



DEFENSE INFORMATION SYSTEMS AGENCY
 JOINT INTEROPERABILITY TEST COMMAND
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IN REPLY
 REFER TO Networks and Transport Division (JTE)
 (Certification 375.037)

31 MAR 04

L-3 Communications Integrated Systems
 10001 Jack Finney Blvd.
 ATTN: Mr. Bryan Harrison
 Greenville, TX 75402

Dear Mr. Harrison:

Military standard (MIL-STD)-188-183 conformance testing has been completed for the MD-1324A(c)/U Modem with the RT-1747D/ARC Airborne Radio. The system is certified as meeting the applicable requirements of MIL-STD-188-183, "Interoperability Standard for 25-kHz UHF TDMA/DAMA Terminal Waveform," 2 December 1996, to the extent detailed in the enclosed summary. The tested system components and associated software versions were:

Modem	MD-1324A(c)U
Digital Signal Processor (DSP).....	VSW-TURBO-DSP-12.27
Orderwire Encryption Board (OEB).....	VSW-VM200-OEB-6.9
Airborne Radio.....	RT-1747D/ARC
Software Version	984-0392-004
Control Indicator (CI)	C-12480/U
Software Version	2.97
High Power Amplifier (HPA).....	AM-7526/ARC
Low Noise Amplifier (LNA)	Miteq AU-2A-0150-8464

Testing was conducted at the Joint Interoperability Test Command (JITC) Ultrahigh Frequency (UHF) Satellite Communications (SATCOM) Test Facility using the JITC procedures contained in "MIL-STD-188-183/MIL-STD-188-183A Conformance Test Procedure," 9 January 2002. A summary of the test results is provided in the enclosed Conformance Certification Testing Summary.

In accordance with the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6251.01A, "Ultrahigh Frequency Satellite Communications Demand Assigned Multiple Access Requirements," 21 April 2003, users are required to have terminals certified compliant to MIL-STD-188-181 series, -182 series, and -183 series. This certification declares that the MD-1324A(c)/U Modem with the RT-1747D/ARC Airborne Radio has met the MIL-STD-188-183 portion of the overall Joint Chiefs of Staff-mandated requirement.

Previous testing has demonstrated that even though a product conforms to standards, there is still a potential for incompatibility between UHF terminals that implement operational requirements differently. Therefore, prior to an initial operational capability assessment, terminal users must define the specific terminal operational requirements. Additionally, the terminal must be tested and certified for interoperability by JITC in accordance with CJCSI 6212.01C, "Interoperability and Supportability of Information Technology and National Security Systems," 20 November 2003.

JITC distributes test documentation via the JITC Electronic Report Distribution (ERD) system which uses unclassified (NIPRNET) e-mail. More comprehensive information is available via the JITC System Tracking Program (STP). The STP is accessible by .mil/.gov users on the NIPRNET at <https://stp.fhu.disa.mil>. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at <http://jit.fhu.disa.mil> (NIPRNET) or <http://199.208.204.125> (SIPRNET). JITC also provides a Demand Assigned Multiple Access (DAMA) Certification Register on the JITC public website under "Product Registers." The DAMA Certification Register can be reached directly at <http://jitc.fhu.disa.mil/reg/dama1.html>. The UHF SATCOM DAMA Test Facility homepage can be reached directly at <http://jitc.fhu.disa.mil/reg/uhfdama.htm>.

The testing agent point of contact is Norma Vega, DSN 879-1741, Commercial (520) 538-1741, e-mail vegan@fhu.disa.mil.

Sincerely,



LESLIE CLAUDIO
Chief
Networks and Transport Division

1 Enclosure:
Conformance Certification
Testing Summary

Distribution:

Joint Chiefs of Staff, Director for Command, Control, Communications, and Computer Systems (J6), Room 1E833, The Pentagon, Washington, DC 20318-6000

Joint Chiefs of Staff (J6C), ATTN: CDR Brigger, Room 1D560, The Pentagon, Washington, DC 20318-6000

Office of the Secretary of Defense, Director Operational Test and Evaluation, Room 3E318, The Pentagon, Washington, DC 20301-1700

Assistant Secretary of Defense (Command, Control, Communications, and Intelligence), ATTN: C3I, The Pentagon, Washington, DC 20301-8000

Defense Information Systems Agency (IN42), ATTN: Andy Pappas, 5600 Columbia Pike, Falls Church, VA 22041-2717

**CONFORMANCE CERTIFICATION TESTING SUMMARY
(Certification 375.037)**

1. CERTIFICATION TITLE. MIL-STD-188-183 Conformance Certification of the MD-1324A(c)/U Modem with the RT-1747D/ARC Airborne Radio.

2. PROPONENT. L-3 Communications Integrated Systems
10001 Jack Finney Blvd.
Greenville, TX 75402

3. PROGRAM MANAGER/USER POC. Mr. Bryan Harrison, (903) 408-8615
E-mail: bryan.harrison@L-3com.com

4. TESTERS. Joint Interoperability Test Command (JITC):
Mr. Larry Metz, (520) 538-5215
Mr. Raymond Hopkins, (520) 538-4275
Ms. Norma Vega, (520) 538-1741

5. SYSTEM DESCRIPTION. The MD-1324A(c)/U Modem with the RT-1747D/ARC Airborne Radio is an Ultrahigh Frequency (UHF) Satellite Communications (SATCOM) system capable of both dedicated and Demand Assigned Multiple Access (DAMA) modes of operation for air platforms. The system provides internal Transmission Security (TRANSEC) for orderwire encryption in the DAMA mode. Communications Security (COMSEC) is provided by external COMSEC devices. The AM-7526/ARC High Power Amplifier (HPA) provides 150 Watts of output power and the Miteq AU-2A-0150-8464 Low Power Amplifier (LNA) provides 20 dB of receive gain for the system.

6. TEST NETWORK DESCRIPTION. The test networks varied for each military standard (MIL-STD) requirement being verified. Testers used various configurations with a Navy 25-kHz DAMA Semi-Automatic Controller (SAC), DAMA Orderwire Processor (DOP), and commercial off-the-shelf test equipment to verify each MIL-STD requirement. Detailed test configurations and data collection information are in the appropriate sections of the JITC test procedure, "MIL-STD-188-183/MIL-STD-188-183A Conformance Test Procedure," 9 January 2002. Figure 1 shows the system configuration of the tested terminal.

7. SYSTEM CONFIGURATION. System components and software versions include:

Modem	MD-1324A(c)U
Digital Signal Processor (DSP).....	VSW-TURBO-DSP-12.27
Orderwire Encryption Board (OEB)	VSW-VM200-OEB-6.9
Airborne Radio	RT-1747D/ARC
Software Version	984-0392-004
Control Indicator (CI).....	C-12480/U
Software Version	2.97

High Power Amplifier (HPA) AM-7526/ARC
 Low Noise Amplifier (LNA) Miteq AU-2A-0150-8464

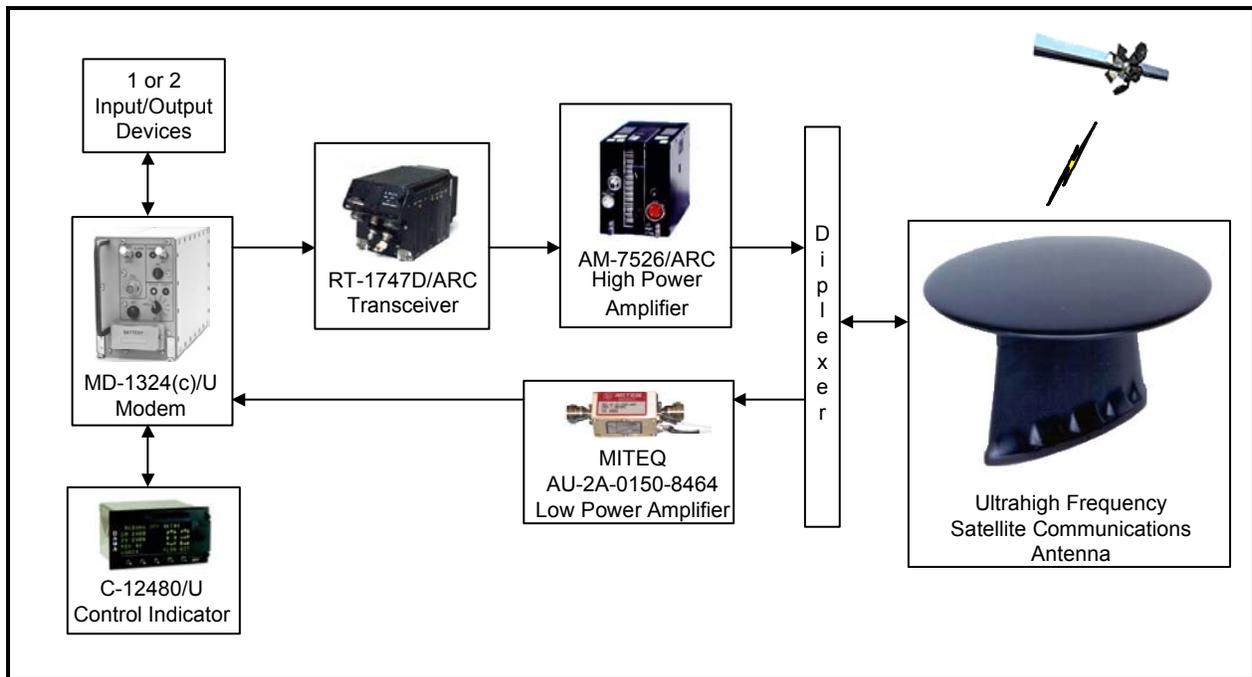


Figure 1. Tested System Configuration

8. MODES OF OPERATION. All MIL-STD-188-183 mandatory and implemented optional modes of operation and capabilities have been verified. Optional capabilities implemented in the terminal include Data Transfer, Type B Conference Requests and, Type B Guard List Reports.

9. TESTING LIMITATIONS. Details of the specific requirements that could not be verified are listed below.

a. Requirement 14, paragraph 5.1.2(5), “The first symbol following the Legendre Polynomial (LPN) shall be the first data symbol.”

1) Not Tested. Fill bits always follow the LPN. It was not possible to determine and compare the first data symbol.

2) Impact. None. No adverse operational impact is anticipated.

b. Requirement 45, paragraph 5.1.4.1.1.b(3), “The accuracy of all ranges shall be 1 time chip or better.”

1) Not Tested. The terminal has no provision for directly measuring internal accuracy of the range delay measurement. However, the RF burst timing as received at the satellite met all other MIL-STD burst timing requirements. These other burst-timing requirements are dependent upon the range delay measurement. Therefore, the range delay accuracy was indirectly verified.

2) Impact. None. No adverse operational impact is anticipated.

c. Requirement 625, paragraph 5.3.2(3), "Hardware implementation of the terminal shall include provisions for future implementation of Over the Air Rekeying (OTAR) for the orderwire."

1) Not Tested. Testing could not be performed because OTAR of the Transmission Security (TRANSEC) Key for Channel Control Orderwire (CCOW) messages has not been implemented in the Channel Controller.

2) Impact. None. Since the Channel Controller will not support OTAR of the TRANSEC Key for FCCOW messages, OTAR is not being used in this mode of operations.

10. REQUIRED STANDARDS AND CONFORMANCE. The required standard is MIL-STD-188-183, "Interoperability Standard for 25-kHz UHF TDMA/DAMA Terminal Waveform," 2 December 1996. Table 1 delineates all the MIL-STD requirements and indicates the status as "Met," "Not Met," "Not Tested," or "Not Applicable." Sufficient testing has been performed to determine the MD-1324A(c)/U Modem with the RT-1747D/ARC Airborne Radio meets the mandatory requirements set forth in MIL-STD-188-183. The following provides details and impacts to some of the noted requirements.

Requirement 2 (for DC CCOWs, #1, #2, and #3) paragraph 4.3, and requirements 550 through 579 paragraphs 5.2.2.4.7.5.a(1) through 5.2.2.4.7.7f(2), all apply to DC mode frequency switching.

1) Not Applicable. As directed by the Joint Chiefs of Staff in a memorandum with subject: "Requirement for Demand Assigned Multiple Access (DAMA) Distributed Control (DC) Mode Frequency Switching Capability," 4 February 1997, MIL-STD-188-183 requirements for DC mode frequency switching are no longer required and have been removed from MIL-STD-188-183A.

2) Impact. None. No impact is anticipated since the requirement has been removed from MIL-STD-188-183A.

11. TEST AND ANALYSIS REPORT. JITC distributes test documentation via the JITC Electronic Report Distribution (ERD) system which uses unclassified (NIPRNET) e-mail. More comprehensive information is available via the JITC System Tracking Program

(STP). The STP is accessible by .mil/.gov users on the NIPRNET at <https://stp.fhu.disa.mil>. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at <http://jit.fhu.disa.mil> (NIPRNET) or <http://199.208.204.125> (SIPRNET). JITC also provides a DAMA Certification Register on the JITC public website under "Product Registers." The DAMA Certification Register can be reached directly at <http://jitc.fhu.disa.mil/reg/dama1.html>. The UHF SATCOM DAMA Test Facility homepage can be reached directly at <http://jitc.fhu.disa.mil/reg/uhfdama.htm>. The testing agent point of contact is Norma Vega, DSN 879-1741, Commercial (520) 538-1741, e-mail vegan@fhu.disa.mil.

