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**DEPARTMENT OF DEFENSE
INTERFACE STANDARD**

**FOR THE
JOINT RANGE EXTENSION APPLICATION
PROTOCOL (JREAP)**



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FORWARD

1. This Military Standard is approved and mandatory for use by all Departments and Agencies of the Department of Defense implementing the Joint Range Extension Application Protocol.

2. In accordance with DoD Instruction 4630.8, it is DoD policy that all Joint and combined operations be supported by compatible, interoperable, and integrated Command, Control, Communications, and Intelligence (C3I) systems. All C3I systems developed for use by U.S. Forces are considered for Joint use and shall conform to technical and procedural standards for compatibility and interoperability. The Director, Defense Information Systems Agency (DISA), serves as the DoD single point of contact for developing information technology standards, in order to achieve interoperability and compatibility.

3. This standard defines the protocols and message structures for the transmission and reception of pre-formatted messages over communications media other than those for which these messages were designed. It provides a foundation for Joint Range Extension (JRE) of Link 16 and other tactical data links (TDLs) to overcome the line-of-sight (LOS) limitations of radio terminals, such as Joint Tactical Information Distribution System (JTIDS) and Multifunctional Information Distribution System (MIDS).

4. The Joint Range Extension Application Protocol (JREAP) is based upon the Open System Interconnection (OSI) layered structure and focuses on the application layer; however, it recognizes that certain network and transmission layer services provided by JTIDS and MIDS terminals for Link 16 are not provided by all communications media. The JREAP also provides for these services, where needed.

5. The main body of this standard describes the common message structures, message elements (data fields), and protocols primarily at the application level that are independent of the media. Appendices are provided for specific communication modes to describe necessary

JREAP message and protocol modifications and provide the OSI layer services appropriate for each mode. Currently, the standard addresses the following communication modes:

- a. Half-Duplex Announced Token Passing.
 - b. Full-Duplex Synchronous and Asynchronous Point-to-Point.
 - c. Internet Protocol (IP) (User Datagram Protocol (UDP) Unicast and Multicast, and Transmission Control Protocol (TCP)).
6. Beneficial comments (recommendations, additions, and deletions) and any pertinent data which may be of use in improving this document may be submitted to the respective point of contact(s) listed below. For agencies not listed below, please contact DISA.

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SECTION 1

1. SCOPE

1.1 Joint Range Extension Application Protocol overview. This document defines a generalized application protocol, designated as the Joint Range Extension Applications Protocol (JREAP). The JREAP enables tactical data to be transmitted over digital media and networks not originally designed for tactical data exchange. Formatted tactical digital messages are embedded inside of JREAP messages as data fields within available commercial and Government protocols, such as those used over satellites and terrestrial links. Specialized management messages are also provided to transport data not contained in the formatted messages, in order to support TDL-unique functions. Capabilities are provided that include: 1) extending the range-limited tactical networks to beyond LOS while reducing their dependence upon relay platforms, 2) reducing the loading on stressed networks, 3) providing backup communications in the event of the loss of the normal link, and 4) providing a connection to a platform that may not be equipped with the specialized communications equipment for that TDL. For media that do not support OSI network and transport layers, the JREAP provides network and transport layer functionality. For media supporting OSI network and transport layers, the JREAP is encapsulated within those layers. JREAP software can be integrated into a host system or into a stand-alone processor. The appropriate interface terminals are required at each end of any JREAP alternate media link.

1.2 Document overview. This document contains six sections and five appendices. [Section 2](#) lists Applicable Documents, [Section 3](#) lists Definitions of Terms and Acronyms, [Section 4](#) defines General Requirements for the design of the generic JREAP applicable to all media, [Section 5](#) presents Detailed Requirements pertaining to important design considerations and implementation recommendations, and [Section 6](#) contains Notes. The first three appendices address the implementation specifics for underlying media protocols: [Appendix A](#) Half-Duplex Announced Token Passing Protocol, [Appendix B](#) Full-Duplex

Synchronous or Asynchronous Point-to-Point Connection, and [Appendix C](#) Encapsulation over Internet Protocol (IP). [Appendix D](#) is the Data Element Dictionary and [Appendix E](#) contains Implementation Requirements. This document will be a living document under configuration management (CM); it will be updated to reflect adaptations to other media, protocols, and improvements to the JREAP system.

SECTION 2

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are referenced in [Sections 3, 4, 5, and 6](#), and associated appendices of this standard. This section does not include documents recommended for additional information or cited as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements in documents cited in [Sections 3, 4, 5, and 6](#), and associated appendices of this standard, whether or not they are each specifically listed. The following documents form a part of this document to the extent specified herein.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the Acquisition Streamlining and Standardization Information System (ASSIST) and supplements thereto cited in the solicitation.

MILITARY STANDARDS

Department of Defense

MIL-STD-188-181	Interoperability Standard for Single-Access 5-kHz and 25-kHz UHF Satellite Communications Channels
MIL-STD-188-183	Interoperability Standard for 25-kHz UHF TDMA/DAMA Terminal Waveform
MIL-STD-1582	EHF Low Data Rate (LDR) Forced Mode Network Operations

MIL-STD-2045-47001	Connectionless Data Transfer Application Layer Standard
MIL-STD-6011	Tactical Data Link (TDL) Link-11/11B Message Standard
MIL-STD-6016	Tactical Data Link (TDL) Link-16 Message Standard
MIL-STD-6017	Variable Message Format (VMF)
MIL-STD-6020	Data Forwarding Between Tactical Data Links (TDLs)
	International Standards Organization Open System Interface (Model)

(Copies of these documents are available online at <https://assist.dla.mil.>)

2.2.2 Other Government sources, documents, and publications.

GIG Technical Guidance Federation
<https://gtg.csd.disa.mil>

Department of Defense Dictionary of Military and Associated Terms
https://jdeis.js.mil/jdeis/new_pubs/dictionary.pdf

DISA JMTCCB TOR	Terms of Reference for the TDL Configuration Control Board https://intelshare.intelink.gov/sites/data/links/SitePages/Home.aspx
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2.3 Non-Government documents.

Internet Engineering Task Forces (IETF) and Requests for Comment (RFCs).

RFC:

768	User Datagram Protocol, J. Postel
791	Internet Protocol, DARPA Internet Program Protocol Specification, Univ. So. Cal.

793	Transmission Control Protocol, DARPA Internet Program Protocol Specification, Univ. So. Cal.
1112	Host Extensions for IP Multicasting, Steve Deering
1662	PPP In HDLC-like Framing, W. Simpson (editor)
1700	Assigned Numbers, J. Reynolds, J. Postel (editors)

(Copies of these documents are available online at
<https://www.ietf.org/standards/rfc.html>.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

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3. DEFINITIONS

3.1 Abbreviations and acronyms. The abbreviations and acronyms used in this standard are defined as follows:

ACK	- Acknowledge
ASSIST	- Acquisition Streamlining and Standardization Information System
C ²	- Command and Control
C ³ I	- Command, Control, Communications, and Intelligence
CANTCO	- Cannot Comply
CANTPRO	- Cannot Process
CMF	- Common Message Format
COTS	- Commercial Off-the-Shelf
CRC	- Cyclic Redundancy Check
CTR	- Common Time Reference
DAMA	- Demand Assigned Multiple Access
DISA	- Defense Information Systems Agency
DISR	- DoD Information Technology Standards and Profile Registry
DoD	- Department of Defense
DVT	- Data Valid Time
EHF	- Extremely High Frequency
EWPI	- Electronic Warfare Product Information
FJUG	- Forwarding JTIDS/MIDS Unit Generic
GHz	- Gigahertz
GU	- Generic Unit
HT	- Header Type

IBS	- Integrated Broadcast Service
ICP	- Interface Change Proposal
IETF	- Internet Engineering Task Force
IP	- Internet Protocol
IU	- Interface Unit
JMSN	- J-Series Message Sequence Number
JRE	- Joint Range Extension
JREAP	- Joint Range Extension Application Protocol
JRE JU	- JRE JTIDS/MIDS Unit
JRE-NC	- JRE Network Controller
JRE-NCB	- JRE Network Controller (Broadcast)
JRE-NP	- JRE Network Participant
JREU	- JRE Unit
JSTN	- JRE Source Track Number
JTIDS	- Joint Tactical Information Distribution System
JU	- JTIDS/MIDS Unit
kbps	- Kilobits per second
LAN	- Local Area Network
LDR	- Low Data Rate
LOS	- Line-of-Sight
Mbps	- Megabits per second
MCE	- Modular Control Equipment
MDA	- Missile Defense Agency
MDR	- Medium Data Rate
MHz	- Megahertz
MIDS	- Multifunctional Information Distribution System

MIL-STD	- Military Standard
ms	- milliseconds
MSB	- Most Significant Bit
MSE	- Mobile Subscriber Equipment
MSN	- Message Sequence Number
MT	- Message Type
NACK	- Not Acknowledged
NCT	- Net Cycle Time
OPTASK LINK	- Operational Tasking Data Link
OSI	- Open System Interconnection
PG	- Participation Group
PPLI	- Precise Participant Location and Identification
PPP	- Point-to-Point Protocol
R ²	- Reporting Responsibility
RARTT	- Recent Average Round-Trip Time
R/C	- Receipt/Compliance
RF	- Radio Frequency
RFC	- Request for Comments
RTT	- Round Trip Time
Rx	- Receive
SATCOM	- Satellite Communications
SHF	- Super High Frequency
SPI	- Special Processing Indicator
STF	- Start of Transmission Flag
STN	- Source Track Number (Link 16)

TCP	- Transmission Control Protocol
TDL	- Tactical Data Link
TDMA	- Time Division Multiple Access
TN	- Track Number
TQ	- Track Quality
T_RARTT	- Time for Recent Average Round-Trip Time
TSL	- Transmission Sequence List
TSN	- Transmission Sequence Number
TTR	- Transmission Time Reference flag
Tx	- Transmit
UDP	- User Datagram Protocol
UHF	- Ultra High Frequency
UTC	- Coordinated Universal Time
VMF	- Variable Message Format
WAN	- Wide Area Network
WILCO	- Will Comply

3.2 TERMS. The terms used in this standard are defined as follows:

Acknowledge	The act of notifying a unit transmitting a message that the message has been received as a valid message.
Common Time Reference	The time reference negotiated between all participants in a JRE Link.
Demand Assigned Multiple Access	A communications protocol used in SATCOM to divide a single communications channel into multiple lower data rate subchannels according to user demand.
Extremely High Frequency	The radio frequency band from 30-300 GHz.

Forwarding JTIDS/MIDS Unit Generic	A Forwarding JTIDS/MIDS Unit Generic in JRE terms is a JRE Processor that is forwarding data between Link 16 and JRE (generic) links.
Interface Unit	A unit communicating directly or indirectly (identified as a data source or addressee) on the interface.
Joint Range Extension	A multi-Service concept for extending the range of nets exchanging tactical data beyond the range of tactical communications terminals used for these nets, and providing alternatives for the transfer of this data within local areas.
JRE Application Protocol	The protocol defined within this document to be used for Joint Range Extension. The JREAP is used for the transmission and reception of tactical digital data over communications media not designed for those specialized data formats.
JRE JU	A host with both JRE and Link 16 capabilities that is using either or both, but is doing no forwarding between the two.
JRE media	These are the protocol-specific JRE paths and their associated hardware (such as routers and encryption devices) that move the data from one point to another, such as a UHF satellite terminal operating in DAMA mode or a fiber line operating with IP.
JRE network	A JRE network consists of two or more JRE Processors exchanging JREAP data via JRE supporting media.
JRE Network Controller	A JRE-NC is a selected JRE Processor terminal that functions as the overall network coordinator/controller in a Token Passing network architecture.

JRE Network Participant	A JRE-NP refers to a networked JRE Processor that does not have any net coordinating or controlling responsibilities.
JRE Processor	Any system which implements the JREAP as an external interface.
JRE Source Track Number	The 16-bit number that is used to identify the source of data passed on a JRE Link. When associated with Link 16, the 15-bit Link 16 STN is used with a 0 placed in the leading (most significant) bit.
JREAP Message	Data generated by a JRE Processor as the payload within a JREAP Packet to be transmitted across a JRE Link.
JREAP Packet	A JREAP Packet consists of JREAP Headers and JREAP messages that are sent as a single transmission.
JREU	A host that has one or more JRE links but no direct connection to a Link 16 network (no JTIDS/MIDS terminal).
JTIDS/MIDS	Joint Tactical Information Distribution System or Multifunctional Information Distribution System Terminals that provide the specific functions and capabilities necessary for Link 16 tactical network operations. Communications are LOS using the Link 16 waveform.
JTIDS/MIDS Unit	A JU is any participant who uses JTIDS/MIDS terminals to exchange information on a Link 16 network.
Line-of-sight	Antenna-to-antenna communications ranges without the benefit of relay or ionospheric or tropospheric deflection.

Link 16	A secure, high capacity, jam-resistant, nodeless data link which uses the transmission characteristics and the protocols, conventions, and fixed-length message formats defined by MIL-STD-6016.
Link 16 network	A Link 16 network is defined as a group of Link 16 users operating with a single common NTR.
Link 16 zone	A geographical subset of Link 16 participants within a network that share a common group of time slots.
Low Data Rate	A 2.4 kbps channel data rate capability used with EHF SATCOM.
Medium Data Rate	A channel data rate capability from 4.8 kbps up to, and including, T1 (1.544 Mbps) used with EHF SATCOM.
Multicast	A one-to-many socket connection.
Packet	A packet consists of two kinds of data, user data (also known as a payload) and control information.
Port	An Internet connection local address.
Relay	The reception and near-real-time retransmission of communications signals by organic assets such as aircraft, or by non-organic assets such as communications satellites.
Reserved/Unused/Spare	JREAP message bits not yet defined.
Round-Robin	A scheduling algorithm where each participant takes a turn in a specific order.
Satellite Communications	The use of earth orbiting satellites for the relaying of communications signals.
Secondary Track Number	The TNs of other terminals that can be loaded into JTIDS/MIDS terminals so that that terminal will provide a machine receipt to a message addressed to the other units' TN.

Silently Discard	The process of discarding received data without notifying the operator.
Socket	An Internet connection mechanism.
Source Track Number	The Link 16 Unit Identification of the source of the data. The STN appears in the header of a Link 16 time slot.
Super High Frequency	The radio frequency band from 3-30 GHz.
Tactical Data Link	A Joint Staff-approved standardized communication link suitable for transmission of tactical digital information. Current practice is to characterize a TDL by its standardized message formats and transmission characteristics. TDLs interface two or more C2 or weapon systems via a single or multiple network architecture and specific communication media designed for that TDL to exchange tactical information (Joint Pub 1-02).
Token Passing	A method for establishing orderly sequential transmission among members of a network who share a limited transmission resource.
Transmission Sequence List	An operator initiated, dynamically updated Announced Token Passing Protocol list of network participants ordered by error rate and network response. It provides the transmission order for the next transmission cycle.
Ultra High Frequency	The radio frequency band between 300 MHz and 3 GHz. Military UHF is that portion of the UHF band used for voice communications between 225 and 400 MHz. JTIDS operates in the UHF spectrum between 960 and 1215 MHz.
Unicast	A one-to-one socket connection.

SECTION 4

4. JREAP OVERVIEW

4.1 JREAP operation over different media.

a. The JREAP is designed to support operations over most communication media (JRE media). Each JRE medium has unique characteristics. Military Ultra High Frequency (UHF) satellite and terrestrial Radio frequency (RF) communications are half-duplex. Military Super High Frequency (SHF) Satellite Communications (SATCOM) support full-duplex operations but are limited to point-to-point circuits. Military Extremely High Frequency (EHF) Medium Data Rate (MDR) SATCOM has circuit configuration limitations. The DoD Information Technology Standards and Profile Registry (DISR) defines the applicable Information Transfer Standards for these military communications systems. Commercial SATCOM is mostly point-to-point and supports full-duplex usage. IP communications can have packet loss, packet reordering, and packet delay characteristics that are difficult to predict. The JREAP supports all of these media, as well as additional media, by providing a flexible protocol design with common fields.

b. The JREAP is designed to support the networking of two or more JRE Processor nodes, as illustrated on [Figure 4.1-1](#), for the purpose of passing selected data from one node to any other node(s), via JRE media. The JREAP contains many management and monitoring features for maintaining required communication capabilities between JRE nodes.

c. In order to manage the JRE network and report connectivity and filtering, a globally unique Designator (16 bits) should be assigned to: 1) each JRE link connecting JRE Processors, and 2) each TDL serviced by a JRE Processor (Link 16, Link 11B, Link 11 net). These Designators provide operational users with the capability to

uniquely identify every JRE subnet in a global JRE environment. For point-to-point communications, each (logical or physical) connection between each pair of JRE Processors will have a unique link Designator. A single Designator will be used for a JRE medium that connects several JRE Processors over a multicast or broadcast link.

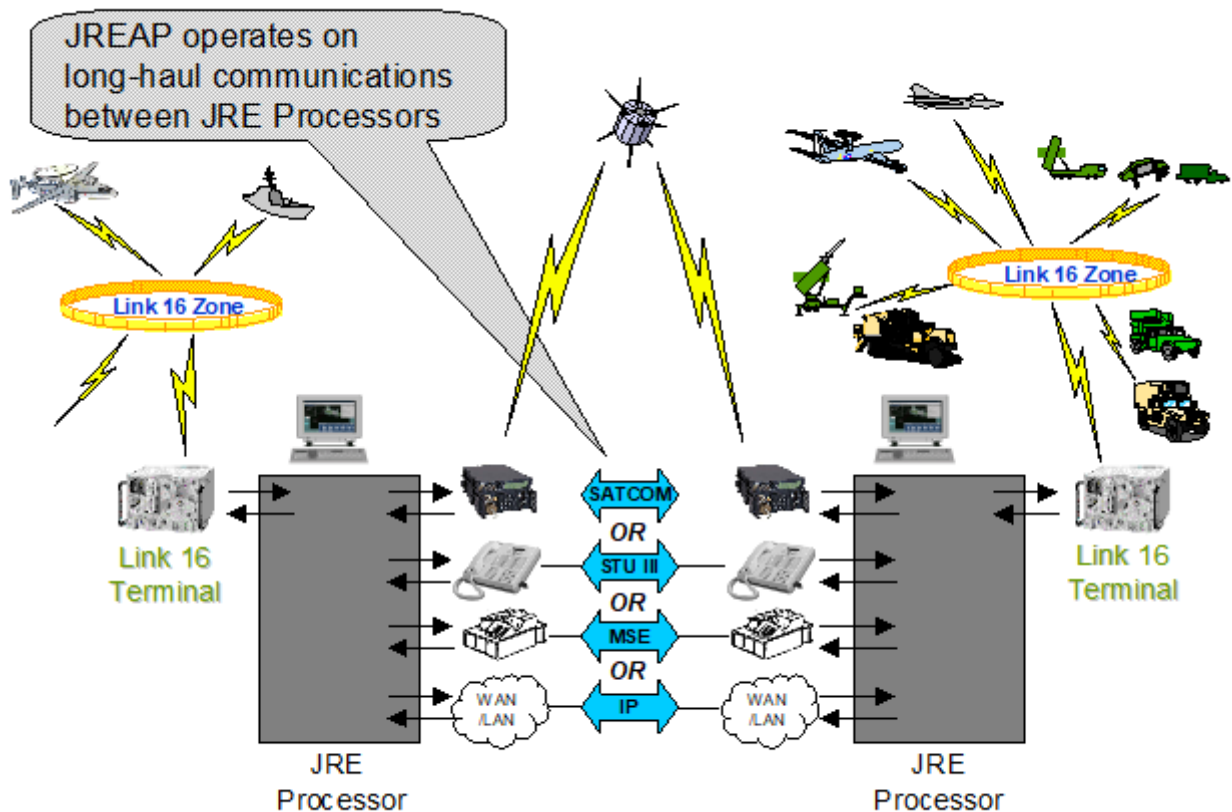


Figure 4.1-1. JREAP Applications

d. Joint operational planners will accomplish the creation of all Designators applicable to the JRE environment and publish them in the OPTASKLINK. While the JREAP presumes that Designators will be assigned, their creation is beyond the scope of this document.

e. The JREAP requires specific processing to support link operations. These include the negotiation of a common time reference (CTR), management of link filters, and the acknowledgment of messages. A JRE Processor maintains the internal state information required to

support these functions. When transmitting a TDL message the JRE Processor shall use the same transmit rules and protocols as specified for that message in its own MIL-STD (e.g. J3.2 message/MIL-STD-6016), unless specified otherwise in this MIL-STD. The JRE Processor shall resolve any differences in the transmit procedures of the various types of links that it interfaces with, as specified in [Section 5](#). [Section 5](#) and the appendices may require other link-specific processing.

f. The JREAP is designed to be used with communications systems that conform to the OSI model, as well as "legacy" communications systems that do not conform to the OSI-layered model. Two separate protocol stack variations are described within this document, Full Stack and Application Layer (see [4.2](#)). [Figure 4.1-2](#) illustrates the concept of these two variations. As shown on [Figure 4.1-2](#), JREAP messages are either transported using a full stack that provides Message Group headers and Transmission Block headers, or they are encapsulated with an Application Layer header and transported using a Commercial Off-the-Shelf (COTS) transport layer. The figure also illustrates the intended use of Appendices [A](#), [B](#), and [C](#).

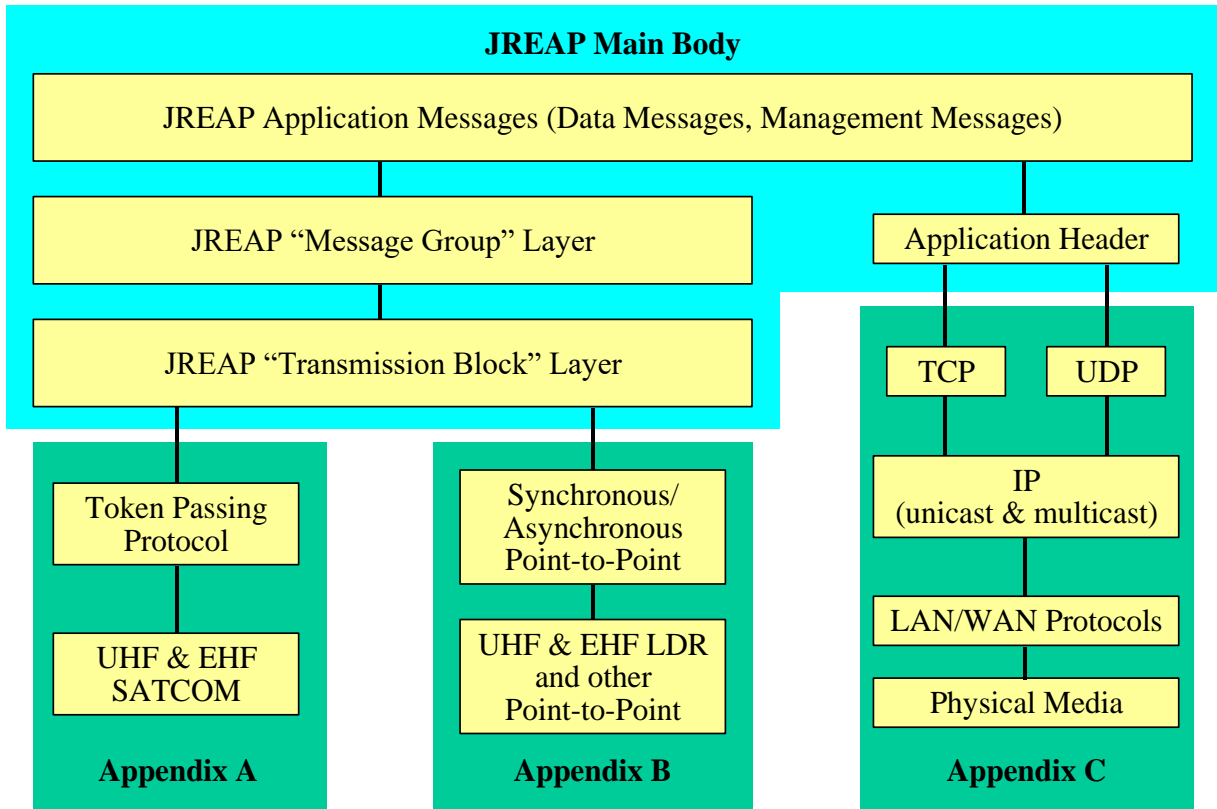


Figure 4.1-2 Full Stack (Appendices A and B) and Application (Appendix C) implementations.

4.2 General structure of the JREAP data stream. At the application level, the stream of data transmitted by a JRE Processor using the JREAP consists of a series of headers, each followed by data defined by the header, as shown on [Figure 4.2-1](#).

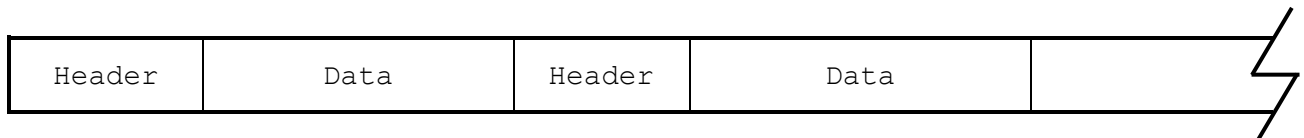


FIGURE 4.2-1. Overview of the general structure of the JREAP data stream.

a. At the start of each header is a Header Type field, indicated by "HT", that can be examined to determine the type of header and structure of the data. Based upon the value in this field, the JRE Processor can determine the header structure and locate the Message Type field, which determines the contents of the data portion of the message. There are several different header types defined in [Section 5](#); however, in general, there are two different header structures.

4.2.1 Full Stack Header Structure. The first header structure is designed for use over media that do not provide for built-in OSI transport layer functionality. For these media, the JREAP includes lower layer functionality, such as error detection and message sequencing. This type of JREAP usage is referred to as "Full Stack". To provide for better efficiency, the necessary fields are divided among two header groups, the Transmission Block Header and the Message Group Header. Basic information pertaining to all the data in the entire transmission block is contained in the Transmission Block Header. A Message Group Header is used to introduce each message or common group of messages with the additional data that is specific to that group of messages, allowing several message groups to be sent in the same transmission block. An overview of the Full Stack JREAP data structure is shown in [Figure 4.2-2](#).

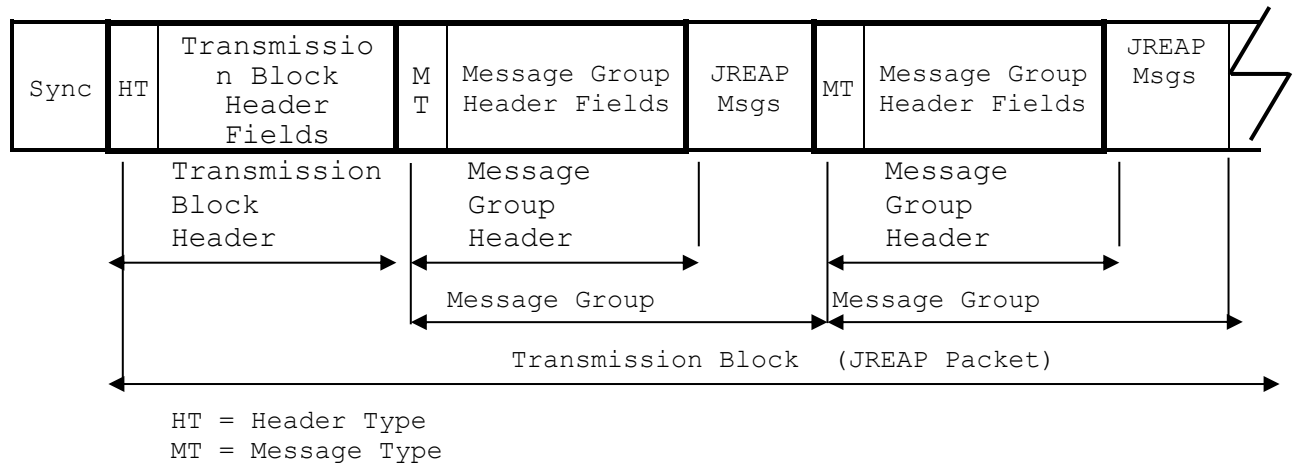


FIGURE 4.2-2. Full Stack JREAP data stream.

a. In [Figure 4.2-2](#), "Sync" indicates a synchronization pattern or other appendix-specific preamble. The Header Type field occurs at the start of a JREAP "Transmission Block". Following the Transmission Block header are one or more "Message Groups". Each Message Group is delimited by a Message Group header, which begins with a Message Type field, indicated by "MT". The structures of both the Transmission Block Header and the Message Group Header are defined in [Section 5](#).

4.2.2 Application Header Structure. The second header structure is designed for use over media utilizing TCP and UDP, that provide OSI transport layer functionality. For such media, the JREAP uses the transport layer functionality of the underlying media, eliminating the need for some of the data that is provided in the Transmission Block Header of the Full Stack structure. This type of JREAP usage is referred to as "Application". All of the basic information that pertains to all the messages that follow are contained in the Application Header. For some JREAP messages, a modified format is used to add the overhead data specific to that message within the first few bytes of the message format that also packs the message(s) (e.g. J-Series, VMF, etc.) being forwarded. An overview of the Application Layer JREAP data structure is shown in [Figure 4.2-3](#).

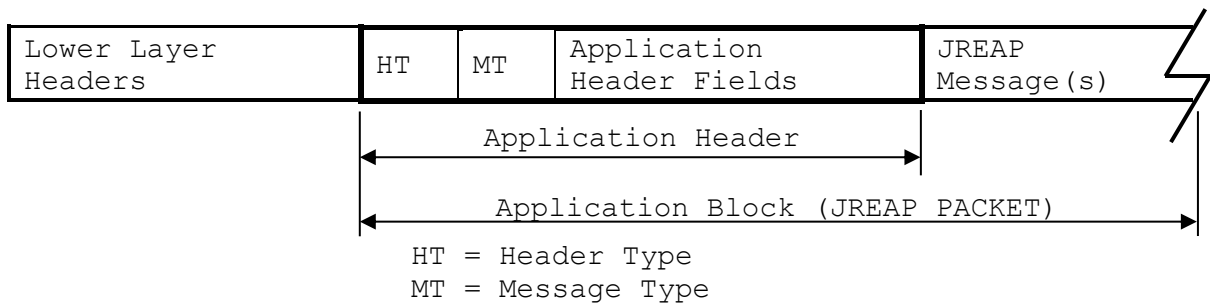


FIGURE 4.2-3. Application layer JREAP data stream.

a. As shown in [Figure 4.2-3](#), in the Application Layer mode of operation, JREAP data is transmitted in JREAP Application blocks. A JREAP Application block consists of a JREAP Application header, followed by one or more JREAP messages. The JREAP Application header uses the same Header Type and Message Type fields as the Full Stack mode of operation.

4.3 Intrusion Detection. The JREAP contains three features at the application level to support detection of intrusion events. JRE Processors should develop intrusion detection logic using these features. This document assumes that the actual process for detecting communication loops and intrusion are covered under the JRE Processor system specification.

a. The first feature is that all transmission JREAP packets have the JRE Processor uniquely identified via the assigned IU number. A JRE Processor should monitor all network traffic and alert the JRE operator when it receives data with its IU number. This monitoring serves to check for data loops within the communication network and for any attempt by a possible intruder to either retransmit a JREAP packet or assume a JRE Processor's identity.

b. The second feature is that the JREAP requires a coordinated time standard on a network that can be used to detect and identify possible intrusion on the secure network. All data is referenced to the DVT in each transmitted JREAP packet. JRE Processors should monitor the average transmission delays for each IU on a network and note if its transmitted JREAP packets constantly exceed the latency requirements (see [5.5.4.9](#)).

c. The third feature is that the JREAP requires a sequence number within each transmitted JREAP packet. All transmitted JREAP packets for each IU should arrive sequentially, at the application level. Part of JREAP processing requires TSN checks to determine if a JREAP packet is a repeat of a previously-received JREAP packet, in addition to "sanity checks" to determine if a repeat was possibly induced by lower layer communications. For example, out of order JREAP packets and repeats are not possible with TCP/IP, and should indicate a problem.

SECTION 5

5. DETAILED REQUIREMENTS

5.1 General. As described in [Section 4](#), the JREAP is intended to operate as an application-layered protocol that encapsulates formatted tactical data within a DISR-compliant transport layer service. In addition, as described above, for certain specific media which do not support a DISR-compliant transport layer and lower layers, the JREAP provides a complete protocol stack to enable the JREAP application data to be exchanged over those media.

a. This document includes requirements that apply when the JREAP uses the Application header, as well as requirements that apply when the JREAP uses Full Stack (Transmission Block and Message Group) headers. Most of the application data fields used by the JREAP are the same in both cases; however, in order to increase bit efficiency and error recovery for specific media, the way in which these fields are embedded within various layers differs between Application and Full Stack headers.

b. The specification of the JREAP is structured as follows: [Section 5.2](#) defines header fields and processing requirements that are common to both the Full Stack and Application headers, [5.3](#) describes the JREAP Application header structure, [5.4](#) describes the JREAP Full Stack usage and its headers, [5.5](#) specifies the format and usage of the JREAP messages, and [5.6](#) describes JRE link monitoring. [Sections 5 Part 1](#) and [5 Part 2](#) contain the detailed requirements for the JREAP headers and messages respectively. Appendices provide further details on how the requirements in [Section 5](#) are to be applied.

5.2 Common Elements.

5.2.1 Transmission order. To ensure compatibility and interoperability, it is essential that every JRE Processor transmit and process data in the same order. The following subparagraphs

define general requirements for the order in which a JRE Processor transmits data.

5.2.1.1 Byte transmission order. This subparagraph defines the order in which the bytes of JREAP headers and messages are constructed and sent to a JRE link for transmission. JREAP header and message structures are defined throughout this document on figures such as [Figure 5.2-1](#). JREAP bytes shall be transmitted in order from right to left, top to bottom. On [Figure 5.2-1](#), Byte 0 would be transmitted first, followed by the remaining bytes in sequential order. JREAP messages received from a JRE link are to be in this order.

Byte	Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Bit	Byte
1	15	Byte 1								Byte 0								0	0
3	31	Byte 3								Byte 2								16	2
5	47	Byte 5								Byte 4								32	4

FIGURE 5.2-1. JREAP Byte Order.

5.2.1.2 Bit order. For each field depicted within this document, the most significant bit shall be located in the lowest numbered bit position unless specifically designated otherwise. Generally, all data fields are read from right to left (lower bit number to higher bit number), with the most significant bit on the right. The order of transmission of bits within a byte is dependent upon the physical layer and is beyond the scope of this document.

5.2.2 Header fields. As discussed in [Section 4](#), the JREAP uses different header structures for the Full Stack and Application modes of operation; however, many fields are common within the different header structures. These common header fields are shown in [Table 5.2-1](#) and are defined in the following subparagraphs.

TABLE 5.2-1. Common header fields.

FIELD NAME	SIZE (BITS)
Header Type	4
Message Type	4
JRE Sender ID	16
Data Valid Time	28
Time Accuracy	4
Transmission Time Reference flag	1
Acknowledgment Request flag	1
Data Age	13
Relay flag	1
Spare	N/A

5.2.2.1 Header Type field. The 4-bit Header Type field identifies the header format to follow. [Table 5.2-2](#) lists the current Header Type values that shall be used. The value of 15 is reserved to allow expansion to a sublevel, providing additional Header Type options if necessary in the future.

TABLE 5.2-2. Header Type field values.

DECIMAL VALUE	ASSIGNMENT
0	Undefined
1	Announced Token Passing (Appendix A)
2	Point-to-Point (Appendix B)
3	Application Layer (Appendix C)
4 - 14	Undefined
15	Reserved for expansion

5.2.2.2 Message Type field. The 4-bit Message Type field identifies the type of message that is contained within the data portion of the JREAP message. JREAP Message Type field values defined in [Table 5.2-3](#) shall be used. While Message Type field values have been assigned for all of the message types shown in [Table 5.2-3](#), only selected message types are currently defined within this document. The value of 15 is reserved to allow expansion to a sublevel, providing additional message type options if necessary in the future.

TABLE 5.2-3. Message Type field values.

FIELD VALUE	MESSAGE TYPE	REFERENCE
0	Management	5.5.4
1	JREAP J-Series	5.5.1
2	JTIDS/MIDS JREAP Free Text (Coded)	5.5.2
3	JTIDS/MIDS JREAP Free Text (Uncoded)	5.5.3
4	Variable Message Format (VMF)	TBD
5	Link 22	TBD
6	Common Message Format (CMF) Integrated Broadcast Service (IBS)	TBD
7	JREAP J-Series with NPG Assignment	5.5.5
8 - 14	Undefined	N/A
15	Reserved for Expansion	N/A

5.2.2.3 JRE Sender ID field. The 16-bit JRE Sender ID field shall contain the Interface Unit (IU) number of the JRE Processor that is generating the message header. Each JRE Processor should be assigned a unique IU number via the OPTASKLINK. Link 16 uses a 15-bit Address number to identify Link 16 participants. For a JRE Processor with an associated Link 16 terminal with its own 15-bit JTIDS/MIDS Unit (JU) number, the JRE Sender ID field shall be set to the associated JU number with bit 0 of the JRE Sender ID field set to 0.

5.2.2.4 Data Valid Time field. The 28-bit Data Valid Time (DVT) field is used throughout the protocol to support data extrapolation, latency determination, and detection of stale data. The DVT field represents the time to which data has been extrapolated (as applicable) and shall be the number of seconds past midnight with a least significant bit of 1/1024 of a second. For some media, it may also indicate a physical transmission time (see [5.2.2.6](#) and the appendices for additional requirements for the DVT field). DVT is referenced to the CTR for each communication link, per appendix requirements and CTR negotiation (see [5.2.6](#)).

a. DVTs subject to a failed CRC shall not be used for extrapolation or latency calculations. Associated extrapolative messages shall be discarded in this case if the negotiated time reference is UTC, JRE-NC, or Event Strobe but shall be accepted and extrapolated for Fixed Delay and RTT time references since the received DVT value is not used. (Subject to other criteria for the data to be considered valid for receipt, and/or processing restrictions such as set forth in [5.2.6](#) and [5.4.3.4.9](#))

5.2.2.5 Time Accuracy field. The 4-bit Time Accuracy field provides the definition of the accuracy of the time contained in the DVT field. This field provides a measure of the uncertainty in the time values provided by the JRE Processor, with respect to the negotiated CTR. The Time Accuracy field value of n shall be defined by the following formula:

$$\text{Time Accuracy} = 1 \text{ millisecond} \times 2^{(n-1)}, \text{ where } 15 \geq n \geq 1$$

a. Time Accuracy values range from 1 millisecond to 16.384 seconds, which provides a large enough range for all networks. When the time accuracy exceeds 16.384 seconds, or the system time accuracy cannot be calculated, a value of 0 (No Statement) shall be set. The time accuracy field shall be set to the lowest integral value of n whose calculated time accuracy exceeds the known system time accuracy.

5.2.2.6 Transmission Time Reference flag. The Transmission Time Reference flag (TTR) specifies whether the DVT field corresponds to the time at which the data is transmitted out of the physical interface. The transmitting JRE Processor shall set this flag to 1 if the DVT represents the physical transmission time within the Time Accuracy, and 0 if the DVT does not.

5.2.2.7 Acknowledgment Request flag. The Acknowledgment Request flag shall be set to 1 if the message is to be acknowledged by the receiving JRE Processor(s). Acknowledgment and retransmission processing is described in both [5.2.3](#) and [5.2.4.3](#).

5.2.2.8 Data Age field. The Data Age is used with the DVT (see [5.2.2.4](#)) to indicate the length of time that a J-Series message has been in the JRE process. It is used to indicate the age (data latency) of the data message(s) behind the header from the time of initial receipt by the first JRE Processor. The Data Age is computed relative to the DVT field. The least significant bit of the Data Age field shall be 1/32 of a second.

a. On [Figure 5.2-2](#), the maximum age of the data behind a given header is represented with respect to the DVT.

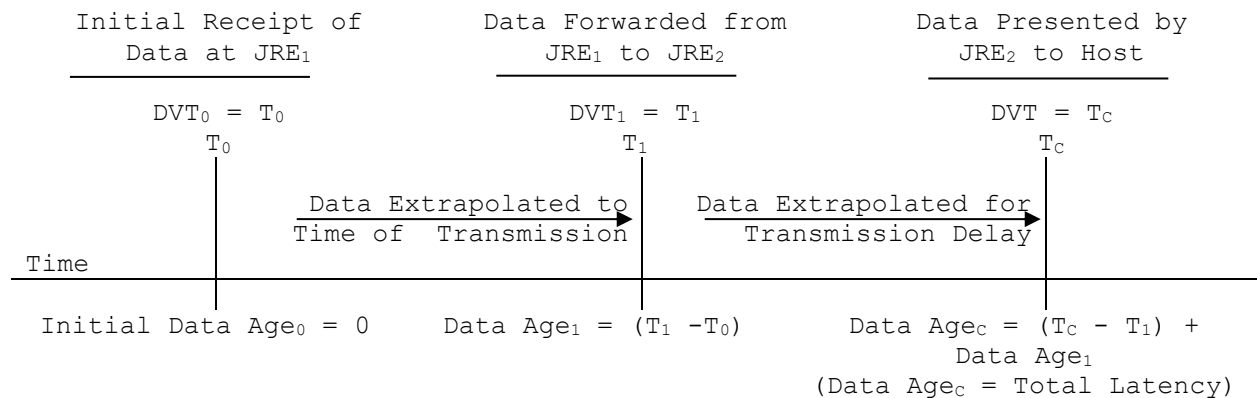


Figure 5.2-2. Relationship between Data Age and Data Valid Time

b. Messages received on a JRE Link come with a DVT and a Data Age. Messages received from other links which provide a DVT shall use that time as the basis for their own receive DVT. For links which do not provide receive time information, the JRE Processor uses the time of receipt as the DVT for the received message. When no Data Age is received with a message, the initial Data Age is assumed to be 0.

c. When a JRE Processor passes a data message on to another JRE link, it computes a new DVT and Data Age for the outgoing message header. The outgoing Data Age is calculated by taking the difference between the received DVT and the new DVT (adjusted as appropriate for timing differences) and adding the Data Age of the received message, if applicable. When more than one message from a common source is being forwarded behind the same header, the Data Age of the oldest message is used (forwarders should only group those messages received in close time proximity of each other). More precisely, the Data Age field in the header shall be set to the value A determined as follows:

(1) $A = \text{Max}[A(m)]$, the maximum is computed over all following data messages m,

Where:

$A(m)$ is the age of message m.

The value of $A(m)$ shall be computed as follows:

$A(m) = [DVT - T_R(m)]$, for message m not received from another JRE link

$A(m) = [DVT - DVT(m)] + A_R(m)$, for message m received from another JRE link

(2) DVT is the Data Valid Time (see [5.2.2.4](#)),

$T_R(m)$ is the time that message m was received by this JRE Processor referenced to link time on the outgoing link,

$DVT(m)$ is the Data Valid Time received from the previous JRE Processor for message m, adjusted for the differences in the link time references, and

$A_R(m)$ is the Data Age value received from the previous JRE Processor for message m.

d. Data age and latency. The goal of the Data Age field is to allow the JRE Processors, at any point in the JRE architecture, to determine the approximate time at which the data originated at the

source TDL. Network architecture plays a significant role in determining the system requirements for data age and data latency. The type of media, the number of hops, and the number of JRE Processors involved in a network (point-to-point or multicast) impact the time needed for messages to arrive at the destination. The range of values for the Data Age field of both the Message Group header and the Application header provides flexibility to accommodate many different scenarios.

5.2.2.9 Relay flag. The Relay flag shall be set to 1 when the JRE Processor transmitting the message is not directly connected to the source network from which the data originated. If the Relay flag is set, the time accuracy in the JREAP Transmission Block header does not include the inaccuracies of previous JRE Processors.

5.2.2.10 Spare fields. Spare fields are identified throughout this standard, inside of various message headers and within message data. All spare bits shall be set to 0 upon transmission and shall be ignored upon reception.

5.2.3 Retransmission timeouts. A JRE Processor may include a request for acknowledgment in various types of messages transmitted. When the corresponding ACK is not received, the sender may be required to retransmit the message. Acknowledgments may be requested for JREAP Management messages or for JREAP messages containing J-Series messages that require machine receipt processing.

a. The policy by which retransmissions occur is common to all message types. Timeout values are expressed in terms of the "variable" T_RETRY, which in turn is related to the type, speed, and latency of specific links.

b. On links that do not provide guaranteed delivery, the JRE Processor shall maintain an estimate of the Recent Average Round-Trip Time (T_RARTT) for each peer on each link. This estimate shall be

initialized from values in [Table 5.2-4](#). The T_RARTT estimate shall be continually updated based on the average of the round-trip times measured for the most recent ten acknowledged management messages. In the absence of acknowledged Management message traffic in the most recent 20 seconds, the JRE Processor shall generate one Round-Trip Time Delay or Echo message for the refinement of the T_RARTT estimate. For purposes of refining T_RARTT, the first processor response, including CANTPRO, to the Round-Trip Time Delay or Echo message shall be used.

c. On links that do not provide guaranteed delivery (see [Table 5.2-4](#)), T_RETRY shall be set to 1.5 times the estimated T_RARTT but with a minimum of no less than 1 second.

d. On links for which an underlying protocol provides guaranteed delivery of data (such as TCP), T_RETRY shall be fixed at 240 seconds to avoid unnecessary JREAP retransmission attempts and transmission of Round-Trip Time Delay or Echo messages is not required for the determination of T_RARTT.

TABLE 5.2-4. Initial T_RARTT values (by link characteristics/type).

APPENDIX	LINK TYPE	GUARANTEED DELIVERY	LINK SPEED (bits/sec)	T_RARTT (seconds)	COMMENTS
A	DAMA	No	2400, 4800	20	Or three token cycles (see Appendix A).
B	ALL	No	$\leq 14.4k$	5	Synchronous or asynchronous.
B	ALL	No	$> 14.4k$	5	Synchronous or asynchronous.
C	TCP	Yes	N/A	N/A	
C	UDP	No	N/A	5	Unicast or multicast.

e. The JRE Processor should make the value of both T_RARTT and T_RETRY available for operator inspection.

5.2.4 Link 16 processing.

5.2.4.1 JRE Processor J2.0 IIU PPLI message. The JRE Processor shall periodically construct and transmit its own unit J2.0 IIU PPLI message on any JRE network regardless of CTR state, as follows.

a. For air units, at the rate positional updates are determined, but shall be no more than once every 3 seconds and no less than once every 12 seconds. If no positional update has been received since the last transmission, the periodic J2.0 message for own unit shall not be transmitted.

b. For mobile surface and land units on JRE Appendix A networks, a J2.0 shall be transmitted once every transmission cycle if a positional update has been received since the last transmission. For surface and land units on JRE Appendix B and C networks, if a positional update has been received since the last transmission, then a J2.0 shall be nominally transmitted every 12 seconds after the previous transmission using the latest positional update. If no positional update has been received since the last transmission, the periodic J2.0 message for own unit shall not be transmitted.

c. For non-mobile (fixed) surface and land units on JRE Appendix A networks, a J2.0 shall be transmitted once every transmission cycle using the initialized positional data. For non-mobile (fixed) surface and land units on JRE Appendix B and C networks, a J2.0 shall be transmitted every 12 seconds using the initialized positional data.

5.2.4.2 J-series message extrapolation. A transmitting JRE Processor extrapolates the Link 16 J-Series messages listed in [Table 5.2-5](#) as defined in MIL-STD 6016, to the time stated in the DVT field (see [5.2.5](#)). With the Exception of a J2.0, a JRE Processor shall not

transmit or process received messages requiring extrapolation on a link unless the CTR is in the ESTABLISHED or FINAL state for that link (see [5.2.6](#)).

TABLE 5.2-5. J-Series messages to be extrapolated.

MESSAGE NO.	MESSAGE TITLE
J2.0 (1)	Indirect Interface Unit PPLI
J2.2 (2)	Air PPLI
J2.3 (2)	Surface PPLI
J2.4 (2)	Sub Surface PPLI
J2.6 (2)	Land Track PPLI
J3.0 (1)	Reference Point
J3.2 (1)	Air Track
J3.3 (1)	Surface Track
J3.4 (1)	Subsurface Track
J3.5 (1)	Land Point/Track
J12.0	Mission Assignment
J12.1 (3)	Vector
J12.6	Target Sorting

Notes:

(1) Messages lacking course or speed will not have their reported position extrapolated. Non-real-time tracks (Track Quality (TQ) = 0) are not extrapolated.

(2) All J2.x PPLI messages are converted to J2.0 messages for transmission.

(3) When the elapsed time exceeds 1 second, the "Time to Intercept" should be reduced by the elapsed time (in seconds, rounding up for 0.5 or greater).

5.2.4.3 JREAP J-Series Message Receipt/Compliance processing.

For certain J-Series messages, MIL-STD-6016 specifies an automated process that provides an indication back to the source terminal and operator as to whether the message has been successfully received or not. The complete Receipt/Compliance (R/C) process is described in Appendix E, paragraph E.4.4 of MIL-STD-6020.

a. The JREAP Acknowledgment Request flag shall be set to 1 when a J-Series message requiring R/C (as specified in MIL-STD-6016) is transmitted in the JREAP J-Series or JREAP J-Series with NPG Assignment message. When the Full Stack mode of operation is being used, the Acknowledgment Request flag is set to 1 in the JREAP Full Stack Message Group header (Type 3) (see [5.4.3.4](#)). When the Application mode of operation is being used, the Acknowledgment Request flag is set to 1 in the JREAP J-Series or JREAP J-Series with NPG Assignment message (Application) (see [5.5.1.1](#)).

b. Either a JREAP J-Series Acknowledgment (Full Stack) message (see [5.5.4.7](#)) or JREAP J-Series Acknowledgment (Application) message (see [5.5.4.8](#)) shall be transmitted when a JREAP J-Series or JREAP J-Series with NPG Assignment message is received with the Acknowledgment Request flag set to 1.

c. If no acknowledgment is received from the destination GU or the GU providing MIL-STD-6020 forwarding for the Link 16 message addressee using the timeout requirements of [5.2.3](#), the J-Series message requiring R/C shall be retransmitted up to two more times with the Acknowledgment Request flag set to 1. The JRE Processor shall alert the operator in the event that no acknowledgment was received from the destination GU or the GU providing MIL-STD-6020 forwarding for the Link 16 message addressee after three transmission attempts.

d. Upon receipt of a JREAP Full Stack Message Group header or JREAP J-Series or JREAP J-Series with NPG Assignment message (Application) with an Acknowledgment Request flag set to 1, the

destination GU or the GU providing MIL-STD-6020 forwarding for the Link 16 message addressee shall send a JREAP Acknowledgment message. The JRE Processor requesting an acknowledgment shall ignore acknowledgment messages received from everyone except the destination GU or the GU providing MIL-STD-6020 forwarding for the Link 16 message addressee.

e. The acknowledgment process is repeated at each intermediate processor when there are multiple hops in the transmission path between source and destination JRE Processors. Acknowledgment takes place separately and independently on each hop.

5.2.4.3.1 Secondary Track Number List. Machine receipt processing shall not be limited by Link 16 terminal secondary track number limitations even if the secondary track number capacity of the host Link 16 terminal is exceeded. The secondary TNs being maintained by the Link 16 terminal shall not be duplicated by the hosting JRE Processor. The Link 16 terminal will provide machine receipts for all secondary TNs contained in its secondary TN table. The JRE Processor shall provide machine receipts for all secondary TNs contained in its own secondary TN list.

5.2.5 Data extrapolation. The JRE Processor extrapolates data identified in [5.2.4.2](#) before transmission. The JRE Processor shall extrapolate this data for the elapsed time from the DVT of the received data to the DVT specified in the header of the outgoing message (accounting for the CTRs of the links). For data received without a DVT the received DVT shall be the time the JRE Processor received the data. For transmission of messages on a link that does not implement the DVT (a non-JRE link), the JRE Processor shall extrapolate the data in the messages from the received DVT to the expected time of transmission (transmission DVT). When the message data goes to the host, the data shall be extrapolated to the current time unless specified otherwise in interface documentation.

a. The JRE processor shall use the extrapolation algorithm shown below. This extrapolation algorithm is only for the area between 85 degrees South and 85 degrees North latitude.

```
Vnorth = Speed * cos(Course)
Veast  = Speed * sin(Course)
eLat   = Lat  + ((ΔT * Vnorth)/(RN+Altitude))
eLong  = Long + ((ΔT * Veast)/((RE+Altitude)*cos(Lat)))
```

where RE (20960800 feet) and RN (20890581 feet) are constants representing the average east and north earth radii of curvature in the mid latitudes (specifically these are the WGS-84 values for a latitude of 45 degrees). For extrapolation purposes, the altitude component will be assumed to be '0' when altitude data is not available for a track or PPLI. The extrapolation time is ΔT. The extrapolated values of latitude and longitude are eLat and eLong.

b. JTIDS/MIDS terminals currently do not extrapolate above 85 degrees latitude, therefore extrapolation within five degrees latitude of the poles shall not be implemented for JRE Processors.

5.2.6 Establishing a common time reference. The CTR message (see [5.5.4.5](#)) is used to coordinate a CTR for each JRE link. In this section, a "Command", "Information", "Query", or "Reject" message refers to a CTR message with the Control/Response Indicator field in the Management message subheader (see [5.5.4.2.8](#)) set to values 1 (Command), 2 (Information), 0 (Query), or 133 (Reject), respectively.

a. CTR negotiation is specified in terms of a state machine, with states as shown on [Table 5.2-6](#).

TABLE 5.2-6. Common time reference negotiation states.

STATE	GENERAL DESCRIPTION
LISTENING	The JRE Processor is gathering information about what other JRE Processors' time reference capabilities are and trying to decide what time reference to propose.
ESTABLISHED	A time reference has been agreed upon by a set of JRE Processors, but remains subject to change if necessary to accommodate additional JRE Processors.
FINAL	A CTR has been chosen, and is not subject to change.
FAIL	The JRE Processor is unable to negotiate a CTR with other participants on the link. Operator action or other corrective actions outside the scope of the protocol, such as restarting the link, may be necessary.

b. A JRE Processor in the LISTENING or FAIL state on a given link shall not transmit or process messages containing extrapolative data (see [5.2.5](#) and [TABLE 5.2-5](#)) other than PPLIs for JRE Processors on that link (these PPLIs are not extrapolated). A JRE Processor in the ESTABLISHED or FINAL state may send and receive extrapolative data.

c. An overview of state transitions is shown on [Figure 5.2-3](#). States are boxes labeled with the state name. State transitions are indicated by arrows labeled with events that must occur and conditions that must be true for a state transition to occur. (Refer to [5.2.6.2](#) for a description of these events and conditions.) The figure provides only an overview of the state machine; detailed requirements are contained in [section 5.2.6.3](#).

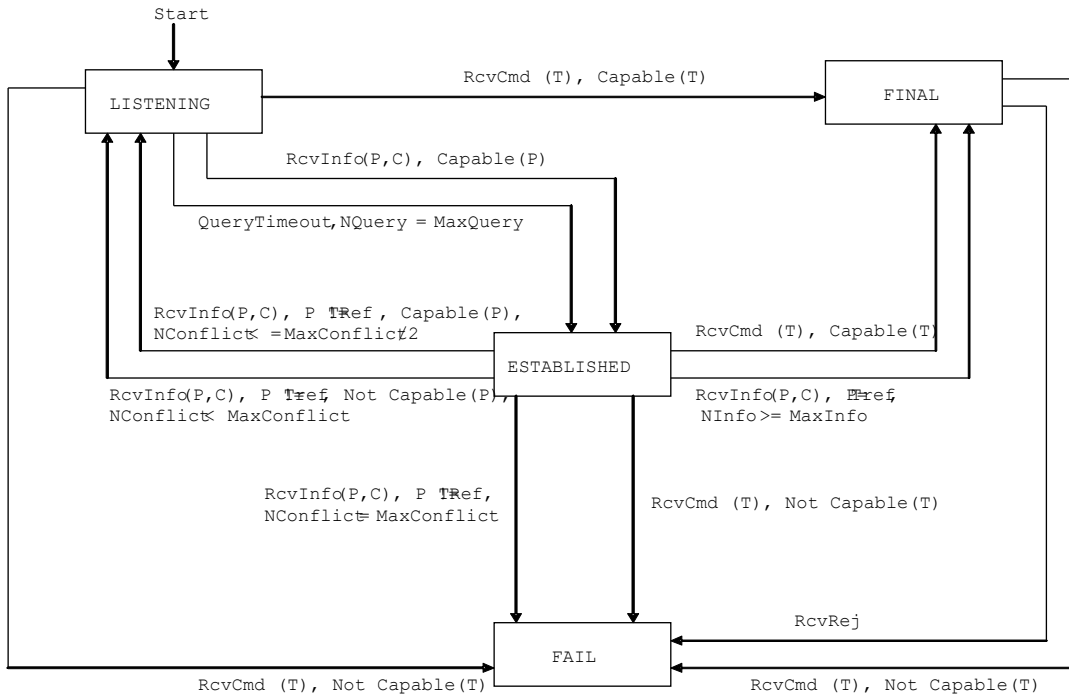


Figure 5.2-3. Common time reference state transition overview diagram.

5.2.6.1 Weighted Capable Time Reference Vector. As discussed in [5.5.4.5](#), the CTR management message allows each JRE Processor to describe the set of time references that it is capable of using, and one time reference that it prefers to use. The CTR negotiation algorithm requires each JRE Processor to maintain internally a “weighted capable time reference vector” that is used to assist in selecting the time reference system that will work for the largest set of processors on the link. The weighted capable time reference vector consists of a list of weight values for each time reference system. The weight values are real numbers between 0 and 1, which sum to 1. We use the notation $w[i]$ to refer to the weight assigned to the i ’th time reference system. The weighted capable time reference vector will be updated each time that a JRE Processor receives a Query or Information message while it is in the LISTENING or ESTABLISHED states.

a. The capable time reference vector shall be initialized as follows. Let n_c denote the number of time references that the JRE Processor is capable of, and let p denote the preferred time reference. Then $w[i]$ is set as follows

- If the processor is not capable of time reference i , then $w[i] = 0$.
- If the processor is capable of time reference i , and i is not equal to p , then $w[i] = 0.1$
- If $i = p$, then $w[i] = 1 - 0.1(n_c - 1)$.

b. Observe that this results in a vector whose weights sum to 1, with the highest weight given to the preferred time reference.

c. On receiving a message indicating the capable time references of another processor, the weight vector of this processor is updated to increase the weight of those time references for which both processors are capable, and to reduce the weight of those time references for which they are not both capable. This shall be done using the following Reweight algorithm.

- If this processor is capable of time reference i and the other processor is not capable for time reference i then set $w[i] = w[i]/2$. Let totalDecr denote the total decrease in weight as a result of this action for all values of i .
- Let n_{cc} denote the number of time references that both this processor and the other processor are capable of. For each such time reference i , set $w[i] = w[i] + \text{total Decr}/n_{cc}$.

d. Observe that after reweighting, the total weight remains constant at 1.

5.2.6.2 Common Time Reference Variables, Constants, Events, and Actions. The variables and constants needed for the CTR state machine are shown in [Table 5.2-7](#). A JRE Processor shall maintain these variables for each JRE link.

a. The events and conditions that can cause state transition events are listed in [Table 5.2-8](#).

b. The actions to be performed when state transitions occur are listed in [Table 5.2-9](#). When Common Time Reference messages are sent in these actions, processor acknowledgment shall not be requested.

TABLE 5.2-7. Common time reference variables and constants

NAME	DESCRIPTION
TRef	When the processor is in the ESTABLISHED state this is the proposed CTR, and when it is in the FINAL state this is the final CTR.
Weight	The weighted capable time reference vector for selection of preferred time (see 5.2.6.1).
NQuery	Counts number of Query messages sent after entering LISTENING state.
MaxQuery	The maximum number of Query messages to send before unilaterally selecting a preferred time reference. This shall be a constant with value 3.
NConflict	Counts number of times the JRE Processor has received an Information message with a preferred time reference that conflicts with TRef.
MaxConflict	The maximum number of received conflicting Information messages before failure. This shall be a constant with value 6.
NInfo	Counts number of times the JRE Processor has received an Information message with a proposed time reference that equals its selected preferred time reference.

TABLE 5.2-7. Common time reference variables and constants
(continued)

NAME	DESCRIPTION
MaxInfo	Number of Information messages with the same proposed time reference needed to transition to FINAL state. This shall be a constant with value 4.
Start	This event occurs whenever the JRE Processor commences operation on the link, as specified in the pertinent appendix.
RcvCmd(T)	A Command message is received, with final time reference T.
RcvInfo(P,C)	An Information message is received, with proposed time reference P a set of capable time references C.
RcvRej	A Reject message is received.
RcvQuery(P,C)	A Query message is received with a preferred time reference P and a set of capable time references C.
Capable(T)	The time source the processor is capable of using.

TABLE 5.2-8. Common time negotiation events and conditions.

EVENT/CONDITION	EXPLANATION
Start	This event occurs whenever the JRE Processor commences operation on the link, as specified in the pertinent appendix.
RcvCmd(T)	A Command message is received, with final time reference T.
RcvInfo(P,C)	An Information message is received, with proposed time reference P and a set of capable time references C.
RcvRej	A Reject message is received.
RcvQuery(P,C)	A Query message is received with a preferred time reference P and a set of capable time references C.
QueryTimeout	A certain amount of time has passed since a Query message was last sent. The initial timeout delay (whenever NQuery=0) shall be randomly selected from 0 to 5 x NConflict 2 seconds (a uniform probability distribution should be used). Subsequent timeout delays shall be set to 10 seconds.

TABLE 5.2-8. Common time negotiation events and conditions.
(continued)

EVENT/CONDITION	EXPLANATION
InfoTimeout	A certain amount of time has passed since an Information message was last sent. The timeout delay for this event shall be set to 30 seconds.
CmdTimeout	A certain amount of time has passed since a Command message was last sent. The timeout delay for this event shall be set to 4 minutes.
Capable(P)	This condition is true if the JRE Processor is capable of operating with preferred time reference P.
Capable(T)	This condition is true if the JRE Processor is operating with final time reference T.
SndInfo(P,C)	The JRE Processor sends an Information message indicating a proposed time reference of P and its capable time reference set C.
SndQuery(P,C)	The JRE Processor sends a Query message. In this message, the JRE Processor shall indicate the time reference that it prefers to use (P), and shall indicate all time references it is capable of supporting (C).
SndCmd(T)	The JRE Processor sends a Command message indicating a final time reference of T.
SndRej	The JRE Processor sends a Reject message.
ChooseT	The JRE Processor selects the highest weight time reference value from its weighted capable times. If there is more than one with the same highest weight, select the one with the maximum index.
Reweight(myC,C)	Updates internally maintained weighted capable time reference vector, myC based on set of received capability bits C (see 5.2.6.1).
BreakTie(myP,P)	Sets TRef to the maximum bit position among the common capable time references of myP and P. This is a tie-breaking rule when multiple common time references are available in both myC and C and the processors cannot agree on the right one at the later rounds of the CTR negotiation.

TABLE 5.2-8. Common time negotiation events and conditions.
(continued)

EVENT/CONDITION	EXPLANATION
Alert	The operator shall be alerted that time negotiation has failed.
AccyOverflow	The negotiated time reference is UTC and the local JRE Processor's estimate of current time has a measure of uncertainty that exceeds 16.384 seconds. The operator shall be alerted that time negotiation has failed due to lack of a reliable time source.

TABLE 5.2-9. Common time negotiation actions.

ACTION	EXPLANATION
SndInfo(P,C)	The JRE Processor sends an Information message indicating a proposed time reference of P and its capable time reference set C.
SndQuery(P,C)	The JRE Processor sends a Query message. In this message, the JRE Processor shall indicate the time reference that it prefers to use (P), and shall indicate all time references it is capable of supporting (C).
SndCmd(T)	The JRE Processor sends a Command message indicating a final time reference of T.
SndRej	The JRE Processor sends a Reject message.
ChooseT	The JRE Processor selects the highest weight time reference value from its weighted capable times. If there is more than one with the same highest weight, select the one with the maximum index.
Reweight(myC,C)	Updates internally maintained weighted capable time reference vector, myC based on set of received capability bits C (see 5.2.6.1).
BreakTie(myP,P)	Sets TRef to the maximum bit position among the common capable time references of myP and P. This is a tie-breaking rule when multiple common time references are available in both myC and C and the processors cannot agree on the right one at the later rounds of the CTR negotiation.
Alert	The operator shall be alerted that time negotiation has failed.

5.2.6.3 Common Time Reference State Machine. The detailed requirements for the state machine are shown on [Table 5.2-10](#). When a JRE Processor is in a given state and an event shown in [Table 5.2-10](#) occurs with the specified conditions true, the JRE Processor shall perform the specified actions and transition to the new state.

TABLE 5.2-10. CTR state transition table.

STATE	EVENT/CONDITIONS	ACTIONS	NEW STATE
N/A	Start	Initialize Weight; Set NQuery = 0; Set NConflict = 0	LISTENING
LISTENING	QueryTimeout, NQuery < MaxQuery	Set P = ChooseT; SndQuery(P,C); Increment NQuery	LISTENING
	QueryTimeout, NQuery = MaxQuery	Set TRef = ChooseT; SndInfo(TRef); Set NInfo = 0	ESTABLISHED
	RcvQuery(P,C)	Reweight(myC,C)	LISTENING
	RcvInfo(P,C), Capable(P)	Reweight(myC,C); Set TRef = P; SndInfo(TRef); Set NInfo = 1	ESTABLISHED
	RcvInfo(P,C), Not Capable(P)	Reweight(myC,C)	LISTENING
	RcvCmd(T), Capable(T)	Set TRef = T; SndCmd(TRef)	FINAL
	RcvCmd(T), Not Capable(T)	Alert	FAIL
ESTABLISHED	InfoTimeout	SndInfo(TRef)	ESTABLISHED
	RcvQuery(P,C)	Reweight(myC,C)	ESTABLISHED
	RcvInfo(P,C), P = TRef, NInfo < MaxInfo	Reweight(myC,C); Increment NInfo	ESTABLISHED
	RcvInfo(P,C), P = TRef, NInfo >= MaxInfo	Reweight(myC,C); Set TRef = P; SndCmd(TRef)	FINAL
	RcvInfo(P,C), P != TRef, Not Capable(P), NConflict < MaxConflict	Reweight(myC,C); Increment NConflict; Set NQuery = 0	LISTENING

TABLE 5.2-10. CTR state transition table. (continued)

STATE	EVENT/CONDITIONS	ACTIONS	NEW STATE
ESTABLISHED (continued)	RcvInfo(P,C), P != TRef, Capable(P), NConflict <= MaxConflict/2	Reweight(myC,C); IncrementNConflict; Set NQuery = 0	LISTENING
	RcvInfo(P,C), P != TRef, Capable(P), MaxConflict/2 < NConflict < MaxConflict	Reweight(myC,C); BreakTie(myP,P)	ESTABLISHED
	RcvInfo(P,C), P != TRef, NConflict = MaxConflict	Alert	FAIL
	RcvCmd(T), Capable(T)	Set TRef = T; SndCmd(TRef)	FINAL
	RcvCmd(T), Not Capable(T)	Alert	FAIL
	AccyOverflow	Alert	FAIL
FINAL	CmdTimeout	SndCmd(TRef)	FINAL
	RcvQuery(P,C)	SndCmd(TRef)	FINAL
	RcvInfo(P,C), P = TRef	Do nothing	FINAL
	RcvInfo(P,C), P != TRef	SndCmd(TRef)	FINAL
	RcvCmd(P), P != TRef	SndRej; Alert	FAIL
	RcvRej (multicast)	Alert	FINAL
	RcvRej (non-multicast)	Alert	FAIL
	AccyOverflow	Alert	FAIL

5.3 JREAP Application block.

5.3.1 JREAP Application block overview. The JREAP Application block consists of a JREAP Application header, followed by a sequence of JREAP messages, as shown on [Figure 5.3-1](#). The JREAP Application header is specified in the following subparagraphs. The JREAP messages following each Application header must all be of the same type as identified in the header (see [5.2.2.2](#)). Rules for embedding JREAP Application blocks into underlying transport layers such as TCP and UDP are found in the appendices to this document.

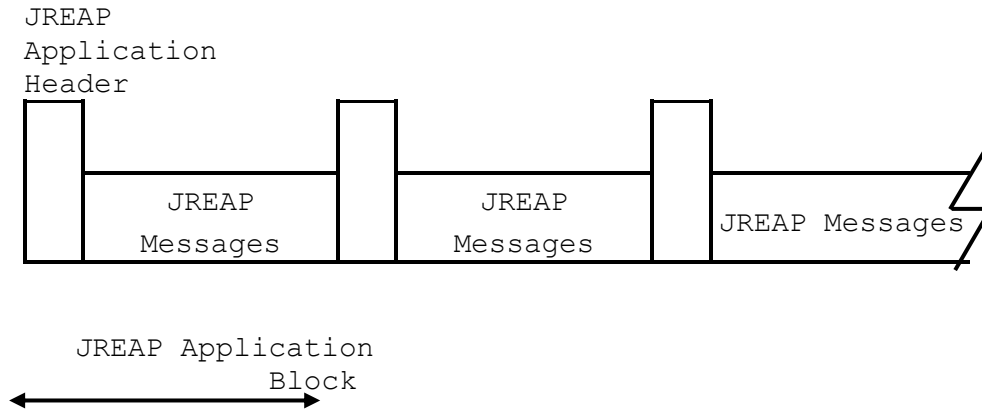


FIGURE 5.3-1. JREAP Application Block overview.

5.3.2 JREAP Application Header. The JREAP Application Header is for use with media that provide OSI transport layer functionality. The format and header details are shown in the [JREAP Application Block Header summary](#). There are no fields for Data Age or Source Track Number (STN) in the Application Header, therefore when this header is used for a J-Series message, a special JREAP J-Series message (Application) with its own Data Age and JSTN fields is used.

5.3.2.1 JREAP Application Header fields. The fields comprising the JREAP Application header are defined in the following subparagraphs.

5.3.2.1.1 Header Type field. This field is defined in [5.2.2.1](#) (In this specific case, the Header Type field is set to a value of 3 "Application Layer").

5.3.2.1.2 Message Type field. This field is defined in [5.2.2.2](#).

5.3.2.1.3 Transmission Time Reference flag. This flag is defined in [5.2.2.6](#).

5.3.2.1.4 Application Protocol Version field. The Version field shall be set to indicate the version of the Application Header that is

in use. The version of the Application Header specified in this document is Version 1. Subsequent versions shall be specified as successive whole numbers for use in this field.

5.3.2.1.5 Application Block Message Length field. The Application Block Message Length field shall be set to the total number of bytes in this JREAP Application block.

5.3.2.1.6 JRE Sender ID field. This field is defined in [5.2.2.3](#).

5.3.2.1.7 Time Accuracy field. This field is defined in [5.2.2.5](#).

5.3.2.1.8 Data Valid Time field. This field is defined in [5.2.2.4](#).

5.4 JREAP Full Stack.

5.4.1 JREAP Full Stack overview. The JREAP Full Stack is designed for use with underlying communication systems that do not provide complete transport and lower layer functionality, or for media with high error rates. For such media, the JREAP provides two complete data headers (Transmission Block and Message Group) that are intended to provide robust performance under low bandwidth and high bit error rate conditions. These headers are described below.

5.4.1.1 Overview of JREAP Full Stack headers. The JREAP Transmission Block Header separates application data into packets and provides error detection. The JREAP Message Group Header provides mechanisms to reduce, where possible, data loss due to media transmission corruption. Each Full Stack transmission shall consist of a JREAP Transmission Block Header followed by one or more JREAP Message Group Headers and their associated data. For JREAP J-Series messages, a separate Message Group Header is used for each message

source; several messages from that source can be packed behind that header. [Figure 5.4-1](#) shows the JREAP packet transmission order for two different JRE Processors that are sequentially transmitting data within network-type architectures such as Token Passing or Round-Robin. The figure could also represent two sequential transmissions made by one JRE Processor on a full-duplex, point-to-point medium. The amount of time that elapses between JRE transmissions is medium-, protocol-, and data load-dependent.

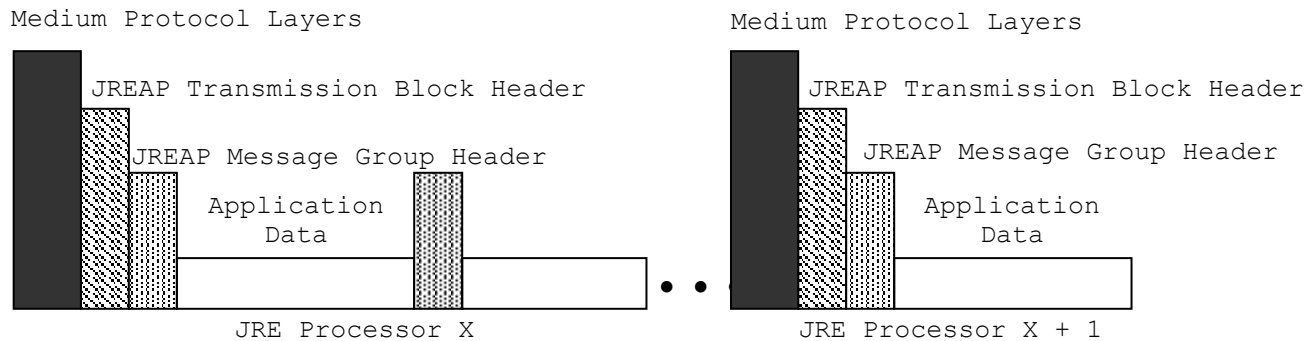


FIGURE 5.4-1. Transmission of data packet structure.

a. The appendices to this document provide additional detail for medium-specific structures.

5.4.2 JREAP Full Stack Transmission Block Header description.

The JREAP Transmission Block Header format and details are shown in the [Transmission Block Header summaries](#).

a. The JREAP Transmission Block Header described in the following subparagraphs includes the common fields required for all media. Additional fields may be required to overcome limitations of some underlying media. Specific JREAP Transmission Block Headers are described in each medium-specific appendix. The JREAP allows for the creation of future JREAP Transmission Block Header formats with new values for the Header Type field, by utilizing additions to this document.

b. If a JRE Processor does not recognize a JREAP Transmission Block Header type, or it cannot process it, it shall "silently discard" the header and the data following the header. The process for identifying the next header in the message is medium-specific (see the appendices).

5.4.2.1 Start of Transmission Flag field. The two consecutive eight bit Start of Transmission Flag fields identify the beginning of each JRE Processor transmission. Each byte (synchronization characters), shall have a Hex value of 16 (22 decimal). The Start of Transmission Flag field lengths are not included in the Transmission Block Header Length field.

5.4.2.2 Transmission Block Header Type field. This field is the header type as defined in [5.2.2.1](#) (see the associated appendix for an Announced Token Passing or Point-to-Point header type).

5.4.2.3 Message Group Header Type field. The Message Group Header Type field defines which of the data packing formats is being used for each JREAP Message Group header that follows the JREAP Full Stack Transmission Block Header. The type number shall be as defined in [5.4.3.4](#).

5.4.2.4 Transmission Block Header Length field. Listed after the Transmission Block Header Type field is the Transmission Block Header Length field. The value in this field shall be the total number of 16-bit words (excluding the Start of Transmission Flag) contained in the JREAP Full Stack Transmission Block Header.

5.4.2.5 JRE Sender ID field. This field is defined in [5.2.2.3](#).

5.4.2.6 Transmission Sequence Number field. The JREAP Full Stack Transmission Block Header includes a 1-byte field for a Transmission Sequence Number (TSN).

a. The TSN shall be incremented by 1 for each new JREAP packet sent, and shall be reset to 0 when the sequence exceeds 255. The TSN shall be reset to 1 each time the JRE Processor interface port is enabled. Protocol implementations may monitor missing sequence numbers as part of a connectivity feedback design (see [5.6.7](#)).

5.4.2.7 Transmission Time Reference flag. The Transmission Time Reference flag is defined in [5.2.2.6](#).

5.4.2.8 Time Accuracy field. This field is defined in [5.2.2.5](#).

5.4.2.9 Data Valid Time field. This field is defined in [5.2.2.4](#).

5.4.2.10 Transport Data Word Count field. The Transport Data Word Count shall be the number of bytes from the end of the JREAP Full Stack Transmission Block Header to the end of the data. The maximum value for this field is 65535 (decimal).

5.4.2.11 Transmission Block Header Cyclic Redundancy Check field. A 16-bit Cyclic Redundancy Check (CRC) is performed on the entire JREAP Full Stack Transmission Block Header. The Transmission Block Header CRC value shall be calculated from the start of the JREAP Full Stack Transmission Block Header up to, but not including, the Transmission Block Header CRC field itself. A description of the generation and use of CRCs is found in RFC 1662. The bytes are processed by the algorithm described, with the byte order being 0, 1, 2, and so forth. If the Transmission Block Header CRC field does not correspond to the checksum calculated on the received JREAP Full Stack Transmission Block Header, a series of checks may be performed in order to determine if any of the header data can be salvaged (see [5.4.3.4.9](#)).

5.4.3 JREAP Full Stack Message Group Header description. There are four possible values for JREAP Full Stack Message Group Header type.

5.4.3.1 JREAP Full Stack Message Group Header (Type 0). The JREAP Full Stack Message Group Header (Type 0) header shall not be used because of the error recovery mechanism.

5.4.3.2 JREAP Full Stack Message Group Header (Type 1).
(Reserved for future growth).

5.4.3.3 JREAP Full Stack Message Group Header (Type 2).
(Reserved for future growth).

5.4.3.4 JREAP Full Stack Message Group Header (Type 3). The JREAP Full Stack Message Group Header (Type 3) contains both information that is common to the application data that follows and a CRC value for the JREAP Full Stack Message Group Header and associated application data. The design provides for recovery from data corruption by making the JREAP Full Stack Message Group Header an integer multiple of the Application layer length.

a. The messages packed behind a JREAP Full Stack Message Group Header shall all be of the same message type. A separate JREAP Full Stack Message Group Header is used to transmit any message or group of messages of a different type. In the Full Stack mode, JREAP J-Series and JREAP J-Series with NPG Assignment messages shall always be transmitted before other message types in a message sequence. The format and header details of the JREAP Full Stack Message Group Header (Type 3) are shown in the JREAP [Full Stack Message Group Header summary](#).

5.4.3.4.1 Message Type field. This field is defined in [5.2.2.2](#).

5.4.3.4.2 Number of Data Words to Follow field. This field defines the number of data words that follow. For a JREAP Full Stack Message Group header (Type 3), the data word size is 72 bits. The number of data words allowed behind a JREAP Full Stack Message Group header (Type 3) is 1 through 1023. The maximum number can be tailored for each media and is specified in each media's respective appendix. Designers should select the maximum number of words allowed per transport packet to achieve a balance between packing efficiency and recovery from media errors.

a. When the total number of bits in a message behind a JREAP Full Stack Message Group header (Type 3) is not an integer multiple of 72, bit padding with zeroes shall be performed after the last message data bit in order to complete the last 72-bit word.

5.4.3.4.3 Message Group Header Cyclic Redundancy Check field. A 16-bit CRC is performed on all JRE data, including the JREAP Full Stack Message Group header (Type 3). If the Message Group Header CRC field does not match the CRC checksum calculated on the received data, that Message Group shall be silently discarded.

a. To calculate the CRC, the Message Group Header Cyclic Redundancy Check field is first filled in with zeros. The CRC shall then be calculated on the JREAP Message Group with the bytes processed by the algorithm (described in RFC 1662), with the byte order being 0, 1, 2, and so forth.

b. Each Message Group (from one JREAP Full Stack Message Group Header (Type 3) to the next) is processed individually. Methods for recovering from CRC errors are as discussed in [5.4.3.4.9](#).

5.4.3.4.4 JRE Source Track Number field. The JRE Source Track Number (JSTN) field is a 16-bit field used to identify the source of the information that follows. The "source" shall be the originating

unit of the message unless the J-Series message contains the Link 16 Source Track Number (STN) within the message (see [5.5.1](#)). When associated with Link 16 operations, the 15-bit Link 16 STN will be used as the JSTN, with a 0 in the first (MSB) bit.

a. JREAP Full Stack Message Group Headers (Type 3) that have JRE Management messages behind them will use the JRE Processor's JU number as the JSTN.

b. A JRE Processor will use the JRE Processor's JU number as the JSTN when it transmits its own PPLI.

c. When a host system connected to a JRE Processor is the source of the data contained in the JREAP packet, the host IU number is used as the JSTN in the JREAP Full Stack Message Group Header (Type 3).

5.4.3.4.5 Data Age field. This field is defined in [5.2.2.8](#).

5.4.3.4.6 Message Group Header Type field. This field shall be set to 3 as defined in [5.4.3.4](#). This field is the same as the Message Group Header Type field in the Transport Block Header (see [5.4.2.3](#)), and supports the Full Stack data recovery scheme (see [5.4.3.4.9](#)). Two other JREAP Full Stack Message Group header types are available (see [5.4.3.2](#) and [5.4.3.3](#).)

5.4.3.4.7 Acknowledgment Request flag. When the Acknowledgment Request flag is set to 1, the transmitting JRE Processor is requesting an acknowledgment for the successful reception of the data behind that particular JREAP Full Stack Message Group header (Type 3). The response to this acknowledgment request is a Management message (see [5.5.4.7](#)).

a. In a multicast network, the destination GU or the GU providing MIL-STD-6020 forwarding for the Link 16 message addressee shall respond to a message having this flag set with an ACK. GUs that are neither the destination GU nor providing MIL-STD-6020 forwarding for the Link 16 message addressee shall not respond.

5.4.3.4.8 Relay flag. This field is defined in [5.2.2.9](#).

5.4.3.4.9 Cyclic Redundancy Check Error Recovery. Message Groups which fail CRC are not considered valid for receipt and shall not be processed, and the Current Error Rate being tracked for the transmitter shall be incremented by one (but not to exceed 127) for the current transmission. Message Groups which pass CRC shall be processed and the Current Error Rate being tracked for the transmitter shall be decremented by one (but not less than zero) for each valid group. If a JRE Processor encounters a JREAP Full Stack Message Group Header (Type 3) with a failed CRC, it shall attempt to locate the next JREAP Full Stack Message Group Header (Type 3) as follows:

a. Scan the received data stream in 72-bit increments, checking for a JREAP Full Stack Message Group Header (Type 3) until one is found or until the end of the data stream is reached.

b. When the next JREAP Full Stack Message Group Header (Type 3) is detected, the JRE Processor validates the header as follows, and if it is valid, can continue normal processing on the data stream.

(1) Check the Number of Data Words to Follow field and determine if the value is within a valid range. "Valid" means that the stated length does not exceed the maximum JREAP Full Stack Message Group Header (Type 3) length or the maximum length of the transmitted packet. If the length is out of range, validation fails.

(2) Perform a CRC on the JREAP Full Stack Message Group Header (Type 3) and data. If the CRC fails, validation fails.

c. Recovery from corrupted JREAP Full Stack Message Group Header (Type 3). The JREAP Full Stack Message Group Header (Type 3), described in [5.4.3.4](#), provides a means to recover from a CRC error. If a CRC error occurs, any data in the JREAP Full Stack Message Group Header (Type 3), and messages that follow it, could be in error and all should be silently discarded. It may, however, be possible to find the next JREAP Full Stack Message Group Header (Type 3) and proceed from there.

(1) The JREAP Full Stack Message Group Header (Type 3) and following data are in 72-bit increments. The JRE Processor can return to the beginning of the corrupted JREAP Full Stack Message Group Header (Type 3) (assuming that the Number of Data Words to Follow field is corrupted) and search in 72-bit intervals, looking for the Message Group Header Type field. When the field is found, the JRE Processor calculates the CRC and does validity check against the bits at the location in the header where the CRC should be located. This process continues until the next valid JREAP Full Stack Message Group Header (Type 3) is located or the end of data is reached.

5.5 JREAP messages. The following subparagraphs describe each of the messages that can be carried by the JREAP. These messages are identified by the Message Type field in the JREAP header, as defined in [5.2.2.2](#).

5.5.1 X1 JREAP "J-Series Message" message description. The JREAP "J-Series Message" message contains all the "J-words" that make up complete Link 16 J-Series messages.

a. The format for each JREAP J-Series word shall be as shown on [Figure 5.5-1](#), which also shows the corresponding bit numbering as used for a Link-16 formatted J-Series word as defined in [Section 5.3](#),

Message Construction, of MIL-STD-6016. Each word in a Link 16 J-Series Message is 70 bits long, but the JREAP J-Series word field is 72 bits long. Bits 64 and 65 of the JREAP J-Series word shall each be set to 0. Definitions of the J-Series messages are found in MIL-STD-6016.

b. Subsequent JREAP J-Series message words shall be packed within a JREAP J-Series message such that no empty bits or bytes reside between packed words. This means that the first byte of a subsequent JREAP J-Series message word may be packed in either an even- or an odd-numbered byte.

Byte	Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Bit	Byte
1	15	8	9	10	11	12	13	14	15	0	1	2	3	4	5	6	7	0	0
3	31	24	25	26	27	28	29	30	31	16	17	18	19	20	21	22	23	16	2
5	47	40	41	42	43	44	45	46	47	32	33	34	35	36	37	38	39	32	4
7	63	56	57	58	59	60	61	62	63	48	49	50	51	52	53	54	55	48	6
	71									64	65	66	67	68	69	0	0	64	8

FIGURE 5.5-1. JREAP J-Series message word format.

c. The structure of the JREAP J-Series message in Application mode differs from the structure used in Full Stack mode. When operating in the Application mode, the J-Series Messages in the JREAP J-Series message are preceded by information that identifies the STN, or JU source of the data, a flag indicating whether an acknowledgment is requested, and associated data. When operating in the Full Stack mode, the STN of the source of the data, the acknowledgment request flag, and associated data are contained in fields in the Message Group header (see [5.4.3.4](#)). Therefore, several J-Series messages from a single STN can be forwarded behind a single Message Group header.

d. In both the Application and Full Stack modes, if a packed J-Series message contains the STN of the originator within the J-Series message, this STN shall take precedence over the JSTN. This allows

the packing of such messages (such as J2.0 PPLI messages) without regard to the JSTN in the header.

e. Additional details are provided in the following subparagraphs.

5.5.1.1 X1.0 JREAP J-Series message (Application) description.
This message would follow a JREAP Application Header. The format of this message shall be as shown in the [X1.0 message summary](#). For an example of a complete message, including headers, see [5.5.1.2](#). It includes a JSTN field that identifies the data source (this may be an STN with a leading 0), a J-Series Message Sequence Number field for message tracking, a Relay flag, an Acknowledgment Request flag, a Data Age field, and a field to indicate the Number of J-Words contained within the following J-Series message(s). Several J-Series messages may be sent following the leading fields, as long as all the leading fields maintain the same association for all the included J-Series messages.

a. Specifications for the JRE Source Track Number field are in [section 5.4.3.4.4](#).

b. The J-Series Message Sequence Number (JMSN) field shall be incremented by 1 in each JREAP J-Series message transmitted by a JRE Processor on each JRE link. The value of the JMSN field used on a JRE link shall be set to 1 when the JRE link is initialized. A value of 0 in this field indicates a JMSN rollover.

c. Specifications for the Relay flag are provided in [Section 5.2.2.9](#).

d. Specifications for the Acknowledgment Request flag are provided in [Section 5.2.2.7](#).

e. Specifications for the Data Age fields are provided in [Section 5.2.2.8](#).

f. The Number of J-Words field specifies the number of J-Series words contained within the JREAP J-Series message. More than one J-Series message may be transmitted in a single JREAP J-Series message, but a J-Series message shall not be split between two or more JREAP J-Series messages. Two J-Series messages having three and two words would have a value of "5" in the Number of J-Words field.

g. Subsequent JREAP J-Series messages shall be packed behind a JREAP Application header such that no empty bits or bytes reside between packed JREAP J-Series messages. This means that the first byte of a subsequent JREAP J-Series message may be packed in either an even- or an odd-numbered byte.

5.5.1.2 JREAP Application example with J-Series Messages

(Application). A complete JREAP J-Series message example is shown in [Figure 5.5-2](#) using the Application mode. Details for the Application Header can be found in [5.3.2](#). Details of JREAP J-Series message (Application) are found in [5.5.1.1](#).

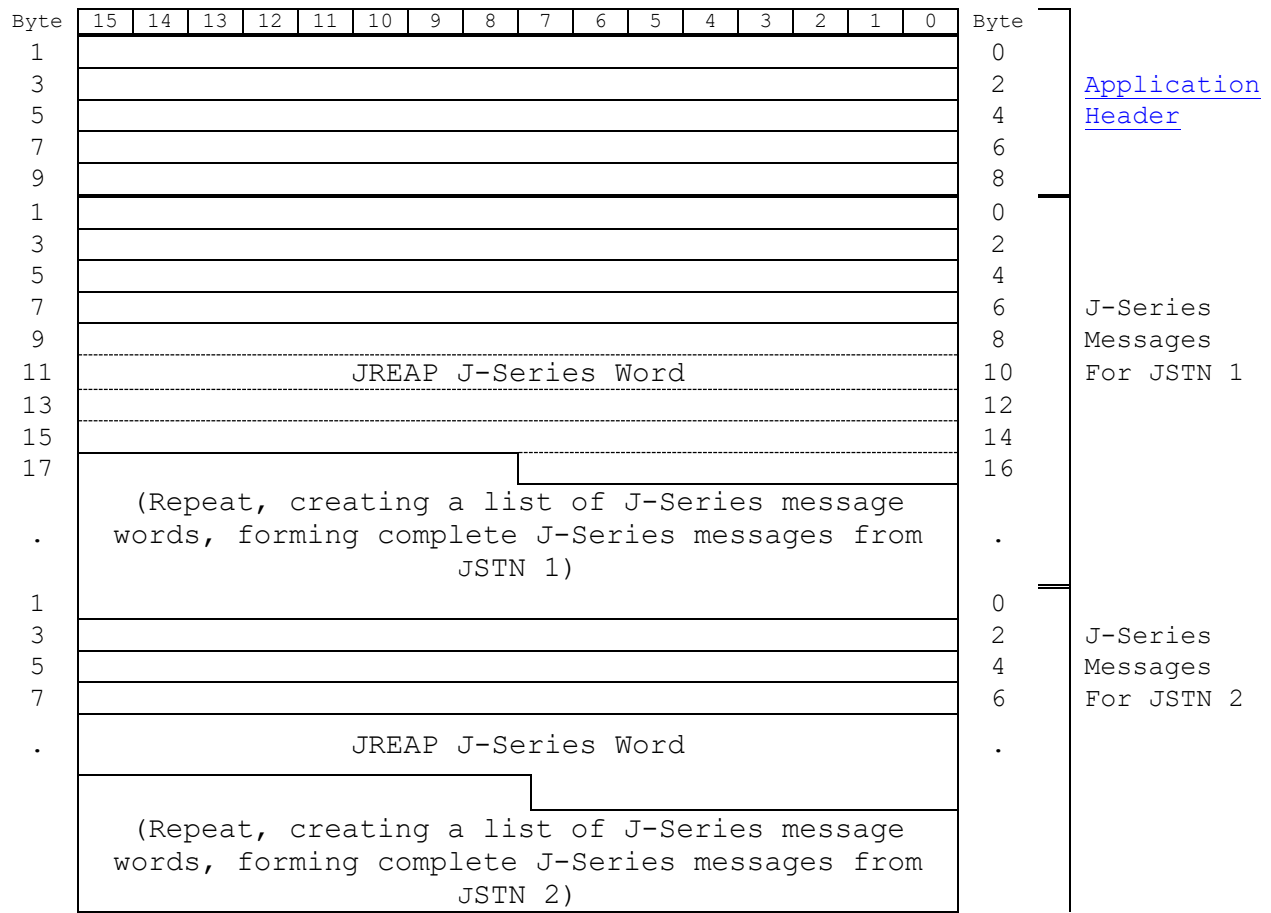


FIGURE 5.5-2. Application example with J-Series Message (Application).

5.5.1.3 X1.1 JREAP J-Series message (Full Stack) description.

This message follows a JREAP Transmission Block Header and Message Group Header. The JREAP J-Series message (Full Stack) shall consist of a sequence of JREAP J-Series words comprising complete J-Series messages. The source of the messages is identified in the Message Group header. The J-Series words shall be formatted as shown in the [X1.1 message summary](#). For an example of a complete message, including headers, see [5.5.1.4](#).

5.5.1.4 JREAP Full Stack example with J-Series Messages (Full Stack). [Figure 5.5-3](#) below shows a complete JREAP J-Series message example using the Full Stack mode. Details for the Full Stack

Transmission Block Header can be found in [5.4.2](#). Details of the Full Stack Message Group Header are in [5.4.3](#) and [5.5.4.1](#). Details of JREAP J-Series message (Full Stack) are found in [5.5.1.3](#).

