Doc. 36647/1

Form NTIA-44 U.S. Department of Commerce			Classification			Control Number
(3/91) National Telecommunications and Information Administration			UNCLASSIFIED			SPS-16654/1 ERP-1079/1
CERTIFICATION OF SPECTRUM SUPPORT						
Recipient Agency	System					Stage of Review
Air Force	AN/PRC-117G(V)((C), Harris R	RF-300M-MP Portabl	le Manpack R <u>adi</u>	o Set	4 – Operational
	Section 1: OPERA	TING CHARA	ACTERISTICS FOR WI	HICH SUPPORT IS	CERTIF	FIED
Frequency (MHz)	Emission	,	Station Class	Power (W)		Operating Location
30-30.56 32-33 34-35 36-37 38.25-39 40-42 46.6-47 49.6-50	8K00F 11K0F 16K0F 18K5F 22K0F 22K0F 25K0G 26K0F	73E 73E 73E 73E 71D		1-10		
138-144 148-149.9 150.05-150.8	8K00F 11K0F 16K0F 18K5F 22K0F	3E 3E 3E 3E	мо	1-10		
	I	6K00A3E 16K0A1D		4		
162.0125-173.2 173.4-174	2 8K00F 11K0F		·	1-10 4		
225-328.6	8K00F 11K0F 16K0F 18K5F 22K0F 22K0F	33E 33E 33E		1-10		US&P
	1M20G 1M20D			1-5		
	6K00A 16K0A			4		
243-270 (Receive)	2K40G 4K80G					
291-318 (Transmit)			UA	2-20		
8K00F1 11K0F3 16K0F3 335.4-399.9 18K5F3 22K0F3 22K0F1		3E 3E 3E 3E	MO FL	1-10		
Downgrading Instructions	5	Classification			Page Nu	
			UNCLASSIFIE	:D		1 of 3 pages

Form NTIA-44 (3/91)		Classificatio	n		System	
CONTINUATION	N PAGE	υ	NCLASSIFIED		Portab	G(V)(C), Harris RF-300M-MP le Manpack Radio Set
Frequency (MHz)	Emission	<u> </u>	Station Class	Pov	wer (W)	Operating Location
	1M20G1D 1M20D1D				1-5	
406.1-420	6K00A 16K0A				4	
	8K00F	1D	1		1-10	
	11K0F				4	
1370-1390	1M200 1M200 5M000 5M000)1D 31D	MO FL		1-5	US&P
1755-1850	1M200 1M200 5M000 5M000)1D 31D			1-5	
1227.6 (receive only) 1575.42 (receive only)	24M00	61D	υм			
		Secti	on 2: SOURCE DOCU	MENT	S	
Docket Number	Description of D	ocument				Dated
SPS-16581/1 SPS-16625/1	Air Force Re	equest for S inary Asse	Stage 4 System Revie ssment	·W		June 27, 2008 August 12, 2008

System

Classification

The Spectrum Planning Subcommittee has reviewed this system under the provisions of Chapter 10 of the NTIA Manual, and recommends that:

- 1. NTIA certify Stage 4 spectrum support for the AN/PRC-117G(V)(C), Harris RF-300M-MP Portable Manpack Radio Set, as specified in Section 1.
- 2. Air Force be aware that:
 - a. in the bands 162-174 and 406.1-420 MHz, tactical communications are prohibited;
 - b. not all emission designators can be used in all bands; emissions in each band must be limited as shown in Section 1:
 - c. any use of the 162.0125-174 MHz and 406.1-420 MHz bands by the military services is limited to non-tactical or intrabase radio operations, in accordance with the channeling plan specified in Sections 4.3.7 and 4.3.9 of the NTIA Manual, as referenced in Footnote G5 to the National Table of Frequency Allocations;
 - d. any tactical and training operations in non-Federal bands with the 30-88 MHz range within the US&P are to be conducted on an unprotected, non-interference basis in accordance with Section 7.15.3 of the NTIA Manual.
- 3. Air Force take all practical steps to protect the radio astronomy service from harmful interference in the band 1350-1400 MHz in accordance with Footnote US311 to the National Table of Frequency Allocation and the bands 322-328.6 and 1330-1400 MHz in accordance with Footnote US342 to the National Table of Frequency Allocation.
- 4. Air Force coordinate all frequency assignment actions for the bands 225-328.6 MHz and 335.4-399.9 MHz with the Military Assignment Group, in accordance with Section 1.3.2 of the NTIA Manual.