Table 1. MIL-STD-188-183 Requirements Matrix for the MD-1324A(c)/U Modem with the RT-1747D/ARC Airborne Radio

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
1	4.2.3	Terminal shall achieve CCOW acquisition for network entrance and synchronization data.	Met
2	4.3	The terminal shall be able to receive and process CCOW commands IAW tables IA and IB [of the MIL-STD] and generate RCCOW requests/responses IAW tables IIA and IIB [of the MIL-STD].	Met (Note)
Note: As directed by the JCS, requirement 2 (for DC CCOWs, #1, #2, and #3), and requirements 550 through 579 are applicable to DC mode frequency switching and are no longer required.			
3	4.4(1)	The terminal transmit power received at the satellite shall be at least -163 decibels relative to 1 watt (dBW).	Not Testable (Note)
Note: General statement/definition. Not testable.			
4	4.4(2)	The terminal receiver system shall be designed to provide error-free reception of CCOW burst for at least 999 of 1000 CCOW bursts, with a confidence of 98 percent.	Met
5	4.4(3)	It shall be assumed that the controller power at the satellite is at least -163 dBW, and error free reception implies successful acquisition of the burst.	Not Applicable (Note)
Note: This is a Channel Controller requirement and, therefore, is not applicable to the terminal.			
6	4.4(4)	The terminal specifications shall define parameters that must be met to comply with requirements of this paragraph.	Not Testable (Note)
Note: General statement/definition. Not testable.			
7	5.1.1b(1)	The terminal shall transmit only in a time slot that is part of the current frame format.	Met
8	5.1.1b(2)	Format configuration and restrictions shall be as described in 5.1.1.1 and 5.1.1.2.	Not Testable (Note)
Note: General statement/definition. Not testable.			
9	5.1.1b(3)	The terminal shall be able to operate within this frame format structure.	Met
10	5.1.2(1)	Each RF transmission shall begin with a synchronization preamble.	Met
11	5.1.2(2)	The preamble structure, as it relates to the burst rates and slot types, shall be in accordance with figure 6 [of the MIL-STD].	Met
12	5.1.2(3)	The latter portion of the synchronization preamble shall be a Legendre polynomial (LPN) whose length is defined in figure 6 [of the MIL-STD] and whose content is specified in table III [of the MIL-STD].	Met
13	5.1.2(4)	The terminal's specification for bit error ratio (BER) and acquisition performance under degraded link conditions shall be used to determine how many LPN bits must be correctly received for a burst to be considered acquired.	Met
14	5.1.2(5)	The first symbol following the LPN shall be the first data symbol.	Not Tested (Note)
Note: Fill bits always follow the LPN. It was not possible to determine and compare the first data symbol.			
15	5.1.3c(1)	All RF transmissions shall occur within the allocated times of the slots specified in 5.1.3.1 through 5.1.3.5.	Met
16	5.1.3c(2)	The terminal's switching time shall not exceed 875 microseconds.	Met
17	5.1.3c(3)	Terminals shall inhibit transmission for at least 500 microseconds of the leading zeros (ones for the QPSK I channel) in figure 6 [of the MIL-STD] preamble structures.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
18	5.1.3d(1)	Duration of specified burst transmission shall be a function of slot type, baseband rate, burst rate, FEC coding (see 5.4.1), and fill bits required due to interleaving (see 5.4.3).	Not Testable (Note)
Note: General statement/definition. Not testable.			
19	5.1.3d(2)	Burst timing requirements and the component parts of all bursts for all defined slots shall be as specified in table IV [of the MIL-STD].	Met
20	5.1.3.e	The terminal's frame time delay for each baseband data rate shall not exceed the maximum corresponding values for each rate shown in table 4-1 of FSCS-212-16D.	Met
21	5.1.3.2(1)	RCCOW slot timing shall be as specified in table V [of the MIL-STD].	Met
22	5.1.3.2(2)	RCCOW reception shall start at time chip 18253 for format number 1 (time chip 5837 for format number 2).	Met
23	5.1.3.2(3)	Requirements for content and use of RCCOW shall be as specified in 5.2.2.2 for AC mode and 5.2.2.5 for DC mode.	Met
24	5.1.3.2(4)	Requirements for RCCOW transmit decision shall be as specified in 5.2.2.3 for AC mode and 5.2.2.6 for DC mode.	Met
25	5.1.3.3(1)	The user terminal shall use a range processing method discussed in 5.1.4 (active or passive ranging).	Met
26	5.1.3.3(2)	Burst transmissions (other than ranging) shall be inhibited by the terminal when it has been determined by any ranging method that the range uncertainty exceeds 0.875-ms.	Met
27	5.1.3.3a(1)	The range time slot is a shared slot and shall be used only to measure range to the satellite.	Met
28	5.1.3.3a(2)	If the average relative velocity between the satellite and the user terminal during a ranging interval is greater than 180 nautical miles per hour, other methods of updating bursts transmission time shall be used, including, but not limited to, the methods listed in this paragraph.	Met
29	5.1.3.3b(1)	The requirement for terminals to maintain accurate timing shall be mandatory.	Not Testable (Note)
Note: General statement/definition. Not testable.			
30	5.1.3.3b(2)	Range and link-test time slots shall not be used by terminals for ranging except in accordance with the requirements specified in 5.1.4.1.	Met
31a	5.1.3.3b(3)	Range slot timing shall be as specified in table V [of the MIL-STD].	Met
31b	Footnote on Page 37 [of the MIL-STD]	If range \leq 241.87-ms, the guard time at the start of the slot shall be reduced by 62 time chips to prevent overlapping a CCOW reception with a ranging transmission.	Met
32	5.1.3.4(1)	Link-test-slot timing shall be as specified in table V [of the MIL-STD].	Met
33	5.1.3.4(2)	The link-test time slot shall be 1293 time chips (67.344-ms) in duration with a variable-length guard time allocated at the end of the slot.	Met
34	5.1.3.4(3)	The link test reception shall start at time chip 4544.	Met
35	5.1.3.4(4)	Only one terminal at a time shall perform a link test.	Met
36	5.1.3.4(5)	Requirements for using the link test slot in support of the ranging function shall be as specified in 5.1.4.1.	Met
37	5.1.3.5(1)	User-segment-slot timing shall be as specified in tables VI through X [of the MIL-STD].	Met
38	5.1.3.5(2)	All RF transmissions shall occur to allow reception within the allocated time slots specified in these tables [of the MIL-STD].	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
39	5.1.4	If terminals use range and link-test time slots to perform active ranging, the algorithms specified in 5.1.4.1 and its subparagraphs shall be used.	Met
40	5.1.4.1.1a(1)	After achieving CCOW acquisition, the terminal shall select the first available odd numbered frame to perform a range measurement in the range time slot.	Met
41	5.1.4.1.1a(2)	If the first random range measurement is unsuccessful, the terminal shall generate a random number (y) between 1 and 128, wait 2y frames, and perform a range measurement using the range time slot to be received in the odd-numbered frame that is 2y frames following the unsuccessful measurement.	Met
42a	5.1.4.1.1a(3)	If this range measurement is unsuccessful, the user terminal shall wait 256 - 2y frames before generating another random number (y)..	Met
42b	5.1.4.1.1a(4)	...and shall repeat the process.	Met
43	5.1.4.1.1b(1)	The range estimate used to set uplink timing for a ranging transmission shall be dithered, in 1-time chip increments, between 251.35- and 257.97-ms when in the random range mode or when range has not been determined.	Met
44	5.1.4.1.1b(2)	As long as range remains determined, the terminal's next ranging transmission shall be positioned so as to attempt to fall exactly in the center of its time slot.	Met
45	5.1.4.1.1b(3)	The accuracy of all ranges shall be 1 time chip or better.	Not Tested (Note)
Note: A terminal has no provision for measuring the internal accuracy of the range delay measurement.			
46	5.1.4.1.2	Two methods of dedicated ranging shall be employed, depending on the terminal's ranging epoch internal requirements.	Not Testable (Note)
Note: General statement/definition. Not testable.			
47	5.1.4.1.2.1(1)	Terminals that do not require range updates within 1024 frames shall not transmit during even numbered range slots.	Not Applicable (Note)
48	5.1.4.1.2.1(2)	Upon successful completion of ranging in the random access mode, the terminal shall continuously monitor link test slots in even numbered frames.	
49	5.1.4.1.2.1a(1)	The terminal shall maintain and update a ranging activity database for 1024 frame times by identifying and flagging those frames with activity in the ELT slot.	
50	5.1.4.1.2.1a(2)	The terminal shall then generate a random number (X) between 1 and 64, wait 2X frames, and identify the next unused ELT slot, based on flags set during the preceding 1024 frames.	
51	5.1.4.1.2.1a(3)	The terminal shall perform a dedicated range measurement in that unused ELT slot and, when successful, every 1024 frames thereafter.	
52	5.1.4.1.2.1b(1)	If the terminal instead continues to perform dedicated ranging, it shall use the established ELT activity database to help identify the next unused ELT slot.	
53	5.1.4.1.2.1b(2)	The terminal again shall generate a random number (X) between 1 and 64, wait 2X frames, and identify the next unused ELT slot, based on flags set during the preceding 1024 frames.	
54	5.1.4.1.2.1b(3)	The terminal shall perform a dedicated range measurement in that unused ELT slot and, when successful, every 1024 frames thereafter.	
55	5.1.4.1.2.1b(4)	This process shall be repeated by the terminal as necessary.	
Note: The terminal performs Method 2 ranging only.			