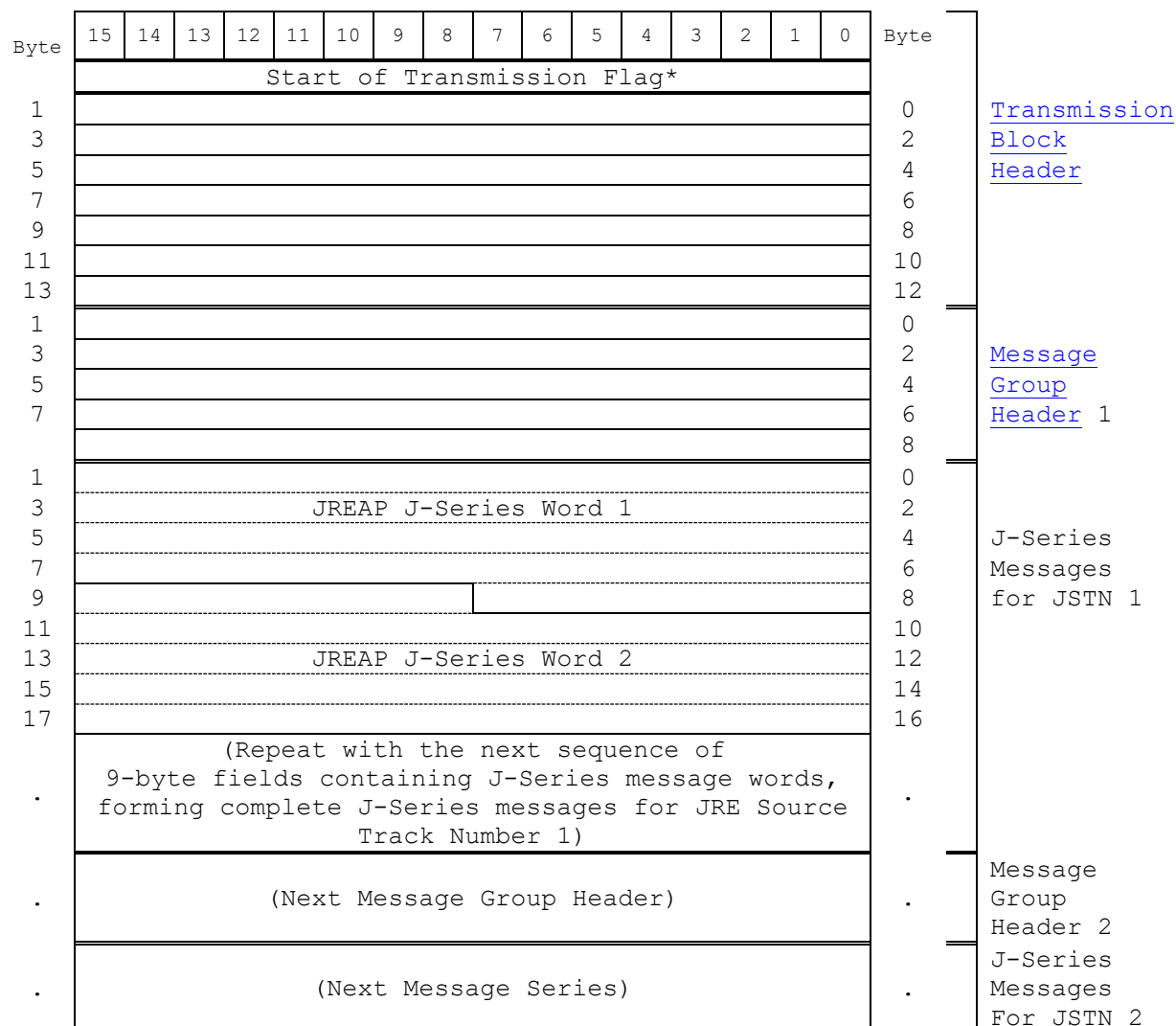


FIGURE 5.5-3. Full Stack example with J-Series Messages (Full Stack).

5.5.2 X2 JREAP JTIDS/MIDS Free Text (Coded) message. The JREAP JTIDS/MIDS Free Text (Coded) message is used to transfer binary data (for example, file transfers, stationary images) between JUs via the JREAP. The JREAP packages this data as a series of JREAP Free Text (Coded) blocks, each 232 bits long. Sequences of these blocks convey the 225-, 450-, and 900-bit, JTIDS/MIDS Free Text Messages (Standard,

Packed-2, and Packed-4, respectively). In JTIDS/MIDS, the bits are numbered 0-224. The bit numbering format used in the JREAP message shall maintain the JTIDS/MIDS bit ordering structure and shall be as shown in [Figure 5.5-4](#).

a. For messages (all packing levels), the JRE Processor shall first divide the packed messages into individual 225-bit blocks and then convert these into the 232-bit JREAP blocks for transmission as shown in [Figure 5.5-4](#). The number of blocks from the original message shall be the same in the JREAP message.

b. A JRE Processor receiving this message over the JRE link, shall maintain the original packing level for retransmission on the destination Link 16 net to preserve the integrity of any underlying protocol. If the original packing level is not used, data may be lost.

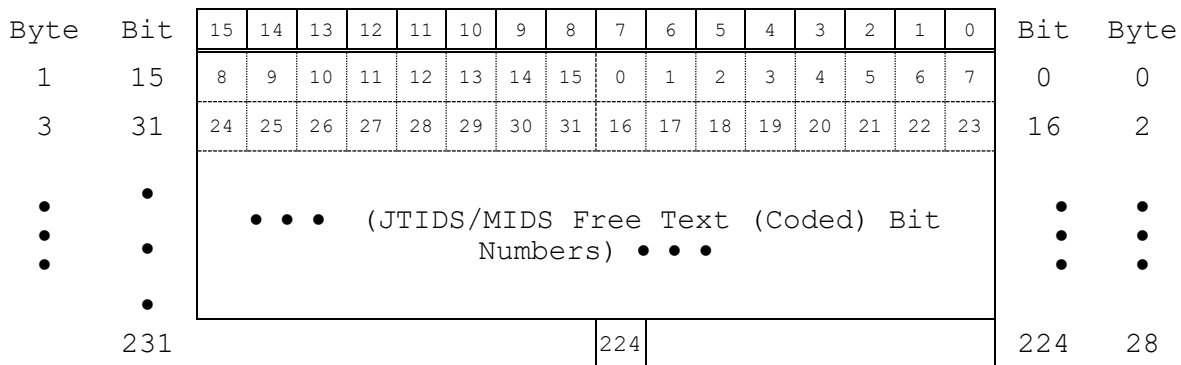


FIGURE 5.5-4. JREAP JTIDS/MIDS Free Text (Coded) block.

5.5.2.1 X2.0 JREAP JTIDS/MIDS Free Text (Coded) message (Application) description. When used in Application mode, the format for the JTIDS/MIDS Free Text (Coded) message (Application) shall be as shown in the [X2.0 Message Summary](#). The Source Track Number field shall identify the source of the Free Text (Coded) message. The Participation Group field shall list the Participation Group (PG) from

which the Free Text (Coded) message was received on JTIDS/MIDS or that was supplied by the transmitting unit for data originating at the JRE Processor.

a. The Number of Blocks field shall define the number of JREAP Free Text (Coded) 29-byte blocks contained in the message. Each JREAP Free Text (Coded) Block field shall be formatted as shown on [Figure 5.5-4](#).

5.5.2.2 X2.1 JREAP JTIDS/MIDS Free Text (Coded) message (Full Stack) description. When used in Full Stack mode, the format of this message shall be as shown in the [X2.1 Message Summary](#). All fields shall be the same as in the Application layer mode, except that the Source Track Number field is omitted, since it is contained in the Message Group header.

a. When Free Text messages are transmitted, the length of the free text data shall be padded out at the end of the packet, if necessary, to a multiple of the 9-byte Full Stack data word size for the [Full Stack Message Group Header type \(Type 3\)](#).

5.5.3 X3 JREAP JTIDS/MIDS Free Text (Uncoded) message. Similar to the JTIDS/MIDS JREAP Free Text (Coded) message, the JTIDS/MIDS JREAP Free Text (Uncoded) message is also used to transfer binary data (file transfers, stationary images) between JUs via the JREAP. In JTIDS/MIDS, the bits are numbered 0-464, with bit 0 transmitted first in the time slot followed by the other blocks.

a. For messages (all packing levels), the JRE Processor shall first divide the packed messages into individual 472-bit blocks and then convert these into the 472-bit JREAP blocks for transmission as shown in [Figure 5.5-5](#). The number of blocks from the original message shall be the same in the JREAP message.

b. A JRE Processor receiving this message over the JRE link, shall maintain the original packing level for retransmission on the destination Link 16 net to preserve the integrity of any underlying protocol. If the original packing level is not used, data may be lost.

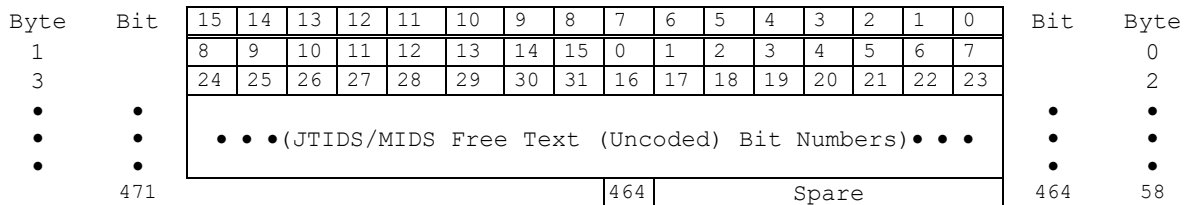


FIGURE 5.5-5. JREAP JTIDS/MIDS Free Text (Uncoded) block.

5.5.3.1 X3.0 JREAP JTIDS/MIDS Free Text (Uncoded) message (Application) description. When used in Application mode, the format for sending the JTIDS/MIDS Free Text (Uncoded) (Application) message shall be as shown in the [X3.0 Message Summary](#). The Participation Group field shall be the PG from which the JTIDS/MIDS Free Text (Uncoded) message was received on JTIDS/MIDS or that was supplied by the transmitting unit for data originating at the JRE Processor. The Source Track Number field shall be the source of the JTIDS/MIDS Free Text (Uncoded) (Application) message. The Number of Blocks field shall define the number of blocks which follow.

5.5.3.2 X3.1 JREAP JTIDS/MIDS Free Text (Uncoded) message (Full Stack) description. When used in Full Stack mode, the format of this message shall be as shown in the [X3.1 Message Summary](#). The fields of this message shall be the same as for the Application layer mode, except that the Source Track Number field is omitted, since it is contained in the Message Group header.

a. When Free Text messages are transmitted, the length of the free text data shall be padded out, if necessary, to a multiple of the data word size for the Message Group header type being used (for example, 9 bytes for a JREAP Full Stack Message Group Header (Type 3)). The padding shall be placed only at the end of the packet.

5.5.4 X0 Management messages. The JREAP Management messages are special purpose messages that augment the basic protocol. These Messages are listed in [Table 5.5-1](#).

a. [Appendix E](#), Implementation Requirements, shows the minimum implementation that shall be implemented by a JRE in accordance with the function(s) or role(s) it may be tasked to perform.

b. When a JRE Processor receives a Management message that it does not implement, and the Control/Response Indicator field in the message is set to value 0 (query) or 1 (command), it shall respond to that Management message subtype with a Management message subheader with a Control/Response Indicator field value of 130 (CANTPRO) and an Error Code value of 2 (Not Implemented), to indicate that the message cannot be processed.

TABLE 5.5-1. JREAP Management messages.

MESSAGE	MESSAGE PURPOSE	REFERENCE SUBPARAGRAPH
Echo (X0.0)	The Echo message is used to test connectivity between JRE Processors.	5.5.4.4
Common Time Reference (X0.1)	The Common Time Reference message is used to negotiate a time reference between two JRE Processors.	5.5.4.5
Round-Trip Time Delay (X0.2)	The Round-Trip Time Delay message is used to determine the round-trip delay over a link.	5.5.4.6
JREAP J-Series Acknowledgment (Full Stack) (X0.3)	The JREAP J-Series acknowledgment (full stack) message acknowledges receipt of a J-series message (in Full Stack operation).	5.5.4.7
JREAP J-Series Acknowledgment (Application) (X0.4)	The JREAP J-Series acknowledgment (application) message acknowledges receipt of a J-series message (in Application operation).	5.5.4.8
Latency Threshold (X0.5)	The Latency Threshold message is used to specify the maximum acceptable latency parameters for transmissions that are received from the originating JRE Processor.	5.5.4.9
Latency Exceeded (X0.6)	The Latency Exceeded message is used to report received message latencies in excess of the value established with the Latency Monitoring message.	5.5.4.10
Operator-to-Operator (X0.7)	The Operator-to-Operator message is used by JRE Processor operators to exchange short textual messages.	5.5.4.11

TABLE 5.5-1. JREAP Management messages (continued).

MESSAGE	MESSAGE PURPOSE	REFERENCE SUBPARAGRAPH
Special Event (X0.8)	The Special Event message is used to report the occurrence of an event (such as a satellite strobe) and the time of the event.	5.5.4.12
Terminate Link (X0.9)	The Terminate Link message is used to terminate communication on a link between JRE Processors.	5.5.4.13
Remote Filter (X0.10)	The Remote Filter message is used to view and modify transmit filter settings for a remote JRE Processor.	5.5.4.14
Secondary Track Number List (X0.11)	The Secondary Track Number List message is used by JRE Processors to exchange and manage the secondary Track Number (TN) list of the Link 16 terminal connected to a remote JRE Processor.	5.5.4.15
Direct Connection List (X0.12)	The Direct Connection List message is generated by a JRE Processor to indicate IUs with which it has direct connectivity on a given link/port.	5.5.4.16
Network Connectivity Matrix (X0.13)	The Network Connectivity Matrix message provides JRE Processors with the means to share connectivity information.	5.5.4.17
Connectivity Feedback (X0.14)	The Connectivity Feedback message provides a JRE Processor with information on how it is receiving data from other JRE Processors.	5.5.4.18

5.5.4.1 Management message subheader. The Management message subheader shall precede the body of all Management messages, including responses and acknowledgments of other Management messages. Unless otherwise specified, each management message subheader shall be followed by a single management message. Format details for the

Management message subheader shall be as provided in the [Management message subheader summary](#). As some Management messages consist of only the Management message subheader, the details of the Management message header are included with each X0 Management message in [Section 5, Part 2](#), X Series Message Descriptions. (For examples of Management messages using the Application and Full Stack modes see [5.5.4.3.4](#) and [5.5.4.6.1](#).)

a. The subheader provides a common set of protocol mechanisms that are available for use in the implementation of the Management messages. It allows a JRE Processor to transmit control commands to other JRE Processors and provides for acknowledgment by each receiving JRE Processor. Both positive and negative acknowledgments may be indicated, and specific error conditions are conveyed as part of negative acknowledgments. This acknowledgment protocol may be combined with timeouts and retransmission to improve the assurance of message receipt. The subheader also allows responses to be requested from the operator of each receiving JRE Processor, and provides for different types of operator responses.

b. The Management message subheader provides for directed addressing of Management messages to particular JRE Processors within a multicast or RF network. It also provides the capability to split large Management messages into a series of fragments that are transmitted separately and reassembled by the receiving JRE Processor(s).

5.5.4.2 Management message subheader fields. The fields of the Management message subheader are specified in the following subparagraphs.

5.5.4.2.1 Management Message Subtype field. The Management Message Subtype field identifies the format of the subtype of the Management message body that follows. Management message subtypes are listed in [Table 5.5-2](#). For a Management message that is a JRE Processor acknowledgment or an operator response to Management message, this field shall be set to the subtype of the transmitted message in the original Management message.

a. In order to minimize interoperability issues that could arise from experimental prototyping efforts using the same number for different purposes, there are reserved ranges of Subtype numbers. Each range is pre-allocated to a branch of the Armed Forces (Army, Air Force, Marines, and Navy) or the MDA (Missile Defense Agency). Each agency must be responsible for number assignment within their range. After prototyping, an Interface Change Proposal (ICP) shall be submitted requesting a permanent Subtype number assignment. The request shall contain adequate documentation for inclusion in the next revision of this MIL-STD.

TABLE 5.5-2. JREAP Management message subtypes.

MESSAGE SUBTYPE	MESSAGE NAME
0	Echo
1	Common Time Reference
2	Round-Trip Time Delay
3	JREAP J-Series Acknowledgment (Full Stack)
4	JREAP J-Series Acknowledgment (Application)
5	Latency Threshold
6	Latency Exceeded
7	Operator-to-Operator
8	Special Event
9	Terminate Link
10	Remote Filter
11	Secondary Track Number List
12	Direct Connection List
13	Network Connectivity Matrix
14	Connectivity Feedback
15-199	Not Currently Assigned
200-209	Reserved for USA Prototyping Efforts
210-219	Reserved for USAF Prototyping Efforts
220-229	Reserved for USMC Prototyping Efforts
230-239	Reserved for USN Prototyping Efforts
240-249	Reserved for MDA Prototyping Efforts
250-254	Not Currently Assigned
255	Reserved for Growth

5.5.4.2.2 Management Version field. The Management Version field shall indicate the version of the Management message subheader that is in use. The version of the Management message subheader specified in this document is 0. Subsequent versions shall be specified as successive whole numbers for use in this field.

5.5.4.2.3 Acknowledgment Protocol field. The Acknowledgment Protocol field specifies the method of message acknowledgment that is required by the transmitting JRE Processor. This field shall be set to the appropriate assigned value as derived from [Table 5.5-3](#).

TABLE 5.5-3. Acknowledgment Protocol field values.

ACKNOWLEDGMENT PROTOCOL VALUE	ACKNOWLEDGMENT PROTOCOL NAME	EXPLANATION
0	Normal	Normal message, no processor acknowledgment is required. For the transmitter, this means there is no requirement to retransmit.
1	Processor Acknowledgment	Indicates that the transmitting JRE Processor requires a processor acknowledgment from the addressed JRE Processor(s) (see 5.5.4.3.2).
2	Operator Acknowledgment	Indicates that the transmitting JRE Processor requires both processor acknowledgment and operator response from the addressed JRE Processor(s) (see 5.5.4.3.2).
3-15	Not Currently Assigned	These values are unused and available for future definition.

5.5.4.2.4 Management Message Length field. The Management Message Length field shall be set to the number of subheader and message bytes being transmitted or when fragmentation is employed, subheader and message bytes within the fragment. The exception is the Terminate Link message which will only be the subheader with the Management Message Length field set to zero (see [5.5.4.13.e](#)). Note that other Full Stack and Application headers may impose length limitations, as will underlying transports.

5.5.4.2.5 Number Destination Addresses field. The Number Destination Addresses field shall specify the number of Destination Addresses that are contained in this subheader. This field may contain values from 0 to 255. A value of 0 indicates that this transmission is being sent to all participants on the link.

5.5.4.2.6 Completion Timeout field. The Completion Timeout field specifies the amount of time (in seconds) that the receiving JRE Processor retains this message for completion of processing related to it.

a. For fragmented messages, this field indicates the period of time that the receiving JRE Processor shall retain received fragments of messages while awaiting all fragments (see [5.5.4.3.3](#)).

b. For messages requiring an operator response, this time shall indicate how long the receiving JRE Processor will wait for operator action before transmitting a response with a Control/Response Indicator field value of 196 (TIMEOUT). (see [5.5.4.3.2](#))

c. This field shall be set to 0 for messages that are not fragmented with the Acknowledgment Protocol Field set to 0 (Normal).

5.5.4.2.7 Message Sequence Number field. The Message Sequence Number (MSN) field shall be initialized to 1 in the first Management message transmitted from a JRE link. It shall then be incremented by 1 in each subsequent Management message transmitted. When message fragmentation is employed, all fragments of a complete Management message shall have the same sequence number.

5.5.4.2.8 Control/Response Indicator field. The Control/Response Indicator field shall be used when requesting a particular action in an original Management message transmission, or when responding to a prior transmission. If a JRE Processor receives

a management message with the Control/Response Indicator field set to values 0 (Query) or 1 (Command), it shall respond with one or more appropriate values. Values from 0 through 127 shall indicate original messages. Values of 128 through 255 shall be used for responses to original messages. The values used shall be as specified in [Table 5.5-4](#).

TABLE 5.5-4. Control/Response Indicator field values.

VALUE	NAME	TYPE	MEANING
0	Query	Control	Used to request information from a JRE Processor(s).
1	Command	Control	Used to direct a JRE Processor(s) to take some action, such as applying the settings specified in a message.
2	Information	Control	Used to transmit data other than Query or Command.
3-127	Reserved	Control	Reserved for additional control codes.
128	ACK	JRE Processor Response	Used to acknowledge the receipt of a Management message.
129	NACK	JRE Processor Response	Used to negatively acknowledge receipt of a Management message fragment.
130	CANTPRO	JRE Processor Response	Used by the JRE Processor to indicate that it cannot process a Query or Command.
131	Report	JRE Processor Response	Used by the JRE Processor to report information requested by a Query.
132	Accept	JRE Processor Response	Used to indicate that a Command has been accepted.
133	Reject	JRE Processor Response	Used to indicate that a Command has been rejected.
134-191	Reserved	JRE Processor Response	Reserved for additional processor response codes.
192	WILCO	Operator Response	Used to indicate that the operator has received the message and will comply.
193	CANTCO	Operator Response	Used to indicate that the operator has received the message and cannot comply.

TABLE 5.5-4. Control/Response Indicator field values. (continued)

VALUE	NAME	TYPE	MEANING
194	UNSTAFFED	JRE Processor Response in lieu of Operator Response	Used by the JRE Processor to reply to Management message that requests operator acknowledgment when it has no operator present (this is a specific case of CANTPRO).
195	NOT SUPPORTED	JRE Processor Response in lieu of Operator Response	Used by the JRE Processor to indicate that it does not support operator acknowledgment of this message subtype.
196	TIMEOUT	JRE Processor Response in lieu of Operator Response	Used by the JRE Processor to reply that the message was not displayed to the operator within the Completion Timeout interval.
197	OPERATOR RECEIPT	Operator Response	Used to indicate that the message has been displayed to the operator.
198-255	Reserved	Operator Response	Reserved for additional operator response codes.

5.5.4.2.9 Error Code field. The Error Code field is used in a Management message response or acknowledgment to amplify upon the response code reported in the Control/Response Indicator field. This field shall be used to indicate the error condition that occurs when a JRE Processor receives and processes a Management message. [Table 5.5-5](#) below is a list of the error code values.

TABLE 5.5-5. Error Code field values.

ERROR CODE	ERROR CODE NAME	EXPLANATION
0	No Error	Indicates no error condition.
1	Missing Fragment	Indicates that the fragment specified in this subheader was not received.
2	Not Implemented	Indicates that the JRE Processor does not process the received message.
3	Lockout/Restricted	Indicates that the requested operation is not permitted due to an operator-initiated lockout.
4	Message Error	Indicates that the receiving JRE Processor did not consider the message to be valid.
5	Resource Not Available	Indicates that the resource affected by the Command or Query is offline or not available (for instance, a Link 16 terminal that is offline and cannot accept Secondary TN changes).
6	Processing Timeout	Indicates that the receiving JRE Processor did not complete the operation within the specified time.
7-31	Common Unused	Reserved for future use for error codes that are common to two or more Management message subtypes.
32-255	Subtype Specific Unused	Values available for definition and use by individual Management message subtypes.

5.5.4.2.10 Fragment Number field. The Fragment Number field is used to uniquely identify message fragments. The fragment number shall be 0 for the first fragment and increment by one for each successive fragment, to a maximum of one less than the Total Number Fragments field. This field shall be 0 in messages that are not fragmented.

5.5.4.2.11 Total Number Fragments field. The Total Number Fragments field shall specify the actual number of fragments that

comprise the complete fragmented message. It shall be set to 0 (no fragments) in messages that are not fragmented (the value of 1 is not used).

5.5.4.2.12 Originating Message Sequence Number field. The Originating Message Sequence Number field is used in Management message responses and acknowledgments. It shall contain the Message Sequence Number (MSN) of the Management message that is being responded to. It shall be set to 0 in all original (non-response) Management messages.

5.5.4.2.13 Destination Address fields. Each Destination Address field identifies an IU number for each specific JRE Processor to which this message is addressed. When addresses are used, each JRE Processor identified in a Destination Address field shall process this message.

5.5.4.3 Management message subheader processing. Requirements for processing Management message subheaders are specified in the following subparagraphs.

5.5.4.3.1 Format of responses and acknowledgments. A JRE Processor acknowledgment or operator response message shall consist of a Management message subheader (bits 0 - 127 of the [X0 Management Messages](#)) without a body, except when the Control/Response Indicator field indicates "Report", signifying that the body contains information in response to a "Query" command.

5.5.4.3.2 Processor and Operator Acknowledgments Processing. An Acknowledgment Protocol field value of "Processor Acknowledgment" or "Operator Acknowledgment" indicates that a processor acknowledgment is required from each addressed JRE Processor. An "Operator Acknowledgment" value indicates that an operator response is also required from each addressed JRE Processor. A JRE Processor shall set the Acknowledgement Protocol field to normal for a message that has

the Number Destination Addresses field set to value 0 (Broadcast) (see [5.5.4.2.3](#) and [5.5.4.2.5](#)). Messages that have the Number Destination Addresses field set to 0 are meant for every GU on a given JRE link.

a. When a management message is received for which a processor acknowledgment is required, each addressed JRE Processor shall provide an acknowledgment message, which shall have the following characteristics:

- (1) Control/Response Indicator field value of 128 - 191,
- (2) Message type identical to the original message type,
- (3) Originating Message Sequence Number field set to the MSN of the original message.

b. An acknowledgment message may consist of only a management message subheader, or it may include a body as specified per each message description.

c. The time within which an acknowledgment is required shall be the maximum value of T_RETRY (see [5.2.3](#)) over all the JRE Processors to which the original message was transmitted. If the originating processor does not receive an acknowledgment (meeting the requirements described above) from all addressees within this time, it shall retransmit the original message. The retransmitted message shall use the same MSN as the original message. The list of addressees in the retransmitted message shall include all the addressees of the original message, except those from whom an acknowledgment has been received. The message shall be transmitted until an acknowledgment is received from all JRE Processors in the original address list, or the message has been transmitted a total of three times, whichever comes first. If no acknowledgment is received, the operator shall be notified.

d. The Acknowledgment Protocol field value of 2 (Operator Acknowledgment) indicates that a response by the operator of the addressed JRE Processor is required. When a Management message is received with this Acknowledgment Protocol field value specified, the addressed JRE Processor shall respond first with a JRE Processor acknowledgment, as specified in the previous paragraph.

e. If a Management message with the Acknowledgement Protocol field set to value 2 (Operator Acknowledgement) is received by a JRE Processor that does not process that message, the JRE Processor shall respond with a Control/Response Indicator value of 130-CANTPRO and no Operator Acknowledgement will be transmitted.

f. When a management message is received for which an operator response is required, each addressed JRE Processor will provide an operator response message, which shall have the following characteristics:

- (1) Control/Response Indicator field value of 192 - 255,
- (2) Message type identical to the original message type,
- (3) Originating Message Sequence Number field set to the MSN of the original message.

g. Following the sending of the JRE Processor acknowledgment, the JRE Processor shall provide the appropriate information to the JRE operator for action. Upon a response from the JRE operator, the addressed JRE Processor shall send a response with the Control/Response Indicator field value reflecting the operator response. This field has a 194 (UNSTAFFED) entry when the JRE Processor has been configured for operation without an operator, or it contains a 195 (NOT SUPPORTED) entry if an operator response is not implemented for the said message subtype. If an operator does not provide a response within the time period specified in the Completion

Timeout field, the addressed JRE Processor shall use a Control/Response Indicator field value of 196 (TIMEOUT) in its response.

h. If a JRE Processor has received a message requiring operator response, and a duplicate message with the same MSN value is received while the operator response is pending, the addressed JRE Processor shall again respond with a JRE Processor ACK, but the message shall not be presented to the operator a second time and the initial response time period shall be retained.

i. JRE operator responses shall be sent with the Acknowledgment Protocol field set to value 1 (Processor Acknowledgment).

j. [Table 5.5-6](#) below provides the management message control response and acknowledgment protocol values to be used in original and response management messages.

TABLE 5.5-6. Management Message Control Response and Acknowledgement Protocol Values.

	Original Message		Periodic or Recurrence	Response Message	
Message Subtype	Control Response	Ack Protocol		Control Response	Ack Protocol
X0.0 Echo	0-Query	1-Proc Ack	See paragraph 5.2.3 (b) .	130-CANTPRO	0-Normal
				131-Report	0-Normal
X0.1 Common Time Reference (Note 1)	0-Query	0-Normal	(Note 1)	(Note 1)	(Note 1)
	2-Information	0-Normal	(Note 1)	(Note 1)	(Note 1)
	1-Command	0-Normal	(Note 1)	(Note 1)	(Note 1)
X0.2 RTT Delay	0-Query	0-Normal	See paragraph 5.2.3 (b) .	130-CANTPRO	0-Normal
				131-Report	0-Normal

TABLE 5.5-6. Management Message Control Response and Acknowledgement Protocol Values.
(continued)

	Original Message		Periodic or Recurrence	Response Message	
Message Subtype	Control Response	Ack Protocol		Control Response	Ack Protocol
X0.3 J-Series Ack (FS)	2-Information	0-Normal	Transmit once.	N/A	N/A
X0.4 J-Series Ack (Appl)	2-Information	0-Normal	Transmit once.	N/A	N/A
X0.5 Latency Threshold	1-Command	1-Proc Ack	Operator initiated.	130-CANTPRO	0-Normal
				132-Accept	0-Normal
X0.6 Latency Exceeded	2-Information	0-Normal	Dependent on latency setting.	N/A	N/A
X0.7 Operator to Operator	2-Information	0-Normal		N/A	N/A

TABLE 5.5-6. Management Message Control Response and Acknowledgement Protocol Values.
(continued)

	Original Message		Periodic or Recurrence	Response Message	
Message Subtype	Control Response	Ack Protocol		Control Response	Ack Protocol
X0.7 Operator to Operator (continued	2-Information	1-Proc Ack OR 2-Oper Ack		129-NACK	0-Normal
				130-CANTPRO	0-Normal
				128-ACK (If Original Message Ack Protocol was set to 2-Oper Ack then a response of 128-Ack must be followed by a message with a code of 194 - 197 below)	0-Normal
				194-Unstaffed	0-Normal
				195-Not supported	0-Normal
				196-Timeout	0-Normal
				197-Operator Receipt	0-Normal

TABLE 5.5-6. Management Message Control Response and Acknowledgement Protocol Values.
(continued)

	Original Message		Periodic or Recurrence	Response Message	
Message Subtype	Control Response	Ack Protocol		Control Response	Ack Protocol
X0.8 Special Event	1-Command	0-Normal	When event occurs.	130-CANTPRO (Note 2)	0-Normal
X0.9 Terminate Link					
Appendix A	2-Information	0-Normal		N/A	N/A
Appendix B	1-Command	1-Proc Ack		128-ACK	0-Normal
Appendix C					
MultiCast	2-Information	0-Normal		N/A	N/A
Unicast	1-Command	1-Proc Ack		128-ACK	0-Normal
				132-Accept	0-Normal

TABLE 5.5-6. Management Message Control Response and Acknowledgement Protocol Values.
(continued)

	Original Message		Periodic or Recurrence	Response Message	
Message Subtype	Control Response	Ack Protocol		Control Response	Ack Protocol
X0.10.0 Filter Settings Request	0-Query	1-Proc Ack		130-CANTPRO (X0.10)	0-Normal
				131-Report (X0.10.2 - X0.10.11) followed by an X0.10.1	0-Normal
X0.10.1 Filter Settings Summary	131-Report	1-Proc Ack		One X0.10 message with one the following codes.	
				128-ACK	0-Normal
				130-CANTPRO (Note 2)	0-Normal

TABLE 5.5-6. Management Message Control Response and Acknowledgement Protocol Values.
(continued)

	Original Message		Periodic or Recurrence	Response Message	
Message Subtype	Control Response	Ack Protocol		Control Response	Ack Protocol
X0.10.2 - X0.10.14	1-Command	1-Proc Ack		One X0.10 message with one the following codes.	
				129-NACK	0-Normal
				130-CANTPRO	0-Normal
				132-Accept	0-Normal
				133-Reject	0-Normal
	1-Command	2-Oper Ack		One or more X0.10 messages, each with one the following codes.	0-Normal
				129-NACK (Note 4)	0-Normal
				130-CANTPRO (Note 4)	0-Normal
				133-REJECT (Note 4)	0-Normal

TABLE 5.5-6. Management Message Control Response and Acknowledgement Protocol Values.
(continued)

	Original Message		Periodic or Recurrence	Response Message	
Message Subtype	Control Response	Ack Protocol		Control Response	Ack Protocol
				128-ACK (Must be followed by a message with a code of 192 - 197 below)	0-Normal
				192-WILCO	0-Normal
				193-CANTCO	0-Normal
				194-Unstaffed	0-Normal
				196-TIMEOUT	0-Normal
				197-OPERATOR RECEIPT	0-Normal
X0.11 STN List	0-Query	1-Proc Ack		129-NACK	
				128-ACK (Must be followed by a 130-CANTPRO or 131-Report) (Note 5)	0-Normal
				130-CANTPRO	0-Normal
				131-Report	0-Normal

TABLE 5.5-6. Management Message Control Response and Acknowledgement Protocol Values.
(continued)

	Original Message		Periodic or Recurrence	Response Message	
Message Subtype	Control Response	Ack Protocol		Control Response	Ack Protocol
	1-Command	1-Proc Ack OR 2-Oper Ack		129-NACK	
				130-CANTPRO (Note 5)	0-Normal
				128-ACK (If 1-Proc Ack received ACK must be followed by a 132- Accept or 133-Reject message. If 2-Oper Ack received Ack must be followed by one message of codes 192- 197 below)	0-Normal
				132-Accept	0-Normal
				133-Reject	0-Normal
				192-WILCO	0-Normal
				193-CANTCO	0-Normal

TABLE 5.5-6. Management Message Control Response and Acknowledgement Protocol Values.
(continued)

	Original Message		Periodic or Recurrence	Response Message	
Message Subtype	Control Response	Ack Protocol		Control Response	Ack Protocol
				194-Unstaffed	0-Normal
				195-Not supported	0-Normal
				196-TIMEOUT	0-Normal
				197-OPERATOR RECEIPT	0-Normal
	2-Information	0-Normal	2-4 Minutes.	N/A	N/A
X0.12 Direct Connection List	2-Information	0-Normal	2-4 Minutes.	N/A	N/A
X0.13 Network Connectivity Matrix	2-Information	0-Normal	2-4 Minutes.	N/A	N/A
X0.14 Connectivity Feedback	2-Information	0-Normal	60 Seconds.	N/A	N/A

Notes:

1. See [Table 5.2-10](#) CTR State Transition Table for appropriate Control Response implementation and periodicity.
2. Response should be 130 (CANTPRO) with an Error Code of 4 (Message Error) when an invalid or incorrectly formatted message is received.
3. Only applies if Control Response is 196 (Timeout) or 197 (Operator Receipt).
4. In lieu of 128 (ACK) respond with 129 (NACK) when the receiver does not receive a complete message, 130 (CANTPRO), or 133 (REJECT) when the Remote Filter control mode is set to Reject All.
5. In lieu of 128 (ACK) respond with 129 (NACK) when the receiver does not receive a complete message or 130 (CANTPRO) when the JRE is in a JRE JU or JREU configuration and receives any X0.11 message.

5.5.4.3.3 Processing of fragmented messages. Fragmented messages shall be transmitted with an Acknowledgment Protocol field value of "Processor ACK" or "Operator ACK". The value of the Completion Timeout interval shall be no less than the value of T_RETRY times the number of fragments being transmitted, rounded up to the nearest second. Upon transmission of the last fragment of a fragmented message, if acknowledgement is not received within T_RETRY, only the last fragment shall be retransmitted. Received fragments shall not be acknowledged individually. Once all of the fragments of a fragmented message are received, the Management message shall then be acknowledged by the addressed JRE Processor.

a. As specified previously, message fragments are transmitted in sequence and are uniquely identified by a fragment number value, which increments with each fragment. When a fragment is received with a fragment number value that is greater than that of the previous fragment plus 1, the receiving JRE Processor shall request retransmission of the intervening fragment(s). For each missing fragment, the JRE Processor shall respond with a Management message subheader that has a Control/Response Indicator field value of 129 (NOT ACKNOWLEDGED (NACK)), an Error Code field value of 1 (Missing Fragment), and the Fragment Number field value of the missing fragment.

b. When a receiving JRE Processor detects that the Completion Timeout interval has expired and not all message fragments have been received, the JRE Processor shall reply with a Management message subheader containing an Error Code, 7 field value of 6 (Processing Timeout) and a Control/Response Indicator field value of 129 (NACK). The receiving JRE Processor shall silently discard all currently and subsequently received fragments of that message.

5.5.4.3.4 JREAP Application example with Management Messages. A complete JREAP Management message example is shown Figure 5.5-6 using the Application mode. Details for the Application Header can be found in 5.3.2. Details of Management messages are found in 5.5.4.

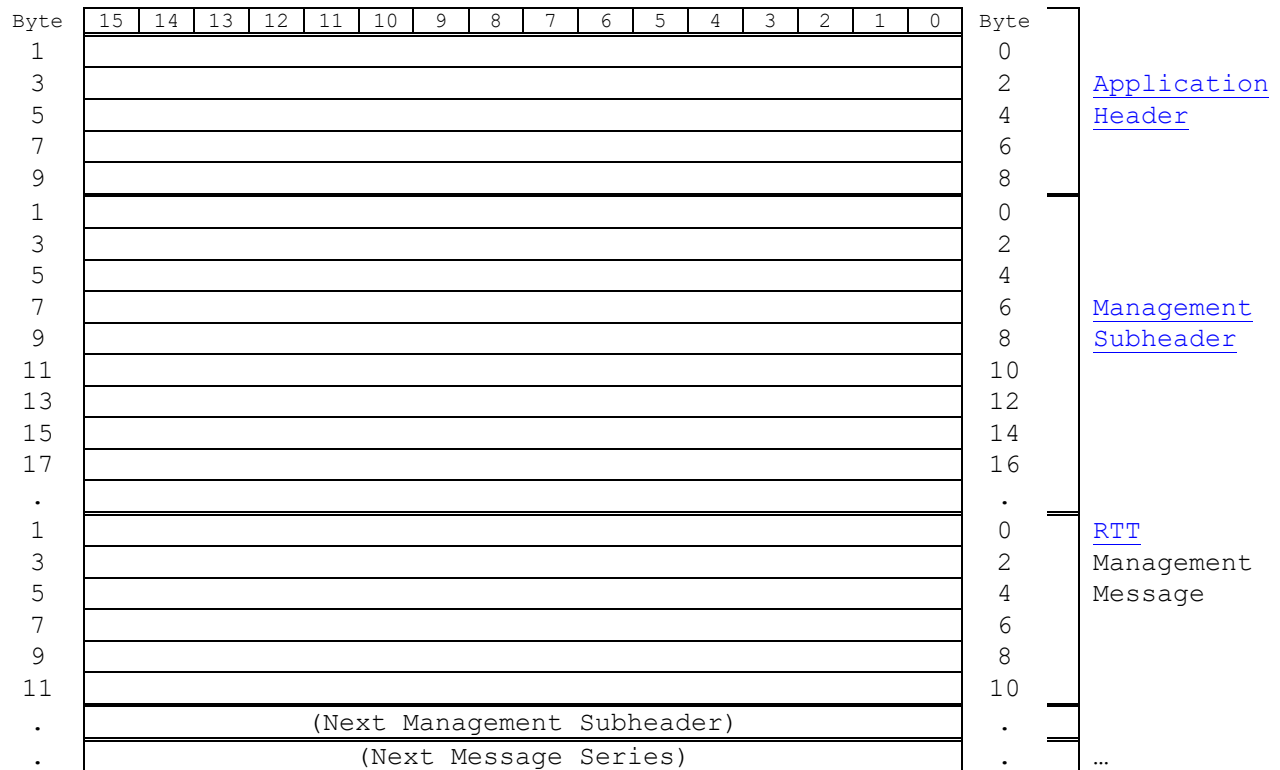


FIGURE 5.5-6. Application example with Management Messages.

5.5.4.4 X0.0 Echo message. The Echo message may be used to test a JRE Processor connection. The Echo message shall contain a 4-byte Application Data field, as shown in the X0.0 message summary. Echo messages shall be transmitted with the Acknowledgment Protocol, 2 field of the Management message subheader set to value 1 (Processor Acknowledgment). The reply to the Echo message shall contain the Application Data field of the original Echo message (which each JRE Processor may use as it sees fit). If the Application Data received back does not match the Application Data originally transmitted, the processor shall increment its error rate by five.

5.5.4.5 X0.1 Common Time Reference message. The CTR message is used during JRE link initialization to negotiate the link reference time source. The format of the message shall be as shown on in the [X0.1 message summary](#). CTR implementation requirements by appendix shall be as shown in [Table 5.5-7](#).

a. The message consists of two groups of bit fields representing time standard references that a JRE Processor can support and that it would prefer to use on this JRE link. The JRE Network Controller (JRE-NC) basis is referenced to the time of the JRE-NC (see [A.5.4](#)). The Fixed Delay is used when there is a known media-specific delay that the JRE Processor has been configured to use (supports asymmetric media delays). The Event Strobe basis is referenced to a specific media event observed by all participants (see [5.5.4.12](#)).

b. When Coordinated Universal Time (UTC) is the negotiated time reference, JREAP processing shall use UTC time as the basis for data valid time and extrapolation. Upon loss of the UTC time source, the CTR state shall transition to FAIL for all links where UTC is the negotiated time reference unless the following capability has been implemented in the JRE Processor.

(1) Typically a JRE processor will have multiple time sources available, such as an externally synchronized UTC feed and a clock built into the processor hardware. When the UTC time source becomes available to the JRE processor, the following functions shall be performed:

(2) The JRE processor shall compare its non-UTC time source to the UTC feed every minute, and maintain an average of the 'drift' rate (measured in ms from -16.384 to +16.384 seconds) of the non-UTC time source relative to the UTC feed over the last ten measurements.

(3) Following the completion of each drift measure the JRE processor shall maintain a delta between the non-UTC time source and the UTC feed.

(4) The JRE processor shall use the non-UTC time source and alert the operator if the UTC feed becomes unavailable.

(5) Once the JRE processor switches to the non-UTC time source, it shall apply the delta and add the magnitude of the drift rate to the time accuracy each minute. The JRE processor shall continue to increase the time accuracy until the time accuracy exceeds 16.384 seconds, the link is reset or the UTC feed is available. When the time accuracy exceeds 16.384 seconds, the JRE shall cease transmitting extrapolated data on that link. If the UTC feed becomes available prior to a link reset or the time accuracy exceeds 16.384 seconds the JRE processor shall switch back to the UTC feed and begin making drift measures between the UTC feed and the non-UTC time source.

c. A JRE processor shall report UTC capable only if its UTC time source is available when it attempts to join the link. The JRE processor shall not change its UTC capable bit when CTR state is either Established or Final.

d. The operator shall be alerted when the UTC time source is lost and provided with the time remaining before CTR failure.

e. If round-trip "R" is the negotiated time reference, the transmitting JRE Processor shall express data in its own timeframe (see [5.2.2.4](#)). The receiving JRE Processor shall adjust that data upon receipt, using the results of the Round-Trip Time Delay message exchange (see [5.5.4.6](#)).

TABLE 5.5-7. Common Time Reference Implementation Requirements.

	Net Controller	Round Trip	Fixed Delay	Event Strobe	UTC
Appendix A (MIL-STD-188-183 operations)	M	N/A	N/A	N/A	M
Appendix A (EHF/LDR)	N/A	N/A	N/A	O	M
Appendix B	N/A	M	O	N/A	M
Appendix C Unicast	N/A	M	O	O	M
Appendix C Multicast	N/A	N/A	N/A	O	M
M=Mandatory O = Optional (allowed but not mandatory) N/A - Not Applicable / Not Allowed					

5.5.4.5.1 Capable Time Standard(s). The transmitting JRE Processor shall set the bit(s) corresponding to each time reference it is capable of supporting on this JRE link.

5.5.4.5.2 Preferred Time Standard. The transmitting JRE Processor shall set a single bit corresponding to the time reference it prefers to use on this JRE link. The other Preferred Time Standard bits shall be set to value 0 (not preferred).

5.5.4.6 X0.2 Round-Trip Time Delay message. The Round-Trip Time Delay message may be used to estimate the time it takes for a message to travel from one JRE Processor to another JRE Processor. The JRE Processor initiating the exchange to determine RTT delay shall set the Control/Response Indicator field of the message subheader to value 0 (Query). The message contains three 28-bit time fields, each with an associated Time Accuracy field.

a. The message shall be transmitted initially with the Rx JRE Receive Time (R2) and Rx JRE Transmit Time (T2) fields set to 0. The Tx JRE Transmit Time (T1) field, (T₁), value shall be the time, using the local time source, at which the transmitting JRE Processor sends the initial message. The Receive Rx JRE Receive Time (R2) field, (R₂), value shall be the time at which the receiving JRE Processor, referencing its own time source, receives the message. The Rx JRE Transmit Time (T2) field, (T₂), value shall be the time that the receiving JRE Processor retransmits the message. A final time that is recorded but not transmitted, (R₁), shall be the time that the initial transmitting JRE Processor receives the Round-Trip Time Delay message back. The format for the Round-Trip Time Delay message shall be as provided in the [X0.2 message summary](#).

b. Assuming that the path delays for each direction on the link are approximately equal, the Delta Time between the two JRE Processors can be calculated as half the total time from initial transmission to final receipt, minus the time in processing at the remote JRE Processor. The formula for Delta Time (the one way transit time) that shall be used is:

$$\text{Delta Time} = [(R_1 - T_1) - (T_2 - R_2)] / 2$$

5.5.4.6.1 JREAP Full Stack example with Management Messages. A complete JREAP Management message example is shown in [Figure 5.5-7](#) using the Full Stack mode. Detailed descriptions of the Full Stack Transmission Block Header fields can be found in [5.4.2](#). Detailed descriptions of the Full Stack Message Group Header fields can be found in [5.4.3](#). Detailed descriptions of the Management message fields are found in [5.5.4.1](#).

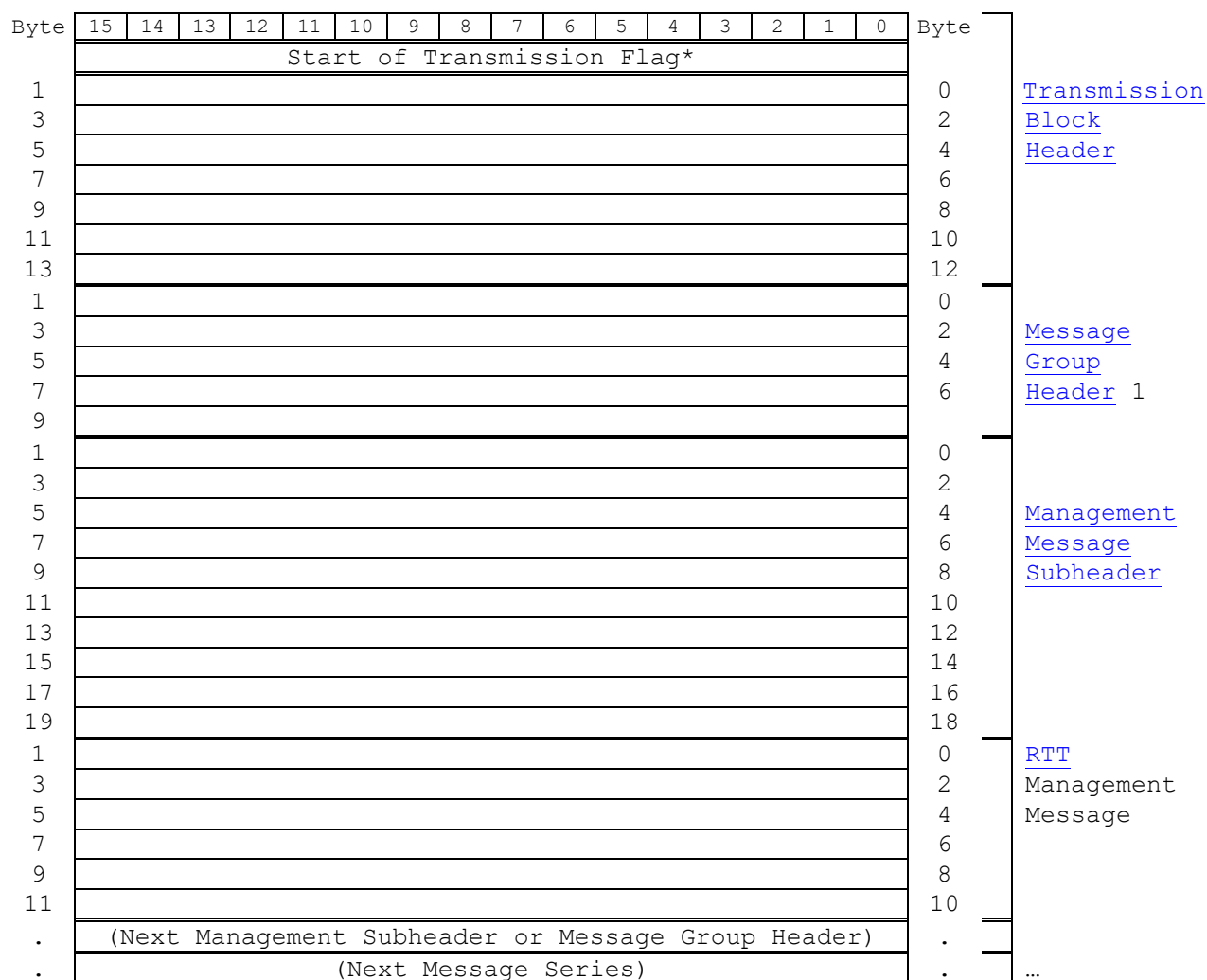


FIGURE 5.5-7. Full Stack example with Management Messages.

5.5.4.7 X0.3 JREAP J-Series Acknowledgment (Full Stack) message.

This message provides for the acknowledgment of JREAP J-Series and JREAP J-Series with NPG Assignment messages between JRE Processors that require Receipt/Compliance service, while operating in Full Stack mode. It shall be transmitted in response to a received JREAP Full Stack Message Group header (Type 3) (FSMGH.3) with the Acknowledgment Request Flag set. One Acknowledgment Response message may be used to acknowledge up to 255 different JREAP FSMGH.3 acknowledgment requests. The number of acknowledgments is determined from the size of the message. The CRC(s) in the Full Stack Message Group header(s) for the message(s) being acknowledged shall be used in this message.

a. The Control/Response Indicator, 3 field shall be set to value 2 (Information) and the Originating MSN field shall be 0. The Destination Addresses shall be set to the JRE Sender IDs of the messages being acknowledged (see [5.5.4.1](#)).

b. The format of this message shall be as shown in the [X0.3 message summary](#).

c. Information on the application of this message to JREAP J-Series and JREAP J-Series with NPG Assignment Message Receipt/Compliance processing is provided in [5.2.4.3](#).

5.5.4.8 X0.4 JREAP J-Series Acknowledgment (Application) message. This message provides for the acknowledgment of JREAP J-series and JREAP J-Series with NPG Assignment messages between JRE Processors that require Receipt/Compliance service. It shall be transmitted in response to a received JREAP J-Series or JREAP J-Series with NPG Assignment message with the Acknowledgment Request flag of the X1 JREAP J-Series or X7 JREAP J-Series with NPG Assignment message set when operating in Application mode. One X0.4 JREAP J-Series Acknowledgment (Application) message may be used to acknowledge up to 255 different acknowledgment requests. For X1 message acknowledgment, each pair of Originating JRE Sender ID and Originating J-Series Message Sequence Number (JMSN) fields shall acknowledge all X1 JREAP J-Series messages that were sent using a JMSN value of "Originating JMSN" by the JRE Processor with an IU number entry of "Originating JRE Sender ID". For X7 message acknowledgment, each pair of Originating JRE Sender ID and Originating NPG Message Sequence Number (NPG MSN) fields shall acknowledge all X7 JREAP J-Series with NPG Assignment messages that were sent using a NPG Message Sequence Number (NPG MSN) value of "Originating NPG MSN" by the JRE Processor with an IU number entry of "Originating JRE Sender ID". The number of acknowledgments is determined from the size of the message.

a. The Control/Response Indicator, 3 field shall be set to value 2 (Information) and the Originating MSN field shall be 0. The Destination Addresses shall be set to the JRE Sender IDs of the messages being acknowledged (see [5.5.4.1](#)).

b. The format of this message shall be as shown in the [X0.4 message](#) summary.

c. Information on the application of this message to JREAP J-Series and JREAP J-Series with NPG Assignment Message Receipt/Compliance processing is provided in [5.2.4.3](#).

5.5.4.9 X0.5 Latency Threshold message. The Latency Threshold message allows a JRE Processor to indicate the maximum latency threshold for a link. Latency Threshold settings shall be JRE operator configurable. The format of the Latency Threshold message shall be as shown in the [X0.5 message summary](#).

a. The originating JRE Processor shall request processor acknowledgment in the Management message subheader when sending this message. Receiving JRE Processors that support latency monitoring shall apply the values specified in the message for monitoring of latency on this JRE link, and generate the Latency Exceeded message when a threshold specified by these values is exceeded.

5.5.4.9.1 Maximum Latency field. The 16 bit Maximum Latency field shall be a number of seconds, with a least significant bit of 1/32 of a sec.

a. Data age can be used by JRE Processors to include only those messages that meet the data latency requirements of the JRE architecture, while excluding those that exceed the limit. It can also be used to detect data loops by allowing the JRE Processor software logic to track the approximate origination time of the data.

5.5.4.9.2 Interval Time field. The Interval Time field shall be the time period (the last 'n' seconds) over which the JREAP messages exceeding the latency are counted. A value of 0 specifies an unlimited time period.

5.5.4.9.3 Count field. The Count field shall be the threshold number of times within the Interval Time period that the maximum latency may be exceeded before a Latency Exceeded message is reported by the receiving JRE Processor.

5.5.4.10 X0.6 Latency Exceeded message. The Latency Exceeded message allows a JRE Processor to inform a peer or network-monitoring site that it is consistently receiving messages that exceed the maximum latency previously specified for a link. The format for the Latency Exceeded message shall be as shown in the [X0.6 message summary](#).

a. The originating JRE Processor shall transmit this message each time the number of messages exceeding the Maximum Latency field value, as specified in the Latency Threshold message, exceeds the Count field value of the Latency Threshold message during the interval specified in the message. It shall be transmitted no more than once every 12 seconds per peer. Upon transmission of a Latency Exceeded message, the sender shall restart the latent message count from 0. A Latency Exceeded message shall not be transmitted if a Latency Threshold message has not been previously received.

5.5.4.10.1 Maximum Latency field. The 16 bit Maximum Latency field value shall be the previously received Maximum Latency field value for this link (see [5.5.4.9.1](#)).

5.5.4.10.2 JRE Sender ID field. The JRE Sender ID field shall be the JRE Sender ID number of the unit from which the latent transmissions were received.

5.5.4.11 X0.7 Operator-to-Operator message. This message allows JRE operators to send ASCII text messages to one another. The message shall contain, at most, 300 printable ASCII characters (digits, letters, symbols and spaces), one per byte, as shown in the [X0.7 message summary](#). The receiving JRE Processor is responsible for formatting the text for display; this may include the wrapping of text or the adding of line termination.

5.5.4.12 X0.8 Special Event message. The Special Event message is used to communicate the time of occurrence of infrequent periodic events. For example, some SATCOM systems provide a time strobe discrete signal that is available to SATCOM terminals and users. The satellite epoch is a relative time event that cannot be tied to an absolute time without some type of external coordination. This Special Event message allows a JRE Processor in a SATCOM link to communicate the time correlated with the occurrence of the strobe to other network participants. This message shall be transmitted during the first opportunity for transmission following the event being indicated.

a. If the CTR exchange has negotiated the use of a SATCOM strobe for time synchronization, the JRE Processors shall indicate an Event Time Accuracy field value of 0 (No Statement) until a strobe event occurrence has been captured and the corresponding Special Event message sent. The format of the Special Event message shall be as shown in the [X0.8 message summary](#).

5.5.4.12.1 Event Type field. The Event Type field shall be set to be 0 when used with the EHF satellite epoch strobe. Other values are reserved for future expansion.

5.5.4.12.2 Event Time Accuracy field. The Event Time Accuracy field shall be calculated the same as the Time Accuracy field (see [5.2.2.5](#)).

5.5.4.12.3 Event Time field. The Event Time field shall represent the time at which the originator of the message detected the event in their own system time reference, in 28-bit time format (see [5.2.2.4](#)).

5.5.4.13 X0.9 Terminate Link message. The Terminate Link message is used by a JRE Processor to indicate that it will terminate communications on a JRE link. The format of the X0.9 message shall be as shown in the [X0.9 message summary](#).

a. When the JRE link is an Appendix A network or a multicast group, the Number Destination Addresses field in the Management message subheader shall be set to 0 to indicate broadcast addressing, and the Acknowledgment Protocol, 2 field shall be set to 0 (Normal), no acknowledgment of receipt requested.

b. For pair-wise JRE links, the Terminate Link message shall be addressed to the other JRE Processor and the Acknowledgment Protocol, 2 field in the Management message subheader set to value 1 (Processor Acknowledgment). On a pair-wise link, after sending a Terminate Link message, no messages should be accepted other than the acknowledgment of the Terminate Link message, and no messages should be transmitted other than possible retransmissions of the Terminate Link message. Once an acknowledgment has been received or the message has been transmitted the maximum number of times (see [5.5.4.3.2](#)), the link shall be closed.

c. If a Terminate Link message is received on a pair-wise link, the receiving JRE Processor shall send an acknowledgment, and immediately close the link.

d. If a Terminate Link message is received on a multicast link, the receiving JRE Processor shall remove the originating JRE Processor from its list of peers on the link.

e. The Terminate Link message shall consist of a Management message subheader with a Management Message Length field value of 0 bytes.

5.5.4.14 X0.10 Remote Filter message. The Remote Filter message is used to send a JRE Processor the transmit-side filter settings to be used for each outgoing link. It is also used by a JRE Processor to report its current filter settings for each of its designated links. Many filter settings can be used simultaneously and can be set differently for each link and each JRE Processor in the network, as long as forwarding rules are not violated. Remote Filter message settings are not cumulative for any given filter type (and index number for geographic filters) on a specific link designator; each shall supersede previously received settings. Filter settings are used to reduce the number of messages on a specific link when throughput is limited, giving consideration to those messages that are more important to the user of the data so they can be forwarded with minimum delay. Filter settings are also used to prevent data looping on a network. Non-indexed (global) filters will be processed prior to indexed (geographic) filters.

a. Processor Remote Filter control modes. A JRE Processor shall implement the following Remote Filter Modes. The selected mode shall apply to all active JRE links.

(1) Allow All: The Allow All setting shall be the default selection during link configuration. This setting shall allow all received remote filter messages to take effect automatically on the link once received, except for those that are received which require operator acknowledgement (e.g. secondary track number list modifications). If a management message that requires operator acknowledgement is received and the operator does not respond prior to the timeout period, the receiving JRE Processor shall automatically respond with a Control/Response Indicator field value of 196 (TIMEOUT).

(2) Unstaffed: This setting shall be used when the JRE Processor will not be staffed by an operator. This filter management setting shall perform exactly as the Allow All selection unless a remote filter messages is received that requires operator acknowledgement. If a remote filter message that requires operator acknowledgement (e.g. secondary track number list modifications) is received, the receiving JRE Processor shall respond with a Control/Response Indicator field value of 194 (Unstaffed) and the remote filter shall not be accepted. If the sending JRE Processor must complete the remote filter setting, it must resend the filter message without operator acknowledgement.

(3) Requires Operator Acknowledgement: This setting should only be used if the JRE Processor has an operator. Any remote filter message received shall require operator acknowledgement prior to the filter setting taking place. The operator shall be alerted upon the reception of a remote filter management message. The operator shall be given a sixty (60) second timeout from the reception of the remote filter management message to respond with either a WILCO or CANTCO. If the operator does not respond prior to the 60 second timeout, the JRE Processor shall automatically respond with a Control/Response Indicator field value of 196 (TIMEOUT).

(4) Reject All: This setting shall cause any received remote filter message to be rejected. The receiving JRE Processor shall respond to the received remote filter message with a Control/Response Indicator field value of 133 (Reject).

b. [Table 5.5-8](#) is a list of filter message types supported by the JRE Processor and the Remote Filter message. The filters in this table shall be implemented IAW Appendix E, Implementation Requirements. Other filters may be added in the future for other types of messages.

c. In the filter messages with filter flags, the filter bit is set to 1 to "Filter" the data, which means the forwarding JRE Processor shall not forward any of the messages specified by the filter.

TABLE 5.5-8. Link 16 Filter message types.

FILTER MESSAGE TYPE	DESCRIPTION	MESSAGE SUMMARY
0	Filter Settings Request	X0.10.0
1	Filter Settings Summary	X0.10.1
2	Category/Identity Filter	X0.10.2
3	Label/Sublabel Filter	X0.10.3
4	Point Type/Point Amplification Filter	X0.10.4
5	Ellipse-Rectangle Geographic Filter	X0.10.5
6	Closed Polygon Geographic Filter	X0.10.6
7	Source Track Number Filter	X0.10.7
8	Special Processing Indicator Filter	X0.10.8
9	J28.2(x) Filter	X0.10.9
10	Data Age Filter	X0.10.10
11	Simulation Filter	X0.10.11
12	J3.6 Rocket Filter	X0.10.12
13	National Use Sub-Sublabel Filter	X0.10.13
14	Network Participation Group Filter	X0.10.14
15-63	Unassigned	N/A

d. Per [Table 5.5-6](#) Control/Response Indicator field values, for Filter Message Type 0, the Control/Response Indicator field will be 0 (Query). For Filter Message Type 1, the Control/Response Indicator field will be set to 131 (Report). For all other Filter Message Types, the Control/Response Indicator field will be set to 1 (Command) or 131 (Report).

5.5.4.14.1 Remote Filter message common fields. The fields that follow have common definitions that are used in several or all Remote Filter messages.

5.5.4.14.1.1 Link Designator To Filter field. The Link Designator To Filter field identifies the specific JRE link to which the Remote Filter message applies. As stated in [4.1.c](#), a unique Designator (16 bits) should be assigned to: 1) each JRE link connecting JRE Processors, and 2) each TDL network serviced by a JRE Processor (Link 16, Link 11B, Link 11). It is this designator number that is used in the Link Designator To Filter field to identify each output link for which the filter settings have been made. Only one Link Designator To Filter field is in a Remote Filter message, so a separate Remote Filter message must be used for each JRE link.

5.5.4.14.1.2 Latitude field. The Latitude field shall be a 23-bit field, containing values from [Table 5.5-9](#). Latitude is a scalar field that is based upon the MIL-STD-6016 DFI/DUI 281/015. The "No Statement" value shall not be used. The precision of this field is 0.0013 minute, or approximately 8 feet.

TABLE 5.5-9. Latitude field values.

FIELD VALUE	DESCRIPTION
0	0 degrees
1-4194303	+90/4,194,303 through +90 degrees North
4194304	No Statement
4194305-8388607	-90 through -90/4,194,303 degrees South

5.5.4.14.1.3 Longitude field. The Longitude field shall be a 24-bit field, containing values from [Table 5.5-10](#). Longitude is a scalar field that is based upon the MIL-STD-6016 DFI/DUI 282/015. The "No Statement" value shall not be used. The precision of this field is 0.0013 minute, or approximately 8 feet.

TABLE 5.5-10. Longitude field values.

FIELD VALUE	DESCRIPTION
0	0 degrees
1-8388607	+180/8,388,607 through +180 degrees East
8388608	No Statement
8388609-16777215	-180 through -180/8,388,607 degrees West

5.5.4.14.1.4 Lower and Upper Altitude Limit fields. The Lower and Upper Altitude Limit fields shall each be 13-bit fields, containing values from [Table 5.5-11](#). Altitude is a scalar field that is based upon the MIL-STD-6016 DFI/DUI 365/033. The Lower and Upper Altitude Limit Flag fields in the geographic filters indicate whether these limits are being applied. When the flag is not set, this indicates that there is no limit on the altitude. The "Altitude Unknown" value shall not be used. If both flags are set, the lower altitude limit shall be less than the upper altitude limit.

TABLE 5.5-11. Lower and Upper Altitude Limit field values.

FIELD VALUE	DESCRIPTION
0-8190	0 through 204,750 feet in 25 foot increments
8191	Altitude Unknown

5.5.4.14.1.5 Category/Identity Matrix. The Category/Identity Matrix represents the filter settings applied to Surveillance and PPLI messages. The filter settings are represented by 8 bytes, 1 for each Identity and one for PPLI messages. The PPLI byte is not used for the Category/Identity filter message, but is used in the Category/Identity matrices in all of the Geographic filter messages. Within each of the bytes in the matrix, the bits map to Category/Identity or PPLI message type settings. A bit shall be set to 1 to indicate that the Category

and Identity combination or the PPLI message type associated with that bit is filtered. The format of the Category/Identity Matrix message shall be as depicted on Figure [5.5-8](#).

Byte	Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Bit	Byte
1	15	ID = Unknown								ID = Pending								0	0
3	31	ID = Friend								ID = Assumed Friend								16	2
5	47	ID = Suspect								ID = Neutral								32	4
7	63	PPLI								ID = Hostile								48	6

FIGURE 5.5-8. Category/Identity Matrix format.

a. The bits within each of the 8 bytes used for Identity or PPLI settings shall map to the categories as shown on Figure [5.5-9](#).

		Bits							
		7	6	5	4	3	2	1	0
Surveillance Bytes		J3.7 & J14.0 Electronic Warfare Product Information (EWPI)	J3.6 Space	J3.5 Land/Ground	J3.4 & J5.4 Subsurface	J3.3 Surface	J3.2 Air	Und	Und
PPLI Byte		Undefined	Und	J2.5, J2.6 & J2.0 Land/Ground	J2.4 & J2.0 Subsurface	J2.3 & J2.0 Surface	J2.2 & J2.0 Air	Und	Und

FIGURE 5.5-9. Category/Identity byte categories (by bit).

5.5.4.14.1.6 Point Type/Point Amplification Matrix. The Point Type/Point Amplification matrix represents the filter settings applied to J3.0 Reference Point messages. These filter settings are represented by sixteen 16-bit fields. Each 16-bit field represents each of the Point Amplifications for an individual Point Type. Bits shall be set to 1 to indicate that the Point Type and Point Amplification combination associated with that bit is filtered. The format of the Point Type/Point Amplification Matrix message shall be as depicted on Figure [5.5-10](#). The bits within each 16-bit field

represent the Point Amplification values and shall be numbered as depicted at the top of Figure [5.5-10](#).

Byte	Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Bit	Byte
1	15	Point Type 0 (Hazard)																0	0
3	31	Point Type 1 (Reference Point - General)																16	2
5	47	Point Type 2 (Station - General)																32	4
7	63	Point Type 3 (Station - Air)																48	6
9	79	Point Type 4 (Line)																64	8
11	95	Point Type 5 (Area - General)																80	10
13	111	Point Type 6 (Area - Hazard)																96	12
15	127	Point Type 7 (ASW)																112	14
17	143	Point Type 8 (ASW, 1)																128	16
...	...	Point Type 9-14 (Undefined)															
31	255	Point Type 15 (Undefined)																240	30

FIGURE 5.5-10. Point Type/Point Amplification Matrix format.

5.5.4.14.1.7 Geographic Filter Index field. Each JRE link supported by a JRE Processor (identified by "Link Designator To Filter") may have up to 32 geographic filters. The Geographic Filter Index field shall contain a value between 0 and 31 that uniquely identifies an individual geographic filter. A JRE Processor might not always use all of the Geographic Filter Index field values for definition of geographic filters; however, the values used shall always start at 0 and be contiguous. The index numbers shall be re-numbered in the event that a filter is deleted.

5.5.4.14.1.8 Geographic Filter Active/Inactive Flag field. Geographic filters may specify filter settings for future application that are not presently applied to the JRE link. The settings specified in the Geographic Filter message shall only be applied when the Active/Inactive Flag field is set to value 1 (active).

5.5.4.14.1.9 Geographic Filter subtypes. The subtype of the Geographic filter specifies the mode of the application of the filter. The value for Geographic Filter subtype shall be as specified in [Table 5.5-12](#).

TABLE 5.5-12. Geographic Filter subtype values.

SUBTYPE	DESCRIPTION
0	Category/Identity, Exception to Filter
1	Category/Identity, Filter
2	Point Type/Point Amplification, Exception to Filter
3	Point Type/Point Amplification, Filter
4-7	Spare

a. Geographic Filter messages shall contain either a Category/Identity matrix or a Point Type/Point Amplification matrix that specifies the attributes of the Surveillance (J3.X) messages to which the filter applies. Additionally, the Subtype field indicates the semantic for evaluation for each geographic filter. The subtype of the geographic filter may be set to "Filter" the data, which means the forwarding JRE Processor shall not forward any of the messages specified by the filter, or to "Exception to Filter", meaning that the receiving JRE Processor shall forward and not exclude the messages with the Category/Identity or a Point Type/Point Amplification specified by the filter. The following additional semantics also apply to the application of Geographic Filter messages:

b. The order of evaluation of filter messages shall start with the Geographic Filter message that contains the lowest Index value in the Geographic Filter Index field and increment to the message with the next higher Index value until the highest index value has been reached. Upon each evaluation, the "filter" settings in each filter message shall be applied to the data that has not been excluded by

previously evaluated filters. Upon each evaluation, the "exception to filter" settings shall be applied to the data that has been excluded by previously evaluated settings. Overlapping filters may be used.

5.5.4.14.1.10 Filter Override fields. In accordance with MIL-STD-6020, filter overrides may be applied to individually designated JRE links to accommodate passing of certain critical messages that would otherwise be filtered. These filter overrides apply to applicable J2.0 and J3.x messages. Flags are provided in the appropriate filter messages for:

(1) Command and Control Indicator Override field. J-Series messages in which the C² indicator is set to 1 (default value) shall be forwarded when the Command and Control Indicator Override field is set to value 1 (Override Filter).

(2) Emergency Indicator Override field. J-Series messages in which the Emergency Indicator is set to 1 (default value) shall be forwarded when the Emergency Indicator Override field is set to value 1 (Override Filter).

(3) Force Tell Indicator Override field. J-Series messages in which the Force Tell Indicator is set to 1 (default value) shall be forwarded when the Force Tell Indicator Override field is set to value 1 (Override Filter).

a. These Filter Overrides shall not take precedence over data looping prevention procedures.

5.5.4.14.1.11 X0.10 Filter Response message. The filter response message is used to provide the required control/response and acknowledgements upon receipt of a filter management message. The format of the Filter Settings Request message shall be as depicted in the [X0.10 message summary](#).

5.5.4.14.2 X0.10.0 Filter Settings Request message. The Filter Settings Request message is used to request current filter settings of another JRE Processor. Requests can be made by designated link for all filter settings, all geographic filters, all filters of a specific type, or an individual filter.

a. The current settings for all filters on the designated link shall be requested by setting the All Filters field to value 1. The Requested Filter Message Type and Geographic Filter Index fields shall be set to 0 for this request. The receiving JRE Processor shall respond with one or more messages that provide all current filter settings for the designated link, followed by the Filter Settings Summary message.

b. All geographic filter settings on the designated link shall be requested by setting the Geographic Filter field to value 1. The Requested Filter Message Type and Geographic Filter Index fields shall be set to 0 for this request. The receiving JRE Processor shall respond with one or more messages that provide all current geographic filter settings, followed by the Filter Settings Summary message (see [5.5.4.14.3](#)).

c. All filters of a specified type on the designated link shall be requested by setting the Type Filter field to value 1. The Requested Filter Message Type field shall be set to the type of filter that is being requested, and the Geographic Filter Index field set to 0. The receiving JRE Processor shall respond with a series of messages that provide all current filter settings of the specified type, followed by the Filter Settings Summary message.

d. The All Filters field shall be set to value 0 when requesting the settings for a specific filter type. The Requested Filter Message Type field shall be set to the type of the filter that is being requested. If a Geographic Filter (filter message types 5 and 6) is being requested, the Geographic Filter Index field shall be set to the

index of the requested filter. The receiving JRE Processor shall respond with a message that contains the settings for the specified filter, followed by the Filter Settings Summary message.

e. When the JRE operator selects a JREAP link/designator on which he intends to make a remote filter change, the JRE shall transmit a remote filter settings request message requesting all filters settings for that designator. The JRE shall not allow a remote filter message to be sent to the selected link/designator until it receives the filter settings request information. The received filter settings shall be displayed to the JRE operator for modification in the filter message being prepared for transmission.

f. The format of the Filter Settings Request message shall be as depicted in the [X0.10.0 message summary](#).

5.5.4.14.3 [X0.10.1 Filter Settings Summary message](#). The Filter Settings Summary message will provide an overall summary of the current settings of the originating JRE Processor. The message will be repeated for each Designated link. The message shall be constructed as shown in the [X0.10.1 message summary](#). When responding to a Filter Settings Request message (except when responding to a request for a specific filter), the Filter Settings Summary message will be the last message sent to the JRE Processor making the request. The Geographic Filter Index field shall only be evaluated for Filter Message Types 5 and 6. When transmitting the Filter Settings Summary, the Acknowledgement Protocol, 4 field shall be set to value 1 (Processor Acknowledgment) and the Control/Response Indicator field, 8 shall be set to value 131 (Report).

5.5.4.14.4 [X0.10.2 Category/Identity Filter message](#). The Category/Identity Filter message is used to direct or report the filter settings applied to PPLI and Surveillance messages. The filter settings shall be represented using a Category/Identity Matrix ([5.5.4.14.1.5](#)), as shown in the [X0.10.2 message summary](#).

5.5.4.14.5 X0.10.3 Label/Sublabel Filter message. The Label/Sublabel Filter message is used to direct or report the filter settings applied to all Link 16 messages, based upon message type, as specified in the Label/Sublabel fields of the Link 16 message. The filter settings are comprised of 32 bytes, with each byte representing the messages for a specified message label. Within each label byte, bits map (by sublabel) to the individual messages for that label. Bits shall be set to value 1 (filtered), to indicate that the Label/Sublabel combination associated with that bit is filtered. The format of the Label/Sublabel Filter message shall be as depicted in the [X0.10.3 message summary](#).

a. The bits within each of the 32 label bytes shall map to the sublabels as shown on [Figure 5.5-11](#).

Bits

7	6	5	4	3	2	1	0
X.7	X.6	X.5	X.4	X.3	X.2	X.1	X.0

FIGURE 5.5-11. Label/Sublabel byte sublabels (by bit).

5.5.4.14.6 X0.10.4 Point Type/Point Amplification Filter message. The Point Type/Point Amplification Filter message is used to direct or report the filter settings applied to the Point Type and Point Amplification fields in J3.0 Reference Point messages. The format of the Point Type/Point Amplification Filter message shall be as shown in the [X0.10.4 message summary](#). The Point Type/Point Amplification Matrix is defined in [5.5.4.14.1.6](#).

5.5.4.14.7 X0.10.5 Ellipse-Rectangle Geographic Filter message. The Ellipse-Rectangle Geographic Filter message is used to direct or report filter settings applied to an elliptical or rectangular area and shall be as shown in the [X0.10.5 message summary](#). It contains Latitude, Center 0.0013 Minute and Longitude, Center 0.0013 Minute

fields (see [5.5.4.14.1.2](#) and [5.5.4.14.1.3](#)) that specify the center coordinates of the ellipse (or circle), or rectangle (or square) and the Rectangle Flag Field that is set to value 1 when the area specified is a rectangle or set to value 0 when the area specified is an ellipse. It has 12-bit major and minor axis lengths in units of data miles with a range from 1 to 4,095 (the value of 0 shall not be used). The Major Axis Orientation field is an eight bit field that specifies the orientation of the major axis in one degree increments from 0 to 179 measured clockwise from true north (the values 180-255 shall not be used). It can also specify lower and upper altitude limits (see [5.5.4.14.1.4](#)) to which the filter applies. The region to which the filter setting applies is inside the specified ellipse or rectangle and subject to specified altitude limits. The Ellipse-Rectangle Geographic Filter message shall include either a Category/ID ([5.5.4.14.1.5](#)) or Point Type/Point Amplification Matrix ([5.5.4.14.1.6](#)).

5.5.4.14.8 X0.10.6 Closed Polygon Geographic Filter message. A Closed Polygon Geographic filter message is used to direct or report filter settings applied to a closed polygon area and shall contain a sequence of between 3 and 15 Latitude and Longitude fields that define an arbitrary area. The first coordinate listed acts as both the starting point and ending point for the perimeter of the polygon. The Last Point Flag field shall be set to 0 for all coordinates except for the last of the series where it is set to 1. Each pair of coordinates defines a line segment that is one of the sides of the polygon. The construction of the polygon shall assure that none of the lines connecting vertices cross. A JRE Processor preparing to transmit or that receives this message shall check for violation of this rule. A JRE Processor creating a local closed polygon filter shall enforce this rule. A JRE processor that receives a message that violates this rule shall respond with a Control/Response Indicator of 130 (CANTPRO) and an Error Code, 7 of 4 (MESSAGE ERROR). Lower and upper altitude limits can also be specified for this area. The format of the Closed

Polygon Geographic Filter message shall be as shown in the [X0.10.6 message summary](#). Closed Polygon Geographic Filter message shall include either a Category/ID ([5.5.4.14.1.5](#)) or Point Type/Point Amplification Matrix ([5.5.4.14.1.6](#))

5.5.4.14.9 [X0.10.7 Source Track Number Filter message](#). The Source Track Number Filter message is used to direct or report filter settings applied to one or more STNs that are to be filtered. All messages from these STNs, including the PPLI of the source, shall be filtered from transmission on the interface link. Multiple message fragments may be used to convey all of the Source Track Number filter settings. The format of the Source Track Number Filter message shall be as shown in the [X0.10.7 message summary](#).

5.5.4.14.10 [X0.10.8 Special Processing Indicator Filter message](#). The Special Processing Indicator (SPI) Filter message is used to direct or report filter settings applied to SPI messages that are to be filtered. When the Special Processing Indicator Filter Flag is set to value 1 (filter SPI messages), all Link 16 messages containing the SPI indicator shall be filtered from transmission on the interface link. The format of the Special Processing Indicator Filter message shall be as shown in the [X0.10.8 message summary](#).

5.5.4.14.11 [X0.10.9 J28.2\(x\) Filter message](#). The J28.2(x) filter message is used to direct or report filter settings applied to the filtering of J28.2(0) messages and J28.2(x) messages other than the J28.2(0). J28.2(x) messages are identified by the value in the (MIL-STD-6016) DFI/DUI 1743/001 field of the J28.2(x)I words. A J28.2(0) message will have a value of 0 in this field. The J28.2(0) Filter Flag field shall be set to value 1 to enable filtering of J28.2(0) messages, and to value 0 to disable filtering of J28.2(0) messages. The J28.2(x) Filter Flag field shall be set to value 1 to enable filtering of J28.2(x) messages other than the J28.2(0), and to

value 0 to disable filtering of those messages. The format of the J28.2(x) Filter message shall be as shown in the [X0.10.9 message summary](#).

5.5.4.14.12 [X0.10.10 Data Age Filter message](#). The Data Age Filter message is used to direct or report filter settings applied to messages that have latencies within the JRE forwarding process greater than a specified amount of time, as measured by the Data Age of the message. It allows each label/sublabel combination to have an explicit Data Age limit. Each Age Limit Value field shall be a number of seconds (0 - 255), with zero meaning "no limit". Messages older than the specified limit shall be filtered on the designated link. The format of the Data Age Filter message shall be as shown in the [X0.10.10 message summary](#).

5.5.4.14.13 [X0.10.11 Simulation Filter message](#). The Simulation Filter message is used to direct or report filter settings if simulation messages are to be filtered. When the Simulation Indicator Filter Flag field is set to value 1 (filter simulated messages), all Link 16 messages containing the simulation indicator shall be filtered from transmission on the designated link. The format of the Simulation Filter message shall be as shown in the [X0.10.11 message summary](#).

5.5.4.14.14 [X0.10.12 J3.6 Rocket Filter message](#). The J3.6 Rocket Filter is used to direct or report filtering of J3.6 messages reporting Rockets. All Link 16 J3.6 messages containing the Rocket Indicator (DFI 1107/DUI 034) set (value 1) shall be filtered from transmission on the designated link when this filter is set to 1. The format of the J3.6 Rocket Filter message shall be as shown in the [X0.10.12 message summary](#).

5.5.4.14.15 X0.10.13 National Use Sub-sublabel Filter message.

The National Use Sub-sublabel Filter message is used to direct or report filter settings applied to the filtering of J series National Use messages that use DFI/DUI 1743/002 Sub-Sublabel, National Message by country of origin. The country of origin is identified by the value (0 - 31) in the (MIL-STD-6016) DFI/DUI 1743/002 Sub-Sublabel, National Message field (bits 13 - 17) of a national use message I word. The 32 Sub-sublabel Filter Flag fields shall be set to value 1 to enable filtering of national use messages, and to value 0 to disable filtering of national use messages. The format of the National Use Sub-sublabel Filter message shall be as shown in the [X0.10.13 message summary](#)

5.5.4.14.16 X0.10.14 Network Participation Group Filter message.

The Network Participation Group Filter message is used to direct or report Network Participation Group filters on a specified JRE Network.

5.5.4.14.16.1 Each filter message sets a filter for a specific NPG from a specific JSTN or Link Designator. When the Active/Inactive Flag field is set to 1 (Active), all Link 16 messages in the JREAP J-Series with NPG Assignment message that meet all of the following criteria shall be filtered from transmission on the link specified by the Link Designator To Filter field:

a. the X7 JREAP J-Series with NPG Assignment message NPG value matches the NPG specified in the Network Participation Group To Filter field.

b. the X7 JREAP J-Series with NPG Assignment message is from either the designated source interface unit or Source Link Designator.

(1) If Source Link Designator is set to 0 (No Statement) then messages shall be filtered by the source JSTN.

(2) If Source Link Designator is set to other than 0 (No Statement) then messages shall be filtered by Source Link Designator and JSTN shall be ignored.

The format of the Network Participation Group Filter message shall be as shown in the [X0.10.14 message summary](#).

5.5.4.15 X0.11 Secondary Track Number List message. The Secondary Track Number List message is used by a JRE Processor that is an FJUG to exchange and modify Link 16 secondary TN lists. A secondary TN list is maintained by each JRE Processor that has an associated Link 16 terminal and contains the secondary TN list held by that terminal. This message can be used to: 1) request the secondary TN list managed by a remote JRE Processor; 2) report the current secondary TN list managed by a JRE Processor; or 3) request a change to the secondary TN list managed by a remote JRE Processor.

a. Link 16 terminals differ in the number of secondary TNs supported and in the mechanisms for establishing secondary TN settings. This message can be used to convey the settings of any Link 16 terminal.

b. Requests for secondary TN lists shall have the Control/Response Indicator, 10 field of the X0.11 Secondary Track Number List message set to value 0 (Query) and shall have no Add/Delete Indicator or Secondary Track Number fields.

c. Responses to requests for secondary TN lists shall have the Control/Response Indicator, 10 field of the X0.11 Secondary Track Number List message set to value 131 (Report), and shall contain all the secondary TNs that are set in the Link 16 terminal attached to the responding JRE Processor and the secondary TNs maintained by the JRE processor hosting the terminal.

d. Each JRE Processor shall transmit the Secondary Track Number List message once, every two to four minutes. These unsolicited data messages shall have the Control/Response Indicator, 10 field of the X0.11 Secondary Track Number List message set to value 2 (Information), and shall contain all of the secondary TNs that are set in the Link 16 terminal attached to the responding JRE Processor and the secondary TNs maintained by the JRE processor hosting the terminal.

e. Requests to modify the secondary TN list managed by a remote JRE Processor shall set the Control/Response Indicator, 10 field to value 1 (Command), and shall contain a list of secondary TN settings to be modified. The Add/Delete Indicator field shall be set to value 0 (Delete) in order to request the deletion of a secondary TN, and set to value 1 (Add) in order to request the addition of a secondary TN. The JRE Processor shall transmit a new Secondary Track Number List Message with the Control/Response Indicator, 10 field set to value 2 (Information) on all active JRE links after its Secondary TN list has been modified in response to a Secondary Track Number List message.

f. Requests for a secondary TN list modification shall use a X0.11 Secondary Track Number List message Acknowledgment Protocol, 3 field value of 1 (Processor Acknowledgment) or 2 (Operator Acknowledgment). Modification requests that cannot be processed shall be replied to with a X0.11 Secondary Track Number List message Control/Response Indicator, 10 field value of 130 (CANTPRO) for processor responses or 193 (CANTCO) for Operator responses, and shall contain each secondary TN for which the modification could not be performed. Acknowledgment processing will be performed as specified in [5.5.4.3.2](#). The format of the Secondary Track Number List message shall be as shown in the [X0.11 message summary](#).

5.5.4.16 X0.12 Direct Connection List message. This message conveys a JRE's connectivity list to other JRE Processors and IUs. A JRE Processor generates a Direct Connection List message to indicate which IUs it has direct two-way connectivity with on each given link. When a Link 16 JU number is available, it shall be used for the Link Interface Unit field with bit 0 of the IU number set to 0 (as in [5.2.2.3](#)). The identity of each link is communicated in the message by its unique link designator (see [4.1.c](#)).

a. The format for the Direct Connection List message shall be as shown in the [X0.12 message summary](#). An example Direct Connection List message is provide in [5.5.4.16.5](#).

b. When reporting direct connectivity, the JRE Processor shall send a Direct Connection List message for each active link. These messages may be packed behind one JREAP Management message subheader, and JRE Processors shall be able to unpack such messages.

c. This message shall be transmitted once every 2-4 minutes for each active link.

5.5.4.16.1 Link Designator field. The Link Designator field shall be a unique 16-bit numeric indicator (see [4.1.c](#)).

5.5.4.16.2 Number Addresses This Designator field. The Number Addresses This Designator field shall be the total number of IU numbers (up to 255) associated with the link being reported by this particular Designator, and is used to determine the length of the message.

5.5.4.16.3 Total Number of Designators field. The Total Number of Designators field shall be the number of links active for this JRE Processor. A JRE Processor shall transmit one message for each Designator.

5.5.4.16.4 Link Interface Unit field. The Link Interface Unit field contains the unique number for each IU being reported. The list of IU numbers for this Designator shall specify which IUs are connected via this Designator.

5.5.4.16.5 Direct Connection List Message example. This section provides an example of the use of the Direct Connection List Message.

a. Assume that a JRE Processor has four transport interfaces: (1) Link 16, (2) UHF SATCOM (each representing a different network), and (1) SHF SATCOM. The Link 16 interface, which has a Link Designator field value of 154 in this example, provides (to/from) connectivity between the JRE Processor and sixteen JUs. The first UHF SATCOM interface, designated as 211, provides connectivity to (5) IUs. The second UHF SATCOM interface, designated as 181, provides connectivity to (3) IUs. Finally, the SHF SATCOM interface, designated as 44, provides connectivity from the JRE Processor to a single IU.

b. [Figure 5.5-12](#) shows the Direct Connection List messages associated with the example JRE Processor as they would appear behind a single [JRE Management message subheader](#). All fields, except for the Link Interface Unit fields, are shown with the appropriate values written in binary. In all four messages, the Total Number of Active Designators field value is 4.

c. The first message is for the Link 16 interface. The Link Designator field value is 154, and bytes 4-35 indicate the sixteen IU numbers used to represent the sixteen JU numbers of the connected JUs. The Number Addresses This Designator field value is 16, representing the number of JUs connected to the JRE Processor via this designator.

d. The second message depicts the first of two UHF SATCOM interfaces. For this designator, the Link Designator field value is 211 and the Number Addresses This Designator field value is 5.

e. The third message represents the second UHF SATCOM link. For this designator, the Link Designator field value is 181 and the Number Addresses This Designator field value is 3.

f. The fourth message is for the SHF SATCOM interface. The Link Designator field value is 44 and the Number Addresses This Designator field value is 1.

Byte	Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Bit	Byte	
1	15	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	Link 16
3	31	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	16	2	
5	47	JTIDS/MIDS Unit 1																32	4	
•	•	•																•	•	
•	•	•																•	•	
•	•	•																•	•	
35	285	JTIDS/MIDS Unit 16																272	34	UHF SATCOM 1
1	15	1	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	
3	31	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	16	2	
5	47	Interface Unit 1																32	4	
•	•	•																•	•	UHF SATCOM 2
•	•	•																•	•	
•	•	•																•	•	
•	•	•																•	•	
13	111	Interface Unit 5																96	12	UHF SATCOM 2
1	15	1	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	
3	31	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	16	2	
5	47	Interface Unit 1																32	4	
7	63	Interface Unit 2																48	6	SHF SATCOM
9	79	Interface Unit 3																64	8	
1	15	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
3	31	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	16	2	
5	47	Interface Unit 1																32	4	

FIGURE 5.5-12. Direct Connection List message example.

5.5.4.17 X0.13 Network Connectivity Matrix message. The Network Connectivity Matrix message provides JRE Processors with the means to share connectivity information, enabling each JRE Processor to create a map of the "Overall JRE network". The connectivity information is provided in terms of a square matrix showing how the designator links supported by the JRE Processor are interconnected. Information on both directions of a link between designators is provided to account for cases when the information flow may only be in one direction. This message shall be transmitted once every 2-4 minutes and also after a change is recognized. The format for the Network Connectivity Matrix message shall be as shown in the [X0.13 message summary](#). An example of a connectivity matrix is shown in [Figure 5.5-13](#).

5.5.4.17.1 Number of Designators Supported field. The Number of Designators Supported field indicates the number of links that the JRE Processor is supporting and therefore represents the number of rows within the connectivity matrix.

5.5.4.17.2 Link Designator field. The Link Designator field includes the unique designator for each of the JRE Processor's capable links. The position within the sequence of Link Designators being reported indicates the zero-based index in the connectivity matrix for that Link Designator. Each Link Designator's index represents both a row and a column in the connectivity matrix.

5.5.4.17.3 Connectivity Matrix Bit field. The connectivity matrix is a D x C bit matrix defined by Connectivity Matrix Bit fields. The D rows of the matrix represent data "sources" and the C columns represent data "destinations". A bit set to 1 at the intersection of a row and column indicates one-way data flow from the source row network to the destination column network. Two way flow would be indicated by setting the bit in the corresponding column and row to 1. A value of 0 designates no flow. A network never forwards to itself; therefore, bits on the diagonal of the matrix are always set to 0.

5.5.4.17.4 Connectivity Matrix transmission. For simplicity of transmission, the number of columns of the matrix will be rounded to an integer multiple of 8, assuring that only complete bytes are sent. (The matrix will be padded out by filling undesignated columns with zeros.) Thus, the number of columns, C , will be equal to $8 \times [\text{Integer} (D/8) + 1]$. The elements of the matrix, $M[i,j]$ will be transmitted row-by-row. If B_0 is the first byte of the transmitted matrix, it contains elements $M[0,j]$, $j = 0 - 7$; B_1 contains elements $M[0,j]$, $j = 8 - 15$; up to $B[C-1]$ containing elements $M[0,j]$, $j = (C-8) - (C-1)$. In general, row $M[x,j]$, $j = 0 - (C-1)$ is transmitted in bytes $B[x \times C]$ to $B[x \times C + (C-1)]$.

5.5.4.17.5 Connectivity Matrix example. As an example, consider a JRE Processor supporting: (1) a Link 16 connection, (2) a SHF SATCOM connection, and (3) a UHF SATCOM connection. Assume that the Network Connectivity Message lists the links in the following order: Link 16, SHF SATCOM, and UHF SATCOM and that data is forwarded in both directions between the Link 16 and SHF SATCOM links. Data is forwarded from Link 16 to the UHF SATCOM link, but data is not forwarded from UHF SATCOM to Link 16. There is no exchange of data between the UHF SATCOM and SHF SATCOM connections. [Figure 5.5-13](#) shows the padded-out connectivity matrix for this example. For convenience, the matrix rows and columns have been labeled. [Figure 5.5-14](#) shows how the three bytes used to represent the connectivity matrix for this JRE Processor are sent in the message. For clarity, the word and bit numbers have been labeled.

Columns

Row	Source	(Padding)					Destination		
		7	6	5	4	3	2	1	0
0	Link 16	0	0	0	0	0	1	1	0
1	SHF	0	0	0	0	0	0	0	1
2	UHF	0	0	0	0	0	0	0	0

NOTE*: **Boldface** numbers are matrix elements; *italic* numbers are zero fill for 8-bit bytes.

FIGURE 5.5-13. Example connectivity matrix.

Bit Numbers

Word	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0
2									0	0	0	0	0	0	0	0

NOTE*: **Boldface** numbers are matrix elements; *italic* numbers are zero fill.

FIGURE 5.5-14. Connectivity Matrix Bit mapping example (for Figure 5.5.13).

5.5.4.18 X0.14 Connectivity Feedback message. The Connectivity Feedback message allows a processor to provide data to other processors on how it is receiving them. This also tells a processor how another processor is receiving it (and the rest of the participants on the link). This message shall be transmitted once every 60 seconds. The format of the Connectivity Feedback message shall be as shown in the [X0.14 message summary](#).

5.5.4.18.1 Management Message Length field. The Management Message Length field value is the length of the message (in bytes).

5.5.4.18.2 JRE Sender ID field. The JRE Sender ID field value is the IU number assigned to the JRE Processor that is producing this message (see [5.2.2.3](#))

5.5.4.18.3 Link Designator field. The Link Designator field uniquely identifies the link/network to which the message refers. When a single JRE Processor transmits data for several networks, each address can be routed differently by the network infrastructure.