Downgrading Instructions	Classification	Page Number
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n NT	IA-44 (3/	91)	Classification	System
	CON	TINUATION PAGE	UNCLASSIFIED	AN/PRC-117G(V)(C), Harris RF-300M-MP Portable Manpack Radio Set
	· ** • • • • • • • • • • • • • • • • • •		Section 3: SPS RECOMMENDA	TIONS
5.	Air F Man	orce be aware that opera ual regarding its lack of co	ition of this system will be subject to ompliance with the following standa	the provisions of Section 5.1.2 of the NTIA
			ards of Subsection 5.2.2.2 of the NT 25K0F1D in the band 291-318 MHz	ΓΙΑ Manual for the use of the emissions z;
	b. t	unwanted emission stand the emission 8K00F1D in	ards of Subsection 5.3.5.2 (narrowb the bands 162.0125-173.2 MHz, 17	eand standard) of the NTIA Manual for the use of 3.4-174 MHz, and 406.1-420 MHz;
				A Manual for the use of the emissions 173.4-174 MHz, and 406.1-420 MHz;
	t			tion 5.3.5.2 of the NTIA Manual for the use of 25-173.2 MHz, 173.4-174 MHz, and 406.1-420
6.	prefe			0125-174 MHz and 406.1-420 MHz give "DOD" or "AGA" in accordance with Section
7.	Air F	orce ensure that this syst	em cannot be configured to transmi	t in bands other than those in Section 1 above.
8.	level	•		s that exceed generally accepted exposure
phe		commending Official utcher,	Signature Stephen J. Bute	Ther NOV 0 3 2008

The Office of Spectrum Management certifies Stage 4 spectrum support for this system.

This office concurs with the SPS recommendations in Section 3. Name/Title of Certifying Official Signature

Deputy Associate Administrator Distribution Classification

IRAC, SPS, FAS, EPS

Edward M. Davison

EIM.S

Section 4: NTIA CERTIFICATION

UNCLASSIFIED

Date

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MILITARY COMMUNICATIONS ELECTRONICS BOARD (MCEB)								
	EQUIPMENT FREQUENCY ALLOCATION GUIDANCE							
Military Department							Stage	
Air Force, Army, Navy	AN	/PRC-117(V)(C), Portable Manpa Multi-band,	ack Ra	adio Se			4-Ope:	rational
Section 1: ENCLOSURES								
Enclosure Number	Descript	ion]	Dated		
1		J/F 12/95	12			23 June 2008		
Section	2: OPERATI	NG CHARACTERISTICS	FOR W	нісн зор	PORT IS	CERI	IFIED	
Frequency (MHz)	Emission	Power (Yar Year)	Туре	of Servi	.ce	Ope	erating	Location
30-30.56 32-33	8K00F1D 11K0F3E	(Max Mean) 10 W	Mobi	le		US	kΡ	
34-35 36-37	16K0F3E 18K5F3E					1.		
38.25-39 40-42	22K0F1D 22K0F3E							
46.6-47 49.6-50	25K0G1D 26K0F1D							
138-144	8K00F1D							
148-149.9 150.05-150.8	11K0F3E 16K0F3E		}			}		
	18K5F3E 22K0F1D							
	22K0F3E		1					
	6K00A3E 16K0A1D	4 W						
162.0125-173.2 173.4-174	8K00F1D 11K0F3E	10 W						
225-328.6	8K00F1D							
335.4-399.9	11K0F3E 16K0F3E							
	18K5F3E 22K0F1D							
1	22K0F3E		1					
	1M20D1D 1M20G1D	5 W						
	6K00A3E 16K0A1D	4 W						
Steering Member Signature Date				. 2 4546	IRAC/SP			Page
MCEB Frequency Panel	MCEB Frequency			3 2008		1665		1 of 5
Downgrading Instructio	ns			Distribution MCEB J-12		-12 Number		
Classified by: NA Declassify on: NA				J-12 Holders J/F 12/9512/1			2/9512/1	