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
56	5.1.4.1.2.2a(1)	Upon successful completion of ranging in the random access mode, the terminal shall continuously monitor link test slots in the even numbered frames.	Met
57	5.1.4.1.2.2a(2)	The terminal shall maintain and update a ranging activity database of 1024 frame times by identifying and flagging those frames with activity in the ELT slot.	Met
58	5.1.4.1.2.2b(1)	The terminal shall then generate a random number (X) between 1 and 64, wait 2X frames, and identify the next unused ELT slot, based on flags set during the preceding 1024 frames.	Met
59	5.1.4.1.2.2b(2)	The terminal shall then determine if this frame number equals $256N + 2$, where N is any positive integer.	Met
60	5.1.4.1.2.2b(3)	If true, this frame number shall be excluded by the terminal as a potential dedicated ranging frame, since the range slot in a frame with this number is reserved for the channel controller.	Met
61	5.1.4.1.2.2b(4)	In such a case, the frame for the next unused ELT slot shall be identified.	Met
62	5.1.4.1.2.2b(5)	The terminal shall attempt to range in the identified unused ELT slot (called frame R), or in the even numbered frame range slot in frame R - 512, whichever comes first.	Met
63	5.1.4.1.2.2c(1)	The terminal shall then perform dedicated ranging by alternating between the ELT slot and the even numbered frame ranging slot each 512 frame periods.	Met
64	5.1.4.1.2.2c(2)	If the terminal instead continues to perform dedicated ranging, it shall use the established ELT activity database to help identify the next unused ELT slot.	Not Applicable (Note)
65	5.1.4.1.2.2c(3)	The terminal again shall generate a random number (X) between 1 and 64, wait 2X frames, and identify the next unused ELT slot, based on flags set during the preceding 1024 frames.	
66	5.1.4.1.2.2c(4)	The process described above shall then be repeated as required.	
Note: Optional Requirements. The terminal reverts to the random ranging algorithm to perform a range measurement when a dedicated range measurement is unsuccessful.			
67	5.2.1(1)	Baseband data from any of the I/O ports shall be selectable through orderwire commands.	Met
68	5.2.1(2)	Baseband data shall be presented to the FEC encoder in the order it is received from the baseband equipment.	Met
69	5.2.1(3)	Baseband data bit number one shall be the first data bit sent into the encoder.	Met
70	5.2.1.1(1)	Each of the orderwires (CCOW and RCCOW) shall be composed of thirteen 8-bit bytes.	Met
71	5.2.1.1(2)	The ordering of these bits and the operation of the cyclic redundancy check (CRC) shall be as described in 5.2.1.2 through 5.2.1.3.	Met
72	5.2.1.1(3)	Except for calculating CRC, terminals shall ignore (unused bits).	Met
73	5.2.1.2	The thirteen 8-bit bytes of the orderwire shall be presented to the encoder in the following order: LSB of byte 1 through MSB of byte 1, LSB of byte 2 through MSB of byte 2, LSB of byte 13 through MSB of byte 13.	Met
74	5.2.1.3(1)	In addition to convolutional encoding and interleaving, orderwires shall undergo 2-byte CRCs on their 13 bytes.	Met
75	5.2.1.3(2)	The parity bytes shall be sent within the structure of each orderwire.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
76	5.2.1.3(3)	The parity of a received orderwire command shall be recalculated and compared to the received parity.	Met
77a	5.2.1.3(4)	If the parities do not match, the orderwire shall be discarded;...	Met
77b	5.2.1.3(5)	...otherwise, it shall be processed.	Met
78	5.2.1.3(5)	To encode the message polynomial G(X) shall first be multiplied by X ⁿ .	Not Testable (Note)
79	5.2.1.3(6)	The result shall be divided by P(X) to form both the quotient Q(X) and the remainder R(X).	
80	5.2.1.3(7)	This CRC method shall be the IBM Binary Synchronous Communications (BSC) CRC-16 Protocol.	
Note: General statements/definitions. Not testable.			
81	5.2.1.3(8)	The CRC shall be calculated using thirteen 8-bit bytes.	Met
82	5.2.1.3(9)	The locations that the CRC will occupy in CCOW and RCCOW messages shall be set to zeros during the CRC calculation.	Not Testable (Note)
Note: General statement/definition. Not testable.			
83	5.2.1.3(10)	Then the zeros shall be replaced by the calculated CRC before the message is transmitted.	Met
84	5.2.2	Field definitions of the CCOW and RCCOW bursts for both AC and DC operating modes shall be as indicated in appendixes A and B, respectively.	Met
85	5.2.2.1	The terminal shall comply with CCOW command no later than the next frame after receiving the CCOW.	Met
86a	5.2.2.1.1(1)	All terminal units shall record in what frame they transmitted an RCCOW...	Met
86b	5.2.2.1.1(2)	...and, exactly three frames later, shall decode the CALL ACK field to find out what type of CALL ACK they have received.	Met
87	5.2.2.1.1(3)	If the terminal does not receive a CALL ACK, it shall proceed in accordance with paragraph 5.2.2.3.3.	Met
88	5.2.2.1.2	The terminal interpretation of these codes shall be as follows:	Met
89	5.2.2.1.2a	The terminal unit shall not transmit an RCCOW that is below the RCCOW precedence.	Met
90	5.2.2.1.2b	Specifies that the terminal unit whose user number matches the number given by the CCOW shall transmit a conference list RCCOW in the next frame.	Met
91	5.2.2.1.2c	Specifies that one particular terminal unit identified in the CCOW by its user number has been dedicated to the RCCOW slot in the next frame.	Met
92	5.2.2.1.2e	Specifies that the terminal unit identified by its user number shall transmit a Status Report A: Group 1 RCCOW in the next frame.	Met
93	5.2.2.1.2f	Specifies that the terminal unit identified by its user number shall transmit a Status Report A: Group 2 RCCOW in the next frame.	Met
94	5.2.2.1.2g	Specifies that the terminal unit identified by its user number shall transmit a Status Report B: Group 1 RCCOW in the next frame.	Met
95	5.2.2.1.2h	Specifies that the terminal unit identified by its user number shall transmit a Status Report B: Group 2 RCCOW in the next frame.	Met
96	5.2.2.1.2i	Specifies that the terminal unit identified by its user number shall transmit a Link Test Results RCCOW in the next frame.	Met
97	5.2.2.1.2j	Specifies that the terminal unit identified by its user number shall report the first group of numbers in its guard lists in the next frame.	Met
98	5.2.2.1.2k	Specifies that the terminal unit identified by its user number shall report the second group of numbers in its guard lists in the next frame.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
99	5.2.2.1.2l	Specifies that the terminal unit identified by its user number shall report the third group of numbers in its guard lists in the next frame.	Met
100	5.2.2.1.2m	Specifies that the terminal unit identified by its user number shall report the fourth group of numbers in its guard lists in the next frame.	Met
101	5.2.2.1.2n	Specifies that the terminal unit with five to eight ports guarding at least 14 numbers and identified by its user number shall report guard numbers not reported in Guard List Report: Groups 1-4 in the next frame.	Met
102	5.2.2.1.2o	Specifies that terminal units shall inhibit the transmission of any RCCOW in the next frame.	Met
103	5.2.2.1.3	All terminals with 16-bit addresses shall assume the MSB (Bit 16) is a zero when receiving the Master Frame CCOW.	Met
104	5.2.2.1.7.1c(1)	If the frame format has not changed from the previous master frame, no terminal action shall be taken.	Met
105	5.2.2.1.7.1c(2)	If the frame format has changed, the terminal shall check its slot connects and disconnect any that existed in the changed segment(s) of the frame format.	Met
106	5.2.2.1.7.1h(1)	If the DC flag is reset, the terminal shall operate in the AC mode.	Met
107	5.2.2.1.7.1h(2)	If the DC flag is set, the terminal shall operate in the DC mode.	Met
108	5.2.2.1.7.2	A terminal shall disconnect its I/O port(s) when it receives a slot disconnect order.	Met
109	5.2.2.1.7.2a	If the slot number is connected to the terminal I/O port, and if the slot connect frequency is the same as the frequency on which the terminal is receiving the CCOW, the terminal shall perform a slot disconnect.	Met
110a	5.2.2.1.7.2b(1)	The terminal shall compare this (User #1 ID) ID number with the port numbers...	Met
110b	5.2.2.1.7.2b(2)	...and shall also search the guarded list of each port for the number.	Met
111	5.2.2.1.7.2b(3)	If no match is found, no terminal action shall be taken.	Met
112	5.2.2.1.7.2b(4)	If a match is found, the terminal I/O port shall be disconnected.	Met
113	5.2.2.1.7.2c	This data field (User #2 ID) shall cause the same terminal action and results for the User #2 ID number as described for the User #1 ID number.	Met
114	5.2.2.1.7.2d	User #1 All Ports Flag - All ports of the terminal identified by User #1 shall be disconnected.	Met
115	5.2.2.1.7.2e	User #2 All Ports Flag - All ports of the terminal identified by User #2 shall be disconnected.	Met
116	5.2.2.1.7.2f	The presence of nonzero data in the TIME #1 field indicates that the terminal I/O port identified by the User #1 ID number shall perform a timed disconnect; in other words, the port shall disconnect when the identified amount of time has elapsed.	Met
117	5.2.2.1.7.2g	The TIME #2 field shall cause the same terminal action for the User #2 ID number, as described in subparagraph f for TIME #1.	Met
118	5.2.2.1.7.3(1)	A terminal shall connect its I/O port(s) when it receives a slot connect order.	Met
119	5.2.2.1.7.3(2)	The slot connect shall be as follows:	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS																				
120	5.2.2.1.7.3a	The port specified in c and d below shall be configured to operate at the bit rate corresponding to the code as shown below: <table border="1"> <thead> <tr> <th>BPS</th> <th>CODE</th> <th>BPS</th> <th>CODE</th> </tr> </thead> <tbody> <tr> <td>75</td> <td>000</td> <td>2400</td> <td>100</td> </tr> <tr> <td>300</td> <td>001</td> <td>4800</td> <td>101</td> </tr> <tr> <td>600</td> <td>010</td> <td>16000</td> <td>110</td> </tr> <tr> <td>1200</td> <td>011</td> <td>SPARE</td> <td>111</td> </tr> </tbody> </table>	BPS	CODE	BPS	CODE	75	000	2400	100	300	001	4800	101	600	010	16000	110	1200	011	SPARE	111	Not Applicable (Note)
BPS	CODE	BPS	CODE																				
75	000	2400	100																				
300	001	4800	101																				
600	010	16000	110																				
1200	011	SPARE	111																				
Note: A terminal does not use the Bit Rate field to determine the actual data rate. The actual data rate is derived from the Slot Number field.																							
121	5.2.2.1.7.3b	Slot Number - These bits indicate the time slot to which the terminal I/O port shall be connected.	Met																				
122a	5.2.2.1.7.3c(1)	The terminal shall compare the User #1 ID with its port numbers...	Met																				
122b	5.2.2.1.7.3c(2)	...and shall also search the guard list of each port for the number.	Met																				
123	5.2.2.1.7.3c(3)	If a match is found, the I/O port that has been identified shall be connected.	Met																				
124a	5.2.2.1.7.3d(1)	The terminal shall compare the User #2 ID with its port numbers...	Met																				
124b	5.2.2.1.7.3d(2)	...and shall also search the guard list of each port for the number.	Met																				
125	5.2.2.1.7.3d(3)	If a match is found, the I/O port that has been identified shall be connected.	Met																				
126	5.2.2.1.7.3e	If the User #1 Receive-Only Flag is set, the User #1 ID number port shall be connected with a receive-only limitation.	Met																				
127	5.2.2.1.7.3.f	If the User #2 Receive-Only Flag is set, the User #2 ID number port shall be connected with a receive-only limitation.	Met																				
128	5.2.2.1.7.3g(1)	The presence of zero in the TIME field indicates that the I/O port identified by either user number shall have an unlimited slot assignment time.	Met																				
129	5.2.2.1.7.3g(2)	If the TIME field is nonzero, the I/O ports identified by the user numbers shall connect for the defined time period.	Met																				
130	5.2.2.1.7.3g(3)	The ports shall disconnect when this time has elapsed.	Met																				
131	5.2.2.1.7.3h(1)	When the Pre-set Channel Code is received and the IDs match, the I/O port shall be checked to determine if it is connected to a slot.	Met																				
132	5.2.2.1.7.3h(2)	If the port is already connected, but not to the same pre-set channel code as in the CCOW, then the connect shall be ignored.	Met																				
133	5.2.2.1.7.3h(3)	If the connect order is accepted, the connect pre-set channel code shall be stored in non-volatile memory.	Not Applicable (Note)																				
Note: This requirement was deleted by change notice one.																							
134	5.2.2.1.7.3h(4)	Appendix C table 30 IB [of the MIL-STD] contains frequency pair information which shall be used for the terminal's pre-set channel code database.	Met																				
135	5.2.2.1.7.4a(1)	Each terminal unit shall compare the User Number with its base address.	Met																				
136	5.2.2.1.7.4a(2)	If a match is found, the CCOW command shall be executed.	Met																				
137	5.2.2.1.7.4b	The T Flag, when set, indicates that an ongoing terminal link test shall be terminated.	Met																				
138	5.2.2.1.7.4c	The 9.6-kbps Flag A, when set, indicates that the terminal link test shall be performed at 9.6-kbps.	Met																				
139	5.2.2.1.7.4d	The 19.2-kbps Flag B, when set, indicates that the terminal link test shall be performed at 19.2-kbps.	Met																				
140	5.2.2.1.7.4e	The 32-kbps Flag C, when set, indicates that the terminal link test shall be performed at 32-kbps.	Met																				