5.5.4.18.4 Unit Report group. The remainder of the message consists of reception reports summarizing how well the reporting JRE Processor is receiving data from network member IUs. For each of the N-received IU sources reported:

a. The Link Interface Unit field (Interface Unit N) is the JRE Sender ID of the network participant being reported.

b. The Average Received Data Media Latency field (Interface Unit N) is the calculated mean latency over the last 60 seconds, on the data that the JRE Processor is receiving from the Source (Interface Unit N). The Average Received Data Media Latency calculation is defined in [5.6.6](#). The 16 bit Average Received Data Media Latency field is set in 1/32 of a second intervals.

c. The Percent Exceeding Latency field (Interface Unit N) value is the percentage of JREAP packets exceeding the specified Maximum Latency ([5.5.4.9.1](#)) limits over the last 60 seconds. If the Maximum Latency value has not been set, a value of zero shall be transmitted. The Percent Exceeding Latency value shall be a percentage from 0 to 100 in one percent increments.

d. The Error Rate, Current field (Interface Unit N) contains the error data as defined in [5.6.14](#).

5.5.5 X7 JREAP J-Series with NPG Assignment messages. The X7 JREAP J-Series with NPG Assignment message is similar to the X1 JREAP J-Series Message. The X7 message is used to transmit J-Series messages in NPGs designated by the originator, providing the ability to specify the NPG upon which the message should be transmitted when forwarded to a Link 16 network. The X7 message shall be used as described in Appendix E of MIL-STD-6020. Additional data fields are included to report the source Link Designator, destination Link Designator, and destination Link 16 Network Participation Group for all JREAP J-Series Message Words contained in the X7 message.

a. The format for each X7 JREAP J-Series with NPG Assignment message is shown in the [X7.0](#) and [X7.1](#) message summaries. The JREAP J-Series Message Word fields of the X7 JREAP J-Series with NPG Assignment message shall be formatted as shown in [Figure 5.5-1](#).

b. Subsequent J-Series message words shall be packed in accordance with [5.5.1.b](#).

c. The structure of the X7 JREAP J-Series with NPG Assignment message in Application mode differs from the structure used in Full Stack mode. When operating in the Application mode, the J-Series Messages in the X7.0 JREAP J-Series with NPG Assignment message (Application) are preceded by information that identifies the STN (or JU source of the data), a flag indicating whether an acknowledgment is requested, and associated data. When operating in the Full Stack mode, the STN of the source of the data, the acknowledgment request flag, and associated data are contained in fields in the Message Group header (see [5.4.3.4](#)).

d. In both the Application and Full Stack modes, if a packed J-Series message contains the STN of the originator within the J-Series message, this STN shall take precedence over the JSTN. This allows the packing of such messages (such as J2.0 PPLI messages) without regard to the JSTN in the header.

e. Additional details are provided in the following subparagraphs.

5.5.5.1 X7.0 JREAP J-Series with NPG Assignment message (Application) description. This message follows a JREAP Application Header. The format of this message shall be as shown in the [X7.0 message summary](#). A complete message, including headers, will be constructed as shown in Figure [5.5-15](#). It includes a JRE STN field that identifies the data source (this may be an STN with a leading 0), a NPG Message Sequence Number (NPG MSN) field for message tracking, a Relay Flag field, an Acknowledgment Request Flag field, a Data Age field, a field to indicate the Number of J-Words contained within the following J-Series message(s), a Source Link Designator field, a Transmit Link Designator, and a Network Participation Group field. Several J-Series messages may be sent following the leading fields, as long as all the leading fields maintain the same association for all the included J-Series messages.

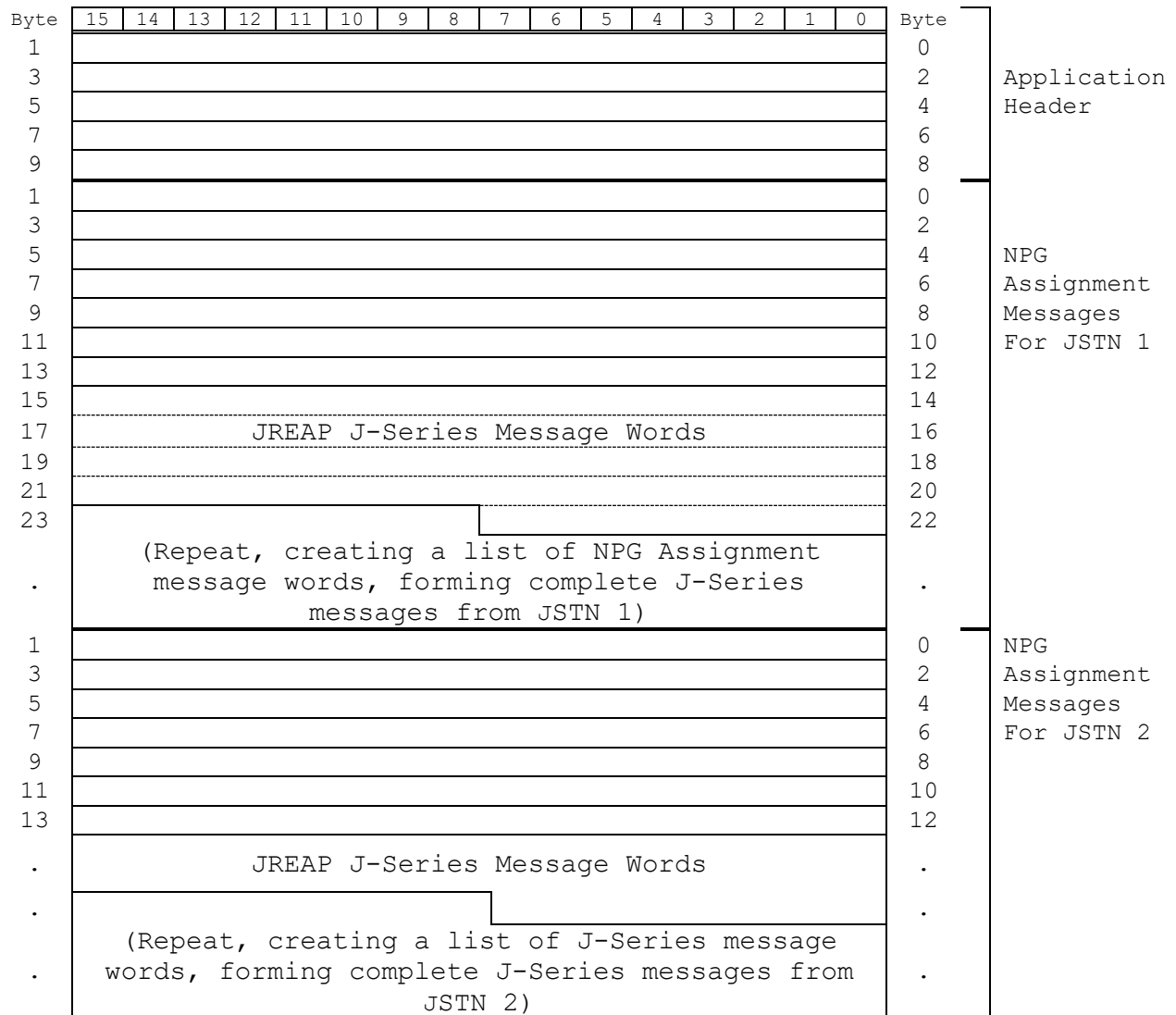


FIGURE 5.5-15. Application example with J-Series Message (Application).

a. Specifications for the JRE Source Track Number field are in [section 5.4.3.4.4](#).

b. The NPG MSN field shall be incremented by 1 in each X7.0 JREAP J-Series with NPG Assignment message transmitted by a JRE Processor on each JRE link. The value of the NPG MSN field used on a JRE link shall be set to 1 when the JRE link is initialized. A value of 0 in this field indicates a NPG MSN rollover.

- c. Specifications for the Relay flag are provided in [Section 5.2.2.9](#).
- d. Specifications for the Acknowledgment Request flag are provided in [Section 5.2.2.7](#).
- e. Specifications for the Data Age field are provided in [Section 5.2.2.8](#).
- f. The Number of J-Words field specifies the number of J-Series words contained within the X7.0 JREAP J-Series with NPG Assignment message. More than one J-Series message may be transmitted in a single X7.0 JREAP J-Series with NPG Assignment message, but a J-Series message shall not be split between two or more JREAP J-Series with NPG Assignment messages. Two J-Series messages having three and two words (i.e. a J3.6I, E0, E1 and a J12.6I and E0) would have a value of "5" in the Number of J-Words field.
- g. The Source Link Designator field specifies the link designator of the network on which the J-Series message was initially transmitted. The Transmit Link Designator field specifies the intended destination link.
- h. The Network Participation Group field specifies the network participation group on which the J-Series message is to be transmitted.
- i. Subsequent X7.0 JREAP J-Series with NPG Assignment messages shall be packed behind a JREAP Application header such that no empty bits or bytes reside between packed X7.0 JREAP J-Series with Participation messages.

5.5.5.2 X7.1 JREAP J-Series with NPG Assignment Message (Full Stack) description. This message follows a JREAP Transmission Block Header and Message Group Header. Each Message Group Header will be followed by a single X7.1 JREAP J-series message. The X7.1 JREAP J-Series with NPG Assignment message (Full Stack) shall consist of the Source and Transmit Link Designator fields ([5.5.5.1.g](#)), and a Network Participant Group field ([5.5.5.1.h](#)) followed by a sequence of JREAP J-Series words (see [5.4.3.4](#)) comprising one or more complete J-Series messages from the same STN and NPG. The source of the messages is identified in the Message Group header. The J-Series words shall be formatted as shown in the [X7.1 message summary](#).

5.5.5.3 X7.1 JREAP J-Series with NPG Assignment message (Full Stack) example with J-Series Messages. A complete JREAP J-Series with NPG Assignment message (Full Stack), including headers, will be constructed as shown in Figure [5.5-16](#). Details for the Full Stack Transmission Block Header can be found in [5.4.2](#). Details of the Full Stack Message Group Header are in [5.4.3](#) and [5.5.4.1](#). Details of JREAP J-Series with NPG Assignment message (Full Stack) are found in [5.5.5.2](#).

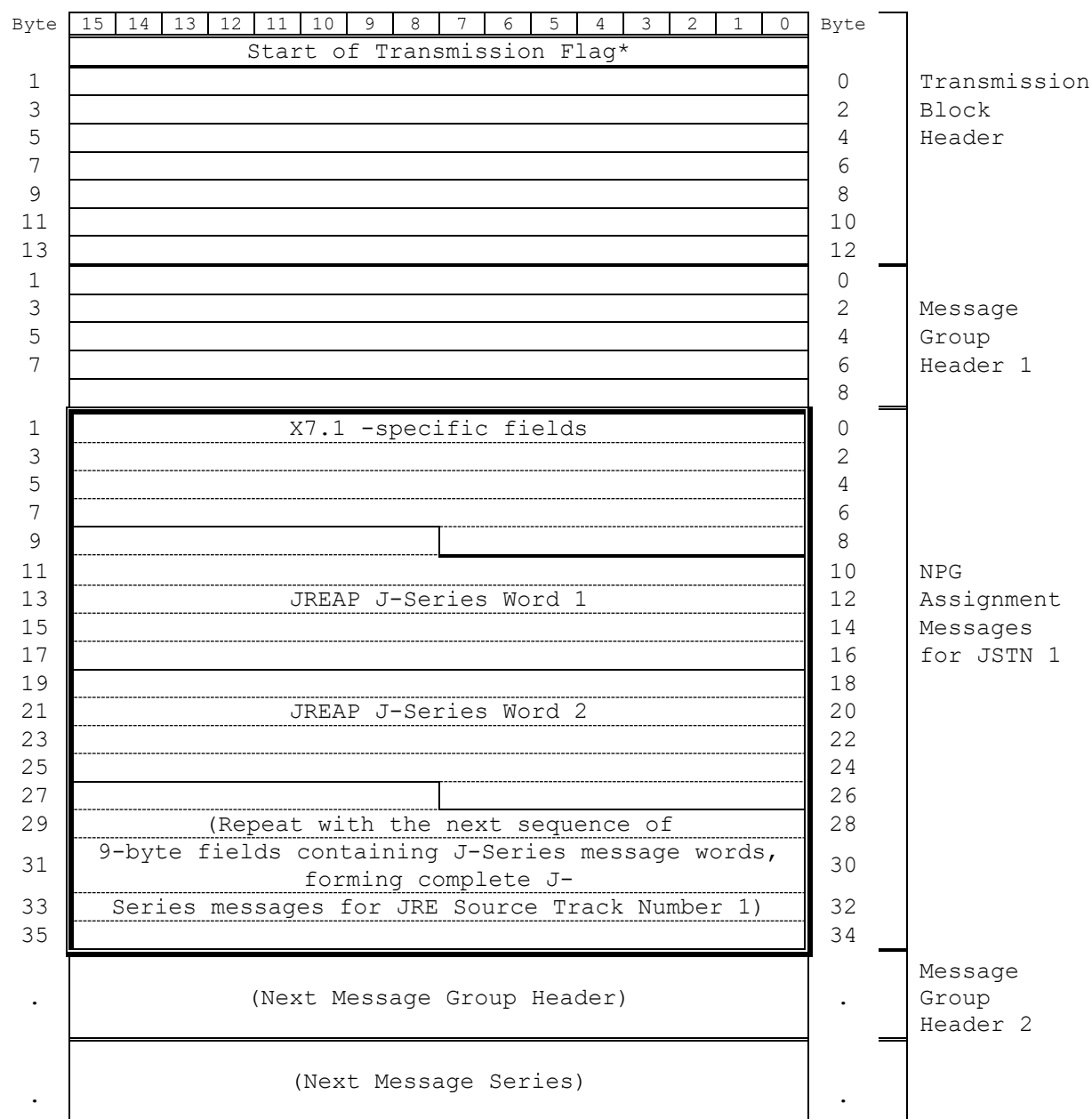


FIGURE 5.5-16. Full Stack example with J-Series Messages (Full Stack).

5.6 Link monitoring. JRE Processors shall monitor and make available for display the status of each active link. Link monitors support link and JRE troubleshooting, traffic analysis, and filter effectiveness evaluation. Each JRE implementation may handle this task in a unique way, however, some guidance is necessary to ensure that common functions are implemented in an interoperable way.

a. Appendixes A, B and C provide details as to what performance monitoring data shall be available for display to the operator.

b. A JRE Processor shall collect link monitoring data for each participant on each link. For a point-to-point link, the participants consist of the local and the peer JRE Processors. For a multicast link, there may be many participants. The data shall be made available to an operator in a format that facilitates link monitoring and troubleshooting. The data shall be current and updated every 6 seconds (or less).

c. Where counts are specified, they shall be cumulative from the time the link was initialized unless specified otherwise.

d. Where averages are specified, the nominal period shall be 60 seconds, unless specified otherwise.

e. Specific link monitoring data requirements are described in the following subparagraphs and shall be implemented by JREAP processors:

5.6.1 Kilobytes Received. This shall be the total count of kilobytes received on a link. For Full Stack links, this counts both good data and data received in error.

5.6.2 Kilobytes Sent. This shall be the total count of kilobytes sent on a link.

5.6.3 Data Messages Received. This shall be the total count of data messages (for example, JREAP J-Series messages) received on a link (prior to any filters being applied on incoming data).

5.6.4 Data Messages Sent. This shall be the total count of application data messages (for example, JREAP J-Series messages) sent on a link (after filters are applied on outgoing data).

5.6.5 Last Receive Activity Time. This shall be the last time the link received data, and shall be accurate to at least 1 second.

5.6.6 Average Received Data Media Latency. The sliding window for calculating latency shall be the most recent 60 seconds (10 cycles for half duplex token passing). This is the average latency of all messages received in the last window. The average latency of the window is the sum of the message latencies during that period divided by the number of messages received during that period.

a. The JRE Processor shall report this average latency in the Connectivity Feedback message (see [5.5.4.18](#)).

5.6.7 Missed Sequence Number Errors. This shall be the count of skips in the sequence number (which usually indicates lost data). One skip shall be counted for each sequence number not received. Apparent skips caused by peer re-initialization shall be detected by a sequence number zero and are not counted.

5.6.8 JREAP J-Series Messages (Application), JREAP J-Series with NPG Assignment Messages, or J-Series Message Group Headers Received. This shall be the count of JREAP J-Series messages (Application) ([5.5.1.1](#)) or Message Group headers ([5.4.3](#)) received containing J-Series messages.

5.6.9 JREAP J-Series Messages (Application), JREAP J-Series with NPG Assignment Messages, or J-Series Message Group Headers Sent. This shall be the count of JREAP J-Series messages (Application) ([5.5.1.1](#)) or Message Group headers ([5.4.3](#)) sent containing J-Series messages.

5.6.10 Transmission Block (or Application) Headers Received. For Full Stack usage, this shall be the count of Transmission Block headers received. For Application usage, this shall be the count of Application headers received.

5.6.11 Transmission Block (or Application) Headers Sent. For Full Stack usage, this shall be the count of Transmission Block headers sent. For Application usage, this shall be the count of Application headers sent.

5.6.12 Message Group Headers Received in Error. For Full Stack usage, this shall be the count of erroneous Message Group headers received.

5.6.13 Transmission Block Headers Received in Error. For Full Stack usage, this shall be the count of erroneous Transmission Block headers received.

5.6.14 Current Error Rate. The Current Error Rate shall be recomputed every second or link cycle as summarized below for each appendix.

(1) For [Appendix A](#), the Current Error Rate is calculated over the last 10 cycles in which that unit was included in the TSL (see also paragraph [A.4.2.2](#)). If no transmission is received with at least two out of three JRE Sender ID triplicate fields matching during a cycle, then increase the Current Error Rate by ten. When a transmission is received with one or more CRC failures in the Transmission Block Header or Message Group Headers then increase the Current Error Rate by one.

(2) For [Appendix B](#), the Current Error Rate is the count of missed transmission sequence numbers during the last 60 seconds (see also [FSTBH.B message summary](#) and paragraph [B.5.1.2.](#))

(3) For [Appendix C](#), the Current Error Rate is the count of missed message sequence numbers during the last 60 seconds.

a. In Full Stack usage, each JRE Processor shall report the 7-Bit Current Error Rate field in the JRE Network Participant Transmission Block header (see [A.5.1.2.1.4](#)) or the Transmission Block header (see [B.5](#)).

5.6.15 Net Cycle Time. For [Appendix A](#), Net Cycle Time (NCT) is the difference between the JRE-NC's most recent DVT and the preceding DVT value. NCT shall be updated by JRE-NPs upon reception of each JRE-NC transmission. NCT shall be updated by the JRE-NC after each transmission.

6. NOTES

6.1 Implementation guidelines. Documents conforming to the requirements of this standard are intended for use as DoD standardization documents for Joint Interoperability when sending TDL data over alternative links. The goal of this standard is to produce a uniform approach throughout the DoD community.

a. This section provides clarification of the JREAP design concepts and implementation guidance with JRE Processors. The JREAP, as presented within this document, only applies to the alternative communication link between JRE Processors. General implementation guidance is provided, based upon one envisioned usage that connects multiple Link 16 zones or networks (see [Figure 4.1-1](#)). The requirements placed upon the protocol, in support of two-way Link 16 data exchange, are not intended to limit other applications of the JREAP. Additionally, JREAP protocol implementation within a JRE Processor does not infer that two or more Link 16 networks can be seamlessly integrated, as the JREAP does not improve upon the lower communication layer performance. Implementations of the JREAP within a JRE structure must ensure that the communications media, JRE Processor, and TDL structure can support the end-to-end JRE and TDL requirements.

6.2 JREAP time. The JREAP supports the concept of deterministic data delivery, meaning the delivery of data packets within a specific (known) time interval. The JREAP cannot guarantee deterministic delivery over any communications link, but it does support monitoring link latency. The JREAP provides a time reference negotiation procedure and time stamping (DVT) that can be used by receiving JRE Processors to monitor communications latency.

a. The JREAP requires all JRE Processors operating on a communications link to negotiate a common time reference, as specified in the relevant appendix and Management message (see [5.5.4.5](#)). This

common time reference allows receiving JRE Processors to know the transmission delay by comparing the time of JREAP packet reception (current reference time) to the DVT in the header. This transmission delay is then available to the JRE Processor for use with other data processing algorithms.

b. The JREAP also requires each JRE Processor to report a time accuracy value, which should include the inaccuracy of the JRE Processor's capability to "lock on to" the time reference source. When DVT is referenced to the physical interface (see [5.2.2.6](#)), it should also include any uncertainty between the DVT and the physical interface transmission (when the leading Sync bit leaves the interface (see [Figure 4.2-2](#))). Additionally, JRE Processors may use the time accuracy in conjunction with the DVT to meet processing requirements.

c. The accuracy of the specific time references are media- (and mission-) specific and beyond the scope of this document.

6.3 Tactical Data Link Reporting Rules requirement. It is imperative that a JRE Processor does not interfere with TDL Reporting Responsibility (R^2) rules and that its application protocol is designed to maintain the validity of these rules. TDL participants use parameters such as Track Quality (TQ), along with the elapsed time since the last update, in determining when to assume R^2 . The JREAP supports this by providing round-trip connectivity between participants and by including the necessary timing data in Management messages.

6.4 Network startup. The generic JRE network startup concept is that JRE Processors already active in the network should have priority over JRE Processors awaiting entry. Control should be provided over JRE Processors entering the network so as to not adversely impact the established network. JRE Processors having difficulties entering the network should not slow the process of other JRE Processors entering the network. Designers should develop procedures for temporarily

“placing aside” problem JRE Processors and periodically checking to see if they can successfully enter the network.

6.5 Subject term (key word) listing.

Beyond Line of Sight
Common Time Reference
Data extrapolation
Management Messages
JRE Processor

6.6 Change Proposals Incorporated. [Table 6.6-1](#) below lists the change proposals incorporated into MIL-STD-3011D.

TABLE 6.6-1 - Incorporated Interface Change Proposals

ICP	DLCP	TITLE
TM14-016Ch4	ML571-006-P518-USA-M10-R1	Rocket Reporting in the J3.6 message
14-090TP-C02	SL-007-P518-USA-M12-R3	Addition of new Point Type/Point Amp DFI/DUIs for use in X0.10.x filter messages in MIL-STD 3011B
14-137TP-C01	SL-008-P518-US-M14-R0	Modification of X0.10.12 message explanation and summary
15-028TP-C00	SL-010-P518-USA-M14-R0	Clarification of Asynchronous HDLC Framing Implementation for Appendix B
15-030D-C02TM	MD647-014-P518-USA-M17-R0	Planning and Operational Restriction on use of RTT as JREAP C UDP/Multicast Common Time Reference
15-092TP-C01	SL-011-P518-USA-M15-R0	Clarification of X7.1 Message Packing Rules for TM11-020
16-108D-C01TP	SL-013-P518-USA-M16-R2	Modification of X0.10.x Filter Message Explanations and Summaries
16-109D-C00TP	SL-012-P518-USA-M16-R0	Correction of HDLC Definition in MIL-STD-3011

TABLE 6.6-1 - Incorporated Interface Change Proposals (continued)

ICP	DLCP	TITLE
16-181D-C01TP	SD-015-P518- USA-M18 R0	Correction to TABLE 5.2-10 CTR State Transition in MIL-STD 3011C
17-135D-C00TP	TDL-SD-020- P518-USA-M21-R0	Add NPG MSN Monitoring to UDP Multicast Operations
17-140D-C01TP	TDL-SD-018- P518-USA-M20-R1	X7 Message Selection Criteria Clarification
18-022D-C01TM	TDL-MD742-022- P518-USA-M22-R0	Illegal use of Special Characters in DFI and DUI Names
18-037D-C00TP	TDL-SD-021- P518-USA-M22-R0	Editorial Field Reference Correction

6.7 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

**NOT MEASUREMENT
SENSITIVE**

**MIL-STD-3011D
28 JUN 2019
SUPERSEDING
MIL-STD-3011C
10 JUN 2016**

DEPARTMENT OF DEFENSE INTERFACE STANDARD

FOR THE JOINT RANGE EXTENSION APPLICATION PROTOCOL (JREAP)

SECTION 5, PART 1 MESSAGE HEADER DESCRIPTIONS



**AMSC
N/A**

**AREA
TCSS**

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APPLICATION HEADER (AH) SUMMARY

PURPOSE

THE JREAP APPLICATION HEADER IS USED WITH MEDIA THAT PROVIDE OSI TRANSPORT LAYER FUNCTIONALITY.

DATA ELEMENT SUMMARY

<u>DATA ELEMENT</u>	<u>AH.0</u>	<u># BITS</u>
HEADER TYPE		4
MESSAGE TYPE		4
TRANSMISSION TIME REFERENCE		1
FLAG		
SPARE		3
APPLICATION PROTOCOL VERSION		4
APPLICATION BLOCK MESSAGE		16
LENGTH		
JRE SENDER ID		16
TIME ACCURACY		4
DATA VALID TIME		28

HEADER TITLE: APPLICATION HEADER

63	62	61	60	59	58	57	56	55	54	53	52:	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:
											:	TIME				:												:			
<---											:	ACCURACY				:	JRE SENDER ID											:			
											:					:												:			
											:	4				:	16											:			

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-----
: 79 78 77 76 75 74 73 72: 71 70: 69 68 67 66 65 64
-----
:
:
: DATA VALID TIME
:
-----
: 28

```

HEADER DESCRIPTION

HEADER NUMBER: AH.0

HEADER TITLE: APPLICATION HEADER

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3007 003	HEADER TYPE (HT)		0-	3 4	0011
3008 001	MESSAGE TYPE (MT)		4-	7 4	
3002 011	TRANSMISSION TIME REFERENCE		8	1	
	FLAG (TTR)				
3099 003	SPARE (SP)		9-	11 3	
3023 001	APPLICATION PROTOCOL VERSION		12-	15 4	0001
	(APV)				
3012 001	APPLICATION BLOCK MESSAGE		16-	31 16	
	LENGTH (ABML)				
3036 001	JRE SENDER ID (JRE SI)		32-	47 16	
3003 011	TIME ACCURACY (TA)		48-	51 4	
3003 004	DATA VALID TIME (DVT)		52-	79 28	

			FIELD CODING FOR AH.0	(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3008	001	MESSAGE TYPE -----		IDENTIFIES THE TYPE OF MESSAGE THAT IS CONTAINED WITHIN THE DATA PORTION OF THE JREAP MESSAGE.
		MANAGEMENT	0	
		JREAP J-SERIES	1	
		JTIDS/MIDS JREAP FREE TEXT (CODED)	2	
		JTIDS/MIDS JREAP FREE TEXT (UNCODED)	3	
		VMF	4	
		LINK 22	5	
		CMF IBS	6	
		UNDEFINED	7 THROUGH 14	
		RESERVED FOR EXPANSION	15	
3002	011	TRANSMISSION TIME REFERENCE FLAG -----		INDICATES WHETHER THE DVT FIELD CORRESPONDS TO THE TIME AT WHICH THE DATA IS TRANSMITTED OUT OF THE PHYSICAL INTERFACE.
		DVT DOES NOT CORRESPOND TO TIME OF TRANSMISSION	0	
		DVT CORRESPONDS TO TIME OF TRANSMISSION	1	
3012	001	APPLICATION BLOCK MESSAGE LENGTH -----		INDICATES THE TOTAL NUMBER OF BYTES IN THIS JREAP APPLICATION BLOCK.
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3036	001	JRE SENDER ID -----		THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER. INTERFACE UNIT NUMBER.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	
3003	011	TIME ACCURACY -----		THE MEASURE OF THE UNCERTAINTY IN THE TIME VALUES PROVIDED BY THE JRE PROCESSOR, WITH RESPECT TO THE NEGOTIATED COMMON TIME REFERENCE. EITHER ACCURACY EXCEEDS 16.834 SECONDS OR ACCURACY CANNOT BE CALCULATED.
		NO STATEMENT	0	

		FIELD CODING FOR AH.0		(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3003	011	TIME ACCURACY -----	(CONTINUED)	
		LESS THAN OR EQUAL TO 1 MS	1	FOR DI'S 1 - 15: TIME ACCURACY = 1 MILLISECOND X 2 ^{(N - 1) } , WHERE 15 <GE> N <LE> 1 MEASURED IN MILLISECONDS.
		GREATER THAN 1 MS, LESS THAN OR EQUAL TO 2 MS	2	
		GREATER THAN 2 MS, LESS THAN OR EQUAL TO 4 MS	3	
		GREATER THAN 4 MS, LESS THAN OR EQUAL TO 8 MS	4	
		GREATER THAN 8 MS, LESS THAN OR EQUAL TO 16 MS	5	
		GREATER THAN 16 MS, LESS THAN OR EQUAL TO 32 MS	6	
		GREATER THAN 32 MS, LESS THAN OR EQUAL TO 64 MS	7	
		GREATER THAN 64 MS, LESS THAN OR EQUAL TO 128 MS	8	
		GREATER THAN 128 MS, LESS THAN OR EQUAL TO 256 MS	9	
		GREATER THAN 256 MS, LESS THAN OR EQUAL TO 512 MS	10	
		GREATER THAN 512 MS, LESS THAN OR EQUAL TO 1024 MS	11	
		GREATER THAN 1024 MS, LESS THAN OR EQUAL TO 2048 MS	12	
		GREATER THAN 2048 MS, LESS THAN OR EQUAL TO 4096 MS	13	

FIELD CODING FOR AH.0					(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION	
3003	011	TIME ACCURACY -----	(CONTINUED)		
		GREATER THAN 4096 MS, LESS THAN OR EQUAL TO 8192 MS	14		
		GREATER THAN 8192 MS, LESS THAN OR EQUAL TO 16,384 MS.	15		
3003	004	DATA VALID TIME -----		SUPPORTS DATA EXTRAPOLATION, LATENCY DETERMINATION, AND DETECTION OF STALE DATA. THE DVT FIELD REPRESENTS THE TIME TO WHICH DATA HAS BEEN EXTRAPOLATED (AS APPLICABLE) AND SHALL BE THE NUMBER OF SECONDS PAST MIDNIGHT WITH A LEAST SIGNIFICANT BIT OF 1/1024 OF A SECOND.	
		0 - 86399 AND 1023/1024 SECONDS	0 THROUGH 88473599	NUMBER OF SECONDS ELAPSED PAST MIDNIGHT MEASURED IN 1/1024 SECOND INCREMENTS.	
		ILLEGAL	88473600 THROUGH 268435455		

FULL STACK TRANSMISSION BLOCK HEADER APPENDIX A NETWORK PARTICIPANT
(FSTBH.A.NP) SUMMARY

PURPOSE

THE JREAP FULL STACK TRANSMISSION BLOCK HEADER (NETWORK PARTICIPANT) IS USED FOR THE HALF-DUPLEX ANNOUNCED TOKEN PASSING PROTOCOL. IT IS TRANSMITTED BY NETWORK PARTICIPANTS AS DICTATED BY THE TSL IN THE PREVIOUSLY RECEIVED NET CONTROLLER TRANSMISSION BLOCK HEADER.

DATA ELEMENT SUMMARY

<u>FSTBH.A.NP.0</u>	
DATA ELEMENT	# BITS
START OF TRANSMISSION FLAG, 1	8
START OF TRANSMISSION FLAG, 2	8
TRANSMISSION BLOCK HEADER TYPE	4
CONTROLLER MODE NP	2
MESSAGE GROUP HEADER TYPE	2
TRANSMISSION BLOCK HEADER LENGTH, 1	8
TRANSMISSION BLOCK HEADER LENGTH, 2	8
TRANSMISSION BLOCK HEADER LENGTH, 3	8
JRE SENDER ID, 1	16
JRE SENDER ID, 2	16
JRE SENDER ID, 3	16
TRANSMISSION SEQUENCE NUMBER	8
TRANSMISSION TIME REFERENCE FLAG	1
JRE-NC ERROR RATE	7
TIME ACCURACY	4
DATA VALID TIME	28
TRANSPORT DATA WORD COUNT, 1	16
TRANSPORT DATA WORD COUNT, 2	16
TRANSPORT DATA WORD COUNT, 3	16
TRANSMISSION BLOCK HEADER CRC	16

HEADER NUMBER: FSTBH.A.NP.0

: 31	30	29	28	27	26	25	24:	23	22:	21	20:	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:									
:								:	:	:	TRANSMISSION			:	:	:												:												
:	TBHL1							:	MGH	:	CM NP	:	BLOCK HEADER			:	START OF TRANSMISSION FLAG, 2										:	START OF TRANSMISSION FLAG, 1								:				
:								:	:	:	TYPE			:												:												:		
8								:	2	:	2	:	4			:	8							:	8															
: 63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:									
:																:											:							:						
:	JRE SENDER ID, 1															:	TBHL3										:	TBHL2						:						
:																:											:							:						
:	16															:	8										:	8						:						
: 95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64:									
:																:											:											:		
:	JRE SENDER ID, 3															:											:	JRE SENDER ID, 2										:		
:																:											:											:		
:	16															:											:	16										:		
127 126 125 124 123 122 121 120 119 118 117 116:115 114 113 112:111 110 109 108 107 106 105:104:103 102 101 100 99 98 97 96:																																								
<---											:	:	:											:	:											:				
											:	TIME ACCURACY					:	JRE-NC ERROR RATE										:	TTR:											:
											:						:											:	:											:
											:	4					:	7										:	1 :	8										:

HEADER NUMBER: FSTBH.A.NP.0

[illegible]

HEADER DESCRIPTION

HEADER NUMBER: FSTBH.A.NP.0

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR	POSITION	BITS		RESOLUTION, CODING, ETC
3045 001	START OF TRANSMISSION FLAG, 1	0-	7	8	00010110
3045 002	START OF TRANSMISSION FLAG, 2	8-	15	8	00010110
3007 001	TRANSMISSION BLOCK HEADER TYPE (TBH TYPE)	16-	19	4	0001
3025 001	CONTROLLER MODE NP (CM NP)	20-	21	2	
3007 002	MESSAGE GROUP HEADER TYPE (MGH TYPE)	22-	23	2	11
3014 002	TRANSMISSION BLOCK HEADER LENGTH, 1 (TBHL1)	24-	31	8	00001100
3014 003	TRANSMISSION BLOCK HEADER LENGTH, 2 (TBHL2)	32-	39	8	00001100
3014 004	TRANSMISSION BLOCK HEADER LENGTH, 3 (TBHL3)	40-	47	8	00001100
3036 002	JRE SENDER ID, 1 (JRE SI1)	48-	63	16	
3036 003	JRE SENDER ID, 2 (JRE SI2)	64-	79	16	
3036 004	JRE SENDER ID, 3 (JRE SI3)	80-	95	16	
3001 001	TRANSMISSION SEQUENCE NUMBER (TSN)	96-	103	8	
3002 011	TRANSMISSION TIME REFERENCE FLAG (TTR)	104		1	
3015 017	JRE-NC ERROR RATE (JNC ER)	105-	111	7	
3003 011	TIME ACCURACY (TA)	112-	115	4	
3003 004	DATA VALID TIME (DVT)	116-	143	28	
3016 003	TRANSPORT DATA WORD COUNT, 1 (TDWC1)	144-	159	16	
3016 004	TRANSPORT DATA WORD COUNT, 2 (TDWC2)	160-	175	16	
3016 005	TRANSPORT DATA WORD COUNT, 3 (TDWC3)	176-	191	16	
3039 002	TRANSMISSION BLOCK HEADER CRC	192-	207	16	

FIELD CODING FOR FSTBH.A.NP.0 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3025	001	CONTROLLER MODE NP -----		USED TO REPORT THE CONTROLLER ROLE OR CAPABILITIES FOR THIS JRE PROCESSOR.
		NOT JRE-ANC-CAPABLE	0	
		JRE-ANC-CAPABLE	1	
		JRE-ANC	2	
		UNDEFINED	3	
3036	002	JRE SENDER ID, 1 -----		THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER. INTERFACE UNIT NUMBER.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	
3036	003	JRE SENDER ID, 2 -----		THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER. INTERFACE UNIT NUMBER.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	
3036	004	JRE SENDER ID, 3 -----		THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER. INTERFACE UNIT NUMBER.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	
3001	001	TRANSMISSION SEQUENCE NUMBER -----		A ONE BYTE FIELD THAT INCREMENTS BY ONE FOR EACH PACKET TRANSMITTED BY A JREAP PROCESSOR ON A JREAP TOKEN PASSING NETWORK.
		RESET	0	INDICATES THE NUMBER OF A PACKETS TRANSMITTED EXCEEDED 255 AND THE COUNT IS BEING RESET.
		TRANSMISSION SEQUENCE NUMBER	1 THROUGH 255	THE SEQUENCE NUMBER OF A PACKET BROADCAST ON A TOKEN PASSING JREAP NETWORK.
3002	011	TRANSMISSION TIME REFERENCE FLAG -----		INDICATES WHETHER THE DVT FIELD CORRESPONDS TO THE TIME AT WHICH THE DATA IS TRANSMITTED OUT OF THE PHYSICAL INTERFACE.
		DVT DOES NOT CORRESPOND TO TIME OF TRANSMISSION	0	

FIELD CODING FOR FSTBH.A.NP.0 (SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3002	011	TRANSMISSION TIME REFERENCE FLAG ----- DVT CORRESPONDS TO TIME OF TRANSMISSION	(CONTINUED) 1	
3015	017	JRE-NC ERROR RATE ----- ERROR RATE ERROR RATE GREATER THAN 126	0 THROUGH 126 127	JRE-NC ERROR RATE. THE CURRENT CALCULATED ERROR RATE BEING REPORTED.
3003	011	TIME ACCURACY ----- NO STATEMENT LESS THAN OR EQUAL TO 1 MS GREATER THAN 1 MS, LESS THAN OR EQUAL TO 2 MS GREATER THAN 2 MS, LESS THAN OR EQUAL TO 4 MS GREATER THAN 4 MS, LESS THAN OR EQUAL TO 8 MS GREATER THAN 8 MS, LESS THAN OR EQUAL TO 16 MS GREATER THAN 16 MS, LESS THAN OR EQUAL TO 32 MS GREATER THAN 32 MS, LESS THAN OR EQUAL TO 64 MS GREATER THAN 64 MS, LESS THAN OR EQUAL TO 128 MS GREATER THAN 128 MS, LESS THAN OR EQUAL TO 256 MS	0 1 2 3 4 5 6 7 8 9	THE MEASURE OF THE UNCERTAINTY IN THE TIME VALUES PROVIDED BY THE JRE PROCESSOR, WITH RESPECT TO THE NEGOTIATED COMMON TIME REFERENCE. EITHER ACCURACY EXCEEDS 16.834 SECONDS OR ACCURACY CANNOT BE CALCULATED. FOR DI'S 1 - 15: TIME ACCURACY = 1 MILLISECOND X $2^{(N-1)}$, WHERE 15 ≥ N ≥ 1 MEASURED IN MILLISECONDS.

FIELD CODING FOR FSTBH.A.NP.0 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3003	011	TIME ACCURACY -----	(CONTINUED)	
		GREATER THAN 256 MS, LESS THAN OR EQUAL TO 512 MS	10	
		GREATER THAN 512 MS, LESS THAN OR EQUAL TO 1024 MS	11	
		GREATER THAN 1024 MS, LESS THAN OR EQUAL TO 2048 MS	12	
		GREATER THAN 2048 MS, LESS THAN OR EQUAL TO 4096 MS	13	
		GREATER THAN 4096 MS, LESS THAN OR EQUAL TO 8192 MS	14	
		GREATER THAN 8192 MS, LESS THAN OR EQUAL TO 16,384 MS.	15	
3003	004	DATA VALID TIME -----		SUPPORTS DATA EXTRAPOLATION, LATENCY DETERMINATION, AND DETECTION OF STALE DATA. THE DVT FIELD REPRESENTS THE TIME TO WHICH DATA HAS BEEN EXTRAPOLATED (AS APPLICABLE) AND SHALL BE THE NUMBER OF SECONDS PAST MIDNIGHT WITH A LEAST SIGNIFICANT BIT OF 1/1024 OF A SECOND.
		0 - 86399 AND 1023/1024 SECONDS	0 THROUGH 88473599	NUMBER OF SECONDS ELAPSED PAST MIDNIGHT MEASURED IN 1/1024 SECOND INCREMENTS.
		ILLEGAL	88473600 THROUGH 268435455	
3016	003	TRANSPORT DATA WORD COUNT, 1 -----		IN ONE BYTE INCREMENTS.
		NO STATEMENT	0	
		1 THROUGH 65535 BYTES	1 THROUGH 65535	INDICATES THE NUMBER OF BYTES THAT

FIELD CODING FOR FSTBH.A.NP.0 (SHEET 4)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3016	003	TRANSPORT DATA WORD COUNT, 1 -----	(CONTINUED)	
				ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF THIS PACKET.
3016	004	TRANSPORT DATA WORD COUNT, 2 -----		INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF A PACKET.
		NO STATEMENT	0	
		1 THROUGH 65535 BYTES	1 THROUGH 65535	INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF THIS PACKET.
3016	005	TRANSPORT DATA WORD COUNT, 3 -----		INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF A PACKET.
		NO STATEMENT	0	
		1 THROUGH 65535 BYTES	1 THROUGH 65535	INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF THIS PACKET.
3039	002	TRANSMISSION BLOCK HEADER CRC -----		TRANSMISSION BLOCK HEADER CYCLIC REDUNDANCY CHECK FIELD.
		NUMERIC	0 THROUGH 65535	THE CALCULATED CRC VALUE.

FULL STACK TRANSMISSION BLOCK HEADER APPENDIX A NETWORK CONTROLLER
(FSTBH.A.NC) SUMMARY

PURPOSE

THE JREAP FULL STACK TRANSMISSION BLOCK HEADER (NETWORK CONTROLLER) IS USED FOR THE HALF-DUPLEX ANNOUNCED TOKEN PASSING PROTOCOL. IT IS TRANSMITTED BY NETWORK CONTROLLERS TO DISIMENATE THE TSL, ANC DESIGNATION AND CURRENT ERROR RATES TO THE NETWORK PARTICIPANTS. IT IS ALSO USED FOR THE NCB MODE OF OPERATION.

DATA ELEMENT SUMMARY

<u>FSTBH.A.NC.0</u>	
DATA ELEMENT	# BITS
START OF TRANSMISSION FLAG, 1	8
START OF TRANSMISSION FLAG, 2	8
TRANSMISSION BLOCK HEADER TYPE	4
CONTROLLER MODE NC	2
MESSAGE GROUP HEADER TYPE	2
TRANSMISSION BLOCK HEADER	8
LENGTH, 1	
TRANSMISSION BLOCK HEADER	8
LENGTH, 2	
TRANSMISSION BLOCK HEADER	8
LENGTH, 3	
JRE SENDER ID, 1	16
JRE SENDER ID, 2	16
JRE SENDER ID, 3	16
TRANSMISSION SEQUENCE NUMBER	8
TRANSMISSION TIME REFERENCE	1
FLAG	
TRANSMISSION SEQUENCE LIST	7
COUNT	
TIME ACCURACY	4
DATA VALID TIME	28
TRANSPORT DATA WORD COUNT, 1	16
TRANSPORT DATA WORD COUNT, 2	16
TRANSPORT DATA WORD COUNT, 3	16
JRE NETWORK PARTICIPANT	16
ALTERNATE NETWORK CONTROLLER	1
ASSIGNMENT FLAG	
JRE-NP ERROR RATE	7
ALTERNATE NETWORK CONTROLLER	1
ASSIGNMENT RECOGNITION	
SPARE	3
JRE-NP TRANSMIT LIMIT	4
TRANSMISSION BLOCK HEADER CRC	16

HEADER NUMBER: FSTBH.A.NC.0

[illegible]

HEADER MAP

HEADER NUMBER: FSTBH.A.NC.0

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136 135 134 133 132 131 130 129 128																															
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HEADER DESCRIPTION

HEADER NUMBER: FSTBH.A.NC.0

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC	
3045 001		START OF TRANSMISSION FLAG, 1	0-	7	8	00010110
3045 002		START OF TRANSMISSION FLAG, 2	8-	15	8	00010110
3007 001		TRANSMISSION BLOCK HEADER TYPE (TBH)	16-	19	4	0001
3025 002		CONTROLLER MODE NC (CM NC)	20-	21	2	11
3007 002		MESSAGE GROUP HEADER TYPE (MGH)	22-	23	2	
3014 002		TRANSMISSION BLOCK HEADER LENGTH, 1 (TBHL1)	24-	31	8	
3014 003		TRANSMISSION BLOCK HEADER LENGTH, 2 (TBHL2)	32-	39	8	
3014 004		TRANSMISSION BLOCK HEADER LENGTH, 3 (TBHL3)	40-	47	8	
3036 002		JRE SENDER ID, 1 (JRE SI1)	48-	63	16	
3036 003		JRE SENDER ID, 2 (JRE SI2)	64-	79	16	
3036 004		JRE SENDER ID, 3 (JRE SI3)	80-	95	16	
3001 001		TRANSMISSION SEQUENCE NUMBER (TSN)	96-	103	8	
3002 011		TRANSMISSION TIME REFERENCE FLAG (TTR)	104		1	
3001 002		TRANSMISSION SEQUENCE LIST COUNT (TSLC)	105-	111	7	
3003 011		TIME ACCURACY (TA)	112-	115	4	
3003 004		DATA VALID TIME (DVT)	116-	143	28	
3016 003		TRANSPORT DATA WORD COUNT, 1 (TDWC1)	144-	159	16	
3016 004		TRANSPORT DATA WORD COUNT, 2 (TDWC2)	160-	175	16	
3016 005		TRANSPORT DATA WORD COUNT, 3 (TDWC3)	176-	191	16	
3036 005		JRE NETWORK PARTICIPANT (JRE NP)	192-	207	16	THESE SIX FIELDS (BITS 192 - 223) CONSTITUTE A SINGLE TRANSMISSION SEQUENCE LIST (TSL) ENTRY AND ARE REPEATED FOR EACH JRE NP IN THE TSL UP TO A MAXIMUM OF 15 JRE NP ENTRIES. IT IS POSSIBLE TO HAVE AN EMPTY TSL (NO ENTRIES).
3002 020		ALTERNATE NETWORK CONTROLLER ASSIGNMENT FLAG (AAF)	208		1	THESE SIX FIELDS (BITS 192 - 223) CONSTITUTE A SINGLE TRANSMISSION SEQUENCE LIST (TSL) ENTRY AND ARE REPEATED FOR EACH JRE NP IN THE TSL UP TO A MAXIMUM OF 15 JRE NP ENTRIES. IT IS POSSIBLE TO HAVE AN EMPTY TSL (NO ENTRIES).

HEADER DESCRIPTION

HEADER NUMBER: FSTBH.A.NC.0

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3015 002	JRE-NP ERROR RATE (JNP ER)		209-215	7	THESE SIX FIELDS (BITS 192 - 223) CONSTITUTE A SINGLE TRANSMISSION SEQUENCE LIST (TSL) ENTRY AND ARE REPEATED FOR EACH JRE NP IN THE TSL UP TO A MAXIMUM OF 15 JRE NP ENTRIES. IT IS POSSIBLE TO HAVE AN EMPTY TSL (NO ENTRIES).
3002 021	ALTERNATE NETWORK CONTROLLER ASSIGNMENT RECOGNITION (ANC ARF)		216	1	THESE SIX FIELDS (BITS 192 - 223) CONSTITUTE A SINGLE TRANSMISSION SEQUENCE LIST (TSL) ENTRY AND ARE REPEATED FOR EACH JRE NP IN THE TSL UP TO A MAXIMUM OF 15 JRE NP ENTRIES. IT IS POSSIBLE TO HAVE AN EMPTY TSL (NO ENTRIES).
3099 003	SPARE (SP)		217-219	3	THESE SIX FIELDS (BITS 192 - 223) CONSTITUTE A SINGLE TRANSMISSION SEQUENCE LIST (TSL) ENTRY AND ARE REPEATED FOR EACH JRE NP IN THE TSL UP TO A MAXIMUM OF 15 JRE NP ENTRIES. IT IS POSSIBLE TO HAVE AN EMPTY TSL (NO ENTRIES).
3035 001	JRE-NP TRANSMIT LIMIT (JNP TL)		220-223	4	THESE SIX FIELDS (BITS 192 - 223) CONSTITUTE A SINGLE TRANSMISSION SEQUENCE LIST (TSL) ENTRY AND ARE REPEATED FOR EACH JRE NP IN THE TSL UP TO A MAXIMUM OF 15 JRE NP ENTRIES. IT IS POSSIBLE TO HAVE AN EMPTY TSL (NO ENTRIES).
3039 002	TRANSMISSION BLOCK HEADER CRC		224-239	16	

FIELD CODING FOR FSTBH.A.NC.0 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3025	002	CONTROLLER MODE NC -----		USED TO REPORT THE CONTROLLER ROLE OR CAPABILITIES FOR THIS JRE PROCESSOR.
		UNDEFINED	0	
		JRE-ANC-CAPABLE	1	
		UNDEFINED	2	
		JRE-NCB	3	
3014	002	TRANSMISSION BLOCK HEADER LENGTH, 1 -----		INDICATES THE TOTAL NUMBER OF 16-BIT WORDS (EXCLUDING THE STF) CONTAINED IN THE JREAP FULL STACK TRANSMISSION BLOCK HEADER.
		NO STATEMENT	0	
		1 THROUGH 255 WORDS	1 THROUGH 255	IN ONE DATA WORD (16- BIT) INCREMENTS.
3014	003	TRANSMISSION BLOCK HEADER LENGTH, 2 -----		INDICATES THE TOTAL NUMBER OF 16-BIT WORDS (EXCLUDING THE STF) CONTAINED IN THE JREAP FULL STACK TRANSMISSION BLOCK HEADER.
		NO STATEMENT	0	
		1 THROUGH 255 WORDS	1 THROUGH 255	IN ONE DATA WORD (16- BIT) INCREMENTS.
3014	004	TRANSMISSION BLOCK HEADER LENGTH, 3 -----		INDICATES THE TOTAL NUMBER OF 16-BIT WORDS (EXCLUDING THE STF) CONTAINED IN THE JREAP FULL STACK TRANSMISSION BLOCK HEADER.
		NO STATEMENT	0	
		1 THROUGH 255 WORDS	1 THROUGH 255	IN ONE DATA WORD (16- BIT) INCREMENTS.
3036	002	JRE SENDER ID, 1 -----		THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER. INTERFACE UNIT NUMBER.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	
3036	003	JRE SENDER ID, 2 -----		THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER. INTERFACE UNIT NUMBER.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	

FIELD CODING FOR FSTBH.A.NC.0 (SHEET 2)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3036	004	JRE SENDER ID, 3 ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER. INTERFACE UNIT NUMBER.
3001	001	TRANSMISSION SEQUENCE NUMBER ----- RESET	0	A ONE BYTE FIELD THAT INCREMENTS BY ONE FOR EACH PACKET TRANSMITTED BY A JREAP PROCESSOR ON A JREAP TOKEN PASSING NETWORK. INDICATES THE NUMBER OF A PACKETS TRANSMITTED EXCEEDED 255 AND THE COUNT IS BEING RESET.
		TRANSMISSION SEQUENCE NUMBER	1 THROUGH 255	THE SEQUENCE NUMBER OF A PACKET BROADCAST ON A TOKEN PASSING JREAP NETWORK.
3002	011	TRANSMISSION TIME REFERENCE FLAG ----- DVT DOES NOT CORRESPOND TO TIME OF TRANSMISSION	0	INDICATES WHETHER THE DVT FIELD CORRESPONDS TO THE TIME AT WHICH THE DATA IS TRANSMITTED OUT OF THE PHYSICAL INTERFACE.
		DVT CORRESPONDS TO TIME OF TRANSMISSION	1	
3001	002	TRANSMISSION SEQUENCE LIST COUNT ----- 0 - 127 ENTRIES	0 THROUGH 127	THE NUMBER OF ENTRIES IN THE TRANSMISSION SEQUENCE LIST. THE NUMBER OF ENTRIES IN THE TSL.
3003	011	TIME ACCURACY ----- NO STATEMENT	0	THE MEASURE OF THE UNCERTAINTY IN THE TIME VALUES PROVIDED BY THE JRE PROCESSOR, WITH RESPECT TO THE NEGOTIATED COMMON TIME REFERENCE. EITHER ACCURACY EXCEEDS 16.834 SECONDS OR ACCURACY CANNOT BE CALCULATED.
		LESS THAN OR EQUAL TO 1 MS	1	FOR DI'S 1 - 15: TIME ACCURACY = 1 MILLISECOND X $2^{(N-1)}$, WHERE $15 \geq N \geq 1$ MEASURED IN MILLISECONDS.

FIELD CODING FOR FSTBH.A.NC.0 (SHEET 3)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3003	011	TIME ACCURACY -----	(CONTINUED)	
		GREATER THAN 1 MS, LESS THAN OR EQUAL TO 2 MS	2	
		GREATER THAN 2 MS, LESS THAN OR EQUAL TO 4 MS	3	
		GREATER THAN 4 MS, LESS THAN OR EQUAL TO 8 MS	4	
		GREATER THAN 8 MS, LESS THAN OR EQUAL TO 16 MS	5	
		GREATER THAN 16 MS, LESS THAN OR EQUAL TO 32 MS	6	
		GREATER THAN 32 MS, LESS THAN OR EQUAL TO 64 MS	7	
		GREATER THAN 64 MS, LESS THAN OR EQUAL TO 128 MS	8	
		GREATER THAN 128 MS, LESS THAN OR EQUAL TO 256 MS	9	
		GREATER THAN 256 MS, LESS THAN OR EQUAL TO 512 MS	10	
		GREATER THAN 512 MS, LESS THAN OR EQUAL TO 1024 MS	11	
		GREATER THAN 1024 MS, LESS THAN OR EQUAL TO 2048 MS	12	
		GREATER THAN 2048 MS, LESS THAN OR EQUAL TO 4096 MS	13	
		GREATER THAN 4096 MS, LESS THAN OR EQUAL TO 8192 MS	14	
		GREATER THAN 8192 MS, LESS THAN OR EQUAL TO 16,384 MS.	15	

FIELD CODING FOR FSTBH.A.NC.0 (SHEET 4)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3003	004	DATA VALID TIME -----		SUPPORTS DATA EXTRAPOLATION, LATENCY DETERMINATION, AND DETECTION OF STALE DATA. THE DVT FIELD REPRESENTS THE TIME TO WHICH DATA HAS BEEN EXTRAPOLATED (AS APPLICABLE) AND SHALL BE THE NUMBER OF SECONDS PAST MIDNIGHT WITH A LEAST SIGNIFICANT BIT OF 1/1024 OF A SECOND.
		0 - 86399 AND 1023/1024 SECONDS	0 THROUGH 88473599	NUMBER OF SECONDS ELAPSED PAST MIDNIGHT MEASURED IN 1/1024 SECOND INCREMENTS.
		ILLEGAL	88473600 THROUGH 268435455	
3016	003	TRANSPORT DATA WORD COUNT, 1 -----		IN ONE BYTE INCREMENTS.
		NO STATEMENT	0	
		1 THROUGH 65535 BYTES	1 THROUGH 65535	INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF THIS PACKET.
3016	004	TRANSPORT DATA WORD COUNT, 2 -----		INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF A PACKET.
		NO STATEMENT	0	
		1 THROUGH 65535 BYTES	1 THROUGH 65535	INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF THIS PACKET.
3016	005	TRANSPORT DATA WORD COUNT, 3 -----		INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF A PACKET.
		NO STATEMENT	0	
		1 THROUGH 65535 BYTES	1 THROUGH 65535	INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF THIS PACKET.
3036	005	JRE NETWORK PARTICIPANT -----		THE INTERFACE UNIT (IU) NUMBER OF FIRST JRE PROCESSOR IN THE TSL.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.

FIELD CODING FOR FSTBH.A.NC.0 (SHEET 5)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3002	020	ALTERNATE NETWORK CONTROLLER ASSIGNMENT FLAG ----- NOT ASSIGNED AS ANC ASSIGNED AS ANC	0 1	SET BY THE JRE-NC TO ASSIGN A JRE-NP AS THE JRE-ANC.
3015	002	JRE-NP ERROR RATE ----- ERROR RATE ERROR RATE GREATER THAN 126	0 THROUGH 126 127	THE JRE-NC'S CURRENT ERROR RATE FOR THIS JRE-NP (5.6.14(1)). THE CURRENT CALCULATED ERROR RATE BEING REPORTED.
3002	021	ALTERNATE NETWORK CONTROLLER ASSIGNMENT RECOGNITION ----- NOT ASSIGNED AS ANC ASSIGNED AS ANC	0 1	SET BY THE JRE-NP THAT HAS BEEN ASSIGNED AS THE JRE-ANC TO ACKNOWLEDGE IT IS THE JRE-ANC.
3035	001	JRE-NP TRANSMIT LIMIT ----- ILLEGAL 1 THROUGH 10 SECONDS ILLEGAL	0 1 THROUGH 10 11 THROUGH 15	THE NUMBER OF SECONDS THAT THE JRE- NP MAY USE FOR ITS NEXT TRANSMISSION. IN ONE SECOND INCREMENTS.
3039	002	TRANSMISSION BLOCK HEADER CRC ----- NUMERIC	0 THROUGH 65535	TRANSMISSION BLOCK HEADER CYCLIC REDUNDANCY CHECK FIELD. THE CALCULATED CRC VALUE.

FULL STACK TRANSMISSION BLOCK HEADER APPENDIX B (FSTBH.B) SUMMARY

PURPOSE

THE JREAP FULL STACK TRANSMISSION BLOCK HEADER (POINT TO POINT) IS USED FOR THE FULL-DUPLEX SYNCHRONOUS OR ASYNCHRONOUS POINT-TO-POINT CONNECTION PROTOCOL. IT IS TRANSMITTED BY NETWORK CONTROLLERS TO DISIMENATE THE TSL, ANC DESIGNATION AND CURRENT ERROR RATES TO THE NETWORK PARTICIPANTS. IT IS ALSO USED FOR THE NCB MODE OF OPERATION.

DATA ELEMENT SUMMARY

<u>FSTBH.B.0</u>	
DATA ELEMENT	# BITS
START OF TRANSMISSION FLAG, 1	8
START OF TRANSMISSION FLAG, 2	8
TRANSMISSION BLOCK HEADER TYPE	4
SPARE	2
MESSAGE GROUP HEADER TYPE	2
TRANSMISSION BLOCK HEADER LENGTH	8
JRE SENDER ID	16
TRANSMISSION SEQUENCE NUMBER	8
TRANSMISSION TIME REFERENCE FLAG	1
CURRENT ERROR RATE	7
TIME ACCURACY	4
DATA VALID TIME	28
TRANSPORT DATA WORD COUNT, 1	16
TRANSMISSION BLOCK HEADER CRC	16

HEADER NUMBER: FSTBH.B.0

:	31	30	29	28	27	26	25	24:	23	22:	21	20:	19	18	17	16:	15	14	13	12	11	10	09	08:	07	06	05	04	03	02	01	00:											
:	TRANSMISSION BLOCK HEADER								:	MGH		:			:			:	START OF TRANSMISSION FLAG, 2								:	START OF TRANSMISSION FLAG, 1								:							
:	LENGTH								:	TYPE		:	SP		:	TBH TYPE		:									:									:							
:									:			:			:			:									:									:							
:	8								:	2		:	2		:	4		:	8								:	8								:							
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:	63	62	61	60	59	58	57:	56:	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32:											
:									:			TRANSMISSION SEQUENCE								:																	:						
:	CURRENT ERROR RATE								:	TTR		NUMBER								:	JRE SENDER ID																:						
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:	7								:	1		:	8								:	16																:					
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:	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70:	69	68	67	66	65	64:											
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:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:											
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:	TRANSMISSION BLOCK HEADER CRC																:	TRANSPORT DATA WORD COUNT, 1																:									
:																	:																	:									
:	16																:	16																:									

HEADER DESCRIPTION

HEADER NUMBER: FSTBH.B.0

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3045 001		START OF TRANSMISSION FLAG, 1	0-	7 8	00010110
3045 002		START OF TRANSMISSION FLAG, 2	8-	15 8	00010110
3007 001		TRANSMISSION BLOCK HEADER TYPE	16-	19 4	0010
		(TBH TYPE)			
3099 002		SPARE (SP)	20-	21 2	
3007 002		MESSAGE GROUP HEADER TYPE	22-	23 2	11
		(MGH TYPE)			
3014 001		TRANSMISSION BLOCK HEADER	24-	31 8	00000111
		LENGTH (TBHL)			
3036 001		JRE SENDER ID (JRE SI)	32-	47 16	
3001 001		TRANSMISSION SEQUENCE NUMBER	48-	55 8	
		(TSN)			
3002 011		TRANSMISSION TIME REFERENCE	56	1	
		FLAG (TTR)			
3015 001		CURRENT ERROR RATE (CER)	57-	63 7	
3003 011		TIME ACCURACY (TA)	64-	67 4	
3003 004		DATA VALID TIME (DVT)	68-	95 28	
3016 003		TRANSPORT DATA WORD COUNT, 1	96-	111 16	
		(TDWC1)			
3039 002		TRANSMISSION BLOCK HEADER CRC	112-	127 16	

FIELD CODING FOR FSTBH.B.0 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3036	001	JRE SENDER ID ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER. INTERFACE UNIT NUMBER.
3001	001	TRANSMISSION SEQUENCE NUMBER ----- RESET	0	A ONE BYTE FIELD THAT INCREMENTS BY ONE FOR EACH PACKET TRANSMITTED BY A JREAP PROCESSOR ON A JREAP TOKEN PASSING NETWORK. INDICATES THE NUMBER OF A PACKETS TRANSMITTED EXCEEDED 255 AND THE COUNT IS BEING RESET.
		TRANSMISSION SEQUENCE NUMBER	1 THROUGH 255	THE SEQUENCE NUMBER OF A PACKET BROADCAST ON A TOKEN PASSING JREAP NETWORK.
3002	011	TRANSMISSION TIME REFERENCE FLAG ----- DVT DOES NOT CORRESPOND TO TIME OF TRANSMISSION	0	INDICATES WHETHER THE DVT FIELD CORRESPONDS TO THE TIME AT WHICH THE DATA IS TRANSMITTED OUT OF THE PHYSICAL INTERFACE.
		DVT CORRESPONDS TO TIME OF TRANSMISSION	1	
3015	001	CURRENT ERROR RATE ----- ERROR RATE	0 THROUGH 126	INDICATES THE CURRENT ERROR RATE OF A REMOTE JRE PROCESSOR (SEE 5.6.14).
		ERROR RATE GREATER THAN 126	127	THE CURRENT CALCULATED ERROR RATE BEING REPORTED.
3003	011	TIME ACCURACY ----- NO STATEMENT	0	THE MEASURE OF THE UNCERTAINTY IN THE TIME VALUES PROVIDED BY THE JRE PROCESSOR, WITH RESPECT TO THE NEGOTIATED COMMON TIME REFERENCE. EITHER ACCURACY EXCEEDS 16.834 SECONDS OR ACCURACY CANNOT BE CALCULATED.
		LESS THAN OR EQUAL TO 1 MS	1	FOR DI'S 1 - 15: TIME ACCURACY = 1 MILLISECOND X $2^{(N-1)}$, WHERE

FIELD CODING FOR FSTBH.B.0 (SHEET 2)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3003	011	TIME ACCURACY -----	(CONTINUED)	
				15 ≥ N ≥ 1 MEASURED IN MILLISECONDS.
		GREATER THAN 1 MS, LESS THAN OR EQUAL TO 2 MS	2	
		GREATER THAN 2 MS, LESS THAN OR EQUAL TO 4 MS	3	
		GREATER THAN 4 MS, LESS THAN OR EQUAL TO 8 MS	4	
		GREATER THAN 8 MS, LESS THAN OR EQUAL TO 16 MS	5	
		GREATER THAN 16 MS, LESS THAN OR EQUAL TO 32 MS	6	
		GREATER THAN 32 MS, LESS THAN OR EQUAL TO 64 MS	7	
		GREATER THAN 64 MS, LESS THAN OR EQUAL TO 128 MS	8	
		GREATER THAN 128 MS, LESS THAN OR EQUAL TO 256 MS	9	
		GREATER THAN 256 MS, LESS THAN OR EQUAL TO 512 MS	10	
		GREATER THAN 512 MS, LESS THAN OR EQUAL TO 1024 MS	11	
		GREATER THAN 1024 MS, LESS THAN OR EQUAL TO 2048 MS	12	
		GREATER THAN 2048 MS, LESS THAN OR EQUAL TO 4096 MS	13	
		GREATER THAN 4096 MS, LESS THAN OR EQUAL TO 8192 MS	14	

FIELD CODING FOR FSTBH.B.0 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3003	011	TIME ACCURACY ----- GREATER THAN 8192 MS, LESS THAN OR EQUAL TO 16,384 MS.	(CONTINUED) 15	
3003	004	DATA VALID TIME ----- 0 - 86399 AND 1023/1024 SECONDS ILLEGAL	0 THROUGH 88473599 88473600 THROUGH 268435455	SUPPORTS DATA EXTRAPOLATION, LATENCY DETERMINATION, AND DETECTION OF STALE DATA. THE DVT FIELD REPRESENTS THE TIME TO WHICH DATA HAS BEEN EXTRAPOLATED (AS APPLICABLE) AND SHALL BE THE NUMBER OF SECONDS PAST MIDNIGHT WITH A LEAST SIGNIFICANT BIT OF 1/1024 OF A SECOND. NUMBER OF SECONDS ELAPSED PAST MIDNIGHT MEASURED IN 1/1024 SECOND INCREMENTS.
3016	003	TRANSPORT DATA WORD COUNT, 1 ----- NO STATEMENT 1 THROUGH 65535 BYTES	0 1 THROUGH 65535	IN ONE BYTE INCREMENTS. INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF THIS PACKET.
3039	002	TRANSMISSION BLOCK HEADER CRC ----- NUMERIC	0 THROUGH 65535	TRANSMISSION BLOCK HEADER CYCLIC REDUNDANCY CHECK FIELD. THE CALCULATED CRC VALUE.

FULL STACK MESSAGE GROUP HEADER (FSMGH) SUMMARY

PURPOSE

THE FULL STACK MESSAGE GROUP HEADER IDENTIFIES THE MESSAGE TYPE, SOURCE OF INFORMATION AND NUMBER OF DATA WORDS FOLLOWING THE HEADER. IT ALSO PROVIDES ERROR CHECKING.

DATA ELEMENT SUMMARY

<u>DATA ELEMENT</u>	<u>FSMGH.3</u>	<u># BITS</u>
SPARE		2
MESSAGE TYPE		4
DATA WORDS		10
MESSAGE GROUP HEADER CRC		16
JRE SOURCE TRACK NUMBER		16
SPARE		3
DATA AGE		13
MESSAGE GROUP HEADER TYPE		2
ACKNOWLEDGEMENT REQUEST FLAG		1
SPARE		4
RELAY FLAG		1

HEADER NUMBER FORM 2

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12	11	10	09	08	07	06:	05	04	03	02:	01	00				
:																	:											:					:			:
:	MESSAGE GROUP HEADER CRC																:	DATA WORDS										:	MESSAGE TYPE				:	SP		:
:																	:											:					:			:
:	16																:	10										:	4				:	2		:

:	63	62	61	60	59	58	57	56	55	54	53	52	51:	50	49	48:	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32:
:														:														:				
:	DATA AGE													:	SP	:	JRE SOURCE TRACK NUMBER													:		
:														:		:														:		
:	13													:	3	:	16													:		

```
-----
: 71: 70   69   68   67: 66: 65   64:
-----
: R :           :ACK: MGH :
:FLG:          SP :REQ: TYPE:
:  :            :  :      :
-----
: 1 :          4       : 1 :    2 :
```

HEADER DESCRIPTION

HEADER NUMBER: FSMGH.3

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3099 002	SPARE (SP)		0-	1 2	
3008 001	MESSAGE TYPE (MT)		2-	5 4	
3016 002	DATA WORDS (DW)		6-	15 10	
3039 001	MESSAGE GROUP HEADER CRC		16-	31 16	
3027 003	JRE SOURCE TRACK NUMBER		32-	47 16	
3099 003	SPARE (SP)		48-	50 3	
3003 003	DATA AGE (DATA AGE)		51-	63 13	
3007 002	MESSAGE GROUP HEADER TYPE		64-	65 2	11
	(MGH TYPE)				
3002 003	ACKNOWLEDGEMENT REQUEST FLAG		66	1	
	(ACKREQ)				
3099 004	SPARE (SP)		67-	70 4	
3002 009	RELAY FLAG (R FLG)		71	1	

			FIELD CODING FOR FSMGH.3	(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3008	001	MESSAGE TYPE -----		IDENTIFIES THE TYPE OF MESSAGE THAT IS CONTAINED WITHIN THE DATA PORTION OF THE JREAP MESSAGE.
		MANAGEMENT	0	
		JREAP J-SERIES	1	
		JTIDS/MIDS JREAP FREE TEXT (CODED)	2	
		JTIDS/MIDS JREAP FREE TEXT (UNCODED)	3	
		VMF	4	
		LINK 22	5	
		CMF IBS	6	
		UNDEFINED	7 THROUGH 14	
		RESERVED FOR EXPANSION	15	
3016	002	DATA WORDS -----		INDICATES NUMBER OF 9 BYTE DATA WORDS TO FOLLOW.
		ILLEGAL	0	
		NUMERIC	1 THROUGH 165	THE NUMBER OF DATA WORDS TO FOLLOW THE MGH.
		UNDEFINED	166 THROUGH 1023	
3039	001	MESSAGE GROUP HEADER CRC -----		MESSAGE GROUP HEADER CYCLIC REDUNDANCY CHECK FIELD.
		NUMERIC	0 THROUGH 65535	THE CALCULATED CRC VALUE.
3027	003	JRE SOURCE TRACK NUMBER -----		
		NUMERIC	000000 THROUGH 177777 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
3003	003	DATA AGE -----		LENGTH OF TIME THAT A J-SERIES MESSAGE HAS BEEN IN THE JRE PROCESS RELATIVE TO THE DVT. MEASURED IN 1/32 SECOND INCREMENTS.
		0 THROUGH 255 AND 31/32 SECONDS	0 THROUGH 8191	NUMBER OF SECONDS MEASURED IN 1/32 SECOND INCREMENTS.
3002	003	ACKNOWLEDGEMENT REQUEST FLAG -----		INDICATES IF THE MESSAGE IS TO BE ACKNOWLEDGED BY THE RECEIVING JRE PROCESSOR.
		ACKNOWLEDGEMENT NOT REQUESTED	0	

FIELD CODING FOR FSMGH.3				(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3002	003	ACKNOWLEDGEMENT REQUEST FLAG -----	(CONTINUED)	
		ACKNOWLEDGEMENT REQUESTED	1	
3002	009	RELAY FLAG -----		INDICATES WHETHER THE JRE PROCESSOR TRANSMITTING THE MESSAGE IS DIRECTLY CONNECTED TO THE SOURCE TACTICAL DATA NETWORK.
		MESSAGE DIRECTLY RECEIVED	0	
		RELAYED MESSAGE	1	

MANAGEMENT MESSAGE SUBHEADER (MMSH) SUMMARY

PURPOSE

THE MANAGEMENT MESSAGE SUBHEADER PROVIDES THE BASIC BODY USED BY ALL JREAP MANAGEMENT MESSAGES AND ACKNOWLEDGEMENT RESPONSES TO THOSE MANAGEMENT MESSAGES.

DATA ELEMENT SUMMARY

<u>MMSH.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR	8
ERROR CODE, 7	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16

HEADER NUMBER: MMSH.0

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:				
:																:	ACKNOWLEDGEMENT:					:	MANAGEMENT					:						:		
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3					:	VERSION					:	MANAGEMENT MESSAGE SUBTYPE					:		
:																:						:						:						:		
:	16															:	4					:	4					:	8					:		
:																																				
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:				
:																:						:						:						:		
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT					:	NUMBER DESTINATION ADDRESSES					:								
:																:						:						:						:		
:	16															:	8					:	8					:								
:																																				
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:				
:									:									:									:									:
:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 7								:	CONTROL/RESPONSE INDICATOR								:
:									:									:									:									:
:	8								:	8								:	8								:	8								:
:																																				
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:				
:																:																		:		
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:		
:																:																		:		
:	16															:	16																	:		

HEADER DESCRIPTION

HEADER NUMBER: MMSH.0

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3008 002	MANAGEMENT MESSAGE SUBTYPE		0-	7 8	
3044 001	MANAGEMENT VERSION		8-	11 4	0000
3006 003	ACKNOWLEDGEMENT PROTOCOL, 3		12-	15 4	
	(AP3)				
3012 003	MANAGEMENT MESSAGE LENGTH (MML)		16-	31 16	
3017 001	NUMBER DESTINATION ADDRESSES		32-	39 8	
3029 001	COMPLETION TIMEOUT		40-	47 8	
3032 001	MESSAGE SEQUENCE NUMBER		48-	63 16	
3020 014	CONTROL/RESPONSE INDICATOR (CR)		64-	71 8	
3034 007	ERROR CODE, 7 (EC7)		72-	79 8	
3033 002	FRAGMENT NUMBER		80-	87 8	
3033 003	TOTAL NUMBER FRAGMENTS		88-	95 8	
3032 002	ORIGINATING MESSAGE SEQUENCE		96-	111 16	
	NUMBER				
3036 020	DESTINATION ADDRESS (DA)		112-	127 16	

		FIELD CODING FOR MMSH.0		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3008	002	MANAGEMENT MESSAGE SUBTYPE -----		IDENTIFIES THE FORMAT OF THE SUBTYPE OF THE MANAGEMENT MESSAGE BODY THAT FOLLOWS.
		ECHO	0	USED TO TEST CONNECTIVITY BETWEEN JRE PROCESSORS.
		COMMON TIME REFERENCE	1	USED TO NEGOTIATE A TIME REFERENCE BETWEEN TWO JRE PROCESSORS.
		ROUND-TRIP TIME DELAY	2	USED TO DETERMINE THE ROUND-TRIP DELAY OVER A LINK.
		JREAP J-SERIES ACKNOWLEDGMENT (FULL STACK)	3	ACKNOWLEDGES RECEIPT OF A J-SERIES MESSAGE (IN FULL STACK OPERATION).
		JREAP J-SERIES ACKNOWLEDGMENT (APPLICATION)	4	ACKNOWLEDGES RECEIPT OF A J-SERIES MESSAGE (IN APPLICATION OPERATION).
		LATENCY THRESHOLD	5	USED TO SPECIFY THE MAXIMUM ACCEPTABLE LATENCY PARAMETERS FOR TRANSMISSIONS THAT ARE RECEIVED FROM THE ORIGINATING JRE PROCESSOR.
		LATENCY EXCEEDED	6	USED TO REPORT RECEIVED MESSAGE LATENCIES IN EXCESS OF THE VALUE ESTABLISHED WITH THE LATENCY MONITORING MESSAGE.
		OPERATOR-TO-OPERATOR	7	USED BY JRE PROCESSOR OPERATORS TO EXCHANGE SHORT TEXTUAL MESSAGES.
		SPECIAL EVENT	8	USED TO COMMUNICATE THE TIME OF OCCURRENCE OF INFREQUENT PERIODIC EVENTS.
		TERMINATE LINK	9	USED TO TERMINATE COMMUNICATION ON A LINK BETWEEN JRE PROCESSORS.
		REMOTE FILTER	10	USED TO VIEW AND MODIFY TRANSMIT FILTER SETTINGS FOR A REMOTE JRE PROCESSOR.
		SECONDARY TRACK NUMBER LIST	11	USED BY JRE PROCESSORS TO EXCHANGE AND MANAGE THE SECONDARY TRACK NUMBER (TN) LIST OF THE LINK 16 TERMINAL CONNECTED TO A REMOTE JRE PROCESSOR.
		DIRECT CONNECTION LIST	12	GENERATED BY A JRE PROCESSOR TO INDICATE IUS WITH WHICH IT HAS DIRECT CONNECTIVITY ON A GIVEN LINK/PORT.
		NETWORK CONNECTIVITY MATRIX	13	USED TO PROVIDE JRE PROCESSORS WITH THE MEANS TO SHARE CONNECTIVITY

		FIELD CODING FOR MMSH.0		(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3008	002	MANAGEMENT MESSAGE SUBTYPE -----	(CONTINUED)	
		CONNECTIVITY FEEDBACK	14	INFORMATION. USED TO PROVIDE A JRE PROCESSOR WITH INFORMATION ON HOW IT IS RECEIVING DATA FROM OTHER JRE PROCESSORS.
		UNDEFINED	15 THROUGH 199	
		RESERVED FOR USA	200 THROUGH 209	
		PROTOTYPING EFFORTS		
		RESERVED FOR USAF	210 THROUGH 219	
		PROTOTYPING EFFORTS		
		RESERVED FOR USMC	220 THROUGH 229	
		PROTOTYPING EFFORTS		
		RESERVED FOR USN	230 THROUGH 239	
		PROTOTYPING EFFORTS		
		RESERVED FOR MDA	240 THROUGH 249	
		PROTOTYPING EFFORTS		
		UNDEFINED	250 THROUGH 254	
		RESERVED FOR EXPANSION	255	
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	001	NUMBER DESTINATION ADDRESSES -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.

		FIELD CODING FOR MMSH.0		(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3017	001	NUMBER DESTINATION ADDRESSES ----- BROADCAST 1 THROUGH 255 ADDRESSES	(CONTINUED) 0 1 THROUGH 255	
3029	001	COMPLETION TIMEOUT ----- NO STATEMENT 1 THROUGH 255 SECONDS	 0 1 THROUGH 255	SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE. IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	 0 1 THROUGH 65535	THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE. INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS. THE SEQUENCE NUMBER OF THE MESSAGE.
3020	014	CONTROL/RESPONSE INDICATOR ----- QUERY COMMAND INFORMATION UNDEFINED ACK NACK CANTPRO REPORT	 0 1 2 3 THROUGH 127 128 129 130 131	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES. USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S). USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE. USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND. RESERVED FOR ADDITIONAL CONTROL CODES. USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE. USED TO NEGATIVELY ACKNOWLEDGE RECEIPT OF A MANAGEMENT MESSAGE FRAGMENT. USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND. USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.

FIELD CODING FOR MMSH.0

(SHEET 4)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	014	CONTROL/RESPONSE INDICATOR -----	(CONTINUED)	
		ACCEPT	132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.
		REJECT	133	USED TO INDICATE THAT A COMMAND HAS BEEN REJECTED.
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		WILCO	192	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND WILL COMPLY.
		CANTCO	193	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND CANNOT COMPLY.
		UNSTAFFED	194	USED BY THE JRE PROCESSOR TO REPLY TO MANAGEMENT MESSAGE THAT REQUESTS OPERATOR ACKNOWLEDGMENT WHEN IT HAS NO OPERATOR PRESENT (THIS IS A SPECIFIC CASE OF CANTPRO).
		NOT SUPPORTED	195	USED BY THE JRE PROCESSOR TO INDICATE THAT IT DOES NOT SUPPORT OPERATOR ACKNOWLEDGMENT OF THIS MESSAGE SUBTYPE.
		TIMEOUT	196	USED BY THE JRE PROCESSOR TO REPLY THAT THE OPERATOR DID NOT REPLY WITHIN THE COMPLETION TIMEOUT INTERVAL.
		OPERATOR RECEIPT	197	USED TO INDICATE THAT THE MESSAGE HAS BEEN DISPLAYED TO THE OPERATOR.
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	007	ERROR CODE, 7 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
		NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.

		FIELD CODING FOR MMSH.0		(SHEET 5)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3034	007	ERROR CODE, 7 -----	(CONTINUED)	
		LOCKOUT/RESTRICTED	3	INDICATES THAT THE REQUESTED OPERATION IS NOT PERMITTED DUE TO AN OPERATOR-INITIATED LOCKOUT.
		MESSAGE ERROR	4	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT CONSIDER THE MESSAGE TO BE VALID.
		RESOURCE NOT AVAILABLE	5	INDICATES THAT THE RESOURCE AFFECTED BY THE COMMAND OR QUERY IS OFFLINE OR NOT AVAILABLE (FOR INSTANCE, A LINK 16 TERMINAL THAT IS OFFLINE AND CANNOT ACCEPT SECONDARY TN CHANGES).
		PROCESSING TIMEOUT	6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.

**NOT MEASUREMENT
SENSITIVE**

**MIL-STD-3011D
28 JUN 2019
SUPERSEDING
MIL-STD-3011C
10 JUN 2016**

DEPARTMENT OF DEFENSE INTERFACE STANDARD

FOR THE JOINT RANGE EXTENSION APPLICATION PROTOCOL (JREAP)

SECTION 5, PART 2 MESSAGE DESCRIPTIONS



**AMSC
N/A**

**AREA
TCSS**

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X0.0 MESSAGE SUMMARY

PURPOSE

THE X0.0 ECHO MESSAGE IS USED TO TEST CONNECTIVITY BETWEEN JRE PROCESSORS.

DATA ELEMENT SUMMARY

<u>X0.0.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 2	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 1	8
ERROR CODE, 2	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
APPLICATION DATA	32

MESSAGE TITLE: ECHO

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:						
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT		:											:			
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 2				:	VERSION		:	MANAGEMENT MESSAGE SUBTYPE										:			
:																:					:			:											:			
:	16															:	4				:	4		:	8										:			
:																																						
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:						
:																:											:	NUMBER DESTINATION ADDRESSES,										:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NON-ZERO										:
:																:											:											:
:	16															:	8										:	8										:
:																																						
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:						
:									:									:									:									:		
:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 2								:	CONTROL/RESPONSE INDICATOR, 1								:		
:									:									:									:									:		
:	8								:	8								:	8								:	8								:		
:																																						
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:						
:																:																		:				
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:				
:																:																		:				
:	16															:	16																	:				

MESSAGE MAP

MESSAGE NUMBER: X0.0.0

MESSAGE TITLE: ECHO

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144 143 142 141 140 139 138 137 136 135 134 133 132 131 130 129 128:

:
: APPLICATION DATA :
:

: 32 :

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.0.0

MESSAGE TITLE: ECHO

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR	POSITION	BITS	RESOLUTION, CODING, ETC	
3008 002	MANAGEMENT MESSAGE SUBTYPE	0-	7	8	00000000
3044 001	MANAGEMENT VERSION	8-	11	4	0000
3006 002	ACKNOWLEDGEMENT PROTOCOL, 2 (AP2)	12-	15	4	
3012 003	MANAGEMENT MESSAGE LENGTH (MML)	16-	31	16	
3017 003	NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39	8	
3029 001	COMPLETION TIMEOUT	40-	47	8	
3032 001	MESSAGE SEQUENCE NUMBER	48-	63	16	
3020 001	CONTROL/RESPONSE INDICATOR, 1 (CR1)	64-	71	8	
3034 002	ERROR CODE, 2 (EC2)	72-	79	8	
3033 002	FRAGMENT NUMBER	80-	87	8	00000000
3033 003	TOTAL NUMBER FRAGMENTS	88-	95	8	00000000
3032 002	ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111	16	
3036 020	DESTINATION ADDRESS (DA)	112-	127	16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3016 001	APPLICATION DATA (APPDATA)	128-	159	32	

FIELD CODING FOR X0.0.0				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	002	ACKNOWLEDGEMENT PROTOCOL, 2 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	001	CONTROL/RESPONSE INDICATOR, 1 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.

		FIELD CODING FOR X0.0.0		(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	001	CONTROL/RESPONSE INDICATOR, 1 -----	(CONTINUED)	
		QUERY	0	USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S).
		ILLEGAL UNDEFINED	1 THROUGH 2 3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL CANTPRO	128 THROUGH 129 130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL UNDEFINED	132 THROUGH 133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	002	ERROR CODE, 2 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1	
		NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.
		ILLEGAL COMMON UNUSED	3 THROUGH 6 7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED

FIELD CODING FOR X0.0.0				(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----	(CONTINUED)	
				TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3016	001	APPLICATION DATA ----- 0 THROUGH 4294967295	0 THROUGH 4294967295	DATA PAYLOAD TRANSMITTED IN THE JREAP ECHO MESSAGE.

X0.1 MESSAGE SUMMARY

PURPOSE

THE COMMON TIME REFERENCE MESSAGE IS USED TO NEGOTIATE A TIME REFERENCE BETWEEN TWO JRE PROCESSORS.

DATA ELEMENT SUMMARY

<u>X0.1.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 2	8
ERROR CODE, 3	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	11
JRE NC, C	1
RTTIME, C	1
FIXED DELAY, C	1
EVENT STROBE, C	1
UTC, C	1
SPARE	11
JRE NC, P	1
RTTIME, P	1
FIXED DELAY, P	1
EVENT STROBE, P	1
UTC, P	1

MESSAGE TITLE: COMMON TIME REFERENCE

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:						
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT		:											:			
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 1				:	VERSION		:	MANAGEMENT MESSAGE SUBTYPE										:			
:																:					:			:											:			
:	16															:	4				:	4		:	8										:			
:																																	:					
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:						
:																:											:											:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NUMBER DESTINATION ADDRESSES										:
:																:											:											:
:	16															:	8										:	8										:
:																																	:					
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:						
:									:	FRAGMENT NUMBER								:	ERROR CODE, 3								:	CONTROL/RESPONSE INDICATOR, 2								:		
:	TOTAL NUMBER FRAGMENTS								:									:									:									:		
:									:									:									:									:		
:	8								:	8								:	8								:	8								:		
:																																	:					
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:						
:																:																		:				
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:				
:																:																		:				
:	16															:	16																	:				

MESSAGE MAP

MESSAGE NUMBER: X0.1.0

MESSAGE TITLE: COMMON TIME REFERENCE

:159:158:157:156:155:154 153 152 151 150 149 148 147 146 145 144:143:142:141:140:139:138 137 136 135 134 133 132 131 130 129 128:																															
:	:	:	:	:	:	SPARE								:	:	:	:	:	:	SPARE								:			
:GP	:EP	:FP	:RP	:NP	:	SPARE								:GC	:EC	:FC	:RC	:NC	:	SPARE								:			
:	:	:	:	:	:	SPARE								:	:	:	:	:	:	:	SPARE								:		
: 1	: 1	: 1	: 1	: 1	:	11								: 1	: 1	: 1	: 1	: 1	:	11								:			

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.1.0

MESSAGE TITLE: COMMON TIME REFERENCE

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3008 002	MANAGEMENT MESSAGE SUBTYPE		0-	7 8	00000001
3044 001	MANAGEMENT VERSION		8-	11 4	0000
3006 001	ACKNOWLEDGEMENT PROTOCOL, 1		12-	15 4	
	(AP1)				
3012 003	MANAGEMENT MESSAGE LENGTH (MML)		16-	31 16	
3017 001	NUMBER DESTINATION ADDRESSES		32-	39 8	
3029 001	COMPLETION TIMEOUT		40-	47 8	
3032 001	MESSAGE SEQUENCE NUMBER		48-	63 16	
3020 002	CONTROL/RESPONSE INDICATOR, 2		64-	71 8	
	(CR2)				
3034 003	ERROR CODE, 3 (EC3)		72-	79 8	
3033 002	FRAGMENT NUMBER		80-	87 8	
3033 003	TOTAL NUMBER FRAGMENTS		88-	95 8	
3032 002	ORIGINATING MESSAGE SEQUENCE		96-	111 16	
	NUMBER				
3036 020	DESTINATION ADDRESS (DA)		112-	127 16	REPEATED FOR EACH ADDRESSED
					INTERFACE UNIT (JRE SENDER ID) UP
					TO A MAXIMUM OF 255. THIS FIELD IS
					OMITTED IF NUMBER DESTINATION
					ADDRESSES IS 0.
3099 011	SPARE (SP)		128-	138 11	
3004 001	JRE NC, C (NC)		139	1	
3004 002	RTTIME, C (RC)		140	1	SAME CODING AS FOR BIT 139.
3004 003	FIXED DELAY, C (FC)		141	1	SAME CODING AS FOR BIT 139.
3004 004	EVENT STROBE, C (EC)		142	1	SAME CODING AS FOR BIT 139.
3004 005	UTC, C (GC)		143	1	SAME CODING AS FOR BIT 139.
3099 011	SPARE (SP)		144-	154 11	
3005 001	JRE NC, P (NP)		155	1	
3005 002	RTTIME, P (RP)		156	1	SAME CODING AS FOR BIT 155.
3005 003	FIXED DELAY, P (FP)		157	1	SAME CODING AS FOR BIT 155.
3005 004	EVENT STROBE, P (EP)		158	1	SAME CODING AS FOR BIT 155.
3005 005	UTC, P (GP)		159	1	SAME CODING AS FOR BIT 155.

			FIELD CODING FOR X0.1.0	(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	001	NUMBER DESTINATION ADDRESSES -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		BROADCAST	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	002	CONTROL/RESPONSE INDICATOR, 2 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		QUERY	0	USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S).
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING

		FIELD CODING FOR X0.1.0		(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	002	CONTROL/RESPONSE INDICATOR, 2 -----	(CONTINUED)	
		INFORMATION	2	THE SETTINGS SPECIFIED IN A MESSAGE.
		UNDEFINED	3 THROUGH 127	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
		ILLEGAL CANTPRO	128 THROUGH 130	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL REJECT	131 THROUGH 133	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		RESERVED	134 THROUGH 191	USED TO INDICATE THAT A COMMAND HAS BEEN REJECTED.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
3034	003	ERROR CODE, 3 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 4	
		RESOURCE NOT AVAILABLE	5	INDICATES THAT THE RESOURCE AFFECTED BY THE COMMAND OR QUERY IS OFFLINE OR NOT AVAILABLE (FOR INSTANCE, A LINK 16 TERMINAL THAT IS OFFLINE AND CANNOT ACCEPT SECONDARY TN CHANGES).
		ILLEGAL COMMON UNUSED	6 7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.

			FIELD CODING FOR X0.1.0	(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS -----		THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.
3004	001	JRE NC, C -----		JRE NETWORK CONTROLLER (JRE-NC) BASED TIME REFERENCE.
		NOT CAPABLE	0	
		CAPABLE	1	
3005	001	JRE NC, P -----		JRE NETWORK CONTROLLER (JRE-NC) BASED TIME REFERENCE.
		NOT PREFERRED	0	
		PREFERRED	1	

X0.2 MESSAGE SUMMARY

PURPOSE

THE ROUND-TRIP TIME DELAY MESSAGE IS USED TO DETERMINE THE ROUND-TRIP DELAY OVER A LINK.

DATA ELEMENT SUMMARY

<u>X0.2.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 1	8
ERROR CODE, 2	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
TIME ACCURACY (T1)	4
TX JRE TRANSMIT TIME (T1)	28
TIME ACCURACY (R2)	4
RX JRE RECEIVE TIME (R2)	28
TIME ACCURACY (T2)	4
RX JRE TRANSMIT TIME (T2)	28

.....

MESSAGE TITLE: ROUND-TRIP TIME DELAY

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:						
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:											:	
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 1				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE										:	
:																:					:					:											:	
:	16															:	4				:	4				:	8										:	
:																																						
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:						
:																:											:	NUMBER DESTINATION ADDRESSES,										:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NON-ZERO										:
:																:											:											:
:	16															:	8										:	8										:
:																																						
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:						
:									:	FRAGMENT NUMBER								:	ERROR CODE, 2								:	CONTROL/RESPONSE INDICATOR, 1								:		
:	TOTAL NUMBER FRAGMENTS								:									:									:									:		
:									:									:									:									:		
:	8								:	8								:	8								:	8								:		
:																																						
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:						
:																:																		:				
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:				
:																:																		:				
:	16															:	16																	:				

MESSAGE TITLE: ROUND-TRIP TIME DELAY