MILITARY COMMUNICATIONS ELECTRONICS BOARD (MCEB)

EQUIPMENT FREQUENCY ALLOCATION GUIDANCE

MCEB GUIDANCE

Equipment

CONTINUATION PAGE

AN/PRC-117(V)(C), Harris RF-300M-MP Portable Manpack Radio Set, Multi-band, Multi-mode

Section 2: OP	ERATING CHA	RACTERISTICS FOR W	HICH SUPPORT IS CERTIF	IED (continued)
Frequency (MHz) 243-270 291-318	Emission 2K40G1D 4K80G1D 22K0F1D 25K0F1D	Power (Max Mean) NA (receive-only) 20 W	Type of Service Mobile-Satellite	Operating Location US&P
406.1-420	8K00F1D 11K0F3E	10 W	Mobile	
1370-1390 1755-1850	1M20D1D 1M20G1D 5M00D1D 5M00G1D	5 W		
1227.6 1575.42	24M0G1D	NA (receive-only)	Radionavigation- Satellite	

Section 3: MCEB GUIDANCE

- 1. The enclosed application as described in Section 2 above is approved for operational use subject to the guidance below.
- 2. For the intended operation in the mobile, mobile-satellite, and radionavigation-satellite services, the subject equipment is in accordance with the US Table of Frequency Allocations, and with the ITU Table of Frequency Allocations in some ITU Regions.
- 3. Based on the information provided, the subject equipment complies with the
 - a. frequency tolerance requirements of NTIA Manual Section 5.2.1;
- transmitter primary emission requirements of NTIA Manual Section 5.2.2.2, except as noted below;
 - c. transmitter harmonic level requirements of NTIA Manual Section 5.2.2.2;
 - d. transmitter spurious level requirements of NTIA Manual Section 5.2.2.2;
- e. transmitter primary emission requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz), except as noted below:

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MILITARY COMMUNICATIONS ELECTRONICS BOARD (MCEB) EQUIPMENT FREQUENCY ALLOCATION GUIDANCE

MCEB GUIDANCE

Equipment

CONTINUATION PAGE

AN/PRC-117(V)(C), Harris RF-300M-MP Portable Manpack Radio Set, Multi-band, Multi-mode

Section 3: MCEB GUIDANCE (continued)

- f. transmitter harmonic level requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz);
- g. transmitter frequency deviation requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz);
- h. receiver spurious response attenuation requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz);
- i. receiver adjacent channel selectivity requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz), except as noted below;
- j. receiver intermodulation attenuation requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz);
- k. receiver conducted spurious emissions requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz).
- 4. Continued compliance with the provisions of the standards cited in paragraphs 3a through 3k above is mandatory.
- 5. Based on the information provided, the subject equipment does not comply with the
- a. transmitter primary emission requirements of NTIA Manual Section 5.2.2.2 for emissions 2K40G1D, 4K80G1D, and 25K0F1D;
- b. transmitter primary emission requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz) for emission 8K00F1D;
- c. transmitter spurious level requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz);
- d. receiver adjacent channel selectivity requirements of NTIA Manual Section 5.3.5.2 (for operation in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz) for emission 8K00FlD.