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
141	5.2.2.1.7.4f(1)	The Dedicated Range Frame-Number field shall be 12 bits wide and shall represent the dedicated receive frame count for the terminal to range in.	Met
142	5.2.2.1.7.4f(2)	The Dedicated Range Frame-Number field shall have a value of zero when the command is a link test assignment.	Met
143	5.2.2.1.7.4f(3)	When the Dedicated Range Frame-Number field is received, the terminal shall store it as new status information.	Met
144	5.2.2.1.7.4f(4)	Every frame time the Dedicated Range Frame-Number shall be compared to the first 12 bits of the current frame count.	Met
145	5.2.2.1.7.4f(5)	If there is a match, the terminal shall perform a range measurement in the identified frame, unless the terminal configuration prohibits ranging.	Met
146	5.2.2.1.7.5	The terminal shall do no processing of the Channel Control Handover Request unless it has the functional capability to become a channel controller.	Not Applicable (Note)
Note: This terminal does not have optional channel control capabilities.			
147	5.2.2.1.7.6a(1)	A terminal shall compare the User #1 ID with its base address.	Met
148	5.2.2.1.7.6a(2)	If a match is found, the terminal shall change its frame format to that which is given in the Format #1 field in subparagraph d, below.	Met
149	5.2.2.1.7.6b(1)	A terminal shall compare the User #2 ID with its base address.	Met
150	5.2.2.1.7.6b(2)	If a match is found, the terminal shall change its frame format to that which is given in the Format #2 field in subparagraph e, below.	Met
151	5.2.2.1.7.6c(1)	When the All-User Flag is set, all terminals on the RF channel shall change their frame formats.	Met
152	5.2.2.1.7.6c(2)	The new format shall be Format #1.	Met
153	5.2.2.1.7.7a(1)	A terminal shall compare the User #1 ID field with its port numbers.	Met
154	5.2.2.1.7.7a(2)	If a match is found, the call request for the port shall be cancelled.	Met
155	5.2.2.1.7.7b(1)	A terminal shall compare the User #2 ID field with its port numbers.	Met
156	5.2.2.1.7.7b(2)	If a match is found, the call request for the port shall be cancelled.	Met
157	5.2.2.1.7.7c(1)	A terminal shall compare the User #3 ID field with its port numbers.	Met
158	5.2.2.1.7.7c(2)	If a match is found, the call request for the port shall be cancelled.	Met
159	5.2.2.1.7.8	Channel assignment shall be performed in accordance with 5.2.2.1.7.8.1 and 5.2.2.1.7.8.2.	Met
160	5.2.2.1.7.8.1(1)	The effect of changing a terminal's frequency code is that the terminal shall transmit and receive orderwires on another RF channel.	Met
161	5.2.2.1.7.8.1(2)	If either the terminal ID matches or all terminals are directed to change their channel, the new frequency code shall replace the existing frequency code.	Met
162	5.2.2.1.7.8.1(3)	The terminal shall determine, based on the frequency field (subparagraph a) and appendix C [of the MIL-STD], if the assigned channel is 5- or 25-kHz.	Met
163	5.2.2.1.7.8.1(4)	If the channel is 5-kHz, the DAMA waveform shall be in accordance with MIL STD 188-182.	Met (Note)
Note: Testing was limited to achieving downlink and uplink synchronization on a 5-kHz DAMA channel, and establishing communications. Compliance to MIL-STD requirements is addressed during separate MIL-STD-188-182A testing.			
164	5.2.2.1.7.8.1(5)	If the assigned channel is 25-kHz, the DAMA waveform shall be in accordance with 188-183.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
165	5.2.2.1.7.8.1(6)	If the terminal cannot achieve downlink and uplink acquisition within 90 seconds, the terminal shall return to the previous channel of operation.	Met
166	5.2.2.1.7.8.1(7)	If the terminal is switching from one 25-kHz DAMA channel to another, then the terminal shall retain all RCCOWs that are held in queue prior to the change.	Met
167a	5.2.2.1.7.8.1(8)	If the terminal is switching from a 25-kHz DAMA channel to a 5-kHz DAMA channel, then the terminal shall clear (i.e., delete) all RCCOWs that are held in queue,...	Met
167b	5.2.2.1.7.8.1(9)	...and shall send a ROW: LOGIN message on the new 5-kHz channel.	Met
168	5.2.2.1.7.8.1(10)	After a terminal is assigned to a new TDMA channel (5- or 25-kHz), it shall not return to the previous channel or change to any other channel unless directed by the channel controller.	Met
169	5.2.2.1.7.8.1a	The terminal shall use the Channel Frequency Code, based on appendix C, table 30 IA [of the MIL-STD], to determine the satellite channel on which to operate.	Met
170	5.2.2.1.7.8.1b	The All-Change Flag, when set, indicates that all terminals on the channel shall change their frequency codes.	Met
171	5.2.2.1.7.8.1c	If the User #1 ID is the same as the terminal's base address, the terminal shall change its frequency code.	Met
172	5.2.2.1.7.8.1d	If the User #2 ID is the same as the terminal's base address, the terminal shall change its frequency code.	Met
173	5.2.2.1.7.8.1.e	If the User #3 ID is the same as the terminal's base address, the terminal shall change its frequency code.	Met
174	5.2.2.1.7.8.2(1)	Terminals shall comply with the configuration of the assigned channel.	Met
175	5.2.2.1.7.8.2(2)	They shall return to the channel of origin (the channel where they received the assignment) under either of the following conditions: After communications are completed, or after the timer expires.	Met
176	5.2.2.1.7.8.2(3)	If the terminal returns to the channel of origin for a reason other than expiration of the timer, it shall respond with an RCCOW Call Complete message after regaining transmit timing on the channel of origin.	Met
177	5.2.2.1.7.8.2a	The terminal shall use the Channel Frequency Code, based on appendix C, table 30-IA [of the MIL-STD], to determine the satellite channel on which to operate.	Met
178	5.2.2.1.7.8.2b	The All-Change Flag, when set, indicates that all terminal on the channel shall change their frequency codes.	Met
179	5.2.2.1.7.8.2c	If the User #1 ID field is the same as the terminal's base address, the terminal shall change its frequency code.	Met
180	5.2.2.1.7.8.2d	If the User #2 ID field is the same as the terminal's base address, the terminal shall change its frequency code.	Met
181	5.2.2.1.7.8.2e(1)	The 6-bit Time field shall be binary numbers 1 through 59.	Met
182	5.2.2.1.7.8.2e(2)	The presence of nonzero data in the Time field indicates that the terminals identified by User ID numbers shall perform a timed slot or channel disconnect; in other words, the terminals shall return to the channel of origin when the identified amount of time has elapsed.	Met
183	5.2.2.1.7.9a(1)	The terminal shall compare the User ID number with its port numbers.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
184	5.2.2.1.7.9a(2)	If a match is found, the terminal shall check the total number of guard numbers for all ports.	Met
185	5.2.2.1.7.9a(3)	If there is less than the maximum that can be guarded by a terminal, the guard numbers defined in b and c (below) shall be entered into the specific port guard list.	Met
186	5.2.2.1.7.9a(4)	Guard lists shall be entered in the order received, up to the maximum number that can be guarded.	Met
187	5.2.2.1.7.9b	As described in a (above), the Guard #1 shall be entered into the port guard list.	Met
188	5.2.2.1.7.9c	As described in a (above), the Guard #2 shall be entered into the port guard list.	Met
189	5.2.2.1.7.10a(1)	The terminal shall compare the User ID number with its port numbers.	Met
190	5.2.2.1.7.10a(2)	If a match is found, the terminal shall search the guard list for the guard numbers defined in b and c (below).	Met
191	5.2.2.1.7.10a(3)	If they are found, they shall be deleted from the guard list.	Met
192	5.2.2.1.7.10b	The Guard #1 field contains a guard number that the terminal shall delete from its guard list.	Met
193	5.2.2.1.7.10c	The Guard #2 field contains a guard number that the terminal shall delete from its guard list.	Met
194	5.2.2.1.7.11a(1)	The terminal shall compare the Called Party number with its port numbers and search the guard list of each port for the number.	Met
195	5.2.2.1.7.11a(2)	For the first match found, the command shall be executed.	Met
196	5.2.2.1.7.12a(1)	The terminal shall compare the Calling Party #1 number with its port numbers.	Met
197	5.2.2.1.7.12a(2)	If a match is found, the terminal shall respond in accordance to the direction specified in the terminal system specification.	Met
198	5.2.2.1.7.12b(1)	The terminal shall compare the Calling Party #2 number with its port numbers.	Met
199	5.2.2.1.7.12b(2)	If a match is found, the terminal shall respond in accordance to the direction specified in the terminal system specification.	Met
200	5.2.2.1.7.13a(1)	The terminal shall compare the Called Party number with its port numbers.	Met
201	5.2.2.1.7.13a(2)	If a match is found, the terminal shall output the data with precedence, as specified in subparagraphs b and c, below.	Met
202	5.2.2.1.7.14a	The terminal shall compare the Called Party number with the user ID number assigned to each of its port numbers for a match.	Met
203	5.2.2.1.7.14.1(1)	After an information request has been received by a terminal, it shall send an information report before sending any other RCCOW.	Met
204	5.2.2.1.7.14.1(2)	No other RCCOW messages shall be sent before the information report.	Met
205	5.2.2.1.7.14.2(1)	The Constant Key Alarm Information Request message shall be used by the terminal to automatically disconnect a port that has been illegally transmitting on a slot for greater than 17 minutes.	Met
206	5.2.2.1.7.14.2(2)	If there is a match between the terminal's port number and the user ID number in the Called Party field of the Information Request, and the code is 4, the terminal shall automatically disconnect its port from the slot.	Met
207	5.2.2.1.7.15	When a terminal receives the Zeroize CCOW command, it shall zeroize the key storage memories of the KG and disconnect all slot connects.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
208	5.2.2.1.7.15a(1)	The terminal shall compare the Called Party #1 number with Called Party #2 and with its base user ID.	Met
209	5.2.2.1.7.15a(2)	If all three match, the command shall be executed by terminal control signals that cause the KG to erase stored keys.	Met
210	5.2.2.1.7.15b	If the Called Party #2 is not an exact copy of the Called Party #1 data field, the command shall not be executed.	Met
211	5.2.2.1.7.16	All terminals receiving the Time Slot Preparation command shall change the manner in which they prepare their orderwire KGs for CCOW and RCCOW.	Met
212	5.2.2.1.7.16a	The terminal action shall be either: a Time Slot Zero (TS0) preparation, or Selection of new variables to prepare the KG.	Met
213	5.2.2.1.7.16b(1)	If the TS0 Flag is set, all terminals shall perform a TS0 at the frame count given in this CCOW.	Met
214	5.2.2.1.7.16b(2)	The result shall be that new variables are used to prepare the KG and that the frame count is reset to 24.	Met
215	5.2.2.1.7.16c(1)	If the Change KG Day Flag is set, all terminals shall change the KG day variable used to prepare the KG.	Met
216a	5.2.2.1.7.16c(2)	The change shall occur at the frame count given in this CCOW,...	Met
216b	5.2.2.1.7.16c(3)	...and the new KG day shall be the one given in this CCOW.	Met
217	5.2.2.1.7.16d(1)	If the Change Memory Flag is set, all terminals shall change the KG memory in use.	Met
218	5.2.2.1.7.16d(2)	The change shall occur at the frame count given in this CCOW, and the new KG memory shall be that which is given in this CCOW.	Met
219	5.2.2.1.7.17a(1)	The terminal shall compare the Calling Party #1 number with its port numbers.	Met
220	5.2.2.1.7.17a(2)	If a match is found, the command shall be executed for the specific port.	Met
221	5.2.2.1.7.17b(1)	The terminal shall compare the Calling Party #2 number with its port numbers.	Met
222	5.2.2.1.7.17b(2)	If a match is found, the command shall be executed for the specific port.	Met
223	5.2.2.1.7.18(1)	If the Transmit flag is reset, it indicates that all terminals shall inhibit their RF transmissions.	Met
224	5.2.2.1.7.18(2)	The terminal shall disconnect all I/O ports connected to time slots.	Met
225	5.2.2.2(1)	The terminal shall be able to send 14 different mandatory RCCOW messages in the AC mode.	Met
226	5.2.2.2(2)	If the terminal is required by its equipment performance specification to use RCCOW Data Transfer messages, it shall also receive RCCOW messages.	Not Applicable (Note)
Note: Optional requirement not implemented in this terminal.			
227	5.2.2.2(3)	There shall be three common fields in the RCCOW message formats: (1) The STATION ID field, (2) The MESSAGE CODE field, and (3) The PARITY field.	Not Testable (Note)
Note: General statement/definition. Not testable.			
228	5.2.2.2(4)	The terminal shall test the RCCOW assignment portion of the CCOW in every frame to determine if it is expected to respond with an RCCOW.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
243	5.2.2.2.4.1e(2)	This Status Report B RCCOW shall be generated whenever a terminal port configuration change is made.	Met
244	5.2.2.2.4.1f	The Port Bit Rate data field shall be a 3-bit code, indicating the bit rate of the I/O port that initiated the RCCOW. The codes are as follows: 75 BPS Code 000 2400 BPS Code 100 300 BPS Code 001 4800 BPS Code 101 600 BPS Code 010 16000 BPS Code 110 1200 BPS Code 011 SPARE Code 111	Met
245	5.2.2.2.4.1g	The Port #1 (#5) Number in Guard List shall contain a binary count from 0 to 15, which shall be the count of guard numbers in port #1 (#5).	Met
246	5.2.2.2.4.1h	The Port #2 (#6) Number in Guard List shall contain a binary count from 0 to 15, which shall be the count of guard numbers in port #2 (#6).	Met
247	5.2.2.2.4.1i	The Port #3 (#7) Number in Guard List shall contain a binary count from 0 to 15, which shall be the count of guard numbers in port #3 (#7).	Met
248	5.2.2.2.4.1j	The Port #4 (#8) Number in Guard List shall contain a binary count from 0 to 15, which shall be the count of guard numbers in port #4 (#8).	Met
249	5.2.2.2.4.1k	The Port #1 (#5) Guard List Change Flag, when set, shall indicate that the terminal has changed the port #1 (#5) guard list.	Met
250	5.2.2.2.4.1l	The Port #2 (#6) Guard List Change Flag, when set, shall indicate that the terminal has changed the port #2 (#6) guard list.	Met
251	5.2.2.2.4.1m	The Port #3 (#7) Guard List Change Flag, when set, shall indicate that the terminal has changed the port #3 (#7) guard list.	Met
252	5.2.2.2.4.1n	The Port #4 (#8) Guard List Change Flag, when set, shall indicate that the terminal has changed the port #4 (#8) guard list.	Met
253	5.2.2.2.4.1o	The Frame Format field shall contain the frame format in use by the terminal.	Met
254	5.2.2.2.4.2(1)	The RCCOW time slot shall be received and processed by any terminal with a requirement for this data transfer capability.	Not Applicable (Note)
255	5.2.2.2.4.2(2)	If the terminal is required to have this capability, it shall be capable of receiving and transmitting two types of data transfer messages.	
Note: Optional requirements not implemented in this terminal.			
256	5.2.2.2.4.2.1a(1)	The precedence field shall contain the precedence of the RCCOW to be transmitted.	Met
257	5.2.2.2.4.2.1a(2)	This bit, when set, shall indicate the message is a higher precedence than the precedence level of the RCCOW assignment field in the present frame's COW.	Met
258	5.2.2.2.4.2.1b	The Initial Entry Flag when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on (AC Mode only).	Met
259	5.2.2.2.4.2.1c	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted (AC Mode only).	Met
260	5.2.2.2.4.2.1d	The Requesting Party field shall contain the user number of the terminal port that initiated the RCCOW.	Met
261	5.2.2.2.4.2.1e	The Requested Party field shall contain the user number of the terminal port to which the RCCOW is directed.	Met
262	5.2.2.2.4.2.1f	The Data Block field shall be composed of four bytes of data.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
263	5.2.2.2.4.2.2a	The Precedence field shall contain the precedence of the RCCOW to be transmitted.	Met
264	5.2.2.2.4.2.2b	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on (AC Mode only).	Met
265	5.2.2.2.4.2.2c	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted (AC Mode only).	Met
266	5.2.2.2.4.2.2d	The Requested Party field shall contain the user number of the terminal port that initiated the RCCOW.	Met
267	5.2.2.2.4.2.2e	The Requested Party field shall contain the user number of the terminal port to which the RCCOW is directed.	Met
268	5.2.2.2.4.2.2f	The Data Block field shall be composed of four bytes of data.	Met
269	5.2.2.2.4.3a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Met
270	5.2.2.2.4.3b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
271	5.2.2.2.4.3c	The Requesting Party field shall contain the terminal's base address (port #1).	Met
272	5.2.2.2.4.3d	The 9.6-kbps Flag, when set, shall indicate that the terminal requests a 9.6-kbps link test.	Met
273	5.2.2.2.4.3e	The 19.2-kbps Flag, when set, shall indicate that the terminal requests a 19.2-kbps link test.	Met
274	5.2.2.2.4.3f	The 32-kbps Flag, when set, shall indicate that the terminal requests a 32-kbps link test.	Met
275	5.2.2.2.4.4a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Not Applicable (Note)
Note: This RCCOW cannot be the Initial Entry Flag. (It is not possible for it to be the first RCCOW created after the unit power has been turned on.)			
276	5.2.2.2.4.4b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
277	5.2.2.2.4.4c	The Requesting Party field shall contain the user number of the terminal port.	Met
278	5.2.2.2.4.5a	The Precedence field shall contain the precedence of the RCCOW to be transmitted.	Met
279	5.2.2.2.4.5b	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Met
280	5.2.2.2.4.5c	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
281	5.2.2.2.4.5d	The Requesting Party field shall contain the user number of the terminal.	Met
282	5.2.2.2.4.5e(1)	The Time field shall contain the estimated time out-of-service for the port.	Met
283	5.2.2.2.4.5e(2)	This data shall consist of 2-bit chronological exponent and a 6-bit binary time field.	Met
284	5.2.2.2.4.5f(1)	The Out-of-Service Code field shall contain the reason code for going out of service.	Met
285	5.2.2.2.4.5f(2)	The Out-of-Service Code shall have a BCD format.	Met
286	5.2.2.2.4.5f(3)	Valid codes shall range from 0 to 99 and are operationally assigned.	Met
287	5.2.2.2.4.6(1)	The terminal shall generate the Information Report RCCOW message in response to the Information Request CCOW from the channel controller.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
288	5.2.2.2.4.6(2)	A terminal that, for operational reasons, is prohibited from responding to the Information Request CCOWs shall be able to report this limitation to the channel controller.	Not Testable (Note)
Note: Network assigned. Not testable.			
289	5.2.2.2.4.6(3)	The terminal Information Report response message shall be generated in accordance with 5.2.2.2.4.6.1, 5.2.2.2.4.6.2, figure 20-6 [of the MIL-STD], and the data fields defined below.	Met
290	5.2.2.2.4.6a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on (AC Mode only).	Met
291	5.2.2.2.4.6b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted (AC Mode only).	Met
292	5.2.2.2.4.6c	The Responding Party field shall contain the user number of the port.	Met
293	5.2.2.2.4.6d(1)	The Response Code field shall contain the response code to the information request.	Met
294	5.2.2.2.4.6d(2)	Valid data shall range from: 1 to 16383 (AC Mode) and 1 to 255 (DC Mode) and are operationally assigned.	Met
295	5.2.2.2.4.6.1(1)	When the terminal receives an Information Request command from the channel controller, it shall respond with an Information Report message before sending any other RCCOW message.	Met
296	5.2.2.2.4.6.1(2)	The terminal (operator) shall respond to the information request by sending an operationally assigned code in the Response Code field of the Information Report message.	Met
297	5.2.2.2.4.6.2(1)	When a terminal port has been constantly keyed for 17 minutes, and has not been configured for legal constant key operation, it shall automatically generate and send this Information Report to the channel controller.	Met
298	5.2.2.2.4.6.2(2)	This message shall be sent before sending any other RCCOW message.	Met
299	5.2.2.2.4.6.2(3)	When a port's constant transmit capability is enabled, the terminal shall not output receive data for the port, regardless of whether the terminal port is keyed or not keyed.	Met
300	5.2.2.2.4.6.2(4)	An Information Report Response code of 200 shall be sent by the terminal in this message.	Met
301	5.2.2.2.4.6.2(5)	The Constant Key Alarm Information Report capability shall function when the terminal is operating in either the AC or DC mode.	Met
302	5.2.2.2.4.7a	The Precedence shall contain the precedence of the RCCOW.	Met
303	5.2.2.2.4.7b	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Met
304	5.2.2.2.4.7c	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
305	5.2.2.2.4.7d	The Requesting Party field shall contain the user number of the terminal port.	Met
306	5.2.2.2.4.7e	The Cancel Call Flag, when set, shall indicate that the requesting party wants its two-party request cancelled.	Met
307	5.2.2.2.4.7f	The Requested Party field shall contain the user number of the terminal port that has been requested for communications.	Met
308	5.2.2.2.4.7g(1)	The Configuration Code field shall contain the configuration code of the terminal port that initiated the RCCOW.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
309	5.2.2.2.4.7g(2)	The data shall have a BCD format.	Met
310	5.2.2.2.4.7g(3)	Valid codes shall range from 1 to 99 and are operationally assigned.	Met
311	5.2.2.2.4.7h(1)	The Contention Report field shall contain a binary count of how many times the terminal port has transmitted two-party or conference request RCCOWs without receiving a CALL ACK.	Met
312	5.2.2.2.4.7h(2)	The counter shall be reset each time a CALL ACK is received for either of these two RCCOWs or when a Status Report A RCCOW is sent and a CALL ACK is received for the status report.	Met
313	5.2.2.2.4.8.1(1)	If the number of requested users is more than one, two RCCOWS shall be created.	Met
314	5.2.2.2.4.8.1(2)	The second of these shall be the Conference Party List.	Met
315	5.2.2.2.4.8.1a	The Precedence field shall contain the precedence of the RCCOW.	Met
316	5.2.2.2.4.8.1b	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Met
317	5.2.2.2.4.8.1c	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
318	5.2.2.2.4.8.1d	The Requesting Party field shall contain the user number of the terminal port.	Met
319	5.2.2.2.4.8.1e	The Cancel Call Flag, when set, shall indicate that the requesting party wants its conference request cancelled.	Met
320a	5.2.2.2.4.8.1f(1)	The List Flag, when set, shall indicate that the conference request is for more than two users;...	Met
320b	5.2.2.2.4.8.1f(2)	...therefore, the controller shall request the conference party list RCCOW with and RCCOW assignment.	Not Applicable (Note)
Note: This is a Channel Controller requirement and, therefore, is not applicable to the terminal.			
321	5.2.2.2.4.8.1g	The Requested Party #1 field shall contain the user number of the terminal port that has been requested for communication.	Met
322	5.2.2.2.4.8.1h(1)	The Contention Report field shall contain a binary count of how many times the terminal port has transmitted two party or conference request RCCOWs without receiving a CALL ACK.	Met
323	5.2.2.2.4.8.1h(2)	The counter shall be reset each time a CALL ACK is received for either of these two RCCOWs or when a Status Report A RCCOW is sent and a CALL ACK is received for the status report.	Met
324	5.2.2.2.4.8.1i(1)	The Time field shall contain the estimated time for which the communications circuit is needed.	Met
325	5.2.2.2.4.8.1i(2)	The data shall consist of a 2-bit chronological exponent and a 6-bit binary time field.	Met
326	5.2.2.2.4.8.1j(1)	The Configuration Code field shall contain the configuration code of the port.	Met
327	5.2.2.2.4.8.1j(2)	The data shall have a BCD format.	Met
328	5.2.2.2.4.8.1j(3)	Valid codes shall range from 1 to 99 and are operationally assigned.	Met
329	5.2.2.2.4.8.2	The terminal shall respond to the controller's direction by creating an RCCOW whose fields are as follows:	Met
330	5.2.2.2.4.8.2a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Not Applicable (Note)
Note: This RCCOW cannot be the Initial Entry Flag. (It is not possible for it to be the first RCCOW created after the unit power has been turned on.)			
331	5.2.2.2.4.8.2b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
332	5.2.2.2.4.8.2c	The Requested Party #2 field shall define the user number of the second requested party with which the conference is to be established.	Met
333	5.2.2.2.4.8.2d(1)	The Requested Party #3 field shall define the user number of the third requested party with which the conference is to be established.	Met
334	5.2.2.2.4.8.2d(2)	If the field is not used, all bits shall be set to zero (0).	Met
335	5.2.2.2.4.8.2e(1)	The Requested Party #4 field shall define the user number of the fourth requested party with which the conference is to be established.	Met
336	5.2.2.2.4.8.2e(2)	If the field is not used, all bits shall be set to zero (0).	Met
337	5.2.2.2.4.8.2f(1)	The Requested Party #5 field shall define the user number of the fifth requested party with which the conference is to be established.	Met
338	5.2.2.2.4.8.2f(2)	If the field is not used, all bits shall be set to zero (0).	Met
339	5.2.2.2.4.8.3(1)	If the number of requested users is three or greater, two RCCOWs shall be created.	Met
340	5.2.2.2.4.8.3(2)	The second of these shall be the conference party list.	Met
341	5.2.2.2.4.8.3a(1)	The Precedence field shall contain the precedence of the RCCOW.	Met
342	5.2.2.2.4.8.3a(2)	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Met
343	5.2.2.2.4.8.3a(3)	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
344	5.2.2.2.4.8.3a(4)	The Requesting Party field shall contain the user number of the terminal port.	Met
345	5.2.2.2.4.8.3a(5)	The Cancel Call Flag, when set, shall indicate that the requesting party wants its conference request cancelled.	Met
346	5.2.2.2.4.8.3a(6)	The List Flag, when set, shall indicate that the conference request is for more than two users; therefore, the controller shall request the conference party list RCCOW with an RCCOW assignment.	Met
347	5.2.2.2.4.8.3a(7)	The Requested Party #1 field shall contain the user number of the terminal port that has been requested for communication.	Met
348	5.2.2.2.4.8.3a(8)a	The Contention Report field shall contain a binary count of how many times the terminal port has transmitted two party or conference request RCCOWs without receiving a CALL ACK.	Met
349	5.2.2.2.4.8.3a(8)b	The counter shall only be reset each time a CALL ACK is received for either of these two RCCOWs or when a Status Report A RCCOW is sent and a CALL ACK is received for the status report.	Met
350	5.2.2.2.4.8.3a(9)	The Requested Party #2 field shall contain the user number of the terminal port that has been requested for communication.	Met
351	5.2.2.2.4.8.3a(10)a	The Time field shall contain the estimated time for which the communications circuit is needed.	Met
352	5.2.2.2.4.8.3a(10)b	The data shall consist of a 2-bit chronological exponent and a 6-bit binary time field.	Met
353	5.2.2.2.4.8.3a(11)a	The Configuration Code field shall contain the configuration code of the port.	Met
354	5.2.2.2.4.8.3a(11)b	The data shall have a BCD format.	Met
355	5.2.2.2.4.8.3a(11)c	Valid codes shall range from 1 to 99 and are operationally assigned.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
356	5.2.2.2.4.8.3b(1)	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Not Applicable (Note)
Note: This RCCOW cannot be the Initial Entry Flag. (It is not possible for it to be the first RCCOW created after the unit power has been turned on.)			
357	5.2.2.2.4.8.3b(2)	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
358	5.2.2.2.4.8.3b(3)a	The Requested Party #1 to #4 fields shall contain user numbers for up to four additional terminal ports, for which the conference is requested.	Met
359	5.2.2.2.4.8.3b(3)b	All bits in unused fields shall be set to zero (0).	Met
360	5.2.2.2.4.9	This RCCOW shall be generated by a terminal in response to a Report Link Test Results assignment in a CCOW's Assignment field.	Met
361	5.2.2.2.4.9a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Met
362	5.2.2.2.4.9b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
363	5.2.2.2.4.9c	The Reporting Party field shall contain the terminal's base user number.	Met
364	5.2.2.2.4.9d	The Symbol Errors field shall contain the count of symbol errors received during the link test.	Met
365	5.2.2.2.4.9e	The Symbol Erasures field shall contain the count of data symbols erased due to pulsed radio frequency interference (RFI) during a link test.	Met
366	5.2.2.2.4.9f	The Missed Acquisitions field shall contain the count of missed acquisitions during the link test.	Met
367	5.2.2.2.4.9g	The Bits Tested field shall contain the length of the link test in bits tested.	Met
368	5.2.2.2.4.9h	The 9.6-kbps Flag, when set, shall indicate that the link test was performed at 9.6-kbps.	Met
369	5.2.2.2.4.9i	The 19.2-kbps Flag, when set, shall indicate that the link test was performed at 19.2-kbps.	Met