```
: : TIME ACCURACY :  
: TX JRE TRANSMIT TIME (T1) : (T1) :  
: : :
```

```

:
:
: RX JRE RECEIVE TIME (R2)
:
:
:
: TIME ACCURACY :
: (R2)
:
:

```

```

:                                     :                               :
:      RX JRE TRANSMIT TIME (T2)    :   TIME ACCURACY   :
:                                     :       (T2)        :

```

5.2-17

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.2.0

MESSAGE TITLE: ROUND-TRIP TIME DELAY

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00000010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 001		ACKNOWLEDGEMENT PROTOCOL, 1 (AP1)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 001		CONTROL/RESPONSE INDICATOR, 1 (CR1)	64-	71 8	
3034 002		ERROR CODE, 2 (EC2)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3003 015		TIME ACCURACY (T1) (TA T1)	128-	131 4	
3003 009		TX JRE TRANSMIT TIME (T1) (T1)	132-	159 28	
3003 014		TIME ACCURACY (R2) (TA R2)	160-	163 4	SAME CODING AS FOR BITS 128-131.
3003 008		RX JRE RECEIVE TIME (R2) (R2)	164-	191 28	SAME CODING AS FOR BITS 132-159.
3003 016		TIME ACCURACY (T2) (TA T2)	192-	195 4	SAME CODING AS FOR BITS 128-131.
3003 010		RX JRE TRANSMIT TIME (T2) (T2)	196-	223 28	SAME CODING AS FOR BITS 132-159

FIELD CODING FOR X0.2.0				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	001	CONTROL/RESPONSE INDICATOR, 1 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		QUERY	0	USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S).
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL

		FIELD CODING FOR X0.2.0		(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	001	CONTROL/RESPONSE INDICATOR, 1 -----	(CONTINUED)	
		ILLEGAL CANTPRO	128 THROUGH 129 130	CODES. USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL UNDEFINED	132 THROUGH 133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	002	ERROR CODE, 2 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1	
		NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.
		ILLEGAL COMMON UNUSED	3 THROUGH 6 7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	

FIELD CODING FOR X0.2.0

(SHEET 3)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC	0	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3003	015	TIME ACCURACY (T1) ----- NO STATEMENT	0	THE MEASURE OF THE UNCERTAINTY IN THE TIME VALUES IN THE TX JRE TRANSMIT TIME (T1). EITHER ACCURACY EXCEEDS 16.834 SECONDS OR ACCURACY CANNOT BE CALCULATED.
		LESS THAN OR EQUAL TO 1 MS	1	FOR DI'S 1 - 15: TIME ACCURACY = 1 MILLISECOND X $2^{(N-1)}$, WHERE $15 \geq N \geq 1$ MEASURED IN MILLISECONDS.
		GREATER THAN 1 MS, LESS THAN OR EQUAL TO 2 MS	2	
		GREATER THAN 2 MS, LESS THAN OR EQUAL TO 4 MS	3	
		GREATER THAN 4 MS, LESS THAN OR EQUAL TO 8 MS	4	
		GREATER THAN 8 MS, LESS THAN OR EQUAL TO 16 MS	5	
		GREATER THAN 16 MS, LESS THAN OR EQUAL TO 32 MS	6	
		GREATER THAN 32 MS, LESS THAN OR EQUAL TO 64 MS	7	
		GREATER THAN 64 MS, LESS THAN OR EQUAL TO 128 MS	8	
		GREATER THAN 128 MS, LESS THAN OR EQUAL TO 256 MS	9	

			FIELD CODING FOR X0.2.0	(SHEET 4)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3003	015	TIME ACCURACY (T1) -----	(CONTINUED)	
		GREATER THAN 256 MS, LESS THAN OR EQUAL TO 512 MS	10	
		GREATER THAN 512 MS, LESS THAN OR EQUAL TO 1024 MS	11	
		GREATER THAN 1024 MS, LESS THAN OR EQUAL TO 2048 MS	12	
		GREATER THAN 2048 MS, LESS THAN OR EQUAL TO 4096 MS	13	
		GREATER THAN 4096 MS, LESS THAN OR EQUAL TO 8192 MS	14	
		GREATER THAN 8192 MS, LESS THAN OR EQUAL TO 16,384 MS.	15	
3003	009	TX JRE TRANSMIT TIME (T1) -----		THE TIME, USING THE LOCAL TIME SOURCE, AT WHICH THE TRANSMITTING JRE PROCESSOR SENDS THE INITIAL MESSAGE.
		0 - 86399 AND 1023/1024 SECONDS	0 THROUGH 88473599	NUMBER OF SECONDS ELAPSED PAST MIDNIGHT MEASURED IN 1/1024 SECOND INCREMENTS.
		ILLEGAL	88473600 THROUGH 268435455	

X0.3 MESSAGE SUMMARY

PURPOSE

THE JREAP J-SERIES ACKNOWLEDGMENT (FULL STACK) MESSAGE ACKNOWLEDGES RECEIPT OF A MESSAGE GROUP HEADER WHICH HAS THE ACKNOWLEDGEMENT REQUEST FLAG SET TO 1 (ACKNOWLEDGEMENT REQUESTED) (IN FULL STACK OPERATION).

DATA ELEMENT SUMMARY

<u>X0.3.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 3	8
ERROR CODE, 4	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
MESSAGE GROUP HEADER CRC	16

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MESSAGE TITLE: JREAP J-SERIES ACKNOWLEDGMENT (FULL STACK)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:														
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:							
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 1				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:							
:																:					:					:													:							
:	16															:	4				:	4				:	8												:							
:																																	:													
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:														
:																:													:	NUMBER DESTINATION ADDRESSES,																:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NON-ZERO																:
:																:													:																	:
:	16															:	8												:	8																:
:																																	:													
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:														
:									:	FRAGMENT NUMBER								:	ERROR CODE, 4								:	CONTROL/RESPONSE INDICATOR, 3																:		
:	TOTAL NUMBER FRAGMENTS								:									:									:																	:		
:									:									:									:																	:		
:	8								:	8								:	8								:	8																:		
:																																	:													
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:														
:																:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:												
:	DESTINATION ADDRESS															:																		:												
:																:																		:												
:	16															:	16																	:												

MESSAGE NUMBER: X0.3.0

MESSAGE TITLE: JREAP J-SERIES ACKNOWLEDGMENT (FULL STACK)

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:143 142 141 140 139 138 137 136 135 134 133 132 131 130 129 128:
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: MESSAGE GROUP HEADER CRC :

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: 16 :

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MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.3.0

MESSAGE TITLE: JREAP J-SERIES ACKNOWLEDGMENT (FULL STACK)

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD	DESCRIPTOR	POSITION	BITS	RESOLUTION, CODING, ETC
3008 002	MANAGEMENT MESSAGE	SUBTYPE	0-	7 8	00000011
3044 001	MANAGEMENT	VERSION	8-	11 4	0000
3006 001	ACKNOWLEDGEMENT	PROTOCOL, 1	12-	15 4	
	(AP1)				
3012 003	MANAGEMENT MESSAGE	LENGTH (MML)	16-	31 16	
3017 003	NUMBER DESTINATION	ADDRESSES,	32-	39 8	
	NON-ZERO				
3029 001	COMPLETION	TIMEOUT	40-	47 8	
3032 001	MESSAGE	SEQUENCE NUMBER	48-	63 16	
3020 003	CONTROL/RESPONSE	INDICATOR, 3	64-	71 8	
	(CR3)				
3034 004	ERROR CODE, 4	(EC4)	72-	79 8	
3033 002	FRAGMENT	NUMBER	80-	87 8	
3033 003	TOTAL NUMBER	FRAGMENTS	88-	95 8	
3032 002	ORIGINATING MESSAGE	SEQUENCE	96-	111 16	0000000000000000
	NUMBER				
3036 020	DESTINATION ADDRESS	(DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3039 001	MESSAGE GROUP	HEADER CRC	128-	143 16	REPEAT THIS FIELD ONCE FOR EACH MGH3 BEING ACKNOWLEDGED UP TO A MAXIMUM OF 255.

FIELD CODING FOR X0.3.0				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	003	CONTROL/RESPONSE INDICATOR, 3 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0 THROUGH 1	
		INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL

			FIELD CODING FOR X0.3.0	(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	003	CONTROL/RESPONSE INDICATOR, 3 -----	(CONTINUED)	
		ILLEGAL	128 THROUGH 133	CODES.
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	004	ERROR CODE, 4 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
		ILLEGAL	2 THROUGH 5	
		PROCESSING TIMEOUT	6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3036	020	DESTINATION ADDRESS -----		THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.

			FIELD CODING FOR X0.3.0	(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3039	001	MESSAGE GROUP HEADER CRC ----- NUMERIC	0 THROUGH 65535	MESSAGE GROUP HEADER CYCLIC REDUNDANCY CHECK FIELD. THE CALCULATED CRC VALUE.

X0.4 MESSAGE SUMMARY

PURPOSE

THE JREAP J-SERIES ACKNOWLEDGMENT (APPLICATION) MESSAGE ACKNOWLEDGES RECEIPT OF AN X1.0 JREAP J-SERIES MESSAGE (APPLICATION) OR X7.0 JREAP J-SERIES WITH NPG ASSIGNMENT MESSAGE (APPLICATION) WHICH HAS THE ACKNOWLEDGEMENT REQUEST FLAG SET TO 1 (ACKNOWLEDGEMENT REQUESTED) (IN APPLICATION OPERATION) .

DATA ELEMENT SUMMARY

<u>X0.4.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 3	8
ERROR CODE, 4	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
ORIGINATING J-SERIES JRE SENDER ID	16
ORIGINATING J-SERIES MESSAGE SEQUENCE NUMBER	16

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MESSAGE TITLE: JREAP J-SERIES ACKNOWLEDGMENT (APPLICATION)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:						
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:											:	
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 1				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE										:	
:																:					:					:											:	
:	16															:	4				:	4				:	8										:	
:																																						
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:						
:																:											:	NUMBER DESTINATION ADDRESSES,										:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NON-ZERO										:
:																:											:											:
:	16															:	8										:	8										:
:																																						
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:						
:									:	FRAGMENT NUMBER								:	ERROR CODE, 4								:	CONTROL/RESPONSE INDICATOR, 3								:		
:	TOTAL NUMBER FRAGMENTS								:									:									:									:		
:									:									:									:									:		
:	8								:	8								:	8								:	8								:		
:																																						
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:						
:																:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:				
:	DESTINATION ADDRESS															:																		:				
:																:																		:				
:	16															:	16																	:				

MESSAGE MAP

MESSAGE NUMBER: X0.4.0

MESSAGE TITLE: JREAP J-SERIES ACKNOWLEDGMENT (APPLICATION)

:159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144	:143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128	:

:															:															:		
:	ORIGINATING J-SERIES MESSAGE SEQUENCE NUMBER														:	ORIGINATING J-SERIES JRE SENDER ID														:		
:															:															:		

:	16														:	16														:		

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.4.0

MESSAGE TITLE: JREAP J-SERIES ACKNOWLEDGMENT (APPLICATION)

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD	DESCRIPTOR	POSITION	BITS	RESOLUTION, CODING, ETC
3008 002	MANAGEMENT MESSAGE	SUBTYPE	0-	7 8	00000100
3044 001	MANAGEMENT	VERSION	8-	11 4	0000
3006 001	ACKNOWLEDGEMENT	PROTOCOL, 1	12-	15 4	
	(AP1)				
3012 003	MANAGEMENT MESSAGE	LENGTH (MML)	16-	31 16	
3017 003	NUMBER DESTINATION	ADDRESSES,	32-	39 8	
	NON-ZERO				
3029 001	COMPLETION	TIMEOUT	40-	47 8	
3032 001	MESSAGE	SEQUENCE NUMBER	48-	63 16	
3020 003	CONTROL/RESPONSE	INDICATOR, 3	64-	71 8	
	(CR3)				
3034 004	ERROR CODE, 4	(EC4)	72-	79 8	
3033 002	FRAGMENT	NUMBER	80-	87 8	
3033 003	TOTAL NUMBER	FRAGMENTS	88-	95 8	
3032 002	ORIGINATING MESSAGE	SEQUENCE	96-	111 16	0000000000000000
	NUMBER				
3036 020	DESTINATION ADDRESS	(DA)	112-	127 16	REPEATED FOR EACH ADDRESSED
					INTERFACE UNIT (JRE SENDER ID) UP
					TO A MAXIMUM OF 255.
3036 021	ORIGINATING J-SERIES	JRE	128-	143 16	
	SENDER ID				
3032 004	ORIGINATING J-SERIES	MESSAGE	144-	159 16	THESE TWO FIELDS (BITS 128 - 159)
	SEQUENCE NUMBER				ARE THE ACKNOWLEDGMENT GROUP AND
					WILL BE REPEATED FOR EACH JRE J-
					SERIES MESSAGE SEQUENCE NUMBER
					BEING ACKNOWLEDGED, UP TO A
					MAXIMUM OF 255 ENTRIES.

FIELD CODING FOR X0.4.0				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	003	CONTROL/RESPONSE INDICATOR, 3 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0 THROUGH 1	
		INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL

FIELD CODING FOR X0.4.0				(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	003	CONTROL/RESPONSE INDICATOR, 3 -----	(CONTINUED)	
		ILLEGAL	128 THROUGH 133	CODES.
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	004	ERROR CODE, 4 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
		ILLEGAL	2 THROUGH 5	
		PROCESSING TIMEOUT	6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3036	020	DESTINATION ADDRESS -----		THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.

FIELD CODING FOR X0.4.0					(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION	
3036	021	ORIGINATING J-SERIES JRE SENDER ID -----		THE INTERFACE UNIT (IU) NUMBER OF THE REMOTE JRE PROCESSOR THAT TRANSMITTED THE JRE J-SERIES MESSAGE ONTO THE LINK.	
		NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.	
3032	004	ORIGINATING J-SERIES MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF THE ORIGINATING J-SERIES MESSAGE THAT AN ACKNOWLEDGEMENT MESSAGE IN RESPONSE TO EACH JREAP J-SERIES MESSAGE REQUIRING ACKNOWLEDGMENT IS BEING TRANSMITTED TO.	
		NUMERIC	0 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE JREAP J-SERIES MESSAGE BEING ACKNOWLEDGED.	

X0.5 MESSAGE SUMMARY

PURPOSE

THE LATENCY THRESHOLD MESSAGE IS USED TO SPECIFY THE MAXIMUM ACCEPTABLE LATENCY PARAMETERS FOR TRANSMISSIONS THAT ARE RECEIVED FROM THE ORIGINATING JRE PROCESSOR.

DATA ELEMENT SUMMARY

<u>X0.5.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 2	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 4	8
ERROR CODE, 2	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
MAXIMUM LATENCY	16
SPARE	6
INTERVAL TIME	10
SPARE	8
COUNT	8

MESSAGE NUMBER: X0.5.0

MESSAGE TITLE: LATENCY THRESHOLD

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:										
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:			
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 2				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:			
:																:					:					:													:			
:	16															:	4				:	4				:	8												:			
:																																	:									
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:										
:																:													:	NUMBER DESTINATION ADDRESSES,												:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NON-ZERO												:
:																:													:													:
:	16															:	8												:	8												:
:																																	:									
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:										
:									:	FRAGMENT NUMBER								:	ERROR CODE, 2								:	CONTROL/RESPONSE INDICATOR, 4								:						
:	TOTAL NUMBER FRAGMENTS								:									:									:									:						
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:	8								:	8								:	8								:	8								:						
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:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:										
:																:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:								
:	DESTINATION ADDRESS															:																		:								
:																:																		:								
:	16															:	16																	:								

MESSAGE MAP

MESSAGE NUMBER: X0.5.0
MESSAGE TITLE: LATENCY THRESHOLD

:159 158 157 156 155 154 153 152 151 150:															149 148 147 146 145 144:143 142 141 140 139 138 137 136 135 134 133 132 131 130 129 128:																														
:															:															:															:
:	INTERVAL TIME														:	SPARE														:	MAXIMUM LATENCY														:
:															:															:															:
:	10														:	6														:	16														:

:175 174 173 172 171 170 169 168:															167 166 165 164 163 162 161 160:															
:															:															:
:	COUNT														:	SPARE														:
:															:															:
:	8														:	8														:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.5.0

MESSAGE TITLE: LATENCY THRESHOLD

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00000101
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 002		ACKNOWLEDGEMENT PROTOCOL, 2 (AP2)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 004		CONTROL/RESPONSE INDICATOR, 4 (CR4)	64-	71 8	
3034 002		ERROR CODE, 2 (EC2)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3003 007		MAXIMUM LATENCY (MAX LTNCY)	128-	143 16	
3099 006		SPARE (SP)	144-	149 6	
3003 013		INTERVAL TIME	150-	159 10	
3099 008		SPARE (SP)	160-	167 8	
3033 001		COUNT	168-	175 8	

		FIELD CODING FOR X0.5.0		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	002	ACKNOWLEDGEMENT PROTOCOL, 2 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	004	CONTROL/RESPONSE INDICATOR, 4 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.

FIELD CODING FOR X0.5.0

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	004	CONTROL/RESPONSE INDICATOR, 4 -----	(CONTINUED)	
		ILLEGAL	0	
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 129	
		CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		ILLEGAL	131	
		ACCEPT	132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.
		ILLEGAL	133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	002	ERROR CODE, 2 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1	
		NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.
		ILLEGAL	3 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.

		FIELD CODING FOR X0.5.0		(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS -----		THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.
3003	007	MAXIMUM LATENCY -----		THE MAXIMUM LATENCY THRESHOLD FOR A LINK.
		0 THROUGH 2047 AND 31/32 SECONDS	0 THROUGH 65535	NUMBER OF SECONDS MEASURED IN 1/32 OF A SECOND INCREMENTS.
3003	013	INTERVAL TIME -----		THE TIME INTERVAL (IN SECONDS) OVER WHICH THE PACKETS EXCEEDING THE LATENCY ARE COUNTED.
		NO INTERVAL	0	RESULTS IN THE LATENCY COUNT NOT BEING RESET ON A TIMED BASIS
		1 THROUGH 1023 SECONDS	1 THROUGH 1023	INTERVAL IN 1 SECOND INCREMENTS
3033	001	COUNT -----		INDICATES THE THRESHOLD NUMBER OF TIMES WITHIN THE TIME INTERVAL SPECIFIED THAT THE MAXIMUM LATENCY MAY BE EXCEEDED BEFORE BEING REPORTED BY THE JRE PROCESSOR.
		NUMERIC	0 THROUGH 255	THE NUMBER OF TIMES THE ERROR THRESHOLD MAY BE EXCEEDED ON THE DESIGNATED LINK BEFORE A LATENCY EXCEEDED MESSAGE IS TRANSMITTED.

X0.6 MESSAGE SUMMARY

PURPOSE

THE LATENCY EXCEEDED MESSAGE IS USED TO REPORT RECEIVED MESSAGE LATENCIES IN EXCESS OF THE VALUE ESTABLISHED WITH THE LATENCY MONITORING MESSAGE.

DATA ELEMENT SUMMARY

<u>X0.6.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 12	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
MAXIMUM LATENCY	16
JRE SENDER ID	16

MESSAGE TITLE: LATENCY EXCEEDED

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:						
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:					:							
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 1				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE				:							
:																:					:					:					:							
:	16															:	4				:	4				:	8				:							
:																																						
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:						
:																:											:											:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NUMBER DESTINATION ADDRESSES										:
:																:											:											:
:	16															:	8										:	8										:
:																																						
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:						
:									:									:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 12								:		
:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:									:									:		
:									:									:									:									:		
:	8								:	8								:	8								:	8								:		
:																																						
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:						
:																:																		:				
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:				
:																:																		:				
:	16															:	16																	:				

MESSAGE MAP

MESSAGE NUMBER: X0.6.0

MESSAGE TITLE: LATENCY EXCEEDED

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136 135 134 133 132 131 130 129 128:																																	
:																:																	:
:	JRE SENDER ID															:	MAXIMUM LATENCY																:
:																:																	:
:	16															:	16																:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.6.0

MESSAGE TITLE: LATENCY EXCEEDED

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00000110
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 001		ACKNOWLEDGEMENT PROTOCOL, 1 (AP1)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 001		NUMBER DESTINATION ADDRESSES	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 012		CONTROL/RESPONSE INDICATOR, 12 (CR12)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	0000000000000000
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255. THIS FIELD IS OMITTED IF NUMBER DESTINATION ADDRESSES IS 0.
3003 007		MAXIMUM LATENCY (MAX LTNCY)	128-	143 16	
3036 001		JRE SENDER ID (JRE SI)	144-	159 16	

FIELD CODING FOR X0.6.0				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	001	NUMBER DESTINATION ADDRESSES -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		BROADCAST	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	012	CONTROL/RESPONSE INDICATOR, 12 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0 THROUGH 1	
		INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL

FIELD CODING FOR X0.6.0				(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	012	CONTROL/RESPONSE INDICATOR, 12 -----	(CONTINUED)	
		ILLEGAL CANTPRO	128 THROUGH 129 130	CODES. USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		ILLEGAL RESERVED	131 THROUGH 133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE. INDICATES NO ERROR CONDITION.
		NO ERROR ILLEGAL COMMON UNUSED	0 1 THROUGH 6 7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES. VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS ILLEGAL NUMBER FRAGMENTS	0 1 2 THROUGH 255	
3036	020	DESTINATION ADDRESS -----		THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.
3003	007	MAXIMUM LATENCY -----		THE MAXIMUM LATENCY THRESHOLD FOR A LINK.

FIELD CODING FOR X0.6.0					(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION	
3003	007	MAXIMUM LATENCY	(CONTINUED)		

		0 THROUGH 2047 AND 31/32	0 THROUGH 65535	NUMBER OF SECONDS MEASURED IN 1/32	
		SECONDS		OF A SECOND INCREMENTS.	
3036	001	JRE SENDER ID		THE INTERFACE UNIT (IU) NUMBER OF	
		-----		THE JRE PROCESSOR THAT IS	
				GENERATING THE MESSAGE HEADER.	
		NUMERIC	000000 THROUGH 177777	INTERFACE UNIT NUMBER.	
			(OCTAL)		

X0.7 MESSAGE SUMMARY

PURPOSE

THE OPERATOR-TO-OPERATOR MESSAGE IS USED BY JRE PROCESSOR OPERATORS TO EXCHANGE SHORT TEXTUAL MESSAGES.

DATA ELEMENT SUMMARY

<u>X0.7.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 5	8
ERROR CODE, 5	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
ASCII	8

MESSAGE MAP

MESSAGE NUMBER: X0.7.0

MESSAGE TITLE: OPERATOR-TO-OPERATOR

: 31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:
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MESSAGE

MESSAGE NUMBER: X0.7.0

MESSAGE TITLE: OPERATOR-TO-OPERATOR

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:135 134 133 132 131 130 129 128:
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MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.7.0

MESSAGE TITLE: OPERATOR-TO-OPERATOR

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00000111
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 001		NUMBER DESTINATION ADDRESSES	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 005		CONTROL/RESPONSE INDICATOR, 5 (CR5)	64-	71 8	
3034 005		ERROR CODE, 5 (EC5)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255. THIS FIELD IS OMITTED IF NUMBER DESTINATION ADDRESSES IS 0.
3024 001		ASCII (ASCII)	128-	135 8	FIELD MAY REPEAT UP TO 300 TIMES, ONE ASCII CHARACTER EACH.

FIELD CODING FOR X0.7.0				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	001	NUMBER DESTINATION ADDRESSES -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		BROADCAST	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	005	CONTROL/RESPONSE INDICATOR, 5 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.7.0

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	005	CONTROL/RESPONSE INDICATOR, 5 -----	(CONTINUED)	
		ILLEGAL INFORMATION	0 THROUGH 1 2	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES. USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ACK	128	USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE.
		NACK	129	USED TO NEGATIVELY ACKNOWLEDGE RECEIPT OF A MANAGEMENT MESSAGE FRAGMENT.
		CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		ILLEGAL RESERVED	131 THROUGH 133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNSTAFFED	192 THROUGH 193 194	USED BY THE JRE PROCESSOR TO REPLY TO MANAGEMENT MESSAGE THAT REQUESTS OPERATOR ACKNOWLEDGMENT WHEN IT HAS NO OPERATOR PRESENT (THIS IS A SPECIFIC CASE OF CANTPRO).
		NOT SUPPORTED	195	USED BY THE JRE PROCESSOR TO INDICATE THAT IT DOES NOT SUPPORT OPERATOR ACKNOWLEDGMENT OF THIS MESSAGE SUBTYPE.
		TIMEOUT	196	USED BY THE JRE PROCESSOR TO REPLY THAT THE OPERATOR DID NOT REPLY WITHIN THE COMPLETION TIMEOUT INTERVAL.
		OPERATOR RECEIPT	197	USED TO INDICATE THAT THE MESSAGE HAS BEEN DISPLAYED TO THE OPERATOR.
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	005	ERROR CODE, 5 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A

		FIELD CODING FOR X0.7.0		(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3034	005	ERROR CODE, 5 -----	(CONTINUED)	
		NO ERROR	0	MANAGEMENT MESSAGE.
		MISSING FRAGMENT	1	INDICATES NO ERROR CONDITION.
				INDICATES THAT THE FRAGMENT
				SPECIFIED IN THIS SUBHEADER WAS
				NOT RECEIVED.
		NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR
				DOES NOT IMPLEMENT THE RECEIVED
				MESSAGE.
		ILLEGAL	3 THROUGH 5	
		PROCESSING TIMEOUT	6	INDICATES THAT THE RECEIVING JRE
				PROCESSOR DID NOT COMPLETE THE
				OPERATION WITHIN THE SPECIFIED
				TIME.
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR
				CODES THAT ARE COMMON TO ALL
				MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND
		UNUSED		USE BY A SPECIFIC MANAGEMENT
				MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE
		NUMERIC	0 THROUGH 255	FRAGMENTS.
				THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT
				COMPRISE THE COMPLETE FRAGMENTED
				MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE
		NUMERIC	0	MANAGEMENT MESSAGE BEING RESPONDED
				TO.
				SET TO 0 IN ORIGINAL (NON-RESPONSE)
				MESSAGES OR RESPONDING TO A
				MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE
				ORIGINAL MESSAGE BEING RESPONDED
				TO.
3036	020	DESTINATION ADDRESS -----		THE INTERFACE UNIT (IU) NUMBER
				WHICH IS ADDRESSED.

FIELD CODING FOR X0.7.0 (SHEET 4)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3036	020	DESTINATION ADDRESS ----- NUMERIC	(CONTINUED) 000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.
3024	001	ASCII ----- ASCII 8-BIT CHARACTER SET	0 THROUGH 255	8-BIT ASCII CHARACTERS.

X0.8 MESSAGE SUMMARY

PURPOSE

THE SPECIAL EVENT MESSAGE IS USED TO REPORT THE OCCURRENCE OF AN EVENT (SUCH AS A SATELLITE STROBE) AND THE TIME OF THE EVENT.

DATA ELEMENT SUMMARY

<u>X0.8.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 13	8
ERROR CODE, 2	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	11
EVENT TYPE	5
EVENT TIME ACCURACY	4
EVENT TIME	28

MESSAGE TITLE: SPECIAL EVENT

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:										
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:			
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 1				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:			
:																:					:					:													:			
:	16															:	4				:	4				:	8												:			
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:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:										
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:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NUMBER DESTINATION ADDRESSES												:
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:									:	FRAGMENT NUMBER								:	ERROR CODE, 2								:	CONTROL/RESPONSE INDICATOR, 13								:						
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:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:										
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MESSAGE TITLE: SPECIAL EVENT

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:                               EVENT TIME
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:                               28

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MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.8.0

MESSAGE TITLE: SPECIAL EVENT

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD	DESCRIPTOR	POSITION	BITS	RESOLUTION, CODING, ETC
3008 002	MANAGEMENT MESSAGE	SUBTYPE	0-	7 8	00001000
3044 001	MANAGEMENT VERSION		8-	11 4	0000
3006 001	ACKNOWLEDGEMENT	PROTOCOL, 1	12-	15 4	
	(AP1)				
3012 003	MANAGEMENT MESSAGE	LENGTH (MML)	16-	31 16	
3017 001	NUMBER DESTINATION	ADDRESSES	32-	39 8	
3029 001	COMPLETION	TIMEOUT	40-	47 8	
3032 001	MESSAGE SEQUENCE	NUMBER	48-	63 16	
3020 013	CONTROL/RESPONSE	INDICATOR, 13	64-	71 8	
	(CR13)				
3034 002	ERROR CODE, 2	(EC2)	72-	79 8	
3033 002	FRAGMENT	NUMBER	80-	87 8	
3033 003	TOTAL NUMBER	FRAGMENTS	88-	95 8	
3032 002	ORIGINATING MESSAGE	SEQUENCE	96-	111 16	
	NUMBER				
3036 020	DESTINATION ADDRESS	(DA)	112-	127 16	REPEATED FOR EACH ADDRESSED
					INTERFACE UNIT (JRE SENDER ID) UP
					TO A MAXIMUM OF 255. THIS FIELD IS
					OMITTED IF NUMBER DESTINATION
					ADDRESSES IS 0.
3099 011	SPARE	(SP)	128-	138 11	
3022 001	EVENT	TYPE	139-	143 5	
3003 005	EVENT TIME	ACCURACY	144-	147 4	
	(EVNT TIME	ACCY)			
3003 012	EVENT	TIME	148-	175 28	

		FIELD CODING FOR X0.8.0		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE. INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	0	THE SEQUENCE NUMBER OF THE MESSAGE.
		NUMERIC	1 THROUGH 65535	
3020	013	CONTROL/RESPONSE INDICATOR, 13 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0	
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 129	
		CANTPRO	130	USED BY THE JRE PROCESSOR TO

FIELD CODING FOR X0.8.0

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	013	CONTROL/RESPONSE INDICATOR, 13 -----		
		ILLEGAL RESERVED	131 THROUGH 133 134 THROUGH 191	INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND. RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	002	ERROR CODE, 2 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1	
		NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.
		ILLEGAL COMMON UNUSED	3 THROUGH 6 7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.

FIELD CODING FOR X0.8.0 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC	(CONTINUED) 1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3022	001	EVENT TYPE ----- EHF SATELLITE EPOCH STROBE UNDEFINED	0 1 THROUGH 31	INDICATES THE TYPE OF EVENT.
3003	005	EVENT TIME ACCURACY ----- NO STATEMENT LESS THAN OR EQUAL TO 1 MS GREATER THAN 1 MS, LESS THAN OR EQUAL TO 2 MS GREATER THAN 2 MS, LESS THAN OR EQUAL TO 4 MS GREATER THAN 4 MS, LESS THAN OR EQUAL TO 8 MS GREATER THAN 8 MS, LESS THAN OR EQUAL TO 16 MS GREATER THAN 16 MS, LESS THAN OR EQUAL TO 32 MS GREATER THAN 32 MS, LESS THAN OR EQUAL TO 64 MS GREATER THAN 64 MS, LESS THAN OR EQUAL TO 128 MS	0 1 2 3 4 5 6 7 8	MEASURE OF THE UNCERTAINTY IN THE TIME VALUES PROVIDED BY THE JRE PROCESSOR, WITH RESPECT TO THE NEGOTIATED COMMON TIME REFERENCE. EITHER ACCURACY EXCEEDS 16.834 SECONDS OR ACCURACY CANNOT BE CALCULATED. FOR DI'S 1 - 15: TIME ACCURACY = 1 MILLISECOND X $2^{(N-1)}$, WHERE $15 \geq N \geq 1$ MEASURED IN MILLISECONDS.

FIELD CODING FOR X0.8.0

(SHEET 4)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3003	005	EVENT TIME ACCURACY -----	(CONTINUED)	
		GREATER THAN 128 MS, LESS THAN OR EQUAL TO 256 MS	9	
		GREATER THAN 256 MS, LESS THAN OR EQUAL TO 512 MS	10	
		GREATER THAN 512 MS, LESS THAN OR EQUAL TO 1024 MS	11	
		GREATER THAN 1024 MS, LESS THAN OR EQUAL TO 2048 MS	12	
		GREATER THAN 2048 MS, LESS THAN OR EQUAL TO 4096 MS	13	
		GREATER THAN 4096 MS, LESS THAN OR EQUAL TO 8192 MS	14	
		GREATER THAN 8192 MS, LESS THAN OR EQUAL TO 16,384 MS.	15	
3003	012	EVENT TIME -----		THE TIME AT WHICH THE ORIGINATOR OF THE MESSAGE DETECTED THE EVENT IN THEIR OWN SYSTEM TIME REFERENCE. NUMBER OF SECONDS ELAPSED PAST MIDNIGHT MEASURED IN 1/1024 SECOND INCREMENTS.
		0 - 86399 AND 1023/1024 SECONDS	0 THROUGH 88473599	
		ILLEGAL	88473600 THROUGH 268435455	

X0.9 MESSAGE SUMMARY

PURPOSE

THE TERMINATE LINK MESSAGE IS USED TO TERMINATE COMMUNICATION ON A LINK BETWEEN JRE PROCESSORS.

DATA ELEMENT SUMMARY

<u>X0.9.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 2	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 6	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16

MESSAGE TITLE: TERMINATE LINK

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:										
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:			
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 2				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:			
:																:					:					:													:			
:	16															:	4				:	4				:	8												:			
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:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:										
:																:													:													:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NUMBER DESTINATION ADDRESSES												:
:																:													:													:
:	16															:	8												:	8												:
:																																	:									
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:										
:									:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 6								:						
:	TOTAL NUMBER FRAGMENTS								:									:									:									:						
:									:									:									:									:						
:	8								:	8								:	8								:	8								:						
:																																	:									
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:										
:																:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:								
:	DESTINATION ADDRESS															:																		:								
:																:																		:								
:	16															:	16																	:								

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.9.0

MESSAGE TITLE: TERMINATE LINK

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD	DESCRIPTOR	POSITION	BITS	RESOLUTION, CODING, ETC
3008 002	MANAGEMENT MESSAGE	SUBTYPE	0-	7 8	00001001
3044 001	MANAGEMENT	VERSION	8-	11 4	0000
3006 002	ACKNOWLEDGEMENT	PROTOCOL, 2	12-	15 4	
	(AP2)				
3012 003	MANAGEMENT MESSAGE	LENGTH (MML)	16-	31 16	0000000000000000
3017 001	NUMBER	DESTINATION ADDRESSES	32-	39 8	
3029 001	COMPLETION	TIMEOUT	40-	47 8	
3032 001	MESSAGE	SEQUENCE NUMBER	48-	63 16	
3020 006	CONTROL/RESPONSE	INDICATOR, 6	64-	71 8	
	(CR6)				
3034 001	ERROR CODE, 1	(EC1)	72-	79 8	
3033 002	FRAGMENT	NUMBER	80-	87 8	00000000
3033 003	TOTAL	NUMBER FRAGMENTS	88-	95 8	00000000
3032 002	ORIGINATING	MESSAGE SEQUENCE	96-	111 16	
	NUMBER				
3036 020	DESTINATION	ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED
					INTERFACE UNIT (JRE SENDER ID) UP
					TO A MAXIMUM OF 255. THIS FIELD IS
					OMITTED IF NUMBER DESTINATION
					ADDRESSES IS 0.

		FIELD CODING FOR X0.9.0		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	002	ACKNOWLEDGEMENT PROTOCOL, 2 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 15	
3017	001	NUMBER DESTINATION ADDRESSES -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		BROADCAST	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	006	CONTROL/RESPONSE INDICATOR, 6 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0	
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.

		FIELD CODING FOR X0.9.0		(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	006	CONTROL/RESPONSE INDICATOR, 6 -----	(CONTINUED)	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ACK	128	USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE.
		ILLEGAL ACCEPT	129 THROUGH 131 132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.
		ILLEGAL RESERVED	133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS -----		THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.

X0.10 MESSAGE SUMMARY

PURPOSE

THE FILTER RESPONSE MESSAGE IS USED TO PROVIDE THE REQUIRED CONTROL/RESPONSE AND ACKNOWLEDGEMENTS UPON RECEIPT OF A FILTER MANAGEMENT MESSAGE.

DATA ELEMENT SUMMARY

<u>X0.10</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 11	8
ERROR CODE, 7	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16

MESSAGE NUMBER: X0.10

MESSAGE TITLE: FILTER RESPONSE

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:														
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:							
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 1				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:							
:																:					:					:													:							
:	16															:	4				:	4				:	8												:							
:																																	:													
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:														
:																:													:	NUMBER DESTINATION ADDRESSES,																:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NON-ZERO																:
:																:													:																	:
:	16															:	8												:	8																:
:																																	:													
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:														
:									:	FRAGMENT NUMBER								:	ERROR CODE, 7								:	CONTROL/RESPONSE INDICATOR, 11																:		
:	TOTAL NUMBER FRAGMENTS								:									:									:																	:		
:									:									:									:																	:		
:	8								:	8								:	8								:	8																:		
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:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:														
:																:																		:												
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:												
:																:																		:												
:	16															:	16																	:												

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10

MESSAGE TITLE: FILTER RESPONSE

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 001		ACKNOWLEDGEMENT PROTOCOL, 1 (AP1)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	000000000100000000
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 011		CONTROL/RESPONSE INDICATOR, 11 (CR11)	64-	71 8	
3034 007		ERROR CODE, 7 (EC7)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	00000000
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	00000000
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	

		FIELD CODING FOR X0.10		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE. INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	0	THE SEQUENCE NUMBER OF THE MESSAGE.
		NUMERIC	1 THROUGH 65535	
3020	011	CONTROL/RESPONSE INDICATOR, 11 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0 THROUGH 2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ACK	128	USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE.
		NACK	129	USED TO NEGATIVELY ACKNOWLEDGE RECEIPT OF A MANAGEMENT MESSAGE FRAGMENT.
		CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.

		FIELD CODING FOR X0.10		(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	011	CONTROL/RESPONSE INDICATOR, 11	(CONTINUED)	

		ILLEGAL	131	
		ACCEPT	132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.
		REJECT	133	USED TO INDICATE THAT A COMMAND HAS BEEN REJECTED.
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		WILCO	192	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND WILL COMPLY.
		CANTCO	193	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND CANNOT COMPLY.
		UNSTAFFED	194	USED BY THE JRE PROCESSOR TO REPLY TO MANAGEMENT MESSAGE THAT REQUESTS OPERATOR ACKNOWLEDGMENT WHEN IT HAS NO OPERATOR PRESENT (THIS IS A SPECIFIC CASE OF CANTPRO).
		ILLEGAL	195	
		TIMEOUT	196	USED BY THE JRE PROCESSOR TO REPLY THAT THE OPERATOR DID NOT REPLY WITHIN THE COMPLETION TIMEOUT INTERVAL.
		OPERATOR RECEIPT	197	USED TO INDICATE THAT THE MESSAGE HAS BEEN DISPLAYED TO THE OPERATOR.
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	007	ERROR CODE, 7		

		NO ERROR	0	INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		MISSING FRAGMENT	1	INDICATES NO ERROR CONDITION.
				INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
		NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.
		LOCKOUT/RESTRICTED	3	INDICATES THAT THE REQUESTED OPERATION IS NOT PERMITTED DUE TO

			FIELD CODING FOR X0.10	(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3034	007	ERROR CODE, 7 -----	(CONTINUED)	
		MESSAGE ERROR	4	AN OPERATOR-INITIATED LOCKOUT. INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT CONSIDER THE MESSAGE TO BE VALID.
		RESOURCE NOT AVAILABLE	5	INDICATES THAT THE RESOURCE AFFECTED BY THE COMMAND OR QUERY IS OFFLINE OR NOT AVAILABLE (FOR INSTANCE, A LINK 16 TERMINAL THAT IS OFFLINE AND CANNOT ACCEPT SECONDARY TN CHANGES).
		PROCESSING TIMEOUT	6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS -----		THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED.
		NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.

X0.10.0 MESSAGE SUMMARY

PURPOSE

THE FILTER SETTINGS REQUEST MESSAGE IS USED TO REQUEST CURRENT FILTER SETTINGS OF ANOTHER JRE PROCESSOR.

DATA ELEMENT SUMMARY

<u>X0.10.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 4	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 7	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
GEOGRAPHIC FILTER INDEX	5
TYPE FILTER	1
GEOGRAPHIC FILTER	1
ALL FILTERS	1
FILTER MESSAGE TYPE	8
LINK DESIGNATOR	16
SPARE	8
REQUESTED FILTER MESSAGE TYPE	8

MESSAGE TITLE: REMOTE FILTER (FILTER SETTINGS REQUEST)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:				
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT		:											:	
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 4				:	VERSION		:	MANAGEMENT MESSAGE SUBTYPE										:	
:																:					:			:											:	
:	16															:	4				:	4		:	8										:	
:																																				
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:				
:																:											:	NUMBER DESTINATION ADDRESSES,							:	
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NON-ZERO							:	
:																:											:								:	
:	16															:	8										:	8							:	
:																																				
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:				
:									:									:									:									:
:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 7								:
:									:									:									:									:
:	8								:	8								:	8								:	8								:
:																																				
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:				
:																:																		:		
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:		
:																:																		:		
:	16															:	16																	:		

MESSAGE MAP

MESSAGE NUMBER: X0.10.0

MESSAGE TITLE: REMOTE FILTER (FILTER SETTINGS REQUEST)

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136:135:134:133:132 131 130 129 128:																																					
:															:											:	ALL:GEO:TYP:	GEOGRAPHIC				:					
:	LINK DESIGNATOR														:	FILTER MESSAGE TYPE										:	FLT:FLT:FLT:	FILTER INDEX				:					
:															:											:	:	:	:					:			
:	16														:	8										:	1	:	1	:	1	:	5				:

:175 174 173 172 171 170 169 168:167 166 165 164 163 162 161 160:																		
:	REQUESTED FILTER MESSAGE										:							:
:	TYPE										:	SPARE						:
:											:							:
:	8										:	8						:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.0

MESSAGE TITLE: REMOTE FILTER (FILTER SETTINGS REQUEST)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 004		ACKNOWLEDGEMENT PROTOCOL, 4 (AP4)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 007		CONTROL/RESPONSE INDICATOR, 7 (CR7)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3031 001		GEOGRAPHIC FILTER INDEX	128-	132 5	
3002 017		TYPE FILTER (TYP FLT)	133	1	
3002 018		GEOGRAPHIC FILTER (GEO FLT)	134	1	
3002 019		ALL FILTERS (ALL FLT)	135	1	
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00000000
3021 002		LINK DESIGNATOR	144-	159 16	
3099 008		SPARE (SP)	160-	167 8	
3008 004		REQUESTED FILTER MESSAGE TYPE	168-	175 8	

FIELD CODING FOR X0.10.0 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	004	ACKNOWLEDGEMENT PROTOCOL, 4 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		ILLEGAL	0	
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	007	CONTROL/RESPONSE INDICATOR, 7 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		QUERY	0	USED TO REQUEST INFORMATION FROM A

FIELD CODING FOR X0.10.0

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	007	CONTROL/RESPONSE INDICATOR, 7 -----	(CONTINUED)	
		ILLEGAL	1 THROUGH 2	JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 133	RESERVED FOR ADDITIONAL
		RESERVED	134 THROUGH 191	PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	RESERVED FOR ADDITIONAL OPERATOR
		UNDEFINED	198 THROUGH 255	RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT
		NO ERROR	0	OCCURS WHEN A JRE PROCESSOR
		ILLEGAL	1 THROUGH 6	RECEIVES AND PROCESSES A
		COMMON UNUSED	7 THROUGH 31	MANAGEMENT MESSAGE.
				INDICATES NO ERROR CONDITION.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	RESERVED FOR FUTURE USE FOR ERROR
				CODES THAT ARE COMMON TO ALL
				MANAGEMENT MESSAGE SUBTYPES.
				VALUES AVAILABLE FOR DEFINITION AND
				USE BY A SPECIFIC MANAGEMENT
				MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE
		NUMERIC	0 THROUGH 255	FRAGMENTS.
				THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT
		NO FRAGMENTS	0	COMPRISE THE COMPLETE FRAGMENTED
		ILLEGAL	1	MESSAGE.
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE
		NUMERIC	0	MANAGEMENT MESSAGE BEING RESPONDED
				TO.
				SET TO 0 IN ORIGINAL (NON-RESPONSE)
				MESSAGES OR RESPONDING TO A
				MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE
				ORIGINAL MESSAGE BEING RESPONDED

FIELD CODING FOR X0.10.0				(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----	(CONTINUED)	TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3031	001	GEOGRAPHIC FILTER INDEX ----- INDEX NUMBER OF FILTER	0 THROUGH 31	INDICATES THE INDEX NUMBER OF A GEOGRAPHIC FILTER.
3002	017	TYPE FILTER ----- NOT SPECIFIED REQUEST TRANSMIT FILTER SETTINGS OF SPECIFIED TYPE(S)	0 1	INDICATES A REQUEST FOR THE CURRENT SETTINGS FOR ALL FILTERS OF THE SPECIFIED TYPE.
3002	018	GEOGRAPHIC FILTER ----- NO REQUEST REQUEST TRANSMIT SETTINGS OF ALL GEOGRAPHIC FILTERS	0 1	INDICATES A REQUEST FOR THE CURRENT SETTINGS FOR ALL GEOGRAPHIC FILTERS.
3002	019	ALL FILTERS ----- NO REQUEST REQUEST TRANSMIT SETTINGS OF ALL FILTERS	0 1	INDICATES A REQUEST FOR THE CURRENT SETTINGS FOR ALL FILTERS.
3021	002	LINK DESIGNATOR ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR FOR EACH OF A JRE PROCESSOR'S CAPABLE JRE LINKS OR TDL NETWORKS. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.

		FIELD CODING FOR X0.10.0		(SHEET 4)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3008	004	REQUESTED FILTER MESSAGE TYPE -----		THE TYPE OF THE FILTER THAT IS BEING REQUESTED.
		ALL FILTER TYPES	0	USED TO REQUEST CURRENT FILTER SETTINGS (ALL TYPES) FROM A REMOTE JRE PROCESSOR.
		FILTER SETTINGS SUMMARY	1	PROVIDE AN OVERALL SUMMARY OF THE CURRENT SETTINGS (ALL FILTERS) OF THE ORIGINATING JRE PROCESSOR.
		CATEGORY/IDENTITY FILTER	2	FILTER SETTINGS APPLIED TO PPLI AND SURVEILLANCE MESSAGES.
		LABEL/SUBLABEL FILTER	3	REPRESENTS THE FILTER SETTINGS APPLIED TO ALL LINK 16 MESSAGES, BASED UPON MESSAGE TYPE, AS SPECIFIED IN THE LABEL/SUBLABEL FIELDS OF THE LINK 16 MESSAGE.
		POINT TYPE/POINT AMPLIFICATION FILTER	4	ALLOWS A FILTER TO BE SPECIFIED BASED UPON POINT TYPE AND POINT AMPLIFICATION FIELDS IN J3.0 REFERENCE POINT MESSAGES.
		ELLIPSE-RECTANGLE GEOGRAPHIC FILTER	5	USED TO SPECIFY AN ELLIPSE (OR CIRCLE) OR RECTANGLE (OR SQUARE) TO BE USED AS A FILTER.
		CLOSED POLYGON GEOGRAPHIC FILTER	6	USED TO SPECIFY AN AREA DEFINED BY 3 - 15 POINTS TO BE USED AS A FILTER.
		SOURCE TRACK NUMBER FILTER	7	CONTAINS ONE OR A SERIES OF STNS THAT ARE TO BE FILTERED. ALL MESSAGES FROM THESE STNS, INCLUDING THE PPLI OF THE SOURCE, SHALL BE FILTERED FROM TRANSMISSION ON THE INTERFACE LINK.
		SPECIAL PROCESSING INDICATOR FILTER	8	CONTAINS A FLAG THAT IS SET IF SPI MESSAGES ARE TO BE FILTERED.
		J28.2(X) FILTER	9	CONTROLS THE FILTERING OF J28.2(0) MESSAGES AND J28.2 MESSAGES THAT ARE NOT THE J28.2(0).
		DATA AGE FILTER	10	CONTROLS THE FILTERING OF MESSAGES THAT HAVE LATENCIES WITHIN THE JRE FORWARDING PROCESS GREATER THAN A SPECIFIED AMOUNT OF TIME, AS MEASURED BY THE DATA AGE OF THE MESSAGE.

FIELD CODING FOR X0.10.0				(SHEET 5)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3008	004	REQUESTED FILTER MESSAGE TYPE	(CONTINUED)	

		SIMULATION FILTER	11	CONTAINS A FLAG THAT IS SET IF SIMULATION MESSAGES ARE TO BE FILTERED.
		J3.6 ROCKET FILTER	12	USED TO FILTER THE REPORTING OF SPACE SPECIFIC TYPE J3.6 DFI 749/DUI 002 VALUES 2043 AND 2044 MEDIUM AND LONG RANGE ROCKETS FROM TRANSMISSION.
		NATIONAL USE SUB-SUBLABEL FILTER	13	USED TO FILTER THE REPORTING OF NATIONAL USE MESSAGES BY SUB-SUBLABEL.
		UNDEFINED	14 THROUGH 255	

X0.10.1 MESSAGE SUMMARY

PURPOSE

THE FILTER SETTINGS SUMMARY MESSAGE IS USED TO PROVIDE AN OVERALL SUMMARY OF THE CURRENT SETTINGS OF THE ORIGINATING JRE PROCESSOR.

DATA ELEMENT SUMMARY

<u>X0.10.1</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 4	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 8	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	8
FILTER MESSAGE TYPE	8
LINK DESIGNATOR	16
SPARE	3
GEOGRAPHIC FILTER INDEX	5
FILTER MESSAGE TYPE	8

MESSAGE TITLE: REMOTE FILTER (FILTER SETTINGS SUMMARY)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:														
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:							
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 4				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:							
:																:					:					:													:							
:	16															:	4				:	4				:	8												:							
:																																	:													
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:														
:																:													:	NUMBER DESTINATION ADDRESSES,																:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NON-ZERO																:
:																:													:																	:
:	16															:	8												:	8																:
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:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:														
:									:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 8																:		
:	TOTAL NUMBER FRAGMENTS								:									:									:																	:		
:									:									:									:																	:		
:	8								:									:	8								:	8																:		
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:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:														
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:												
:																:																		:												
:	16															:	16																	:												

MESSAGE MAP

MESSAGE NUMBER: X0.10.1
MESSAGE TITLE: REMOTE FILTER (FILTER SETTINGS SUMMARY)

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:																:143 142 141 140 139 138 137 136:135 134 133 132 131 130 129 128:															
:																:	:														:
:	LINK DESIGNATOR															:	:	FILTER MESSAGE TYPE													:
:																:	:	SPARE													:
:	16															:	:	8													:

:175 174 173 172 171 170 169 168:167 166 165 164 163:162 161 160:																																	
:																:	GEOGRAPHIC FILTER													:			
:	FILTER MESSAGE TYPE															:	INDEX													:	SPARE		:
:																:														:			:
:	8															:	5													:	3		:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.1

MESSAGE TITLE: REMOTE FILTER (FILTER SETTINGS SUMMARY)

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR	POSITION	BITS		RESOLUTION, CODING, ETC
3008 002	MANAGEMENT MESSAGE SUBTYPE	0-	7	8	00001010
3044 001	MANAGEMENT VERSION	8-	11	4	0000
3006 004	ACKNOWLEDGEMENT PROTOCOL, 4 (AP4)	12-	15	4	
3012 003	MANAGEMENT MESSAGE LENGTH (MML)	16-	31	16	
3017 003	NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39	8	
3029 001	COMPLETION TIMEOUT	40-	47	8	
3032 001	MESSAGE SEQUENCE NUMBER	48-	63	16	
3020 008	CONTROL/RESPONSE INDICATOR, 8 (CR8)	64-	71	8	
3034 001	ERROR CODE, 1 (EC1)	72-	79	8	
3033 002	FRAGMENT NUMBER	80-	87	8	
3033 003	TOTAL NUMBER FRAGMENTS	88-	95	8	
3032 002	ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111	16	
3036 020	DESTINATION ADDRESS (DA)	112-	127	16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 008	SPARE (SP)	128-	135	8	
3008 003	FILTER MESSAGE TYPE (FMT)	136-	143	8	00000001
3021 002	LINK DESIGNATOR	144-	159	16	
3099 003	SPARE (SP)	160-	162	3	REPEAT THESE FIELDS (BITS 160 - 175) IN SEQUENCE FOR EACH FILTER BEING REPORTED.
3031 001	GEOGRAPHIC FILTER INDEX	163-	167	5	REPEAT THESE FIELDS (BITS 160 - 175) IN SEQUENCE FOR EACH FILTER BEING REPORTED. FOR FILTER MESSAGE TYPES OTHER THAN 5 OR 6, SET TO ZERO AND DO NOT INTERPRET.
3008 003	FILTER MESSAGE TYPE (FMT)	168-	175	8	REPEAT THESE FIELDS (BITS 160 - 175) IN SEQUENCE FOR EACH FILTER BEING REPORTED.

		FIELD CODING FOR X0.10.1		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	004	ACKNOWLEDGEMENT PROTOCOL, 4 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		ILLEGAL	0	
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	008	CONTROL/RESPONSE INDICATOR, 8 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0 THROUGH 2	

FIELD CODING FOR X0.10.1

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	008	CONTROL/RESPONSE INDICATOR, 8 -----	(CONTINUED)	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL REPORT	128 THROUGH 130 131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL RESERVED	132 THROUGH 133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE

FIELD CODING FOR X0.10.1				(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----	(CONTINUED)	
				ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3021	002	LINK DESIGNATOR ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR FOR EACH OF A JRE PROCESSOR'S CAPABLE JRE LINKS OR TDL NETWORKS. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3031	001	GEOGRAPHIC FILTER INDEX ----- INDEX NUMBER OF FILTER	0 THROUGH 31	INDICATES THE INDEX NUMBER OF A GEOGRAPHIC FILTER.
3008	003	FILTER MESSAGE TYPE ----- ALL FILTER TYPES FILTER SETTINGS SUMMARY CATEGORY/IDENTITY FILTER LABEL/SUBLABEL FILTER POINT TYPE/POINT AMPLIFICATION FILTER	0 1 2 3 4	FILTER MESSAGE TYPES SUPPORTED BY THE JRE PROCESSOR AND THE REMOTE FILTER MESSAGE. USED TO REQUEST CURRENT FILTER SETTINGS (ALL TYPES) FROM A REMOTE JRE PROCESSOR. PROVIDE AN OVERALL SUMMARY OF THE CURRENT SETTINGS (ALL FILTERS) OF THE ORIGINATING JRE PROCESSOR. FILTER SETTINGS APPLIED TO PPLI AND SURVEILLANCE MESSAGES. REPRESENTS THE FILTER SETTINGS APPLIED TO ALL LINK 16 MESSAGES, BASED UPON MESSAGE TYPE, AS SPECIFIED IN THE LABEL/SUBLABEL FIELDS OF THE LINK 16 MESSAGE. ALLOWS A FILTER TO BE SPECIFIED BASED UPON POINT TYPE AND POINT AMPLIFICATION FIELDS IN J3.0 REFERENCE POINT MESSAGES.

		FIELD CODING FOR X0.10.1		(SHEET 4)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3008	003	FILTER MESSAGE TYPE -----	(CONTINUED)	
		ELLIPSE-RECTANGLE GEOGRAPHIC FILTER	5	USED TO SPECIFY AN ELLIPSE (OR CIRCLE) OR RECTANGLE (OR SQUARE) TO BE USED AS A FILTER.
		CLOSED POLYGON GEOGRAPHIC FILTER	6	USED TO SPECIFY AN AREA DEFINED BY 3 - 15 POINTS TO BE USED AS A FILTER.
		SOURCE TRACK NUMBER FILTER	7	CONTAINS ONE OR A SERIES OF STNS THAT ARE TO BE FILTERED. ALL MESSAGES FROM THESE STNS, INCLUDING THE PPLI OF THE SOURCE, SHALL BE FILTERED FROM TRANSMISSION ON THE INTERFACE LINK.
		SPECIAL PROCESSING INDICATOR FILTER	8	CONTAINS A FLAG THAT IS SET IF SPI MESSAGES ARE TO BE FILTERED.
		J28.2(X) FILTER	9	CONTROLS THE FILTERING OF J28.2(0) MESSAGES AND J28.2 MESSAGES THAT ARE NOT THE J28.2(0).
		DATA AGE FILTER	10	CONTROLS THE FILTERING OF MESSAGES THAT HAVE LATENCIES WITHIN THE JRE FORWARDING PROCESS GREATER THAN A SPECIFIED AMOUNT OF TIME, AS MEASURED BY THE DATA AGE OF THE MESSAGE.
		SIMULATION FILTER	11	CONTAINS A FLAG THAT IS SET IF SIMULATION MESSAGES ARE TO BE FILTERED.
		J3.6 ROCKET FILTER	12	USED TO FILTER THE REPORTING OF SPACE SPECIFIC TYPE J3.6 DFI 749/DUI 002 VALUES 2043 AND 2044 MEDIUM AND LONG RANGE ROCKETS FROM TRANSMISSION.
		NATIONAL USE SUB-SUBLABEL FILTER	13	USED TO FILTER THE REPORTING OF NATIONAL USE MESSAGES BY SUB-SUBLABEL.
		UNDEFINED	14 THROUGH 255	

X0.10.2 MESSAGE SUMMARY

PURPOSE

THE CATEGORY/IDENTITY FILTER MESSAGE IS USED TO DIRECT OR REPORT THE FILTER SETTINGS APPLIED TO PPLI AND SURVEILLANCE MESSAGES.

DATA ELEMENT SUMMARY

<u>X0.10.2</u>		<u>X0.10.2 (Continued)</u>	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8	J3.7 AND J14.0 EW PRODUCT	1
MANAGEMENT VERSION	4	INFORMATION, 2	
ACKNOWLEDGEMENT PROTOCOL, 3	4	SPARE	2
MANAGEMENT MESSAGE LENGTH	16	J3.2 AIR, 3	1
NUMBER DESTINATION ADDRESSES,	8	J3.3 SURFACE, 3	1
NON-ZERO		J3.4 AND J5.4 SUBSURFACE, 3	1
COMPLETION TIMEOUT	8	J3.5 LAND/GROUND, 3	1
MESSAGE SEQUENCE NUMBER	16	J3.6 SPACE, 3	1
CONTROL/RESPONSE INDICATOR, 9	8	J3.7 AND J14.0 EW PRODUCT	1
ERROR CODE, 1	8	INFORMATION, 3	
FRAGMENT NUMBER	8	SPARE	2
TOTAL NUMBER FRAGMENTS	8	J3.2 AIR, 4	1
ORIGINATING MESSAGE SEQUENCE	16	J3.3 SURFACE, 4	1
NUMBER		J3.4 AND J5.4 SUBSURFACE, 4	1
DESTINATION ADDRESS	16	J3.5 LAND/GROUND, 4	1
SPARE	5	J3.6 SPACE, 4	1
COMMAND AND CONTROL INDICATOR	1	J3.7 AND J14.0 EW PRODUCT	1
OVERRIDE		INFORMATION, 4	
EMERGENCY INDICATOR OVERRIDE	1	SPARE	2
FORCE TELL INDICATOR OVERRIDE	1	J3.2 AIR, 5	1
FILTER MESSAGE TYPE	8	J3.3 SURFACE, 5	1
LINK DESIGNATOR TO FILTER	16	J3.4 AND J5.4 SUBSURFACE, 5	1
SPARE	2	J3.5 LAND/GROUND, 5	1
J3.2 AIR, 0	1	J3.6 SPACE, 5	1
J3.3 SURFACE, 0	1	J3.7 AND J14.0 EW PRODUCT	1
J3.4 AND J5.4 SUBSURFACE, 0	1	INFORMATION, 5	
J3.5 LAND/GROUND, 0	1	SPARE	2
J3.6 SPACE, 0	1	J3.2 AIR, 6	1
J3.7 AND J14.0 EW PRODUCT	1	J3.3 SURFACE, 6	1
INFORMATION, 0		J3.4 AND J5.4 SUBSURFACE, 6	1
SPARE	2	J3.5 LAND/GROUND, 6	1
J3.2 AIR, 1	1	J3.6 SPACE, 6	1
J3.3 SURFACE, 1	1	J3.7 AND J14.0 EW PRODUCT	1
J3.4 AND J5.4 SUBSURFACE, 1	1	INFORMATION, 6	
J3.5 LAND/GROUND, 1	1	SPARE	2
J3.6 SPACE, 1	1	J2.2 AND J2.0 AIR	1
J3.7 AND J14.0 EW PRODUCT	1	J2.3 AND J2.0 SURFACE	1
INFORMATION, 1		J2.4 AND J2.0 SUBSURFACE	1
SPARE	2	J2.5, J2.6 AND J2.0 LAND	1
J3.2 AIR, 2	1	SPARE	2
J3.3 SURFACE, 2	1		
J3.4 AND J5.4 SUBSURFACE, 2	1		
J3.5 LAND/GROUND, 2	1		
J3.6 SPACE, 2	1		

MESSAGE TITLE: REMOTE FILTER (CATEGORY IDENTITY FILTER)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:					
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:					:						
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE				:						
:																:					:					:					:						
:	16															:	4				:	4				:	8				:						
:																																					
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:					
:																:																:	NUMBER DESTINATION ADDRESSES,				:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT															:	NON-ZERO				:
:																:																:					:
:	16															:	8															:	8				:
:																																					
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:					
:									:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 9								:	
:	TOTAL NUMBER FRAGMENTS								:									:									:									:	
:									:									:									:									:	
:	8								:	8								:	8								:	8								:	
:																																					
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:					
:																:																		:			
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:			
:																:																		:			
:	16															:	16																	:			

MESSAGE MAP

MESSAGE NUMBER: X0.10.2

MESSAGE TITLE: REMOTE FILTER (CATEGORY IDENTITY FILTER)

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136:135:134:133:132 131 130 129 128:																																																												
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:191:190:189:188:187:186:185:184:183:182:181:180:179:178:177:176:175:174:173:172:171:170:169:168:167:166:165:164:163:162:161:160:																																																												
:J37:J36:J35:J34:J33:J32:										:J37:J36:J35:J34:J33:J32:										:J37:J36:J35:J34:J33:J32:										:J37:J36:J35:J34:J33:J32:										:																				
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:223:222:221:220:219:218:217:216:215:214:213:212:211:210:209:208:207:206:205:204:203:202:201:200:199:198:197:196:195:194:193:192:																																																												
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: SP :J25:J24:J23:J22: SP										: 6 : 6 : 6 : 6 : 6 : 6 : SP										: 5 : 5 : 5 : 5 : 5 : 5 : SP										: 4 : 4 : 4 : 4 : 4 : 4 : SP										:																				
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MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.2

MESSAGE TITLE: REMOTE FILTER (CATEGORY IDENTITY FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 005		SPARE (SP)	128-	132 5	
3002 004		COMMAND AND CONTROL INDICATOR OVERRIDE (CC OVR)	133	1	
3002 005		EMERGENCY INDICATOR OVERRIDE (EMG OVR)	134	1	SAME CODING AS FOR BIT 133.
3002 006		FORCE TELL INDICATOR OVERRIDE (FTI OVR)	135	1	SAME CODING AS FOR BIT 133.
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00000010
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3099 002		SPARE (SP)	160-	161 2	
3080 003		J3.2 AIR, 0 (J32 0)	162	1	
3080 004		J3.3 SURFACE, 0 (J33 0)	163	1	SAME CODING AS FOR BIT 162.
3080 005		J3.4 AND J5.4 SUBSURFACE, 0 (J34 0)	164	1	SAME CODING AS FOR BIT 162.
3080 006		J3.5 LAND/GROUND, 0 (J35 0)	165	1	SAME CODING AS FOR BIT 162.
3080 007		J3.6 SPACE, 0 (J36 0)	166	1	SAME CODING AS FOR BIT 162.
3080 008		J3.7 AND J14.0 EW PRODUCT INFORMATION, 0 (J37 0)	167	1	SAME CODING AS FOR BIT 162.
3099 002		SPARE (SP)	168-	169 2	

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.2

MESSAGE TITLE: REMOTE FILTER (CATEGORY IDENTITY FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3081 003	J3.2	AIR, 1 (J32 1)	170	1	
3081 004	J3.3	SURFACE, 1 (J33 1)	171	1	SAME CODING AS FOR BIT 170.
3081 005	J3.4	AND J5.4 SUBSURFACE, 1 (J34 1)	172	1	SAME CODING AS FOR BIT 170.
3081 006	J3.5	LAND/GROUND, 1 (J35 1)	173	1	SAME CODING AS FOR BIT 170.
3081 007	J3.6	SPACE, 1 (J36 1)	174	1	SAME CODING AS FOR BIT 170.
3081 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 1 (J37 1)	175	1	SAME CODING AS FOR BIT 170.
3099 002	SPARE	(SP)	176-177	2	
3082 003	J3.2	AIR, 2 (J32 2)	178	1	
3082 004	J3.3	SURFACE, 2 (J33 2)	179	1	SAME CODING AS FOR BIT 178.
3082 005	J3.4	AND J5.4 SUBSURFACE, 2 (J34 2)	180	1	SAME CODING AS FOR BIT 178.
3082 006	J3.5	LAND/GROUND, 2 (J35 2)	181	1	SAME CODING AS FOR BIT 178.
3082 007	J3.6	SPACE, 2 (J36 2)	182	1	SAME CODING AS FOR BIT 178.
3082 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 2 (J37 2)	183	1	SAME CODING AS FOR BIT 178.
3099 002	SPARE	(SP)	184-185	2	
3083 003	J3.2	AIR, 3 (J32 3)	186	1	
3083 004	J3.3	SURFACE, 3 (J33 3)	187	1	SAME CODING AS FOR BIT 186.
3083 005	J3.4	AND J5.4 SUBSURFACE, 3 (J34 3)	188	1	SAME CODING AS FOR BIT 186.
3083 006	J3.5	LAND/GROUND, 3 (J35 3)	189	1	SAME CODING AS FOR BIT 186.
3083 007	J3.6	SPACE, 3 (J36 3)	190	1	SAME CODING AS FOR BIT 186.
3083 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 3 (J37 3)	191	1	SAME CODING AS FOR BIT 186.
3099 002	SPARE	(SP)	192-193	2	
3084 003	J3.2	AIR, 4 (J32 4)	194	1	
3084 004	J3.3	SURFACE, 4 (J33 4)	195	1	SAME CODING AS FOR BIT 194.
3084 005	J3.4	AND J5.4 SUBSURFACE, 4 (J34 4)	196	1	SAME CODING AS FOR BIT 194.
3084 006	J3.5	LAND/GROUND, 4 (J35 4)	197	1	SAME CODING AS FOR BIT 194.
3084 007	J3.6	SPACE, 4 (J36 4)	198	1	SAME CODING AS FOR BIT 194.
3084 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 4 (J37 4)	199	1	SAME CODING AS FOR BIT 194.
3099 002	SPARE	(SP)	200-201	2	
3085 003	J3.2	AIR, 5 (J32 5)	202	1	
3085 004	J3.3	SURFACE, 5 (J33 5)	203	1	SAME CODING AS FOR BIT 202.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.2

MESSAGE TITLE: REMOTE FILTER (CATEGORY IDENTITY FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3085 005	J3.4 AND J5.4	SUBSURFACE, 5 (J34 5)	204	1	SAME CODING AS FOR BIT 202.
3085 006	J3.5	LAND/GROUND, 5 (J35 5)	205	1	SAME CODING AS FOR BIT 202.
3085 007	J3.6	SPACE, 5 (J36 5)	206	1	SAME CODING AS FOR BIT 202.
3085 008	J3.7 AND J14.0	EW PRODUCT INFORMATION, 5 (J37 5)	207	1	SAME CODING AS FOR BIT 202.
3099 002	SPARE (SP)		208-209	2	
3086 003	J3.2	AIR, 6 (J32 6)	210	1	
3086 004	J3.3	SURFACE, 6 (J33 6)	211	1	SAME CODING AS FOR BIT 210.
3086 005	J3.4 AND J5.4	SUBSURFACE, 6 (J34 6)	212	1	SAME CODING AS FOR BIT 210.
3086 006	J3.5	LAND/GROUND, 6 (J35 6)	213	1	SAME CODING AS FOR BIT 210.
3086 007	J3.6	SPACE, 6 (J36 6)	214	1	SAME CODING AS FOR BIT 210.
3086 008	J3.7 AND J14.0	EW PRODUCT INFORMATION, 6 (J37 6)	215	1	SAME CODING AS FOR BIT 210.
3099 002	SPARE (SP)		216-217	2	
3087 003	J2.2 AND J2.0	AIR (J22)	218	1	
3087 004	J2.3 AND J2.0	SURFACE (J23)	219	1	SAME CODING AS FOR BIT 218.
3087 005	J2.4 AND J2.0	SUBSURFACE (J24)	220	1	SAME CODING AS FOR BIT 218.
3087 006	J2.5, J2.6 AND J2.0	LAND (J25)	221	1	SAME CODING AS FOR BIT 218.
3099 002	SPARE (SP)		222-223	2	

		FIELD CODING FOR X0.10.2		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.2

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

FIELD CODING FOR X0.10.2 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3002	004	COMMAND AND CONTROL INDICATOR OVERRIDE ----- FILTER OVERRIDE FILTER	0 1	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3080	003	J3.2 AIR, 0 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3081	003	J3.2 AIR, 1 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY

			FIELD CODING FOR X0.10.2	(SHEET 4)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3082	003	J3.2 AIR, 2 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3083	003	J3.2 AIR, 3 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3084	003	J3.2 AIR, 4 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3085	003	J3.2 AIR, 5 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3086	003	J3.2 AIR, 6 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3087	003	J2.2 AND J2.0 AIR ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY

X0.10.3 MESSAGE SUMMARY

PURPOSE

THE LABEL/SUBLABEL FILTER MESSAGE IS USED TO DIRECT OR REPORT THE FILTER SETTINGS APPLIED TO ALL LINK 16 MESSAGES, BASED UPON MESSAGE TYPE, AS SPECIFIED IN THE LABEL/SUBLABEL FIELDS OF THE LINK 16 MESSAGE.

DATA ELEMENT SUMMARY

<u>X0.10.3</u>		<u>X0.10.3 (Continued)</u>	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8	SUBLABEL 5, 2	1
MANAGEMENT VERSION	4	SUBLABEL 6, 2	1
ACKNOWLEDGEMENT PROTOCOL, 3	4	SUBLABEL 7, 2	1
MANAGEMENT MESSAGE LENGTH	16	SUBLABEL 0, 3	1
NUMBER DESTINATION ADDRESSES, NON-ZERO	8	SUBLABEL 1, 3	1
COMPLETION TIMEOUT	8	SUBLABEL 2, 3	1
MESSAGE SEQUENCE NUMBER	16	SUBLABEL 3, 3	1
CONTROL/RESPONSE INDICATOR, 9	8	SUBLABEL 4, 3	1
ERROR CODE, 1	8	SUBLABEL 5, 3	1
FRAGMENT NUMBER	8	SUBLABEL 6, 3	1
TOTAL NUMBER FRAGMENTS	8	SUBLABEL 7, 3	1
ORIGINATING MESSAGE SEQUENCE NUMBER	16	SUBLABEL 0, 4	1
DESTINATION ADDRESS	16	SUBLABEL 1, 4	1
SPARE	5	SUBLABEL 2, 4	1
COMMAND AND CONTROL INDICATOR OVERRIDE	1	SUBLABEL 3, 4	1
EMERGENCY INDICATOR OVERRIDE	1	SUBLABEL 4, 4	1
FORCE TELL INDICATOR OVERRIDE	1	SUBLABEL 5, 4	1
FILTER MESSAGE TYPE	8	SUBLABEL 6, 4	1
LINK DESIGNATOR TO FILTER	16	SUBLABEL 7, 4	1
SUBLABEL 0, 0	1	SUBLABEL 0, 5	1
SUBLABEL 1, 0	1	SUBLABEL 1, 5	1
SUBLABEL 2, 0	1	SUBLABEL 2, 5	1
SUBLABEL 3, 0	1	SUBLABEL 3, 5	1
SUBLABEL 4, 0	1	SUBLABEL 4, 5	1
SUBLABEL 5, 0	1	SUBLABEL 5, 5	1
SUBLABEL 6, 0	1	SUBLABEL 6, 5	1
SUBLABEL 7, 0	1	SUBLABEL 7, 5	1
SUBLABEL 0, 1	1	SUBLABEL 0, 6	1
SUBLABEL 1, 1	1	SUBLABEL 1, 6	1
SUBLABEL 2, 1	1	SUBLABEL 2, 6	1
SUBLABEL 3, 1	1	SUBLABEL 3, 6	1
SUBLABEL 4, 1	1	SUBLABEL 4, 6	1
SUBLABEL 5, 1	1	SUBLABEL 5, 6	1
SUBLABEL 6, 1	1	SUBLABEL 6, 6	1
SUBLABEL 7, 1	1	SUBLABEL 7, 6	1
SUBLABEL 0, 2	1	SUBLABEL 0, 7	1
SUBLABEL 1, 2	1	SUBLABEL 1, 7	1
SUBLABEL 2, 2	1	SUBLABEL 2, 7	1
SUBLABEL 3, 2	1	SUBLABEL 3, 7	1
SUBLABEL 4, 2	1	SUBLABEL 4, 7	1
		SUBLABEL 5, 7	1
		SUBLABEL 6, 7	1
		SUBLABEL 7, 7	1

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X0.10.3 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

X0.10.3 (Continued)		X0.10.3 (Continued)	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
SUBLABEL 0, 8	1	SUBLABEL 1, 14	1
SUBLABEL 1, 8	1	SUBLABEL 2, 14	1
SUBLABEL 2, 8	1	SUBLABEL 3, 14	1
SUBLABEL 3, 8	1	SUBLABEL 4, 14	1
SUBLABEL 4, 8	1	SUBLABEL 5, 14	1
SUBLABEL 5, 8	1	SUBLABEL 6, 14	1
SUBLABEL 6, 8	1	SUBLABEL 7, 14	1
SUBLABEL 7, 8	1	SUBLABEL 0, 15	1
SUBLABEL 0, 9	1	SUBLABEL 1, 15	1
SUBLABEL 1, 9	1	SUBLABEL 2, 15	1
SUBLABEL 2, 9	1	SUBLABEL 3, 15	1
SUBLABEL 3, 9	1	SUBLABEL 4, 15	1
SUBLABEL 4, 9	1	SUBLABEL 5, 15	1
SUBLABEL 5, 9	1	SUBLABEL 6, 15	1
SUBLABEL 6, 9	1	SUBLABEL 7, 15	1
SUBLABEL 7, 9	1	SUBLABEL 0, 16	1
SUBLABEL 0, 10	1	SUBLABEL 1, 16	1
SUBLABEL 1, 10	1	SUBLABEL 2, 16	1
SUBLABEL 2, 10	1	SUBLABEL 3, 16	1
SUBLABEL 3, 10	1	SUBLABEL 4, 16	1
SUBLABEL 4, 10	1	SUBLABEL 5, 16	1
SUBLABEL 5, 10	1	SUBLABEL 6, 16	1
SUBLABEL 6, 10	1	SUBLABEL 7, 16	1
SUBLABEL 7, 10	1	SUBLABEL 0, 17	1
SUBLABEL 0, 11	1	SUBLABEL 1, 17	1
SUBLABEL 1, 11	1	SUBLABEL 2, 17	1
SUBLABEL 2, 11	1	SUBLABEL 3, 17	1
SUBLABEL 3, 11	1	SUBLABEL 4, 17	1
SUBLABEL 4, 11	1	SUBLABEL 5, 17	1
SUBLABEL 5, 11	1	SUBLABEL 6, 17	1
SUBLABEL 6, 11	1	SUBLABEL 7, 17	1
SUBLABEL 7, 11	1	SUBLABEL 0, 18	1
SUBLABEL 0, 12	1	SUBLABEL 1, 18	1
SUBLABEL 1, 12	1	SUBLABEL 2, 18	1
SUBLABEL 2, 12	1	SUBLABEL 3, 18	1
SUBLABEL 3, 12	1	SUBLABEL 4, 18	1
SUBLABEL 4, 12	1	SUBLABEL 5, 18	1
SUBLABEL 5, 12	1	SUBLABEL 6, 18	1
SUBLABEL 6, 12	1	SUBLABEL 7, 18	1
SUBLABEL 7, 12	1	SUBLABEL 0, 19	1
SUBLABEL 0, 13	1	SUBLABEL 1, 19	1
SUBLABEL 1, 13	1	SUBLABEL 2, 19	1
SUBLABEL 2, 13	1	SUBLABEL 3, 19	1
SUBLABEL 3, 13	1	SUBLABEL 4, 19	1
SUBLABEL 4, 13	1	SUBLABEL 5, 19	1
SUBLABEL 5, 13	1	SUBLABEL 6, 19	1
SUBLABEL 6, 13	1	SUBLABEL 7, 19	1
SUBLABEL 7, 13	1	SUBLABEL 0, 20	1
SUBLABEL 0, 14	1	SUBLABEL 1, 20	1

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X0.10.3 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

X0.10.3 (Continued)		X0.10.3 (Continued)	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
SUBLABEL 2, 20	1	SUBLABEL 3, 26	1
SUBLABEL 3, 20	1	SUBLABEL 4, 26	1
SUBLABEL 4, 20	1	SUBLABEL 5, 26	1
SUBLABEL 5, 20	1	SUBLABEL 6, 26	1
SUBLABEL 6, 20	1	SUBLABEL 7, 26	1
SUBLABEL 7, 20	1	SUBLABEL 0, 27	1
SUBLABEL 0, 21	1	SUBLABEL 1, 27	1
SUBLABEL 1, 21	1	SUBLABEL 2, 27	1
SUBLABEL 2, 21	1	SUBLABEL 3, 27	1
SUBLABEL 3, 21	1	SUBLABEL 4, 27	1
SUBLABEL 4, 21	1	SUBLABEL 5, 27	1
SUBLABEL 5, 21	1	SUBLABEL 6, 27	1
SUBLABEL 6, 21	1	SUBLABEL 7, 27	1
SUBLABEL 7, 21	1	SUBLABEL 0, 28	1
SUBLABEL 0, 22	1	SUBLABEL 1, 28	1
SUBLABEL 1, 22	1	SUBLABEL 2, 28	1
SUBLABEL 2, 22	1	SUBLABEL 3, 28	1
SUBLABEL 3, 22	1	SUBLABEL 4, 28	1
SUBLABEL 4, 22	1	SUBLABEL 5, 28	1
SUBLABEL 5, 22	1	SUBLABEL 6, 28	1
SUBLABEL 6, 22	1	SUBLABEL 7, 28	1
SUBLABEL 7, 22	1	SUBLABEL 0, 29	1
SUBLABEL 0, 23	1	SUBLABEL 1, 29	1
SUBLABEL 1, 23	1	SUBLABEL 2, 29	1
SUBLABEL 2, 23	1	SUBLABEL 3, 29	1
SUBLABEL 3, 23	1	SUBLABEL 4, 29	1
SUBLABEL 4, 23	1	SUBLABEL 5, 29	1
SUBLABEL 5, 23	1	SUBLABEL 6, 29	1
SUBLABEL 6, 23	1	SUBLABEL 7, 29	1
SUBLABEL 7, 23	1	SUBLABEL 0, 30	1
SUBLABEL 0, 24	1	SUBLABEL 1, 30	1
SUBLABEL 1, 24	1	SUBLABEL 2, 30	1
SUBLABEL 2, 24	1	SUBLABEL 3, 30	1
SUBLABEL 3, 24	1	SUBLABEL 4, 30	1
SUBLABEL 4, 24	1	SUBLABEL 5, 30	1
SUBLABEL 5, 24	1	SUBLABEL 6, 30	1
SUBLABEL 6, 24	1	SUBLABEL 7, 30	1
SUBLABEL 7, 24	1	SUBLABEL 0, 31	1
SUBLABEL 0, 25	1	SUBLABEL 1, 31	1
SUBLABEL 1, 25	1	SUBLABEL 2, 31	1
SUBLABEL 2, 25	1	SUBLABEL 3, 31	1
SUBLABEL 3, 25	1	SUBLABEL 4, 31	1
SUBLABEL 4, 25	1	SUBLABEL 5, 31	1
SUBLABEL 5, 25	1	SUBLABEL 6, 31	1
SUBLABEL 6, 25	1	SUBLABEL 7, 31	1
SUBLABEL 7, 25	1		
SUBLABEL 0, 26	1		
SUBLABEL 1, 26	1		
SUBLABEL 2, 26	1		

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:														
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:							
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:							
:																:					:					:													:							
:	16															:	4				:	4				:	8												:							
:																																	:													
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:														
:																:													:	NUMBER DESTINATION ADDRESSES,																:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NON-ZERO																:
:																:													:																	:
:	16															:	8												:	8																:
:																																	:													
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:														
:									:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 9								:	
:									:									:									:									:										
:	8								:									:	8								:	8								:										
:																																	:													
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:														
:																:																		:												
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:												
:																:																		:												
:	16															:	16																	:												

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

[illegible][illegible][illegible]

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

[illegible]

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

[illegible]

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.3

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 005		SPARE (SP)	128-	132 5	
3002 004		COMMAND AND CONTROL INDICATOR OVERRIDE (CC OVR)	133	1	
3002 005		EMERGENCY INDICATOR OVERRIDE (EMG OVR)	134	1	SAME CODING AS FOR BIT 133.
3002 006		FORCE TELL INDICATOR OVERRIDE (FTI OVR)	135	1	SAME CODING AS FOR BIT 133.
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00000011
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3100 001		SUBLABEL 0, 0 (SL0 0)	160	1	
3100 002		SUBLABEL 1, 0 (SL1 0)	161	1	SAME CODING AS FOR BIT 160.
3100 003		SUBLABEL 2, 0 (SL2 0)	162	1	SAME CODING AS FOR BIT 160.
3100 004		SUBLABEL 3, 0 (SL3 0)	163	1	SAME CODING AS FOR BIT 160.
3100 005		SUBLABEL 4, 0 (SL4 0)	164	1	SAME CODING AS FOR BIT 160.
3100 006		SUBLABEL 5, 0 (SL5 0)	165	1	SAME CODING AS FOR BIT 160.
3100 007		SUBLABEL 6, 0 (SL6 0)	166	1	SAME CODING AS FOR BIT 160.
3100 008		SUBLABEL 7, 0 (SL7 0)	167	1	SAME CODING AS FOR BIT 160.
3101 001		SUBLABEL 0, 1 (SL0 1)	168	1	
3101 002		SUBLABEL 1, 1 (SL1 1)	169	1	SAME CODING AS FOR BIT 168.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.3

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

REFERENCE	DFI/DUI	DATA FIELD	DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3101 003	SUBLABEL	2, 1 (SL2 1)	170	1	SAME CODING AS FOR BIT 168.	
3101 004	SUBLABEL	3, 1 (SL3 1)	171	1	SAME CODING AS FOR BIT 168.	
3101 005	SUBLABEL	4, 1 (SL4 1)	172	1	SAME CODING AS FOR BIT 168.	
3101 006	SUBLABEL	5, 1 (SL5 1)	173	1	SAME CODING AS FOR BIT 168.	
3101 007	SUBLABEL	6, 1 (SL6 1)	174	1	SAME CODING AS FOR BIT 168.	
3101 008	SUBLABEL	7, 1 (SL7 1)	175	1	SAME CODING AS FOR BIT 168.	
3102 001	SUBLABEL	0, 2 (SL0 2)	176	1		
3102 002	SUBLABEL	1, 2 (SL1 2)	177	1	SAME CODING AS FOR BIT 176.	
3102 003	SUBLABEL	2, 2 (SL2 2)	178	1	SAME CODING AS FOR BIT 176.	
3102 004	SUBLABEL	3, 2 (SL3 2)	179	1	SAME CODING AS FOR BIT 176.	
3102 005	SUBLABEL	4, 2 (SL4 2)	180	1	SAME CODING AS FOR BIT 176.	
3102 006	SUBLABEL	5, 2 (SL5 2)	181	1	SAME CODING AS FOR BIT 176.	
3102 007	SUBLABEL	6, 2 (SL6 2)	182	1	SAME CODING AS FOR BIT 176.	
3102 008	SUBLABEL	7, 2 (SL7 2)	183	1	SAME CODING AS FOR BIT 176.	
3103 001	SUBLABEL	0, 3 (SL0 3)	184	1		
3103 002	SUBLABEL	1, 3 (SL1 3)	185	1	SAME CODING AS FOR BIT 184.	
3103 003	SUBLABEL	2, 3 (SL2 3)	186	1	SAME CODING AS FOR BIT 184.	
3103 004	SUBLABEL	3, 3 (SL3 3)	187	1	SAME CODING AS FOR BIT 184.	
3103 005	SUBLABEL	4, 3 (SL4 3)	188	1	SAME CODING AS FOR BIT 184.	
3103 006	SUBLABEL	5, 3 (SL5 3)	189	1	SAME CODING AS FOR BIT 184.	
3103 007	SUBLABEL	6, 3 (SL6 3)	190	1	SAME CODING AS FOR BIT 184.	
3103 008	SUBLABEL	7, 3 (SL7 3)	191	1	SAME CODING AS FOR BIT 184.	
3104 001	SUBLABEL	0, 4 (SL0 4)	192	1		
3104 002	SUBLABEL	1, 4 (SL1 4)	193	1	SAME CODING AS FOR BIT 192.	
3104 003	SUBLABEL	2, 4 (SL2 4)	194	1	SAME CODING AS FOR BIT 192.	
3104 004	SUBLABEL	3, 4 (SL3 4)	195	1	SAME CODING AS FOR BIT 192.	
3104 005	SUBLABEL	4, 4 (SL4 4)	196	1	SAME CODING AS FOR BIT 192.	
3104 006	SUBLABEL	5, 4 (SL5 4)	197	1	SAME CODING AS FOR BIT 192.	
3104 007	SUBLABEL	6, 4 (SL6 4)	198	1	SAME CODING AS FOR BIT 192.	
3104 008	SUBLABEL	7, 4 (SL7 4)	199	1	SAME CODING AS FOR BIT 192.	
3105 001	SUBLABEL	0, 5 (SL0 5)	200	1		
3105 002	SUBLABEL	1, 5 (SL1 5)	201	1	SAME CODING AS FOR BIT 200.	
3105 003	SUBLABEL	2, 5 (SL2 5)	202	1	SAME CODING AS FOR BIT 200.	
3105 004	SUBLABEL	3, 5 (SL3 5)	203	1	SAME CODING AS FOR BIT 200.	
3105 005	SUBLABEL	4, 5 (SL4 5)	204	1	SAME CODING AS FOR BIT 200.	
3105 006	SUBLABEL	5, 5 (SL5 5)	205	1	SAME CODING AS FOR BIT 200.	
3105 007	SUBLABEL	6, 5 (SL6 5)	206	1	SAME CODING AS FOR BIT 200.	
3105 008	SUBLABEL	7, 5 (SL7 5)	207	1	SAME CODING AS FOR BIT 200.	

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.3

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

REFERENCE				BIT	#	
DFI/DUI		DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3106	001	SUBLABEL 0, 6 (SL0 6)		208	1	
3106	002	SUBLABEL 1, 6 (SL1 6)		209	1	SAME CODING AS FOR BIT 208.
3106	003	SUBLABEL 2, 6 (SL2 6)		210	1	SAME CODING AS FOR BIT 208.
3106	004	SUBLABEL 3, 6 (SL3 6)		211	1	SAME CODING AS FOR BIT 208.
3106	005	SUBLABEL 4, 6 (SL4 6)		212	1	SAME CODING AS FOR BIT 208.
3106	006	SUBLABEL 5, 6 (SL5 6)		213	1	SAME CODING AS FOR BIT 208.
3106	007	SUBLABEL 6, 6 (SL6 6)		214	1	SAME CODING AS FOR BIT 208.
3106	008	SUBLABEL 7, 6 (SL7 6)		215	1	SAME CODING AS FOR BIT 208.
3107	001	SUBLABEL 0, 7 (SL0 7)		216	1	
3107	002	SUBLABEL 1, 7 (SL1 7)		217	1	SAME CODING AS FOR BIT 216.
3107	003	SUBLABEL 2, 7 (SL2 7)		218	1	SAME CODING AS FOR BIT 216.
3107	004	SUBLABEL 3, 7 (SL3 7)		219	1	SAME CODING AS FOR BIT 216.
3107	005	SUBLABEL 4, 7 (SL4 7)		220	1	SAME CODING AS FOR BIT 216.
3107	006	SUBLABEL 5, 7 (SL5 7)		221	1	SAME CODING AS FOR BIT 216.
3107	007	SUBLABEL 6, 7 (SL6 7)		222	1	SAME CODING AS FOR BIT 216.
3107	008	SUBLABEL 7, 7 (SL7 7)		223	1	SAME CODING AS FOR BIT 216.
3108	001	SUBLABEL 0, 8 (SL0 8)		224	1	
3108	002	SUBLABEL 1, 8 (SL1 8)		225	1	SAME CODING AS FOR BIT 224.
3108	003	SUBLABEL 2, 8 (SL2 8)		226	1	SAME CODING AS FOR BIT 224.
3108	004	SUBLABEL 3, 8 (SL3 8)		227	1	SAME CODING AS FOR BIT 224.
3108	005	SUBLABEL 4, 8 (SL4 8)		228	1	SAME CODING AS FOR BIT 224.
3108	006	SUBLABEL 5, 8 (SL5 8)		229	1	SAME CODING AS FOR BIT 224.
3108	007	SUBLABEL 6, 8 (SL6 8)		230	1	SAME CODING AS FOR BIT 224.
3108	008	SUBLABEL 7, 8 (SL7 8)		231	1	SAME CODING AS FOR BIT 224.
3109	001	SUBLABEL 0, 9 (SL0 9)		232	1	
3109	002	SUBLABEL 1, 9 (SL1 9)		233	1	SAME CODING AS FOR BIT 232.
3109	003	SUBLABEL 2, 9 (SL2 9)		234	1	SAME CODING AS FOR BIT 232.
3109	004	SUBLABEL 3, 9 (SL3 9)		235	1	SAME CODING AS FOR BIT 232.
3109	005	SUBLABEL 4, 9 (SL4 9)		236	1	SAME CODING AS FOR BIT 232.
3109	006	SUBLABEL 5, 9 (SL5 9)		237	1	SAME CODING AS FOR BIT 232.
3109	007	SUBLABEL 6, 9 (SL6 9)		238	1	SAME CODING AS FOR BIT 232.
3109	008	SUBLABEL 7, 9 (SL7 9)		239	1	SAME CODING AS FOR BIT 232.
3110	001	SUBLABEL 0, 10 (SL0 10)		240	1	
3110	002	SUBLABEL 1, 10 (SL1 10)		241	1	SAME CODING AS FOR BIT 240.
3110	003	SUBLABEL 2, 10 (SL2 10)		242	1	SAME CODING AS FOR BIT 240.
3110	004	SUBLABEL 3, 10 (SL3 10)		243	1	SAME CODING AS FOR BIT 240.
3110	005	SUBLABEL 4, 10 (SL4 10)		244	1	SAME CODING AS FOR BIT 240.
3110	006	SUBLABEL 5, 10 (SL5 10)		245	1	SAME CODING AS FOR BIT 240.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.3

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3110	007	SUBLABEL 6, 10 (SL6 10)	246	1	SAME CODING AS FOR BIT 240.
3110	008	SUBLABEL 7, 10 (SL7 10)	247	1	SAME CODING AS FOR BIT 240.
3111	001	SUBLABEL 0, 11 (SL0 11)	248	1	
3111	002	SUBLABEL 1, 11 (SL1 11)	249	1	SAME CODING AS FOR BIT 248.
3111	003	SUBLABEL 2, 11 (SL2 11)	250	1	SAME CODING AS FOR BIT 248.
3111	004	SUBLABEL 3, 11 (SL3 11)	251	1	SAME CODING AS FOR BIT 248.
3111	005	SUBLABEL 4, 11 (SL4 11)	252	1	SAME CODING AS FOR BIT 248.
3111	006	SUBLABEL 5, 11 (SL5 11)	253	1	SAME CODING AS FOR BIT 248.
3111	007	SUBLABEL 6, 11 (SL6 11)	254	1	SAME CODING AS FOR BIT 248.
3111	008	SUBLABEL 7, 11 (SL7 11)	255	1	SAME CODING AS FOR BIT 248.
3112	001	SUBLABEL 0, 12 (SL0 12)	256	1	
3112	002	SUBLABEL 1, 12 (SL1 12)	257	1	SAME CODING AS FOR BIT 256.
3112	003	SUBLABEL 2, 12 (SL2 12)	258	1	SAME CODING AS FOR BIT 256.
3112	004	SUBLABEL 3, 12 (SL3 12)	259	1	SAME CODING AS FOR BIT 256.
3112	005	SUBLABEL 4, 12 (SL4 12)	260	1	SAME CODING AS FOR BIT 256.
3112	006	SUBLABEL 5, 12 (SL5 12)	261	1	SAME CODING AS FOR BIT 256.
3112	007	SUBLABEL 6, 12 (SL6 12)	262	1	SAME CODING AS FOR BIT 256.
3112	008	SUBLABEL 7, 12 (SL7 12)	263	1	SAME CODING AS FOR BIT 256.
3113	001	SUBLABEL 0, 13 (SL0 13)	264	1	
3113	002	SUBLABEL 1, 13 (SL1 13)	265	1	SAME CODING AS FOR BIT 264.
3113	003	SUBLABEL 2, 13 (SL2 13)	266	1	SAME CODING AS FOR BIT 264.
3113	004	SUBLABEL 3, 13 (SL3 13)	267	1	SAME CODING AS FOR BIT 264.
3113	005	SUBLABEL 4, 13 (SL4 13)	268	1	SAME CODING AS FOR BIT 264.
3113	006	SUBLABEL 5, 13 (SL5 13)	269	1	SAME CODING AS FOR BIT 264.
3113	007	SUBLABEL 6, 13 (SL7 13)	270	1	SAME CODING AS FOR BIT 264.
3113	008	SUBLABEL 7, 13 (SL7 13)	271	1	SAME CODING AS FOR BIT 264.
3114	001	SUBLABEL 0, 14 (SL0 14)	272	1	
3114	002	SUBLABEL 1, 14 (SL1 14)	273	1	SAME CODING AS FOR BIT 272.
3114	003	SUBLABEL 2, 14 (SL2 14)	274	1	SAME CODING AS FOR BIT 272.
3114	004	SUBLABEL 3, 14 (SL3 14)	275	1	SAME CODING AS FOR BIT 272.
3114	005	SUBLABEL 4, 14 (SL4 14)	276	1	SAME CODING AS FOR BIT 272.
3114	006	SUBLABEL 5, 14 (SL5 14)	277	1	SAME CODING AS FOR BIT 272.
3114	007	SUBLABEL 6, 14 (SL6 14)	278	1	SAME CODING AS FOR BIT 272.
3114	008	SUBLABEL 7, 14 (SL7 14)	279	1	SAME CODING AS FOR BIT 272.
3115	001	SUBLABEL 0, 15 (SL0 15)	280	1	
3115	002	SUBLABEL 1, 15 (SL1 15)	281	1	SAME CODING AS FOR BIT 280.
3115	003	SUBLABEL 2, 15 (SL2 15)	282	1	SAME CODING AS FOR BIT 280.
3115	004	SUBLABEL 3, 15 (SL3 15)	283	1	SAME CODING AS FOR BIT 280.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.3

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3115	005	SUBLABEL 4, 15 (SL4 15)	284	1	SAME CODING AS FOR BIT 280.
3115	006	SUBLABEL 5, 15 (SL5 15)	285	1	SAME CODING AS FOR BIT 280.
3115	007	SUBLABEL 6, 15 (SL6 15)	286	1	SAME CODING AS FOR BIT 280.
3115	008	SUBLABEL 7, 15 (SL7 15)	287	1	SAME CODING AS FOR BIT 280.
3116	001	SUBLABEL 0, 16 (SL0 16)	288	1	
3116	002	SUBLABEL 1, 16 (SL1 16)	289	1	SAME CODING AS FOR BIT 288.
3116	003	SUBLABEL 2, 16 (SL2 16)	290	1	SAME CODING AS FOR BIT 288.
3116	004	SUBLABEL 3, 16 (SL4 16)	291	1	SAME CODING AS FOR BIT 288.
3116	005	SUBLABEL 4, 16 (SL4 16)	292	1	SAME CODING AS FOR BIT 288.
3116	006	SUBLABEL 5, 16 (SL5 16)	293	1	SAME CODING AS FOR BIT 288.
3116	007	SUBLABEL 6, 16 (SL6 16)	294	1	SAME CODING AS FOR BIT 288.
3116	008	SUBLABEL 7, 16 (SL7 16)	295	1	SAME CODING AS FOR BIT 288.
3117	001	SUBLABEL 0, 17 (SL0 17)	296	1	
3117	002	SUBLABEL 1, 17 (SL1 17)	297	1	SAME CODING AS FOR BIT 296.
3117	003	SUBLABEL 2, 17 (SL2 17)	298	1	SAME CODING AS FOR BIT 296.
3117	004	SUBLABEL 3, 17 (SL3 17)	299	1	SAME CODING AS FOR BIT 296.
3117	005	SUBLABEL 4, 17 (SL4 17)	300	1	SAME CODING AS FOR BIT 296.
3117	006	SUBLABEL 5, 17 (SL5 17)	301	1	SAME CODING AS FOR BIT 296.
3117	007	SUBLABEL 6, 17 (SL6 17)	302	1	SAME CODING AS FOR BIT 296.
3117	008	SUBLABEL 7, 17 (SL7 17)	303	1	SAME CODING AS FOR BIT 296.
3118	001	SUBLABEL 0, 18 (SL0 18)	304	1	
3118	002	SUBLABEL 1, 18 (SL1 18)	305	1	SAME CODING AS FOR BIT 304.
3118	003	SUBLABEL 2, 18 (SL2 18)	306	1	SAME CODING AS FOR BIT 304.
3118	004	SUBLABEL 3, 18 (SL3 18)	307	1	SAME CODING AS FOR BIT 304.
3118	005	SUBLABEL 4, 18 (SL4 18)	308	1	SAME CODING AS FOR BIT 304.
3118	006	SUBLABEL 5, 18 (SL5 18)	309	1	SAME CODING AS FOR BIT 304.
3118	007	SUBLABEL 6, 18 (SL6 18)	310	1	SAME CODING AS FOR BIT 304.
3118	008	SUBLABEL 7, 18 (SL7 18)	311	1	SAME CODING AS FOR BIT 304.
3119	001	SUBLABEL 0, 19 (SL0 19)	312	1	
3119	002	SUBLABEL 1, 19 (SL1 19)	313	1	SAME CODING AS FOR BIT 312.
3119	003	SUBLABEL 2, 19 (SL2 19)	314	1	SAME CODING AS FOR BIT 312.
3119	004	SUBLABEL 3, 19 (SL3 19)	315	1	SAME CODING AS FOR BIT 312.
3119	005	SUBLABEL 4, 19 (SL4 19)	316	1	SAME CODING AS FOR BIT 312.
3119	006	SUBLABEL 5, 19 (SL5 19)	317	1	SAME CODING AS FOR BIT 312.
3119	007	SUBLABEL 6, 19 (SL6 19)	318	1	SAME CODING AS FOR BIT 312.
3119	008	SUBLABEL 7, 19 (SL7 19)	319	1	SAME CODING AS FOR BIT 312.
3120	001	SUBLABEL 0, 20 (SL0 20)	320	1	
3120	002	SUBLABEL 1, 20 (SL1 20)	321	1	SAME CODING AS FOR BIT 320.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.3

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3120	003	SUBLABEL 2, 20 (SL2 20)	322	1	SAME CODING AS FOR BIT 320.
3120	004	SUBLABEL 3, 20 (SL3 20)	323	1	SAME CODING AS FOR BIT 320.
3120	005	SUBLABEL 4, 20 (SL4 20)	324	1	SAME CODING AS FOR BIT 320.
3120	006	SUBLABEL 5, 20 (SL5 20)	325	1	SAME CODING AS FOR BIT 320.
3120	007	SUBLABEL 6, 20 (SL6 20)	326	1	SAME CODING AS FOR BIT 320.
3120	008	SUBLABEL 7, 20 (SL7 20)	327	1	SAME CODING AS FOR BIT 320.
3121	001	SUBLABEL 0, 21 (SL0 21)	328	1	
3121	002	SUBLABEL 1, 21 (SL1 21)	329	1	SAME CODING AS FOR BIT 328.
3121	003	SUBLABEL 2, 21 (SL2 21)	330	1	SAME CODING AS FOR BIT 328.
3121	004	SUBLABEL 3, 21 (SL3 21)	331	1	SAME CODING AS FOR BIT 328.
3121	005	SUBLABEL 4, 21 (SL4 21)	332	1	SAME CODING AS FOR BIT 328.
3121	006	SUBLABEL 5, 21 (SL5 21)	333	1	SAME CODING AS FOR BIT 328.
3121	007	SUBLABEL 6, 21 (SL6 21)	334	1	SAME CODING AS FOR BIT 328.
3121	008	SUBLABEL 7, 21 (SL7 21)	335	1	SAME CODING AS FOR BIT 328.
3122	001	SUBLABEL 0, 22 (SL0 22)	336	1	
3122	002	SUBLABEL 1, 22 (SL1 22)	337	1	SAME CODING AS FOR BIT 336.
3122	003	SUBLABEL 2, 22 (SL2 22)	338	1	SAME CODING AS FOR BIT 336.
3122	004	SUBLABEL 3, 22 (SL3 22)	339	1	SAME CODING AS FOR BIT 336.
3122	005	SUBLABEL 4, 22 (SL4 22)	340	1	SAME CODING AS FOR BIT 336.
3122	006	SUBLABEL 5, 22 (SL5 22)	341	1	SAME CODING AS FOR BIT 336.
3122	007	SUBLABEL 6, 22 (SL6 22)	342	1	SAME CODING AS FOR BIT 336.
3122	008	SUBLABEL 7, 22 (SL7 22)	343	1	SAME CODING AS FOR BIT 336.
3123	001	SUBLABEL 0, 23 (SL0 23)	344	1	
3123	002	SUBLABEL 1, 23 (SL1 23)	345	1	SAME CODING AS FOR BIT 344.
3123	003	SUBLABEL 2, 23 (SL2 23)	346	1	SAME CODING AS FOR BIT 344.
3123	004	SUBLABEL 3, 23 (SL3 23)	347	1	SAME CODING AS FOR BIT 344.
3123	005	SUBLABEL 4, 23 (SL4 23)	348	1	SAME CODING AS FOR BIT 344.
3123	006	SUBLABEL 5, 23 (SL5 23)	349	1	SAME CODING AS FOR BIT 344.
3123	007	SUBLABEL 6, 23 (SL6 23)	350	1	SAME CODING AS FOR BIT 344.
3123	008	SUBLABEL 7, 23 (SL7 23)	351	1	SAME CODING AS FOR BIT 344.
3124	001	SUBLABEL 0, 24 (SL0 24)	352	1	
3124	002	SUBLABEL 1, 24 (SL1 24)	353	1	SAME CODING AS FOR BIT 352.
3124	003	SUBLABEL 2, 24 (SL2 24)	354	1	SAME CODING AS FOR BIT 352.
3124	004	SUBLABEL 3, 24 (SL3 24)	355	1	SAME CODING AS FOR BIT 352.
3124	005	SUBLABEL 4, 24 (SL4 24)	356	1	SAME CODING AS FOR BIT 352.
3124	006	SUBLABEL 5, 24 (SL5 24)	357	1	SAME CODING AS FOR BIT 352.
3124	007	SUBLABEL 6, 24 (SL6 24)	358	1	SAME CODING AS FOR BIT 352.
3124	008	SUBLABEL 7, 24 (SL7 24)	359	1	SAME CODING AS FOR BIT 352.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.3

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3125 001	SUBLABEL 0, 25	(SL0 25)	360	1	
3125 002	SUBLABEL 1, 25	(SL1 25)	361	1	SAME CODING AS FOR BIT 360.
3125 003	SUBLABEL 2, 25	(SL2 25)	362	1	SAME CODING AS FOR BIT 360.
3125 004	SUBLABEL 3, 25	(SL3 25)	363	1	SAME CODING AS FOR BIT 360.
3125 005	SUBLABEL 4, 25	(SL4 25)	364	1	SAME CODING AS FOR BIT 360.
3125 006	SUBLABEL 5, 25	(SL5 25)	365	1	SAME CODING AS FOR BIT 360.
3125 007	SUBLABEL 6, 25	(SL6 25)	366	1	SAME CODING AS FOR BIT 360.
3125 008	SUBLABEL 7, 25	(SL7 25)	367	1	SAME CODING AS FOR BIT 360.
3126 001	SUBLABEL 0, 26	(SL0 26)	368	1	
3126 002	SUBLABEL 1, 26	(SL1 26)	369	1	SAME CODING AS FOR BIT 368.
3126 003	SUBLABEL 2, 26	(SL2 26)	370	1	SAME CODING AS FOR BIT 368.
3126 004	SUBLABEL 3, 26	(SL3 26)	371	1	SAME CODING AS FOR BIT 368.
3126 005	SUBLABEL 4, 26	(SL4 26)	372	1	SAME CODING AS FOR BIT 368.
3126 006	SUBLABEL 5, 26	(SL5 26)	373	1	SAME CODING AS FOR BIT 368.
3126 007	SUBLABEL 6, 26	(SL6 26)	374	1	SAME CODING AS FOR BIT 368.
3126 008	SUBLABEL 7, 26	(SL7 26)	375	1	SAME CODING AS FOR BIT 368.
3127 001	SUBLABEL 0, 27	(SL0 27)	376	1	
3127 002	SUBLABEL 1, 27	(SL1 27)	377	1	SAME CODING AS FOR BIT 376.
3127 003	SUBLABEL 2, 27	(SL2 27)	378	1	SAME CODING AS FOR BIT 376.
3127 004	SUBLABEL 3, 27	(SL3 27)	379	1	SAME CODING AS FOR BIT 376.
3127 005	SUBLABEL 4, 27	(SL4 27)	380	1	SAME CODING AS FOR BIT 376.
3127 006	SUBLABEL 5, 27	(SL5 27)	381	1	SAME CODING AS FOR BIT 376.
3127 007	SUBLABEL 6, 27	(SL6 27)	382	1	SAME CODING AS FOR BIT 376.
3127 008	SUBLABEL 7, 27	(SL7 27)	383	1	SAME CODING AS FOR BIT 376.
3128 001	SUBLABEL 0, 28	(SL0 28)	384	1	
3128 002	SUBLABEL 1, 28	(SL1 28)	385	1	SAME CODING AS FOR BIT 384.
3128 003	SUBLABEL 2, 28	(SL2 28)	386	1	SAME CODING AS FOR BIT 384.
3128 004	SUBLABEL 3, 28	(SL3 28)	387	1	SAME CODING AS FOR BIT 384.
3128 005	SUBLABEL 4, 28	(SL4 28)	388	1	SAME CODING AS FOR BIT 384.
3128 006	SUBLABEL 5, 28	(SL5 28)	389	1	SAME CODING AS FOR BIT 384.
3128 007	SUBLABEL 6, 28	(SL6 28)	390	1	SAME CODING AS FOR BIT 384.
3128 008	SUBLABEL 7, 28	(SL7 28)	391	1	SAME CODING AS FOR BIT 384.
3129 001	SUBLABEL 0, 29	(SL0 29)	392	1	
3129 002	SUBLABEL 1, 29	(SL1 29)	393	1	SAME CODING AS FOR BIT 392.
3129 003	SUBLABEL 2, 29	(SL2 29)	394	1	SAME CODING AS FOR BIT 392.
3129 004	SUBLABEL 3, 29	(SL3 29)	395	1	SAME CODING AS FOR BIT 392.
3129 005	SUBLABEL 4, 29	(SL4 29)	396	1	SAME CODING AS FOR BIT 392.
3129 006	SUBLABEL 5, 29	(SL5 29)	397	1	SAME CODING AS FOR BIT 392.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.3

MESSAGE TITLE: REMOTE FILTER (LABEL SUBLABEL FILTER)

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD	DESCRIPTOR	POSITION	BITS	RESOLUTION, CODING, ETC
3129 007	SUBLABEL 6,	29 (SL6 29)	398	1	SAME CODING AS FOR BIT 392.
3129 008	SUBLABEL 7,	29 (SL7 29)	399	1	SAME CODING AS FOR BIT 392.
3130 001	SUBLABEL 0,	30 (SL0 30)	400	1	
3130 002	SUBLABEL 1,	30 (SL1 30)	401	1	SAME CODING AS FOR BIT 400.
3130 003	SUBLABEL 2,	30 (SL2 30)	402	1	SAME CODING AS FOR BIT 400.
3130 004	SUBLABEL 3,	30 (SL3 30)	403	1	SAME CODING AS FOR BIT 400.
3130 005	SUBLABEL 4,	30 (SL4 30)	404	1	SAME CODING AS FOR BIT 400.
3130 006	SUBLABEL 5,	30 (SL5 30)	405	1	SAME CODING AS FOR BIT 400.
3130 007	SUBLABEL 6,	30 (SL6 30)	406	1	SAME CODING AS FOR BIT 400.
3130 008	SUBLABEL 7,	30 (SL7 30)	407	1	SAME CODING AS FOR BIT 400.
3131 001	SUBLABEL 0,	31 (SL0 31)	408	1	
3131 002	SUBLABEL 1,	31 (SL1 31)	409	1	SAME CODING AS FOR BIT 408.
3131 003	SUBLABEL 2,	31 (SL2 31)	410	1	SAME CODING AS FOR BIT 408.
3131 004	SUBLABEL 3,	31 (SL3 31)	411	1	SAME CODING AS FOR BIT 408.
3131 005	SUBLABEL 4,	31 (SL4 31)	412	1	SAME CODING AS FOR BIT 408.
3131 006	SUBLABEL 5,	31 (SL5 31)	413	1	SAME CODING AS FOR BIT 408.
3131 007	SUBLABEL 6,	31 (SL6 31)	414	1	SAME CODING AS FOR BIT 408.
3131 008	SUBLABEL 7,	31 (SL7 31)	415	1	SAME CODING AS FOR BIT 408.

		FIELD CODING FOR X0.10.3		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.3

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

FIELD CODING FOR X0.10.3 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3002	004	COMMAND AND CONTROL INDICATOR OVERRIDE ----- FILTER OVERRIDE FILTER	0 1	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3100	001	SUBLABEL 0, 0 ----- NOT FILTERED FILTERED	0 1	FOR LABEL/SUBLABEL FILTER MATRIX. INDICATES LABEL/SULABEL IS NOT FILTERED. INDICATES LABEL/SULABEL IS FILTERED.
3101	001	SUBLABEL 0, 1 ----- NOT FILTERED FILTERED	0 1	FOR LABEL/SUBLABEL FILTER MATRIX. INDICATES THE LABEL/SUBLABEL IS NOT FILTERED. INDICATES THE LABEL/SUBLABEL IS FILTERED.

			FIELD CODING FOR X0.10.3		(SHEET 4)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION	
3102	001	SUBLABEL 0, 2 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3103	001	SUBLABEL 0, 3 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3104	001	SUBLABEL 0, 4 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3105	001	SUBLABEL 0, 5 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3106	001	SUBLABEL 0, 6 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3107	001	SUBLABEL 0, 7 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3108	001	SUBLABEL 0, 8 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT	

			FIELD CODING FOR X0.10.3	(SHEET 5)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3108	001	SUBLABEL 0, 8 -----	(CONTINUED)	
		FILTERED	1	FILTERED. INDICATES THE LABEL/SUBLABEL IS FILTERED.
3109	001	SUBLABEL 0, 9 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3110	001	SUBLABEL 0, 10 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3111	001	SUBLABEL 0, 11 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3112	001	SUBLABEL 0, 12 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3113	001	SUBLABEL 0, 13 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3114	001	SUBLABEL 0, 14 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.

			FIELD CODING FOR X0.10.3	(SHEET 6)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3114	001	SUBLABEL 0, 14 ----- FILTERED	(CONTINUED) 1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3115	001	SUBLABEL 0, 15 ----- NOT FILTERED FILTERED	 0 1	FOR LABEL/SUBLABEL FILTER MATRIX. INDICATES THE LABEL/SUBLABEL IS NOT FILTERED. INDICATES THE LABEL/SUBLABEL IS FILTERED.
3116	001	SUBLABEL 0, 16 ----- NOT FILTERED FILTERED	 0 1	FOR LABEL/SUBLABEL FILTER MATRIX. INDICATES THE LABEL/SUBLABEL IS NOT FILTERED. INDICATES THE LABEL/SUBLABEL IS FILTERED.
3117	001	SUBLABEL 0, 17 ----- NOT FILTERED FILTERED	 0 1	FOR LABEL/SUBLABEL FILTER MATRIX. INDICATES THE LABEL/SUBLABEL IS NOT FILTERED. INDICATES THE LABEL/SUBLABEL IS FILTERED.
3118	001	SUBLABEL 0, 18 ----- NOT FILTERED FILTERED	 0 1	FOR LABEL/SUBLABEL FILTER MATRIX. INDICATES THE LABEL/SUBLABEL IS NOT FILTERED. INDICATES THE LABEL/SUBLABEL IS FILTERED.
3119	001	SUBLABEL 0, 19 ----- NOT FILTERED FILTERED	 0 1	FOR LABEL/SUBLABEL FILTER MATRIX. INDICATES THE LABEL/SUBLABEL IS NOT FILTERED. INDICATES THE LABEL/SUBLABEL IS FILTERED.
3120	001	SUBLABEL 0, 20 ----- NOT FILTERED FILTERED	 0 1	FOR LABEL/SUBLABEL FILTER MATRIX. INDICATES THE LABEL/SUBLABEL IS NOT FILTERED. INDICATES THE LABEL/SUBLABEL IS

			FIELD CODING FOR X0.10.3	(SHEET 7)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3120	001	SUBLABEL 0, 20 -----	(CONTINUED)	
				FILTERED.
3121	001	SUBLABEL 0, 21 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3122	001	SUBLABEL 0, 22 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3123	001	SUBLABEL 0, 23 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3124	001	SUBLABEL 0, 24 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3125	001	SUBLABEL 0, 25 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.
3126	001	SUBLABEL 0, 26 -----		FOR LABEL/SUBLABEL FILTER MATRIX.
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

			FIELD CODING FOR X0.10.3		(SHEET 8)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION	
3127	001	SUBLABEL 0, 27 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3128	001	SUBLABEL 0, 28 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3129	001	SUBLABEL 0, 29 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3130	001	SUBLABEL 0, 30 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.	
3131	001	SUBLABEL 0, 31 -----		FOR LABEL/SUBLABEL FILTER MATRIX.	
		NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	
		FILTERED	1	INDICATES LABEL/SULABEL IS FILTERED.	

MIL-STD-3011D

X0.10.4 MESSAGE SUMMARY

PURPOSE

THE POINT TYPE/POINT AMPLIFICATION FILTER MESSAGE IS USED TO DIRECT OR REPORT THE FILTER SETTINGS APPLIED TO THE POINT TYPE AND POINT AMPLIFICATION FIELDS IN J3.0 REFERENCE POINT MESSAGES.

DATA ELEMENT SUMMARY

<u>X0.10.4</u>		<u>X0.10.4 (Continued)</u>	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8	POSITION AND INTENDED MOVEMENT	1
MANAGEMENT VERSION	4	(PIM)	
ACKNOWLEDGEMENT PROTOCOL, 3	4	DISPOSITION CENTER	1
MANAGEMENT MESSAGE LENGTH	16	FORMATION CENTER	1
NUMBER DESTINATION ADDRESSES, NON-ZERO	8	SEARCH AREA	1
COMPLETION TIMEOUT	8	VICTOR LIMA (VL)	1
MESSAGE SEQUENCE NUMBER	16	SUBMARINE POSITION AND INTENDED MOVEMENT (SIM)	1
CONTROL/RESPONSE INDICATOR, 9	8	PT1, AMP10	1
ERROR CODE, 1	8	DEFENDED ASSET	1
FRAGMENT NUMBER	8	PT1, AMP12	1
TOTAL NUMBER FRAGMENTS	8	PT1, AMP13	1
ORIGINATING MESSAGE SEQUENCE NUMBER	16	PT1, AMP14	1
DESTINATION ADDRESS	16	PT1, AMP15	1
SPARE	5	NO STATEMENT	1
COMMAND AND CONTROL INDICATOR OVERRIDE	1	TOMCAT	1
EMERGENCY INDICATOR OVERRIDE	1	PICKET	1
FORCE TELL INDICATOR OVERRIDE	1	RENDEZVOUS	1
FILTER MESSAGE TYPE	8	PT2, AMP4	1
LINK DESIGNATOR TO FILTER	16	REPLENISHMENT	1
NO STATEMENT	1	RESCUE	1
NAVIGATION	1	PT2, AMP7	1
MINE	1	PT2, AMP8	1
IMPACT POINT	1	PT2, AMP9	1
GROUND ZERO	1	PT2, AMP10	1
AIM/WEAPON ENTRY POINT	1	PT2, AMP11	1
MISSILE LAUNCH POINT	1	PT2, AMP12	1
ELECTRONIC ATTACK (EA) DECOY	1	PT2, AMP13	1
ENGAGEMENT POINT	1	PT2, AMP14	1
OIL RIG	1	PT2, AMP15	1
PT0, AMP10	1	NO STATEMENT	1
PT0, AMP11	1	COMBAT AIR PATROL (CAP)	1
PT0, AMP12	1	AIRBORNE EARLY WARNING (AEW)	1
PT0, AMP13	1	ANTISUBMARINE WARFARE (ASW)	1
PT0, AMP14	1	FIXED WING	
PT0, AMP15	1	ANTISUBMARINE WARFARE (ASW)	1
NO STATEMENT	1	HELICOPTER (HELO)	
MARSHALL POINT	1	REPLENISHMENT	1
WAYPOINT	1	STRIKE INITIAL POINT (IP)	1
CORRIDOR TAB	1	TACAN	1
		TANKER	1
		ORBIT, RACE TRACK	1
		ORBIT, FIGURE EIGHT	1

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X0.10.4 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

X0.10.4 (Continued)		X0.10.4 (Continued)	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
ORBIT, RANDOM CLOSED	1	KILL ZONE	1
ORBIT POINT	1	TARGET AREA OF INTEREST	1
PT3, AMP13	1	NAMED AREA OF INTEREST	1
PT3, AMP14	1	PT6, AMP11	1
PT3, AMP15	1	PT6, AMP12	1
NO STATEMENT	1	PT6, AMP13	1
FORWARD EDGE OF THE BATTLE	1	PT6, AMP14	1
AREA (FEBA)		PT6, AMP15	1
GUN TARGET LINE	1	NO STATEMENT	1
CORRIDOR	1	SINKER	1
HOSTILE BOUNDARY	1	BRIEF CONTACT	1
BUFFER ZONE BOUNDARY	1	SEARCH CENTER (ASW)	1
LOW LEVEL TRANSIT ROUTE	1	ESTIMATED POSITION (EP)	1
TACTICAL ACTION LINE	1	FIX (ASW)	1
FIRE SUPPORT COORDINATION LINE	1	NOTACK AREA	1
(FSCL)		MOVING HAVEN	1
FORWARD LINE OF OWN TROOPS	1	DISUSED	1
(FLOT)		SONOBUOY POSITION	1
PT4, AMP10	1	SONOBUOY PATTERN REFERENCE	1
PT4, AMP11	1	POSITION	
PT4, AMP12	1	LIMITING LINE OF APPROACH	1
PT4, AMP13	1	AREA OF PROBABILITY (ASW)	1
PT4, AMP14	1	FRIENDLY WEAPON DANGER AREA	1
PT4, AMP15	1	(FWDA)	
NO STATEMENT	1	PT7, AMP14	1
SEARCH	1	PT7, AMP15	1
RESTRICTED	1	CHARTED WRECK	1
EXERCISE	1	BOTTOMED NONSUBMARINE	1
SUBMARINE PATROL AREA	1	ASW STATION	1
FIGHTER ENGAGEMENT ZONE/	1	PT8, AMP3	1
FIGHTER AOR		PT8, AMP4	1
GROUND AREA OF RESPONSIBILITY	1	PT8, AMP5	1
DEFENDED AREA	1	PT8, AMP6	1
PT5, AMP8	1	PT8, AMP7	1
PT5, AMP9	1	PT8, AMP8	1
PT5, AMP10	1	PT8, AMP9	1
PT5, AMP11	1	PT8, AMP10	1
PT5, AMP12	1	PT8, AMP11	1
PT5, AMP13	1	PT8, AMP12	1
PT5, AMP14	1	PT8, AMP13	1
PT5, AMP15	1	PT8, AMP14	1
NO STATEMENT	1	PT8, AMP15	1
DANGER	1	PT9, AMP0	1
CONTAMINATED	1	PT9, AMP1	1
MISSILE ENGAGEMENT ZONE	1	PT9, AMP2	1
DISUSED	1	PT9, AMP3	1
HOSTILE WEAPON ZONE	1	PT9, AMP4	1
HOSTILE TACTICAL ZONE	1	PT9, AMP5	1
SHORAD	1	PT9, AMP6	1

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X0.10.4 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

X0.10.4 (Continued)		X0.10.4 (Continued)	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
PT9, AMP7	1	PT12, AMP9	1
PT9, AMP8	1	PT12, AMP10	1
PT9, AMP9	1	PT12, AMP11	1
PT9, AMP10	1	PT12, AMP12	1
PT9, AMP11	1	PT12, AMP13	1
PT9, AMP12	1	PT12, AMP14	1
PT9, AMP13	1	PT12, AMP15	1
PT9, AMP14	1	PT13, AMP0	1
PT9, AMP15	1	PT13, AMP1	1
PT10, AMP0	1	PT13, AMP2	1
PT10, AMP1	1	PT13, AMP3	1
PT10, AMP2	1	PT13, AMP4	1
PT10, AMP3	1	PT13, AMP5	1
PT10, AMP4	1	PT13, AMP6	1
PT10, AMP5	1	PT13, AMP7	1
PT10, AMP6	1	PT13, AMP8	1
PT10, AMP7	1	PT13, AMP9	1
PT10, AMP8	1	PT13, AMP10	1
PT10, AMP9	1	PT13, AMP11	1
PT10, AMP10	1	PT13, AMP12	1
PT10, AMP11	1	PT13, AMP13	1
PT10, AMP12	1	PT13, AMP14	1
PT10, AMP13	1	PT13, AMP15	1
PT10, AMP14	1	PT14, AMP0	1
PT10, AMP15	1	PT14, AMP1	1
PT11, AMP0	1	PT14, AMP2	1
PT11, AMP1	1	PT14, AMP3	1
PT11, AMP2	1	PT14, AMP4	1
PT11, AMP3	1	PT14, AMP5	1
PT11, AMP4	1	PT14, AMP6	1
PT11, AMP5	1	PT14, AMP7	1
PT11, AMP6	1	PT14, AMP8	1
PT11, AMP7	1	PT14, AMP9	1
PT11, AMP8	1	PT14, AMP10	1
PT11, AMP9	1	PT14, AMP11	1
PT11, AMP10	1	PT14, AMP12	1
PT11, AMP11	1	PT14, AMP13	1
PT11, AMP12	1	PT14, AMP14	1
PT11, AMP13	1	PT14, AMP15	1
PT11, AMP14	1	PT15, AMP0	1
PT11, AMP15	1	PT15, AMP1	1
PT12, AMP0	1	PT15, AMP2	1
PT12, AMP1	1	PT15, AMP3	1
PT12, AMP2	1	PT15, AMP4	1
PT12, AMP3	1	PT15, AMP5	1
PT12, AMP4	1	PT15, AMP6	1
PT12, AMP5	1	PT15, AMP7	1
PT12, AMP6	1	PT15, AMP8	1
PT12, AMP7	1	PT15, AMP9	1
PT12, AMP8	1	PT15, AMP10	1

X0.10.4 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

<u>X0.10.4 (Continued)</u>	
<u>DATA ELEMENT</u>	<u># BITS</u>
PT15, AMP11	1
PT15, AMP12	1
PT15, AMP13	1
PT15, AMP14	1
PT15, AMP15	1

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:								
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:	
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:	
:																:					:					:													:	
:	16															:	4				:	4				:	8												:	
:																																								
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:								
:																:													:	NUMBER DESTINATION ADDRESSES,				:						
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NON-ZERO				:						
:																:													:					:						
:	16															:	8												:	8				:						
:																																								
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70:	69	68	67	66	65	64:								
:									:									:													:									
:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 1												:	CONTROL/RESPONSE INDICATOR, 9								:
:									:									:													:									:
:	8								:									:	8												:	8								:
:																																								
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:								
:																:																		:						
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:						
:																:																		:						
:	16															:	16																	:						

MESSAGE MAP

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

