TRANSMITTER EQUIPMENT CHARACTERISTICS

1. NOMENCLATURE, MANUFACTURER'S MODEL NO.
(U) AN/PRC-148B(V)1(C)
See Data Overflow Page

2. MANUFACTURER'S NAME
(U) Thales Communications, Inc.

3. TRANSMITTER INSTALLATION
(U) Ground Mobile, Hand-held, Portable

4. TRANSMITTER TYPE
(U) CPM, MSK

5. TUNING RANGE
(U) 225.000 MHz - 450.000 MHz

6. METHOD OF TUNING
(U) PLL Synthesizer

7. RF CHANNELING CAPABILITY
(U) 225.000 MHz, 25kHz Increments

8. EMISSION DESIGNATORS
(U) 1M20G1D (U) (U)

9. FREQUENCY TOLERANCE
(U) 0.5 ppm

10. FILTER EMPLOYED
(U) [X] a. YES [ ] b. NO

11. SPREAD SPECTRUM
(U) [X] a. YES [ ] b. NO

12. EMISSION BANDWIDTH
[ ] CALCULATED [X] MEASURED

a. -3 dB (U)	617 KHz	(U)	(U)
b. -20 dB (U)	1.280 MHz	(U)	(U)
c. -40 dB (U)	2.260 MHz	(U)	(U)
d. -60 dB (U)	3.530 MHz	(U)	(U)
e. OC-BW (U)	1.430 MHz	(U)	(U)

13. MAXIMUM BIT RATE
(U) 12.000 Mbps

14. MODULATION TECHNIQUES AND CODING
(U)
CPM, QBL-MSK

15. MAXIMUM MODULATION FREQUENCY
(U) 2.400 MHz

16. PRE-EMPHASIS
(U) [X] a. YES [ ] b. NO

17. DEVIATION RATIO
(U) NA

18. PULSE CHARACTERISTICS

a. RATE (U)	NA	(U)	(U)
b. WIDTH (U)	NA	(U)	(U)
c. RISE TIME (U)	NA	(U)	(U)
d. FALL TIME (U)	NA	(U)	(U)
e. COMP RATIO (U)	NA	(U)	(U)

19. POWER

a. MEAN (U)	0.1 W - 5 W	(U)	(U)
b. PEP (U)		(U)	(U)

20. OUTPUT DEVICE
(U) LDMOS OR GAN FET

21. HARMONIC LEVEL

a. 2nd	(U)	-50 dB
b. 3rd	(U)	-50 dB
c. OTHER	(U)	-60 dB

22. SPURIOUS LEVEL
(U) -60 dB

23. FCC TYPE ACCEPTANCE NO.
(U)

24. REMARKS (U)

ITEM 1: The SRW Waveform Description Specification delineates the tuning requirements shown here. User access to tuning range can be limited by depot level software configurable band blocks.
ITEM 5: 216.025-220 MHz, 225-328.6 MHz and 335.4-399.875 MHz.
ITEM 10: RF Filtering is performed on the transmit signal to control out-of-band emissions across the entire frequency range. Tunable output bandpass filters suppress harmonics, broadband noise and spurious emissions.
ITEM 8/14/15/17:

Emssn Des.	Chip Rate(MHz)	Spread Fctr	Code Rate	Data Rate	BW(kbps)	Mod
1M20G1D	2.4	1	5/6	2000	1.2	4ary CPM(h=1/6)
1M20G1D	1.2	16	3/4	56.25	1.2	QBL-MSK
1M20G1D	1.2	8	3/4	112.5	1.2	QBL-MSK
1M20G1D	1.2	1	32/41	936.59	1.2	QBL-MSK

(U) The maximum chip to symbol (spreading) ratio using QBM MSK is 128.