370	5.2.2.2.4.9j	The 32-kbps Flag, when set, shall indicate that the link test was performed at 32-kbps.	Met
371	5.2.2.2.4.9k	The Contention Flag, when set, shall indicate that slot contention was detected during the link test.	Met
372	5.2.2.2.4.10	The STATUS REPORT A RCCOW shall contain status information that is not contained in Status Report B.	Met
373	5.2.2.2.4.10a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	Met
374	5.2.2.2.4.10b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
375	5.2.2.2.4.10c	The Reporting Party field shall contain the base user number of the terminal assigned to create the RCCOW.	Met
376	5.2.2.2.4.10d(1)	The Port #1 to Port #4 (or Port #5 to Port #8) fields shall contain a code that indicates the bit rate for each port.	Met
377	5.2.2.2.4.10d(2)	The bit rate code assignments shall be as follows: 75 BPS Code 000 2400 BPS Code 100 300 BPS Code 001 4800 BPS Code 101 600 BPS Code 010 16000 BPS Code 110 1200 BPS Code 011 SPARE Code 111	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
378	5.2.2.2.4.10e	The Port #1 to Port #4 (or Port #5 to Port #8) Slot Assignment Number fields shall contain the slot number (binary) to which each port is assigned.	Met
379	5.2.2.2.4.10f	The Number of Users In Guard List field shall contain the total count of guarded numbers in all terminal port guard lists.	Met
380	5.2.2.2.4.10g(1)	The Contention Report field shall contain a binary count of the sum of all times that all ports within a terminal have transmitted Call Request RCCOWs (Two party or conference) without receiving CALL ACKs.	Met
381	5.2.2.2.4.10g(2)	All individual port contention counters within the terminal shall be cleared when a CALL ACK is received for the RCCOW.	Met
382	5.2.2.2.4.10h	The Special Frame Format Flag, when set, shall indicate that this terminal is operating with a frame format other than the one transmitted in a master frame CCOW.	Met
383	5.2.2.2.4.10i	The Frequency Change Flag, when set, shall indicate that this terminal is capable of frequency switching.	Met
384	5.2.2.2.4.10j	The Full Duplex Flag, when set, shall indicate that this terminal is operating with a full-duplex receiver/transmitter.	Met
385	5.2.2.2.4.11	A terminal that has channel control capability shall transmit the Acknowledge Channel Control Request to acknowledge the controller's channel control handover request CCOW.	Not Applicable (Note)
386	5.2.2.2.4.11a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by a terminal after its power has been turned on.	
387	5.2.2.2.4.11b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	
388	5.2.2.2.4.11c	The Data Transfer Flag, when set, shall indicate that acknowledging terminal requires additional system configuration information.	
389	5.2.2.2.4.11d	The Ready Flag, when set, shall indicate that acknowledging terminal is ready to perform the handover.	
390	5.2.2.2.4.11e	The Request Control Flag, when set, shall indicate that acknowledging terminal is requesting a channel control handover.	
391	5.2.2.2.4.11f	The Channel Frequency field shall contain the RF channel frequency number, as shown in appendix C, for which control is to be handed over.	
392	5.2.2.2.4.11g	The Current Time 2-byte field shall contain the current time in hours and minutes, as shown in figure 20-12 [of the MIL-STD].	
393	5.2.2.2.4.11h	The Handover Time 2-byte field shall contain the current time in hours and minutes as shown in figure 20-12 [of the MIL-STD].	
Note: Optional requirements not implemented in this terminal.			
394	5.2.2.2.4.12(1)	The terminal shall generate the Guard List Report RCCOW message in response to a Guard List Report assignment directed to it by the channel controller.	Met
395	5.2.2.2.4.12(2)	Two types of Guard List Reports are defined: (1) Type A, which is mandatory and shall be used by 16-bit address terminals, and (2) Type B, which is optional and used by 14-bit address terminals.	Met
396	5.2.2.2.4.12.1(1)	The Guard List Report Type A is mandatory and shall be used by 16-bit address terminals.	Met
397	5.2.2.2.4.12.1(2)	The Guard List Report Type A shall identify a group of three addresses from the terminal's guard list.	Met
398	5.2.2.2.4.12.1(3)	The group of addresses to be reported shall be as defined by the controller in the CCOW's RCCOW Assignment field.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
399	5.2.2.2.4.12.1(4)	The Guard List Report Type A messages shall be developed in accordance with figure 20-13 [of the MIL-STD] and the data field definitions described below.	Met
400	5.2.2.2.4.12.1a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by the terminal after its power as been turned on.	Met
401	5.2.2.2.4.12.1b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
402	5.2.2.2.4.12.1c	The Port Guarding #1 field shall define the terminal port number (1 through 16) that guards the address defined by the Guarded #1 field of this message.	Met
403	5.2.2.2.4.12.1d	The Port Guarding #2 field shall define the terminal port number (1 through 16) that guards the address defined by the Guarded #2 field of this message.	Met
404	5.2.2.2.4.12.1e	The Port Guarding #3 field shall define the terminal port number (1 through 16) that guards the address defined by the Guarded #3 field of this message.	Met
405	5.2.2.2.4.12.1f	The Guarded #1 field shall contain the number 1 address, as reported by this message, and which is guarded by the terminal port defined in Port Guarding #1.	Met
406	5.2.2.2.4.12.1g	The Guarded #2 field shall contain the number 1 address, as reported by this message, and which is guarded by the terminal port defined in Port Guarding #2.	Met
407	5.2.2.2.4.12.1h	The Guarded #3 field shall contain the number 1 address, as reported by this message, and which is guarded by the terminal port defined in Port Guarding #3.	Met
408	5.2.2.2.4.12.1(5)	There shall be no gaps (empty fields) within the list.	Met
409	5.2.2.2.4.12.1(6)	The list shall then be reported in groups as specified by the table (page 89 [of the MIL-STD]) and requested in a RCCOW assignment.	Met
410	5.2.2.2.4.12.2	The Guard List Report Type B (Optional) RCCOW shall be generated by a terminal to Report four numbers in its guard lists in response to a Guard List Report assignment in the RCCOW Assignment field of a CCOW.	Met
411	5.2.2.2.4.12.2a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by the terminal after its power as been turned on.	Met
412	5.2.2.2.4.12.2b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
413	5.2.2.2.4.12.2c	The Guarded #1 to #4 (or Guarded #5 to #8) fields shall contain up to four guard numbers.	Met
414	5.2.2.2.4.12.2e(1)	The Port Guarding #1 to #4 (or Port Guarding #5 to #8) fields shall contain a code that identifies the terminal port number corresponding to each of the reported guard numbers.	Met
415	5.2.2.2.4.12.2e(2)	The coding shall be as follows: Field Code = 0 Guarded = 00 Address = 1 Field Code = 0 Guarded = 01 Address = 2 Field Code = 0 Guarded = 10 Address = 3 Field Code = 0 Guarded = 11 Address = 4 Field Code = 1 Guarded = 00 Address = 5 Field Code = 1 Guarded = 01 Address = 6 Field Code = 1 Guarded = 10 Address = 7 Field Code = 1 Guarded = 11 Address = 8	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
416	5.2.2.2.4.12.3(1)	The terminal shall respond to this direction with the RCCOW messages developed in accordance with 5.2.2.2.4.12.2 a through e.	Met
417	5.2.2.2.4.12.3(2)	Up to 15 different guard list numbers shall be stored in the 20 possible locations (one guard list number per location) and reported, as shown in the following table (see page 91 [of the MIL-STD]).	Met
418	5.2.2.2.4.13a	The Initial Entry Flag, when set, shall indicate that this is the first RCCOW created by the terminal after power has been turned on.	Met
419	5.2.2.2.4.13b	The Stored Call Flag, when set, shall indicate that the terminal has another RCCOW stored in queue to be transmitted.	Met
420	5.2.2.2.4.13c	The Requesting User field shall contain the user number of the terminal port.	Met
421	5.2.2.2.4.13d	The Requested User #1 field shall define the ID number of the first user who is paged.	Met
422	5.2.2.2.4.13e	The Requested User #2 field shall define the ID number of the second user who is paged.	Met
423	5.2.2.2.4.13f	The Requested User #3 field shall define the ID number of the third user who is paged.	Met
424	5.2.2.3	The following factors shall affect the choice of transmit time for RCCOW messages: Transmit enable, Dedicated RCCOW access, and Random RCCOW access.	Not Testable (Note)
425	5.2.2.3.1(1)	The terminal shall perform various checks to determine if RCCOW transmit is enabled.	
426	5.2.2.3.1(2)	If so, the terminal shall move into either the dedicated or random RCCOW access selection process.	
Note: General statements/definitions. Not testable.			
427	5.2.2.3.1(3)	The checks, and the possible results, are listed below in the order in which they shall occur:	Met
428	5.2.2.3.1a(1)	When a terminal fails to receive a CCOW, RCCOW transmission shall be inhibited in the next frame.	Met
429	5.2.2.3.1a(2)	After a succession of six lost CCOWs, the terminal shall reenter the CCOW acquisition process.	Met
430	5.2.2.3.1b	If a terminal does not have range lock, RCCOW transmissions shall be inhibited.	Met
431	5.2.2.3.1c	RCCOW transmissions shall be inhibited in any frame in which a terminal transmit inhibit condition occurs.	Met
432	5.2.2.3.1d(1)	The terminal shall reach this point when it has been determined that an RCCOW inhibit condition does not exist.	Met
433	5.2.2.3.1d(2)	The RCCOW assignment code shall then be tested, and the terminal shall either enter dedicated RCCOW access or random RCCOW access.	Met
434	5.2.2.3.2(1)	Dedicated RCCOW access shall be entered when the RCCOW assignment requests a specified terminal to transmit an RCCOW.	Met
435	5.2.2.3.2(2)	The terminal shall halt all other RCCOW processing to reply immediately with the specified RCCOW in the next frame.	Met
436	5.2.2.3.2(3)	The first step shall be to save data that states which RCCOW was being processed or transmitted in the last frame.	Met
437	5.2.2.3.2(4)	The terminal shall then determine the specific RCCOW assignment to execute.	Met
438	5.2.2.3.2(5)	The assignments, and possible actions, shall be as follows:	Met
439	5.2.2.3.2a(1)	When a terminal receives the Conference List Report RCCOW assignment, the terminal shall transmit its conference list.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
440	5.2.2.3.2a(2)	This RCCOW shall be created by a conference request entry at the terminal.	Met
441	5.2.2.3.2a(3)	The terminal shall then perform a check to determine if any other RCCOWs are stored in queue.	Met
442	5.2.2.3.2a(4)	If there are, the Stored Call Flag shall be set.	Met
443	5.2.2.3.2a(5)	The message shall then be formatted and transmitted over the RF channel.	Met
444	5.2.2.3.2a(6)	The terminal shall not delete this RCCOW from the transmitting queue until a positive CALL ACK is received.	Met
445	5.2.2.3.2a(7)	If it is not acknowledged, it shall remain in the queue and wait for another Conference List Report RCCOW assignment.	Met
446	5.2.2.3.2b(1)	When a terminal receives the Dedicated RCCOW Slot RCCOW assignment, the terminal shall transmit any RCCOW it has in queue.	Met
447	5.2.2.3.2b(2)	If the terminal does not have an RCCOW in queue, it shall create and transmit a Status Report A.	Met
448	5.2.2.3.2b(3)	Since the CCOW does not request any particular RCCOW, the terminal shall use random RCCOW access processing to find an RCCOW to transmit.	Met
449	5.2.2.3.2b(4)	Transmit processing shall also be handled by the random RCCOW access process (as described in 5.2.2.3.3).	Met
450	5.2.2.3.2c(1)	When a terminal receives the Status Report A: Group 1 or Status Report A: Group 2 RCCOW assignment, the terminal shall transmit the corresponding Status Report A.	Met
451a	5.2.2.3.2c(2)	This RCCOW shall be transmitted only once per assignment...	Met
451b	5.2.2.3.2c(3)	...and shall be deleted from the queue after its first transmission.	Met
452	5.2.2.3.2d(1)	When a terminal receives the Status Report B: Group 1 or Status Report B: Group 2 RCCOW assignment, the terminal shall transmit the corresponding Status Report B.	Met
453a	5.2.2.3.2d(2)	This RCCOW shall be transmitted only once per assignment...	Met
453b	5.2.2.3.2d(3)	...and shall be deleted from the queue after its first transmission.	Met
454	5.2.2.3.2e(1)	When a terminal receives the Report Link Test Results RCCOW assignment, the terminal shall transmit a Link Test Results RCCOW.	Met
455a	5.2.2.3.2e(2)	This RCCOW shall be transmitted only once per assignment...	Met
455b	5.2.2.3.2e(3)	...and shall be deleted from the queue after its first transmission.	Met
456	5.2.2.3.2f(1)	When a terminal receives the Guard List Report: Group 1 RCCOW assignment, the terminal shall transmit the Guard List Report: Group 1 message.	Met
457a	5.2.2.3.2f(2)	This RCCOW shall be transmitted only once per assignment...	Met
457b	5.2.2.3.2f(3)	...and shall be deleted from the queue after its first transmission.	Met
458	5.2.2.3.2g(1)	When a terminal receives the Guard List Report: Group 2 RCCOW assignment, the terminal shall transmit the Guard List Report: Group 2 message.	Met
459a	5.2.2.3.2g(2)	This RCCOW shall be transmitted only once per assignment...	Met
459b	5.2.2.3.2g(3)	...and shall be deleted from the queue after its first transmission.	Met
460	5.2.2.3.2h(1)	When a terminal receives the Guard List Report: Group 3 RCCOW assignment, the terminal shall transmit the Guard List Report: Group 3 message.	Met
461a	5.2.2.3.2h(2)	This RCCOW shall be transmitted only once per assignment...	Met
461b	5.2.2.3.2h(3)	...and shall be deleted from the queue after its first transmission.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
462	5.2.2.3.2i(1)	When a terminal receives the Guard List Report: Group 4 RCCOW assignment, the terminal shall transmit the Guard List Report: Group 4 message.	Met
463a	5.2.2.3.2i(2)	This RCCOW shall be transmitted only once per assignment...	Met
463b	5.2.2.3.2i(3)	...and shall be deleted from the queue after its first transmission.	Met
464	5.2.2.3.2j(1)	When a terminal receives the Guard List Report: Group 5 RCCOW assignment, the terminal shall transmit the Guard List Report: Group 5 message.	Met
465a	5.2.2.3.2j(2)	This RCCOW shall be transmitted only once per assignment...	Met
465b	5.2.2.3.2j(3)	...and shall be deleted from the queue after its first transmission.	Met
466	5.2.2.3.2k	When a terminal receives the RCCOW Inhibit RCCOW assignment, the terminal shall inhibit its RCCOW transmission in this frame.	Met
467	5.2.2.3.3	The terminal shall search its RCCOW queues to select an RCCOW for transmission.	Not Testable (Note)
468	5.2.2.3.3a(1)	The terminal shall perform specific checks to determine an RCCOW to transmit.	
Note: General statements/definitions. Not testable.			
469	5.2.2.3.3a(2)	The checks shall be performed in the following sequence:	Met
470	5.2.2.3.3a.1(1)	The RCCOW assignment shall be checked to determine if this frame is dedicated to another terminal.	Met
471	5.2.2.3.3a.1(2)	If it is, the terminal shall inhibit RCCOW transmission.	Met
472	5.2.2.3.3a.1(3)	If the frame is not dedicated, the next check shall be performed.	Met
473	5.2.2.3.3a.2(1)	The terminal shall check to determine if it transmitted a dedicated RCCOW in the last frame.	Met
474a	5.2.2.3.3a.2(2)	If a dedicated RCCOW was transmitted, it shall be cleared from the queue (except for a conference list report),...	Met
474b	5.2.2.3.3a.2(3)	...and any RCCOW that was interrupted by the dedicated RCCOW shall be recovered for transmission.	Met
475	5.2.2.3.3a.2(4)	The next check shall then be performed.	Met
476	5.2.2.3.3a.3(1)	The terminal shall check to determine if there is an Acknowledge Channel Control Request RCCOW to transmit.	Not Applicable (Note)
477	5.2.2.3.3a.3(2)	If there is, the terminal shall check for an RCCOW with a precedence.	
Note: Optional requirements not implemented in the terminal.			
478	5.2.2.3.3a.3(3)	If there is not an Acknowledge Channel Control Request RCCOW, the terminal shall check for an RCCOW with a precedence.	Met
479	5.2.2.3.3a.3(4)	When the RCCOW with the highest precedence has been found, the terminal shall determine when to transmit the RCCOW.	Met
480	5.2.2.3.3a.3(5)	If there is not an RCCOW with a precedence, the terminal shall check for an RCCOW without a precedence.	Met
481	5.2.2.3.3a.3(6)	If an RCCOW without a precedence is found, the terminal shall determine when to transmit the RCCOW.	Met
482	5.2.2.3.3a.3(7)	If more than one RCCOW is found at any level, the first one transmitted shall be selected on a first in/first out basis.	Met
483	5.2.2.3.3b(1)	To determine when and how often to transmit a selected RCCOW, the terminal shall use decision processes based on the type of RCCOW to be transmitted.	Met
484	5.2.2.3.3b(2)	A first-in/first-out decision process shall be used when more than one RCCOW of the same priority or precedence level exists in the queue.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
485	5.2.2.3.3b(3)	The types of RCCOWS in their order of importance shall be as follows:	Met
486	5.2.2.3.3b.1(1)	The Dedicated RCCOW type of RCCOW is requested by the RCCOW assignment and shall have the highest priority to be transmitted.	Met
487	5.2.2.3.3b.1(2)	It shall pre-empt the transmission of any other RCCOW.	Met
488a	5.2.2.3.3b.1(3)	The Dedicated RCCOW shall be transmitted only once...	Met
488b	5.2.2.3.3b.1(4)	...and shall be deleted from the queue (except for conference party list) after its first transmission.	Met
489	5.2.2.3.3b.1(5)	Any RCCOW that was pre-empted from transmission shall be recovered to renew the transmit processing.	Met
490	5.2.2.3.3b.2(1)	The Acknowledge Channel Control Request RCCOW type of RCCOW shall have the second highest priority to be transmitted.	Not Applicable (Note)
491	5.2.2.3.3b.2(2)	It shall pre-empt the transmission of any RCCOW except for a dedicated RCCOW.	
492	5.2.2.3.3b.2(3)	The RCCOW shall be transmitted immediately upon appearing in queue.	
493	5.2.2.3.3b.2(4)	The RCCOW shall remain in queue for a random (less than 20) number of frames.	
494	5.2.2.3.3b.2(5)	If the terminal does not receive a CALL ACK, the RCCOW shall be transmitted again, still remaining in queue for a random (less than 20) number of frames.	
495	5.2.2.3.3b.2(6)	If the second transmission does not receive a CALL ACK, the RCCOW shall be cleared from the queue, requiring a re-entry for further transmission.	
496	5.2.2.3.3b.2(7)	If a CALL ACK is received any time during transmit processing, the RCCOW shall be cleared from the queue.	
Note: Optional requirements not implemented in the terminal.			
497	5.2.2.3.3b.3(1)	(RCCOW with a precedence) This shall have a precedence contained within it, indicating the message's priority.	Met
498	5.2.2.3.3b.3(2)	This type of RCCOW shall be as illustrated in figures 20-2, 20-5, 20-7, and 20-8 [of the MIL-STD].	Met
499	5.2.2.3.3b.3(3)	This type of RCCOW shall have the third highest priority to be transmitted.	Met
500	5.2.2.3.3b.3(4)	It shall preempt the transmission of any RCCOW with a lower precedence (highest precedence RCCOW shall always be transmitted first), as well as any RCCOW with no precedence.	Met
501	5.2.2.3.3b.3a(1)	The decision to transmit this type of RCCOW shall be based on a minimum frame precedence value contained in the RCCOW assignment.	Met
502	5.2.2.3.3b.3a(2)	The RCCOW shall be transmitted for the first time in any frame in which its precedence is equal to or greater than the minimum frame precedence.	Met
503	5.2.2.3.3b.3a(3)	The RCCOW shall remain in queue for a random (less than 20) number of frames.	Met
504	5.2.2.3.3b.3a(4)	If the terminal does not receive a CALL ACK, it shall undergo more checking to determine when the second transmission shall take place.	Met
505	5.2.2.3.3b.3b(1)	The second transmission shall depend on the frame precedence in which the first transmission took place.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
506	5.2.2.3.3b.3b(2)	If the first transmission took place when the RCCOW precedence and the frame precedence were equal, the second transmission shall occur in the first frame in which the RCCOW precedence is equal to or greater than the frame precedence.	Met
507	5.2.2.3.3b.3b(3)	If the first transmission took place when the RCCOW precedence was greater than the frame precedence, the next eight frames shall be checked to find a frame in which the RCCOW precedence and frame precedence are equal.	Met
508	5.2.2.3.3b.3b(4)	If an equal precedence frame is found within the eight-frame check period, the second transmission of the RCCOW shall occur in that frame.	Met
509	5.2.2.3.3b.3b(5)	If an equal precedence frame does not occur, the second transmission of the RCCOW shall occur in the next frame, after the eight-frame check period, where the RCCOW precedence is equal to or greater than the frame precedence.	Met
510	5.2.2.3.3b.3c(1)	After the second transmission, the RCCOW shall remain in queue for a random (less than 20) number of frames.	Met
511	5.2.2.3.3b.3c(2)	If the second transmission does not receive a CALL ACK, the RCCOW shall be cleared from the queue, requiring a re-entry for further transmission.	Met
512	5.2.2.3.3b.3c(3)	If a CALL ACK is received any time during transmit processing, the RCCOW shall be cleared from the queue.	Not Applicable (Note)
Note: This requirement is not correct in the MIL-STD. It is removed in MIL-STD-188-183A.			
513	5.2.2.3.3b.4(1)	RCCOW without a Precedence: This type of RCCOW has no priority to be transmitted and shall be processed at any time in which there are no priority messages to be transmitted.	Met
514	5.2.2.3.3b.4(2)	This type of RCCOW shall be as illustrated in figures 20-1, 20-3, 20-4, 20-6, and 20-14 [of the MIL-STD].	Met
515	5.2.2.3.3b.4(3)	This type of RCCOW shall have the lowest priority to be transmitted.	Met
516	5.2.2.3.3b.4(4)	It shall be pre-empted by all RCCOWS, except for another RCCOW without a precedence.	Met
517	5.2.2.3.3b.4(5)	The RCCOW shall be transmitted in the first frame that has not been accessed by a higher priority RCCOW.	Met
518	5.2.2.3.3b.4(6)	The RCCOW shall remain in queue for a random (less than 20) number of frames.	Met
519a	5.2.2.3.3b.4(7)	If the terminal does not receive a CALL ACK, it shall transmit the RCCOW again,...	Met
519b	5.2.2.3.3b.4(8)	...and shall retain the RCCOW in queue for a random (less than 20) number of frames.	Met
520	5.2.2.3.3b.4(9)	If the second transmission does not receive a CALL ACK, the RCCOW shall be cleared from the queue, requiring a re-entry for further transmission.	Met
521	5.2.2.3.3b.4(10)	If a CALL ACK is received any time during transmit processing, the RCCOW shall be cleared from the queue.	Not Applicable (Note)
Note: This requirement is not correct in the MIL-STD. It is removed in MIL-STD-188-183A.			
522	5.2.2.4	If the terminal is required by its performance specification to have DC-mode channel controller capability, the terminal shall also be capable of accepting inputs to compose and transmit the CCOW messages described in 5.2.2.4.1 through 5.2.2.4.7.7.	Not Applicable (Note)
Note: Optional requirement not implemented in the terminal.			
523a	5.2.2.4.1(1)	All terminals shall record in what frame they transmitted an RCCOW;...	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
523b	5.2.2.4.1(2)	...exactly three frames later, they shall decode the CALL ACK field to find out what type of CALL ACK they have received.	Met
524	5.2.2.4.1(3)	If the terminal does not receive a CALL ACK, it shall proceed in accordance with 5.2.2.3.3.	Met
525	5.2.2.4.1(4)	Terminal retransmission of RCCOWS shall occur if proper acknowledgement is not received.	Met
526	5.2.2.4.1(5)	Terminal interpretation of these calls shall be as follows:	Met
527	5.2.2.4.1a	No Acknowledgement (Code 000). No call was received. The terminal shall retransmit the RCCOW.	Met
528	5.2.2.4.1b	Positive RCCOW CALL ACK (Codes 001 to 111). The RCCOW has been received. User number in the CCOW is the user whose RCCOW was received.	Met
529	5.2.2.4.3	All terminals with 16-bit addresses shall assume the MSB (bit 16) is a zero when receiving the Master Frame CCOW.	Met
530	5.2.2.4.7.1c(1)	If the frame format has not changed from the previous Master Frame, no terminal action shall be taken.	Met
531	5.2.2.4.7.1c(2)	If the frame format has changed, the terminal shall check its slot connects and disconnect any that existed in the changed segment(s) of the frame format.	Met
532	5.2.2.4.7.1h(1)	If the DC Flag is reset, the system shall operate in the AC mode.	Met
533	5.2.2.4.7.1h(2)	If the DC Flag is set, the system shall operate in the DC mode.	Met
534	5.2.2.4.7.2a	The terminal shall compare the Called Party number with the user ID number assigned to each of its port numbers for a match.	Met
535	5.2.2.4.7.2.1(1)	After an information request has been received by the terminal, it shall send an information report before sending any other RCCOW.	Met
536	5.2.2.4.7.2.1(2)	No other RCCOW messages shall be sent before the Information Report.	Met
537	5.2.2.4.7.2.2(1)	This Information Request message shall be used by the terminal to automatically disconnect a port that has been illegally transmitting on a slot for greater than 17 minutes.	Met
538	5.2.2.4.7.2.2(2)	If there is a match between the terminal's port number and the user ID number in the Called Party field of the Information Request, and the code is 4, the terminal shall automatically disconnect its port from the slot.	Met
539	5.2.2.4.7.3	When a terminal receives the Zeroize CCOW command, it shall zeroize the key storage memories of the KG and disconnect all slot connects.	Met
540	5.2.2.4.7.3a(1)	The terminal shall compare Called Party #1 field with Called Party #2 and with its terminal base address.	Met
541	5.2.2.4.7.3a(2)	If all three match, the command shall be executed by control signals that cause the KG to erase stored keys.	Met
542	5.2.2.4.7.3b	If it is not an exact copy of the Called Party #1 data field, the command shall not be executed.	Met
543	5.2.2.4.7.4a	The terminal action shall be either: a TS0 preparation, or Selection of new keys to prepare the KG.	Met
544	5.2.2.4.7.4b(1)	If the TS0 Flag is set, all terminals shall perform a TS0 at the frame count given in this CCOW.	Met
545	5.2.2.4.7.4b(2)	The result shall be that new variables are used to prepare the KG, and the frame count is reset to 24.	Met
546	5.2.2.4.7.4c(1)	If the Change KG Day Flag is set, all terminals shall change the KG day variable used to prepare the KG.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
547a	5.2.2.4.7.4c(2)	The change shall occur at the frame count given in this CCOW,...	Met
547b	5.2.2.4.7.4c(3)	...and the new KG day shall be the one given in this CCOW.	Met
548	5.2.2.4.7.4d(1)	If the Change Memory Flag is set, all terminal shall change the KG memory in use.	Met
549a	5.2.2.4.7.4d(2)	The change shall occur at the frame count given in this CCOW and...	Met
549b	5.2.2.4.7.4d(3)	...the new KG memory shall be that which is given in this CCOW.	Met
550	5.2.2.4.7.5a(1)	If the frame format has not changed in value, no terminal action shall be taken.	Not Applicable (Note)
551	5.2.2.4.7.5a(2)	If the frame format has changed, the terminal shall check its slot connects and shall disconnect any that existed in the changed segment(s) of the frame format.	
552	5.2.2.4.7.5b(1)	If the frame format has not changed in value, no terminal action shall be taken.	
553	5.2.2.4.7.5b(2)	If the frame format has changed, the terminal shall check its slot connects and shall disconnect any that existed in the changed segment(s) of the frame format.	
554	5.2.2.4.7.5c(1)	If the frame format has not changed in value, no terminal action shall be taken.	
555	5.2.2.4.7.5c(2)	If the frame format has changed, the terminal shall check its slot connects and shall disconnect any that existed in the changed segment(s) of the frame format.	
556	5.2.2.4.7.6a(1)	If the frame format has not changed in value, no terminal action shall be taken.	
557	5.2.2.4.7.6a(2)	If the frame format has changed, the terminal shall check its slot connects and shall disconnect any that existed in the changed segment(s) of the frame format.	
558	5.2.2.4.7.6b(1)	If the frame format has not changed in value, no terminal action shall be taken.	
559	5.2.2.4.7.6b(2)	If the frame format has changed, the terminal shall check its slot connects and shall disconnect any that existed in the changed segment(s) of the frame format.	
560	5.2.2.4.7.6c(1)	If the frame format has not changed in value, no terminal action shall be taken.	
561	5.2.2.4.7.6c(2)	If the frame format has changed, the terminal shall check its slot connects and shall disconnect any that existed in the changed segment(s) of the frame format.	
562	5.2.2.4.7.6d(1)	The Channel #4 Frequency Code/KG Net Number shall contain a 5-bit frequency code for channel #4.	
563	5.2.2.4.7.6d(2)	It shall indicate the frequency code for channel #4.	
564	5.2.2.4.7.6e(1)	The Channel #5 Frequency Code/KG Net Number shall contain a 5-bit frequency code for channel #5.	
565	5.2.2.4.7.6e(2)	It shall indicate the frequency code for channel #5.	
566	5.2.2.4.7.6f(1)	The Channel #6 Frequency Code/KG Net Number shall contain a 5-bit frequency code for channel #6.	
567	5.2.2.4.7.6f(2)	It shall indicate the frequency code for channel #6.	
568	5.2.2.4.7.7a(1)	If the frame format has not changed in value, no terminal action shall be taken.	