```
-----
:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136:135:134:133:132 131 130 129 128:
-----
:                                     :                               :FTI:EMG:CC :                               :
:                               LINK DESIGNATOR TO FILTER           :       FILTER MESSAGE TYPE       :OVR:OVR:OVR:       SPARE       :
:                                     :                               :   :   :   :                               :
-----
:                               16                               :                               8                               : 1 : 1 : 1 :       5       :
-----

:191:190:189:188:187:186:185:184:183:182:181:180:179:178:177:176:175:174:173:172:171:170:169:168:167:166:165:164:163:162:161:160:
-----
:PT1:PT1:PT1:PT1:DEF:PT1:   :   :SHC:FRM:DIS:   :COR:WAY:MAR:   :PT0:PT0:PT0:PT0:PT0:PT0:OIL:ENG:EA :MSL:AIM:GND:IMP:   :   :
:A15:A14:A13:A12:AST:A10:SIM:VL :ARE:CTR:CTR:PIM:TAB:PT :PT :NS :A15:A14:A13:A12:A11:A10:RIG:PT :DEC:LP :PT :ZER:PT :MNE:NAV:NS :
:   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :
-----
: 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 :
-----

:223:222:221:220:219:218:217:216:215:214:213:212:211:210:209:208:207:206:205:204:203:202:201:200:199:198:197:196:195:194:193:192:
-----
:PT3:PT3:PT3:ORB:ORB:ORB:ORB:   :   :STK:   :ASW:ASW:   :   :PT2:PT2:PT2:PT2:PT2:PT2:PT2:PT2:PT2:PT2:RES:   :PT2:   :PIC:TOM:   :
:A15:A14:A13:PT :RC :F8 :RT :TKR:TAC:IP :RPL:HEL:FW :AEW:CAP:NS :A15:A14:A13:A12:A11:A10:A9 :A8 :A7 :CUE:REP:A4 :RVS:KET:CAT:NS :
:   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :
-----
: 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 :
-----

:255:254:253:252:251:250:249:248:247:246:245:244:243:242:241:240:239:238:237:236:235:234:233:232:231:230:229:228:227:226:225:224:
-----
:PT5:PT5:PT5:PT5:PT5:PT5:PT5:PT5:DEF:GND:   :SUB:   :   :SEA:   :PT4:PT4:PT4:PT4:PT4:PT4:FLO:FSC:   :LLT:BZ :HOS:COR:   :FEB:   :
:A15:A14:A13:A12:A11:A10:A9 :A8 :AR :AOR:FEZ:PTL:EX :RTD:RCH:NS :A15:A14:A13:A12:A11:A10: T : L :TAL: R :BND:BND:RDR:GTL: A :NS :
:   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :
-----
: 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 :
-----
```

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

[illegible][illegible][illegible][illegible]

MESSAGE MAP

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

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-----
:415:414:413:412:411:410:409:408:407:406:405:404:403:402:401:400:399:398:397:396:395:394:393:392:391:390:389:388:387:386:385:384:
-----
:PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :PT :
:15 :15 :15 :15 :15 :15 :15 :15 :15 :15 :15 :15 :15 :15 :15 :14 :14 :14 :14 :14 :14 :14 :14 :14 :14 :14 :14 :14 :14 :
:A15:A14:A13:A12:A11:A10:A9 :A8 :A7 :A6 :A5 :A4 :A3 :A2 :A1 :A0 :A15:A14:A13:A12:A11:A10:A9 :A8 :A7 :A6 :A5 :A4 :A3 :A2 :A1 :A0 :
-----
: 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 :
-----
```

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 005		SPARE (SP)	128-	132 5	
3002 004		COMMAND AND CONTROL INDICATOR OVERRIDE (CC OVR)	133	1	
3002 005		EMERGENCY INDICATOR OVERRIDE (EMG OVR)	134	1	SAME CODING AS FOR BIT 133.
3002 006		FORCE TELL INDICATOR OVERRIDE (FTI OVR)	135	1	SAME CODING AS FOR BIT 133.
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00000100
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3050 001		NO STATEMENT (NS)	160	1	
3050 002		NAVIGATION (NAV)	161	1	SAME CODING AS FOR BIT 160.
3050 003		MINE (MNE)	162	1	SAME CODING AS FOR BIT 160.
3050 004		IMPACT POINT (IMP PT)	163	1	SAME CODING AS FOR BIT 160.
3050 005		GROUND ZERO (GND ZER)	164	1	SAME CODING AS FOR BIT 160.
3050 006		AIM/WEAPON ENTRY POINT (AIM PT)	165	1	SAME CODING AS FOR BIT 160.
3050 007		MISSILE LAUNCH POINT (MSL LP)	166	1	SAME CODING AS FOR BIT 160.
3050 008		ELECTRONIC ATTACK (EA) DECOY (EA DEC)	167	1	SAME CODING AS FOR BIT 160.
3050 009		ENGAGEMENT POINT (ENG PT)	168	1	SAME CODING AS FOR BIT 160.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3050 010		OIL RIG	169	1	SAME CODING AS FOR BIT 160.
3050 011		PT0, AMP10 (PT0 A10)	170	1	SAME CODING AS FOR BIT 160.
3050 012		PT0, AMP11 (PT0 A11)	171	1	SAME CODING AS FOR BIT 160.
3050 013		PT0, AMP12 (PT0 A12)	172	1	SAME CODING AS FOR BIT 160.
3050 014		PT0, AMP13 (PT0 A13)	173	1	SAME CODING AS FOR BIT 160.
3050 015		PT0, AMP14 (PT0 A14)	174	1	SAME CODING AS FOR BIT 160.
3050 016		PT0, AMP15 (PT0 A15)	175	1	SAME CODING AS FOR BIT 160.
3051 001		NO STATEMENT (NS)	176	1	
3051 002		MARSHALL POINT (MAR PT)	177	1	SAME CODING AS FOR BIT 176.
3051 003		WAYPOINT (WAY PT)	178	1	SAME CODING AS FOR BIT 176.
3051 004		CORRIDOR TAB (COR TAB)	179	1	SAME CODING AS FOR BIT 176.
3051 005		POSITION AND INTENDED MOVEMENT (PIM) (PIM)	180	1	SAME CODING AS FOR BIT 176.
3051 006		DISPOSITION CENTER (DIS CTR)	181	1	SAME CODING AS FOR BIT 176.
3051 007		FORMATION CENTER (FRM CTR)	182	1	SAME CODING AS FOR BIT 176.
3051 008		SEARCH AREA (SCH ARE)	183	1	SAME CODING AS FOR BIT 176.
3051 009		VICTOR LIMA (VL) (VL)	184	1	SAME CODING AS FOR BIT 176.
3051 010		SUBMARINE POSITION AND INTENDED MOVEMENT (SIM) (SIM)	185	1	SAME CODING AS FOR BIT 176.
3051 011		PT1, AMP10 (PT1 A10)	186	1	SAME CODING AS FOR BIT 176.
3051 012		DEFENDED ASSET (DEF AST)	187	1	SAME CODING AS FOR BIT 176.
3051 013		PT1, AMP12 (PT1 A12)	188	1	SAME CODING AS FOR BIT 176.
3051 014		PT1, AMP13 (PT1 A13)	189	1	SAME CODING AS FOR BIT 176.
3051 015		PT1, AMP14 (PT1 A14)	190	1	SAME CODING AS FOR BIT 176.
3051 016		PT1, AMP15 (PT1 A15)	191	1	SAME CODING AS FOR BIT 176.
3052 001		NO STATEMENT (NS)	192	1	
3052 002		TOMCAT	193	1	SAME CODING AS FOR BIT 192.
3052 003		PICKET	194	1	SAME CODING AS FOR BIT 192.
3052 004		RENDEZVOUS (RVS)	195	1	SAME CODING AS FOR BIT 192.
3052 005		PT2, AMP4 (PT2 A4)	196	1	SAME CODING AS FOR BIT 192.
3052 006		REPLENISHMENT (REP)	197	1	SAME CODING AS FOR BIT 192.
3052 007		RESCUE	198	1	SAME CODING AS FOR BIT 192.
3052 008		PT2, AMP7 (PT2 A7)	199	1	SAME CODING AS FOR BIT 192.
3052 009		PT2, AMP8 (PT2 A8)	200	1	SAME CODING AS FOR BIT 192.
3052 010		PT2, AMP9 (PT2 A9)	201	1	SAME CODING AS FOR BIT 192.
3052 011		PT2, AMP10 (PT2 A10)	202	1	SAME CODING AS FOR BIT 192.
3052 012		PT2, AMP11 (PT2 A11)	203	1	SAME CODING AS FOR BIT 192.
3052 013		PT2, AMP12 (PT2 A12)	204	1	SAME CODING AS FOR BIT 192.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3052 014	PT2, AMP13	(PT2 A13)	205	1	SAME CODING AS FOR BIT 192.
3052 015	PT2, AMP14	(PT2 A14)	206	1	SAME CODING AS FOR BIT 192.
3052 016	PT2, AMP15	(PT2 A15)	207	1	SAME CODING AS FOR BIT 192.
3053 001	NO STATEMENT	(NS)	208	1	
3053 002	COMBAT AIR PATROL	(CAP) (CAP)	209	1	SAME CODING AS FOR BIT 208.
3053 003	AIRBORNE EARLY WARNING	(AEW) (AEW)	210	1	SAME CODING AS FOR BIT 208.
3053 004	ANTISUBMARINE WARFARE	(ASW) FIXED WING (ASW FW)	211	1	SAME CODING AS FOR BIT 208.
3053 005	ANTISUBMARINE WARFARE	(ASW) HELICOPTER (HELO) (ASW HEL)	212	1	SAME CODING AS FOR BIT 208.
3053 006	REPLENISHMENT	(RPL)	213	1	SAME CODING AS FOR BIT 208.
3053 007	STRIKE INITIAL POINT	(IP) (STK IP)	214	1	SAME CODING AS FOR BIT 208.
3053 008	TACAN	(TAC)	215	1	SAME CODING AS FOR BIT 208.
3053 009	TANKER	(TKR)	216	1	SAME CODING AS FOR BIT 208.
3053 010	ORBIT, RACE TRACK	(ORB RT)	217	1	SAME CODING AS FOR BIT 208.
3053 011	ORBIT, FIGURE EIGHT	(ORB F8)	218	1	SAME CODING AS FOR BIT 208.
3053 012	ORBIT, RANDOM CLOSED	(ORB RC)	219	1	SAME CODING AS FOR BIT 208.
3053 013	ORBIT POINT	(ORB PT)	220	1	SAME CODING AS FOR BIT 208.
3053 014	PT3, AMP13	(PT3 A13)	221	1	SAME CODING AS FOR BIT 208.
3053 015	PT3, AMP14	(PT3 A14)	222	1	SAME CODING AS FOR BIT 208.
3053 016	PT3, AMP15	(PT3 A15)	223	1	SAME CODING AS FOR BIT 208.
3054 001	NO STATEMENT	(NS)	224	1	
3054 002	FORWARD EDGE OF THE BATTLE	AREA (FEBA) (FEBA)	225	1	SAME CODING AS FOR BIT 224.
3054 003	GUN TARGET LINE	(GTL)	226	1	SAME CODING AS FOR BIT 224.
3054 004	CORRIDOR	(CORRDR)	227	1	SAME CODING AS FOR BIT 224.
3054 005	HOSTILE BOUNDARY	(HOS BND)	228	1	SAME CODING AS FOR BIT 224.
3054 006	BUFFER ZONE BOUNDARY	(BZ BND)	229	1	SAME CODING AS FOR BIT 224.
3054 007	LOW LEVEL TRANSIT ROUTE	(LLTR)	230	1	SAME CODING AS FOR BIT 224.
3054 008	TACTICAL ACTION LINE	(TAL)	231	1	SAME CODING AS FOR BIT 224.
3054 009	FIRE SUPPORT COORDINATION LINE	(FSCL) (FSCL)	232	1	SAME CODING AS FOR BIT 224.
3054 010	FORWARD LINE OF OWN TROOPS	(FLOT) (FLOT)	233	1	SAME CODING AS FOR BIT 224.
3054 011	PT4, AMP10	(PT4 A10)	234	1	SAME CODING AS FOR BIT 224.
3054 012	PT4, AMP11	(PT4 A11)	235	1	SAME CODING AS FOR BIT 224.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3054 013	PT4,	AMP12 (PT4 A12)	236	1	SAME CODING AS FOR BIT 224.
3054 014	PT4,	AMP13 (PT4 A13)	237	1	SAME CODING AS FOR BIT 224.
3054 015	PT4,	AMP14 (PT4 A14)	238	1	SAME CODING AS FOR BIT 224.
3054 016	PT4,	AMP15 (PT4 A15)	239	1	SAME CODING AS FOR BIT 224.
3055 001		NO STATEMENT (NS)	240	1	
3055 002		SEARCH (SEA RCH)	241	1	SAME CODING AS FOR BIT 240.
3055 003		RESTRICTED (RTD)	242	1	SAME CODING AS FOR BIT 240.
3055 004		EXERCISE (EX)	243	1	SAME CODING AS FOR BIT 240.
3055 005		SUBMARINE PATROL AREA (SUB PTL)	244	1	SAME CODING AS FOR BIT 240.
3055 006		FIGHTER ENGAGEMENT ZONE/ FIGHTER AOR (FEZ)	245	1	SAME CODING AS FOR BIT 240.
3055 007		GROUND AREA OF RESPONSIBILITY (GND AOR)	246	1	SAME CODING AS FOR BIT 240.
3055 008		DEFENDED AREA (DEF AR)	247	1	SAME CODING AS FOR BIT 240.
3055 009	PT5,	AMP8 (PT5 A8)	248	1	SAME CODING AS FOR BIT 240.
3055 010	PT5,	AMP9 (PT5 A9)	249	1	SAME CODING AS FOR BIT 240.
3055 011	PT5,	AMP10 (PT5 A10)	250	1	SAME CODING AS FOR BIT 240.
3055 012	PT5,	AMP11 (PT5 A11)	251	1	SAME CODING AS FOR BIT 240.
3055 013	PT5,	AMP12 (PT5 A12)	252	1	SAME CODING AS FOR BIT 240.
3055 014	PT5,	AMP13 (PT5 A13)	253	1	SAME CODING AS FOR BIT 240.
3055 015	PT5,	AMP14 (PT5 A14)	254	1	SAME CODING AS FOR BIT 240.
3055 016	PT5,	AMP15 (PT5 A15)	255	1	SAME CODING AS FOR BIT 240.
3056 001		NO STATEMENT (NS)	256	1	
3056 002		DANGER (DGR)	257	1	SAME CODING AS FOR BIT 256.
3056 003		CONTAMINATED (CTMNTD)	258	1	SAME CODING AS FOR BIT 256.
3056 004		MISSILE ENGAGEMENT ZONE (MEZ)	259	1	SAME CODING AS FOR BIT 256.
3056 005		DISUSED (DIS)	260	1	SAME CODING AS FOR BIT 256.
3056 006		HOSTILE WEAPON ZONE (HOS WZ)	261	1	SAME CODING AS FOR BIT 256.
3056 007		HOSTILE TACTICAL ZONE (HOS TZ)	262	1	SAME CODING AS FOR BIT 256.
3056 008		SHORAD	263	1	SAME CODING AS FOR BIT 256.
3056 009		KILL ZONE (KIL ZNE)	264	1	SAME CODING AS FOR BIT 256.
3056 010		TARGET AREA OF INTEREST (TGT AOI)	265	1	SAME CODING AS FOR BIT 256.
3056 011		NAMED AREA OF INTEREST (NMD AOI)	266	1	SAME CODING AS FOR BIT 256.
3056 012	PT6,	AMP11 (PT6 A11)	267	1	SAME CODING AS FOR BIT 256.
3056 013	PT6,	AMP12 (PT6 A12)	268	1	SAME CODING AS FOR BIT 256.
3056 014	PT6,	AMP13 (PT6 A13)	269	1	SAME CODING AS FOR BIT 256.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3056 015	PT6,	AMP14 (PT6 A14)	270	1	SAME CODING AS FOR BIT 256.
3056 016	PT6,	AMP15 (PT6 A15)	271	1	SAME CODING AS FOR BIT 256.
3057 001		NO STATEMENT (NS)	272	1	
3057 002		SINKER (SKR)	273	1	SAME CODING AS FOR BIT 272.
3057 003		BRIEF CONTACT (BRF CTC)	274	1	SAME CODING AS FOR BIT 272.
3057 004		SEARCH CENTER (ASW) (SC ASW)	275	1	SAME CODING AS FOR BIT 272.
3057 005		ESTIMATED POSITION (EP) (EP)	276	1	SAME CODING AS FOR BIT 272.
3057 006		FIX (ASW) (FIX ASW)	277	1	SAME CODING AS FOR BIT 272.
3057 007		NOTACK AREA (NOT ACK)	278	1	SAME CODING AS FOR BIT 272.
3057 008		MOVING HAVEN (MOV HAV)	279	1	SAME CODING AS FOR BIT 272.
3057 009		DISUSED (DIS)	280	1	SAME CODING AS FOR BIT 272.
3057 010		SONOBUOY POSITION (SBY POS)	281	1	SAME CODING AS FOR BIT 272.
3057 011		SONOBUOY PATTERN REFERENCE POSITION (SBY PRP)	282	1	SAME CODING AS FOR BIT 272.
3057 012		LIMITING LINE OF APPROACH (LIM LOA)	283	1	SAME CODING AS FOR BIT 272.
3057 013		AREA OF PROBABILITY (ASW) (AOP ASW)	284	1	SAME CODING AS FOR BIT 272.
3057 014		FRIENDLY WEAPON DANGER AREA (FWDA) (FW DA)	285	1	SAME CODING AS FOR BIT 272.
3057 015	PT7,	AMP14 (PT7 A14)	286	1	SAME CODING AS FOR BIT 272.
3057 016	PT7,	AMP15 (PT7 A15)	287	1	SAME CODING AS FOR BIT 272.
3058 001		CHARTED WRECK (CHD WRK)	288	1	
3058 002		BOTTOMED NONSUBMARINE (BTM NSB)	289	1	SAME CODING AS FOR BIT 288.
3058 003		ASW STATION (ASW STN)	290	1	SAME CODING AS FOR BIT 288.
3058 004	PT8,	AMP3 (PT8 A3)	291	1	SAME CODING AS FOR BIT 288.
3058 005	PT8,	AMP4 (PT8 A4)	292	1	SAME CODING AS FOR BIT 288.
3058 006	PT8,	AMP5 (PT8 A5)	293	1	SAME CODING AS FOR BIT 288.
3058 007	PT8,	AMP6 (PT8 A6)	294	1	SAME CODING AS FOR BIT 288.
3058 008	PT8,	AMP7 (PT8 A7)	295	1	SAME CODING AS FOR BIT 288.
3058 009	PT8,	AMP8 (PT8 A8)	296	1	SAME CODING AS FOR BIT 288.
3058 010	PT8,	AMP9 (PT8 A9)	297	1	SAME CODING AS FOR BIT 288.
3058 011	PT8,	AMP10 (PT8 A10)	298	1	SAME CODING AS FOR BIT 288.
3058 012	PT8,	AMP11 (PT8 A11)	299	1	SAME CODING AS FOR BIT 288.
3058 013	PT8,	AMP12 (PT8 A12)	300	1	SAME CODING AS FOR BIT 288.
3058 014	PT8,	AMP13 (PT8 A13)	301	1	SAME CODING AS FOR BIT 288.
3058 015	PT8,	AMP14 (PT8 A14)	302	1	SAME CODING AS FOR BIT 288.
3058 016	PT8,	AMP15 (PT8 A15)	303	1	SAME CODING AS FOR BIT 288.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3059 001	PT9,	AMP0 (PT9 A0)	304	1	
3059 002	PT9,	AMP1 (PT9 A1)	305	1	SAME CODING AS FOR BIT 304.
3059 003	PT9,	AMP2 (PT9 A2)	306	1	SAME CODING AS FOR BIT 304.
3059 004	PT9,	AMP3 (PT9 A3)	307	1	SAME CODING AS FOR BIT 304.
3059 005	PT9,	AMP4 (PT9 A4)	308	1	SAME CODING AS FOR BIT 304.
3059 006	PT9,	AMP5 (PT9 A5)	309	1	SAME CODING AS FOR BIT 304.
3059 007	PT9,	AMP6 (PT9 A6)	310	1	SAME CODING AS FOR BIT 304.
3059 008	PT9,	AMP7 (PT9 A7)	311	1	SAME CODING AS FOR BIT 304.
3059 009	PT9,	AMP8 (PT9 A8)	312	1	SAME CODING AS FOR BIT 304.
3059 010	PT9,	AMP9 (PT9 A9)	313	1	SAME CODING AS FOR BIT 304.
3059 011	PT9,	AMP10 (PT9 A10)	314	1	SAME CODING AS FOR BIT 304.
3059 012	PT9,	AMP11 (PT9 A11)	315	1	SAME CODING AS FOR BIT 304.
3059 013	PT9,	AMP12 (PT9 A12)	316	1	SAME CODING AS FOR BIT 304.
3059 014	PT9,	AMP13 (PT9 A13)	317	1	SAME CODING AS FOR BIT 304.
3059 015	PT9,	AMP14 (PT9 A14)	318	1	SAME CODING AS FOR BIT 304.
3059 016	PT9,	AMP15 (PT9 A15)	319	1	SAME CODING AS FOR BIT 304.
3061 001	PT10,	AMP0 (PT10 A0)	320	1	
3061 002	PT10,	AMP1 (PT10 A1)	321	1	SAME CODING AS FOR BIT 320.
3061 003	PT10,	AMP2 (PT10 A2)	322	1	SAME CODING AS FOR BIT 320.
3061 004	PT10,	AMP3 (PT10 A3)	323	1	SAME CODING AS FOR BIT 320.
3061 005	PT10,	AMP4 (PT10 A4)	324	1	SAME CODING AS FOR BIT 320.
3061 006	PT10,	AMP5 (PT10 A5)	325	1	SAME CODING AS FOR BIT 320.
3061 007	PT10,	AMP6 (PT10 A6)	326	1	SAME CODING AS FOR BIT 320.
3061 008	PT10,	AMP7 (PT10 A7)	327	1	SAME CODING AS FOR BIT 320.
3061 009	PT10,	AMP8 (PT10 A8)	328	1	SAME CODING AS FOR BIT 320.
3061 010	PT10,	AMP9 (PT10 A9)	329	1	SAME CODING AS FOR BIT 320.
3061 011	PT10,	AMP10 (PT10 A10)	330	1	SAME CODING AS FOR BIT 320.
3061 012	PT10,	AMP11 (PT10 A11)	331	1	SAME CODING AS FOR BIT 320.
3061 013	PT10,	AMP12 (PT10 A12)	332	1	SAME CODING AS FOR BIT 320.
3061 014	PT10,	AMP13 (PT10 A13)	333	1	SAME CODING AS FOR BIT 320.
3061 015	PT10,	AMP14 (PT10 A14)	334	1	SAME CODING AS FOR BIT 320.
3061 016	PT10,	AMP15 (PT10 A15)	335	1	SAME CODING AS FOR BIT 320.
3062 001	PT11,	AMP0 (PT11 A0)	336	1	
3062 002	PT11,	AMP1 (PT11 A1)	337	1	SAME CODING AS FOR BIT 336.
3062 003	PT11,	AMP2 (PT11 A2)	338	1	SAME CODING AS FOR BIT 336.
3062 004	PT11,	AMP3 (PT11 A3)	339	1	SAME CODING AS FOR BIT 336.
3062 005	PT11,	AMP4 (PT11 A4)	340	1	SAME CODING AS FOR BIT 336.
3062 006	PT11,	AMP5 (PT11 A5)	341	1	SAME CODING AS FOR BIT 336.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3062 007	PT11,	AMP6 (PT11 A6)	342	1	SAME CODING AS FOR BIT 336.
3062 008	PT11,	AMP7 (PT11 A7)	343	1	SAME CODING AS FOR BIT 336.
3062 009	PT11,	AMP8 (PT11 A8)	344	1	SAME CODING AS FOR BIT 336.
3062 010	PT11,	AMP9 (PT11 A9)	345	1	SAME CODING AS FOR BIT 336.
3062 011	PT11,	AMP10 (PT11 A10)	346	1	SAME CODING AS FOR BIT 336.
3062 012	PT11,	AMP11 (PT11 A11)	347	1	SAME CODING AS FOR BIT 336.
3062 013	PT11,	AMP12 (PT11 A12)	348	1	SAME CODING AS FOR BIT 336.
3062 014	PT11,	AMP13 (PT11 A13)	349	1	SAME CODING AS FOR BIT 336.
3062 015	PT11,	AMP14 (PT11 A14)	350	1	SAME CODING AS FOR BIT 336.
3062 016	PT11,	AMP15 (PT11 A15)	351	1	SAME CODING AS FOR BIT 336.
3063 001	PT12,	AMP0 (PT12 A0)	352	1	
3063 002	PT12,	AMP1 (PT12 A1)	353	1	SAME CODING AS FOR BIT 352.
3063 003	PT12,	AMP2 (PT12 A2)	354	1	SAME CODING AS FOR BIT 352.
3063 004	PT12,	AMP3 (PT12 A3)	355	1	SAME CODING AS FOR BIT 352.
3063 005	PT12,	AMP4 (PT12 A4)	356	1	SAME CODING AS FOR BIT 352.
3063 006	PT12,	AMP5 (PT12 A5)	357	1	SAME CODING AS FOR BIT 352.
3063 007	PT12,	AMP6 (PT12 A6)	358	1	SAME CODING AS FOR BIT 352.
3063 008	PT12,	AMP7 (PT12 A7)	359	1	SAME CODING AS FOR BIT 352.
3063 009	PT12,	AMP8 (PT12 A8)	360	1	SAME CODING AS FOR BIT 352.
3063 010	PT12,	AMP9 (PT12 A9)	361	1	SAME CODING AS FOR BIT 352.
3063 011	PT12,	AMP10 (PT12 A10)	362	1	SAME CODING AS FOR BIT 352.
3063 012	PT12,	AMP11 (PT12 A11)	363	1	SAME CODING AS FOR BIT 352.
3063 013	PT12,	AMP12 (PT12 A12)	364	1	SAME CODING AS FOR BIT 352.
3063 014	PT12,	AMP13 (PT12 A13)	365	1	SAME CODING AS FOR BIT 352.
3063 015	PT12,	AMP14 (PT12 A14)	366	1	SAME CODING AS FOR BIT 352.
3063 016	PT12,	AMP15 (PT12 A15)	367	1	SAME CODING AS FOR BIT 352.
3064 001	PT13,	AMP0 (PT13 A0)	368	1	
3064 002	PT13,	AMP1 (PT13 A1)	369	1	SAME CODING AS FOR BIT 368.
3064 003	PT13,	AMP2 (PT13 A2)	370	1	SAME CODING AS FOR BIT 368.
3064 004	PT13,	AMP3 (PT13 A3)	371	1	SAME CODING AS FOR BIT 368.
3064 005	PT13,	AMP4 (PT13 A4)	372	1	SAME CODING AS FOR BIT 368.
3064 006	PT13,	AMP5 (PT13 A5)	373	1	SAME CODING AS FOR BIT 368.
3064 007	PT13,	AMP6 (PT13 A6)	374	1	SAME CODING AS FOR BIT 368.
3064 008	PT13,	AMP7 (PT13 A7)	375	1	SAME CODING AS FOR BIT 368.
3064 009	PT13,	AMP8 (PT13 A8)	376	1	SAME CODING AS FOR BIT 368.
3064 010	PT13,	AMP9 (PT13 A9)	377	1	SAME CODING AS FOR BIT 368.
3064 011	PT13,	AMP10 (PT13 A10)	378	1	SAME CODING AS FOR BIT 368.
3064 012	PT13,	AMP11 (PT13 A11)	379	1	SAME CODING AS FOR BIT 368.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.4

MESSAGE TITLE: REMOTE FILTER (POINT TYPE POINT AMPLIFICATION FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3064	013	PT13, AMP12 (PT13 A12)	380	1	SAME CODING AS FOR BIT 368.
3064	014	PT13, AMP13 (PT13 A13)	381	1	SAME CODING AS FOR BIT 368.
3064	015	PT13, AMP14 (PT13 A14)	382	1	SAME CODING AS FOR BIT 368.
3064	016	PT13, AMP15 (PT13 A15)	383	1	SAME CODING AS FOR BIT 368.
3065	001	PT14, AMP0 (PT14 A0)	384	1	
3065	002	PT14, AMP1 (PT14 A1)	385	1	SAME CODING AS FOR BIT 384.
3065	003	PT14, AMP2 (PT14 A2)	386	1	SAME CODING AS FOR BIT 384.
3065	004	PT14, AMP3 (PT14 A3)	387	1	SAME CODING AS FOR BIT 384.
3065	005	PT14, AMP4 (PT14 A4)	388	1	SAME CODING AS FOR BIT 384.
3065	006	PT14, AMP5 (PT14 A5)	389	1	SAME CODING AS FOR BIT 384.
3065	007	PT14, AMP6 (PT14 A6)	390	1	SAME CODING AS FOR BIT 384.
3065	008	PT14, AMP7 (PT14 A7)	391	1	SAME CODING AS FOR BIT 384.
3065	009	PT14, AMP8 (PT14 A8)	392	1	SAME CODING AS FOR BIT 384.
3065	010	PT14, AMP9 (PT14 A9)	393	1	SAME CODING AS FOR BIT 384.
3065	011	PT14, AMP10 (PT14 A10)	394	1	SAME CODING AS FOR BIT 384.
3065	012	PT14, AMP11 (PT14 A11)	395	1	SAME CODING AS FOR BIT 384.
3065	013	PT14, AMP12 (PT14 A12)	396	1	SAME CODING AS FOR BIT 384.
3065	014	PT14, AMP13 (PT14 A13)	397	1	SAME CODING AS FOR BIT 384.
3065	015	PT14, AMP14 (PT14 A14)	398	1	SAME CODING AS FOR BIT 384.
3065	016	PT14, AMP15 (PT14 A15)	399	1	SAME CODING AS FOR BIT 384.
3066	001	PT15, AMP0 (PT15 A0)	400	1	
3066	002	PT15, AMP1 (PT15 A1)	401	1	SAME CODING AS FOR BIT 400.
3066	003	PT15, AMP2 (PT15 A2)	402	1	SAME CODING AS FOR BIT 400.
3066	004	PT15, AMP3 (PT15 A3)	403	1	SAME CODING AS FOR BIT 400.
3066	005	PT15, AMP4 (PT15 A4)	404	1	SAME CODING AS FOR BIT 400.
3066	006	PT15, AMP5 (PT15 A5)	405	1	SAME CODING AS FOR BIT 400.
3066	007	PT15, AMP6 (PT15 A6)	406	1	SAME CODING AS FOR BIT 400.
3066	008	PT15, AMP7 (PT15 A7)	407	1	SAME CODING AS FOR BIT 400.
3066	009	PT15, AMP8 (PT15 A8)	408	1	SAME CODING AS FOR BIT 400.
3066	010	PT15, AMP9 (PT15 A9)	409	1	SAME CODING AS FOR BIT 400.
3066	011	PT15, AMP10 (PT15 A10)	410	1	SAME CODING AS FOR BIT 400.
3066	012	PT15, AMP11 (PT15 A11)	411	1	SAME CODING AS FOR BIT 400.
3066	013	PT15, AMP12 (PT15 A12)	412	1	SAME CODING AS FOR BIT 400.
3066	014	PT15, AMP13 (PT15 A13)	413	1	SAME CODING AS FOR BIT 400.
3066	015	PT15, AMP14 (PT15 A14)	414	1	SAME CODING AS FOR BIT 400.
3066	016	PT15, AMP15 (PT15 A15)	415	1	SAME CODING AS FOR BIT 400.

FIELD CODING FOR X0.10.4 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.4

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

FIELD CODING FOR X0.10.4 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3002	004	COMMAND AND CONTROL INDICATOR OVERRIDE ----- FILTER OVERRIDE FILTER	0 1	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3050	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1	
3051	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1	

FIELD CODING FOR X0.10.4

(SHEET 4)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3052	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3053	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3054	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3055	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3056	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3057	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3058	001	CHARTED WRECK -----		
		NOT FILTERED	0	
		FILTERED	1	
3059	001	PT9, AMP0 -----		
		NOT FILTERED	0	
		FILTERED	1	
3061	001	PT10, AMP0 -----		
		NOT FILTERED	0	
		FILTERED	1	

		FIELD CODING FOR X0.10.4		(SHEET 5)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3062	001	PT11, AMP0		

		NOT FILTERED	0	
		FILTERED	1	
3063	001	PT12, AMP0		

		NOT FILTERED	0	
		FILTERED	1	
3064	001	PT13, AMP0		

		NOT FILTERED	0	
		FILTERED	1	
3065	001	PT14, AMP0		

		NOT FILTERED	0	
		FILTERED	1	
3066	001	PT15, AMP0		

		NOT FILTERED	0	
		FILTERED	1	

X0.10.5 MESSAGE SUMMARY

PURPOSE

THE ELLIPSE-RECTANGLE GEOGRAPHIC FILTER MESSAGE IS USED TO DIRECT OR REPORT FILTER SETTINGS APPLIED TO AN ELLIPTICAL OR RECTANGULAR AREA. THE ELLIPSE-RECTANGLE GEOGRAPHIC FILTER MESSAGE SHALL INCLUDE EITHER A CATEGORY/ID (X0.10.5A) OR POINT TYPE/POINT AMPLIFICATION MATRIX (X0.10.5B).

DATA ELEMENT SUMMARY

<u>X0.10.5</u>		<u>X0.10.5a</u>	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8		
MANAGEMENT VERSION	4	SPARE	2
ACKNOWLEDGEMENT PROTOCOL, 3	4	J3.2 AIR, 0	1
MANAGEMENT MESSAGE LENGTH	16	J3.3 SURFACE, 0	1
NUMBER DESTINATION ADDRESSES, NON-ZERO	8	J3.4 AND J5.4 SUBSURFACE, 0	1
COMPLETION TIMEOUT	8	J3.5 LAND/GROUND, 0	1
MESSAGE SEQUENCE NUMBER	16	J3.6 SPACE, 0	1
CONTROL/RESPONSE INDICATOR, 9	8	J3.7 AND J14.0 EW PRODUCT INFORMATION, 0	1
ERROR CODE, 1	8	SPARE	2
FRAGMENT NUMBER	8	J3.2 AIR, 1	1
TOTAL NUMBER FRAGMENTS	8	J3.3 SURFACE, 1	1
ORIGINATING MESSAGE SEQUENCE NUMBER	16	J3.4 AND J5.4 SUBSURFACE, 1	1
DESTINATION ADDRESS	16	J3.5 LAND/GROUND, 1	1
GEOGRAPHIC FILTER INDEX	5	J3.6 SPACE, 1	1
GEO FILTER SUBTYPE	3	J3.7 AND J14.0 EW PRODUCT INFORMATION, 1	1
FILTER MESSAGE TYPE	8	SPARE	2
LINK DESIGNATOR TO FILTER	16	J3.2 AIR, 2	1
COMMAND AND CONTROL INDICATOR OVERRIDE	1	J3.3 SURFACE, 2	1
EMERGENCY INDICATOR OVERRIDE	1	J3.4 AND J5.4 SUBSURFACE, 2	1
LOWER ALTITUDE LIMIT FLAG	1	J3.5 LAND/GROUND, 2	1
LOWER ALTITUDE LIMIT	13	J3.6 SPACE, 2	1
SPARE	1	J3.7 AND J14.0 EW PRODUCT INFORMATION, 2	1
FORCE TELL INDICATOR OVERRIDE	1	SPARE	2
UPPER ALTITUDE LIMIT FLAG	1	J3.2 AIR, 3	1
UPPER ALTITUDE LIMIT	13	J3.3 SURFACE, 3	1
MAJOR AXIS ORIENTATION	8	J3.4 AND J5.4 SUBSURFACE, 3	1
ACTIVE/INACTIVE FLAG	1	J3.5 LAND/GROUND, 3	1
LATITUDE, CENTER 0.0013 MINUTE	23	J3.6 SPACE, 3	1
SPARE	8	J3.7 AND J14.0 EW PRODUCT INFORMATION, 3	1
LONGITUDE, CENTER 0.0013 MINUTE	24	SPARE	2
SPARE	3	J3.2 AIR, 4	1
RECTANGLE FLAG	1	J3.3 SURFACE, 4	1
MAJOR AXIS LENGTH	12	J3.4 AND J5.4 SUBSURFACE, 4	1
SPARE	4	J3.5 LAND/GROUND, 4	1
MINOR AXIS LENGTH	12	J3.6 SPACE, 4	1
		J3.7 AND J14.0 EW PRODUCT INFORMATION, 4	1
		SPARE	2

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X0.10.5 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

<u>X0.10.5a (Continued)</u>		<u>X0.10.5b (Continued)</u>	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
J3.2 AIR, 5	1	SEARCH AREA	1
J3.3 SURFACE, 5	1	VICTOR LIMA (VL)	1
J3.4 AND J5.4 SUBSURFACE, 5	1	SUBMARINE POSITION AND	1
J3.5 LAND/GROUND, 5	1	INTENDED MOVEMENT (SIM)	
J3.6 SPACE, 5	1	PT1, AMP10	1
J3.7 AND J14.0 EW PRODUCT	1	DEFENDED ASSET	1
INFORMATION, 5		PT1, AMP12	1
SPARE	2	PT1, AMP13	1
J3.2 AIR, 6	1	PT1, AMP14	1
J3.3 SURFACE, 6	1	PT1, AMP15	1
J3.4 AND J5.4 SUBSURFACE, 6	1	NO STATEMENT	1
J3.5 LAND/GROUND, 6	1	TOMCAT	1
J3.6 SPACE, 6	1	PICKET	1
J3.7 AND J14.0 EW PRODUCT	1	RENDEZVOUS	1
INFORMATION, 6		PT2, AMP4	1
SPARE	2	REPLENISHMENT	1
J2.2 AND J2.0 AIR	1	RESCUE	1
J2.3 AND J2.0 SURFACE	1	PT2, AMP7	1
J2.4 AND J2.0 SUBSURFACE	1	PT2, AMP8	1
J2.5, J2.6 AND J2.0 LAND	1	PT2, AMP9	1
SPARE	2	PT2, AMP10	1
		PT2, AMP11	1
		PT2, AMP12	1
		PT2, AMP13	1
		PT2, AMP14	1
		PT2, AMP15	1
		NO STATEMENT	1
		COMBAT AIR PATROL (CAP)	1
		AIRBORNE EARLY WARNING (AEW)	1
		ANTISUBMARINE WARFARE (ASW)	1
		FIXED WING	
		ANTISUBMARINE WARFARE (ASW)	1
		HELICOPTER (HELO)	
		REPLENISHMENT	1
		STRIKE INITIAL POINT (IP)	1
		TACAN	1
		TANKER	1
		ORBIT, RACE TRACK	1
		ORBIT, FIGURE EIGHT	1
		ORBIT, RANDOM CLOSED	1
		ORBIT POINT	1
		PT3, AMP13	1
		PT3, AMP14	1
		PT3, AMP15	1
		NO STATEMENT	1
		FORWARD EDGE OF THE BATTLE	1
		AREA (FEBA)	
		GUN TARGET LINE	1
		CORRIDOR	1

X0.10.5b

DATA ELEMENT	# BITS
NO STATEMENT	1
NAVIGATION	1
MINE	1
IMPACT POINT	1
GROUND ZERO	1
AIM/WEAPON ENTRY POINT	1
MISSILE LAUNCH POINT	1
ELECTRONIC ATTACK (EA) DECOY	1
ENGAGEMENT POINT	1
OIL RIG	1
PT0, AMP10	1
PT0, AMP11	1
PT0, AMP12	1
PT0, AMP13	1
PT0, AMP14	1
PT0, AMP15	1
NO STATEMENT	1
MARSHALL POINT	1
WAYPOINT	1
CORRIDOR TAB	1
POSITION AND INTENDED MOVEMENT	1
(PIM)	
DISPOSITION CENTER	1
FORMATION CENTER	1

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X0.10.5 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

X0.10.5b (Continued)		X0.10.5b (Continued)	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
HOSTILE BOUNDARY	1	BRIEF CONTACT	1
BUFFER ZONE BOUNDARY	1	SEARCH CENTER (ASW)	1
LOW LEVEL TRANSIT ROUTE	1	ESTIMATED POSITION (EP)	1
TACTICAL ACTION LINE	1	FIX (ASW)	1
FIRE SUPPORT COORDINATION LINE	1	NOTACK AREA	1
(FSCL)		MOVING HAVEN	1
FORWARD LINE OF OWN TROOPS	1	DISUSED	1
(FLOT)		SONOBUOY POSITION	1
PT4, AMP10	1	SONOBUOY PATTERN REFERENCE	1
PT4, AMP11	1	POSITION	
PT4, AMP12	1	LIMITING LINE OF APPROACH	1
PT4, AMP13	1	AREA OF PROBABILITY (ASW)	1
PT4, AMP14	1	FRIENDLY WEAPON DANGER AREA	1
PT4, AMP15	1	(FWDA)	
NO STATEMENT	1	PT7, AMP14	1
SEARCH	1	PT7, AMP15	1
RESTRICTED	1	CHARTED WRECK	1
EXERCISE	1	BOTTOMED NONSUBMARINE	1
SUBMARINE PATROL AREA	1	ASW STATION	1
FIGHTER ENGAGEMENT ZONE/	1	PT8, AMP3	1
FIGHTER AOR		PT8, AMP4	1
GROUND AREA OF RESPONSIBILITY	1	PT8, AMP5	1
DEFENDED AREA	1	PT8, AMP6	1
PT5, AMP8	1	PT8, AMP7	1
PT5, AMP9	1	PT8, AMP8	1
PT5, AMP10	1	PT8, AMP9	1
PT5, AMP11	1	PT8, AMP10	1
PT5, AMP12	1	PT8, AMP11	1
PT5, AMP13	1	PT8, AMP12	1
PT5, AMP14	1	PT8, AMP13	1
PT5, AMP15	1	PT8, AMP14	1
NO STATEMENT	1	PT8, AMP15	1
DANGER	1	PT9, AMP0	1
CONTAMINATED	1	PT9, AMP1	1
MISSILE ENGAGEMENT ZONE	1	PT9, AMP2	1
DISUSED	1	PT9, AMP3	1
HOSTILE WEAPON ZONE	1	PT9, AMP4	1
HOSTILE TACTICAL ZONE	1	PT9, AMP5	1
SHORAD	1	PT9, AMP6	1
KILL ZONE	1	PT9, AMP7	1
TARGET AREA OF INTEREST	1	PT9, AMP8	1
NAMED AREA OF INTEREST	1	PT9, AMP9	1
PT6, AMP11	1	PT9, AMP10	1
PT6, AMP12	1	PT9, AMP11	1
PT6, AMP13	1	PT9, AMP12	1
PT6, AMP14	1	PT9, AMP13	1
PT6, AMP15	1	PT9, AMP14	1
NO STATEMENT	1	PT9, AMP15	1
SINKER	1	PT10, AMP0	1

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X0.10.5 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

X0.10.5b (Continued)		X0.10.5b (Continued)	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
PT10, AMP1	1	PT13, AMP4	1
PT10, AMP2	1	PT13, AMP5	1
PT10, AMP3	1	PT13, AMP6	1
PT10, AMP4	1	PT13, AMP7	1
PT10, AMP5	1	PT13, AMP8	1
PT10, AMP6	1	PT13, AMP9	1
PT10, AMP7	1	PT13, AMP10	1
PT10, AMP8	1	PT13, AMP11	1
PT10, AMP9	1	PT13, AMP12	1
PT10, AMP10	1	PT13, AMP13	1
PT10, AMP11	1	PT13, AMP14	1
PT10, AMP12	1	PT13, AMP15	1
PT10, AMP13	1	PT14, AMP0	1
PT10, AMP14	1	PT14, AMP1	1
PT10, AMP15	1	PT14, AMP2	1
PT11, AMP0	1	PT14, AMP3	1
PT11, AMP1	1	PT14, AMP4	1
PT11, AMP2	1	PT14, AMP5	1
PT11, AMP3	1	PT14, AMP6	1
PT11, AMP4	1	PT14, AMP7	1
PT11, AMP5	1	PT14, AMP8	1
PT11, AMP6	1	PT14, AMP9	1
PT11, AMP7	1	PT14, AMP10	1
PT11, AMP8	1	PT14, AMP11	1
PT11, AMP9	1	PT14, AMP12	1
PT11, AMP10	1	PT14, AMP13	1
PT11, AMP11	1	PT14, AMP14	1
PT11, AMP12	1	PT14, AMP15	1
PT11, AMP13	1	PT15, AMP0	1
PT11, AMP14	1	PT15, AMP1	1
PT11, AMP15	1	PT15, AMP2	1
PT12, AMP0	1	PT15, AMP3	1
PT12, AMP1	1	PT15, AMP4	1
PT12, AMP2	1	PT15, AMP5	1
PT12, AMP3	1	PT15, AMP6	1
PT12, AMP4	1	PT15, AMP7	1
PT12, AMP5	1	PT15, AMP8	1
PT12, AMP6	1	PT15, AMP9	1
PT12, AMP7	1	PT15, AMP10	1
PT12, AMP8	1	PT15, AMP11	1
PT12, AMP9	1	PT15, AMP12	1
PT12, AMP10	1	PT15, AMP13	1
PT12, AMP11	1	PT15, AMP14	1
PT12, AMP12	1	PT15, AMP15	1
PT12, AMP13	1		
PT12, AMP14	1		
PT12, AMP15	1		
PT13, AMP0	1		
PT13, AMP1	1		
PT13, AMP2	1		
PT13, AMP3	1		

MESSAGE TITLE: REMOTE FILTER (ELLIPSE-RECTANGLE GEOGRAPHIC FILTER)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:																				
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:													
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:													
:																:					:					:													:													
:	16															:	4				:	4				:	8												:													
:																																	:																			
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:																				
:																:													:	NUMBER DESTINATION ADDRESSES,																:						
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NON-ZERO																:						
:																:													:																	:						
:	16															:	8												:	8																:						
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:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:																				
:									:									:																	:																	
:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 1																:	CONTROL/RESPONSE INDICATOR, 9																:
:									:									:																	:																	:
:	8								:									:	8																:	8																:
:																																	:																			
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:																				
:																:																		:																		
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:																		
:																:																		:																		
:	16															:	16																	:																		

MESSAGE MAP

MESSAGE NUMBER: X0.10.5

MESSAGE TITLE: REMOTE FILTER (ELLIPSE-RECTANGLE GEOGRAPHIC FILTER)

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136:135:134:133:132 131 130 129 128:																																					
:															:											:	GEO FILTER : GEOGRAPHIC FILTER :					:					
:	LINK DESIGNATOR TO FILTER														:	FILTER MESSAGE TYPE										:	SUBTYPE :					:	INDEX :				
:															:											:						:					
:	16														:	8										:	3					:	5				
:191:190:189:188:187:186:185:184:183:182:181:180:179:178:177:176:175:174:173:172:171:170:169:168:167:166:165:164:163:162:161:160:																																					
:															:	:UV :FTI: :					:											:	:LAL:EMG:CC :				
:	UPPER ALTITUDE LIMIT														:	:LT :OVR:SP :					:	LOWER ALTITUDE LIMIT										:	:LMT:OVR:OVR:				
:															:	: : : :					:											:	: : : :				
:	13														:	: 1 : 1 : 1 :					:	13										:	: 1 : 1 : 1 :				
:223:222:221:220:219:218:217:216:215:214:213:212:211:210:209:208:207:206:205:204:203:202:201:200:199:198:197:196:195:194:193:192:																																					
:															:						:						:										
:	LATITUDE, CENTER 0.0013 MINUTE														:	:A/I: MAJOR AXIS ORIENTATION					:																
:															:						:																
:	23														:	: 1 :					:	8															
:255:254:253:252:251:250:249:248:247:246:245:244:243:242:241:240:239:238:237:236:235:234:233:232:231:230:229:228:227:226:225:224:																																					
:															:						:																
:	LONGITUDE, CENTER 0.0013 MINUTE														:						:	SPARE															
:															:						:																
:	24														:						:	8															

MESSAGE MAP

MESSAGE NUMBER: X0.10.5

MESSAGE TITLE: REMOTE FILTER (ELLIPSE-RECTANGLE GEOGRAPHIC FILTER)

:287:286:285:284:283:282:281:280:279:278:277:276:275:274:273:272:271:270:269:268:267:266:265:264:263:262:261:260:259:258:257:256:																	
:	MINOR AXIS LENGTH				:	SPARE		:	MAJOR AXIS LENGTH				:	REC:	:		
:					:			:					:	FLG:	SPARE	:	
:					:			:					:	:		:	
:	12				:	4		:	12				:	1	:	3	:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5

MESSAGE TITLE: REMOTE FILTER (ELLIPSE-RECTANGLE GEOGRAPHIC FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3031 001		GEOGRAPHIC FILTER INDEX	128-	132 5	
3009 001		GEO FILTER SUBTYPE	133-	135 3	
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00000101
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3002 004		COMMAND AND CONTROL INDICATOR OVERRIDE (CC OVR)	160	1	
3002 005		EMERGENCY INDICATOR OVERRIDE (EMG OVR)	161	1	SAME CODING AS FOR BIT 160.
3002 013		LOWER ALTITUDE LIMIT FLAG (LAL LMT)	162	1	
3042 001		LOWER ALTITUDE LIMIT	163-	175 13	
3099 001		SPARE (SP)	176	1	
3002 006		FORCE TELL INDICATOR OVERRIDE (FTI OVR)	177	1	SAME CODING AS FOR BIT 160.
3002 012		UPPER ALTITUDE LIMIT FLAG (UA LT)	178	1	
3042 002		UPPER ALTITUDE LIMIT	179-	191 13	
3043 001		MAJOR AXIS ORIENTATION	192-	199 8	
3002 002		ACTIVE/INACTIVE FLAG (A/I)	200	1	

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5

MESSAGE TITLE: REMOTE FILTER (ELLIPSE-RECTANGLE GEOGRAPHIC FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3010 018		LATITUDE, CENTER 0.0013 MINUTE	201-223	23	
3099 008		SPARE (SP)	224-231	8	
3011 016		LONGITUDE, CENTER 0.0013 MINUTE	232-255	24	
3099 003		SPARE (SP)	256-258	3	
3002 008		RECTANGLE FLAG (RECFLG)	259	1	
3013 001		MAJOR AXIS LENGTH (MAJ AL)	260-271	12	
3099 004		SPARE (SP)	272-275	4	
3013 002		MINOR AXIS LENGTH (MIN AL)	276-287	12	SAME CODING AS FOR BITS 260-271.

FIELD CODING FOR X0.10.5 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.5

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

FIELD CODING FOR X0.10.5

(SHEET 3)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3031	001	GEOGRAPHIC FILTER INDEX ----- INDEX NUMBER OF FILTER	0 THROUGH 31	INDICATES THE INDEX NUMBER OF A GEOGRAPHIC FILTER.
3009	001	GEO FILTER SUBTYPE ----- CATEGORY/IDENTITY, EXCEPTION TO FILTER CATEGORY/IDENTITY, FILTER POINT TYPE/POINT AMPLIFICATION, EXCEPTION TO FILTER POINT TYPE/POINT AMPLIFICATION, FILTER UNDEFINED	0 1 2 3 4 THROUGH 7	INDICATES THE ATTRIBUTES OF THE SURVEILLANCE (J3.X) MESSAGES TO WHICH THE FILTER APPLIES, AND THE SEMANTIC (FILTER OR EXCEPTION TO FILTER) FOR EVALUATION OF EACH GEOGRAPHIC FILTER AS IT APPLIES TO A SURVEILLANCE MESSAGE.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.

FIELD CODING FOR X0.10.5

(SHEET 4)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3002	004	COMMAND AND CONTROL INDICATOR OVERRIDE ----- FILTER OVERRIDE FILTER	 0 1	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.
3002	013	LOWER ALTITUDE LIMIT FLAG ----- NO LIMIT LOWER ALTITUDE LIMIT	 0 1	INDICATES WHETHER THE POINT IS THE LOWER ALTITUDE LIMIT.
3042	001	LOWER ALTITUDE LIMIT ----- 0 THROUGH 204,750 FEET ALTITUDE UNKNOWN	 0 THROUGH 8190 8191	INDICATES THE LOWER ALTITUDE LIMIT OF A GEOGRAPHIC FILTER. IN 25 FOOT INCREMENTS.
3002	012	UPPER ALTITUDE LIMIT FLAG ----- NO LIMIT UPPER ALTITUDE LIMIT	 0 1	INDICATES WHETHER THE POINT IS THE UPPER ALTITUDE LIMIT.
3042	002	UPPER ALTITUDE LIMIT ----- 0 THROUGH 204,750 FEET ALTITUDE UNKNOWN	 0 THROUGH 8190 8191	INDICATES THE UPPER ALTITUDE LIMIT OF A GEOGRAPHIC FILTER. IN 25 FOOT INCREMENTS.
3043	001	MAJOR AXIS ORIENTATION ----- 0 THROUGH 179 DEGREES ILLEGAL NO STATEMENT	 0 THROUGH 179 180 THROUGH 254 255	THE MAJOR AXIS ORIENTATION IS AN EIGHT BIT FIELD THAT SPECIFIES THE ORIENTATION OF THE MAJOR AXIS IN ONE DEGREE INCREMENTS FROM 0 TO 179 MEASURED CLOCKWISE FROM TRUE NORTH . IN ONE DEGREE INCREMENTS.
3002	002	ACTIVE/INACTIVE FLAG ----- INACTIVE ACTIVE	 0 1	INDICATES WHETHER A GEOGRAPHIC FILTER IS ACTIVE OR INACTIVE.

		FIELD CODING FOR X0.10.5		(SHEET 5)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3010	018	LATITUDE, CENTER 0.0013 MINUTE -----		SPECIFIES THE CENTER COORDINATE OF AN ELLIPSE (OR CIRCLE). THE PRECISION IS APPROXIMATELY 8 FEET.
		0 DEGREES	0	
		+90/4,194,303 THROUGH +90 DEGREES NORTH	1 THROUGH 4194303	
		NO STATEMENT	4194304	
		-90 THROUGH -90/4,194,303 DEGREES SOUTH	4194305 THROUGH 8388607	
3011	016	LONGITUDE, CENTER 0.0013 MINUTE -----		SPECIFIES THE CENTER COORDINATE OF AN ELLIPSE (OR CIRCLE). THE PRECISION IS APPROXIMATELY 8 FEET.
		0 DEGREES	0	
		+180/8,388,607 THROUGH +180 DEGREES EAST	1 THROUGH 8388607	
		NO STATEMENT	8388608	
		-180 THROUGH -180/8,388,607 DEGREES WEST	8388609 THROUGH 16777215	
3002	008	RECTANGLE FLAG -----		INDICATES WHETHER THE AREA SPECIFIED IS A RECTANGLE.
		ELLIPSE	0	
		RECTANGLE	1	
3013	001	MAJOR AXIS LENGTH -----		LENGTH (IN DATA MILES) OF THE MAJOR AXIS OF A GEOGRAPHIC MESSAGE FILTER.
		ILLEGAL	0	
		1 THROUGH 4095 DATA MILES	1 THROUGH 4095	IN ONE DATA MILE INCREMENTS.