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MILITARY COMMUNICATIONS ELECTRONICS BOARD (MCEB) EQUIPMENT FREQUENCY ALLOCATION GUIDANCE MCEB GUIDANCE Equipment CONTINUATION PAGE AN/PRC-117(V)(C), Harris RF-300M-MP Portable Manpack Radio Set, Multi-band, Multi-mode

Section 3: MCEB GUIDANCE (continued)

- 6. In any instance of harmful interference caused by nonconformance with the provisions of the standards cited in paragraphs 5a through 5d above, the responsibility for eliminating the harmful interference normally shall rest with the agency operating in nonconformance.
- 7. Based on the information provided, the subject equipment does not comply with the harmonic level and spurious level requirements of MIL-STD-461F.
- 8. Frequency assignment requests must be submitted using Standard Frequency Action Format (SFAF) and coordinated with the cognizant area frequency coordinator in accordance with ACP 190 US SUPP-1 (C), Guide to Frequency Planning, prior to activation.
- 9. Coordination with NTIA/SPS has been completed and the following comments were received:
 - a. DOD be aware that:
- 1) in the bands 162.0125-173.2~MHz, 173.4-174~MHz, and 406.1-420~MHz, tactical communications are prohibited;
- 2) not all emission designators can be used in all bands; emissions in each band must be limited as shown in Section 2;
- 3) any use of the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz by the military services is limited to non-tactical or intrabase radio operations, in accordance with the channeling plan specified in Sections 4.3.7 and 4.3.9 of the NTIA Manual, as referenced in Footnote G5 to the National Table of Frequency Allocations.
- 4) any tactical and training operations in non-Federal bands within the 30-88 MHz range within the US&P are to be conducted on an unprotected, non-interference basis in accordance with Section 7.15.3 of the NTIA Manual.
- b. DOD take all practicable steps to protect the radio astronomy service from harmful interference in the band 1350-1400 MHz in accordance with Footnote US311 to the National Table of Frequency Allocations and the bands 322-328.6 MHz and 1330-1400 MHz in accordance with Footnote US342 to the National Table of Frequency Allocations.
- c. DOD coordinate all frequency assignment actions for the bands 225-328.6 MHz and 335.4-399.9 MHz with the Military Assignment Group, in accordance with Section 1.3.2 of the NTIA Manual.

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MILITARY COMMUNICATIONS ELECTRONICS BOARD (MCEB) EQUIPMENT FREQUENCY ALLOCATION GUIDANCE MCEB GUIDANCE Equipment CONTINUATION PAGE AN/PRC-117(V)(C), Harris RF-300M-MP Portable Manpack Radio Set, Multi-band, Multi-mode Section 3: MCEB GUIDANCE (continued)

- d. DOD be aware that operation of this system will be subject to the provisions of Section 5.1.2 of the NTIA Manual regarding its lack of compliance with the following standards:
- 1) unwanted emissions standards of Subsection 5.2.2.2 of the NTIA Manual for the use of the emissions 2K40G1D, 4K80G1D, and 25K0F1D in the band 291-318 MHz;
- 2) unwanted emissions standards of Subsection 5.3.5.2 (narrowband standard) of the NTIA Manual for the use of the emission 8K00F1D in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz;
- 3) spurious level standards of Subsection 5.3.5.2 of the NTIA Manual for the use of the emissions 8K00F1D and 11K0F3E in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz;
- 4) receiver adjacent channel selectivity standards of Subsection 5.3.5.2 of the NTIA Manual for the use of the digital receiver (emission 8K00F1D) in the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz.
- e. DOD, if frequency availability dictates, use of the bands 162.0125-173.2 MHz, 173.4-174 MHz, and 406.1-420 MHz give preference in selecting frequencies to those channels designated "DOD" or "AGA" in accordance with Section 8.3.18 of the NTIA Manual.
- f. DOD ensure that this system cannot be configured to transmit in bands other than those in Section 2 above.
- g. DOD ensure that personnel are protected from radiation levels that exceed generally accepted exposure criteria.
- 10. Operational use within the appropriate theater commands outside the United States has not been approved. Approval for operational use in the intended deployment area requires appropriate COCOM's statement(s) that the subject system has been deemed frequency supportable.

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