Note: As directed by the JCS, requirement 2 (for DC CCOWs, #1, #2, and #3), and requirements 550 through 579 are applicable to DC mode frequency switching and are no longer required.

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
569	5.2.2.4.7.7a(2)	If the frame format has changed, the terminal shall check its slot connects and shall disconnect any that existed in the changed segment(s) of the frame format.	Not Applicable (Note)
570	5.2.2.4.7.7b(1)	If the frame format has not changed in value, no terminal action shall be taken.	
571	5.2.2.4.7.7b(2)	If the frame format has changed, the terminal shall check its slot connects and shall disconnect any that existed in the changed segment(s) of the frame format.	
572	5.2.2.4.7.7c(1)	If the frame format has not changed in value, no terminal action shall be taken.	
573	5.2.2.4.7.7c(2)	If the frame format has changed, the terminal shall check its slot connects and shall disconnect any that existed in the changed segment(s) of the frame format.	
574	5.2.2.4.7.7d(1)	The Channel #7 Frequency Code/KG Net Number shall contain a 5-bit frequency code for channel #7.	
575	5.2.2.4.7.7d(2)	It shall indicate the frequency code for channel #7.	
576	5.2.2.4.7.7e(1)	The Channel #8 Frequency Code/KG Net Number shall contain a 5-bit frequency code for channel #8.	
577	5.2.2.4.7.7e(2)	It shall indicate the frequency code for channel #8.	
578	5.2.2.4.7.7f(1)	The Channel #9 Frequency Code/KG Net Number shall contain a 5-bit frequency code for channel #9.	
579	5.2.2.4.7.7f(2)	It shall indicate the frequency code for channel #9.	
Note: As directed by the JCS, requirement 2 (for DC CCOWs, #1, #2, and #3), and requirements 550 through 579 are applicable to DC mode frequency switching and are no longer required.			
580	5.2.2.5(1)	If the terminal is required by its equipment performance specification to use RCCOW Data Transfer messages, it shall also receive RCCOW messages.	Met
581	5.2.2.5(2)	Data field definitions shall be the same as those given for the AC mode, with the exception of those fields labeled "AC Mode Only."	Met
582	5.2.2.5(3)	The AC mode fields shall be set to zeros for the DC mode.	Met
583	5.2.2.6	The following factors shall affect the choice of transmit time for RCCOW messages: Transmit enable, and Random RCCOW access.	Not Testable (Note)
584	5.2.2.6.1(1)	The terminal shall perform various checks to determine if RCCOW transmission is enabled.	
585	5.2.2.6.1(2)	If RCCOW transmission is enabled, the terminal shall progress into the random RCCOW access selection process.	
586	5.2.2.6.1(3)	The checks and the possible results are listed below in the order in which they shall occur:	
Note: General statements/definitions. Not testable.			
587	5.2.2.6.1a(1)	When the terminal fails to receive a CCOW, RCCOW transmission shall be inhibited in the next frame.	Met
588	5.2.2.6.1a(2)	RCCOW transmission shall also be inhibited if the terminal has not acquired range lock or if the terminal fails to properly decode a CCOW.	Met
589	5.2.2.6.1a.1(1)	When a terminal has acquired range and frame lock and has properly decoded CCOW, it shall be considered to be acquired.	Not Testable (Note)
590	5.2.2.6.1a.1(2)	The acquired mode of operation shall not preclude the missing of individual CCOWs.	
Note: General statements/definitions. Not testable.			
591	5.2.2.6.1a.1(3)	If this occurs, RCCOW transmission shall be inhibited until another CCOW is properly received.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
592	5.2.2.6.1a.1(4)	At this time, the RCCOW transmission shall again be enabled.	Met
593	5.2.2.6.1a.2	If every CCOW is missed for five minutes, the terminal shall reenter the acquisition process.	Met
594	5.2.2.6.1b(1)	RCCOW transmission shall be inhibited in any frame in which a terminal transmit inhibit condition occurs.	Met
595	5.2.2.6.1b(2)	The transmission inhibit condition shall be imposed by the terminal.	Met
596	5.2.2.6.2(1)	The terminal shall search its RCCOW queues to select an RCCOW for transmission.	Met
597	5.2.2.6.2(2)	Since neither the Data Transfer (figure 20-2 [of the MIL-STD]) RCCOW nor the Information Report (figure 20-6 [of the MIL-STD]) RCCOW has a higher priority of transmission than the other (except when the terminal is responding to an information request from the channel controller), whichever one appears in queue first shall be transmitted immediately.	Met
598	5.2.2.6.2(3)	The RCCOW shall remain in queue for a random (less than 20) number of frames after the first transmission.	Met
599	5.2.2.6.2(4)	If the terminal does not receive a CALL ACK, the RCCOW shall be transmitted again, still remaining in queue for a random (less than 20) number of frames.	Met
600	5.2.2.6.2(5)	If the second transmission does not receive a CALL ACK, the RCCOW shall be cleared from the queue, requiring a re-entry for further transmission.	Met
601	5.2.2.6.2(6)	If a CALL ACK is received any time during transmit processing, the RCCOW shall be cleared from the queue.	Not Applicable (Note)
Note: This requirement is not correct in the MIL-STD. It is removed in MIL-STD-188-183A.			
602	5.3.1(1)	To fully operate within the waveform, the terminal shall be capable of processing plain text (PT) orderwire messages in both the AC and DC modes.	Met
603	5.3.1(2)	In PT or unencrypted orderwire operation, the terminal shall process CCOWs and RCCOWs as described in 5.3.1.1 to 5.3.1.5.	Met
604	5.3.1.1	In plain text operation within the AC mode, the reception process shall be the same for both master frame CCOWs and all other CCOWs and shall be as follows:	Met
605	5.3.1.1d(1)	The CRC generation method shall be the IBM BSC CRC 16 Protocol (see 5.2.1.3).	Met
606	5.3.1.1d(2)	Calculation of the CRC shall begin with byte 1 and end with byte 13.	Met
607	5.3.1.1d(3)	The generated 2 byte CRC shall be compared with byte 5 (high order CRC byte) and byte 6 (low order CRC byte) stored in step b, above.	Met
608	5.3.1.1e(1)	If the calculated CRC and the stored CRC match, reception of the CCOW shall be considered successful, and the CCOW messages data bytes shall be considered valid for further processing by the terminal.	Met
609	5.3.1.1e(2)	The terminal shall consider CCOW reception to be failed, and the CCOW message data bytes shall be discarded, if the calculated CRC does not match the stored CRC message parity bytes.	Met
610	5.3.1.2(1)	For reception of the Master Frame CCOW, the processes described in paragraph 5.3.1.1 shall be adhered to.	Met
611	5.3.1.2(2)	This process shall be supplemented by reading the KG ID field in bytes 12 and 13 and separately storing this number in terminal memory as the channel controller ID number.	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
612	5.3.1.3	In AC or DC modes, in plain text operation, the terminal shall prepare RCCOW messages before encoding, interleaving, and modulating, as follows:	Met
613	5.3.1.3b(1)	The CRC generation method shall be the IBM BSC CRC 16 Protocol (see 5.2.1.3).	Met
614	5.3.1.3b(2)	Calculation of the CRC shall begin with byte 1 and end with byte 13.	Met
615	5.3.1.3b(3)	The generated 2 byte CRC shall be placed into RCCOW message bytes 12 (high order CRC byte) and 13 (low order CRC byte).	Met
616	5.3.1.4(1)	If a terminal is required by its performance specification to be DC mode channel controller, it shall prepare PT CCOW messages to be transmitted for Master Frame CCOWs and all other DC mode CCOWs.	Not Applicable (Note)
617	5.3.1.4(2)	The process shall be as follows:	
618	5.3.1.4d	The generated 2 byte CRC shall be placed into CCOW message bytes 5 (high order CRC byte) and 6 (low order CRC byte).	
Note: Optional requirements not implemented in the terminal.			
619	5.3.1.5	If the terminal is required by its performance specification to be a DC mode channel controller, or required to receive Data Transfer RCCOW messages, it shall process PT RCCOW messages as follows:	Met
620	5.3.1.5d	The generated 2 byte CRC shall be compared with byte 12 (high order CRC byte) and byte 13 (low order CRC byte), stored in step b, above.	Met
621	5.3.1.5e(1)	If the calculated CRC and the stored CRC match, reception of the RCCOW shall be considered successful, and the RCCOW messages data bytes shall be considered valid for further processing by the terminal.	Met
622	5.3.1.5e(2)	The terminal shall consider RCCOW reception to be failed, and the RCCOW message data bytes shall be discarded, if the calculated CRC does not match the stored CRC message parity bytes.	Met
623	5.3.2(1)	To fully operate within the waveform, the terminal shall be capable of processing encrypted orderwire messages in both the AC and DC modes.	Met
624	5.3.2(2)	Orderwire encryption/decryption shall be performed using the COMSEC/TRANSEC Integrated Circuit (CTIC) or an alternate NSA approved device that is cryptographically and functionally compatible with the CTIC implementing KGV-11 as specified in NSA specifications 88-4A and 87-1.	Met
625	5.3.2(3)	Hardware implementation of the terminal shall include provisions for future implementation of Over the Air Rekeying (OTAR) for the orderwire.	Not Tested (Note)
Note: OTAR Channel Control Orderwire (CCOW) messages have not been implemented in the Channel Controller Therefore, testing could not be performed			
626	5.3.2(4)	In encrypted or cipher text (CT) orderwire operation, the terminal shall process CCOWs and RCCOWs as described in 5.3.2.1 to 5.3.2.4.	Met
627	5.3.2.1.1	The reception process for encrypted Master Frame CCOWs shall be as follows:	Met
628	5.3.2.1.1i(1)	The CRC generation method shall be the IBM BSC CRC 16 Protocol (see 5.2.1.3).	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
629	5.3.2.1.1i(2)	The generated 2 byte CRC shall be compared with byte 5 (high order CRC byte) and byte 6 (low order CRC byte), which are stored from g, above, in the decrypted CCOW message.	Met
630	5.3.2.1.1j(1)	If the calculated CRC and the stored CRC match, reception of the CCOW shall be considered successful, and the CCOW messages data bytes shall be considered valid for further processing by the terminal.	Met
631	5.3.2.1.1j(2)	The terminal shall consider CCOW reception to be failed, and the CCOW message data bytes shall be discarded, if the calculated CRC does not match the stored CRC message parity bytes.	Met
632	5.3.2.1.2	The reception process for all encrypted CCOWs other than Master Frame CCOWs shall be as follows:	Met
633	5.3.2.1.2f(1)	The CRC generation method shall be the IBM BSC CRC 16 Protocol (see 5.2.1.3).	Met
634	5.3.2.1.2f(2)	The generated 2 byte CRC shall be compared with byte 5 (high order CRC byte) and byte 6 (low order CRC byte), which are stored from g, above, in the decrypted CCOW message.	Met
635	5.3.2.1.2g(1)	If the calculated CRC and the stored CRC match, reception of the CCOW shall be considered successful, and the CCOW messages data bytes shall be considered valid for further processing by the terminal.	Met
636	5.3.2.1.2g(2)	The terminal shall consider CCOW reception to be failed, and the CCOW message data bytes shall be discarded, if the calculated CRC does not match the stored CRC message parity bytes.	Met
637	5.3.2.2	In AC or DC mode, in encrypted operation, the terminal shall prepare RCCOW messages before encoding, interleaving, and modulating, as follows:	Met
638	5.3.2.2b(1)	The CRC generation method shall be the IBM BSC CRC 16 Protocol (see 5.2.1.3).	Met
639	5.3.2.2b(2)	The generated 2 byte CRC shall be placed into RCCOW message bytes 12 (high order CRC byte) and 13 (low order CRC byte).	Met
640	5.3.2.2d	The serial data stream of these bytes presented to the KG for encryption shall begin with byte 3, MSB, and end with byte 13, LSB.	Met
641	5.3.2.3	If the terminal is required by its performance specification to be a DC mode channel controller, it shall prepare encrypted CCOW messages to be transmitted for both Master Frame CCOWs and all other Non-master Frame DC mode CCOWs.	Not Applicable (Note)
642	5.3.2.3.1	The sequence of events to encrypt CCOW Master Frame data shall be as follows:	
643	5.3.2.3.1b(1)	The CRC generation method shall be the IBM BSC CRC 16 Protocol (see 5.2.1.3).	
644	5.3.2.3.1b(2)	The generated 2 byte CRC shall be placed into CCOW message bytes 5 (high order CRC byte), and 6 (low order CRC byte).	
645	5.3.2.3.2	The sequence of events used to encrypt CCOW Non-master Frame data shall be as follows:	
646	5.3.2.3.2b(1)	The CRC generation method shall be the IBM BSC CRC 16 Protocol (see 5.2.1.3).	
647	5.3.2.3.2b(2)	The generated 2 byte CRC shall be placed into CCOW message bytes 5 (high order CRC byte), and 6 (low order CRC byte).	
Note: Optional requirements not implemented in the terminal.			