MESSAGE TITLE: CATEGORY/ID AMPLIFICATION MATRIX

351	350	349	348	347	346	345	344	343	342	341	340	339	338	337	336	335	334	333	332	331	330	329	328	327	326	325	324	323	322	321	320	:				
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:			
:	SP	:	J25	J24	J23	J22	SP	:	6	6	6	6	6	6	6	5	5	5	5	5	5	5	SP	:	4	4	4	4	4	4	4	SP	:			
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:			
:	2	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	2	:	1	:	1	:	1	:	1	:	2	:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5a

MESSAGE TITLE: CATEGORY/ID AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3099 002		SPARE (SP)	288-289	2	
3080 003		J3.2 AIR, 0 (J32 0)	290	1	
3080 004		J3.3 SURFACE, 0 (J33 0)	291	1	SAME CODING AS FOR BIT 290.
3080 005		J3.4 AND J5.4 SUBSURFACE, 0 (J34 0)	292	1	SAME CODING AS FOR BIT 290.
3080 006		J3.5 LAND/GROUND, 0 (J35 0)	293	1	SAME CODING AS FOR BIT 290.
3080 007		J3.6 SPACE, 0 (J36 0)	294	1	SAME CODING AS FOR BIT 290.
3080 008		J3.7 AND J14.0 EW PRODUCT INFORMATION, 0 (J37 0)	295	1	SAME CODING AS FOR BIT 290.
3099 002		SPARE (SP)	296-297	2	
3081 003		J3.2 AIR, 1 (J32 1)	298	1	
3081 004		J3.3 SURFACE, 1 (J33 1)	299	1	SAME CODING AS FOR BIT 298.
3081 005		J3.4 AND J5.4 SUBSURFACE, 1 (J34 1)	300	1	SAME CODING AS FOR BIT 298.
3081 006		J3.5 LAND/GROUND, 1 (J35 1)	301	1	SAME CODING AS FOR BIT 298.
3081 007		J3.6 SPACE, 1 (J36 1)	302	1	SAME CODING AS FOR BIT 298.
3081 008		J3.7 AND J14.0 EW PRODUCT INFORMATION, 1 (J37 1)	303	1	SAME CODING AS FOR BIT 298.
3099 002		SPARE (SP)	304-305	2	
3082 003		J3.2 AIR, 2 (J32 2)	306	1	
3082 004		J3.3 SURFACE, 2 (J33 2)	307	1	SAME CODING AS FOR BIT 306.
3082 005		J3.4 AND J5.4 SUBSURFACE, 2 (J34 2)	308	1	SAME CODING AS FOR BIT 306.
3082 006		J3.5 LAND/GROUND, 2 (J35 2)	309	1	SAME CODING AS FOR BIT 306.
3082 007		J3.6 SPACE, 2 (J36 2)	310	1	SAME CODING AS FOR BIT 306.
3082 008		J3.7 AND J14.0 EW PRODUCT INFORMATION, 2 (J37 2)	311	1	SAME CODING AS FOR BIT 306.
3099 002		SPARE (SP)	312-313	2	
3083 003		J3.2 AIR, 3 (J32 3)	314	1	
3083 004		J3.3 SURFACE, 3 (J33 3)	315	1	SAME CODING AS FOR BIT 314.
3083 005		J3.4 AND J5.4 SUBSURFACE, 3 (J34 3)	316	1	SAME CODING AS FOR BIT 314.
3083 006		J3.5 LAND/GROUND, 3 (J35 3)	317	1	SAME CODING AS FOR BIT 314.
3083 007		J3.6 SPACE, 3 (J36 3)	318	1	SAME CODING AS FOR BIT 314.
3083 008		J3.7 AND J14.0 EW PRODUCT INFORMATION, 3 (J37 3)	319	1	SAME CODING AS FOR BIT 314.
3099 002		SPARE (SP)	320-321	2	

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5a

MESSAGE TITLE: CATEGORY/ID AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3084 003	J3.2	AIR, 4 (J32 4)	322	1	
3084 004	J3.3	SURFACE, 4 (J33 4)	323	1	SAME CODING AS FOR BIT 323.
3084 005	J3.4	AND J5.4 SUBSURFACE, 4 (J34 4)	324	1	SAME CODING AS FOR BIT 323.
3084 006	J3.5	LAND/GROUND, 4 (J35 4)	325	1	SAME CODING AS FOR BIT 323.
3084 007	J3.6	SPACE, 4 (J36 4)	326	1	SAME CODING AS FOR BIT 323.
3084 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 4 (J37 4)	327	1	SAME CODING AS FOR BIT 323.
3099 002	SPARE	(SP)	328-329	2	
3085 003	J3.2	AIR, 5 (J32 5)	330	1	
3085 004	J3.3	SURFACE, 5 (J33 5)	331	1	SAME CODING AS FOR BIT 331.
3085 005	J3.4	AND J5.4 SUBSURFACE, 5 (J34 5)	332	1	SAME CODING AS FOR BIT 331.
3085 006	J3.5	LAND/GROUND, 5 (J35 5)	333	1	SAME CODING AS FOR BIT 331.
3085 007	J3.6	SPACE, 5 (J36 5)	334	1	SAME CODING AS FOR BIT 331.
3085 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 5 (J37 5)	335	1	SAME CODING AS FOR BIT 331.
3099 002	SPARE	(SP)	336-337	2	
3086 003	J3.2	AIR, 6 (J32 6)	338	1	
3086 004	J3.3	SURFACE, 6 (J33 6)	339	1	SAME CODING AS FOR BIT 338.
3086 005	J3.4	AND J5.4 SUBSURFACE, 6 (J34 6)	340	1	SAME CODING AS FOR BIT 338.
3086 006	J3.5	LAND/GROUND, 6 (J35 6)	341	1	SAME CODING AS FOR BIT 338.
3086 007	J3.6	SPACE, 6 (J36 6)	342	1	SAME CODING AS FOR BIT 338.
3086 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 6 (J37 6)	343	1	SAME CODING AS FOR BIT 338.
3099 002	SPARE	(SP)	344-345	2	
3087 003	J2.2	AND J2.0 AIR (J22)	346	1	
3087 004	J2.3	AND J2.0 SURFACE (J23)	347	1	SAME CODING AS FOR BIT 347.
3087 005	J2.4	AND J2.0 SUBSURFACE (J24)	348	1	SAME CODING AS FOR BIT 347.
3087 006	J2.5,	J2.6 AND J2.0 LAND (J25)	349	1	SAME CODING AS FOR BIT 347.
3099 002	SPARE	(SP)	350-351	2	

FIELD CODING FOR X0.10.5a

(SHEET 1)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3080	003	J3.2 AIR, 0 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3081	003	J3.2 AIR, 1 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3082	003	J3.2 AIR, 2 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3083	003	J3.2 AIR, 3 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3084	003	J3.2 AIR, 4 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3085	003	J3.2 AIR, 5 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3086	003	J3.2 AIR, 6 ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY
3087	003	J2.2 AND J2.0 AIR ----- NOT FILTERED FILTERED	0 1	J-SERIES MESSAGE CATEGORY

MESSAGE MAP

MESSAGE NUMBER: X0.10.5b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

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:319:318:317:316:315:314:313:312:311:310:309:308:307:306:305:304:303:302:301:300:299:298:297:296:295:294:293:292:291:290:289:288:
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:PT1:PT1:PT1:PT1:DEF:PT1:      :SCH:FRM:DIS:      :COR:WAY:MAR:      :PT0:PT0:PT0:PT0:PT0:PT0:OIL:ENG:EA :MSL:AIM:GND:IMP:      :      :
:A15:A14:A13:A12:AST:A10:SIM:VL :ARE:CTR:CTR:PIM:TAB:PT :PT :NS :A15:A14:A13:A12:A11:A10:RIG:PT :DEC:LP :PT :ZER:PT :MNE:NAV:NS :
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:351:350:349:348:347:346:345:344:343:342:341:340:339:338:337:336:335:334:333:332:331:330:329:328:327:326:325:324:323:322:321:320:
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:PT3:PT3:PT3:ORB:ORB:ORB:ORB:      :STK:      :ASW:ASW:      :      :PT2:PT2:PT2:PT2:PT2:PT2:PT2:PT2:PT2:PT2:RES:      :PT2:      :PIC:TOM:
:A15:A14:A13:PT :RC :F8 :RT :TKR:TAC:IP :RPL:HEL:FW :AEW:CAP:NS :A15:A14:A13:A12:A11:A10:A9 :A8 :A7 :CUE:REP:A4 :RVS:KET:CAT:NS :
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:383:382:381:380:379:378:377:376:375:374:373:372:371:370:369:368:367:366:365:364:363:362:361:360:359:358:357:356:355:354:353:352:
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:PT5:PT5:PT5:PT5:PT5:PT5:PT5:PT5:DEF:GND:      :SUB:      :SEA:      :PT4:PT4:PT4:PT4:PT4:PT4:FLO:FSC:      :LLT:BZ :HOS:COR:      :FEB:      :
:A15:A14:A13:A12:A11:A10:A9 :A8 :AR :AOR:FEZ:PTL:EX :RTD:RCH:NS :A15:A14:A13:A12:A11:A10: T : L :TAL: R :BND:BND:RDR:GTL: A :NS :
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:415:414:413:412:411:410:409:408:407:406:405:404:403:402:401:400:399:398:397:396:395:394:393:392:391:390:389:388:387:386:385:384:
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:PT7:PT7:FW :AOP:LIM:SBY:SBY:      :MOV:NOT:FIX:      :SC :BRF:      :PT6:PT6:PT6:PT6:PT6:NMD:TGT:KIL:SHO:HOS:HOS:      :CTM:DAN:      :
:A15:A14:DA :ASW:LOA:PRP:POS:DIS:HAV:ACK:ASW:EP :ASW:CTC:SKR:NS :A15:A14:A13:A12:A11:AOI:AOI:ZNE:RAD:TZ :WZ :DIS:MEZ:NTD:GER:NS :
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MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

[illegible][illegible][illegible]

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3050 001		NO STATEMENT (NS)	288	1	
3050 002		NAVIGATION (NAV)	289	1	SAME CODING AS FOR BIT 288.
3050 003		MINE (MNE)	290	1	SAME CODING AS FOR BIT 288.
3050 004		IMPACT POINT (IMP PT)	291	1	SAME CODING AS FOR BIT 288.
3050 005		GROUND ZERO (GND ZER)	292	1	SAME CODING AS FOR BIT 288.
3050 006		AIM/WEAPON ENTRY POINT (AIM PT)	293	1	SAME CODING AS FOR BIT 288.
3050 007		MISSILE LAUNCH POINT (MSL LP)	294	1	SAME CODING AS FOR BIT 288.
3050 008		ELECTRONIC ATTACK (EA) DECOY (EA DEC)	295	1	SAME CODING AS FOR BIT 288.
3050 009		ENGAGEMENT POINT (ENG PT)	296	1	SAME CODING AS FOR BIT 288.
3050 010		OIL RIG	297	1	SAME CODING AS FOR BIT 288.
3050 011		PT0, AMP10 (PT0 A10)	298	1	SAME CODING AS FOR BIT 288.
3050 012		PT0, AMP11 (PT0 A11)	299	1	SAME CODING AS FOR BIT 288.
3050 013		PT0, AMP12 (PT0 A12)	300	1	SAME CODING AS FOR BIT 288.
3050 014		PT0, AMP13 (PT0 A13)	301	1	SAME CODING AS FOR BIT 288.
3050 015		PT0, AMP14 (PT0 A14)	302	1	SAME CODING AS FOR BIT 288.
3050 016		PT0, AMP15 (PT0 A15)	303	1	SAME CODING AS FOR BIT 288.
3051 001		NO STATEMENT (NS)	304	1	
3051 002		MARSHALL POINT (MAR PT)	305	1	SAME CODING AS FOR BIT 304.
3051 003		WAYPOINT (WAY PT)	306	1	SAME CODING AS FOR BIT 304.
3051 004		CORRIDOR TAB (COR TAB)	307	1	SAME CODING AS FOR BIT 304.
3051 005		POSITION AND INTENDED MOVEMENT (PIM) (PIM)	308	1	SAME CODING AS FOR BIT 304.
3051 006		DISPOSITION CENTER (DIS CTR)	309	1	SAME CODING AS FOR BIT 304.
3051 007		FORMATION CENTER (FRM CTR)	310	1	SAME CODING AS FOR BIT 304.
3051 008		SEARCH AREA (SCH ARE)	311	1	SAME CODING AS FOR BIT 304.
3051 009		VICTOR LIMA (VL) (VL)	312	1	SAME CODING AS FOR BIT 304.
3051 010		SUBMARINE POSITION AND INTENDED MOVEMENT (SIM) (SIM)	313	1	SAME CODING AS FOR BIT 304.
3051 011		PT1, AMP10 (PT1 A10)	314	1	SAME CODING AS FOR BIT 304.
3051 012		DEFENDED ASSET (DEF AST)	315	1	SAME CODING AS FOR BIT 304.
3051 013		PT1, AMP12 (PT1 A12)	316	1	SAME CODING AS FOR BIT 304.
3051 014		PT1, AMP13 (PT1 A13)	317	1	SAME CODING AS FOR BIT 304.
3051 015		PT1, AMP14 (PT1 A14)	318	1	SAME CODING AS FOR BIT 304.
3051 016		PT1, AMP15 (PT1 A15)	319	1	SAME CODING AS FOR BIT 304.
3052 001		NO STATEMENT (NS)	320	1	
3052 002		TOMCAT	321	1	SAME CODING AS FOR BIT 320.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3052 003		PICKET	322	1	SAME CODING AS FOR BIT 320.
3052 004		RENDEZVOUS (RVS)	323	1	SAME CODING AS FOR BIT 320.
3052 005		PT2, AMP4 (PT2 A4)	324	1	SAME CODING AS FOR BIT 320.
3052 006		REPLENISHMENT (REP)	325	1	SAME CODING AS FOR BIT 320.
3052 007		RESCUE	326	1	SAME CODING AS FOR BIT 320.
3052 008		PT2, AMP7 (PT2 A7)	327	1	SAME CODING AS FOR BIT 320.
3052 009		PT2, AMP8 (PT2 A8)	328	1	SAME CODING AS FOR BIT 320.
3052 010		PT2, AMP9 (PT2 A9)	329	1	SAME CODING AS FOR BIT 320.
3052 011		PT2, AMP10 (PT2 A10)	330	1	SAME CODING AS FOR BIT 320.
3052 012		PT2, AMP11 (PT2 A11)	331	1	SAME CODING AS FOR BIT 320.
3052 013		PT2, AMP12 (PT2 A12)	332	1	SAME CODING AS FOR BIT 320.
3052 014		PT2, AMP13 (PT2 A13)	333	1	SAME CODING AS FOR BIT 320.
3052 015		PT2, AMP14 (PT2 A14)	334	1	SAME CODING AS FOR BIT 320.
3052 016		PT2, AMP15 (PT2 A15)	335	1	SAME CODING AS FOR BIT 320.
3053 001		NO STATEMENT (NS)	336	1	
3053 002		COMBAT AIR PATROL (CAP) (CAP)	337	1	SAME CODING AS FOR BIT 336.
3053 003		AIRBORNE EARLY WARNING (AEW) (AEW)	338	1	SAME CODING AS FOR BIT 336.
3053 004		ANTISUBMARINE WARFARE (ASW) FIXED WING (ASW FW)	339	1	SAME CODING AS FOR BIT 336.
3053 005		ANTISUBMARINE WARFARE (ASW) HELICOPTER (HELO) (ASW HEL)	340	1	SAME CODING AS FOR BIT 336.
3053 006		REPLENISHMENT (RPL)	341	1	SAME CODING AS FOR BIT 336.
3053 007		STRIKE INITIAL POINT (IP) (STK IP)	342	1	SAME CODING AS FOR BIT 336.
3053 008		TACAN (TAC)	343	1	SAME CODING AS FOR BIT 336.
3053 009		TANKER (TKR)	344	1	SAME CODING AS FOR BIT 336.
3053 010		ORBIT, RACE TRACK (ORB RT)	345	1	SAME CODING AS FOR BIT 336.
3053 011		ORBIT, FIGURE EIGHT (ORB F8)	346	1	SAME CODING AS FOR BIT 336.
3053 012		ORBIT, RANDOM CLOSED (ORB RC)	347	1	SAME CODING AS FOR BIT 336.
3053 013		ORBIT POINT (ORB PT)	348	1	SAME CODING AS FOR BIT 336.
3053 014		PT3, AMP13 (PT3 A13)	349	1	SAME CODING AS FOR BIT 336.
3053 015		PT3, AMP14 (PT3 A14)	350	1	SAME CODING AS FOR BIT 336.
3053 016		PT3, AMP15 (PT3 A15)	351	1	SAME CODING AS FOR BIT 336.
3054 001		NO STATEMENT (NS)	352	1	
3054 002		FORWARD EDGE OF THE BATTLE AREA (FEBA) (FEBA)	353	1	SAME CODING AS FOR BIT 352.
3054 003		GUN TARGET LINE (GTL)	354	1	SAME CODING AS FOR BIT 352.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3054 004		CORRIDOR (CORRDR)	355	1	SAME CODING AS FOR BIT 352.
3054 005		HOSTILE BOUNDARY (HOS BND)	356	1	SAME CODING AS FOR BIT 352.
3054 006		BUFFER ZONE BOUNDARY (BZ BND)	357	1	SAME CODING AS FOR BIT 352.
3054 007		LOW LEVEL TRANSIT ROUTE (LLTR)	358	1	SAME CODING AS FOR BIT 352.
3054 008		TACTICAL ACTION LINE (TAL)	359	1	SAME CODING AS FOR BIT 352.
3054 009		FIRE SUPPORT COORDINATION LINE (FSCL) (FSCL)	360	1	SAME CODING AS FOR BIT 352.
3054 010		FORWARD LINE OF OWN TROOPS (FLOT) (FLOT)	361	1	SAME CODING AS FOR BIT 352.
3054 011	PT4, AMP10	(PT4 A10)	362	1	SAME CODING AS FOR BIT 352.
3054 012	PT4, AMP11	(PT4 A11)	363	1	SAME CODING AS FOR BIT 352.
3054 013	PT4, AMP12	(PT4 A12)	364	1	SAME CODING AS FOR BIT 352.
3054 014	PT4, AMP13	(PT4 A13)	365	1	SAME CODING AS FOR BIT 352.
3054 015	PT4, AMP14	(PT4 A14)	366	1	SAME CODING AS FOR BIT 352.
3054 016	PT4, AMP15	(PT4 A15)	367	1	SAME CODING AS FOR BIT 352.
3055 001		NO STATEMENT (NS)	368	1	
3055 002		SEARCH (SEA RCH)	369	1	SAME CODING AS FOR BIT 368.
3055 003		RESTRICTED (RTD)	370	1	SAME CODING AS FOR BIT 368.
3055 004		EXERCISE (EX)	371	1	SAME CODING AS FOR BIT 368.
3055 005		SUBMARINE PATROL AREA (SUB PTL)	372	1	SAME CODING AS FOR BIT 368.
3055 006		FIGHTER ENGAGEMENT ZONE/ FIGHTER AOR (FEZ)	373	1	SAME CODING AS FOR BIT 368.
3055 007		GROUND AREA OF RESPONSIBILITY (GND AOR)	374	1	SAME CODING AS FOR BIT 368.
3055 008		DEFENDED AREA (DEF AR)	375	1	SAME CODING AS FOR BIT 368.
3055 009	PT5, AMP8	(PT5 A8)	376	1	SAME CODING AS FOR BIT 368.
3055 010	PT5, AMP9	(PT5 A9)	377	1	SAME CODING AS FOR BIT 368.
3055 011	PT5, AMP10	(PT5 A10)	378	1	SAME CODING AS FOR BIT 368.
3055 012	PT5, AMP11	(PT5 A11)	379	1	SAME CODING AS FOR BIT 368.
3055 013	PT5, AMP12	(PT5 A12)	380	1	SAME CODING AS FOR BIT 368.
3055 014	PT5, AMP13	(PT5 A13)	381	1	SAME CODING AS FOR BIT 368.
3055 015	PT5, AMP14	(PT5 A14)	382	1	SAME CODING AS FOR BIT 368.
3055 016	PT5, AMP15	(PT5 A15)	383	1	SAME CODING AS FOR BIT 368.
3056 001		NO STATEMENT (NS)	384	1	
3056 002		DANGER (DGR)	385	1	SAME CODING AS FOR BIT 384.
3056 003		CONTAMINATED (CTMNTD)	386	1	SAME CODING AS FOR BIT 384.
3056 004		MISSILE ENGAGEMENT ZONE (MEZ)	387	1	SAME CODING AS FOR BIT 384.
3056 005		DISUSED (DIS)	388	1	SAME CODING AS FOR BIT 384.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3056 006		HOSTILE WEAPON ZONE (HOS WZ)	389	1	SAME CODING AS FOR BIT 384.
3056 007		HOSTILE TACTICAL ZONE (HOS TZ)	390	1	SAME CODING AS FOR BIT 384.
3056 008		SHORAD	391	1	SAME CODING AS FOR BIT 384.
3056 009		KILL ZONE (KIL ZNE)	392	1	SAME CODING AS FOR BIT 384.
3056 010		TARGET AREA OF INTEREST (TGT AOI)	393	1	SAME CODING AS FOR BIT 384.
3056 011		NAMED AREA OF INTEREST (NMD AOI)	394	1	SAME CODING AS FOR BIT 384.
3056 012		PT6, AMP11 (PT6 A11)	395	1	SAME CODING AS FOR BIT 384.
3056 013		PT6, AMP12 (PT6 A12)	396	1	SAME CODING AS FOR BIT 384.
3056 014		PT6, AMP13 (PT6 A13)	397	1	SAME CODING AS FOR BIT 384.
3056 015		PT6, AMP14 (PT6 A14)	398	1	SAME CODING AS FOR BIT 384.
3056 016		PT6, AMP15 (PT6 A15)	399	1	SAME CODING AS FOR BIT 384.
3057 001		NO STATEMENT (NS)	400	1	
3057 002		SINKER (SKR)	401	1	SAME CODING AS FOR BIT 400.
3057 003		BRIEF CONTACT (BRF CTC)	402	1	SAME CODING AS FOR BIT 400.
3057 004		SEARCH CENTER (ASW) (SC ASW)	403	1	SAME CODING AS FOR BIT 400.
3057 005		ESTIMATED POSITION (EP) (EP)	404	1	SAME CODING AS FOR BIT 400.
3057 006		FIX (ASW) (FIX ASW)	405	1	SAME CODING AS FOR BIT 400.
3057 007		NOTACK AREA (NOT ACK)	406	1	SAME CODING AS FOR BIT 400.
3057 008		MOVING HAVEN (MOV HAV)	407	1	SAME CODING AS FOR BIT 400.
3057 009		DISUSED (DIS)	408	1	SAME CODING AS FOR BIT 400.
3057 010		SONOBUOY POSITION (SBY POS)	409	1	SAME CODING AS FOR BIT 400.
3057 011		SONOBUOY PATTERN REFERENCE POSITION (SBY PRP)	410	1	SAME CODING AS FOR BIT 400.
3057 012		LIMITING LINE OF APPROACH (LIM LOA)	411	1	SAME CODING AS FOR BIT 400.
3057 013		AREA OF PROBABILITY (ASW) (AOP ASW)	412	1	SAME CODING AS FOR BIT 400.
3057 014		FRIENDLY WEAPON DANGER AREA (FWDA) (FW DA)	413	1	SAME CODING AS FOR BIT 400.
3057 015		PT7, AMP14 (PT7 A14)	414	1	SAME CODING AS FOR BIT 400.
3057 016		PT7, AMP15 (PT7 A15)	415	1	SAME CODING AS FOR BIT 400.
3058 001		CHARTED WRECK (CHD WRK)	416	1	
3058 002		BOTTOMED NONSUBMARINE (BTM NSB)	417	1	SAME CODING AS FOR BIT 416.
3058 003		ASW STATION (ASW STN)	418	1	SAME CODING AS FOR BIT 416.
3058 004		PT8, AMP3 (PT8 A3)	419	1	SAME CODING AS FOR BIT 416.
3058 005		PT8, AMP4 (PT8 A4)	420	1	SAME CODING AS FOR BIT 416.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3058 006	PT8,	AMP5 (PT8 A5)	421	1	SAME CODING AS FOR BIT 416.
3058 007	PT8,	AMP6 (PT8 A6)	422	1	SAME CODING AS FOR BIT 416.
3058 008	PT8,	AMP7 (PT8 A7)	423	1	SAME CODING AS FOR BIT 416.
3058 009	PT8,	AMP8 (PT8 A8)	424	1	SAME CODING AS FOR BIT 416.
3058 010	PT8,	AMP9 (PT8 A9)	425	1	SAME CODING AS FOR BIT 416.
3058 011	PT8,	AMP10 (PT8 A10)	426	1	SAME CODING AS FOR BIT 416.
3058 012	PT8,	AMP11 (PT8 A11)	427	1	SAME CODING AS FOR BIT 416.
3058 013	PT8,	AMP12 (PT8 A12)	428	1	SAME CODING AS FOR BIT 416.
3058 014	PT8,	AMP13 (PT8 A13)	429	1	SAME CODING AS FOR BIT 416.
3058 015	PT8,	AMP14 (PT8 A14)	430	1	SAME CODING AS FOR BIT 416.
3058 016	PT8,	AMP15 (PT8 A15)	431	1	SAME CODING AS FOR BIT 416.
3059 001	PT9,	AMP0 (PT9 A0)	432	1	
3059 002	PT9,	AMP1 (PT9 A1)	433	1	SAME CODING AS FOR BIT 432.
3059 003	PT9,	AMP2 (PT9 A2)	434	1	SAME CODING AS FOR BIT 432.
3059 004	PT9,	AMP3 (PT9 A3)	435	1	SAME CODING AS FOR BIT 432.
3059 005	PT9,	AMP4 (PT9 A4)	436	1	SAME CODING AS FOR BIT 432.
3059 006	PT9,	AMP5 (PT9 A5)	437	1	SAME CODING AS FOR BIT 432.
3059 007	PT9,	AMP6 (PT9 A6)	438	1	SAME CODING AS FOR BIT 432.
3059 008	PT9,	AMP7 (PT9 A7)	439	1	SAME CODING AS FOR BIT 432.
3059 009	PT9,	AMP8 (PT9 A8)	440	1	SAME CODING AS FOR BIT 432.
3059 010	PT9,	AMP9 (PT9 A9)	441	1	SAME CODING AS FOR BIT 432.
3059 011	PT9,	AMP10 (PT9 A10)	442	1	SAME CODING AS FOR BIT 432.
3059 012	PT9,	AMP11 (PT9 A11)	443	1	SAME CODING AS FOR BIT 432.
3059 013	PT9,	AMP12 (PT9 A12)	444	1	SAME CODING AS FOR BIT 432.
3059 014	PT9,	AMP13 (PT9 A13)	445	1	SAME CODING AS FOR BIT 432.
3059 015	PT9,	AMP14 (PT9 A14)	446	1	SAME CODING AS FOR BIT 432.
3059 016	PT9,	AMP15 (PT9 A15)	447	1	SAME CODING AS FOR BIT 432.
3061 001	PT10,	AMP0 (PT10 A0)	448	1	
3061 002	PT10,	AMP1 (PT10 A1)	449	1	SAME CODING AS FOR BIT 448.
3061 003	PT10,	AMP2 (PT10 A2)	450	1	SAME CODING AS FOR BIT 448.
3061 004	PT10,	AMP3 (PT10 A3)	451	1	SAME CODING AS FOR BIT 448.
3061 005	PT10,	AMP4 (PT10 A4)	452	1	SAME CODING AS FOR BIT 448.
3061 006	PT10,	AMP5 (PT10 A5)	453	1	SAME CODING AS FOR BIT 448.
3061 007	PT10,	AMP6 (PT10 A6)	454	1	SAME CODING AS FOR BIT 448.
3061 008	PT10,	AMP7 (PT10 A7)	455	1	SAME CODING AS FOR BIT 448.
3061 009	PT10,	AMP8 (PT10 A8)	456	1	SAME CODING AS FOR BIT 448.
3061 010	PT10,	AMP9 (PT10 A9)	457	1	SAME CODING AS FOR BIT 448.
3061 011	PT10,	AMP10 (PT10 A10)	458	1	SAME CODING AS FOR BIT 448.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3061	012	PT10, AMP11 (PT10 A11)	459	1	SAME CODING AS FOR BIT 448.
3061	013	PT10, AMP12 (PT10 A12)	460	1	SAME CODING AS FOR BIT 448.
3061	014	PT10, AMP13 (PT10 A13)	461	1	SAME CODING AS FOR BIT 448.
3061	015	PT10, AMP14 (PT10 A14)	462	1	SAME CODING AS FOR BIT 448.
3061	016	PT10, AMP15 (PT10 A15)	463	1	SAME CODING AS FOR BIT 448.
3062	001	PT11, AMP0 (PT11 A0)	464	1	
3062	002	PT11, AMP1 (PT11 A1)	465	1	SAME CODING AS FOR BIT 464.
3062	003	PT11, AMP2 (PT11 A2)	466	1	SAME CODING AS FOR BIT 464.
3062	004	PT11, AMP3 (PT11 A3)	467	1	SAME CODING AS FOR BIT 464.
3062	005	PT11, AMP4 (PT11 A4)	468	1	SAME CODING AS FOR BIT 464.
3062	006	PT11, AMP5 (PT11 A5)	469	1	SAME CODING AS FOR BIT 464.
3062	007	PT11, AMP6 (PT11 A6)	470	1	SAME CODING AS FOR BIT 464.
3062	008	PT11, AMP7 (PT11 A7)	471	1	SAME CODING AS FOR BIT 464.
3062	009	PT11, AMP8 (PT11 A8)	472	1	SAME CODING AS FOR BIT 464.
3062	010	PT11, AMP9 (PT11 A9)	473	1	SAME CODING AS FOR BIT 464.
3062	011	PT11, AMP10 (PT11 A10)	474	1	SAME CODING AS FOR BIT 464.
3062	012	PT11, AMP11 (PT11 A11)	475	1	SAME CODING AS FOR BIT 464.
3062	013	PT11, AMP12 (PT11 A12)	476	1	SAME CODING AS FOR BIT 464.
3062	014	PT11, AMP13 (PT11 A13)	477	1	SAME CODING AS FOR BIT 464.
3062	015	PT11, AMP14 (PT11 A14)	478	1	SAME CODING AS FOR BIT 464.
3062	016	PT11, AMP15 (PT11 A15)	479	1	SAME CODING AS FOR BIT 464.
3063	001	PT12, AMP0 (PT12 A0)	480	1	
3063	002	PT12, AMP1 (PT12 A1)	481	1	SAME CODING AS FOR BIT 480.
3063	003	PT12, AMP2 (PT12 A2)	482	1	SAME CODING AS FOR BIT 480.
3063	004	PT12, AMP3 (PT12 A3)	483	1	SAME CODING AS FOR BIT 480.
3063	005	PT12, AMP4 (PT12 A4)	484	1	SAME CODING AS FOR BIT 480.
3063	006	PT12, AMP5 (PT12 A5)	485	1	SAME CODING AS FOR BIT 480.
3063	007	PT12, AMP6 (PT12 A6)	486	1	SAME CODING AS FOR BIT 480.
3063	008	PT12, AMP7 (PT12 A7)	487	1	SAME CODING AS FOR BIT 480.
3063	009	PT12, AMP8 (PT12 A8)	488	1	SAME CODING AS FOR BIT 480.
3063	010	PT12, AMP9 (PT12 A9)	489	1	SAME CODING AS FOR BIT 480.
3063	011	PT12, AMP10 (PT12 A10)	490	1	SAME CODING AS FOR BIT 480.
3063	012	PT12, AMP11 (PT12 A11)	491	1	SAME CODING AS FOR BIT 480.
3063	013	PT12, AMP12 (PT12 A12)	492	1	SAME CODING AS FOR BIT 480.
3063	014	PT12, AMP13 (PT12 A13)	493	1	SAME CODING AS FOR BIT 480.
3063	015	PT12, AMP14 (PT12 A14)	494	1	SAME CODING AS FOR BIT 480.
3063	016	PT12, AMP15 (PT12 A15)	495	1	SAME CODING AS FOR BIT 480.
3064	001	PT13, AMP0 (PT13 A0)	496	1	

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3064 002	PT13, AMP1	(PT13 A1)	497	1	SAME CODING AS FOR BIT 496.
3064 003	PT13, AMP2	(PT13 A2)	498	1	SAME CODING AS FOR BIT 496.
3064 004	PT13, AMP3	(PT13 A3)	499	1	SAME CODING AS FOR BIT 496.
3064 005	PT13, AMP4	(PT13 A4)	500	1	SAME CODING AS FOR BIT 496.
3064 006	PT13, AMP5	(PT13 A5)	501	1	SAME CODING AS FOR BIT 496.
3064 007	PT13, AMP6	(PT13 A6)	502	1	SAME CODING AS FOR BIT 496.
3064 008	PT13, AMP7	(PT13 A7)	503	1	SAME CODING AS FOR BIT 496.
3064 009	PT13, AMP8	(PT13 A8)	504	1	SAME CODING AS FOR BIT 496.
3064 010	PT13, AMP9	(PT13 A9)	505	1	SAME CODING AS FOR BIT 496.
3064 011	PT13, AMP10	(PT13 A10)	506	1	SAME CODING AS FOR BIT 496.
3064 012	PT13, AMP11	(PT13 A11)	507	1	SAME CODING AS FOR BIT 496.
3064 013	PT13, AMP12	(PT13 A12)	508	1	SAME CODING AS FOR BIT 496.
3064 014	PT13, AMP13	(PT13 A13)	509	1	SAME CODING AS FOR BIT 496.
3064 015	PT13, AMP14	(PT13 A14)	510	1	SAME CODING AS FOR BIT 496.
3064 016	PT13, AMP15	(PT13 A15)	511	1	SAME CODING AS FOR BIT 496.
3065 001	PT14, AMP0	(PT14 A0)	512	1	
3065 002	PT14, AMP1	(PT14 A1)	513	1	SAME CODING AS FOR BIT 512.
3065 003	PT14, AMP2	(PT14 A2)	514	1	SAME CODING AS FOR BIT 512.
3065 004	PT14, AMP3	(PT14 A3)	515	1	SAME CODING AS FOR BIT 512.
3065 005	PT14, AMP4	(PT14 A4)	516	1	SAME CODING AS FOR BIT 512.
3065 006	PT14, AMP5	(PT14 A5)	517	1	SAME CODING AS FOR BIT 512.
3065 007	PT14, AMP6	(PT14 A6)	518	1	SAME CODING AS FOR BIT 512.
3065 008	PT14, AMP7	(PT14 A7)	519	1	SAME CODING AS FOR BIT 512.
3065 009	PT14, AMP8	(PT14 A8)	520	1	SAME CODING AS FOR BIT 512.
3065 010	PT14, AMP9	(PT14 A9)	521	1	SAME CODING AS FOR BIT 512.
3065 011	PT14, AMP10	(PT14 A10)	522	1	SAME CODING AS FOR BIT 512.
3065 012	PT14, AMP11	(PT14 A11)	523	1	SAME CODING AS FOR BIT 512.
3065 013	PT14, AMP12	(PT14 A12)	524	1	SAME CODING AS FOR BIT 512.
3065 014	PT14, AMP13	(PT14 A13)	525	1	SAME CODING AS FOR BIT 512.
3065 015	PT14, AMP14	(PT14 A14)	526	1	SAME CODING AS FOR BIT 512.
3065 016	PT14, AMP15	(PT14 A15)	527	1	SAME CODING AS FOR BIT 512.
3066 001	PT15, AMP0	(PT15 A0)	528	1	
3066 002	PT15, AMP1	(PT15 A1)	529	1	SAME CODING AS FOR BIT 528.
3066 003	PT15, AMP2	(PT15 A2)	530	1	SAME CODING AS FOR BIT 528.
3066 004	PT15, AMP3	(PT15 A3)	531	1	SAME CODING AS FOR BIT 528.
3066 005	PT15, AMP4	(PT15 A4)	532	1	SAME CODING AS FOR BIT 528.
3066 006	PT15, AMP5	(PT15 A5)	533	1	SAME CODING AS FOR BIT 528.
3066 007	PT15, AMP6	(PT15 A6)	534	1	SAME CODING AS FOR BIT 528.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.5b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE			BIT #		RESOLUTION, CODING, ETC
DFI/DUI	DATA FIELD	DESCRIPTOR	POSITION	BITS	
3066 008	PT15, AMP7	(PT15 A7)	535	1	SAME CODING AS FOR BIT 528.
3066 009	PT15, AMP8	(PT15 A8)	536	1	SAME CODING AS FOR BIT 528.
3066 010	PT15, AMP9	(PT15 A9)	537	1	SAME CODING AS FOR BIT 528.
3066 011	PT15, AMP10	(PT15 A10)	538	1	SAME CODING AS FOR BIT 528.
3066 012	PT15, AMP11	(PT15 A11)	539	1	SAME CODING AS FOR BIT 528.
3066 013	PT15, AMP12	(PT15 A12)	540	1	SAME CODING AS FOR BIT 528.
3066 014	PT15, AMP13	(PT15 A13)	541	1	SAME CODING AS FOR BIT 528.
3066 015	PT15, AMP14	(PT15 A14)	542	1	SAME CODING AS FOR BIT 528.
3066 016	PT15, AMP15	(PT15 A15)	543	1	SAME CODING AS FOR BIT 528.

			FIELD CODING FOR X0.10.5b		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION	
3050	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1		
3051	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1		
3052	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1		
3053	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1		
3054	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1		
3055	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1		
3056	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1		
3057	001	NO STATEMENT ----- NOT FILTERED FILTERED	0 1		
3058	001	CHARTED WRECK ----- NOT FILTERED FILTERED	0 1		

		FIELD CODING FOR X0.10.5b		(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3059	001	PT9, AMP0 ----- NOT FILTERED FILTERED	0 1	
3061	001	PT10, AMP0 ----- NOT FILTERED FILTERED	0 1	
3062	001	PT11, AMP0 ----- NOT FILTERED FILTERED	0 1	
3063	001	PT12, AMP0 ----- NOT FILTERED FILTERED	0 1	
3064	001	PT13, AMP0 ----- NOT FILTERED FILTERED	0 1	
3065	001	PT14, AMP0 ----- NOT FILTERED FILTERED	0 1	
3066	001	PT15, AMP0 ----- NOT FILTERED FILTERED	0 1	

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X0.10.6 MESSAGE SUMMARY

PURPOSE

A CLOSED POLYGON GEOGRAPHIC FILTER MESSAGE IS USED TO DIRECT OR REPORT FILTER SETTINGS APPLIED TO A CLOSED POLYGON AREA. A CLOSED POLYGON GEOGRAPHIC FILTER MESSAGE SHALL INCLUDE EITHER A CATEGORY/ID (X0.10.6A) OR POINT TYPE/POINT AMPLIFICATION MATRIX (X0.10.6B).

DATA ELEMENT SUMMARY

<u>X0.10.6</u>		<u>X0.10.6a (Continued)</u>	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8		
MANAGEMENT VERSION	4	J3.2 AIR, 0	1
ACKNOWLEDGEMENT PROTOCOL, 3	4	J3.3 SURFACE, 0	1
MANAGEMENT MESSAGE LENGTH	16	J3.4 AND J5.4 SUBSURFACE, 0	1
NUMBER DESTINATION ADDRESSES, NON-ZERO	8	J3.5 LAND/GROUND, 0	1
COMPLETION TIMEOUT	8	J3.6 SPACE, 0	1
MESSAGE SEQUENCE NUMBER	16	J3.7 AND J14.0 EW PRODUCT INFORMATION, 0	1
CONTROL/RESPONSE INDICATOR, 9	8	SPARE	2
ERROR CODE, 1	8	J3.2 AIR, 1	1
FRAGMENT NUMBER	8	J3.3 SURFACE, 1	1
TOTAL NUMBER FRAGMENTS	8	J3.4 AND J5.4 SUBSURFACE, 1	1
ORIGINATING MESSAGE SEQUENCE NUMBER	16	J3.5 LAND/GROUND, 1	1
DESTINATION ADDRESS	16	J3.6 SPACE, 1	1
GEOGRAPHIC FILTER INDEX	5	J3.7 AND J14.0 EW PRODUCT INFORMATION, 1	1
GEO FILTER SUBTYPE	3	SPARE	2
FILTER MESSAGE TYPE	8	J3.2 AIR, 2	1
LINK DESIGNATOR TO FILTER	16	J3.3 SURFACE, 2	1
COMMAND AND CONTROL INDICATOR OVERRIDE	1	J3.4 AND J5.4 SUBSURFACE, 2	1
EMERGENCY INDICATOR OVERRIDE	1	J3.5 LAND/GROUND, 2	1
LOWER ALTITUDE LIMIT FLAG	1	J3.6 SPACE, 2	1
LOWER ALTITUDE LIMIT	13	J3.7 AND J14.0 EW PRODUCT INFORMATION, 2	1
SPARE	1	SPARE	2
FORCE TELL INDICATOR OVERRIDE	1	J3.2 AIR, 3	1
UPPER ALTITUDE LIMIT FLAG	1	J3.3 SURFACE, 3	1
UPPER ALTITUDE LIMIT	13	J3.4 AND J5.4 SUBSURFACE, 3	1
SPARE	8	J3.5 LAND/GROUND, 3	1
ACTIVE/INACTIVE FLAG	1	J3.6 SPACE, 3	1
LATITUDE, 0.0013 MINUTE	23	J3.7 AND J14.0 EW PRODUCT INFORMATION, 3	1
SPARE	8	SPARE	2
LONGITUDE, 0.0013 MINUTE	24	J3.2 AIR, 4	1
LAST POINT FLAG	1	J3.3 SURFACE, 4	1
SPARE	8	J3.4 AND J5.4 SUBSURFACE, 4	1
LATITUDE, 0.0013 MINUTE	23	J3.5 LAND/GROUND, 4	1
SPARE	8	J3.6 SPACE, 4	1
LONGITUDE, 0.0013 MINUTE	24	J3.7 AND J14.0 EW PRODUCT INFORMATION, 4	1
		SPARE	2
		J3.2 AIR, 5	1

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X0.10.6 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

X0.10.6a (Continued)		X0.10.6b (Continued)	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
J3.3 SURFACE, 5	1	VICTOR LIMA (VL)	1
J3.4 AND J5.4 SUBSURFACE, 5	1	SUBMARINE POSITION AND	1
J3.5 LAND/GROUND, 5	1	INTENDED MOVEMENT (SIM)	
J3.6 SPACE, 5	1	PT1, AMP10	1
J3.7 AND J14.0 EW PRODUCT	1	DEFENDED ASSET	1
INFORMATION, 5		PT1, AMP12	1
SPARE	2	PT1, AMP13	1
J3.2 AIR, 6	1	PT1, AMP14	1
J3.3 SURFACE, 6	1	PT1, AMP15	1
J3.4 AND J5.4 SUBSURFACE, 6	1	NO STATEMENT	1
J3.5 LAND/GROUND, 6	1	TOMCAT	1
J3.6 SPACE, 6	1	PICKET	1
J3.7 AND J14.0 EW PRODUCT	1	RENDEZVOUS	1
INFORMATION, 6		PT2, AMP4	1
SPARE	2	REPLENISHMENT	1
J2.2 AND J2.0 AIR	1	RESCUE	1
J2.3 AND J2.0 SURFACE	1	PT2, AMP7	1
J2.4 AND J2.0 SUBSURFACE	1	PT2, AMP8	1
J2.5, J2.6 AND J2.0 LAND	1	PT2, AMP9	1
SPARE	2	PT2, AMP10	1
		PT2, AMP11	1
		PT2, AMP12	1
		PT2, AMP13	1
		PT2, AMP14	1
		PT2, AMP15	1
		NO STATEMENT	1
		COMBAT AIR PATROL (CAP)	1
		AIRBORNE EARLY WARNING (AEW)	1
		ANTISUBMARINE WARFARE (ASW)	1
		FIXED WING	
		ANTISUBMARINE WARFARE (ASW)	1
		HELICOPTER (HELO)	
		REPLENISHMENT	1
		STRIKE INITIAL POINT (IP)	1
		TACAN	1
		TANKER	1
		ORBIT, RACE TRACK	1
		ORBIT, FIGURE EIGHT	1
		ORBIT, RANDOM CLOSED	1
		ORBIT POINT	1
		PT3, AMP13	1
		PT3, AMP14	1
		PT3, AMP15	1
		NO STATEMENT	1
		FORWARD EDGE OF THE BATTLE	1
		AREA (FEBA)	
		GUN TARGET LINE	1
		CORRIDOR	1
		HOSTILE BOUNDARY	1

X0.10.6b

DATA ELEMENT	# BITS
NO STATEMENT	1
NAVIGATION	1
MINE	1
IMPACT POINT	1
GROUND ZERO	1
AIM/WEAPON ENTRY POINT	1
MISSILE LAUNCH POINT	1
ELECTRONIC ATTACK (EA) DECOY	1
ENGAGEMENT POINT	1
OIL RIG	1
PT0, AMP10	1
PT0, AMP11	1
PT0, AMP12	1
PT0, AMP13	1
PT0, AMP14	1
PT0, AMP15	1
NO STATEMENT	1
MARSHALL POINT	1
WAYPOINT	1
CORRIDOR TAB	1
POSITION AND INTENDED MOVEMENT	1
(PIM)	
DISPOSITION CENTER	1
FORMATION CENTER	1
SEARCH AREA	1

MIL-STD-3011D

X0.10.6 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

X0.10.6b (Continued)		X0.10.6b (Continued)	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
BUFFER ZONE BOUNDARY	1	SEARCH CENTER (ASW)	1
LOW LEVEL TRANSIT ROUTE	1	ESTIMATED POSITION (EP)	1
TACTICAL ACTION LINE	1	FIX (ASW)	1
FIRE SUPPORT COORDINATION LINE	1	NOTACK AREA	1
(FSCL)		MOVING HAVEN	1
FORWARD LINE OF OWN TROOPS	1	DISUSED	1
(FLOT)		SONOBUOY POSITION	1
PT4, AMP10	1	SONOBUOY PATTERN REFERENCE	1
PT4, AMP11	1	POSITION	
PT4, AMP12	1	LIMITING LINE OF APPROACH	1
PT4, AMP13	1	AREA OF PROBABILITY (ASW)	1
PT4, AMP14	1	FRIENDLY WEAPON DANGER AREA	1
PT4, AMP15	1	(FWDA)	
NO STATEMENT	1	PT7, AMP14	1
SEARCH	1	PT7, AMP15	1
RESTRICTED	1	CHARTED WRECK	1
EXERCISE	1	BOTTOMED NONSUBMARINE	1
SUBMARINE PATROL AREA	1	ASW STATION	1
FIGHTER ENGAGEMENT ZONE/	1	PT8, AMP3	1
FIGHTER AOR		PT8, AMP4	1
GROUND AREA OF RESPONSIBILITY	1	PT8, AMP5	1
DEFENDED AREA	1	PT8, AMP6	1
PT5, AMP8	1	PT8, AMP7	1
PT5, AMP9	1	PT8, AMP8	1
PT5, AMP10	1	PT8, AMP9	1
PT5, AMP11	1	PT8, AMP10	1
PT5, AMP12	1	PT8, AMP11	1
PT5, AMP13	1	PT8, AMP12	1
PT5, AMP14	1	PT8, AMP13	1
PT5, AMP15	1	PT8, AMP14	1
NO STATEMENT	1	PT8, AMP15	1
DANGER	1	PT9, AMP0	1
CONTAMINATED	1	PT9, AMP1	1
MISSILE ENGAGEMENT ZONE	1	PT9, AMP2	1
DISUSED	1	PT9, AMP3	1
HOSTILE WEAPON ZONE	1	PT9, AMP4	1
HOSTILE TACTICAL ZONE	1	PT9, AMP5	1
SHORAD	1	PT9, AMP6	1
KILL ZONE	1	PT9, AMP7	1
TARGET AREA OF INTEREST	1	PT9, AMP8	1
NAMED AREA OF INTEREST	1	PT9, AMP9	1
PT6, AMP11	1	PT9, AMP10	1
PT6, AMP12	1	PT9, AMP11	1
PT6, AMP13	1	PT9, AMP12	1
PT6, AMP14	1	PT9, AMP13	1
PT6, AMP15	1	PT9, AMP14	1
NO STATEMENT	1	PT9, AMP15	1
SINKER	1	PT10, AMP0	1
BRIEF CONTACT	1	PT10, AMP1	1

MIL-STD-3011D

X0.10.6 MESSAGE SUMMARY (Continued)

DATA ELEMENT SUMMARY (Continued)

X0.10.6b (Continued)		X0.10.6b (Continued)	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
PT10, AMP2	1	PT13, AMP5	1
PT10, AMP3	1	PT13, AMP6	1
PT10, AMP4	1	PT13, AMP7	1
PT10, AMP5	1	PT13, AMP8	1
PT10, AMP6	1	PT13, AMP9	1
PT10, AMP7	1	PT13, AMP10	1
PT10, AMP8	1	PT13, AMP11	1
PT10, AMP9	1	PT13, AMP12	1
PT10, AMP10	1	PT13, AMP13	1
PT10, AMP11	1	PT13, AMP14	1
PT10, AMP12	1	PT13, AMP15	1
PT10, AMP13	1	PT14, AMP0	1
PT10, AMP14	1	PT14, AMP1	1
PT10, AMP15	1	PT14, AMP2	1
PT11, AMP0	1	PT14, AMP3	1
PT11, AMP1	1	PT14, AMP4	1
PT11, AMP2	1	PT14, AMP5	1
PT11, AMP3	1	PT14, AMP6	1
PT11, AMP4	1	PT14, AMP7	1
PT11, AMP5	1	PT14, AMP8	1
PT11, AMP6	1	PT14, AMP9	1
PT11, AMP7	1	PT14, AMP10	1
PT11, AMP8	1	PT14, AMP11	1
PT11, AMP9	1	PT14, AMP12	1
PT11, AMP10	1	PT14, AMP13	1
PT11, AMP11	1	PT14, AMP14	1
PT11, AMP12	1	PT14, AMP15	1
PT11, AMP13	1	PT15, AMP0	1
PT11, AMP14	1	PT15, AMP1	1
PT11, AMP15	1	PT15, AMP2	1
PT12, AMP0	1	PT15, AMP3	1
PT12, AMP1	1	PT15, AMP4	1
PT12, AMP2	1	PT15, AMP5	1
PT12, AMP3	1	PT15, AMP6	1
PT12, AMP4	1	PT15, AMP7	1
PT12, AMP5	1	PT15, AMP8	1
PT12, AMP6	1	PT15, AMP9	1
PT12, AMP7	1	PT15, AMP10	1
PT12, AMP8	1	PT15, AMP11	1
PT12, AMP9	1	PT15, AMP12	1
PT12, AMP10	1	PT15, AMP13	1
PT12, AMP11	1	PT15, AMP14	1
PT12, AMP12	1	PT15, AMP15	1
PT12, AMP13	1		
PT12, AMP14	1		
PT12, AMP15	1		
PT13, AMP0	1		
PT13, AMP1	1		
PT13, AMP2	1		
PT13, AMP3	1		
PT13, AMP4	1		

MESSAGE TITLE: REMOTE FILTER (CLOSED POLYGON GEOGRAPHIC FILTER)

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MESSAGE MAP

MESSAGE NUMBER: X0.10.6

MESSAGE TITLE: REMOTE FILTER (CLOSED POLYGON GEOGRAPHIC FILTER)

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:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136:135 134 133:132 131 130 129 128:
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:                                     :                               :GEO FILTER : GEOGRAPHIC FILTER :
:          LINK DESIGNATOR TO FILTER :          FILTER MESSAGE TYPE : SUBTYPE : INDEX :
:                                     :                               :         :         :
:                                     :                               :         :         :
:          16                         :          8                     :    3    :    5    :
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:191 190 189 188 187 186 185 184 183 182 181 180 179:178:177:176:175 174 173 172 171 170 169 168 167 166 165 164 163:162:161:160:
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:                                     :UA :FTI: :                               :LA :EMG:CC :
:          UPPER ALTITUDE LIMIT    :LT :OVR:SP :          LOWER ALTITUDE LIMIT :LMT:OVR:OVR:
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:                                     :         :                               :
:          LATITUDE, 0.0013 MINUTE :A/I: SPARE :
:                                     :         :                               :
:          23                       : 1 :                               8 :
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:255 254 253 252 251 250 249 248 247 246 245 244 243 242 241 240 239 238 237 236 235 234 233 232:231 230 229 228 227 226 225 224:
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:                                     :         :                               :
:          LONGITUDE, 0.0013 MINUTE :         : SPARE :
:                                     :         :                               :
:          24                       :         :          8 :
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MESSAGE TITLE: REMOTE FILTER (CLOSED POLYGON GEOGRAPHIC FILTER)

:319	318	317	316	315	314	313	312	311	310	309	308	307	306	305	304	303	302	301	300	299	298	297	296:295	294	293	292	291	290	289	288:
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MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6

MESSAGE TITLE: REMOTE FILTER (CLOSED POLYGON GEOGRAPHIC FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3031 001		GEOGRAPHIC FILTER INDEX	128-	132 5	
3009 001		GEO FILTER SUBTYPE	133-	135 3	
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00000110
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3002 004		COMMAND AND CONTROL INDICATOR OVERRIDE (CC OVR)	160	1	
3002 005		EMERGENCY INDICATOR OVERRIDE (EMG OVR)	161	1	SAME CODING AS FOR BIT 160.
3002 013		LOWER ALTITUDE LIMIT FLAG (LAL LMT)	162	1	
3042 001		LOWER ALTITUDE LIMIT	163-	175 13	
3099 001		SPARE (SP)	176	1	
3002 006		FORCE TELL INDICATOR OVERRIDE (FTI OVR)	177	1	SAME CODING AS FOR BIT 160.
3002 012		UPPER ALTITUDE LIMIT FLAG (UA LT)	178	1	
3042 002		UPPER ALTITUDE LIMIT	179-	191 13	
3099 008		SPARE (SP)	192-	199 8	
3002 002		ACTIVE/INACTIVE FLAG (A/I)	200	1	

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6

MESSAGE TITLE: REMOTE FILTER (CLOSED POLYGON GEOGRAPHIC FILTER)

REFERENCE	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3010 015	LATITUDE, 0.0013 MINUTE	201-223	23	
3099 008	SPARE (SP)	224-231	8	
3011 015	LONGITUDE, 0.0013 MINUTE	232-255	24	
3002 007	LAST POINT FLAG (LP FLG)	256	1	THESE FIVE FIELDS REPEAT IN SEQUENCE FOR N NUMBER OF POINTS WHERE N IS A VALUE IN THE RANGE FROM 2 TO 14.
3099 008	SPARE (SP)	257-264	8	THESE FIVE FIELDS REPEAT IN SEQUENCE FOR N NUMBER OF POINTS WHERE N IS A VALUE IN THE RANGE FROM 2 TO 14.
3010 015	LATITUDE, 0.0013 MINUTE	265-287	23	THESE FIVE FIELDS REPEAT IN SEQUENCE FOR N NUMBER OF POINTS WHERE N IS A VALUE IN THE RANGE FROM 2 TO 14.
3099 008	SPARE (SP)	288-295	8	THESE FIVE FIELDS REPEAT IN SEQUENCE FOR N NUMBER OF POINTS WHERE N IS A VALUE IN THE RANGE FROM 2 TO 14.
3011 015	LONGITUDE, 0.0013 MINUTE	296-319	24	THESE FIVE FIELDS REPEAT IN SEQUENCE FOR N NUMBER OF POINTS WHERE N IS A VALUE IN THE RANGE FROM 2 TO 14.

FIELD CODING FOR X0.10.6

(SHEET 1)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.6

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

		FIELD CODING FOR X0.10.6		(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3031	001	GEOGRAPHIC FILTER INDEX ----- INDEX NUMBER OF FILTER	0 THROUGH 31	INDICATES THE INDEX NUMBER OF A GEOGRAPHIC FILTER.
3009	001	GEO FILTER SUBTYPE ----- CATEGORY/IDENTITY, EXCEPTION TO FILTER CATEGORY/IDENTITY, FILTER POINT TYPE/POINT AMPLIFICATION, EXCEPTION TO FILTER POINT TYPE/POINT AMPLIFICATION, FILTER UNDEFINED	0 1 2 3 4 THROUGH 7	INDICATES THE ATTRIBUTES OF THE SURVEILLANCE (J3.X) MESSAGES TO WHICH THE FILTER APPLIES, AND THE SEMANTIC (FILTER OR EXCEPTION TO FILTER) FOR EVALUATION OF EACH GEOGRAPHIC FILTER AS IT APPLIES TO A SURVEILLANCE MESSAGE.

FIELD CODING FOR X0.10.6 (SHEET 4)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3021	001	LINK DESIGNATOR TO FILTER -----		THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO.
		NO STATEMENT	0	
		ASSIGNED DESIGNATOR	1 THROUGH 65535	UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3002	004	COMMAND AND CONTROL INDICATOR OVERRIDE -----		INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.
		FILTER	0	
		OVERRIDE FILTER	1	
3002	013	LOWER ALTITUDE LIMIT FLAG -----		INDICATES WHETHER THE POINT IS THE LOWER ALTITUDE LIMIT.
		NO LIMIT	0	
		LOWER ALTITUDE LIMIT	1	
3042	001	LOWER ALTITUDE LIMIT -----		INDICATES THE LOWER ALTITUDE LIMIT OF A GEOGRAPHIC FILTER.
		0 THROUGH 204,750 FEET	0 THROUGH 8190	IN 25 FOOT INCREMENTS.
		ALTITUDE UNKNOWN	8191	
3002	012	UPPER ALTITUDE LIMIT FLAG -----		INDICATES WHETHER THE POINT IS THE UPPER ALTITUDE LIMIT.
		NO LIMIT	0	
		UPPER ALTITUDE LIMIT	1	
3042	002	UPPER ALTITUDE LIMIT -----		INDICATES THE UPPER ALTITUDE LIMIT OF A GEOGRAPHIC FILTER.
		0 THROUGH 204,750 FEET	0 THROUGH 8190	IN 25 FOOT INCREMENTS.
		ALTITUDE UNKNOWN	8191	
3002	002	ACTIVE/INACTIVE FLAG -----		INDICATES WHETHER A GEOGRAPHIC FILTER IS ACTIVE OR INACTIVE.
		INACTIVE	0	
		ACTIVE	1	

FIELD CODING FOR X0.10.6

(SHEET 5)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3010	015	LATITUDE, 0.0013 MINUTE -----		THE PRECISION IS APPROXIMATELY 8 FEET.
		0 DEGREES	0	
		+90/4,194,303 THROUGH	1 THROUGH 4194303	
		+90 DEGREES NORTH		
		NO STATEMENT	4194304	
		-90 THROUGH	4194305 THROUGH 8388607	
		-90/4,194,303 DEGREES SOUTH		
3011	015	LONGITUDE, 0.0013 MINUTE -----		THE PRECISION IS APPROXIMATELY 8 FEET.
		0 DEGREES	0	
		+180/8,388,607 THROUGH	1 THROUGH 8388607	
		+180 DEGREES EAST		
		NO STATEMENT	8388608	
		-180 THROUGH	8388609 THROUGH 16777215	
		-180/8,388,607 DEGREES WEST		
3002	007	LAST POINT FLAG -----		INDICATES THE LAST POINT IN A SERIES OF GEOGRAPHIC POINTS.
		NOT LAST POINT	0	
		LAST POINT	1	
3010	015	LATITUDE, 0.0013 MINUTE -----		THE PRECISION IS APPROXIMATELY 8 FEET.
		0 DEGREES	0	
		+90/4,194,303 THROUGH	1 THROUGH 4194303	
		+90 DEGREES NORTH		
		NO STATEMENT	4194304	
		-90 THROUGH	4194305 THROUGH 8388607	
		-90/4,194,303 DEGREES SOUTH		
3011	015	LONGITUDE, 0.0013 MINUTE -----		THE PRECISION IS APPROXIMATELY 8 FEET.
		0 DEGREES	0	
		+180/8,388,607 THROUGH	1 THROUGH 8388607	
		+180 DEGREES EAST		
		NO STATEMENT	8388608	
		-180 THROUGH	8388609 THROUGH 16777215	
		-180/8,388,607 DEGREES WEST		

MESSAGE MAP

MESSAGE NUMBER: X0.10.6a

MESSAGE TITLE: CATEGORY/ID AMPLIFICATION MATRIX

:351:350:349:348:347:346:345 344:343:342:341:340:339:338:337 336:335:334:333:332:331:330:329 328:327:326:325:324:323:322:321 320:																																	
:J37:J36:J35:J34:J33:J32:								:J37:J36:J35:J34:J33:J32:								:J37:J36:J35:J34:J33:J32:								:J37:J36:J35:J34:J33:J32:								:	
: 3	: 3	: 3	: 3	: 3	: 3	: 3	: SP	: 2	: 2	: 2	: 2	: 2	: 2	: SP	: 1	: 1	: 1	: 1	: 1	: 1	: SP	: 0	: 0	: 0	: 0	: 0	: 0	: SP	:				
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:383 382:381:380:379:378:377 376:375:374:373:372:371:370:369 368:367:366:365:364:363:362:361 360:359:358:357:356:355:354:353 352:																																	
:	:	:	:	:	:	:	:	:J37:J36:J35:J34:J33:J32:								:J37:J36:J35:J34:J33:J32:								:J37:J36:J35:J34:J33:J32:								:	
: SP	:	J25:J24:J23:J22:	: SP	:	:	:	:	: 6	: 6	: 6	: 6	: 6	: 6	: SP	: 5	: 5	: 5	: 5	: 5	: 5	: SP	: 4	: 4	: 4	: 4	: 4	: 4	: SP	:				
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: 2	:	1	: 1	: 1	: 1	: 1	: 2	: 1	: 1	: 1	: 1	: 1	: 1	: 2	: 1	: 1	: 1	: 1	: 1	: 1	: 2	: 1	: 1	: 1	: 1	: 1	: 1	: 2	:				

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6a

MESSAGE TITLE: CATEGORY/ID AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3099 002		SPARE (SP)	320-321	2	
3080 003		J3.2 AIR, 0 (J32 0)	322	1	
3080 004		J3.3 SURFACE, 0 (J33 0)	323	1	SAME CODING AS FOR BIT 322.
3080 005		J3.4 AND J5.4 SUBSURFACE, 0 (J34 0)	324	1	SAME CODING AS FOR BIT 322.
3080 006		J3.5 LAND/GROUND, 0 (J35 0)	325	1	SAME CODING AS FOR BIT 322.
3080 007		J3.6 SPACE, 0 (J36 0)	326	1	SAME CODING AS FOR BIT 322.
3080 008		J3.7 AND J14.0 EW PRODUCT INFORMATION, 0 (J37 0)	327	1	SAME CODING AS FOR BIT 322.
3099 002		SPARE (SP)	328-329	2	
3081 003		J3.2 AIR, 1 (J32 1)	330	1	
3081 004		J3.3 SURFACE, 1 (J33 1)	331	1	SAME CODING AS FOR BIT 330.
3081 005		J3.4 AND J5.4 SUBSURFACE, 1 (J34 1)	332	1	SAME CODING AS FOR BIT 330.
3081 006		J3.5 LAND/GROUND, 1 (J35 1)	333	1	SAME CODING AS FOR BIT 330.
3081 007		J3.6 SPACE, 1 (J36 1)	334	1	SAME CODING AS FOR BIT 330.
3081 008		J3.7 AND J14.0 EW PRODUCT INFORMATION, 1 (J37 1)	335	1	SAME CODING AS FOR BIT 330.
3099 002		SPARE (SP)	336-337	2	
3082 003		J3.2 AIR, 2 (J32 2)	338	1	
3082 004		J3.3 SURFACE, 2 (J33 2)	339	1	SAME CODING AS FOR BIT 338.
3082 005		J3.4 AND J5.4 SUBSURFACE, 2 (J34 2)	340	1	SAME CODING AS FOR BIT 338.
3082 006		J3.5 LAND/GROUND, 2 (J35 2)	341	1	SAME CODING AS FOR BIT 338.
3082 007		J3.6 SPACE, 2 (J36 2)	342	1	SAME CODING AS FOR BIT 338.
3082 008		J3.7 AND J14.0 EW PRODUCT INFORMATION, 2 (J37 2)	343	1	SAME CODING AS FOR BIT 338.
3099 002		SPARE (SP)	344-345	2	
3083 003		J3.2 AIR, 3 (J32 3)	346	1	
3083 004		J3.3 SURFACE, 3 (J33 3)	347	1	SAME CODING AS FOR BIT 346.
3083 005		J3.4 AND J5.4 SUBSURFACE, 3 (J34 3)	348	1	SAME CODING AS FOR BIT 346.
3083 006		J3.5 LAND/GROUND, 3 (J35 3)	349	1	SAME CODING AS FOR BIT 346.
3083 007		J3.6 SPACE, 3 (J36 3)	350	1	SAME CODING AS FOR BIT 346.
3083 008		J3.7 AND J14.0 EW PRODUCT INFORMATION, 3 (J37 3)	351	1	SAME CODING AS FOR BIT 346.
3099 002		SPARE (SP)	352-353	2	

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6a

MESSAGE TITLE: CATEGORY/ID AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3084 003	J3.2	AIR, 4 (J32 4)	354	1	
3084 004	J3.3	SURFACE, 4 (J33 4)	355	1	SAME CODING AS FOR BIT 354.
3084 005	J3.4	AND J5.4 SUBSURFACE, 4 (J34 4)	356	1	SAME CODING AS FOR BIT 354.
3084 006	J3.5	LAND/GROUND, 4 (J35 4)	357	1	SAME CODING AS FOR BIT 354.
3084 007	J3.6	SPACE, 4 (J36 4)	358	1	SAME CODING AS FOR BIT 354.
3084 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 4 (J37 4)	359	1	SAME CODING AS FOR BIT 354.
3099 002	SPARE	(SP)	360-361	2	
3085 003	J3.2	AIR, 5 (J32 5)	362	1	
3085 004	J3.3	SURFACE, 5 (J33 5)	363	1	SAME CODING AS FOR BIT 362.
3085 005	J3.4	AND J5.4 SUBSURFACE, 5 (J34 5)	364	1	SAME CODING AS FOR BIT 362.
3085 006	J3.5	LAND/GROUND, 5 (J35 5)	365	1	SAME CODING AS FOR BIT 362.
3085 007	J3.6	SPACE, 5 (J36 5)	366	1	SAME CODING AS FOR BIT 362.
3085 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 5 (J37 5)	367	1	SAME CODING AS FOR BIT 362.
3099 002	SPARE	(SP)	368-369	2	
3086 003	J3.2	AIR, 6 (J32 6)	370	1	
3086 004	J3.3	SURFACE, 6 (J33 6)	371	1	SAME CODING AS FOR BIT 370.
3086 005	J3.4	AND J5.4 SUBSURFACE, 6 (J34 6)	372	1	SAME CODING AS FOR BIT 370.
3086 006	J3.5	LAND/GROUND, 6 (J35 6)	373	1	SAME CODING AS FOR BIT 370.
3086 007	J3.6	SPACE, 6 (J36 6)	374	1	SAME CODING AS FOR BIT 370.
3086 008	J3.7	AND J14.0 EW PRODUCT INFORMATION, 6 (J37 6)	375	1	SAME CODING AS FOR BIT 370.
3099 002	SPARE	(SP)	376-377	2	
3087 003	J2.2	AND J2.0 AIR (J22)	378	1	
3087 004	J2.3	AND J2.0 SURFACE (J23)	379	1	SAME CODING AS FOR BIT 378.
3087 005	J2.4	AND J2.0 SUBSURFACE (J24)	380	1	SAME CODING AS FOR BIT 378.
3087 006	J2.5,	J2.6 AND J2.0 LAND (J25)	381	1	SAME CODING AS FOR BIT 378.
3099 002	SPARE	(SP)	382-383	2	

FIELD CODING FOR X0.10.6a					(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION	
3080	003	J3.2 AIR, 0 -----		J-SERIES MESSAGE CATEGORY	
		NOT FILTERED	0		
		FILTERED	1		
3081	003	J3.2 AIR, 1 -----		J-SERIES MESSAGE CATEGORY	
		NOT FILTERED	0		
		FILTERED	1		
3082	003	J3.2 AIR, 2 -----		J-SERIES MESSAGE CATEGORY	
		NOT FILTERED	0		
		FILTERED	1		
3084	003	J3.2 AIR, 4 -----		J-SERIES MESSAGE CATEGORY	
		NOT FILTERED	0		
		FILTERED	1		
3085	003	J3.2 AIR, 5 -----		J-SERIES MESSAGE CATEGORY	
		NOT FILTERED	0		
		FILTERED	1		
3086	003	J3.2 AIR, 6 -----		J-SERIES MESSAGE CATEGORY	
		NOT FILTERED	0		
		FILTERED	1		
3087	003	J2.2 AND J2.0 AIR -----		J-SERIES MESSAGE CATEGORY	
		NOT FILTERED	0		
		FILTERED	1		

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

[illegible]

MIT-STD-3011D

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

[illegible][illegible]

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3050 001		NO STATEMENT (NS)	320	1	
3050 002		NAVIGATION (NAV)	321	1	SAME CODING AS FOR BIT 320.
3050 003		MINE (MNE)	322	1	SAME CODING AS FOR BIT 320.
3050 004		IMPACT POINT (IMP PT)	323	1	SAME CODING AS FOR BIT 320.
3050 005		GROUND ZERO (GND ZER)	324	1	SAME CODING AS FOR BIT 320.
3050 006		AIM/WEAPON ENTRY POINT (AIM PT)	325	1	SAME CODING AS FOR BIT 320.
3050 007		MISSILE LAUNCH POINT (MSL LP)	326	1	SAME CODING AS FOR BIT 320.
3050 008		ELECTRONIC ATTACK (EA) DECOY (EA DEC)	327	1	SAME CODING AS FOR BIT 320.
3050 009		ENGAGEMENT POINT (ENG PT)	328	1	SAME CODING AS FOR BIT 320.
3050 010		OIL RIG	329	1	SAME CODING AS FOR BIT 320.
3050 011		PT0, AMP10 (PT0 A10)	330	1	SAME CODING AS FOR BIT 320.
3050 012		PT0, AMP11 (PT0 A11)	331	1	SAME CODING AS FOR BIT 320.
3050 013		PT0, AMP12 (PT0 A12)	332	1	SAME CODING AS FOR BIT 320.
3050 014		PT0, AMP13 (PT0 A13)	333	1	SAME CODING AS FOR BIT 320.
3050 015		PT0, AMP14 (PT0 A14)	334	1	SAME CODING AS FOR BIT 320.
3050 016		PT0, AMP15 (PT0 A15)	335	1	SAME CODING AS FOR BIT 320.
3051 001		NO STATEMENT (NS)	336	1	
3051 002		MARSHALL POINT (MAR PT)	337	1	SAME CODING AS FOR BIT 336.
3051 003		WAYPOINT (WAY PT)	338	1	SAME CODING AS FOR BIT 336.
3051 004		CORRIDOR TAB (COR TAB)	339	1	SAME CODING AS FOR BIT 336.
3051 005		POSITION AND INTENDED MOVEMENT (PIM) (PIM)	340	1	SAME CODING AS FOR BIT 336.
3051 006		DISPOSITION CENTER (DIS CTR)	341	1	SAME CODING AS FOR BIT 336.
3051 007		FORMATION CENTER (FRM CTR)	342	1	SAME CODING AS FOR BIT 336.
3051 008		SEARCH AREA (SCH ARE)	343	1	SAME CODING AS FOR BIT 336.
3051 009		VICTOR LIMA (VL) (VL)	344	1	SAME CODING AS FOR BIT 336.
3051 010		SUBMARINE POSITION AND INTENDED MOVEMENT (SIM) (SIM)	345	1	SAME CODING AS FOR BIT 336.
3051 011		PT1, AMP10 (PT1 A10)	346	1	SAME CODING AS FOR BIT 336.
3051 012		DEFENDED ASSET (DEF AST)	347	1	SAME CODING AS FOR BIT 336.
3051 013		PT1, AMP12 (PT1 A12)	348	1	SAME CODING AS FOR BIT 336.
3051 014		PT1, AMP13 (PT1 A13)	349	1	SAME CODING AS FOR BIT 336.
3051 015		PT1, AMP14 (PT1 A14)	350	1	SAME CODING AS FOR BIT 336.
3051 016		PT1, AMP15 (PT1 A15)	351	1	SAME CODING AS FOR BIT 336.
3052 001		NO STATEMENT (NS)	352	1	
3052 002		TOMCAT	353	1	SAME CODING AS FOR BIT 352.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3052 003		PICKET	354	1	SAME CODING AS FOR BIT 352.
3052 004		RENDEZVOUS (RVS)	355	1	SAME CODING AS FOR BIT 352.
3052 005		PT2, AMP4 (PT2 A4)	356	1	SAME CODING AS FOR BIT 352.
3052 006		REPLENISHMENT (REP)	357	1	SAME CODING AS FOR BIT 352.
3052 007		RESCUE	358	1	SAME CODING AS FOR BIT 352.
3052 008		PT2, AMP7 (PT2 A7)	359	1	SAME CODING AS FOR BIT 352.
3052 009		PT2, AMP8 (PT2 A8)	360	1	SAME CODING AS FOR BIT 352.
3052 010		PT2, AMP9 (PT2 A9)	361	1	SAME CODING AS FOR BIT 352.
3052 011		PT2, AMP10 (PT2 A10)	362	1	SAME CODING AS FOR BIT 352.
3052 012		PT2, AMP11 (PT2 A11)	363	1	SAME CODING AS FOR BIT 352.
3052 013		PT2, AMP12 (PT2 A12)	364	1	SAME CODING AS FOR BIT 352.
3052 014		PT2, AMP13 (PT2 A13)	365	1	SAME CODING AS FOR BIT 352.
3052 015		PT2, AMP14 (PT2 A14)	366	1	SAME CODING AS FOR BIT 352.
3052 016		PT2, AMP15 (PT2 A15)	367	1	SAME CODING AS FOR BIT 352.
3053 001		NO STATEMENT (NS)	368	1	
3053 002		COMBAT AIR PATROL (CAP) (CAP)	369	1	SAME CODING AS FOR BIT 368.
3053 003		AIRBORNE EARLY WARNING (AEW) (AEW)	370	1	SAME CODING AS FOR BIT 368.
3053 004		ANTISUBMARINE WARFARE (ASW) FIXED WING (ASW FW)	371	1	SAME CODING AS FOR BIT 368.
3053 005		ANTISUBMARINE WARFARE (ASW) HELICOPTER (HELO) (ASW HEL)	372	1	SAME CODING AS FOR BIT 368.
3053 006		REPLENISHMENT (RPL)	373	1	SAME CODING AS FOR BIT 368.
3053 007		STRIKE INITIAL POINT (IP) (STK IP)	374	1	SAME CODING AS FOR BIT 368.
3053 008		TACAN (TAC)	375	1	SAME CODING AS FOR BIT 368.
3053 009		TANKER (TKR)	376	1	SAME CODING AS FOR BIT 368.
3053 010		ORBIT, RACE TRACK (ORB RT)	377	1	SAME CODING AS FOR BIT 368.
3053 011		ORBIT, FIGURE EIGHT (ORB F8)	378	1	SAME CODING AS FOR BIT 368.
3053 012		ORBIT, RANDOM CLOSED (ORB RC)	379	1	SAME CODING AS FOR BIT 368.
3053 013		ORBIT POINT (ORB PT)	380	1	SAME CODING AS FOR BIT 368.
3053 014		PT3, AMP13 (PT3 A13)	381	1	SAME CODING AS FOR BIT 368.
3053 015		PT3, AMP14 (PT3 A14)	382	1	SAME CODING AS FOR BIT 368.
3053 016		PT3, AMP15 (PT3 A15)	383	1	SAME CODING AS FOR BIT 368.
3054 001		NO STATEMENT (NS)	384	1	
3054 002		FORWARD EDGE OF THE BATTLE AREA (FEBA) (FEBA)	385	1	SAME CODING AS FOR BIT 384.
3054 003		GUN TARGET LINE (GTL)	386	1	SAME CODING AS FOR BIT 384.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3054	004	CORRIDOR (CORRDR)	387	1	SAME CODING AS FOR BIT 384.
3054	005	HOSTILE BOUNDARY (HOS BND)	388	1	SAME CODING AS FOR BIT 384.
3054	006	BUFFER ZONE BOUNDARY (BZ BND)	389	1	SAME CODING AS FOR BIT 384.
3054	007	LOW LEVEL TRANSIT ROUTE (LLTR)	390	1	SAME CODING AS FOR BIT 384.
3054	008	TACTICAL ACTION LINE (TAL)	391	1	SAME CODING AS FOR BIT 384.
3054	009	FIRE SUPPORT COORDINATION LINE (FSCL) (FSCL)	392	1	SAME CODING AS FOR BIT 384.
3054	010	FORWARD LINE OF OWN TROOPS (FLOT) (FLOT)	393	1	SAME CODING AS FOR BIT 384.
3054	011	PT4, AMP10 (PT4 A10)	394	1	SAME CODING AS FOR BIT 384.
3054	012	PT4, AMP11 (PT4 A11)	395	1	SAME CODING AS FOR BIT 384.
3054	013	PT4, AMP12 (PT4 A12)	396	1	SAME CODING AS FOR BIT 384.
3054	014	PT4, AMP13 (PT4 A13)	397	1	SAME CODING AS FOR BIT 384.
3054	015	PT4, AMP14 (PT4 A14)	398	1	SAME CODING AS FOR BIT 384.
3054	016	PT4, AMP15 (PT4 A15)	399	1	SAME CODING AS FOR BIT 384.
3055	001	NO STATEMENT (NS)	400	1	
3055	002	SEARCH (SEA RCH)	401	1	SAME CODING AS FOR BIT 400.
3055	003	RESTRICTED (RTD)	402	1	SAME CODING AS FOR BIT 400.
3055	004	EXERCISE (EX)	403	1	SAME CODING AS FOR BIT 400.
3055	005	SUBMARINE PATROL AREA (SUB PTL)	404	1	SAME CODING AS FOR BIT 400.
3055	006	FIGHTER ENGAGEMENT ZONE/ FIGHTER AOR (FEZ)	405	1	SAME CODING AS FOR BIT 400.
3055	007	GROUND AREA OF RESPONSIBILITY (GND AOR)	406	1	SAME CODING AS FOR BIT 400.
3055	008	DEFENDED AREA (DEF AR)	407	1	SAME CODING AS FOR BIT 400.
3055	009	PT5, AMP8 (PT5 A8)	408	1	SAME CODING AS FOR BIT 400.
3055	010	PT5, AMP9 (PT5 A9)	409	1	SAME CODING AS FOR BIT 400.
3055	011	PT5, AMP10 (PT5 A10)	410	1	SAME CODING AS FOR BIT 400.
3055	012	PT5, AMP11 (PT5 A11)	411	1	SAME CODING AS FOR BIT 400.
3055	013	PT5, AMP12 (PT5 A12)	412	1	SAME CODING AS FOR BIT 400.
3055	014	PT5, AMP13 (PT5 A13)	413	1	SAME CODING AS FOR BIT 400.
3055	015	PT5, AMP14 (PT5 A14)	414	1	SAME CODING AS FOR BIT 400.
3055	016	PT5, AMP15 (PT5 A15)	415	1	SAME CODING AS FOR BIT 400.
3056	001	NO STATEMENT (NS)	416	1	
3056	002	DANGER (DGR)	417	1	SAME CODING AS FOR BIT 416.
3056	003	CONTAMINATED (CTMNTD)	418	1	SAME CODING AS FOR BIT 416.
3056	004	MISSILE ENGAGEMENT ZONE (MEZ)	419	1	SAME CODING AS FOR BIT 416.
3056	005	DISUSED (DIS)	420	1	SAME CODING AS FOR BIT 416.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3056 006		HOSTILE WEAPON ZONE (HOS WZ)	421	1	SAME CODING AS FOR BIT 416.
3056 007		HOSTILE TACTICAL ZONE (HOS TZ)	422	1	SAME CODING AS FOR BIT 416.
3056 008		SHORAD	423	1	SAME CODING AS FOR BIT 416.
3056 009		KILL ZONE (KIL ZNE)	424	1	SAME CODING AS FOR BIT 416.
3056 010		TARGET AREA OF INTEREST (TGT AOI)	425	1	SAME CODING AS FOR BIT 416.
3056 011		NAMED AREA OF INTEREST (NMD AOI)	426	1	SAME CODING AS FOR BIT 416.
3056 012		PT6, AMP11 (PT6 A11)	427	1	SAME CODING AS FOR BIT 416.
3056 013		PT6, AMP12 (PT6 A12)	428	1	SAME CODING AS FOR BIT 416.
3056 014		PT6, AMP13 (PT6 A13)	429	1	SAME CODING AS FOR BIT 416.
3056 015		PT6, AMP14 (PT6 A14)	430	1	SAME CODING AS FOR BIT 416.
3056 016		PT6, AMP15 (PT6 A15)	431	1	SAME CODING AS FOR BIT 416.
3057 001		NO STATEMENT (NS)	432	1	
3057 002		SINKER (SKR)	433	1	SAME CODING AS FOR BIT 432.
3057 003		BRIEF CONTACT (BRF CTC)	434	1	SAME CODING AS FOR BIT 432.
3057 004		SEARCH CENTER (ASW) (SC ASW)	435	1	SAME CODING AS FOR BIT 432.
3057 005		ESTIMATED POSITION (EP) (EP)	436	1	SAME CODING AS FOR BIT 432.
3057 006		FIX (ASW) (FIX ASW)	437	1	SAME CODING AS FOR BIT 432.
3057 007		NOTACK AREA (NOT ACK)	438	1	SAME CODING AS FOR BIT 432.
3057 008		MOVING HAVEN (MOV HAV)	439	1	SAME CODING AS FOR BIT 432.
3057 009		DISUSED (DIS)	440	1	SAME CODING AS FOR BIT 432.
3057 010		SONOBUOY POSITION (SBY POS)	441	1	SAME CODING AS FOR BIT 432.
3057 011		SONOBUOY PATTERN REFERENCE POSITION (SBY PRP)	442	1	SAME CODING AS FOR BIT 432.
3057 012		LIMITING LINE OF APPROACH (LIM LOA)	443	1	SAME CODING AS FOR BIT 432.
3057 013		AREA OF PROBABILITY (ASW) (AOP ASW)	444	1	SAME CODING AS FOR BIT 432.
3057 014		FRIENDLY WEAPON DANGER AREA (FWDA) (FW DA)	445	1	SAME CODING AS FOR BIT 432.
3057 015		PT7, AMP14 (PT7 A14)	446	1	SAME CODING AS FOR BIT 432.
3057 016		PT7, AMP15 (PT7 A15)	447	1	SAME CODING AS FOR BIT 432.
3058 001		CHARTED WRECK (CHD WRK)	448	1	
3058 002		BOTTOMED NONSUBMARINE (BTM NSB)	449	1	SAME CODING AS FOR BIT 448.
3058 003		ASW STATION (ASW STN)	450	1	SAME CODING AS FOR BIT 448.
3058 004		PT8, AMP3 (PT8 A3)	451	1	SAME CODING AS FOR BIT 448.
3058 005		PT8, AMP4 (PT8 A4)	452	1	SAME CODING AS FOR BIT 448.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3058 006	PT8,	AMP5 (PT8 A5)	453	1	SAME CODING AS FOR BIT 448.
3058 007	PT8,	AMP6 (PT8 A6)	454	1	SAME CODING AS FOR BIT 448.
3058 008	PT8,	AMP7 (PT8 A7)	455	1	SAME CODING AS FOR BIT 448.
3058 009	PT8,	AMP8 (PT8 A8)	456	1	SAME CODING AS FOR BIT 448.
3058 010	PT8,	AMP9 (PT8 A9)	457	1	SAME CODING AS FOR BIT 448.
3058 011	PT8,	AMP10 (PT8 A10)	458	1	SAME CODING AS FOR BIT 448.
3058 012	PT8,	AMP11 (PT8 A11)	459	1	SAME CODING AS FOR BIT 448.
3058 013	PT8,	AMP12 (PT8 A12)	460	1	SAME CODING AS FOR BIT 448.
3058 014	PT8,	AMP13 (PT8 A13)	461	1	SAME CODING AS FOR BIT 448.
3058 015	PT8,	AMP14 (PT8 A14)	462	1	SAME CODING AS FOR BIT 448.
3058 016	PT8,	AMP15 (PT8 A15)	463	1	SAME CODING AS FOR BIT 448.
3059 001	PT9,	AMP0 (PT9 A0)	464	1	
3059 002	PT9,	AMP1 (PT9 A1)	465	1	SAME CODING AS FOR BIT 464.
3059 003	PT9,	AMP2 (PT9 A2)	466	1	SAME CODING AS FOR BIT 464.
3059 004	PT9,	AMP3 (PT9 A3)	467	1	SAME CODING AS FOR BIT 464.
3059 005	PT9,	AMP4 (PT9 A4)	468	1	SAME CODING AS FOR BIT 464.
3059 006	PT9,	AMP5 (PT9 A5)	469	1	SAME CODING AS FOR BIT 464.
3059 007	PT9,	AMP6 (PT9 A6)	470	1	SAME CODING AS FOR BIT 464.
3059 008	PT9,	AMP7 (PT9 A7)	471	1	SAME CODING AS FOR BIT 464.
3059 009	PT9,	AMP8 (PT9 A8)	472	1	SAME CODING AS FOR BIT 464.
3059 010	PT9,	AMP9 (PT9 A9)	473	1	SAME CODING AS FOR BIT 464.
3059 011	PT9,	AMP10 (PT9 A10)	474	1	SAME CODING AS FOR BIT 464.
3059 012	PT9,	AMP11 (PT9 A11)	475	1	SAME CODING AS FOR BIT 464.
3059 013	PT9,	AMP12 (PT9 A12)	476	1	SAME CODING AS FOR BIT 464.
3059 014	PT9,	AMP13 (PT9 A13)	477	1	SAME CODING AS FOR BIT 464.
3059 015	PT9,	AMP14 (PT9 A14)	478	1	SAME CODING AS FOR BIT 464.
3059 016	PT9,	AMP15 (PT9 A15)	479	1	SAME CODING AS FOR BIT 464.
3061 001	PT10,	AMP0 (PT10 A0)	480	1	
3061 002	PT10,	AMP1 (PT10 A1)	481	1	SAME CODING AS FOR BIT 480.
3061 003	PT10,	AMP2 (PT10 A2)	482	1	SAME CODING AS FOR BIT 480.
3061 004	PT10,	AMP3 (PT10 A3)	483	1	SAME CODING AS FOR BIT 480.
3061 005	PT10,	AMP4 (PT10 A4)	484	1	SAME CODING AS FOR BIT 480.
3061 006	PT10,	AMP5 (PT10 A5)	485	1	SAME CODING AS FOR BIT 480.
3061 007	PT10,	AMP6 (PT10 A6)	486	1	SAME CODING AS FOR BIT 480.
3061 008	PT10,	AMP7 (PT10 A7)	487	1	SAME CODING AS FOR BIT 480.
3061 009	PT10,	AMP8 (PT10 A8)	488	1	SAME CODING AS FOR BIT 480.
3061 010	PT10,	AMP9 (PT10 A9)	489	1	SAME CODING AS FOR BIT 480.
3061 011	PT10,	AMP10 (PT10 A10)	490	1	SAME CODING AS FOR BIT 480.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3061 012	PT10,	AMP11 (PT10 A11)	491	1	SAME CODING AS FOR BIT 480.
3061 013	PT10,	AMP12 (PT10 A12)	492	1	SAME CODING AS FOR BIT 480.
3061 014	PT10,	AMP13 (PT10 A13)	493	1	SAME CODING AS FOR BIT 480.
3061 015	PT10,	AMP14 (PT10 A14)	494	1	SAME CODING AS FOR BIT 480.
3061 016	PT10,	AMP15 (PT10 A15)	495	1	SAME CODING AS FOR BIT 480.
3062 001	PT11,	AMP0 (PT11 A0)	496	1	
3062 002	PT11,	AMP1 (PT11 A1)	497	1	SAME CODING AS FOR BIT 496.
3062 003	PT11,	AMP2 (PT11 A2)	498	1	SAME CODING AS FOR BIT 496.
3062 004	PT11,	AMP3 (PT11 A3)	499	1	SAME CODING AS FOR BIT 496.
3062 005	PT11,	AMP4 (PT11 A4)	500	1	SAME CODING AS FOR BIT 496.
3062 006	PT11,	AMP5 (PT11 A5)	501	1	SAME CODING AS FOR BIT 496.
3062 007	PT11,	AMP6 (PT11 A6)	502	1	SAME CODING AS FOR BIT 496.
3062 008	PT11,	AMP7 (PT11 A7)	503	1	SAME CODING AS FOR BIT 496.
3062 009	PT11,	AMP8 (PT11 A8)	504	1	SAME CODING AS FOR BIT 496.
3062 010	PT11,	AMP9 (PT11 A9)	505	1	SAME CODING AS FOR BIT 496.
3062 011	PT11,	AMP10 (PT11 A10)	506	1	SAME CODING AS FOR BIT 496.
3062 012	PT11,	AMP11 (PT11 A11)	507	1	SAME CODING AS FOR BIT 496.
3062 013	PT11,	AMP12 (PT11 A12)	508	1	SAME CODING AS FOR BIT 496.
3062 014	PT11,	AMP13 (PT11 A13)	509	1	SAME CODING AS FOR BIT 496.
3062 015	PT11,	AMP14 (PT11 A14)	510	1	SAME CODING AS FOR BIT 496.
3062 016	PT11,	AMP15 (PT11 A15)	511	1	SAME CODING AS FOR BIT 496.
3063 001	PT12,	AMP0 (PT12 A0)	512	1	
3063 002	PT12,	AMP1 (PT12 A1)	513	1	SAME CODING AS FOR BIT 512.
3063 003	PT12,	AMP2 (PT12 A2)	514	1	SAME CODING AS FOR BIT 512.
3063 004	PT12,	AMP3 (PT12 A3)	515	1	SAME CODING AS FOR BIT 512.
3063 005	PT12,	AMP4 (PT12 A4)	516	1	SAME CODING AS FOR BIT 512.
3063 006	PT12,	AMP5 (PT12 A5)	517	1	SAME CODING AS FOR BIT 512.
3063 007	PT12,	AMP6 (PT12 A6)	518	1	SAME CODING AS FOR BIT 512.
3063 008	PT12,	AMP7 (PT12 A7)	519	1	SAME CODING AS FOR BIT 512.
3063 009	PT12,	AMP8 (PT12 A8)	520	1	SAME CODING AS FOR BIT 512.
3063 010	PT12,	AMP9 (PT12 A9)	521	1	SAME CODING AS FOR BIT 512.
3063 011	PT12,	AMP10 (PT12 A10)	522	1	SAME CODING AS FOR BIT 512.
3063 012	PT12,	AMP11 (PT12 A11)	523	1	SAME CODING AS FOR BIT 512.
3063 013	PT12,	AMP12 (PT12 A12)	524	1	SAME CODING AS FOR BIT 512.
3063 014	PT12,	AMP13 (PT12 A13)	525	1	SAME CODING AS FOR BIT 512.
3063 015	PT12,	AMP14 (PT12 A14)	526	1	SAME CODING AS FOR BIT 512.
3063 016	PT12,	AMP15 (PT12 A15)	527	1	SAME CODING AS FOR BIT 512.
3064 001	PT13,	AMP0 (PT13 A0)	528	1	

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE	DFI/DUI	DATA FIELD	DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3064	002	PT13, AMP1	(PT13 A1)	529	1	SAME CODING AS FOR BIT 528.
3064	003	PT13, AMP2	(PT13 A2)	530	1	SAME CODING AS FOR BIT 528.
3064	004	PT13, AMP3	(PT13 A3)	531	1	SAME CODING AS FOR BIT 528.
3064	005	PT13, AMP4	(PT13 A4)	532	1	SAME CODING AS FOR BIT 528.
3064	006	PT13, AMP5	(PT13 A5)	533	1	SAME CODING AS FOR BIT 528.
3064	007	PT13, AMP6	(PT13 A6)	534	1	SAME CODING AS FOR BIT 528.
3064	008	PT13, AMP7	(PT13 A7)	535	1	SAME CODING AS FOR BIT 528.
3064	009	PT13, AMP8	(PT13 A8)	536	1	SAME CODING AS FOR BIT 528.
3064	010	PT13, AMP9	(PT13 A9)	537	1	SAME CODING AS FOR BIT 528.
3064	011	PT13, AMP10	(PT13 A10)	538	1	SAME CODING AS FOR BIT 528.
3064	012	PT13, AMP11	(PT13 A11)	539	1	SAME CODING AS FOR BIT 528.
3064	013	PT13, AMP12	(PT13 A12)	540	1	SAME CODING AS FOR BIT 528.
3064	014	PT13, AMP13	(PT13 A13)	541	1	SAME CODING AS FOR BIT 528.
3064	015	PT13, AMP14	(PT13 A14)	542	1	SAME CODING AS FOR BIT 528.
3064	016	PT13, AMP15	(PT13 A15)	543	1	SAME CODING AS FOR BIT 528.
3065	001	PT14, AMP0	(PT14 A0)	544	1	
3065	002	PT14, AMP1	(PT14 A1)	545	1	SAME CODING AS FOR BIT 544.
3065	003	PT14, AMP2	(PT14 A2)	546	1	SAME CODING AS FOR BIT 544.
3065	004	PT14, AMP3	(PT14 A3)	547	1	SAME CODING AS FOR BIT 544.
3065	005	PT14, AMP4	(PT14 A4)	548	1	SAME CODING AS FOR BIT 544.
3065	006	PT14, AMP5	(PT14 A5)	549	1	SAME CODING AS FOR BIT 544.
3065	007	PT14, AMP6	(PT14 A6)	550	1	SAME CODING AS FOR BIT 544.
3065	008	PT14, AMP7	(PT14 A7)	551	1	SAME CODING AS FOR BIT 544.
3065	009	PT14, AMP8	(PT14 A8)	552	1	SAME CODING AS FOR BIT 544.
3065	010	PT14, AMP9	(PT14 A9)	553	1	SAME CODING AS FOR BIT 544.
3065	011	PT14, AMP10	(PT14 A10)	554	1	SAME CODING AS FOR BIT 544.
3065	012	PT14, AMP11	(PT14 A11)	555	1	SAME CODING AS FOR BIT 544.
3065	013	PT14, AMP12	(PT14 A12)	556	1	SAME CODING AS FOR BIT 544.
3065	014	PT14, AMP13	(PT14 A13)	557	1	SAME CODING AS FOR BIT 544.
3065	015	PT14, AMP14	(PT14 A14)	558	1	SAME CODING AS FOR BIT 544.
3065	016	PT14, AMP15	(PT14 A15)	559	1	SAME CODING AS FOR BIT 544.
3066	001	PT15, AMP0	(PT15 A0)	560	1	
3066	002	PT15, AMP1	(PT15 A1)	561	1	SAME CODING AS FOR BIT 560.
3066	003	PT15, AMP2	(PT15 A2)	562	1	SAME CODING AS FOR BIT 560.
3066	004	PT15, AMP3	(PT15 A3)	563	1	SAME CODING AS FOR BIT 560.
3066	005	PT15, AMP4	(PT15 A4)	564	1	SAME CODING AS FOR BIT 560.
3066	006	PT15, AMP5	(PT15 A5)	565	1	SAME CODING AS FOR BIT 560.
3066	007	PT15, AMP6	(PT15 A6)	566	1	SAME CODING AS FOR BIT 560.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.6b

MESSAGE TITLE: POINT TYPE/POINT AMPLIFICATION MATRIX

REFERENCE			BIT	#	
DFI/DUI	DATA	FIELD	POSITION	BITS	RESOLUTION, CODING, ETC
DESCRIPTOR					
3066 008	PT15,	AMP7 (PT15 A7)	567	1	SAME CODING AS FOR BIT 560.
3066 009	PT15,	AMP8 (PT15 A8)	568	1	SAME CODING AS FOR BIT 560.
3066 010	PT15,	AMP9 (PT15 A9)	569	1	SAME CODING AS FOR BIT 560.
3066 011	PT15,	AMP10 (PT15 A10)	570	1	SAME CODING AS FOR BIT 560.
3066 012	PT15,	AMP11 (PT15 A11)	571	1	SAME CODING AS FOR BIT 560.
3066 013	PT15,	AMP12 (PT15 A12)	572	1	SAME CODING AS FOR BIT 560.
3066 014	PT15,	AMP13 (PT15 A13)	573	1	SAME CODING AS FOR BIT 560.
3066 015	PT15,	AMP14 (PT15 A14)	574	1	SAME CODING AS FOR BIT 560.
3066 016	PT15,	AMP15 (PT15 A15)	575	1	SAME CODING AS FOR BIT 560.

			FIELD CODING FOR X0.10.6b	(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3050	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3051	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3052	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3053	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3054	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3055	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3056	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3057	001	NO STATEMENT -----		
		NOT FILTERED	0	
		FILTERED	1	
3058	001	CHARTED WRECK -----		
		NOT FILTERED	0	
		FILTERED	1	

			FIELD CODING FOR X0.10.6b	(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3059	001	PT9, AMP0 -----		
		NOT FILTERED	0	
		FILTERED	1	
3061	001	PT10, AMP0 -----		
		NOT FILTERED	0	
		FILTERED	1	
3062	001	PT11, AMP0 -----		
		NOT FILTERED	0	
		FILTERED	1	
3063	001	PT12, AMP0 -----		
		NOT FILTERED	0	
		FILTERED	1	
3064	001	PT13, AMP0 -----		
		NOT FILTERED	0	
		FILTERED	1	
3065	001	PT14, AMP0 -----		
		NOT FILTERED	0	
		FILTERED	1	
3066	001	PT15, AMP0 -----		
		NOT FILTERED	0	
		FILTERED	1	

X0.10.7 MESSAGE SUMMARY

PURPOSE

THE SOURCE TRACK NUMBER FILTER MESSAGE IS USED TO DIRECT OR REPORT FILTER SETTINGS APPLIED TO ONE OR MORE STNS THAT ARE TO BE FILTERED.

DATA ELEMENT SUMMARY

<u>X0.10.7</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 9	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	5
COMMAND AND CONTROL INDICATOR OVERRIDE	1
EMERGENCY INDICATOR OVERRIDE	1
FORCE TELL INDICATOR OVERRIDE	1
FILTER MESSAGE TYPE	8
LINK DESIGNATOR TO FILTER	16
SPARE	1
SOURCE TRACK NUMBER	15

MESSAGE TITLE: REMOTE FILTER (SOURCE TRACK NUMBER FILTER)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:													
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:						
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:						
:																:					:					:													:						
:	16															:	4				:	4				:	8												:						
:																																	:												
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:													
:																:											:	NUMBER DESTINATION ADDRESSES,							:										
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NON-ZERO							:										
:																:											:								:										
:	16															:	8										:	8							:										
:																																	:												
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:													
:									:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 9								:
:									:									:									:									:									
:	8								:	8								:	8								:	8								:									
:																																	:												
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:													
:																:																		:											
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:											
:																:																		:											
:	16															:	16																	:											

MESSAGE MAP

MESSAGE NUMBER: X0.10.7
MESSAGE TITLE: REMOTE FILTER (ELLIPSE-RECTANGLE GEOGRAPHIC FILTER)

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136:135:134:133:132 131 130 129 128:																																	
:	LINK DESIGNATOR TO FILTER														:	FILTER MESSAGE TYPE										:	FTI:EMG:CC :				:		
:															:											:	:OVR:OVR:OVR:				:		
:															:											:	: : : :				:		
:	16														:	8										:	: 1 : 1 : 1 :				:		

:175 174 173 172 171 170 169 168 167 166 165 164 163 162 161:160:																															
:																															:
:	SOURCE TRACK NUMBER																														:SP :
:																															:
:	15																														: 1 :

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.7

MESSAGE TITLE: REMOTE FILTER (SOURCE TRACK NUMBER FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 005		SPARE (SP)	128-	132 5	
3002 004		COMMAND AND CONTROL INDICATOR OVERRIDE (CC OVR)	133	1	
3002 005		EMERGENCY INDICATOR OVERRIDE (EMG OVR)	134	1	SAME CODING AS FOR BIT 133.
3002 006		FORCE TELL INDICATOR OVERRIDE (FTI OVR)	135	1	SAME CODING AS FOR BIT 133.
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00000111
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3099 001		SPARE (SP)	160	1	REPEAT THESE TWO FIELDS IN SEQUENCE FOR EACH SOURCE TRACK NUMBER OF N SOURCE TRACK NUMBERS.
3027 001		SOURCE TRACK NUMBER	161-	175 15	REPEAT THESE TWO FIELDS IN SEQUENCE FOR EACH SOURCE TRACK NUMBER OF N SOURCE TRACK NUMBERS.

FIELD CODING FOR X0.10.7 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.7

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

		FIELD CODING FOR X0.10.7		(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3002	004	COMMAND AND CONTROL INDICATOR OVERRIDE ----- FILTER OVERRIDE FILTER	0 1	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3027	001	SOURCE TRACK NUMBER ----- ILLEGAL NUMERIC ILLEGAL NUMERIC NUMERIC NUMERIC	0 00001 THROUGH 00076 (OCTAL) 00077 (OCTAL) 00100 THROUGH 00175 (OCTAL) 00176 (OCTAL) 00177 (OCTAL)	A RANGE OF VALID TRACK NUMBERS. A RANGE OF VALID TRACK NUMBERS. RESERVED FOR USE AS THE PSEUDO SOURCE TRACK NUMBER ADDRESS. COLLECTIVE ADDRESS.

			FIELD CODING FOR X0.10.7	(SHEET 4)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3027	001	SOURCE TRACK NUMBER	(CONTINUED)	

		NUMERIC	00200 THROUGH 07776 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
		ILLEGAL	07777 (OCTAL)	
		NUMERIC	10000 THROUGH 77776 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
		NUMERIC	77777 (OCTAL)	USED AS AN STN TO IDENTIFY THE LINK 16 NETWORK MANAGER.

X0.10.8 MESSAGE SUMMARY

PURPOSE

THE SPECIAL PROCESSING INDICATOR (SPI) FILTER MESSAGE IS USED TO DIRECT OR REPORT FILTER SETTINGS APPLIED TO SPI MESSAGES THAT ARE TO BE FILTERED.

