 3394.9 MHz b. EMISSION DESIGNATOR(S) 10M0L2N		
5. PURPOSE OF SYSTEM, OPERATIONAL AND SYSTEM CONCEPTS (WARTIME USE) (X one) ☒ a. YES ☐ b. NO (U) AN/TPQ-47 is a tactical S-Band mobile radar that locates the firing positions from artillery/mortar fire and rocket/missile launches.		
6. INFORMATION TRANSFER REQUIREMENTS		
7. ESTIMATED INITIAL COST OF THE SYSTEM (U) \$57.3M for three EMD radar systems		
8. TARGET DATE FOR a. APPLICATION APPROVAL b. SYSTEM ACTIVATION c. SYSTEM TERMINATION (U) March 2025		
9. SYSTEM RELATIONSHIP AND ESSENTIALITY		
10. REPLACEMENT INFORMATION		
11. RELATED ANALYSIS AND TEST DATA (U) None		
12. NUMBER OF MOBILE UNITS (U) Three		
13. GEOGRAPHICAL AREA FOR a. STAGE 2 (U) NA b. STAGE 3 (U) Fullerton, CA; c. STAGE 4 (U) Fullerton, CA;		
14. LINE DIAGRAM (See Page(s)) (U) NA	15. SPACE SYSTEMS (See Page(s)) (U) NA	
16. TYPE OF SERVICE(S) FOR STAGE 4 (U) NA	17. STATION CLASS(ES) FOR STAGE 4 (U) NA	
18. REMARKS (U) Distribution Statement F: As of 1July1998, Dissemination of Firefinder AN/TPQ-47technical documentation and software source code will be only as directed by the Product Manager Firefinder, ATTN: AMSEL-DSA-FF, Ft. Monmouth, NJ 07703-5404 or higher DA authority.		
DOWNGRADING INSTRUCTIONS	CLASSIFICATION UNCLASSIFIED	