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
648	5.3.2.4	If the terminal is required by its performance specification to be a DC mode channel controller, or required to receive Data Transfer RCCOW messages it shall process encrypted RCCOW messages received as follows:	Met
649	5.3.2.4g(1)	The CRC generation method shall be the IBM BSC CRC 16 Protocol (see 5.2.1.3).	Met
650	5.3.2.4g(2)	The generated 2 byte CRC shall be compared with byte 12 (high order CRC byte) and byte 13 (low order CRC byte), which are stored from e, above.	Met
651	5.3.2.4h(1)	If the calculated CRC and the stored CRC match, reception of the RCCOW shall be considered successful, and the RCCOW messages data bytes shall be considered valid for further processing by the terminal.	Met
652	5.3.2.4h(2)	The terminal shall consider RCCOW reception to be failed, and the RCCOW message data bytes shall be discarded, if the calculated CRC does not match the stored CRC message parity bytes.	Met
653	5.4.1(1)	The FEC coding used shall be convolutional, with interleaving, to ensure errors are random.	Met
654	5.4.1(2)	The code rates used shall be 1) Rate one-half (R=1/2) or 2) Rate three-fourths (R=3/4).	Met
655	5.4.1(3)	The constraint lengths for these codes shall be k=7 and k=9 for the rate 1/2 and rate 3/4 codes respectively.	Met
656	5.4.1(4)	CCOW and RCCOW transmission shall use rate 1/2, k = 7 FEC coding.	Met
657	5.4.1(5)	Range and Link test transmissions shall not use FEC coding.	Not Testable (Note)
Note: General statement/definition. Not testable.			
658	5.4.1(6)	The code employed for user communications shall be determined by the transmission time slot, as defined in figures 3 through 5 [of the MIL-STD].	Met
659	5.4.2(1)	The code tap positions shall be as follows: Rate = 1/2, k = 7 P1 1111001 P2 1011011 Rate = 3/4, k = 9 P1 100111010 P2 010001101 P3 001001011 P4 111110100	Met
660	5.4.2(2)	The encoder tap connections shall be as shown in figure 9 [of the MIL-STD].	Met
661	5.4.3(1)	The interleaver shall use a random interleaving method with a block depth of 224 symbols.	Met
662	5.4.3(2)	The block substructure shall consist of 2 independently constructed blocks of 112 symbols each, which are used in sequence.	Met
663	5.4.3(3)	A hybrid random scatter shall be incorporated in each block of 112 symbols.	Met
664	5.4.3(4)	The interleaver sequence shall be as shown in table XI (page 116 [of the MIL-STD]).	Met
665a	5.5.1(1)	The modulation shall be interoperable with binary phase-shift keying (BPSK) and differentially encoded quadrature phase-shift keying (DEQPSK),...	Met