DATA ELEMENT SUMMARY

<u>X0.10.8</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 9	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	8
FILTER MESSAGE TYPE	8
LINK DESIGNATOR TO FILTER	16
SPARE	15
SPECIAL PROCESSING INDICATOR FILTER FLAG	1

MESSAGE TITLE: REMOTE FILTER (SPECIAL PROCESSING INDICATOR FILTER)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:				
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT		:											:	
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION		:	MANAGEMENT MESSAGE SUBTYPE										:	
:																:					:			:											:	
:	16															:	4				:	4		:	8										:	
:																																				
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:				
:																:											:	NUMBER DESTINATION ADDRESSES,							:	
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NON-ZERO							:	
:																:											:								:	
:	16															:	8										:	8							:	
:																																				
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:				
:									:									:									:									:
:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 9								:
:									:									:									:									:
:	8								:	8								:	8								:	8								:
:																																				
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:				
:																:																		:		
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:		
:																:																		:		
:	16															:	16																	:		

MESSAGE TITLE: REMOTE FILTER (SPECIAL PROCESSING INDICATOR FILTER)

:159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144:143	142	141	140	139	138	137	136:135:134:133:132	131	130	129	128:
:															:						:					:
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:175:174 173 172 171 170 169 168 167 166 165 164 163 162 161:160:
-----
:SPI:
:FLG:          SPARE
:   :
-----
: 1 :          15
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MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.8

MESSAGE TITLE: REMOTE FILTER (SPECIAL PROCESSING INDICATOR FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 008		SPARE (SP)	128-	135 8	
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00001000
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3099 015		SPARE (SP)	160-	174 15	
3002 016		SPECIAL PROCESSING INDICATOR FILTER FLAG (SPI FLG)	175	1	

FIELD CODING FOR X0.10.8 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.8

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

		FIELD CODING FOR X0.10.8		(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3002	016	SPECIAL PROCESSING INDICATOR FILTER FLAG ----- ACCEPT SPI MESSAGES FILTER SPI MESSAGES	0 1	INDICATES WHETHER SPI MESSAGES ARE TO BE FILTERED.

X0.10.9 MESSAGE SUMMARY

PURPOSE

THE J28.2(X) FILTER MESSAGE IS USED TO DIRECT OR REPORT FILTER SETTINGS APPLIED TO THE FILTERING OF J28.2(0) MESSAGES AND J28.2 MESSAGES THAT ARE NOT THE J28.2(0).

DATA ELEMENT SUMMARY

<u>X0.10.9</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 9	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	8
FILTER MESSAGE TYPE	8
LINK DESIGNATOR TO FILTER	16
SPARE	14
J28.2(0) FILTER FLAG	1
J28.2(X) FILTER FLAG	1

MESSAGE TITLE: REMOTE FILTER (J28.2(X.0.) FILTER)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:						
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT		:											:			
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION		:	MANAGEMENT MESSAGE SUBTYPE										:			
:																:					:			:											:			
:	16															:	4				:	4		:	8										:			
:																																	:					
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:						
:																:											:	NUMBER DESTINATION ADDRESSES										:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NON-ZERO										:
:																:											:											:
:	16															:	8										:	8										:
:																																	:					
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:						
:									:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 9								:		
:	TOTAL NUMBER FRAGMENTS								:									:									:									:		
:									:									:									:									:		
:	8								:	8								:	8								:	8								:		
:																																	:					
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:						
:																:																		:				
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:				
:																:																		:				
:	16															:	16																	:				

MESSAGE MAP

MESSAGE NUMBER: X0.10.9
MESSAGE TITLE: REMOTE FILTER (J28.2(X.0.) FILTER)

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:																:143 142 141 140 139 138 137 136:135:134:133:132 131 130 129 128:																				
:																:	:	:	:	:	:	:	:	:	:	:	:	:	:	:						
:	LINK DESIGNATOR TO FILTER															:	FILTER MESSAGE TYPE													:	SPARE					:
:																:	:	:	:	:	:	:	:	:	:	:	:	:	:	:						
:	16															:	8													:	8					:

:175:174:173 172 171 170 169 168 167 166 165 164 163 162 161:160:																													
:J28:J28:																													
: 2 : 2 :																SPARE													
:(X):(0):																													
: 1 : 1 :																14													

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.9

MESSAGE TITLE: REMOTE FILTER (J28.2(X.0.) FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 008		SPARE (SP)	128-	135 8	
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00001001
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3099 014		SPARE (SP)	160-	173 14	
3002 014		J28.2(0) FILTER FLAG (J28 20)	174	1	FILTER J28.2(0) MESSAGES IF SET TO 1.
3002 015		J28.2(X) FILTER FLAG (J28 2X)	175	1	FILTER ALL OTHER J28.2 MESSAGES IF SET TO 1.

FIELD CODING FOR X0.10.9 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.9

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

		FIELD CODING FOR X0.10.9		(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3002	014	J28.2(0) FILTER FLAG ----- ACCEPT ALL J28.2(0) MESSAGES FILTER ALL J28.2(0) MESSAGES	0 1	INDICATES WHETHER J28.2(0) MESSAGES ARE TO BE FILTERED.
3002	015	J28.2(X) FILTER FLAG ----- ACCEPT ALL J28.2(X) MESSAGES EXCEPT THE J28.2(0) FILTER ALL J28.2(X) MESSAGES EXCEPT THE J28.2(0)	0 1	INDICATES WHETHER J28.2(X) MESSAGES OTHER THAN THE J28.2(0) ARE TO BE FILTERED.

X0.10.10 MESSAGE SUMMARY

PURPOSE

THE DATA AGE FILTER MESSAGE IS USED TO DIRECT OR REPORT FILTER SETTINGS APPLIED TO MESSAGES THAT HAVE LATENCIES WITHIN THE JRE FORWARDING PROCESS GREATER THAN A SPECIFIED AMOUNT OF TIME, AS MEASURED BY THE DATA AGE OF THE MESSAGE.

DATA ELEMENT SUMMARY

<u>X0.10.10</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 9	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	8
FILTER MESSAGE TYPE	8
LINK DESIGNATOR TO FILTER	16
LABEL, J-SERIES	5
SUBLABEL, J-SERIES	3
AGE LIMIT VALUE	8

MESSAGE TITLE: REMOTE FILTER (DATA AGE FILTER)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:						
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:											:	
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE										:	
:																:					:					:											:	
:	16															:	4				:	4				:	8										:	
:																																						
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:						
:																:											:	NUMBER DESTINATION ADDRESSES,										:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NON-ZERO										:
:																:											:											:
:	16															:	8										:	8										:
:																																						
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:						
:									:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 9								:		
:	TOTAL NUMBER FRAGMENTS								:									:									:									:		
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:	8								:	8								:	8								:	8								:		
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:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:						
:																:																		:				
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:				
:																:																		:				
:	16															:	16																	:				

MESSAGE MAP

MESSAGE NUMBER: X0.10.10

MESSAGE TITLE: REMOTE FILTER (DATA AGE FILTER)

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136:135:134:133:132 131 130 129 128:																																			
:	LINK DESIGNATOR TO FILTER														:	FILTER MESSAGE TYPE										:	SPARE								:
:															:											:									:
:															:											:									:
:	16														:	8										:	8								:

:175 174 173 172 171 170 169 168:167 166 165:164 163 162 161 160:																																			
:															:	SUBLABEL, :										:									:
:	AGE LIMIT VALUE														:	J-SERIES : LABEL, J-SERIES										:									:
:															:											:									:
:															:	3										:	5								:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.10

MESSAGE TITLE: REMOTE FILTER (DATA AGE FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 008		SPARE (SP)	128-	135 8	
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00001010
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3037 001		LABEL, J-SERIES	160-	164 5	REPEAT THESE FIELDS (BITS 160 - 175) IN SEQUENCE FOR EACH OF N LABEL/ SUBLABELS TO BE FILTERED BY DATA AGE LIMIT WHERE N IS A VALUE FROM 1 TO 256.
3038 001		SUBLABEL, J-SERIES	165-	167 3	REPEAT THESE FIELDS (BITS 160 - 175) IN SEQUENCE FOR EACH OF N LABEL/ SUBLABELS TO BE FILTERED BY DATA AGE LIMIT WHERE N IS A VALUE FROM 1 TO 256.
3003 001		AGE LIMIT VALUE (AGE LIMIT)	168-	175 8	REPEAT THESE FIELDS (BITS 160 - 175) IN SEQUENCE FOR EACH OF N LABEL/ SUBLABELS TO BE FILTERED BY DATA AGE LIMIT WHERE N IS A VALUE FROM 1 TO 256.

FIELD CODING FOR X0.10.10				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.10

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

FIELD CODING FOR X0.10.10 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3037	001	LABEL, J-SERIES ----- SYSTEM INFORMATION EXCHANGE AND NETWORK MANAGEMENT SYSTEM INFORMATION EXCHANGE AND NETWORK MANAGEMENT PRECISE PARTICIPANT LOCATION AND IDENTIFICATION (PPLI) SURVEILLANCE UNDEFINED ANTISUBMARINE WARFARE AMPLIFICATION INFORMATION MANAGEMENT INFORMATION MANAGEMENT	0 1 2 3 4 5 6 7 8	PROVIDES A LABEL FOR J-SERIES MESSAGES.

FIELD CODING FOR X0.10.10 (SHEET 4)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3037	001	LABEL, J-SERIES -----	(CONTINUED)	
		WEAPONS COORDINATION AND MANAGEMENT	9	
		WEAPONS COORDINATION AND MANAGEMENT	10	
		MISSION SUPPORT	11	
		CONTROL	12	
		PLATFORM AND SYSTEM STATUS	13	
		CONTROL	14	
		THREAT WARNING	15	
		MISSION SUPPORT	16	
		MISCELLANEOUS	17	
		UNDEFINED	18 THROUGH 26	
		NATIONAL USE	27 THROUGH 30	
		MISCELLANEOUS	31	
3038	001	SUBLABEL, J-SERIES -----		PROVIDES A SUBLABEL FOR FURTHER DIVISION OF LABEL, J-SERIES.
		NUMERIC	0 THROUGH 7	DENOTES SUBLABEL ASSOCIATED WITH LABEL, J-SERIES.
3003	001	AGE LIMIT VALUE -----		SPECIFIED IN ONE SECOND INCREMENTS. MESSAGES OLDER THAN THIS LIMIT WILL BE FILTERED BY THE DATA AGE FILTER.
		NO LIMIT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	AGE LIMIT MEASURED IN ONE SECOND INTERVALS.

X0.10.11 MESSAGE SUMMARY

PURPOSE

THE SIMULATION FILTER MESSAGE IS USED TO DIRECT OR REPORT FILTER SETTINGS IF SIMULATION MESSAGES ARE TO BE FILTERED.

DATA ELEMENT SUMMARY

<u>X0.10.11</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 9	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	8
FILTER MESSAGE TYPE	8
LINK DESIGNATOR TO FILTER	16
SPARE	15
SIMULATION INDICATOR FILTER FLAG	1

MESSAGE TITLE: REMOTE FILTER (SIMULATION FILTER)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:														
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:							
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:							
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:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NON-ZERO																:
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:									:									:									:																	:		
:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 9																:		
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:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:												
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MESSAGE MAP

MESSAGE NUMBER: X0.10.11

MESSAGE TITLE: REMOTE FILTER (SIMULATION FILTER)

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:																:143 142 141 140 139 138 137 136:135 134 133 132 131 130 129 128:															
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MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.11

MESSAGE TITLE: REMOTE FILTER (SIMULATION FILTER)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 008		SPARE (SP)	128-	135 8	
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00001011
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3099 015		SPARE (SP)	160-	174 15	
3002 010		SIMULATION INDICATOR FILTER FLAG (SIM FLG)	175	1	

FIELD CODING FOR X0.10.11				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.11

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

FIELD CODING FOR X0.10.11 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC	0	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3002	010	SIMULATION INDICATOR FILTER FLAG ----- ACCEPT SIMULATED MESSAGES FILTER SIMULATED MESSAGES	0 1	INDICATES WHETHER SIMULATION MESSAGES ARE TO BE FILTERED.

X0.10.12 MESSAGE SUMMARY

PURPOSE

THE J3.6 ROCKET FILTER MESSAGE IS USED TO DIRECT OR REPORT FILTERING OF J3.6 MESSAGES WHICH ARE REPORTING ROCKETS.

DATA ELEMENT SUMMARY

<u>X0.10.12</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 9	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	7
FORCE TELL INDICATOR OVERRIDE	1
FILTER MESSAGE TYPE	8
LINK DESIGNATOR TO FILTER	16
DISUSED	1
DISUSED	1
FILTER ROCKET (DI 1) (FRG)	1
SPARE	13

MESSAGE TITLE: J3.6 ROCKET FILTER

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:									
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:									:						
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE								:						
:																:					:					:									:						
:	16															:	4				:	4				:	8								:						
:																																									
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:									
:																:																:	NUMBER DESTINATION ADDRESSES,								:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT															:	NON-ZERO								:
:																:																:									:
:	16															:	8															:	8								:
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:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:									
:									:	FRAGMENT NUMBER								:	ERROR CODE, 1								:									:					
:	TOTAL NUMBER FRAGMENTS								:									:									:	CONTROL/RESPONSE INDICATOR, 9								:					
:									:									:									:									:					
:	8								:	8								:	8								:	8								:					
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:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:									
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:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:							
:																:																		:							
:	16															:	16																	:							

MESSAGE TITLE: J3.6 ROCKET FILTER

:159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144:143	142	141	140	139	138	137	136:135:134	133	132	131	130	129	128:
:															:							:FTI:						:
:															:							:OVR:			SPARE			:
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:175 174 173 172 171 170 169 168 167 166 165 164 163:162:161:160:
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:
:                               SPARE                               :   :   :   :
:                               :FRG:DIS:DIS:                       :   :   :   :
:                               :   :   :   :                       :   :   :   :
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:                               13                               :   1   :   1   :   1   :

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MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.12

MESSAGE TITLE: J3.6 ROCKET FILTER

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 007		SPARE (SP)	128-	134 7	
3002 006		FORCE TELL INDICATOR OVERRIDE (FTI OVR)	135	1	
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00001100
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3060 001		DISUSED (DIS)	160	1	
3060 002		DISUSED (DIS)	161	1	
3060 003		FILTER ROCKET (DI 1) (FRG)	162	1	
3099 013		SPARE (SP)	163-	175 13	

FIELD CODING FOR X0.10.12				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.12 (SHEET 2)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

FIELD CODING FOR X0.10.12				(SHEET 3)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC	0	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3002	006	FORCE TELL INDICATOR OVERRIDE ----- FILTER OVERRIDE FILTER	0 1	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3060	003	FILTER ROCKET (DI 1) ----- OFF FILTERED	0 1	FOR J3.6 ROCKET FILTER ROCKET FILTER MATRIX. DO NOT FILTER J3.6 MESSAGES BASED ON ROCKET INDICATOR SETTING. J3.6 MESSAGES WITH ROCKET FILTER INDICATOR SET TO 1 (ROCKET) SHALL BE FILTERED.

X0.10.13 MESSAGE SUMMARY

PURPOSE

THE NATIONAL USE SUB-SUBLABEL FILTER MESSAGE IS USED TO DIRECT OR REPORT FILTER SETTINGS APPLIED TO THE FILTERING OF NATIONAL USE MESSAGES BY SUB-SUBLABEL.

DATA ELEMENT SUMMARY

<u>X0.10.13</u>		<u>X0.10.13 (Continued)</u>	
DATA ELEMENT	# BITS	DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8	SUB-SUBLABEL 22	1
MANAGEMENT VERSION	4	SUB-SUBLABEL 23	1
ACKNOWLEDGEMENT PROTOCOL, 3	4	SUB-SUBLABEL 24	1
MANAGEMENT MESSAGE LENGTH	16	SUB-SUBLABEL 25	1
NUMBER DESTINATION ADDRESSES,	8	SUB-SUBLABEL 26	1
NON-ZERO		SUB-SUBLABEL 27	1
COMPLETION TIMEOUT	8	SUB-SUBLABEL 28	1
MESSAGE SEQUENCE NUMBER	16	SUB-SUBLABEL 29	1
CONTROL/RESPONSE INDICATOR, 9	8	SUB-SUBLABEL 30	1
ERROR CODE, 1	8	SUB-SUBLABEL 31	1
FRAGMENT NUMBER	8		
TOTAL NUMBER FRAGMENTS	8		
ORIGINATING MESSAGE SEQUENCE	16		
NUMBER			
DESTINATION ADDRESS	16		
SPARE	5		
COMMAND AND CONTROL INDICATOR	1		
OVERRIDE			
EMERGENCY INDICATOR OVERRIDE	1		
FORCE TELL INDICATOR OVERRIDE	1		
FILTER MESSAGE TYPE	8		
LINK DESIGNATOR TO FILTER	16		
SUB-SUBLABEL 0	1		
SUB-SUBLABEL 1	1		
SUB-SUBLABEL 2	1		
SUB-SUBLABEL 3	1		
SUB-SUBLABEL 4	1		
SUB-SUBLABEL 5	1		
SUB-SUBLABEL 6	1		
SUB-SUBLABEL 7	1		
SUB-SUBLABEL 8	1		
SUB-SUBLABEL 9	1		
SUB-SUBLABEL 10	1		
SUB-SUBLABEL 11	1		
SUB-SUBLABEL 12	1		
SUB-SUBLABEL 13	1		
SUB-SUBLABEL 14	1		
SUB-SUBLABEL 15	1		
SUB-SUBLABEL 16	1		
SUB-SUBLABEL 17	1		
SUB-SUBLABEL 18	1		
SUB-SUBLABEL 19	1		
SUB-SUBLABEL 20	1		
SUB-SUBLABEL 21	1		

MESSAGE TITLE: NATIONAL USE SUB-SUBLABEL FILTER

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:														
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:							
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:							
:																:					:					:													:							
:	16															:	4				:	4				:	8												:							
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:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:														
:																:													:	NUMBER DESTINATION ADDRESSES,																:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NON-ZERO																:
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:	16															:	8												:	8																:
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:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:														
:									:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 9								:	
:									:									:									:									:										
:	8								:	8								:	8								:	8								:										
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:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:														
:																:																		:												
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:												
:																:																		:												
:	16															:	16																	:												

MESSAGE MAP

MESSAGE NUMBER: X0.10.13

MESSAGE TITLE: NATIONAL USE SUB-SUBLABEL FILTER MESSAGE

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136:135:134:133:132 131 130 129 128:																																												
:															:											:	FTI:EMG:CC :				:													
:	LINK DESIGNATOR TO FILTER														:	FILTER MESSAGE TYPE										:	OVR:OVR:OVR:				:	SPARE				:								
:															:											:	:	:	:	:	:					:								
:	16														:	8										:	:	1	:	1	:	1	:	5	:									
:191:190:189:188:187:186:185:184:183:182:181:180:179:178:177:176:175:174:173:172:171:170:169:168:167:166:165:164:163:162:161:160:																																												
:	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SSL	SUB	SUB	SSL	SSL	:								
:	31	:30	:29	:28	:27	:26	:25	:24	:23	:22	:21	:20	:19	:18	:17	:16	:15	:14	:13	:12	:11	:10	:	9	:	8	:	7	:	6	:	5	:	4	:	3	:	2	:	1	:	0	:	
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:	1	:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.13

MESSAGE TITLE: NATIONAL USE SUB-SUBLABEL FILTER MESSAGE

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003		NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009		CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001		ERROR CODE, 1 (EC1)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 005		SPARE (SP)	128-	132 5	
3002 004		COMMAND AND CONTROL INDICATOR OVERRIDE (CC OVR)	133	1	
3002 005		EMERGENCY INDICATOR OVERRIDE (EMG OVR)	134	1	SAME CODING AS FOR BIT 133.
3002 006		FORCE TELL INDICATOR OVERRIDE (FTI OVR)	135	1	SAME CODING AS FOR BIT 133.
3008 003		FILTER MESSAGE TYPE (FMT)	136-	143 8	00001101
3021 001		LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3140 001		SUB-SUBLABEL 0 (SSL0)	160	1	
3140 002		SUB-SUBLABEL 1 (SSL1)	161	1	SAME CODING AS FOR BIT 160.
3140 003		SUB-SUBLABEL 2 (SSL2)	162	1	SAME CODING AS FOR BIT 160.
3140 004		SUB-SUBLABEL 3 (SSL3)	163	1	SAME CODING AS FOR BIT 160.
3140 005		SUB-SUBLABEL 4 (SSL4)	164	1	SAME CODING AS FOR BIT 160.
3140 006		SUB-SUBLABEL 5 (SSL5)	165	1	SAME CODING AS FOR BIT 160.
3140 007		SUB-SUBLABEL 6 (SSL6)	166	1	SAME CODING AS FOR BIT 160.
3140 008		SUB-SUBLABEL 7 (SSL7)	167	1	SAME CODING AS FOR BIT 160.
3140 009		SUB-SUBLABEL 8 (SSL8)	168	1	SAME CODING AS FOR BIT 160.
3140 010		SUB-SUBLABEL 9 (SSL9)	169	1	SAME CODING AS FOR BIT 160.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.13

MESSAGE TITLE: NATIONAL USE SUB-SUBLABEL FILTER MESSAGE

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3140 011	SUB-SUBLABEL 10	(SSL10)	170	1	SAME CODING AS FOR BIT 160.
3140 012	SUB-SUBLABEL 11	(SSL11)	171	1	SAME CODING AS FOR BIT 160.
3140 013	SUB-SUBLABEL 12	(SSL12)	172	1	SAME CODING AS FOR BIT 160.
3140 014	SUB-SUBLABEL 13	(SSL13)	173	1	SAME CODING AS FOR BIT 160.
3140 015	SUB-SUBLABEL 14	(SSL14)	174	1	SAME CODING AS FOR BIT 160.
3140 016	SUB-SUBLABEL 15	(SSL15)	175	1	SAME CODING AS FOR BIT 160.
3140 017	SUB-SUBLABEL 16	(SSL16)	176	1	SAME CODING AS FOR BIT 160.
3140 018	SUB-SUBLABEL 17	(SSL17)	177	1	SAME CODING AS FOR BIT 160.
3140 019	SUB-SUBLABEL 18	(SSL18)	178	1	SAME CODING AS FOR BIT 160.
3140 020	SUB-SUBLABEL 19	(SSL19)	179	1	SAME CODING AS FOR BIT 160.
3140 021	SUB-SUBLABEL 20	(SSL20)	180	1	SAME CODING AS FOR BIT 160.
3140 022	SUB-SUBLABEL 21	(SSL21)	181	1	SAME CODING AS FOR BIT 160.
3140 023	SUB-SUBLABEL 22	(SSL22)	182	1	SAME CODING AS FOR BIT 160.
3140 024	SUB-SUBLABEL 23	(SSL23)	183	1	SAME CODING AS FOR BIT 160.
3140 025	SUB-SUBLABEL 24	(SSL24)	184	1	SAME CODING AS FOR BIT 160.
3140 026	SUB-SUBLABEL 25	(SSL25)	185	1	SAME CODING AS FOR BIT 160.
3140 027	SUB-SUBLABEL 26	(SSL26)	186	1	SAME CODING AS FOR BIT 160.
3140 028	SUB-SUBLABEL 27	(SSL27)	187	1	SAME CODING AS FOR BIT 160.
3140 029	SUB-SUBLABEL 28	(SSL28)	188	1	SAME CODING AS FOR BIT 160.
3140 030	SUB-SUBLABEL 29	(SSL29)	189	1	SAME CODING AS FOR BIT 160.
3140 031	SUB-SUBLABEL 30	(SSL30)	190	1	SAME CODING AS FOR BIT 160.
3140 032	SUB-SUBLABEL 31	(SSL31)	191	1	SAME CODING AS FOR BIT 160.

FIELD CODING FOR X0.10.13				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.13

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
		ILLEGAL	0	ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

FIELD CODING FOR X0.10.13 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3002	004	COMMAND AND CONTROL INDICATOR OVERRIDE ----- FILTER OVERRIDE FILTER	0 1	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3140	001	SUB-SUBLABEL 0 ----- NOT FILTERED FILTERED	0 1	FOR SUB-SUBLABEL FILTER MATRIX. INDICATES THE SUB-SUBLABEL IS NOT FILTERED. INDICATES THE SUB-SUBLABEL IS FILTERED.

X0.10.14 MESSAGE SUMMARY

PURPOSE

THE NETWORK PARTICIPATION GROUP FILTER MESSAGE IS USED TO DIRECT OR REPORT NETWORK PARTICIPATION GROUP FILTERS ON A SPECIFIED JRE NETWORK.

DATA ELEMENT SUMMARY

<u>X0.10.14</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES, NON-ZERO	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 9	8
ERROR CODE, 1	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	7
ACTIVE/INACTIVE FLAG	1
FILTER MESSAGE TYPE	8
LINK DESIGNATOR TO FILTER	16
SOURCE LINK DESIGNATOR	16
JRE SOURCE TRACK NUMBER	16
NETWORK PARTICIPATION GROPU TO FILTER	9
SPARE	7

MESSAGE TITLE: NETWORK PARTICIPATION GROUP FILTER

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:				
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT		:											:	
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION		:	MANAGEMENT MESSAGE SUBTYPE										:	
:																:					:			:											:	
:	16															:	4				:	4		:	8										:	
:																																				
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:				
:																:											:	NUMBER DESTINATION ADDRESSES,							:	
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NON-ZERO							:	
:																:											:								:	
:	16															:	8										:	8							:	
:																																				
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:				
:									:	FRAGMENT NUMBER								:	ERROR CODE, 1								:	CONTROL/RESPONSE INDICATOR, 9								:
:	TOTAL NUMBER FRAGMENTS								:									:									:									:
:									:									:									:									:
:	8								:	8								:	8								:	8								:
:																																				
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:				
:																:																		:		
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:		
:																:																		:		
:	16															:	16																	:		

MESSAGE MAP

MESSAGE NUMBER: X0.10.14

MESSAGE TITLE: NETWORK PARTICIPATION GROUP FILTER

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:	143 142 141 140 139 138 137 136:	135:134 133 132 131 130 129 128:
:	:	:
: LINK DESIGNATOR TO FILTER	: FILTER MESSAGE TYPE	: A/I: SPARE
:	:	:
: 16	: 8	: 1 : 7

:191 190 189 188 187 186 185 184 183 182 181 180 179 178 177 176:	175 174 173 172 171 170 169 168 167 166 165 164 163 162 161 160:
:	:
: JRE SOURCE TRACK NUMBER	: SOURCE LINK DESIGNATOR
:	:
: 16	: 16

:	:207 206 205 204 203 202 201:	200 199 198 197 196 195 194 193 192:
:	:	:
: SPARE	:	: NETWORK PARTICIPATION GROUP TO FILTER
:	:	:
: 7	:	: 9

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.10.14

MESSAGE TITLE: NETWORK PARTICIPATION GROUP FILTER

REFERENCE			BIT #	
DFI/DUI	DATA FIELD DESCRIPTOR	POSITION	BITS	RESOLUTION, CODING, ETC
3008 002	MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001010
3044 001	MANAGEMENT VERSION	8-	11 4	0000
3006 003	ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003	MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 003	NUMBER DESTINATION ADDRESSES, NON-ZERO	32-	39 8	
3029 001	COMPLETION TIMEOUT	40-	47 8	
3032 001	MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 009	CONTROL/RESPONSE INDICATOR, 9 (CR9)	64-	71 8	
3034 001	ERROR CODE, 1 (EC1)	72-	79 8	
3033 002	FRAGMENT NUMBER	80-	87 8	
3033 003	TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002	ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020	DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255.
3099 007	SPARE (SP)	128-	134 7	
3002 002	ACTIVE/INACTIVE FLAG	135-	135 1	
3008 003	FILTER MESSAGE TYPE (FMT)	136-	143 8	00001110
3021 001	LINK DESIGNATOR TO FILTER (DTF)	144-	159 16	
3021 003	SOURCE LINK DESIGNATOR	160-	175 16	SAME CODING AS FOR BITS 144-159
3027 003	JRE SOURCE TRACK NUMBER	176-	191 16	
3040 003	NETWORK PARTICIPATION GROUP TO FILTER (NTF)	192-	200 9	IDENTIFIES THE NETWORK PARTICIPATION GROUP BEING FILTERED
3099 007	SPARE (SP)	201-	207 7	

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.
		NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	003	NUMBER DESTINATION ADDRESSES, NON-ZERO -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		ILLEGAL	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE

FIELD CODING FOR X0.10.14

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	009	CONTROL/RESPONSE INDICATOR, 9 -----	(CONTINUED)	
				ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0	
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		ILLEGAL	2	
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 130	
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ILLEGAL	132 THROUGH 133	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	001	ERROR CODE, 1 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		ILLEGAL	1 THROUGH 6	
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	

FIELD CODING FOR X0.10.14 (SHEET 3)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	003	TOTAL NUMBER FRAGMENTS ----- NUMBER FRAGMENTS	(CONTINUED) 2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO. SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0. MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3002	002	ACTIVE/INACTIVE FLAG ----- INACTIVE ACTIVE	0 1	INDICATES WHETHER A GEOGRAPHIC FILTER IS ACTIVE OR INACTIVE.
3021	001	LINK DESIGNATOR TO FILTER ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3027	003	JRE SOURCE TRACK NUMBER ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3040	002	NETWORK PARTICIPATION GROUP TO FILTER		THE DESTINATION PARTICIPATION GROUP (PG) SELECTED FOR FILTERING.

		NO STATEMENT	0	
		INITIAL ENTRY	1	
		RTT A	2	
		RTT B	3	
		NETWORK MANAGEMENT	4	
		PPLI AND STATUS GROUP A	5	
		PPLI AND STATUS GROUP B	6	
		SURVEILLANCE	7	
		MISSION MANAGEMENT/ WEAPONS COORDINATION	8	
		CONTROL	9	
		ELECTRONIC WARFARE	10	
		IMAGE TRANSFER	11	
		VOICE GROUP A	12	
		VOICE GROUP B	13	
		PARTICIPATION GROUPS 14 THROUGH 18	14 THROUGH 18	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NONC2 JU-TO-NONC2 JU A	19	
		NONC2 JU-TO-NONC2 JU B	20	
		BMD OPERATIONS	21	
		COMPOSITE A	22	
		COMPOSITE B	23	
		PARTICIPATION GROUPS 24 THROUGH 26	24 THROUGH 26	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		JOINT NET PPLI	27	
		DISTRIBUTED NETWORK MANAGEMENT	28	
		RESIDUAL MESSAGES	29	
		IJMS POSITION AND STATUS	30	
		OTHER IJMS	31	
		PARTICIPATION GROUPS 32 THROUGH 509	32 THROUGH 509	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NET CONTROL NEEDLINE	510	
		NET STATUS NEEDLINE	511	

X0.11 MESSAGE SUMMARY

PURPOSE

THE SECONDARY TRACK NUMBER LIST MESSAGE IS USED BY JRE PROCESSORS TO EXCHANGE AND MANAGE THE SECONDARY TRACK NUMBER (TN) LIST OF THE LINK 16 TERMINAL CONNECTED TO A REMOTE JRE PROCESSOR.

DATA ELEMENT SUMMARY

<u>X0.11.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 3	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 10	8
ERROR CODE, 6	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
ADD/DELETE INDICATOR	1
SECONDARY TRACK NUMBER	15

MESSAGE TITLE: SECONDARY TRACK NUMBER LIST

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:													
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT				:													:						
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 3				:	VERSION				:	MANAGEMENT MESSAGE SUBTYPE												:						
:																:					:					:													:						
:	16															:	4				:	4				:	8												:						
:																																	:												
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:													
:																:													:													:			
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT												:	NUMBER DESTINATION ADDRESSES												:			
:																:													:													:			
:	16															:	8												:	8												:			
:																																	:												
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:													
:									:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:	ERROR CODE, 6								:	CONTROL/RESPONSE INDICATOR, 10								:
:									:									:									:									:									
:	8								:	8								:	8								:	8								:									
:																																	:												
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:													
:																:																		:											
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:											
:																:																		:											
:	16															:	16																	:											

MESSAGE MAP

MESSAGE NUMBER: X0.11.0

MESSAGE TITLE: SECONDARY TRACK NUMBER LIST

:	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129:128:	:	

:															:	:	:
:	SECONDARY TRACK NUMBER														:	A/D:	:
:															:	:	:

:	15														:	1	:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.11.0

MESSAGE TITLE: SECONDARY TRACK NUMBER LIST

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001011
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 003		ACKNOWLEDGEMENT PROTOCOL, 3 (AP3)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 001		NUMBER DESTINATION ADDRESSES	32-	39 8	
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 010		CONTROL/RESPONSE INDICATOR, 10 (CR10)	64-	71 8	
3034 006		ERROR CODE, 6 (EC6)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255. THIS FIELD IS OMITTED IF NUMBER DESTINATION ADDRESSES IS 0.
3002 001		ADD/DELETE INDICATOR (A/D)	128	1	REPEAT THESE TWO FIELDS (BITS 128 - 143) IN SEQUENCE FOR EACH SECONDARY TRACK NUMBER N WHERE N < LE> 150.
3027 002		SECONDARY TRACK NUMBER	129-	143 15	REPEAT THESE TWO FIELDS (BITS 128 - 143) IN SEQUENCE FOR EACH SECONDARY TRACK NUMBER N WHERE N < LE> 150.

FIELD CODING FOR X0.11.0 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	003	ACKNOWLEDGEMENT PROTOCOL, 3 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S).
		OPERATOR ACKNOWLEDGMENT	2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3017	001	NUMBER DESTINATION ADDRESSES -----		SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.
		BROADCAST	0	
		1 THROUGH 255 ADDRESSES	1 THROUGH 255	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.
		NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.
3020	010	CONTROL/RESPONSE INDICATOR, 10 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.

FIELD CODING FOR X0.11.0

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	010	CONTROL/RESPONSE INDICATOR, 10 -----	(CONTINUED)	
		QUERY	0	USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S).
		COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
		INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ACK	128	USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE.
		ILLEGAL	129	
		CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
		ACCEPT	132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.
		REJECT	133	USED TO INDICATE THAT A COMMAND HAS BEEN REJECTED.
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL	192	
		CANTCO	193	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND CANNOT COMPLY
		ILLEGAL	194	
		NOT SUPPORTED	195	USED BY THE JRE PROCESSOR TO INDICATE THAT IT DOES NOT SUPPORT OPERATOR ACKNOWLEDGMENT OF THIS MESSAGE SUBTYPE.
		ILLEGAL	196 THROUGH 197	
		UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	006	ERROR CODE, 6 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
		NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED

FIELD CODING FOR X0.11.0

(SHEET 3)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3034	006	ERROR CODE, 6 -----	(CONTINUED)	
		LOCKOUT/RESTRICTED	3	MESSAGE. INDICATES THAT THE REQUESTED OPERATION IS NOT PERMITTED DUE TO AN OPERATOR-INITIATED LOCKOUT.
		ILLEGAL	4	
		RESOURCE NOT AVAILABLE	5	INDICATES THAT THE RESOURCE AFFECTED BY THE COMMAND OR QUERY IS OFFLINE OR NOT AVAILABLE (FOR INSTANCE, A LINK 16 TERMINAL THAT IS OFFLINE AND CANNOT ACCEPT SECONDARY TN CHANGES).
		PROCESSING TIMEOUT	6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
		NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.

FIELD CODING FOR X0.11.0

(SHEET 4)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3002	001	ADD/DELETE INDICATOR ----- DELETE ADD	0 1	INDICATES THE ADDITION OR DELETION OF SECONDARY TRACK NUMBERS FROM THE SECONDARY TRACK NUMBER LIST MAINTAINED BY A JREAP PROCESSOR.
3027	002	SECONDARY TRACK NUMBER ----- ILLEGAL NUMERIC ILLEGAL NUMERIC NUMERIC NUMERIC NUMERIC ILLEGAL NUMERIC NUMERIC	0 00001 THROUGH 00076 (OCTAL) 00077 (OCTAL) 00100 THROUGH 00175 (OCTAL) 00176 (OCTAL) 00177 (OCTAL) 00200 THROUGH 07776 (OCTAL) 07777 (OCTAL) 10000 THROUGH 77776 (OCTAL) 77777 (OCTAL)	A RANGE OF VALID TRACK NUMBERS. A RANGE OF VALID TRACK NUMBERS. RESERVED FOR USE AS THE PSEUDO SOURCE TRACK NUMBER ADDRESS. COLLECTIVE ADDRESS. A RANGE OF VALID TRACK NUMBERS. A RANGE OF VALID TRACK NUMBERS. USED AS AN STN TO IDENTIFY THE LINK 16 NETWORK MANAGER.

X0.12 MESSAGE SUMMARY

PURPOSE

THE DIRECT CONNECTION LIST MESSAGE IS GENERATED BY A JRE PROCESSOR TO INDICATE IUS WITH WHICH IT HAS DIRECT CONNECTIVITY ON A GIVEN LINK/PORT.

DATA ELEMENT SUMMARY

<u>X0.12.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 12	8
ERROR CODE, 4	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
LINK DESIGNATOR	16
NUMBER ADDRESSES THIS DESIGNATOR	8
TOTAL NUMBER OF ACTIVE DESIGNATORS	8
LINK INTERFACE UNIT	16

MESSAGE TITLE: DIRECT CONNECTION LIST

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:						
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT		:											:			
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 1				:	VERSION		:	MANAGEMENT MESSAGE SUBTYPE										:			
:																:					:			:											:			
:	16															:	4				:	4		:	8										:			
:																																						
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:						
:																:											:											:
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:	NUMBER DESTINATION ADDRESSES										:
:																:											:											:
:	16															:	8										:	8										:
:																																						
:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:						
:									:	FRAGMENT NUMBER								:	ERROR CODE, 4								:											:
:	TOTAL NUMBER FRAGMENTS								:									:									:	CONTROL/RESPONSE INDICATOR, 12										:
:									:									:									:											:
:	8								:	8								:	8								:	8								:		
:																																						
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:						
:																:																		:				
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:				
:																:																		:				
:	16															:	16																	:				

MESSAGE TITLE: DIRECT CONNECTION LIST

:159	158	157	156	155	154	153	152:151	150	149	148	147	146	145	144:143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128:
:								:								:													:
:	TOTAL NUMBER OF DESIGNATORS							:	NUMBER ADDRESSES THIS							:	LINK DESIGNATOR												:
:								:	DESIGNATOR							:													:
:	8							:	8							:	16												:

```

-----
:175 174 173 172 171 170 169 168 167 166 165 164 163 162 161 160:
-----
:
:                               LINK INTERFACE UNIT
:
:
-----
:                               16
:

```

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.12.0

MESSAGE TITLE: DIRECT CONNECTION LIST

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR	POSITION	BITS		RESOLUTION, CODING, ETC
3008 002	MANAGEMENT MESSAGE SUBTYPE	0-	7	8	00001100
3044 001	MANAGEMENT VERSION	8-	11	4	0000
3006 001	ACKNOWLEDGEMENT PROTOCOL, 1 (AP1)	12-	15	4	
3012 003	MANAGEMENT MESSAGE LENGTH (MML)	16-	31	16	
3017 001	NUMBER DESTINATION ADDRESSES	32-	39	8	00000000
3029 001	COMPLETION TIMEOUT	40-	47	8	
3032 001	MESSAGE SEQUENCE NUMBER	48-	63	16	
3020 012	CONTROL/RESPONSE INDICATOR, 12 (CR12)	64-	71	8	
3034 004	ERROR CODE, 4 (EC4)	72-	79	8	
3033 002	FRAGMENT NUMBER	80-	87	8	
3033 003	TOTAL NUMBER FRAGMENTS	88-	95	8	
3032 002	ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111	16	
3036 020	DESTINATION ADDRESS (DA)	112-	127	16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255. THIS FIELD IS OMITTED IF NUMBER DESTINATION ADDRESSES IS 0.
3021 002	LINK DESIGNATOR	128-	143	16	REPEAT THESE THREE FIELDS (BITS 128 - 159) IN SEQUENCE FOR EACH LINK DESIGNATOR N WHERE N <LE> 255.
3017 002	NUMBER ADDRESSES THIS DESIGNATOR	144-	151	8	REPEAT THESE THREE FIELDS (BITS 128 - 159) IN SEQUENCE FOR EACH LINK DESIGNATOR N WHERE N <LE> 255.
3018 002	TOTAL NUMBER OF ACTIVE DESIGNATORS (TND)	152-	159	8	REPEAT THESE THREE FIELDS (BITS 128 - 159) IN SEQUENCE FOR EACH LINK DESIGNATOR N WHERE N <LE> 255.
3036 022	LINK INTERFACE UNIT	160-	175	16	EACH OCCURANCE OF THE TOTAL NUMBER OF DESIGNATORS (BITS 152 - 159) WILL BE FOLLOWED BY A SERIES OF REPETITIONS (UP TO 255) OF THIS FIELD.

FIELD CODING FOR X0.12.0 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE. INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	0	THE SEQUENCE NUMBER OF THE MESSAGE.
		NUMERIC	1 THROUGH 65535	
3020	012	CONTROL/RESPONSE INDICATOR, 12 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0 THROUGH 1	
		INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 129	
		CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		ILLEGAL	131 THROUGH 133	

FIELD CODING FOR X0.12.0

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	012	CONTROL/RESPONSE INDICATOR, 12 -----	(CONTINUED)	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	004	ERROR CODE, 4 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
		ILLEGAL PROCESSING TIMEOUT	2 THROUGH 5 6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.

FIELD CODING FOR X0.12.0 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC	(CONTINUED) 1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3021	002	LINK DESIGNATOR ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR FOR EACH OF A JRE PROCESSOR'S CAPABLE JRE LINKS OR TDL NETWORKS. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3017	002	NUMBER ADDRESSES THIS DESIGNATOR ----- 0 THROUGH 255 ADDRESSES	0 THROUGH 255	THE TOTAL NUMBER OF IU NUMBERS (UP TO 255) ASSOCIATED WITH THE LINK BEING REPORTED BY THIS PARTICULAR DESIGNATOR. USED TO DETERMINE THE LENGTH OF THE MESSAGE.
3018	002	TOTAL NUMBER OF ACTIVE DESIGNATORS ----- NO STATEMENT 1 THROUGH 255 DESIGNATORS	0 1 THROUGH 255	INDICATES THE NUMBER OF LINKS ACTIVE FOR THIS JRE PROCESSOR.
3036	022	LINK INTERFACE UNIT ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE UNIQUE NUMBER FOR EACH UNIT PARTICIPATING ON THE LINK. INTERFACE UNIT NUMBER.

X0.13 MESSAGE SUMMARY

PURPOSE

THE NETWORK CONNECTIVITY MATRIX MESSAGE PROVIDES JRE PROCESSORS WITH THE MEANS TO SHARE CONNECTIVITY INFORMATION.

DATA ELEMENT SUMMARY

<u>X0.13.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 12	8
ERROR CODE, 4	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
SPARE	8
NUMBER OF DESIGNATORS SUPPORTED	8
LINK DESIGNATOR	16
CONNECTIVITY MATRIX BIT	1

MESSAGE TITLE: NETWORK CONNECTIVITY MATRIX

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:				
:																:	ACKNOWLEDGEMENT:				:	MANAGEMENT		:											:	
:	MANAGEMENT MESSAGE LENGTH															:	PROTOCOL, 1				:	VERSION		:	MANAGEMENT MESSAGE SUBTYPE										:	
:																:					:			:											:	
:	16															:	4				:	4		:	8										:	
:																																				
:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:				
:																:											:	NUMBER DESTINATION ADDRESSES							:	
:	MESSAGE SEQUENCE NUMBER															:	COMPLETION TIMEOUT										:								:	
:																:											:								:	
:	16															:	8										:	8							:	
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:	95	94	93	92	91	90	89	88:	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72:	71	70	69	68	67	66	65	64:				
:									:									:	ERROR CODE, 4								:	CONTROL/RESPONSE INDICATOR, 12								:
:	TOTAL NUMBER FRAGMENTS								:	FRAGMENT NUMBER								:									:									:
:									:									:									:									:
:	8								:	8								:	8								:	8								:
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:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:				
:																:																		:		
:	DESTINATION ADDRESS															:	ORIGINATING MESSAGE SEQUENCE NUMBER																	:		
:																:																		:		
:	16															:	16																	:		

MESSAGE MAP

MESSAGE NUMBER: X0.13.0

MESSAGE TITLE: NETWORK CONNECTIVITY MATRIX

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:																:143 142 141 140 139 138 137 136:135 134 133 132 131 130 129 128:															
:																:														:	
:	LINK DESIGNATOR															:	NUMBER OF DESIGNATORS SUPPORTED:													:	
:																:														:	
:	16															:	8													:	

:160:

:CM :
:BIT:
: :

: 1 :

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.13.0

MESSAGE TITLE: NETWORK CONNECTIVITY MATRIX

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001101
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 001		ACKNOWLEDGEMENT PROTOCOL, 1 (AP1)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 001		NUMBER DESTINATION ADDRESSES	32-	39 8	00000000
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 012		CONTROL/RESPONSE INDICATOR, 12 (CR12)	64-	71 8	
3034 004		ERROR CODE, 4 (EC4)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255. THIS FIELD IS OMITTED IF NUMBER DESTINATION ADDRESSES IS 0.
3099 008		SPARE (SP)	128-	135 8	
3018 001		NUMBER OF DESIGNATORS SUPPORTED (NDS)	136-	143 8	
3021 002		LINK DESIGNATOR	144-	159 16	REPEAT THIS FIELD D TIMES WHERE D = THE NUMBER OF DESIGNATORS SUPPORTED.
3019 001		CONNECTIVITY MATRIX BIT (CMB)	160	1	REPEAT THIS FIELD AS NECESSARY TO BUILD THE CONNECTIVITY MATRIX (5.5.4.17.3).

FIELD CODING FOR X0.13.0

(SHEET 1)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE. INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	0	THE SEQUENCE NUMBER OF THE MESSAGE.
		NUMERIC	1 THROUGH 65535	
3020	012	CONTROL/RESPONSE INDICATOR, 12 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0 THROUGH 1	
		INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 129	
		CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		ILLEGAL	131 THROUGH 133	

FIELD CODING FOR X0.13.0

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	012	CONTROL/RESPONSE INDICATOR, 12 -----	(CONTINUED)	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	004	ERROR CODE, 4 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
		ILLEGAL PROCESSING TIMEOUT	2 THROUGH 5 6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.

FIELD CODING FOR X0.13.0 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC	(CONTINUED) 1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3018	001	NUMBER OF DESIGNATORS SUPPORTED ----- NO STATEMENT 1 THROUGH 255 DESIGNATORS	0 1 THROUGH 255	INDICATES THE NUMBER OF LINKS THAT THE JRE PROCESSOR IS SUPPORTING.
3021	002	LINK DESIGNATOR ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR FOR EACH OF A JRE PROCESSOR'S CAPABLE JRE LINKS OR TDL NETWORKS. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3019	001	CONNECTIVITY MATRIX BIT ----- NO DATA FLOW DATA FLOW	0 1	A BIT SET TO 1 AT THE INTERSECTION OF A ROW AND COLUMN INDICATES ONE- WAY DATA FLOW FROM THE SOURCE ROW NETWORK TO THE DESTINATION COLUMN NETWORK. TWO WAY FLOW WOULD BE INDICATED BY SETTING THE BIT IN THE CORRESPONDING COLUMN AND ROW TO 1. A VALUE OF 0 DESIGNATES NO FLOW. A NETWORK NEVER FORWARDS TO ITSELF; THEREFORE, BITS ON THE DIAGONAL OF THE MATRIX ARE ALWAYS SET TO 0.

X0.14 MESSAGE SUMMARY

PURPOSE

THE CONNECTIVITY FEEDBACK MESSAGE PROVIDES A JRE PROCESSOR WITH INFORMATION ON HOW IT IS RECEIVING DATA FROM OTHER JRE PROCESSORS.

DATA ELEMENT SUMMARY

<u>X0.14.0</u>	
DATA ELEMENT	# BITS
MANAGEMENT MESSAGE SUBTYPE	8
MANAGEMENT VERSION	4
ACKNOWLEDGEMENT PROTOCOL, 1	4
MANAGEMENT MESSAGE LENGTH	16
NUMBER DESTINATION ADDRESSES	8
COMPLETION TIMEOUT	8
MESSAGE SEQUENCE NUMBER	16
CONTROL/RESPONSE INDICATOR, 12	8
ERROR CODE, 4	8
FRAGMENT NUMBER	8
TOTAL NUMBER FRAGMENTS	8
ORIGINATING MESSAGE SEQUENCE NUMBER	16
DESTINATION ADDRESS	16
LENGTH OF MESSAGE	16
JRE SENDER ID	16
LINK DESIGNATOR	16
LINK INTERFACE UNIT	16
AVERAGE RECEIVED DATA MEDIA LATENCY	16
SPARE	9
PERCENT EXCEEDING LATENCY	7
ERROR RATE, CURRENT	16

MESSAGE MAP

MESSAGE NUMBER: X0.14.0

MESSAGE TITLE: CONNECTIVITY FEEDBACK

: 31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12:	11	10	09	08:	07	06	05	04	03	02	01	00:
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MESSAGE TITLE: CONNECTIVITY FEEDBACK

[illegible][illegible]

:	239	238	237	236	235	234	233	232	231	230	229	228	227	226	225	224:
:																:
:	ERROR RATE, CURRENT															:
:																:
:																:
:	16															:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.14.0

MESSAGE TITLE: CONNECTIVITY FEEDBACK

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3008 002		MANAGEMENT MESSAGE SUBTYPE	0-	7 8	00001110
3044 001		MANAGEMENT VERSION	8-	11 4	0000
3006 001		ACKNOWLEDGEMENT PROTOCOL, 1 (AP1)	12-	15 4	
3012 003		MANAGEMENT MESSAGE LENGTH (MML)	16-	31 16	
3017 001		NUMBER DESTINATION ADDRESSES	32-	39 8	00000000
3029 001		COMPLETION TIMEOUT	40-	47 8	
3032 001		MESSAGE SEQUENCE NUMBER	48-	63 16	
3020 012		CONTROL/RESPONSE INDICATOR, 12 (CR12)	64-	71 8	
3034 004		ERROR CODE, 4 (EC4)	72-	79 8	
3033 002		FRAGMENT NUMBER	80-	87 8	
3033 003		TOTAL NUMBER FRAGMENTS	88-	95 8	
3032 002		ORIGINATING MESSAGE SEQUENCE NUMBER	96-	111 16	
3036 020		DESTINATION ADDRESS (DA)	112-	127 16	REPEATED FOR EACH ADDRESSED INTERFACE UNIT (JRE SENDER ID) UP TO A MAXIMUM OF 255. THIS FIELD IS OMITTED IF NUMBER DESTINATION ADDRESSES IS 0.
3012 002		LENGTH OF MESSAGE (LM)	128-	143 16	THESE FIELDS (BITS 128 - 175) MAY BE REPEATED ONCE FOR EACH LINK BEING REPORTED ON. EACH DESIGNATOR BEING REPORTED ON WILL BE FOLLOWED BY A SERIES OF ONE OR MORE UNIT REPORT GROUPS (BITS 176 - 239).
3036 001		JRE SENDER ID (JRE SI)	144-	159 16	THESE FIELDS (BITS 128 - 175) MAY BE REPEATED ONCE FOR EACH LINK BEING REPORTED ON. EACH DESIGNATOR BEING REPORTED ON WILL BE FOLLOWED BY A SERIES OF ONE OR MORE UNIT REPORT GROUPS (BITS 176 - 239).
3021 002		LINK DESIGNATOR	160-	175 16	THESE FIELDS (BITS 128 - 175) MAY BE REPEATED ONCE FOR EACH LINK BEING REPORTED ON. EACH DESIGNATOR BEING REPORTED ON WILL BE FOLLOWED BY A SERIES OF ONE OR MORE UNIT REPORT GROUPS (BITS 176 - 239).

MESSAGE DESCRIPTION

MESSAGE NUMBER: X0.14.0

MESSAGE TITLE: CONNECTIVITY FEEDBACK

REFERENCE	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3036 022	LINK INTERFACE UNIT	176-191	16	THESE FIVE FIELDS (BITS 176 - 239) ARE THE UNIT REPORT GROUP (5.5.4.18.4) AND ARE REPEATED FOR EACH LINK INTERFACE UNIT BEING REPORTED.
3003 002	AVERAGE RECEIVED DATA MEDIA LATENCY (AVG REC LTNCY)	192-207	16	THESE FIVE FIELDS (BITS 176 - 239) ARE THE UNIT REPORT GROUP (5.5.4.18.4) AND ARE REPEATED FOR EACH LINK INTERFACE UNIT BEING REPORTED.
3099 009	SPARE (SP)	208-216	9	THESE FIVE FIELDS (BITS 176 - 239) ARE THE UNIT REPORT GROUP (5.5.4.18.4) AND ARE REPEATED FOR EACH LINK INTERFACE UNIT BEING REPORTED.
3000 001	PERCENT EXCEEDING LATENCY (%EXCLAT)	217-223	7	THESE FIVE FIELDS (BITS 176 - 239) ARE THE UNIT REPORT GROUP (5.5.4.18.4) AND ARE REPEATED FOR EACH LINK INTERFACE UNIT BEING REPORTED.
3015 018	ERROR RATE, CURRENT (ERC)	224-239	16	THESE FIVE FIELDS (BITS 176 - 239) ARE THE UNIT REPORT GROUP (5.5.4.18.4) AND ARE REPEATED FOR EACH LINK INTERFACE UNIT BEING REPORTED.

FIELD CODING FOR X0.14.0 (SHEET 1)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3006	001	ACKNOWLEDGEMENT PROTOCOL, 1 -----		SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR. INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
		NORMAL	0	
		ILLEGAL	1 THROUGH 2	
		UNDEFINED	3 THROUGH 15	
3012	003	MANAGEMENT MESSAGE LENGTH -----		THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).
		0 THROUGH 65535 BYTES	0 THROUGH 65535	
3029	001	COMPLETION TIMEOUT -----		SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.
		NO STATEMENT	0	
		1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS
3032	001	MESSAGE SEQUENCE NUMBER -----		THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE. INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
		NUMERIC	0	THE SEQUENCE NUMBER OF THE MESSAGE.
		NUMERIC	1 THROUGH 65535	
3020	012	CONTROL/RESPONSE INDICATOR, 12 -----		USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.
		ILLEGAL	0 THROUGH 1	
		INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
		UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
		ILLEGAL	128 THROUGH 129	
		CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
		ILLEGAL	131 THROUGH 133	

FIELD CODING FOR X0.14.0

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3020	012	CONTROL/RESPONSE INDICATOR, 12 -----	(CONTINUED)	
		RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
		ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
3034	004	ERROR CODE, 4 -----		INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.
		NO ERROR	0	INDICATES NO ERROR CONDITION.
		MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
		ILLEGAL PROCESSING TIMEOUT	2 THROUGH 5 6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
		COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
		SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
3033	002	FRAGMENT NUMBER -----		USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.
		NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
3033	003	TOTAL NUMBER FRAGMENTS -----		THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.
		NO FRAGMENTS	0	
		ILLEGAL	1	
		NUMBER FRAGMENTS	2 THROUGH 255	
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER -----		THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.
		NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.

FIELD CODING FOR X0.14.0 (SHEET 3)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3032	002	ORIGINATING MESSAGE SEQUENCE NUMBER ----- NUMERIC	(CONTINUED) 1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
3036	020	DESTINATION ADDRESS ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED. INTERFACE UNIT NUMBER.
3012	002	LENGTH OF MESSAGE ----- 0 THROUGH 65535 BYTES	0 THROUGH 65535	INDICATES THE LENGTH OF THE MESSAGE (IN BYTES).
3036	001	JRE SENDER ID ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER. INTERFACE UNIT NUMBER.
3021	002	LINK DESIGNATOR ----- NO STATEMENT ASSIGNED DESIGNATOR	0 1 THROUGH 65535	THE UNIQUE DESIGNATOR FOR EACH OF A JRE PROCESSOR'S CAPABLE JRE LINKS OR TDL NETWORKS. UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3036	022	LINK INTERFACE UNIT ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	THE UNIQUE NUMBER FOR EACH UNIT PARTICIPATING ON THE LINK. INTERFACE UNIT NUMBER.
3003	002	AVERAGE RECEIVED DATA MEDIA LATENCY ----- 0 THROUGH 2047 AND 31/32 SECONDS	0 THROUGH 65535	THE CALCULATED MEAN LATENCY OVER A SPECIFIC INTERVAL ON THE DATA THAT THE JRE PROCESSOR IS RECEIVING FROM THE SOURCE MEASURED IN 1/32 SECOND INCREMENTS. NUMBER OF SECONDS MEASURED IN 1/32 OF A SECOND INCREMENTS.

FIELD CODING FOR X0.14.0 (SHEET 4)				
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3000	001	PERCENT EXCEEDING LATENCY -----		THE PERCENTAGE OF PACKETS EXCEEDING THE SPECIFIED MAXIMUM LATENCY LIMITS OVER THE SAME INTERVAL OF TIME.
		LATENCY	0 THROUGH 100	THE PERCENTAGE OF PACKETS EXCEEDING THE SPECIFIED MAXIMUM LATENCY LIMITS OVER THE SAME INTERVAL OF TIME IN ONE PERCENT INCREMENTS.
		ILLEGAL	101 THROUGH 127	
3015	018	ERROR RATE, CURRENT -----		INDICATES THE CURRENT ERROR RATE OF A REMOTE JRE PROCESSOR (SEE 5.6.14)
		ERROR RATE	0 THROUGH 65534	THE CURRENT CALCULATED ERROR RATE BEING REPORTED.
		ERROR RATE GREATER THAN 65534	65535	

X1.0 MESSAGE SUMMARY

PURPOSE

THE JREAP J-SERIES MESSAGE PROVIDES TRANSPORT AND MANAGEMENT OF J-SERIES MESSAGES ACROSS A JREAP NETWORK WHEN USING AN APPLICATION HEADER.

DATA ELEMENT SUMMARY

<u>X1.0.0</u>	
DATA ELEMENT	# BITS
JRE SOURCE TRACK NUMBER	16
J-SERIES MESSAGE SEQUENCE NUMBER	16
RELAY FLAG	1
ACKNOWLEDGEMENT REQUEST FLAG	1
SPARE	1
DATA AGE	13
SPARE	4
NUMBER OF J-WORDS	12
JREAP J-SERIES MESSAGE WORD, 1	16
JREAP J-SERIES MESSAGE WORD, 2	16
JREAP J-SERIES MESSAGE WORD, 3	16
JREAP J-SERIES MESSAGE WORD, 4	16
SPARE	2
JREAP J-SERIES MESSAGE WORD, 5	6

MESSAGE TITLE: JREAP J-SERIES MESSAGE (APPLICATION)

:	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00:
:																:																:
:	J-SERIES MESSAGE SEQUENCE NUMBER															:	JRE SOURCE TRACK NUMBER															:
:																:																:
:																:																:
:	16															:	16															:
:																:																:
:	63	62	61	60	59	58	57	56	55	54	53	52:	51	50	49	48:	47	46	45	44	43	42	41	40	39	38	37	36	35:	34:	33:	32:
:																:																:
:	NUMBER OF J-WORDS															:	SPARE															:
:																:	DATA AGE															:
:																:																:
:	12															:	4															:
:																:	13															:
:																:																:
:	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64:
:																:																:
:	JREAP J-SERIES MESSAGE WORD, 2															:	JREAP J-SERIES MESSAGE WORD, 1															:
:																:																:
:	16															:	16															:
:																:																:
:	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96 :
:																:																:
:	JREAP J-SERIES MESSAGE WORD, 4															:	JREAP J-SERIES MESSAGE WORD, 3															:
:																:																:
:	16															:	16															:

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MESSAGE NUMBER: X1.0.0

MESSAGE TITLE: JREAP J-SERIES MESSAGE (APPLICATION)

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:135 134 133 132 131 130 129 128:
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:JREAP J-SERIES MESSAGE : SP :
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: WORD, 5 :

$$: \quad 6 \quad : \quad 2 \quad :$$

MESSAGE DESCRIPTION

MESSAGE NUMBER: X1.0.0

MESSAGE TITLE: JREAP J-SERIES MESSAGE (APPLICATION)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3027 003		JRE SOURCE TRACK NUMBER	0-	15 16	
3032 003		J-SERIES MESSAGE SEQUENCE NUMBER	16-	31 16	
3002 009		RELAY FLAG (R FLG)	32	1	
3002 003		ACKNOWLEDGEMENT REQUEST FLAG (ACKREQ)	33	1	
3099 001		SPARE (SP)	34	1	
3003 003		DATA AGE (DATA AGE)	35-	47 13	
3099 004		SPARE (SP)	48-	51 4	
3033 005		NUMBER OF J-WORDS	52-	63 12	
3028 001		JREAP J-SERIES MESSAGE WORD, 1	64-	79 16	THESE SIX FIELDS (BITS 64 - 135) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE FIVE FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1.
3028 002		JREAP J-SERIES MESSAGE WORD, 2	80-	95 16	THESE SIX FIELDS (BITS 64 - 135) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE FIVE FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X1.0.0

WO MESSAGE RD TITLE: JREAP J-SERIES MESSAGE (APPLICATION)

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3028 003	JREAP J-SERIES MESSAGE WORD, 3	96-111	16		THESE SIX FIELDS (BITS 64 - 135) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE FIVE FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3028 004	JREAP J-SERIES MESSAGE WORD, 4	112-127	16		THESE SIX FIELDS (BITS 64 - 135) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE FIVE FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3099 002	SPARE (SP)	128-129	2		THESE SIX FIELDS (BITS 64 - 135) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE FIVE FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .

MESSAGE DESCRIPTION

MESSAGE NUMBER: X1.0.0

MESSAGE TITLE: JREAP J-SERIES MESSAGE (APPLICATION)

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3028 005	JREAP J-SERIES MESSAGE WORD,	5	130-135	6	THESE SIX FIELDS (BITS 64 - 135) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE FIVE FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .

			FIELD CODING FOR X1.0.0	(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3027	003	JRE SOURCE TRACK NUMBER ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
3032	003	J-SERIES MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE SEQUENCE NUMBER OF EACH JREAP J-SERIES MESSAGE TRANSMITTED BY A JRE PROCESSOR ON EACH JRE LINK. INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS. THE MESSAGE SEQUENCE NUMBER OF A JREAP J-SERIES MESSAGE.
3002	009	RELAY FLAG ----- MESSAGE DIRECTLY RECEIVED RELAYED MESSAGE	0 1	INDICATES WHETHER THE JRE PROCESSOR TRANSMITTING THE MESSAGE IS DIRECTLY CONNECTED TO THE SOURCE TACTICAL DATA NETWORK.
3002	003	ACKNOWLEDGEMENT REQUEST FLAG ----- ACKNOWLEDGEMENT NOT REQUESTED ACKNOWLEDGEMENT REQUESTED	0 1	INDICATES IF THE MESSAGE IS TO BE ACKNOWLEDGED BY THE RECEIVING JRE PROCESSOR.
3003	003	DATA AGE ----- 0 THROUGH 255 AND 31/32 SECONDS	0 THROUGH 8191	LENGTH OF TIME THAT A J-SERIES MESSAGE HAS BEEN IN THE JRE PROCESS RELATIVE TO THE DVT. MEASURED IN 1/32 SECOND INCREMENTS. NUMBER OF SECONDS MEASURED IN 1/32 SECOND INCREMENTS.
3033	005	NUMBER OF J-WORDS ----- ILLEGAL NUMERIC	0 1 THROUGH 4095	INDICATES THE NUMBER OF J-WORDS CONTAINED WITHIN THE FOLLOWING J-SERIES MESSAGE(S).
3028	001	JREAP J-SERIES MESSAGE WORD, 1 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J-

FIELD CODING FOR X1.0.0				(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3028	001	JREAP J-SERIES MESSAGE WORD, 1 -----		
		DATA, 1	0 THROUGH 65535	SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 . DATA
3028	002	JREAP J-SERIES MESSAGE WORD, 2 -----		
		DATA, 1	0 THROUGH 65535	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 . DATA
3028	003	JREAP J-SERIES MESSAGE WORD, 3 -----		
		DATA, 1	0 THROUGH 65535	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 . DATA
3028	004	JREAP J-SERIES MESSAGE WORD, 4 -----		
		DATA, 1	0 THROUGH 65535	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 . DATA
3028	005	JREAP J-SERIES MESSAGE WORD, 5 -----		
		DATA	0 THROUGH 63	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .

X1.1 MESSAGE SUMMARY

PURPOSE

THE JREAP J-SERIES MESSAGE PROVIDES TRANSPORT AND MANAGEMENT OF J-SERIES MESSAGES ACROSS A JREAP NETWORK WHEN USING A FULL STACK HEADER.

DATA ELEMENT SUMMARY

<u>X1.1.0</u>			
DATA ELEMENT		#	BITS
JREAP J-SERIES MESSAGE WORD,	1	1	16
JREAP J-SERIES MESSAGE WORD,	2	1	16
JREAP J-SERIES MESSAGE WORD,	3	1	16
JREAP J-SERIES MESSAGE WORD,	4	1	16
SPARE			2
JREAP J-SERIES MESSAGE WORD,	5	1	6

MESSAGE TITLE: JREAP J-SERIES MESSAGE (FULL STACK)

:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32:		
:																	:																	:
:	JREAP J-SERIES MESSAGE WORD, 4																:	JREAP J-SERIES MESSAGE WORD, 3																:
:																	:																	:
:	16																:	16																:

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: 71 70 69 68 67 66: 65 64:
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:
:JREAP J-SERIES MESSAGE : SP :
: WORD, 5 : :
-----
: 6 : 2 :

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MESSAGE DESCRIPTION

MESSAGE NUMBER: X1.1.0

MESSAGE TITLE: JREAP J-SERIES MESSAGE (FULL STACK)

REFERENCE	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3028 001	JREAP J-SERIES MESSAGE WORD, 1	0- 15	16	THESE SIX FIELDS (BITS 0 - 71) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE DATA WORDS FIELD (BITS 6 - 15 IN THE MESSAGE GROUP HEADER) UP TO A MAXIMUM OF TO 165 TIMES.
3028 002	JREAP J-SERIES MESSAGE WORD, 2	16- 31	16	THESE SIX FIELDS (BITS 0 - 71) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE DATA WORDS FIELD (BITS 6 - 15 IN THE MESSAGE GROUP HEADER) UP TO A MAXIMUM OF TO 165 TIMES.
3028 003	JREAP J-SERIES MESSAGE WORD, 3	32- 47	16	THESE SIX FIELDS (BITS 0 - 71) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE DATA WORDS FIELD (BITS 6 - 15 IN THE MESSAGE GROUP HEADER) UP TO A MAXIMUM OF TO 165 TIMES.
3028 004	JREAP J-SERIES MESSAGE WORD, 4	48- 63	16	THESE SIX FIELDS (BITS 0 - 71) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE DATA WORDS FIELD (BITS 6 - 15 IN THE MESSAGE GROUP HEADER) UP TO A MAXIMUM OF TO 165 TIMES.
3099 002	SPARE (SP)	64- 65	2	THESE SIX FIELDS (BITS 0 - 71) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE DATA WORDS FIELD (BITS 6 - 15 IN THE MESSAGE GROUP HEADER) UP TO A MAXIMUM OF TO 165 TIMES.

MESSAGE DESCRIPTION					

MESSAGE NUMBER: X1.1.0					
MESSAGE TITLE: JREAP J-SERIES MESSAGE (FULL STACK)					
REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3028 005	JREAP J-SERIES MESSAGE WORD,	5	66-	71	6
					THESE SIX FIELDS (BITS 0 - 71) ARE THE J-SERIES MESSAGE WORD GROUP (5.5.1) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE DATA WORDS FIELD (BITS 6 - 15 IN THE MESSAGE GROUP HEADER) UP TO A MAXIMUM OF TO 165 TIMES.

FIELD CODING FOR X1.1.0				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3028	001	JREAP J-SERIES MESSAGE WORD, 1 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	002	JREAP J-SERIES MESSAGE WORD, 2 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	003	JREAP J-SERIES MESSAGE WORD, 3 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	004	JREAP J-SERIES MESSAGE WORD, 4 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	005	JREAP J-SERIES MESSAGE WORD, 5 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA	0 THROUGH 63	

X2.0 MESSAGE SUMMARY

PURPOSE

THE JREAP JTIDS/MIDS FREE TEXT (CODED) MESSAGE IS USED TO TRANSFER BINARY DATA (FOR EXAMPLE, FILE TRANSFERS, STATIONARY IMAGES) BETWEEN JUS VIA THE JREAP WHEN USING AN APPLICATION HEADER.

DATA ELEMENT SUMMARY

<u>X2.0.0</u>		
DATA ELEMENT		# BITS
JRE SOURCE TRACK NUMBER		16
JTIDS/MIDS PARTICIPATION GROUP		9
NUMBER OF BLOCKS		7
JREAP/JTIDS FREE TEXT, 1		16
JREAP/JTIDS FREE TEXT, 2		16
JREAP/JTIDS FREE TEXT, 3		16
JREAP/JTIDS FREE TEXT, 4		16
JREAP/JTIDS FREE TEXT, 5		16
JREAP/JTIDS FREE TEXT, 6		16
JREAP/JTIDS FREE TEXT, 7		16
JREAP/JTIDS FREE TEXT, 8		16
JREAP/JTIDS FREE TEXT, 9		16
JREAP/JTIDS FREE TEXT, 10		16
JREAP/JTIDS FREE TEXT, 11		16
JREAP/JTIDS FREE TEXT, 12		16
JREAP/JTIDS FREE TEXT, 13		16
JREAP/JTIDS FREE TEXT, 14		16
SPARE		7
JREAP/JTIDS FREE TEXT, 16		1

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (CODED) MESSAGE (APPLICATION)

:	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48:	47	46	45	44	43	42	41	40:	39	38	37	36	35	34	33	32:		
:																	:																	:
:	JREAP/JTIDS FREE TEXT, 2																:	JREAP/JTIDS FREE TEXT, 1																:
:																	:																	:
:																	:																	:
:	16																:	16																:

:127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96:
:															:																:
:					JREAP/JTIDS	FREE TEXT,	6								:							JREAP/JTIDS	FREE TEXT,	5							:
:															:																:
:															:																:
:						16									:									16							:

MIL-STD-3011D

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (CODED) MESSAGE (APPLICATION)

[illegible]

MESSAGE MAP

MESSAGE NUMBER: X2.0.0
MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (CODED) MESSAGE (APPLICATION)

:263:	262	261	260	259	258	257	256:		

:JFT:								:	
:1BT:	SPARE							:	
:	:								:

: 1 :	7							:	

MESSAGE DESCRIPTION

MESSAGE NUMBER: X2.0.0

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (CODED) MESSAGE (APPLICATION)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3027 003	JRE	SOURCE TRACK NUMBER	0- 15	16	
3040 001	JTIDS/MIDS	PARTICIPATION GROUP	16- 24	9	
3033 004	NUMBER OF	BLOCKS	25- 31	7	
3030 001	JREAP/JTIDS	FREE TEXT, 1	32- 47	16	THESE SIXTEEN FIELDS (BITS 32-263) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 232 BIT JREAP BLOCK AS SHOWN IN FIGURE 5.5-4 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 25-31).
3030 002	JREAP/JTIDS	FREE TEXT, 2	48- 63	16	SAME CODING AS FOR BITS 32-47.
3030 003	JREAP/JTIDS	FREE TEXT, 3	64- 79	16	SAME CODING AS FOR BITS 32-47.
3030 004	JREAP/JTIDS	FREE TEXT, 4	80- 95	16	SAME CODING AS FOR BITS 32-47.
3030 005	JREAP/JTIDS	FREE TEXT, 5	96-111	16	SAME CODING AS FOR BITS 32-47.
3030 006	JREAP/JTIDS	FREE TEXT, 6	112-127	16	SAME CODING AS FOR BITS 32-47.
3030 007	JREAP/JTIDS	FREE TEXT, 7	128-143	16	SAME CODING AS FOR BITS 32-47.
3030 008	JREAP/JTIDS	FREE TEXT, 8	144-159	16	SAME CODING AS FOR BITS 32-47.
3030 009	JREAP/JTIDS	FREE TEXT, 9	160-175	16	SAME CODING AS FOR BITS 32-47.
3030 010	JREAP/JTIDS	FREE TEXT, 10	176-191	16	SAME CODING AS FOR BITS 32-47.
3030 011	JREAP/JTIDS	FREE TEXT, 11	192-207	16	SAME CODING AS FOR BITS 32-47.
3030 012	JREAP/JTIDS	FREE TEXT, 12	208-223	16	SAME CODING AS FOR BITS 32-47.
3030 013	JREAP/JTIDS	FREE TEXT, 13	224-239	16	SAME CODING AS FOR BITS 32-47.
3030 014	JREAP/JTIDS	FREE TEXT, 14	240-255	16	SAME CODING AS FOR BITS 32-47.
3099 007	SPARE	(SP)	256-262	7	THESE SIXTEEN FIELDS (BITS 32-263) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 232 BIT JREAP BLOCK AS SHOWN IN FIGURE 5.5-4 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 25-31).
3030 016	JREAP/JTIDS	FREE TEXT, 16 (JFT 1BT)	263	1	THESE SIXTEEN FIELDS (BITS 32-263) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 232 BIT JREAP BLOCK AS SHOWN IN FIGURE 5.5-4 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 25-31).

		FIELD CODING FOR X2.0.0		(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3027	003	JRE SOURCE TRACK NUMBER ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
3040	001	JTIDS/MIDS PARTICIPATION GROUP -----		THE PARTICIPATION GROUP (PG) FROM WHICH THE FREE TEXT (CODED) MESSAGE WAS RECEIVED ON JTIDS/MIDS OR THAT WAS SUPPLIED BY THE TRANSMITTING UNIT FOR DATA ORIGINATING AT THE JRE PROCESSOR.
		NO STATEMENT	0	
		INITIAL ENTRY	1	
		RTT A	2	
		RTT B	3	
		NETWORK MANAGEMENT	4	
		PPLI AND STATUS GROUP A	5	
		PPLI AND STATUS GROUP B	6	
		SURVEILLANCE	7	
		MISSION MANAGEMENT/ WEAPONS COORDINATION	8	
		CONTROL	9	
		ELECTRONIC WARFARE	10	
		IMAGE TRANSFER	11	
		VOICE GROUP A	12	
		VOICE GROUP B	13	
		PARTICIPATION GROUPS 14 THROUGH 18	14 THROUGH 18	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NONC2 JU-TO-NONC2 JU A	19	
		NONC2 JU-TO-NONC2 JU B	20	
		BMD OPERATIONS	21	
		COMPOSITE A	22	
		COMPOSITE B	23	
		PARTICIPATION GROUPS 24 THROUGH 26	24 THROUGH 26	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		JOINT NET PPLI	27	
		DISTRIBUTED NETWORK MANAGEMENT	28	
		RESIDUAL MESSAGES	29	
		IJMS POSITION AND STATUS	30	
		OTHER IJMS	31	
		PARTICIPATION GROUPS 32 THROUGH 509	32 THROUGH 509	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL

FIELD CODING FOR X2.0.0				(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3040	001	JTIDS/MIDS PARTICIPATION GROUP (CONTINUED) -----		COMMUNICATIONS PLAN.
		NET CONTROL NEEDLINE	510	
		NET STATUS NEEDLINE	511	
3033	004	NUMBER OF BLOCKS -----		DEFINES THE NUMBER OF JREAP FREE TEXT BLOCKS THAT FOLLOW (ARE CONTAINED) IN THE MESSAGE.
		ILLEGAL	0	
		NUMERIC	1 THROUGH 127	
3030	001	JREAP/JTIDS FREE TEXT, 1 -----		USED TO TRANSFER BINARY DATA.
		DATA	0 THROUGH 65535	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .
3030	016	JREAP/JTIDS FREE TEXT, 16 -----		USED TO TRANSFER BINARY DATA.
		DATA	0 THROUGH 1	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .

X2.1 MESSAGE SUMMARY

PURPOSE

THE JREAP JTIDS/MIDS FREE TEXT (CODED) MESSAGE IS USED TO TRANSFER BINARY DATA (FOR EXAMPLE, FILE TRANSFERS, STATIONARY IMAGES) BETWEEN JUS VIA THE JREAP WHEN USING A FULL STACK HEADER..

DATA ELEMENT SUMMARY

<u>X2.1.0</u>	
DATA ELEMENT	# BITS
JTIDS/MIDS PARTICIPATION GROUP	9
NUMBER OF BLOCKS	7
JREAP/JTIDS FREE TEXT, 1	16
JREAP/JTIDS FREE TEXT, 2	16
JREAP/JTIDS FREE TEXT, 3	16
JREAP/JTIDS FREE TEXT, 4	16
JREAP/JTIDS FREE TEXT, 5	16
JREAP/JTIDS FREE TEXT, 6	16
JREAP/JTIDS FREE TEXT, 7	16
JREAP/JTIDS FREE TEXT, 8	16
JREAP/JTIDS FREE TEXT, 9	16
JREAP/JTIDS FREE TEXT, 10	16
JREAP/JTIDS FREE TEXT, 11	16
JREAP/JTIDS FREE TEXT, 12	16
JREAP/JTIDS FREE TEXT, 13	16
JREAP/JTIDS FREE TEXT, 14	16
SPARE	7
JREAP/JTIDS FREE TEXT, 16	1

MESSAGE MAP

MESSAGE NUMBER: X2.1.0

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (CODED) MESSAGE (FULL STACK)

: 31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12	11	10	09:	08	07	06	05	04	03	02	01	00:
:															:							:									:
:										JREAP/JTIDS FREE TEXT, 1					:							:									:
:															:		NUMBER OF BLOCKS					:						JTIDS/MIDS PARTICIPATION GROUP			:
:															:							:									:
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MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (CODED) MESSAGE (FULL STACK)

:247:246	245	244	243	242	241	240:239	238	237	236	235	234	233	232	231	230	229	228	227	226	225	224:
:JFT:						:															:
:1BT:			SPARE			:						JREAP/JTIDS	FREE	TEXT,	14						:
:	:					:															:
: 1 :			7			:									16						:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X2.1.0

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (CODED) MESSAGE (FULL STACK)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3040 001		JTIDS/MIDS PARTICIPATION GROUP	0-	8 9	
3033 004		NUMBER OF BLOCKS	9-	15 7	
3030 001		JREAP/JTIDS FREE TEXT, 1	16-	31 16	THESE SIXTEEN FIELDS (BITS 16-247) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 232 BIT JREAP BLOCK AS SHOWN IN FIGURE 5.5-4 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 9-15).
3030 002		JREAP/JTIDS FREE TEXT, 2	32-	47 16	SAME CODING AS FOR BITS 16-31.
3030 003		JREAP/JTIDS FREE TEXT, 3	48-	63 16	SAME CODING AS FOR BITS 16-31.
3030 004		JREAP/JTIDS FREE TEXT, 4	64-	79 16	SAME CODING AS FOR BITS 16-31.
3030 005		JREAP/JTIDS FREE TEXT, 5	80-	95 16	SAME CODING AS FOR BITS 16-31.
3030 006		JREAP/JTIDS FREE TEXT, 6	96-	111 16	SAME CODING AS FOR BITS 16-31.
3030 007		JREAP/JTIDS FREE TEXT, 7	112-	127 16	SAME CODING AS FOR BITS 16-31.
3030 008		JREAP/JTIDS FREE TEXT, 8	128-	143 16	SAME CODING AS FOR BITS 16-31.
3030 009		JREAP/JTIDS FREE TEXT, 9	144-	159 16	SAME CODING AS FOR BITS 16-31.
3030 010		JREAP/JTIDS FREE TEXT, 10	160-	175 16	SAME CODING AS FOR BITS 16-31.
3030 011		JREAP/JTIDS FREE TEXT, 11	176-	191 16	SAME CODING AS FOR BITS 16-31.
3030 012		JREAP/JTIDS FREE TEXT, 12	192-	207 16	SAME CODING AS FOR BITS 16-31.
3030 013		JREAP/JTIDS FREE TEXT, 13	208-	223 16	SAME CODING AS FOR BITS 16-31.
3030 014		JREAP/JTIDS FREE TEXT, 14	224-	239 16	SAME CODING AS FOR BITS 16-31.
3099 007		SPARE (SP)	240-	246 7	THESE SIXTEEN FIELDS (BITS 16-247) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 232 BIT JREAP BLOCK AS SHOWN IN FIGURE 5.5-4 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 9-15).
3030 016		JREAP/JTIDS FREE TEXT, 16 (JFT 1BT)	247	1	THESE SIXTEEN FIELDS (BITS 16-247) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 232 BIT JREAP BLOCK AS SHOWN IN FIGURE 5.5-4 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 9-15).

FIELD CODING FOR X2.1.0

(SHEET 1)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3040	001	JTIDS/MIDS PARTICIPATION GROUP -----		THE PARTICIPATION GROUP (PG) FROM WHICH THE FREE TEXT (CODED) MESSAGE WAS RECEIVED ON JTIDS/MIDS OR THAT WAS SUPPLIED BY THE TRANSMITTING UNIT FOR DATA ORIGINATING AT THE JRE PROCESSOR.
		NO STATEMENT	0	
		INITIAL ENTRY	1	
		RTT A	2	
		RTT B	3	
		NETWORK MANAGEMENT	4	
		PPLI AND STATUS GROUP A	5	
		PPLI AND STATUS GROUP B	6	
		SURVEILLANCE	7	
		MISSION MANAGEMENT/ WEAPONS COORDINATION	8	
		CONTROL	9	
		ELECTRONIC WARFARE	10	
		IMAGE TRANSFER	11	
		VOICE GROUP A	12	
		VOICE GROUP B	13	
		PARTICIPATION GROUPS 14 THROUGH 18	14 THROUGH 18	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NONC2 JU-TO-NONC2 JU A	19	
		NONC2 JU-TO-NONC2 JU B	20	
		BMD OPERATIONS	21	
		COMPOSITE A	22	
		COMPOSITE B	23	
		PARTICIPATION GROUPS 24 THROUGH 26	24 THROUGH 26	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		JOINT NET PPLI	27	
		DISTRIBUTED NETWORK MANAGEMENT	28	
		RESIDUAL MESSAGES	29	
		IJMS POSITION AND STATUS	30	
		OTHER IJMS	31	
		PARTICIPATION GROUPS 32 THROUGH 509	32 THROUGH 509	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NET CONTROL NEEDLINE	510	
		NET STATUS NEEDLINE	511	

			FIELD CODING FOR X2.1.0	(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	004	NUMBER OF BLOCKS -----		DEFINES THE NUMBER OF JREAP FREE TEXT BLOCKS THAT FOLLOW (ARE CONTAINED) IN THE MESSAGE.
		ILLEGAL NUMERIC	0 1 THROUGH 127	
3030	001	JREAP/JTIDS FREE TEXT, 1 -----		USED TO TRANSFER BINARY DATA.
		DATA	0 THROUGH 65535	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .
3030	016	JREAP/JTIDS FREE TEXT, 16 -----		USED TO TRANSFER BINARY DATA.
		DATA	0 THROUGH 1	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .

X3.0 MESSAGE SUMMARY

PURPOSE

THE JTIDS/MIDS JREAP FREE TEXT (UNCODED) MESSAGE (APPLICATION) IS USED TO TRANSFER BINARY DATA (FILE TRANSFERS, STATIONARY IMAGES) BETWEEN JUS VIA THE JREAP.