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
665b	5.5.1(2)	...and shall have spectral containment equal to or better than BPSK and DEQPSK, respectively.	Met
666	5.5.2	The terminal shall burst at 9,600 or 19,200 sps using BPSK modulation and 32,000 sps using DEQPSK modulation.	Met
667	5.5.4	The data bit mapping in the modulation process of DEQPSK waveform shall be the following Gray code mapping convention: (see page 117).	Met
668	5.5.5.1	The modulating signal timing jitter requirement shall be less than 2 percent of a data bit period, or 10 microseconds, whichever is less.	Met
669	5.5.5.2	The maximum allowable error in the data rate shall be 1 part in 1000000 (1 part per million (ppm)).	Met
670	5.6.1	The uplink frequency of any transmission, as received at the satellite, shall be within 240-Hz of the allocated uplink frequency, provided a and b (below) are both true: a. The CCOW transmission from the satellite is within 30-Hz of the allocated downlink frequency, and b. The satellite inclination angle is equal to or less than 10 degrees.	Met
671	5.6.2(1)	The terminal shall be capable of receiving downlink signals within 310-Hz of the allocated center frequency.	Met
672	5.6.2(2)	The frequency accuracy requirement shall include inaccuracies caused by Doppler and inaccuracies caused by frequency-standard, frequency measurement, and frequency-setting errors.	Not Testable (Note)
673	5.6.2(3)	Downlink frequency offset shall not exceed uplink frequency offset from the transponder center frequency plus the satellite transponder translation error.	
Note: General statements/definitions. Not testable.			
674	5.6.3	The probability of a missed acquisition of any burst shall not degrade the terminal's specified BER performance by more than a factor of two.	Met
675	5.7.1	Voice digitization and security shall be as follows:	Met
676	5.7.1(1)	For joint operations, secure voice at 2400-bps shall be interoperable with the digitization and encryption techniques used in the Advanced Narrowband Digital Voice Terminal (ANDVT), application 3 (see MIL-C-28883A).	Met (Note)
Note: This requirement was met using external COMSEC equipment.			
677	5.7.1(2)	Secure voice at 4800-bps shall be interoperable with the digitization techniques used in the Code Excited Linear Prediction (CELP) (FED STD 1016) and encryption techniques used by the KG-84A (NSA NO. 82-2B).	Not Applicable (Note)
678	5.7.1(3)	Secure voice at 16000-bps shall be interoperable with the digitization techniques using Continuous Variable Slope Delta (CVSD) modulation and encryption techniques used by the VINSON (CSESD 14).	
Note: Optional requirements not implemented in the terminal.			
679	5.7.2(1)	For joint operations, data encryption shall be interoperable with KYV-5 and KG-84A encryption devices.	Met (Note)
Note: This requirement was met using external COMSEC equipment.			

JITC REQ #	MIL-STD Paragraph	REQUIREMENT DESCRIPTION	STATUS
680	5.7.2(2)	Terminals that embed COMSEC devices shall support all data rates specified in the MIL STD for communications over the DAMA channel.	Met (Note)

Note: This requirement was met using external COMSEC equipment.

Legend:

AC – Automatic Control	LPN – Legendre Polynomial
	LSB – Least Significant Bit
BCD – Binary-Coded Decimal	MIL-STD – Military Standard
BER – Bit Error Ratio	ms – Millisecond
bps – Bits Per Second	MSB – Most Significant Bit
BPSK – Binary Phase-Shift Keying	N/A – Not Applicable
BSC – Binary Synchronous Communications	nmi – Nautical Miles
CALL ACK – Call Acknowledgment	POR – Power On Reset
CCOW – Channel Control Orderwire	ppm – Part Per Million
COMSEC – Communications Security	PSK – Phase-Shift Keying
CRC – Cyclic Redundancy Check	PT – Plain Text
CTIC – COMSEC/TRANSEC Integrated Circuit	
DAMA- Demand Assigned Multiple Access	Q – Quadrature
dB – Decibel	QPSK – Quadrature Phase-Shift Keying
DC – Distributed Control	
DEQPSK – Differentially Encoded Quadrature Phase-Shift Keying	RCCOW – Return Channel Control Orderwire
DoD – Department of Defense	Req – Requirement
DoDISS – DoD Index of Specifications and Standards	RF – Radio Frequency
ECM – Embedded CTIC Module	RFI – Radio Frequency Interference
EICM – Embedded INDICATOR COMSEC Module	R/T – Receiver/Transmitter
ELT – Even Link Test	s – Seconds
FEC – Forward Error Correction	SATCOM – Satellite Communications
FSCS – Fleet Satellite Communications System	sps – Symbols Per Second
HEX – Hexadecimal	TBD – To Be Determined
Hz – Hertz	TDMA – Time Division Multiple Access
I – In-Phase	TRANSEC – Transmission Security
ID – Identification	TS0 – Time Slot Zero
I/O – Input/Output	UHF – Ultrahigh Frequency
kbps – Kilobits Per Second	
KG – Key Generator	μ s – Microsecond
kHz – Kilohertz	
ksps – Kilosymbols Per Second	