DATA ELEMENT SUMMARY

<u>X3.0.0</u>	
DATA ELEMENT	# BITS
JRE SOURCE TRACK NUMBER	16
JTIDS/MIDS PARTICIPATION GROUP	9
NUMBER OF BLOCKS	7
JREAP/JTIDS FREE TEXT, 1	16
JREAP/JTIDS FREE TEXT, 2	16
JREAP/JTIDS FREE TEXT, 3	16
JREAP/JTIDS FREE TEXT, 4	16
JREAP/JTIDS FREE TEXT, 5	16
JREAP/JTIDS FREE TEXT, 6	16
JREAP/JTIDS FREE TEXT, 7	16
JREAP/JTIDS FREE TEXT, 8	16
JREAP/JTIDS FREE TEXT, 9	16
JREAP/JTIDS FREE TEXT, 10	16
JREAP/JTIDS FREE TEXT, 11	16
JREAP/JTIDS FREE TEXT, 12	16
JREAP/JTIDS FREE TEXT, 13	16
JREAP/JTIDS FREE TEXT, 14	16
JREAP/JTIDS FREE TEXT, 15	16
JREAP/JTIDS FREE TEXT, 17	16
JREAP/JTIDS FREE TEXT, 18	16
JREAP/JTIDS FREE TEXT, 19	16
JREAP/JTIDS FREE TEXT, 20	16
JREAP/JTIDS FREE TEXT, 21	16
JREAP/JTIDS FREE TEXT, 22	16
JREAP/JTIDS FREE TEXT, 23	16
JREAP/JTIDS FREE TEXT, 24	16
JREAP/JTIDS FREE TEXT, 25	16
JREAP/JTIDS FREE TEXT, 26	16
JREAP/JTIDS FREE TEXT, 27	16
JREAP/JTIDS FREE TEXT, 28	16
JREAP/JTIDS FREE TEXT, 29	16
JREAP/JTIDS FREE TEXT, 30	16
SPARE	7
JREAP/JTIDS FREE TEXT, 16	1

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (APPLICATION)

: 31 30 29 28 27 26 25: 24 23 22 21 20 19 18 17 16: 15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 00:

NUMBER OF BLOCKS	JTIDS/MIDS PARTICIPATION GROUP	JRE SOURCE TRACK NUMBER
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19
20	20	20
21	21	21
22	22	22
23	23	23
24	24	24
25	25	25
26	26	26
27	27	27
28	28	28
29	29	29
30	30	30
31	31	31
32	32	32
33	33	33
34	34	34
35	35	35
36	36	36
37	37	37
38	38	38
39	39	39
40	40	40
41	41	41
42	42	42
43	43	43
44	44	44
45	45	45
46	46	46
47	47	47
48	48	48
49	49	49
50	50	50
51	51	51
52	52	52
53	53	53
54	54	54
55	55	55
56	56	56
57	57	57
58	58	58
59	59	59
60	60	60
61	61	61
62	62	62
63	63	63
64	64	64
65	65	65
66	66	66
67	67	67
68	68	68
69	69	69
70	70	70
71	71	71
72	72	72
73	73	73
74	74	74
75	75	75
76	76	76
77	77	77
78	78	78
79	79	79
80	80	80
81	81	81
82	82	82
83	83	83
84	84	84
85	85	85
86	86	86
87	87	87
88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

7 9 16

: 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48: 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32:

```

:
: JREAP/JTIDS FREE TEXT, 2
:
: JREAP/JTIDS FREE TEXT, 1
:
:

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: 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80: 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64:

```

:
: JREAP/JTIDS FREE TEXT, 4
:
:
: JREAP/JTIDS FREE TEXT, 3
:
:

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:127 126 125 124 123 122 121 120 119 118 117 116 115 114 113 112:111 110 109 108 107 106 105 104 103 102 101 100 99 98 97 96:

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:
: JREAP/JTIDS FREE TEXT, 6
:
:
: JREAP/JTIDS FREE TEXT, 5
:
:

```

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (APPLICATION)

:255	254	253	252	251	250	249	248	247	246	245	244	243	242	241	240:	239	238	237	236	235	234	233	232	231	230	229	228	227	226	225	224:
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:	JREAP/JTIDS FREE TEXT, 14														:	JREAP/JTIDS FREE TEXT, 13													:		
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:	16														:	16													:		

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MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (APPLICATION)

:287 286 285 284 283 282 281 280 279 278 277 276 275 274 273 272:271 270 269 268 267 266 265 264 263 262 261 260 259 258 257 256:

:	:
JREAP/JTIDS FREE TEXT, 17	JREAP/JTIDS FREE TEXT, 15
:	:
:	:
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16	16

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:319 318 317 316 315 314 313 312 311 310 309 308 307 306 305 304:303 302 301 300 299 298 297 296 295 294 293 292 291 290 289 288:

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:	:
JREAP/JTIDS FREE TEXT, 19	JREAP/JTIDS FREE TEXT, 18
:	:
:	:

16	16

```

:351 350 349 348 347 346 345 344 343 342 341 340 339 338 337 336:335 334 333 332 331 330 329 328 327 326 325 324 323 322 321 320:

```

:	:
JREAP/JTIDS FREE TEXT, 21	JREAP/JTIDS FREE TEXT, 20
:	:
:	:

:	:
16	16

```

:383 382 381 380 379 378 377 376 375 374 373 372 371 370 369 368:367 366 365 364 363 362 361 360 359 358 357 356 355 354 353 352:

```

:	:
JREAP/JTIDS FREE TEXT, 23	JREAP/JTIDS FREE TEXT, 22
:	:
:	:

:	:
16	16

MESSAGE MAP

MESSAGE NUMBER: X3.0.0

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (APPLICATION)

:415 414 413 412 411 410 409 408 407 406 405 404 403 402 401 400:	399 398 397 396 395 394 393 392 391 390 389 388 387 386 385 384:
:	:
: JREAP/JTIDS FREE TEXT, 25	: JREAP/JTIDS FREE TEXT, 24
:	:
: 16	: 16
:	:
:447 446 445 444 443 442 441 440 439 438 437 436 435 434 433 432:	431 430 429 428 427 426 425 424 423 422 421 420 419 418 417 416:
:	:
: JREAP/JTIDS FREE TEXT, 27	: JREAP/JTIDS FREE TEXT, 26
:	:
: 16	: 16
:	:
:479 478 477 476 475 474 473 472 471 470 469 468 467 466 465 464:	463 462 461 460 459 458 457 456 455 454 453 452 451 450 449 448:
:	:
: JREAP/JTIDS FREE TEXT, 29	: JREAP/JTIDS FREE TEXT, 28
:	:
: 16	: 16
:	:
:503 502 501 500 499 498 497 496:	495 494 493 492 491 490 489 488 487 486 485 484 483 482 481 480:
:JFT:	:
:1BT: SPARE	: JREAP/JTIDS FREE TEXT, 30
: :	:
: 1 :	: 16
:	:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X3.0.0

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (APPLICATION)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3027 003	JRE	SOURCE TRACK NUMBER	0- 15	16	
3040 001	JTIDS/MIDS	PARTICIPATION GROUP	16- 24	9	
3033 004	NUMBER OF BLOCKS		25- 31	7	
3030 001	JREAP/JTIDS	FREE TEXT, 1	32- 47	16	THESE THIRTY ONE FIELDS (BITS 32-503) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 472 BIT FREE TEXT DATA BLOCK AS SHOWN IN FIGURE 5.5-5 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 25-31).
3030 002	JREAP/JTIDS	FREE TEXT, 2	48- 63	16	SAME CODING AS FOR BITS 32-47.
3030 003	JREAP/JTIDS	FREE TEXT, 3	64- 79	16	SAME CODING AS FOR BITS 32-47.
3030 004	JREAP/JTIDS	FREE TEXT, 4	80- 95	16	SAME CODING AS FOR BITS 32-47.
3030 005	JREAP/JTIDS	FREE TEXT, 5	96-111	16	SAME CODING AS FOR BITS 32-47.
3030 006	JREAP/JTIDS	FREE TEXT, 6	112-127	16	SAME CODING AS FOR BITS 32-47.
3030 007	JREAP/JTIDS	FREE TEXT, 7	128-143	16	SAME CODING AS FOR BITS 32-47.
3030 008	JREAP/JTIDS	FREE TEXT, 8	144-159	16	SAME CODING AS FOR BITS 32-47.
3030 009	JREAP/JTIDS	FREE TEXT, 9	160-175	16	SAME CODING AS FOR BITS 32-47.
3030 010	JREAP/JTIDS	FREE TEXT, 10	176-191	16	SAME CODING AS FOR BITS 32-47.
3030 011	JREAP/JTIDS	FREE TEXT, 11	192-207	16	SAME CODING AS FOR BITS 32-47.
3030 012	JREAP/JTIDS	FREE TEXT, 12	208-223	16	SAME CODING AS FOR BITS 32-47.
3030 013	JREAP/JTIDS	FREE TEXT, 13	224-239	16	SAME CODING AS FOR BITS 32-47.
3030 014	JREAP/JTIDS	FREE TEXT, 14	240-255	16	SAME CODING AS FOR BITS 32-47.
3030 015	JREAP/JTIDS	FREE TEXT, 15	256-271	16	SAME CODING AS FOR BITS 32-47.
3030 017	JREAP/JTIDS	FREE TEXT, 17	272-287	16	SAME CODING AS FOR BITS 32-47.
3030 018	JREAP/JTIDS	FREE TEXT, 18	288-303	16	SAME CODING AS FOR BITS 32-47.
3030 019	JREAP/JTIDS	FREE TEXT, 19	304-319	16	SAME CODING AS FOR BITS 32-47.
3030 020	JREAP/JTIDS	FREE TEXT, 20	320-335	16	SAME CODING AS FOR BITS 32-47.
3030 021	JREAP/JTIDS	FREE TEXT, 21	336-351	16	SAME CODING AS FOR BITS 32-47.
3030 022	JREAP/JTIDS	FREE TEXT, 22	352-367	16	SAME CODING AS FOR BITS 32-47.
3030 023	JREAP/JTIDS	FREE TEXT, 23	368-383	16	SAME CODING AS FOR BITS 32-47.
3030 024	JREAP/JTIDS	FREE TEXT, 24	384-399	16	SAME CODING AS FOR BITS 32-47.
3030 025	JREAP/JTIDS	FREE TEXT, 25	400-415	16	SAME CODING AS FOR BITS 32-47.
3030 026	JREAP/JTIDS	FREE TEXT, 26	416-431	16	SAME CODING AS FOR BITS 32-47.
3030 027	JREAP/JTIDS	FREE TEXT, 27	432-447	16	SAME CODING AS FOR BITS 32-47.
3030 028	JREAP/JTIDS	FREE TEXT, 28	448-463	16	SAME CODING AS FOR BITS 32-47.
3030 029	JREAP/JTIDS	FREE TEXT, 29	464-479	16	SAME CODING AS FOR BITS 32-47.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X3.0.0

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (APPLICATION)

REFERENCE		BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR	POSITION	BITS	RESOLUTION, CODING, ETC
3030 030	JREAP/JTIDS FREE TEXT, 30	480-495	16	SAME CODING AS FOR BITS 32-47.
3099 007	SPARE (SP)	496-502	7	THESE THIRTY ONE FIELDS (BITS 32-503) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 472 BIT FREE TEXT DATA BLOCK AS SHOWN IN FIGURE 5.5-5 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 25-31).
3030 016	JREAP/JTIDS FREE TEXT, 16 (JFT 1BT)	503	1	THESE THIRTY ONE FIELDS (BITS 32-503) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 472 BIT FREE TEXT DATA BLOCK AS SHOWN IN FIGURE 5.5-5 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 25-31).

			FIELD CODING FOR X3.0.0	(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3027	003	JRE SOURCE TRACK NUMBER ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
3040	001	JTIDS/MIDS PARTICIPATION GROUP -----		THE PARTICIPATION GROUP (PG) FROM WHICH THE FREE TEXT (CODED) MESSAGE WAS RECEIVED ON JTIDS/MIDS OR THAT WAS SUPPLIED BY THE TRANSMITTING UNIT FOR DATA ORIGINATING AT THE JRE PROCESSOR.
		NO STATEMENT	0	
		INITIAL ENTRY	1	
		RTT A	2	
		RTT B	3	
		NETWORK MANAGEMENT	4	
		PPLI AND STATUS GROUP A	5	
		PPLI AND STATUS GROUP B	6	
		SURVEILLANCE	7	
		MISSION MANAGEMENT/ WEAPONS COORDINATION	8	
		CONTROL	9	
		ELECTRONIC WARFARE	10	
		IMAGE TRANSFER	11	
		VOICE GROUP A	12	
		VOICE GROUP B	13	
		PARTICIPATION GROUPS 14 THROUGH 18	14 THROUGH 18	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NONC2 JU-TO-NONC2 JU A	19	
		NONC2 JU-TO-NONC2 JU B	20	
		BMD OPERATIONS	21	
		COMPOSITE A	22	
		COMPOSITE B	23	
		PARTICIPATION GROUPS 24 THROUGH 26	24 THROUGH 26	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		JOINT NET PPLI	27	
		DISTRIBUTED NETWORK MANAGEMENT	28	
		RESIDUAL MESSAGES	29	
		IJMS POSITION AND STATUS	30	
		OTHER IJMS	31	
		PARTICIPATION GROUPS 32 THROUGH 509	32 THROUGH 509	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL

FIELD CODING FOR X3.0.0				(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3040	001	JTIDS/MIDS PARTICIPATION GROUP (CONTINUED) -----		COMMUNICATIONS PLAN.
		NET CONTROL NEEDLINE	510	
		NET STATUS NEEDLINE	511	
3033	004	NUMBER OF BLOCKS -----		DEFINES THE NUMBER OF JREAP FREE TEXT BLOCKS THAT FOLLOW (ARE CONTAINED) IN THE MESSAGE.
		ILLEGAL	0	
		NUMERIC	1 THROUGH 127	
3030	001	JREAP/JTIDS FREE TEXT, 1 -----		USED TO TRANSFER BINARY DATA.
		DATA	0 THROUGH 65535	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .
3030	016	JREAP/JTIDS FREE TEXT, 16 -----		USED TO TRANSFER BINARY DATA.
		DATA	0 THROUGH 1	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .

X3.1 MESSAGE SUMMARY

PURPOSE

THE JTIDS/MIDS JREAP FREE TEXT (UNCODED) MESSAGE (FULL STACK) IS USED TO TRANSFER BINARY DATA (FILE TRANSFERS, STATIONARY IMAGES) BETWEEN JUS VIA THE JREAP.

DATA ELEMENT SUMMARY

<u>X3.1.0</u>	
DATA ELEMENT	# BITS
JTIDS/MIDS PARTICIPATION GROUP	9
NUMBER OF BLOCKS	7
JREAP/JTIDS FREE TEXT, 1	16
JREAP/JTIDS FREE TEXT, 2	16
JREAP/JTIDS FREE TEXT, 3	16
JREAP/JTIDS FREE TEXT, 4	16
JREAP/JTIDS FREE TEXT, 5	16
JREAP/JTIDS FREE TEXT, 6	16
JREAP/JTIDS FREE TEXT, 7	16
JREAP/JTIDS FREE TEXT, 8	16
JREAP/JTIDS FREE TEXT, 9	16
JREAP/JTIDS FREE TEXT, 10	16
JREAP/JTIDS FREE TEXT, 11	16
JREAP/JTIDS FREE TEXT, 12	16
JREAP/JTIDS FREE TEXT, 13	16
JREAP/JTIDS FREE TEXT, 14	16
JREAP/JTIDS FREE TEXT, 15	16
JREAP/JTIDS FREE TEXT, 17	16
JREAP/JTIDS FREE TEXT, 18	16
JREAP/JTIDS FREE TEXT, 19	16
JREAP/JTIDS FREE TEXT, 20	16
JREAP/JTIDS FREE TEXT, 21	16
JREAP/JTIDS FREE TEXT, 22	16
JREAP/JTIDS FREE TEXT, 23	16
JREAP/JTIDS FREE TEXT, 24	16
JREAP/JTIDS FREE TEXT, 25	16
JREAP/JTIDS FREE TEXT, 26	16
JREAP/JTIDS FREE TEXT, 27	16
JREAP/JTIDS FREE TEXT, 28	16
JREAP/JTIDS FREE TEXT, 29	16
JREAP/JTIDS FREE TEXT, 30	16
SPARE	7
JREAP/JTIDS FREE TEXT, 16	1

MESSAGE MAP

MESSAGE NUMBER: X3.1.0

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (FULL STACK)

: 31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16:	15	14	13	12	11	10	09:	08	07	06	05	04	03	02	01	00:
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MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (FULL STACK)

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:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:143 142 141 140 139 138 137 136 135 134 133 132 131 130 129 128:

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:	:
JREAP/JTIDS FREE TEXT, 9	JREAP/JTIDS FREE TEXT, 8
:	:
:	:
<hr/>	
16	16
:	:

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:191 190 189 188 187 186 185 184 183 182 181 180 179 178 177 176:175 174 173 172 171 170 169 168 167 166 165 164 163 162 161 160

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:	:
JREAP/JTIDS FREE TEXT, 11	JREAP/JTIDS FREE TEXT, 10
:	:
:	:
<hr/>	
16	16

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:223 222 221 220 219 218 217 216 215 214 213 212 211 210 209 208:207 206 205 204 203 202 201 200 199 198 197 196 195 194 193 192:

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:	:
JREAP/JTIDS FREE TEXT, 13	JREAP/JTIDS FREE TEXT, 12
:	:
:	:
:	:

:	:
16	16

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:255 254 253 252 251 250 249 248 247 246 245 244 243 242 241 240:239 238 237 236 235 234 233 232 231 230 229 228 227 226 225 224:

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:	:	:
:	JREAP/JTIDS FREE TEXT, 15	:
:	:	JREAP/JTIDS FREE TEXT, 14
:	:	:
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:	16	:
:	:	16

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (FULL STACK)

[illegible]

MIT-STD-3011D

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (FULL STACK)

:447	446	445	444	443	442	441	440	439	438	437	436	435	434	433	432:	431	430	429	428	427	426	425	424	423	422	421	420	419	418	417	416:
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:					JREAP/JTIDS FREE TEXT, 30										:								JREAP/JTIDS FREE TEXT, 29								:
:															:																:
:					16										:								16								:

487	486	485	484	483	482	481	480:
:JFT:							:
:1BT:			SPARE				:
:	:						:
: 1 :			7				:

MESSAGE DESCRIPTION

MESSAGE NUMBER: X3.1.0

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (FULL STACK)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3040 001		JTIDS/MIDS PARTICIPATION GROUP	0-	8 9	
3033 004		NUMBER OF BLOCKS	9-	15 7	
3030 001		JREAP/JTIDS FREE TEXT, 1	16-	31 16	THESE THIRTY ONE FIELDS (BITS 16-487) SHALL BE CONCATENATED TOGETHER FORM A SINGLE 472 BIT FREE TEXT DATA BLOCK AS SHOWN IN FIGURE 5.5-5 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 9-15).
3030 002		JREAP/JTIDS FREE TEXT, 2	32-	47 16	SAME CODING AS FOR BITS 16-31.
3030 003		JREAP/JTIDS FREE TEXT, 3	48-	63 16	SAME CODING AS FOR BITS 16-31.
3030 004		JREAP/JTIDS FREE TEXT, 4	64-	79 16	SAME CODING AS FOR BITS 16-31.
3030 005		JREAP/JTIDS FREE TEXT, 5	80-	95 16	SAME CODING AS FOR BITS 16-31.
3030 006		JREAP/JTIDS FREE TEXT, 6	96-	111 16	SAME CODING AS FOR BITS 16-31.
3030 007		JREAP/JTIDS FREE TEXT, 7	112-	127 16	SAME CODING AS FOR BITS 16-31.
3030 008		JREAP/JTIDS FREE TEXT, 8	128-	143 16	SAME CODING AS FOR BITS 16-31.
3030 009		JREAP/JTIDS FREE TEXT, 9	144-	159 16	SAME CODING AS FOR BITS 16-31.
3030 010		JREAP/JTIDS FREE TEXT, 10	160-	175 16	SAME CODING AS FOR BITS 16-31.
3030 011		JREAP/JTIDS FREE TEXT, 11	176-	191 16	SAME CODING AS FOR BITS 16-31.
3030 012		JREAP/JTIDS FREE TEXT, 12	192-	207 16	SAME CODING AS FOR BITS 16-31.
3030 013		JREAP/JTIDS FREE TEXT, 13	208-	223 16	SAME CODING AS FOR BITS 16-31.
3030 014		JREAP/JTIDS FREE TEXT, 14	224-	239 16	SAME CODING AS FOR BITS 16-31.
3030 015		JREAP/JTIDS FREE TEXT, 15	240-	255 16	SAME CODING AS FOR BITS 16-31.
3030 017		JREAP/JTIDS FREE TEXT, 17	256-	271 16	SAME CODING AS FOR BITS 16-31.
3030 018		JREAP/JTIDS FREE TEXT, 18	272-	287 16	SAME CODING AS FOR BITS 16-31.
3030 019		JREAP/JTIDS FREE TEXT, 19	288-	303 16	SAME CODING AS FOR BITS 16-31.
3030 020		JREAP/JTIDS FREE TEXT, 20	304-	319 16	SAME CODING AS FOR BITS 16-31.
3030 021		JREAP/JTIDS FREE TEXT, 21	320-	335 16	SAME CODING AS FOR BITS 16-31.
3030 022		JREAP/JTIDS FREE TEXT, 22	336-	351 16	SAME CODING AS FOR BITS 16-31.
3030 023		JREAP/JTIDS FREE TEXT, 23	352-	367 16	SAME CODING AS FOR BITS 16-31.
3030 024		JREAP/JTIDS FREE TEXT, 24	368-	383 16	SAME CODING AS FOR BITS 16-31.
3030 025		JREAP/JTIDS FREE TEXT, 25	384-	399 16	SAME CODING AS FOR BITS 16-31.
3030 026		JREAP/JTIDS FREE TEXT, 26	400-	415 16	SAME CODING AS FOR BITS 16-31.
3030 027		JREAP/JTIDS FREE TEXT, 27	416-	431 16	SAME CODING AS FOR BITS 16-31.
3030 028		JREAP/JTIDS FREE TEXT, 28	432-	447 16	SAME CODING AS FOR BITS 16-31.
3030 029		JREAP/JTIDS FREE TEXT, 29	448-	463 16	SAME CODING AS FOR BITS 16-31.

MESSAGE DESCRIPTION

MESSAGE NUMBER: X3.1.0

MESSAGE TITLE: JREAP JTIDS/MIDS FREE TEXT (UNCODED) MESSAGE (FULL STACK)

REFERENCE			BIT	#	
DFI/DUI	DATA FIELD DESCRIPTOR		POSITION	BITS	RESOLUTION, CODING, ETC
3030 030	JREAP/JTIDS FREE TEXT, 30		464-479	16	SAME CODING AS FOR BITS 16-31.
3099 007	SPARE (SP)		480-486	7	THESE THIRTY ONE FIELDS (BITS 16-487) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 472 BIT FREE TEXT DATA BLOCK AS SHOWN IN FIGURE 5.5-5 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 9-15).
3030 016	JREAP/JTIDS FREE TEXT, 16 (JFT 1BT)		487	1	THESE THIRTY ONE FIELDS (BITS 16-487) SHALL BE CONCATENATED TOGETHER TO FORM A SINGLE 472 BIT FREE TEXT DATA BLOCK AS SHOWN IN FIGURE 5.5-5 , AND ARE REPEATED FOR THE NUMBER OF BLOCKS SPECIFIED IN THE NUMBER OF BLOCKS FIELD (BITS 9-15).

FIELD CODING FOR X3.1.0

(SHEET 1)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3040	001	JTIDS/MIDS PARTICIPATION GROUP -----		THE PARTICIPATION GROUP (PG) FROM WHICH THE FREE TEXT (CODED) MESSAGE WAS RECEIVED ON JTIDS/MIDS OR THAT WAS SUPPLIED BY THE TRANSMITTING UNIT FOR DATA ORIGINATING AT THE JRE PROCESSOR.
		NO STATEMENT	0	
		INITIAL ENTRY	1	
		RTT A	2	
		RTT B	3	
		NETWORK MANAGEMENT	4	
		PPLI AND STATUS GROUP A	5	
		PPLI AND STATUS GROUP B	6	
		SURVEILLANCE	7	
		MISSION MANAGEMENT/ WEAPONS COORDINATION	8	
		CONTROL	9	
		ELECTRONIC WARFARE	10	
		IMAGE TRANSFER	11	
		VOICE GROUP A	12	
		VOICE GROUP B	13	
		PARTICIPATION GROUPS 14 THROUGH 18	14 THROUGH 18	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NONC2 JU-TO-NONC2 JU A	19	
		NONC2 JU-TO-NONC2 JU B	20	
		BMD OPERATIONS	21	
		COMPOSITE A	22	
		COMPOSITE B	23	
		PARTICIPATION GROUPS 24 THROUGH 26	24 THROUGH 26	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		JOINT NET PPLI	27	
		DISTRIBUTED NETWORK MANAGEMENT	28	
		RESIDUAL MESSAGES	29	
		IJMS POSITION AND STATUS	30	
		OTHER IJMS	31	
		PARTICIPATION GROUPS 32 THROUGH 509	32 THROUGH 509	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NET CONTROL NEEDLINE	510	
		NET STATUS NEEDLINE	511	

			FIELD CODING FOR X3.1.0	(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3033	004	NUMBER OF BLOCKS ----- ILLEGAL NUMERIC	0 1 THROUGH 127	DEFINES THE NUMBER OF JREAP FREE TEXT BLOCKS THAT FOLLOW (ARE CONTAINED) IN THE MESSAGE.
3030	001	JREAP/JTIDS FREE TEXT, 1 ----- DATA	0 THROUGH 65535	USED TO TRANSFER BINARY DATA. USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .
3030	016	JREAP/JTIDS FREE TEXT, 16 ----- DATA	0 THROUGH 1	USED TO TRANSFER BINARY DATA. USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .

X7.0.0 MESSAGE SUMMARY

PURPOSE

THE JREAP J-SERIES WITH NPG ASSIGNMENT MESSAGE PROVIDES TRANSPORT AND MANAGEMENT OF J-SERIES MESSAGES ACROSS A JRE NETWORK WHEN USING AN APPLICATION HEADER.

DATA ELEMENT SUMMARY

<u>X7.0.0</u>	
DATA ELEMENT	# BITS
JRE SOURCE TRACK NUMBER	16
NETWORK PARTICIPATION GROUP	16
MESSAGE SEQUENCE NUMBER	
RELAY FLAG	1
ACKNOWLEDGEMENT REQUEST FLAG	1
SPARE	1
DATA AGE	13
SPARE	4
NUMBER OF J-WORDS	12
SOURCE LINK DESIGNATOR	16
TRANSMIT LINK DESIGNATOR	16
NETWORK PARTICIPATION GROUP	9
SPARE	7
JREAP J-SERIES MESSAGE WORD, 1	16
JREAP J-SERIES MESSAGE WORD, 2	16
JREAP J-SERIES MESSAGE WORD, 3	16
JREAP J-SERIES MESSAGE WORD, 4	16
SPARE	2
JREAP J-SERIES MESSAGE WORD, 5	6

MESSAGE TITLE: JREAP J-SERIES WITH NPG ASSIGNMENT MESSAGE (APPLICATION)

:	63	62	61	60	59	58	57	56	55	54	53	52:	51	50	49	48:	47	46	45	44	43	42	41	40	39	38	37	36	35:	34:	33:	32:														
:													:					:													:					:										
:	NUMBER OF J-WORDS												:	SPARE				:	DATA AGE												:	:SP				:	:REQ:FLG:									
:													:					:													:					:										
:	12												:	4				:	13												:	1				:	1				:	1				:

:	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80:	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64:
:																:																:
:	TRANSMIT LINK DESIGNATOR															:	SOURCE LINK DESIGNATOR															:
:																:																:
:	16															:	16															:

:127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112:111	110	109	108	107	106	105:104	103	102	101	100	99	98	97	96	.
:															:						:									:
:					JREAP	J-SERIES MESSAGE WORD,	1								:		SPARE				:		NETWORK PARTICIPATION GROUP						:	
:															:						:								:	
:							16								:		7				:				9				:	

MESSAGE MAP

MESSAGE NUMBER: X7.0.0

MESSAGE TITLE: JREAP J-SERIES WITH NPG ASSIGNMENT MESSAGE (APPLICATION)

:159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144:	143 142 141 140 139 138 137 136 135 134 133 132 131 130 129 128:
:	:
: JREAP J-SERIES MESSAGE WORD, 3	: JREAP J-SERIES MESSAGE WORD, 2
:	:
:	:
: 16	: 16

:183 182 181 180 179 178:177 176:175 174 173 172 171 170 169 168 167 166 165 164 163 162 161 160:
: JREAP J-SERIES
: MESSAGE WORD, 5
: SP
: JREAP J-SERIES MESSAGE WORD, 4
: 6
: 2
: 16

MESSAGE DESCRIPTION

MESSAGE NUMBER: X7.0.0

MESSAGE TITLE: JREAP J-SERIES WITH NPG ASSIGNMENT (APPLICATION)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3027	003	JRE SOURCE TRACK NUMBER	0-	15	16
3032	005	NETWORK PARTICIPATION GROUP	16-	31	16
		MESSAGE SEQUENCE NUMBER, 1			
3002	009	RELAY FLAG (R FLG)	32		1
3002	003	ACKNOWLEDGEMENT REQUEST FLAG (ACKREQ)	33		1
3099	001	SPARE (SP)	34		1
3003	003	DATA AGE (DATA AGE)	35-	47	13
3099	004	SPARE (SP)	48-	51	4
3033	005	NUMBER OF J-WORDS	52-	63	12
3021	003	SOURCE LINK DESIGNATOR	64-	79	16
3021	004	TRANSMIT LINK DESIGNATOR	80-	95	16
3040	002	NETWORK PARTICIPATION GROUP	96-	104	9
3099	007	SPARE	105-	111	7
3028	001	JREAP J-SERIES MESSAGE WORD, 1	112-	127	16
					THESE SIX FIELDS (BITS 112 - 183) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3028	002	JREAP J-SERIES MESSAGE WORD, 2	128-	143	16
					THESE SIX FIELDS (BITS 112 - 183) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3028	003	JREAP J-SERIES MESSAGE WORD, 3	144-	159	16
					THESE SIX FIELDS (BITS 112 - 183) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .

MESSAGE DESCRIPTION

MESSAGE NUMBER: X7.0.0
MESSAGE TITLE: JREAP J-SERIES WITH NPG ASSIGNMENT (APPLICATION)

REFERENCE	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3028 004	JREAP J-SERIES MESSAGE WORD,	4	160-175 16	THESE SIX FIELDS (BITS 112 - 183) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3099 002	SPARE		176-177 2	THESE SIX FIELDS (BITS 112 - 183) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3028 005	JREAP J-SERIES MESSAGE WORD,	5	178-183 6	THESE SIX FIELDS (BITS 112 - 183) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .

			FIELD CODING FOR X7.0.0	(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3027	003	JRE SOURCE TRACK NUMBER ----- NUMERIC	000000 THROUGH 177777 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
3032	005	NETWORK PARTICIPATION GROUP MESSAGE SEQUENCE NUMBER ----- NUMERIC NUMERIC	0 1 THROUGH 65535	THE SEQUENCE NUMBER OF EACH JREAP J-SERIES MESSAGE WITH NPG ASSIGNMENT TRANSMITTED BY A JRE PROCESSOR ON EACH JRE LINK. INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS. THE MESSAGE SEQUENCE NUMBER OF A JREAP J-SERIES MESSAGE.
3002	009	RELAY FLAG ----- MESSAGE DIRECTLY RECEIVED RELAYED MESSAGE	0 1	INDICATES WHETHER THE JRE PROCESSOR TRANSMITTING THE MESSAGE IS DIRECTLY CONNECTED TO THE SOURCE TACTICAL DATA NETWORK.
3002	003	ACKNOWLEDGEMENT REQUEST FLAG ----- ACKNOWLEDGEMENT NOT REQUESTED ACKNOWLEDGEMENT REQUESTED	0 1	INDICATES IF THE MESSAGE IS TO BE ACKNOWLEDGED BY THE RECEIVING JRE PROCESSOR.
3003	003	DATA AGE ----- 0 THROUGH 255 AND 31/32 SECONDS	0 THROUGH 8191	LENGTH OF TIME THAT A J-SERIES MESSAGE HAS BEEN IN THE JRE PROCESS RELATIVE TO THE DVT. MEASURED IN 1/32 SECOND INCREMENTS. NUMBER OF SECONDS MEASURED IN 1/32 SECOND INCREMENTS.
3033	005	NUMBER OF J-WORDS ----- ILLEGAL NUMERIC	0 1 THROUGH 4095	INDICATES THE NUMBER OF J-WORDS CONTAINED WITHIN THE FOLLOWING J-SERIES MESSAGE(S).

FIELD CODING FOR X7.0.0

(SHEET 2)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3021	003	SOURCE LINK DESIGNATOR -----		THE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THE DATA ORIGINATED FROM.
		NO STATEMENT	0	
		ASSIGNED DESIGNATOR	1 THROUGH 65535	UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3040	002	NETWORK PARTICIPATION GROUP -----		THE PARTICIPATION GROUP (PG) ON WHICH A J-SERIES MESSAGE IS TO BE TRANSMITTED.
		NO STATEMENT	0	
		INITIAL ENTRY	1	
		RTT A	2	
		RTT B	3	
		NETWORK MANAGEMENT	4	
		PPLI AND STATUS GROUP A	5	
		PPLI AND STATUS GROUP B	6	
		SURVEILLANCE	7	
		MISSION MANAGEMENT/ WEAPONS COORDINATION	8	
		CONTROL	9	
		ELECTRONIC WARFARE	10	
		IMAGE TRANSFER	11	
		VOICE GROUP A	12	
		VOICE GROUP B	13	
		PARTICIPATION GROUPS 14 THROUGH 18	14 THROUGH 18	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NONC2 JU-TO-NONC2 JU A	19	
		NONC2 JU-TO-NONC2 JU B	20	
		BMD OPERATIONS	21	
		COMPOSITE A	22	
		COMPOSITE B	23	
		PARTICIPATION GROUPS 24 THROUGH 26	24 THROUGH 26	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		JOINT NET PPLI	27	
		DISTRIBUTED NETWORK MANAGEMENT	28	
		RESIDUAL MESSAGES	29	

FIELD CODING FOR X7.0.0

(SHEET 3)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3040	002	NETWORK PARTICIPATION GROUP (CONTINUED) -----		
		IJMS POSITION AND STATUS	30	
		OTHER IJMS	31	
		PARTICIPATION GROUPS 32 THROUGH 509	32 THROUGH 509	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NET CONTROL NEEDLINE	510	
		NET STATUS NEEDLINE	511	
3028	001	JREAP J-SERIES MESSAGE WORD, 1 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	002	JREAP J-SERIES MESSAGE WORD, 2 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	003	JREAP J-SERIES MESSAGE WORD, 3 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA

FIELD CODING FOR X7.0.0				(SHEET 4)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3028	004	JREAP J-SERIES MESSAGE WORD, 4 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNES OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	005	JREAP J-SERIES MESSAGE WORD, 5 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNES OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA	0 THROUGH 63	

X7.1.0 MESSAGE SUMMARY

PURPOSE

THE JREAP J-SERIES WITH NPG ASSIGNMENT MESSAGE PROVIDES TRANSPORT AND MANAGEMENT OF J-SERIES MESSAGES ACROSS A JREAP NETWORK WHEN USING A FULL STACK HEADER.

DATA ELEMENT SUMMARY

<u>X7.1.0</u>	
DATA ELEMENT	# BITS
SOURCE LINK DESIGNATOR	16
TRANSMIT LINK DESIGNATOR	16
NETWORK PARTICIPATION GROUP	9
SPARE	31
JREAP J-SERIES MESSAGE WORD, 1	16
JREAP J-SERIES MESSAGE WORD, 2	16
JREAP J-SERIES MESSAGE WORD, 3	16
JREAP J-SERIES MESSAGE WORD, 4	16
SPARE	2
JREAP J-SERIES MESSAGE WORD, 5	6

MESSAGE TITLE: JREAP J-SERIES WITH NPG ASSIGNMENT MESSAGE (FULL STACK)

63	62	61	60	59	58	57	56	55	54	53	52:	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35:	34:	33:	32:						
																						:	NETWORK PARTICIPATION GROUP														:
																						:															:
																						:															:
31																						:	9														:

95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64
								:																	:						
JREAP J-SERIES MESSAGE WORD, 2								:	JREAP J-SERIES MESSAGE WORD, 1																:						
								:																	:						
16								:	16																:						

127	126	125	124	123	122	121	120:119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104:103	102	101	100	99	98	97	96	
							:																:							
JREAP J-SERIES MESSAGE WORD, 4							:	JREAP J-SERIES MESSAGE WORD, 3															:							
							:																:							
16							:																:							

MESSAGE MAP

MESSAGE NUMBER: X7.1.0

MESSAGE TITLE: JREAP J-SERIES WITH NPG ASSIGNMENT MESSAGE (FULL STACK)

:	143	142	141	140	139	138:	137	136:	135	134	133	132	131	130	129	128

:						:						:				
:	JREAP J-SERIES					:	SP					:				
:	MESSAGE WORD, 5					:						:				

:	6					:	2					:				

MESSAGE DESCRIPTION

MESSAGE NUMBER: X7.1.0

MESSAGE TITLE: JREAP J-SERIES WITH NPG ASSIGNMENT (FULL STACK)

REFERENCE	DFI/DUI	DATA FIELD DESCRIPTOR	BIT POSITION	# BITS	RESOLUTION, CODING, ETC
3021 003		SOURCE LINK DESIGNATOR	0-	15 16	
3021 004		TRANSMIT LINK DESIGNATOR	16-	31 16	SAME CODING AS FOR BITS 0-15
3040 002		NETWORK PARTICIPATION GROUP	32-	40 9	
3099 031		SPARE	41-	71 31	
3028 001		JREAP J-SERIES MESSAGE WORD, 1	72-	87 16	THESE SIX FIELDS (BITS 72 - 143) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3028 002		JREAP J-SERIES MESSAGE WORD, 2	88-	103 16	THESE SIX FIELDS (BITS 72 - 143) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3028 003		JREAP J-SERIES MESSAGE WORD, 3	104-	119 16	THESE SIX FIELDS (BITS 72 - 143) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3028 004		JREAP J-SERIES MESSAGE WORD, 4	120-	135 16	THESE SIX FIELDS (BITS 72 - 143) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .

MESSAGE DESCRIPTION

MESSAGE NUMBER: X7.1.0
MESSAGE TITLE: JREAP J-SERIES WITH NPG ASSIGNMENT (FULL STACK)

REFERENCE		BIT #	
DFI/DUI	DATA FIELD DESCRIPTOR	POSITION	BITS
			RESOLUTION, CODING, ETC
3099 002	SPARE	136-137	2
			THESE SIX FIELDS (BITS 72 - 143) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .
3028 005	JREAP J-SERIES MESSAGE WORD, 5	138-143	6
			THESE SIX FIELDS (BITS 72 - 143) ARE THE J-SERIES WITH NPG ASSIGNMENT MESSAGE WORD GROUP (5.5.5) AND ARE REPEATED FOR THE NUMBER OF WORDS SPECIFIED IN THE NUMBER OF J WORDS FIELD (BITS 52 - 63). THESE SIX FIELDS FORM A J-SERIES MESSAGE WORD GROUP AND SHALL BE CONCATENATED TO FORM A SINGLE, LARGER FIELD AS SHOWN IN FIGURE 5.5-1 .

FIELD CODING FOR X7.1.0				(SHEET 1)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3021	003	SOURCE LINK DESIGNATOR -----		THE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THE DATA ORIGINATED FROM.
		NO STATEMENT	0	
		ASSIGNED DESIGNATOR	1 THROUGH 65535	UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.
3040	002	NETWORK PARTICIPATION GROUP -----		THE PARTICIPATION GROUP (PG) ON WHICH A J-SERIES MESSAGE IS TO BE TRANSMITTED.
		NO STATEMENT	0	
		INITIAL ENTRY	1	
		RTT A	2	
		RTT B	3	
		NETWORK MANAGEMENT	4	
		PPLI AND STATUS GROUP A	5	
		PPLI AND STATUS GROUP B	6	
		SURVEILLANCE	7	
		MISSION MANAGEMENT/ WEAPONS COORDINATION	8	
		CONTROL	9	
		ELECTRONIC WARFARE	10	
		IMAGE TRANSFER	11	
		VOICE GROUP A	12	
		VOICE GROUP B	13	
		PARTICIPATION GROUPS 14 THROUGH 18	14 THROUGH 18	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NONC2 JU-TO-NONC2 JU A	19	
		NONC2 JU-TO-NONC2 JU B	20	
		BMD OPERATIONS	21	
		COMPOSITE A	22	
		COMPOSITE B	23	
		PARTICIPATION GROUPS 24 THROUGH 26	24 THROUGH 26	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		JOINT NET PPLI	27	
		DISTRIBUTED NETWORK MANAGEMENT	28	
		RESIDUAL MESSAGES	29	
		IJMS POSITION AND STATUS	30	
		OTHER IJMS	31	

FIELD CODING FOR X7.1.0				(SHEET 2)
DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3040	002	NETWORK PARTICIPATION GROUP (CONTINUED) -----		
		PARTICIPATION GROUPS 32 THROUGH 509	32 THROUGH 509	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
		NET CONTROL NEEDLINE	510	
		NET STATUS NEEDLINE	511	
3028	001	JREAP J-SERIES MESSAGE WORD, 1 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	002	JREAP J-SERIES MESSAGE WORD, 2 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	003	JREAP J-SERIES MESSAGE WORD, 3 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA
3028	004	JREAP J-SERIES MESSAGE WORD, 4 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA, 1	0 THROUGH 65535	DATA

FIELD CODING FOR X7.1.0

(SHEET 3)

DFI	DUI	DUI/DI NAME	DI BIT CODE	DUI/DI EXPLANATION
3028	005	JREAP J-SERIES MESSAGE WORD, 5 -----		USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .
		DATA	0 THROUGH 63	

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**NOT MEASUREMENT
SENSITIVE**

**MIL-STD-3011D
28 JUN 2019
SUPERSEDING
MIL-STD-3011C
10 JUN 2016**

DEPARTMENT OF DEFENSE INTERFACE STANDARD

FOR THE JOINT RANGE EXTENSION APPLICATION PROTOCOL (JREAP)

APPENDIX A- HALF-DUPLEX ANNOUNCED TOKEN PASSING PROTOCOL



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APPENDIX A

HALF-DUPLEX ANNOUNCED TOKEN PASSING PROTOCOLA.1 SCOPE

A.1.1. Purpose. This appendix describes the JREAP using an Announced Token Passing protocol for half-duplex communications.

A.1.2. Background. This protocol may be used when several terminals share the same JRE media and take turns transmitting, or, in a broadcast situation, when one transmits and the rest receive. It is targeted to data rates down to 2400 bits per second (bps) on a serial data interface with a TSEC/KG-84A/KIV-7 or a compatible encryption device used for data security. It is designed for use with media such as: 25-kHz UHF TDMA/DAMA SATCOM (MIL-STD-188-183), EHF LDR Forced Mode Network Operations (MIL-STD-1582), and 5- and 25-kHz UHF non-DAMA SATCOM (MIL-STD-188-181).

A.2 APPLICABLE DOCUMENTS

The references in [Section 2](#) of this standard apply to this appendix.

A.3 DEFINITIONS

A.3.1 Abbreviations and acronyms. The definitions in Section 3 of this standard apply to this appendix; however, the following acronyms are exclusive to this appendix:

bps	-	bits per second
CM	-	Controller Mode
EMCON	-	Emission Control
JRE-ANC	-	JRE Alternate Network Controller
JRE-NL	-	JRE Net Listener

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NTR	-	Network Time Reference
TBH	-	Transmission block Header

A.3.2 Terms. The definitions in [Section 3](#) of this standard apply to this appendix; however, the following terms are exclusive to this appendix:

Emission Control	The mechanism by which warfighters control electronic emissions.
JRE Alternate Network Controller	The designated JRE-NP that takes over if the JRE-NC fails.
JRE Network Controller Broadcast	The JRE-NC in a broadcast mode.
Network Listener	A listener to traffic who does not transmit and is not in the TSL.
Subscriber List	The list of currently eligible participants maintained by the JRE NC (normally derived from the OPTASKLINK and current mission requirements.)
Transmission limit	The mechanism by which the JRE-NC throttles units' transmissions.

A.4 GENERAL REQUIREMENTS

A.4.1 Fundamental link characteristics. This Token Passing version of the JREAP addresses the following basic timing and communication characteristics:

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- a. The maximum cycle time should not normally exceed 20 seconds.
- b. The link latency should not exceed 12 seconds.
- c. The protocol supports extrapolation of time sensitive data.
- d. The Network Time Reference (NTR) should include the time error for estimating when the transmission sync bits leave the physical interface when determining time accuracy.
- e. The protocol should support both operations within 25-kHz UHF DAMA and EHF LDR equipment limitations, using the Full Stack mode of operation (see [5.4](#)).

A.4.2 Roles and capabilities. JRE Processors have various capabilities and assume various roles in the half-duplex Announced Token Passing network. Roles define how the participants in the network interact while capabilities define what roles the various participants can assume. In this appendix, a JRE Processor will be referred to as a JRE Network Controller (JRE-NC), a JRE Alternate Network Controller (JRE-ANC), a JRE Network Participant (JRE-NP), a JRE Network Listener (JRE-NL), or a JRE Network Controller Broadcast (JRE-NCB), depending on which role it is playing in the network.

a. The key role is JRE-NC, which is the unit responsible for specifying a list of units with permission to transmit. The JRE-NC's Transmission Sequence List (TSL) (see [FSTBH.A.NC message summary](#)) gives the order of JRE-NPs and specifies characteristics for each unit. The TSL shall contain from 1 to 15 JRE-NPs and specify the order of the participants in the network cycle. Through the TSL, the JRE-NC shall nominate one unit to fill the role of JRE-ANC provided one or more JRE-NPs are JRE-ANC capable. Additionally, the JRE-NC shall limit the maximum transmission length of each JRE-NP. JRE

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Processors receiving (listening to) network traffic that are not in the TSL are in the role of JRE-NL.

b. Each JRE-NP may be capable of other roles. These roles may be explicitly stated in the protocol or externally imposed by operational controls. Specifically, a JRE-NP shall indicate whether it is capable of being the JRE-ANC or is the JRE-ANC. It may also be the case that a JRE-NP under Emission Control (EMCON) is prohibited from transmitting by its operator and implicitly takes the JRE-NL role.

c. Another role is that of the JRE-NCB, which does not include a TSL in its transmissions and serves an unspecified set of JRE-NLs.

d. In each case, a unit may transmit only when directed in the TSL (or when acting as the JRE-NC).

e. The rules for transmission timing, error handling, and control hand-off are presented in [A.5](#).

A.4.2.1 Network startup. To simplify startup (initial activation) and reduce token cycle time, the JRE-NC shall start up the network by calling a single JRE-NP during the first cycle. If the JRE-NP responds, it shall be included in subsequent TSLs that the JRE-NC transmits. The JRE-NC shall add only one new JRE-NP for the next transmission. This procedure shall continue until all JRE-NPs in the JRE-NC subscriber list respond or until the JRE-NC operator drops the non-responding JRE-NP(s) from the list (see [A.6.2](#)).

a. A JRE-NC activating a network shall not interrupt an operational network. When the JRE-NC interface is enabled for output, the JRE-NP assuming the position of JRE-NC shall listen for at least 30 seconds for a valid Transmission Block header, indicating that the net is already operational. If a valid Transmission Block

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header is heard, the JRE-NP attempting to assume the JRE-NC role shall alert the operator that a TSL was detected and switch to JRE-NP mode.

A.4.2.2 JRE-NP failure detection. JRE-NPs transmit in the order they are listed in the TSL with the first JRE-NP on the list transmitting immediately following receipt of the JRE-NC transmission.

a. If the immediately preceding JRE-NP in the TSL is not received (with the exception of case b below), then the JRE-NP shall transmit within 100 ms following the timeout period specified in [Table A.4.2-1](#).

b. If the two immediately preceding JRE-NPs in the TSL are not received, then the JRE-NP shall not transmit in that cycle.

TABLE A.4.2-1. Timeout periods.

MODE OF OPERATION	TIMEOUT PERIOD
25-kHz DAMA	2.6 sec
UHF Non-DAMA	1.2 sec
EHF MDR/LDR	1.4 sec

A.4.2.3 Transmission Sequence List order. A high probability of a protocol breakdown occurs when multiple JRE-NPs fail to respond early in a network cycle. To avoid a breakdown, the JRE-NC shall monitor the quality of receptions from each JRE-NP. The JRE-NC shall be capable of ordering the TSL based upon error rates. It shall place the address of the JRE-NP with the lowest error rate first in the next cycle's TSL (see [A.4.2.5](#)). It shall also list the remaining JRE-NPs in order of increasing error rate. This TSL ordering scheme results in the highest probability of a broken chain near the end of the cycle where a failure to respond will impact the fewest number of JRE-NPs.

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a. The Current Error Rate for a missed JRE-NP shall be increased by 10 for each cycle where no TBH is received and the JRE-NP shall be placed at the end of the next TSL. When a JRE-NP is not received for 5 consecutive cycles, this JRE-NP shall only be included in every third TSL.

b. When two sequential JRE-NPs are not received, the JRE-NPs that were listed in the TSL after the failing JRE-NPs are considered as responding and are placed in the next TSL using their Current Error Rate. The first of the two non-received JRE-NPs is placed at the end of the next TSL. The second of the non-received JRE-NPs is placed in the TSL in accordance with its Current Error Rate.

A.4.2.4 JRE Alternate Network Controller. The failure of a JRE-NC is a serious disruption, since all JRE-NPs rely upon the broadcast of the TSL within the JRE-NC's Transmission Block Header to determine the token passing sequence. To reduce disruption due to JRE-NC failure, the JRE-NC transmits a JRE-ANC assignment as part of every Transmission Block header and shall designate one unit as JRE-ANC, provided at least one JRE-NP is JRE-ANC capable. The JRE-NC shall be capable of updating the JRE-ANC assignment at least once every 25 network cycles by scanning the Current Error Rates and reassigning the JRE-ANC duties to the JRE-NC-capable JRE-NP with the lowest error rate. The JRE-NC shall be capable of disabling the automated JRE-ANC reassignment logic and manually designating the JRE-ANC. JRE-NCs shall be JRE-ANC capable.

a. The designated JRE-ANC shall acknowledge to the JRE-NC that it has assumed the role of alternate in its own Transmission Block header. If an acknowledgment is not received within two cycles, the JRE-NC shall select a new JRE-ANC when feasible.

b. JRE-NC-capable JRE Processors shall have the capability to override the JRE-NC-capable bit setting in the Transmission Block

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header during the initial JRE Processor setup dialogue. This limits the automated selection of JRE-ANCs to exclusive pre-designated JRE Processor sites. For broadcast operations, the JRE-NCB shall not appoint a JRE-ANC. Switching to a different JRE-NCB will be done manually.

A.4.2.5 Recovery from sequential JRE Processor response failures. For satellite networks, reception qualities may vary dramatically between JRE-NPs. When two or more sequential JRE-NPs in the TSL fail to respond, the potential for failure of the timeout recovery process increases greatly. To minimize recovery failures when this occurs, the JRE-NC shall recognize that a second sequential JRE-NP has not responded and shall immediately develop a new TSL, placing the address of the first of the failing JRE-NPs at the end of the TSL. The network will not complete the current cycle and the JRE-NC starts a new cycle immediately by transmitting a new TSL (see [A.6.2](#)).

A.4.2.6 Recovery from false synchronization detection. Each JRE-NP shall provide a means to recover from false synchronization detection. After detection of the Start of Transmission Flag (STF), each JRE-NP shall validate the received Transmission Block header. If the header is found to be invalid, the JRE-NP shall resume scanning for a STF.

A.4.2.7 Recovery from JRE Network Controller failure. When a JRE-ANC receives no valid Transmission Block header transmissions for 30 seconds, it shall assume JRE-NC duties. The new JRE-NC constructs a TSL based upon the JRE-NP transmissions received during the last three cycles which contained valid transmissions. After assuming JRE-NC duties, if no response is received during the first 20 seconds, the new JRE-NC shall alert the operator.

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a. The new JRE-NC shall generate an alert to signal its operator that it has assumed the JRE-NC duties and the subscriber list should be checked to ensure that all JRE-NPs are in the TSL. Since the new JRE-NC's initial TSL only contains the JRE-NPs heard in the last three valid cycles, the JRE-NC operator must manually add all JRE-NPs that were not heard and are not on the list.

A.4.2.8 JRE Network Controller recovery from JRE Alternate Network Controller failure. If the JRE-ANC has a receive failure, it attempts to assume JRE-NC and could jam the existing JRE-NC and stop network operation. There is no automated recovery procedure for this failure. If a JRE-NC (existing or attempting to assume control) receives no response to its JRE-NC transmissions for 20 seconds, it shall listen for network activity for an additional 20 seconds. If another JRE-NC is heard during the listening period, the listening JRE-NC shall assume the role of JRE-NP and alert the operator. If no activity is heard, the JRE-NC shall resume operations.

A.4.2.9 Special considerations for processing corrupted Transmission Block Headers. When a Transmission Block Header from the Net Controller fails CRC, the TSL will be discarded and the receiving JRE-NP shall remain silent until a TBH with TSL is received which passes CRC. Also, if the common time reference being used is JRE-NC, the DVT will not be accepted as a refinement to the current network time.

a. When a TBH from any JRE-NP is received which fails CRC but the triplicate fields for Transmission Block Header Length, JRE Sender ID, and Transport Data Word Count contain "two out of three" majorities, the rest of the transmission shall be processed (subject to [5.2.2.4](#) and [5.4.3.4.9](#)) unless the Transport Data Word Count majority is greater than 1500 bytes.

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b. If triplicates of a field do not contain a "two out of three" majority then the rest of the transmission shall not be processed.

A.5 DETAILED REQUIREMENTS

A.5.1 Transmission Block header fields for Announced Token Passing. The JRE Processor Network Participant Transmission Block header shall have the format shown in the JRE Processor Network Participant Transmission Block Header (JRE NP TBH) summary. The format of the JRE Network Controller Transmission Block Header shall have the format shown in the JRE Processor Network Controller Transmission Block Header (JRE NC TBH) summary.

A.5.1.1 JREAP Full Stack Transmission Block Header (Network Participant) fields. The Transmission Block Header contains the following fields, in addition to those specified in [Section 5](#):

A.5.1.1.1 Controller Mode NP field. The Controller Mode NP field is used to report the controller role or capabilities for this JRE Processor. [Table A.5.1-1](#) lists the values that shall be used.

TABLE A.5.1-1. Controller Mode NP values.

VALUES	MEANING
0	Not JRE-ANC-capable
1	JRE-ANC-capable
2	JRE-ANC
3	Undefined

a. A JRE-NP that is not the JRE-ANC shall indicate whether it is capable of being a JRE-ANC by setting the value to 1 - JRE-ANC-capable or 0 - Not JRE-ANC-capable.

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b. A JRE-ANC shall acknowledge its assignment as alternate by setting the value to 2 - JRE-ANC.

c. A JRE-NC shall set the value to 2 - JRE-ANC-capable.

A.5.1.1.2 JRE NC Error Rate field. All JRE-NPs shall provide the error rate of the JRE-NC in this 7-bit field (see [5.6.14](#) and [A.5.5](#)).

A.5.1.2 JREAP Full Stack Transmission Block Header (Network Controller) fields.

A.5.1.2.1 Transmission Sequence List fields. In addition to the fields described in [Section 5](#), the JREAP Full Stack Transmission Block Header (Network Controller) shall contain TSL fields and support 15 TSL entries. The TSL shall not contain any spare TSL pad values. Each TSL entry consists of the following five fields:

A.5.1.2.1.1 JRE Network Participant field. This field shall contain the 16-bit IU number of the JRE-NP participant.

A.5.1.2.1.2 Alternate Network Controller Assignment Flag field. This field shall be set by the JRE-NC to assign a JRE-NP as the JRE-ANC.

A.5.1.2.1.3 Alternate Network Controller Assignment Recognition Flag field. This field shall be set by the JRE-NC after the JRE-ANC acknowledges its assignment as "Alternate". The JRE-NC shall designate no more than one JRE-NP as JRE-ANC.

A.5.1.2.1.4 JRE-NP Error Rate, 1 field. The JRE-NC shall report the JRE-NC's Current Error Rate (see [5.6.14](#)) for the JRE-NP in the 7-bit JRE-NP Error Rate, 1 field.

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A.5.1.2.1.5 JRE-NP Transmission Limit, 1 field. The JRE-NC shall set this field to limit the number of seconds that the JRE-NP may use for its next transmission (see [A.5.3](#)).

A.5.1.2.2 Transmission Sequence List Count field. This field shall contain the number of entries in the TSL.

A.5.2 Announced Token Passing Message Group packet structure. This appendix uses the Full Stack Message Group header and packing structure, as defined in [5.4](#).

a. For the JREAP J-Series message and JREAP J-Series with NPG Assignment message types, a maximum of 29 data words, each 72-bits long, shall be packed behind each JREAP Message Group header.

b. JREAP J-Series messages and JREAP J-Series with NPG Assignment messages shall be placed before any other message types in the Transmission Block.

A.5.3 Transmission time allocation. The JRE-NC shall assign a default JRE-NP Transmission Limit, 1 of 8 seconds for all JRE-NPs at link initialization unless modified by the JRE-NC operator. The JRE-NC shall be capable of adjusting the transmit time limit of each JRE-NP between 1 and 10 seconds. The JRE-NC should limit its own transmissions to 8 seconds. A JRE-NCB may operate with a transmit time limit of 15 seconds.

a. Each JRE-NP shall not transmit for longer than specified by the JRE-NP Transmission Limit, 1 in its TSL entry.

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A.5.4 Network Time Reference. The JRE-NC shall determine the common time reference for the network, and start in the FINAL state (see [5.2.6](#) and [Figure 5.2-3](#)). Only the JRE-NC shall respond to common time reference queries. Each JRE-NP shall begin in the LISTENING state. The JRE-NC shall send a Common Time Reference message every four minutes with the Control/Response Indicator, 2 field in the Management message subheader set to value 1 - Command to support participation of JRE-NLs (see [Tables 5.2-8](#) and [5.2-10](#)).

a. When using JRE-NC basis for time reference on a UHF SATCOM based link, the network time is calculated by each JRE-NP using the DVT of the JRE-NC's transmission and a fixed propagation time delay shown in [Table A.5.4-1](#) with appropriate hardware configuration corrections. The JRE-NC shall set the Transmission Time Reference (TTR) Flag to value 1 (DVT), and shall set the Time Accuracy field to a value representing the accuracy of the Data Valid Time field, with respect to the time at which the STF leaves the interface (see [5.2.2.5](#) and [5.2.2.6](#)). A JRE Processor's hardware configuration one-way propagation is defined as the measured elapsed time from when the STF is transmitted on the JRE Processor JREAP A interface to the time it is received on the remote JRE Processor's JREAP A interface, with both hosts having the same radio and crypto hardware configuration. Hardware configuration one-way propagations shall not exceed [Table A.4.2-1](#) timeout values. If the JRE Processor's hardware configuration one-way propagation is different than [Table A.5.4-1](#) values, the JRE Processor shall adjust the Data Valid Time field for $\frac{1}{2}$ the different between the [Table A.5.4-1](#) value and the hardware configuration propagation value (i.e. if actual hardware DAMA Propagation is 1934ms, transmitted Data Valid Time field is current JRE-NC time - 50 ms, and received Data Valid Time fields are adjusted by -50 ms. If actual hardware DAMA Propagation is 1684ms, transmitted Data Valid Time field is current JRE-NC time + 75 ms, and received Data Valid Time fields are adjusted by +75 ms.).

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TABLE A.5.4-1. UHF Satellite Transmission Delay Times

DATA RATE	DAMA	NON-DAMA
2400 bps	1834 ms	719 ms
4800 bps	1933 ms	604 ms
9600 bps	N/A	579 ms

A.5.5 Link monitoring. JRE-NPs software shall incorporate link monitoring (see [5.6](#)) with the following modification and minimum operator display:

a. Where averages or error rates are specified, the nominal period shall be the last 10 network cycles.

b. Minimum JRE-NP operator display shall include TSL, NCT, Current Error Rate, Controller Mode, JRE-ANC IU number, CTR (state and TRef), and Last Received Activity Time.

A.5.6 Network feedback. The JRE-NC is responsible for monitoring and reporting Current Error Rates (see [5.6.14](#)). Network feedback is not applicable to broadcast operations.

A.5.7 Acknowledgment logic. Acknowledgment logic for the Announced Token Passing protocol is based upon the principle of the "next transmission opportunity".

a. When a JRE-NP is required to transmit an acknowledgment, it shall respond during its next transmission opportunity. The originator shall wait until the responding JRE Processor's next transmission opportunity in order to receive the appropriate acknowledgment (see [5.5.4.3](#) or [5.5.4.7](#)). If the acknowledgment is not received during the responding JRE Processor's next transmission opportunity, the originator will retransmit the initial message at its

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next opportunity and apply the same logic for the acknowledgment. After three failed attempts, no additional attempts will be made and the JRE operator shall be alerted.

b. Acknowledgment transmission is not applicable to broadcast operations.

A.5.8 EHF operations. When the CTR is event strobe, the JRE-NC shall transmit the Special Event Message after each satellite epoch strobe sequence is detected. The satellite epoch strobe sequence consists of two separate strobes, one for transmit and one for receive. The mid-point between the strobes is defined as the actual zero satellite time. This time shall be placed in the Event Time field of the JRE-NC Special Event message. All other JRE-NPs shall record in their local time when they received the strobes and compute their mid-point. They shall adjust their DVT by the difference between this point and the Event Time reported in the Special Event message.

A.6 NOTES

A.6.1 Link analysis. Link analysis is supported by the Current Error Rate reports in the JRE-NP and JRE-NC Transmission Block headers. Each JRE-NP should monitor the Current Error Rates reported by the JRE-NC and other JRE-NPs. Each JRE-NP can compare three different views of the link functionality. One view is from the perspective of the Current Error Rate of the JRE-NC and all other JRE-NPs. The second view is the JRE-NC reported Current Error Rate in the TSL. The last view is the Current Error Rate of the JRE-NC reported by each JRE-NP. Each JRE-NP should have the capability to display these three Current Error Rate views in a manner that supports the analysis of link problems.

A.6.2 Full Stack time adjustments. JRE-NPs can use a separate time delta to correct for the difference in their time reference and

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that of the JRE-NC providing the NTR. The time delta is established by recording the system time that the JRE-NC's STF is detected. The DVT is extracted from the JRE-NC's Transmission Block header, and the correct time delay is then selected for the media per [A.5.4.a](#).

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**MIL-STD-3011D
28 JUN 2019
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10 JUN 2016**

DEPARTMENT OF DEFENSE INTERFACE STANDARD

FOR THE JOINT RANGE EXTENSION APPLICATION PROTOCOL (JREAP)

APPENDIX B – FULL-DUPLEX, SYNCHRONOUS OR ASYNCHRONOUS POINT-TO-POINT CONNECTION



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B.1 SCOPE

B.1.1 Purpose. This appendix describes the synchronous and asynchronous point-to-point mode of the JREAP. This mode is similar in design to the Half-Duplex Announced Token Passing Protocol described in [Appendix A](#). This mode can be used with SHF and EHF LDR point-to-point mode synchronous connections, STU-III operations via phone lines, and other point-to-point media connections. This JREAP application presumes full-duplex data-transparent communication media.

B.1.2 Background. SHF SATCOM links typically experience a high data bit error rate, relative to other media. Since commercial data link layer protocols expect a low bit error rate, they routinely discard entire data frames with single bit errors. This appendix defines an application-layer-type protocol that includes link layer-style error detection in place of the lower level protocols, in order to salvage as much data as possible from corrupted JREAP packets.

B.2 APPLICABLE DOCUMENTS

a. The references in [Section 2](#) of this standard apply to this appendix.

B.3 DEFINITIONS

B.3.1 Abbreviations and acronyms. The definitions in [Section 3](#) of this standard apply to this appendix; however, the following acronyms are exclusive to this appendix:

CTS	-	Clear-to-Send
FCS	-	Frame Check Sequence
HDLC	-	High-Level Data Link Control
MTU	-	Maximum Transmission Unit

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RTS - Request-to-Send

B.3.2 Terms. The definitions in [Section 3](#) of this standard apply to this appendix.

B.4 GENERAL REQUIREMENTS

B.4.1 Mode of operation. This point-to-point version of the JREAP supports peer-to-peer communications, using the Full Stack mode of operation (see [5.4](#)).

B.4.2 Point-to-Point configuration. [Figure B.4.2-1](#) shows a configuration supported by the JREAP. It includes two JRE Processors connected, via encryption devices, to communications links. Both JRE Processors use full-duplex for transmitting and receiving JRE data.

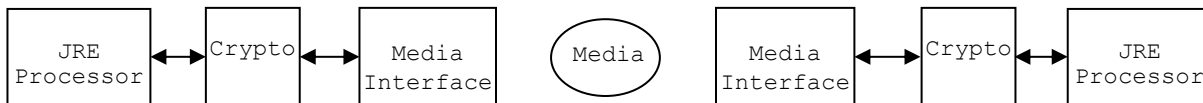


FIGURE B.4.2-1. Generic point-to-point configuration.

B.5 DETAILED REQUIREMENTS

B.5.1 JREAP Packet structure. JREAP packets are structured in accordance with [Figure 4.2-2](#). One or more Message Group headers are encapsulated by a Transmission Block header. The Transmission Block is encapsulated by the data link layer frame structure, as specified in [B.5.1.3](#).

B.5.1.1 Message Group Header (Type 3) field. The format of the Message Group Header (Type 3) fields shall be as shown in [5.4.3.4](#).

B.5.1.2 Transmission Block Header Type field. The Transmission Block Header Type field shall be set to Value 2 Point-to-Point (see

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[5.2.2.1](#)). The Transmission Block header format shall be as shown in the JREAP Full Stack Transmission Block header (Point to Point) summary.

B.5.1.3 Data link layer. Each Transmission Block header, and its associated series of Message Group headers, shall be encapsulated in a High-Level Data Link Control (HDLC)-like frame (as described in Request for Comment (RFC) 1662) with the following modifications as shown in [Figure B.5.1.3-1](#):

- a. The HDLC header compression shall be implemented so that the HDLC address, control, and protocol fields are not transmitted.
- b. The Frame Check Sequence (FCS) is 16 bits.
- c. The FCS in the HDLC frame is ignored and JREAP error recovery methods are used (see [5.4.3.4.9](#)).

START FLAG	JREAP-B TRANSMISSION BLOCK	FCS	STOP FLAG
0x7e	VARIABLE	2 bytes	0x7e

Figure B.5.1.3-1. Modified HDLC Frame Format to be used for JREAP-B.

B.5.1.3.1 Asynchronous HDLC-like framing. When using an asynchronous interface to the point-to-point medium, the JRE Processor shall transmit the asynchronous HDLC octet-stuffed framing, as described in RFC 1662. The JRE processor shall implement octet stuffing only on the start flag (0x7e) and escape character (0x7d) when they are contained within the payload. RFC 1662 option ACCM (Async-Control-Character-Map) is not to be used by JREAP B.

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B.5.1.3.2 Synchronous HDLC-like framing. When using a synchronous interface, the JRE Processor shall transmit the synchronous HDLC bit-stuffed framing, as described in RFC 1662.

B.5.1.3.3 Maximum transmission unit limitations. JRE Processors shall not exceed a Maximum Transmission Unit (MTU) of 1500 bytes. The MTU includes the JREAP Transmission Block header (Point to Point), the JREAP Full Stack Message Group headers, and the JRE application data. A JREAP packet shall not be split across lower layer transmission units.

a. For the JREAP J-Series message and JREAP J-Series with NPG Assignment message types, a maximum of 29 data words, each 72-bits long, shall be packed behind each JREAP Full Stack Message Group header.

B.5.2 Point-to-Point link phases. Links are established, operated, and terminated.

B.5.2.1 Point-to-Point link establishment. Common Time Reference (CTR) messages for time reference shall be exchanged between JRE Processors to establish a CTR before extrapolative data is transmitted (see [5.2.6](#)).

B.5.2.2 Point-to-Point link operations. During link operations, messages are exchanged as per [Section 5](#).

a. At the JRE application level, a Cyclic Redundancy Check (CRC) is used to detect errors. If the JREAP Full Stack Transmission Block header CRC fails, the JREAP packet shall be silently discarded.

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b. A CRC provides data error detection within the Full Stack Message Group header, as well as application data. A Full Stack Message Group header CRC failure shall be processed per [5.4.3.4.9](#) requirements.

c. In a full-duplex interface, it is possible to lose one direction of the link without losing both sides of the link. In this instance, the JRE Processor transmitting on the half of the link still operating shall continue to transmit information (on the assumption that its peer is receiving the data) until an interface event forces the JRE Processor to cease transmitting.

d. Some encryption devices (for example, the TSEC/KG-84A) support periodic synchronization. When using such a device, each JRE Processor shall initiate the synchronization process prior to the transmission of the first JREAP packet, then subsequently at a nominal 12-second interval. The JRE Processor shall perform the synchronization process between JREAP packet transmissions (never during a transmission) (see [B.6.2](#)).

B.5.2.3 Point-to-Point link termination. See [5.5.4.13](#).

B.5.3 Point-to-Point link monitoring. JRE Processor software shall incorporate link monitoring (see [5.6](#)).

a. Minimum operator display shall include, Current Error Rate, CTR (state and TRef), and Last Received Activity Time.

B.5.4 Point-to-Point connectivity feedback. A JRE Processor shall send a Connectivity Feedback message once every 60 seconds (see [5.5.4.18](#)).

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B.6 NOTES

B.6.1 Exceeding Transmit Capacity. System implementers should pay close attention to capacity issues since it is possible to generate JREAP messages at a rate that exceeds the transmit capacity.

B.6.2 TSEC/KG-84A issues. TSEC/KG-84A encryption devices operate in a full-duplex, independent mode that supports simplex resynchronization. In this mode, the transmitting JRE Processor gets no indication that the data is being received by the other JRE Processor.

a. Once a JRE Processor raises Request-to-Send (RTS), and Clear-to-Send (CTS) is returned by the crypto device, only idle characters (0x7e) or JRE data should be transmitted until the RTS is lowered and the CTS drops. When using the TSEC/KG-84A, raising RTS will cause crypto resynchronization, and the first JREAP packet transmitted after a crypto resynchronization should be preceded by 30 ms of idle or frame characters.

b. KG-84-series crypto resynchronization may be initiated by the SYNC COMMAND TRANSMIT control line or by the cycling of the RTS control line (within some wiring configurations). Crypto black side interface implementation may dictate the red side resynchronization control design.

B.6.3 Data count. Due to escape sequence requirements of RFC 1662, the physically transmitted JREAP packet length may be longer than that stated in the JREAP Full Stack Transmission Block header values (if the data contains escaped data bytes).

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B.6.4 Full Stack time adjustments. All JREAP data is sent using the negotiated common time reference. This may require the receiving JRE Processor to develop and apply a delta between the reference time being used by its peer and its own internal time. For full-duplex constant latency links, round-trip timing may be negotiated as the common time reference and then the delta must be developed using T_RARTT (see [5.2.3](#)) or Round-Trip Timing messages.

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DEPARTMENT OF DEFENSE INTERFACE STANDARD

FOR THE JOINT RANGE EXTENSION APPLICATION PROTOCOL (JREAP)

APPENDIX C – ENCAPSULATION OVER INTERNET PROTOCOL (IP)



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C.1 SCOPE

C.1.1 Purpose. This appendix describes a JREAP mode that makes use of the IP in conjunction with either the UDP or TCP.

C.1.2 Background. The Internet Protocol Suite is a standard set of protocols that is deployed worldwide in commercial as well as military networks. By using JREAP encapsulation over IP, JRE can be performed over IP-based networks that meet operational requirements for security, speed of service, and so on.

a. Since TCP IP and UDP IP data are either delivered intact or not delivered at all, the JREAP application layer does not provide for recovery of corrupted messages.

b. The JREAP is independent of the version of IP that is used.

C.2 APPLICABLE DOCUMENTS

a. The references in [Section 2](#) of this standard apply to this appendix.

C.3 DEFINITIONS

C.3.1 Abbreviations and acronyms. The definitions in [Section 3](#) of this standard apply to this appendix.

C.3.2 Terms. The definitions in [Section 3](#) of this standard apply to this appendix.

C.4 GENERAL REQUIREMENTS

a. For operation over IP networks, JREAP Application blocks (see [5.3](#)) are encapsulated within either a TCP data stream or within UDP

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datagrams. For operation over TCP, JREAP Application blocks are simply sent one after another. For operation over UDP, one or more JREAP Application blocks may be packed into a UDP datagram. UDP datagrams may be sent using either unicast or multicast addresses. A JRE Processor may implement any or all of these IP modes. See [C.6.1](#) for discussion of implementation considerations.

b. In this appendix, a JRE link, as defined in [4.1](#), refers to a TCP connection, a pair of UDP unicast peers, a UDP multicast group, or a group of UDP broadcast peers. The operator shall be able to obtain a list or table of open JRE links, and the operator shall be able to view statistics gathered from link monitoring on each JRE link (see [C.5.4](#)).

C.4.1 Operations using TCP. TCP operations are performed between a client and a server in a connection-oriented mode. The server listens for connections on a given port number and clients may connect to that port number.

a. Each JRE Processor, whether acting as a client or server, shall be capable of supporting multiple TCP connections. Each connection comprises a unique JRE link (see [C.6.1](#) for further guidance).

b. The operator shall be alerted when a connection opens or closes.

c. The Nagle algorithm shall be disabled. For example, in a socket-based implementation this can be accomplished by setting the TCP_NODELAY socket option.

C.4.2 Operations using UDP unicast. UDP unicast operations are performed between a pair of peers in a connectionless mode. Each JRE Processor sends datagrams to a specific peer address. Each JRE

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Processor opens a port and listens for arriving datagrams. There is no explicit IP connection between a pair of JRE Processors. Each pair of peers comprises a unique JRE link.

C.4.3 Operations using UDP multicast. UDP multicast operations are performed among a group of peers in a connectionless mode. Each JRE Processor sends datagrams to a specific peer group address and port. Each JRE Processor opens a specific group address and port and listens for arriving datagrams. There is no explicit IP connection between the JRE Processors. Each group comprises a unique JRE link. A JRE Processor shall be able to support 255 peers on each group (see [C.6.1](#) for further guidance).

C.5 DETAILED REQUIREMENTSC.5.1 TCP requirements.

C.5.1.1 TCP configuration parameters. The following configuration information is required:

- a. One node must be configured to be a client and the other node must be configured to be a server.
- b. Both nodes must know the server's TCP port number.
- c. The client must know the IP address of the server.

C.5.1.2 TCP link establishment. In order to establish a link, the following steps are performed:

- a. The server shall listen for, and accept, incoming connections on the TCP port number. The client shall issue a TCP connection request to the server's IP address and TCP port number.

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b. The server and client shall exchange CTR messages (see [5.2.6](#)). If CTR messages do not resolve to agreement, both JRE Processor operators shall be alerted.

c. While negotiating CTR, the TCP connection should be open for exchange of data other than extrapolative data (see [5.2.4.2](#)).

C.5.1.3 TCP link operations. Messages shall be exchanged over the TCP connection per [Section 5](#).

C.5.1.4 TCP link termination.

a. Either side may close the TCP connection (see [5.5.4.13](#)).

b. Both server and client shall be able to handle unexpected termination of the TCP session.

c. A JRE Processor acting as a server shall be able to accept reconnections from a failed TCP session within (T_RETRY/2) seconds (see [5.2.3](#)) after a connection fails (this may entail the "Socket Reuse" option). A JRE Processor acting as a client shall attempt to reconnect to the server within T_RETRY seconds after a connection fails.

C.5.2 UDP unicast requirements.

C.5.2.1 UDP unicast configuration parameters. The following configuration information is required:

a. Both nodes must know the designated destination UDP port number.

b. Each node must know the IP address of the other node.

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c. Each node shall receive incoming JREAP data on the designated UDP destination port number, and shall send data to the other node's IP address on the designated UDP destination port number.

C.5.2.2 UDP unicast link establishment. To establish a JRE link, the peers shall exchange CTR messages (see [5.2.6](#)). If CTR messages do not resolve to agreement, both JRE Processor operators shall be alerted.

C.5.2.3 UDP unicast link operation. JRE Processors shall monitor JREAP J-Series Message Sequence Numbers (JMSN) and Network Participation Group Message Sequence Numbers (NPG MSN) on a per-remote-processor basis and discard duplicate messages (same sequence number for the message type) and those with associated sequence numbers that indicate transmission prior to the most recently received sequence number for that message type. If the out of order packet contains only a management message sub-header, it shall not be discarded. Retransmissions of management messages shall not be packed with any other message type(s) in the same UDP packet. However, the JRE Processor shall accept the first UDP packet received from a remote processor after a Terminate Link message was received from it, or if half of the current T_RETRY time interval has elapsed since receipt of the last valid message.

a. During link operation, messages are exchanged per [Section 5](#).

C.5.2.4 UDP unicast link termination. Either side may terminate the peer-to-peer relationship (see [5.5.4.13](#)).

C.5.3 UDP multicast requirements.

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C.5.3.1 UDP multicast configuration parameters. The following configuration information is required:

a. All nodes must know the designated destination UDP port number.

b. All nodes must know the IP address of the multicast group. Each node shall receive incoming JREAP data on the UDP destination port number and multicast group IP address, and shall send data to the same destination port number and IP address.

C.5.3.2 UDP multicast link establishment. To establish a link, peers shall exchange CTR messages (see [5.2.6](#)). If CTR messages do not resolve to agreement, the JRE Processor(s) in a failed state shall alert the JRE Processor operator(s). All JRE Processors not in a failed state should alert the JRE Processor operator when it is determined that another JRE processor attempting time negotiation has entered a failed state.

C.5.3.3 UDP multicast link operation. JRE Processors shall monitor JREAP JMSNs and Network Participation Group Message Sequence Numbers (NPG MSNs) on a per-remote-processor basis and discard duplicate messages (same sequence number for the message type) and those with associated sequence numbers that indicate transmission prior to the most recently received sequence number for that message type. If the out of order UDP packet contains only a management message sub-header, it shall not be discarded. Retransmissions of management messages shall not be packed with any other message type(s) in the same UDP packet. However, the JRE Processor shall accept the first UDP packet received from a remote processor after a Terminate Link message was received from it, or if half of the current T_RETRY time interval has elapsed since receipt of the last valid message.

a. During link operation, messages are exchanged per [Section 5](#).

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C.5.3.4 UDP multicast link termination. Each JRE Processor shall send a Terminate Link JREAP Management Message, prior to terminating participation in the group (see [5.5.4.13](#)).

C.5.4 IP link monitoring. JRE Processor software shall incorporate link monitoring for each link (see [5.6](#)).

C.5.4.1 TCP link monitoring. Minimum operator display shall include, TCP Session Status (listening, connected or timeout), Average Received Data Media Latency, CTR (state and TRef), and Last Received Activity Time.

C.5.4.2 UDP link monitoring. Minimum operator display shall include CTR (state and TRef) for own JRE Processor; Current Error Rate, Average Received Data Media Latency, and Last Received Activity Time for all JRE Processors.

C.5.5 IP connectivity feedback. A JRE Processor shall send a Connectivity Feedback message on each link once every 60 seconds (see [5.5.4.18](#)).

C.5.6 EHF multicast considerations. In EHF MDR/LDR operations, if Event Strobe has been negotiated as the CTR (see [5.5.4.5](#)), one JRE Processor in the group (designated by higher operational authority) shall send the Special Event message after each satellite epoch strobe is detected. All other JRE Processors shall compare their local time when the strobe occurred to the time in the Special Event message (see [5.5.4.12](#)), in order to develop the time delta.

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C.6 NOTES

C.6.1 Characteristics and capabilities of individual implementations. The range of capabilities for implementers of the JREAP over IP may vary widely. Consider the following scenarios:

(1) A soldier-carried unit may use an existing RF Local Area Network (LAN) to obtain an operational picture, via a JREAP battlefield client.

(2) An operations center server may provide a picture to a battlefield client (as in a., above), link to Navy ships via multicast IP, link to another operations center with TCP, and provide reach-back via UDP unicast.

(3) A battalion tactical operations center may send its air picture to a missile battery via local UDP, and also to a higher echelon operations center via TCP.

a. System interoperability will be maximized if all implementations support all forms of the JREAP over IP (TCP client, TCP server, UDP unicast, and UDP multicast). However, as discussed above, the requirements for different applications of the JREAP over IP may vary widely. Some clients may need only a single function. Servers may need to be more capable. All TCP implementations may need to function as either client or server. While these considerations have substantial impact on interoperability, they are considered system specification issues, and are not covered in this standard.

b. The JREAP requires specific handling of each JRE link in some regards, including the negotiation of CTR, applying link filters, tracking message acknowledgments, and various other details. These apply to each TCP connection, as well as each UDP unicast pair and UDP multicast group. Taking a flexible approach to these requirements

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will prevent interoperability issues. In large measure, proper implementation of these features is simplified by appropriate software design practices.

c. The guidelines listed below will promote improved interoperability.

C.6.1.1 Guidelines for TCP implementations. In a TCP implementation, client support should provide the ability to connect with multiple servers, simultaneously. In an embedded, or very limited, implementation, that may mean two servers (a primary and a possible backup). Complete implementations should permit dozens of connections.

C.6.1.2 Guidelines for UDP unicast implementations. In a UDP unicast implementation, support for multiple UDP connections may be useful for larger implementations. These implementations may have more than one IP address and interface, and may require more than one UDP destination port available.

C.6.1.3 Guidelines for UDP multicast implementations. In a UDP multicast implementation:

a. Support when interacting with multiple peers simultaneously is intrinsic, but is different from that of unicast. Each group represents a single link, and one set of link filters and a single time reference apply to that group. In an embedded implementation, the ability to recover from network configuration errors (for example, conflicting time references) may be limited. Full-scale implementations should support dozens of peers per group and several groups.

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b. Support for multiple UDP connections may be useful for larger implementations. These implementations may have more than one IP address and interface, and may require more than one UDP port to be available.

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DEPARTMENT OF DEFENSE INTERFACE STANDARD

FOR THE JOINT RANGE EXTENSION APPLICATION PROTOCOL (JREAP)

APPENDIX D – DATA ELEMENT DICTIONARY



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APPENDIX D - DATA ELEMENT DICTIONARY

D.1 SCOPE

This document contains the data elements used in the Joint Range Extension Application Protocol. The data elements are uniquely specified by two numbers, the Data Field Identifier (DFI) and its Data Use Identifier (DUI). The DFI includes a single concept and is the generic representation of the DUIs grouped under it. The DUIs, which are representative of the DFI concept, contain the Data Items (DIs) used to compose the data element. The DFIs are listed in numerical sequence. Alphabetical and numerical indexes of the [DFIs](#) and [DUIs](#) are included before the first DFI.

D.2 APPLICABLE DOCUMENTS

The documents listed in Section 2 of this standard are applicable to this appendix.

D.3 DEFINITIONS

The definitions in Section 3 of this standard apply to this appendix.

D.4 GENERAL REQUIREMENTSD.4.1 RULES AND CONVENTIONS

This section describes the structure and use of DFIs, DUIs, and DIs as well as the related data to be used in developing data elements.

D.4.1.1 GENERAL

a. Every special character used in the formatting of a DFI shall have a predetermined meaning.

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b. Use readily understood terms.

c. Acronyms may be used as part of a name, but must be spelled out in the definition or explanation.

d. DFI and DI names shall be as short as practicable.

D.4.1.2 DFI

All DFIs must have at least one associated DUI.

D.4.1.2.1 DFI NAME

a. Each DFI name shall be unique.

b. The DFI name shall identify a single concept.

c. The DFI name shall be a generic representation of the contained DUIs.

d. The DFI name shall be singular.

e. Group words (type, category, degree, designator, etc.) in DFI names shall follow modifying words and phrases, e.g., "Aircraft Type" rather than "Type of Aircraft."

D.4.1.2.2 DFI DEFINITION

a. The DFI definition shall be provided only when necessary for amplification.

b. The DFI definition shall be a generic definition of the concept represented by the associated DUIs.

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c. The DFI definition shall attempt to use definitions from previously accepted standards.

d. The DFI definition shall be based on a review of all appropriate definition sources.

D.4.1.3 DUI

All DUIs must have associated DIs.

D.4.1.3.1 DUI NAME

a. Each DUI name shall be unique.

b. All DUI names shall be singular.

c. Parallelism of phraseology of all DUI names within the DFI shall be preserved.

d. DUI names shall be representative of the DFI concept.

D.4.1.3.2 FIELD DESCRIPTOR

Field descriptors shall be provided for all DUIs whose name will not fit within the allocated space in the message map ([Section 5](#)).

D.4.1.3.3 DUI EXPLANATION

a. A DUI explanation shall exist for each DUI.

b. A DUI explanation shall not be a restatement of the name.

c. A DUI explanation shall not be solely an example.

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D.4.1.4 DI

a. Split DUIs shall be indicated by a virgule between the DUI numbers, e.g., "FOR DUI 001/005."

b. Ranges of DUIs shall be indicated by a dash between the inclusive DUI numbers, e.g., "FOR DUIs 003-006."

D.4.1.4.1 DI NAME

a. Within a DUI, each DI shall have a specific name and meaning.

b. DIs shall be consistent with the explanation of the DUI.

D.4.1.4.2 BIT CODES

a. Bit codes shall be expressed in decimal with the exception of DIs that are displayed to the operator in octal, e.g., IFF/SIF. When the bit code is octal, a notation shall be made to indicate that octal values are used.

b. Within a DUI, each DI shall be represented by a unique bit code and have a specific meaning.

D.4.1.4.3 DI EXPLANATION

a. The DI explanation shall be provided only when necessary for amplification.

b. The DI explanation shall attempt to use explanations from previously accepted standards.

c. The DI explanation shall be based upon a review of all appropriate sources.

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d. The DI explanation shall not be a restatement of the name unless it is spelling out an acronym.

e. When a DI name is "NUMERIC," the DI explanation must contain a description of what the DI represents. For example:

<u>Data Item</u>	<u>Bit Code</u>	<u>Explanation</u>
(NUMERIC)	(0 THROUGH 127)	Explanation...
(SEE EXPLANATION)		

f. In expressing numerical quantities, the following are the type of entries required:

<u>Data Item</u>	<u>Bit Code</u>	<u>Explanation</u>
(0 THROUGH 511 3/4 DATA MILES)	(0 THROUGH 2047)	Distance in 1/4 data mile increments
(NO STATEMENT)	(2048)	
(-511 3/4 THROUGH - 1/4 DATA MILES)	(2049 THROUGH 4095)	

D.4.1.4.4 GENERIC DATA ITEMS ENTRIES

<u>Term</u>	<u>Meaning</u>
DISUSED	A DI value that was previously named but is no longer valid. A DISUSED value cannot be renamed without determining if coordinated implementation is required.

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UNDEFINED	A term used to describe a bit code that has no value currently assigned but may have a value assigned in the future. (This occurs in logically coded items (DUIs) in which all the DIs in the DUI do not have assigned values.)
ILLEGAL	A term used to describe a bit code that is not a permissible entry into the tactical data system(s) supporting the interface, e.g., a 9 bit DUI called HEADING that has legal values of 0 through 359 representing degrees has illegal values of 360 through 511.
NO STATEMENT	A DI that indicates no information on this DUI is being transmitted. (This does not necessarily indicate that the originator does not have the information.)
UNKNOWN	A DI that indicates other values available for this DUI have not been determined by the originator.
TO BE DETERMINED	DI design is incomplete. (DI names and bit codes will be specified at a later time.)

D.4.1.4.5 NO STATEMENT ASSIGNMENT

When two options are shown, the binary value 0 shall be used as NO STATEMENT except when the binary value 0 has a valid numeric value, in which case the highest binary value shall be used.

The following examples of a 3 bit DUI show the proper assignment (indicated by an asterisk) of the NO STATEMENT DI name:

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<u>Binary</u> <u>Value</u>	<u>Logical</u>	<u>Unsigned</u>	<u>Sign+</u> <u>Magnitude</u>	<u>Twos</u> <u>Complement</u>	<u>Mod Twos</u> <u>Complement</u>	<u>Ones</u> <u>Complement</u>
000	a*	0	+0	0	-4*	+0
001	b	1	+1	+1	-3	+1
010	c	2	+2	+2	-2	+2
011	d	3	+3	+3	-1	+3
100	e	4	-0*	-4*	0	-3
101	f	5	-1	-3	+1	-2
110	g	6	-2	-2	+2	-1
111	h*	7*	-3	-1	+3	-0*

D.4.1.5 DEFINITION OF SYMBOLS THAT CAN BE USED IN DFI AND DUI
NAME

- a. Hyphen (-) shall be used in compound terms.
- b. Virgule (/) shall be used with bona fide acronyms and in the expression "and/or" only.
- c. Parentheses () shall be used to enclose an acronym when both title and acronym are included in name.
- d. Comma (,) shall be used in its normal sense.
- e. A decimal point (.) shall be used when a decimal value segment is used as part of the name.
- f. A number sign (#) shall be used to indicate a "number" in the general sense.

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g. An underscore (_) shall be used to indicate whitespace when supporting XML naming and design rules.

h. No other symbols shall be used.

D.4.2 DESCRIPTION

[Figure D-1](#) shows the format of the DFI information that can be displayed on individual DFIs. In order to explain the information in the DFI listings, the paragraphs following [Figure D-1](#) are keyed to the numbers in the figure, i.e., the parenthetical numbers to the left of the text correspond to the bold parenthetical numbers in [Figure D-1](#).

In the figure, all information is in capital letters; parentheses and dashes are exactly as printed in the listing. Zs indicate zero suppression, 9s represent numerics, and Xs indicate alphanumerics.

(1) Classification. The highest classification of the information contained on that page is printed at the top and bottom of each page. Each paragraph has its classification printed to the left in parentheses. US markings are one character in length, and NATO markings are two characters.

(2) DFI Number. The DFI number is printed at both the top and bottom of each page. The DFI number consists of a maximum of 4 digits with the first leading zero suppressed.

(3) DFI Name. The DFI name is printed at the top of each page. The DFI name is limited to a maximum of 30 alphanumerics for the first line and a maximum of 28 for the second line.

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(4) DFI Definition. The DFI definition is used only when the meaning of the DFI is unclear. It consists of a maximum of 62 alphanumerics for the first line and 60 for the second through tenth lines (a maximum of 10 lines).

(5) Data Standard Usage. This information indicates the name of those standards using this DFI. It consists of 9 alphanumerics followed by a space with a maximum of three 9 character groups per line and a maximum of 3 lines.

(6) Status. This element identifies the current status of the DFI. It consists of a maximum of 3 lines of alphanumerics with a maximum of 20 characters per line.

(7) DUI Number. The DUI number consists of 3 digits with no suppression.

(8) DUI Name. The DUI name consists of a maximum of 30 alphanumerics for the first line and a maximum of 28 alphanumerics for the second line.

(9) DUI Explanation. The DUI explanation consists of a maximum of 36 alphanumerics for the first line and 34 alphanumerics for all following lines with a maximum of 999 lines.

(10) Applicability. This element identifies the JREAP headers and JREAP messages that use the DUI it appears with. It consists of a maximum of 999 lines per DUI with 3 words per line.

(11) Change Bars. Change bars appear to the right of a line that has changed from a previous edition.

(12) Bit. This element identifies the number of bits that make up the DUI. It consists of 3 digits with leading zeros suppressed.

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(13) Field Descriptor. The field descriptor is an abbreviation used in place of the DUI name when the DUI name will not fit in the allocated space of a message map. The maximum number of alphanumerics is determined by the DUI bit size as follows:

- a. For a 1 bit field, 2 lines of 3 characters each.
- b. For a 2 bit field, 3 lines of 7 characters each.
- c. For a 3 bit field, 3 lines of 11 characters each.
- d. For a 4 or more bit field, 3 lines of 15 characters each.

If a field descriptor does not exist for a DUI, this element will be blank.

(14) Ultra Header DI Qualifier. This is a qualifier for the DIs that follow and is composed of one line with a maximum of 68 alphanumeric characters.

(15) Major Header DI Qualifier. This is a qualifier for the DIs that follow and is composed of a maximum of five lines. The first line contains a maximum of 24 alphanumeric characters, and the second through the fifth lines each contain a maximum of 22 alphanumeric characters.

(16) Subheader DI Qualifier. This is a qualifier for the DIs that follow and is composed of a maximum of five lines. The first line contains a maximum of 24 alphanumeric characters, and the second through the fifth lines each contain a maximum of 22 alphanumeric characters.

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(17) Page Number. A sequence number (beginning with one for each DFI) showing the page number within the total number of pages for the DFI. The page number consists of a maximum of 3 digits with leading zeros suppressed.

(18) DI Name. The DI name is composed of a maximum of 999 lines. The first line consists of a maximum of 24 alphanumeric characters, and the remaining lines each contain a maximum of 22 characters.

(19) DI Bit Code. The DI bit code is the numeric value corresponding to the associated DI name. It consists of 999 lines with each line consisting of a maximum of 24 alphanumeric characters. It is normally specified in decimal. It is specified in octal only for those data elements that are normally displayed in octal digits.

(20) DI Explanation. The DI explanation consists of a maximum of 999 lines. The first line consists of a maximum of 36 alphanumeric characters, and the remaining lines each contain a maximum of 34 characters.

CLASSIFICATION (1)			
(2)	DFI NAME (3)	DEFINITION (4)	
(X) ZZ999	XXXX.....XXX	XXXXX.....XXXX	
(1)	XX.....XXX	XXX.....XXXX	
(X)	DATA STANDARD USAGE: XXXXXXXXXX XXXXXXXXXX	STATUS: XXXX.....XXXXX	
(5)		(6) XXXX.....XXXXX	
		XXXX.....XXXXX	
(7) (8)	DUI NAME	EXPLANATION (9)	(10) APPLICABILITY
(X) 999	XXXX.....XXX	XXXXX.....XXXX	XXXXX XXXXX
	XX.....XXX	XXX.....XXXX	XXXXX XXXXX (11)
	[ZZ9 BIT] (XXX)		
	(12) (13)		
(X) 999	XXXX.....XXX	XXXXX.....XXXX	XXXXX XXXXX
	XX.....XXX	XXX.....XXXX	XXXXX XXXXX
	[ZZ9 BIT] (XXX)		
	DATA ITEM (14)	BIT CODE	EXPLANATION
(X)	--- FOR DUI 999 ---		
(X)	XXX.....XXXX	0	
	XXX.....XXXX		

(X)	XXXXX = XX (15)		

(X)	XXX.....XXXX	1	
	XXX.....XXXX		
(X)	XX = X (16)		

CLASSIFICATION (1)		DFI NO ZZ999 PAGE ZZ9 OF Z99	(17)

Figure D-1. DFI Format (Sheet 1 of 2)

CLASSIFICATION (1)		
(2)	DFI	NAME (3)
(X)	ZZ999	XXXX.....XXX XX.....XXX
DATA ITEM (CONT'D) (18)		BIT CODE
(X)	XXX.....XXXX XXX.....XXXX	XXX.....XXXX (19)
		EXPLANATION (20)
		XXXXX.....XXXX XXX.....XXXX
CLASSIFICATION (1)		
DFI NO ZZ999 PAGE ZZ9 OF Z99 (2) (17)		

Figure D-1. DFI Format (Sheet 2 of 2)

APPENDIX D

D.5 DETAILED REQUIREMENTS

D.5.1 INDEX OF DFIs AND DUIs

To assist in using this standard, four listings immediately follow this page. The first list, [Table D-1](#), is ordered alphabetically by DFI name, the second list, [Table D-2](#), is ordered numerically by DFI number, the third, [Table D-3](#), is ordered alphabetically by DUI name, and the fourth, [Table D-4](#), is ordered numerically by DUI number. Each table also contains the revision date of the DFI.

TABLE D-1. ALPHABETICAL LIST OF DATA FIELD IDENTIFIERS (DFIS)

SHEET 1

DFI NAME	DFI NO.
ALTITUDE (HEIGHT)	3042
AXIS LENGTH	3013
AXIS ORIENTATION	3043
CAPABLE TIME STANDARD	3004
CONNECTIVITY MATRIX	3019
CONTROL/RESPONSE	3020
CRC	3039
CURRENT ERROR RATE	3015
DATA	3016
DESIGNATOR	3021
ERROR	3034
FREE TEXT	3030
GEOGRAPHIC FILTER SUBTYPE	3009
HEADER LENGTH	3014
HEADER TYPE	3007
ID 1 PENDING	3080
ID 2 UNKNOWN	3081
ID 3 ASSUMED FRIEND	3082
ID 4 FRIEND	3083
ID 5 NEUTRAL	3084
ID 6 SUSPECT	3085
ID 7 HOSTILE	3086
ID 8 PPLI	3087
INDEX	3031
INDICATOR/FLAG	3002
JREAP J-SERIES MESSAGE	3028
JREAP PERFORMANCE	3000
JREAP TIME FUNCTION	3003
LABEL	3037
LABEL 0	3100
LABEL 1	3101
LABEL 10	3110
LABEL 11	3111
LABEL 12	3112
LABEL 13	3113
LABEL 14	3114
LABEL 15	3115
LABEL 16	3116
LABEL 17	3117
LABEL 18	3118

TABLE D-1. ALPHABETICAL LIST OF DATA FIELD IDENTIFIERS (DFIS)

SHEET 2

DFI NAME	DFI NO.
LABEL 19	3119
LABEL 2	3102
LABEL 20	3120
LABEL 21	3121
LABEL 22	3122
LABEL 23	3123
LABEL 24	3124
LABEL 25	3125
LABEL 26	3126
LABEL 27	3127
LABEL 28	3128
LABEL 29	3129
LABEL 3	3103
LABEL 30	3130
LABEL 31	3131
LABEL 4	3104
LABEL 5	3105
LABEL 6	3106
LABEL 7	3107
LABEL 8	3108
LABEL 9	3109
LATITUDE	3010
LONGITUDE	3011
MESSAGE LENGTH	3012
MESSAGE TYPE	3008
MODE	3025
NUMBER	3033
NUMBER OF ADDRESSES	3017
NUMBER OF DESIGNATORS	3018
PARTICIPATION GROUP	3040
POINT TYPE 0 (HAZARD)	3050
POINT TYPE 1 (REFERENCE POINT - GENERAL)	3051
POINT TYPE 10 (UNDEFINED)	3061
POINT TYPE 11 (UNDEFINED)	3062
POINT TYPE 12 (UNDEFINED)	3063
POINT TYPE 13 (UNDEFINED)	3064
POINT TYPE 14 (UNDEFINED)	3065
POINT TYPE 15 (UNDEFINED)	3066

TABLE D-1. ALPHABETICAL LIST OF DATA FIELD IDENTIFIERS (DFIS)

SHEET 3

DFI NAME	DFI NO.
POINT TYPE 2 (STATION - GENERAL)	3052
POINT TYPE 3 (STATION - AIR)	3053
POINT TYPE 4 (LINE)	3054
POINT TYPE 5 (AREA - GENERAL)	3055
POINT TYPE 6 (AREA - HAZARD)	3056
POINT TYPE 7 (ASW)	3057
POINT TYPE 8 (ASW, 1)	3058
POINT TYPE 9 (UNDEFINED)	3059
PREFERRED TIME STANDARD	3005
PROTOCOL VERSION	3023
RECEIPT/COMPLIANCE	3006
ROCKET	3060
SENDER ID	3036
SEQUENCE NUMBER	3032
SPARE BIT	3099
SPECIAL EVENT	3022
SUB-SUBLABEL	3140
SUBLABEL	3038
TEXT	3024
TIMEOUT	3029
TRACK NUMBER	3027
TRANSMISSION FLAG	3045
TRANSMISSION SEQUENCE	3001
TRANSMIT LIMIT	3035
VERSION	3044

TABLE D-2. NUMERICAL LIST OF DATA FIELD IDENTIFIERS (DFIS)

SHEET 1

DFI NAME	DFI NO.
JREAP PERFORMANCE	3000
TRANSMISSION SEQUENCE	3001
INDICATOR/FLAG	3002
JREAP TIME FUNCTION	3003
CAPABLE TIME STANDARD	3004
PREFERRED TIME STANDARD	3005
RECEIPT/COMPLIANCE	3006
HEADER TYPE	3007
MESSAGE TYPE	3008
GEOGRAPHIC FILTER SUBTYPE	3009
LATITUDE	3010
LONGITUDE	3011
MESSAGE LENGTH	3012
AXIS LENGTH	3013
HEADER LENGTH	3014
CURRENT ERROR RATE	3015
DATA	3016
NUMBER OF ADDRESSES	3017
NUMBER OF DESIGNATORS	3018
CONNECTIVITY MATRIX	3019
CONTROL/RESPONSE	3020
DESIGNATOR	3021
SPECIAL EVENT	3022
PROTOCOL VERSION	3023
TEXT	3024
MODE	3025
TRACK NUMBER	3027
JREAP J-SERIES MESSAGE	3028
TIMEOUT	3029
FREE TEXT	3030
INDEX	3031
SEQUENCE NUMBER	3032
NUMBER	3033
ERROR	3034
TRANSMIT LIMIT	3035
SENDER ID	3036
LABEL	3037
SUBLABEL	3038
CRC	3039
PARTICIPATION GROUP	3040

TABLE D-2. NUMERICAL LIST OF DATA FIELD IDENTIFIERS (DFIS)

SHEET 2

DFI NAME	DFI NO.
ALTITUDE (HEIGHT)	3042
AXIS ORIENTATION	3043
VERSION	3044
TRANSMISSION FLAG	3045
POINT TYPE 0 (HAZARD)	3050
POINT TYPE 1 (REFERENCE POINT - GENERAL)	3051
POINT TYPE 2 (STATION - GENERAL)	3052
POINT TYPE 3 (STATION - AIR)	3053
POINT TYPE 4 (LINE)	3054
POINT TYPE 5 (AREA - GENERAL)	3055
POINT TYPE 6 (AREA - HAZARD)	3056
POINT TYPE 7 (ASW)	3057
POINT TYPE 8 (ASW, 1)	3058
POINT TYPE 9 (UNDEFINED)	3059
ROCKET	3060
POINT TYPE 10 (UNDEFINED)	3061
POINT TYPE 11 (UNDEFINED)	3062
POINT TYPE 12 (UNDEFINED)	3063
POINT TYPE 13 (UNDEFINED)	3064
POINT TYPE 14 (UNDEFINED)	3065
POINT TYPE 15 (UNDEFINED)	3066
ID 1 PENDING	3080
ID 2 UNKNOWN	3081
ID 3 ASSUMED FRIEND	3082
ID 4 FRIEND	3083
ID 5 NEUTRAL	3084
ID 6 SUSPECT	3085
ID 7 HOSTILE	3086
ID 8 PPLI	3087
SPARE BIT	3099
LABEL 0	3100
LABEL 1	3101
LABEL 2	3102
LABEL 3	3103
LABEL 4	3104
LABEL 5	3105
LABEL 6	3106
LABEL 7	3107

TABLE D-2. NUMERICAL LIST OF DATA FIELD IDENTIFIERS (DFIS)

SHEET 3

DFI NAME	DFI NO.
LABEL 8	3108
LABEL 9	3109
LABEL 10	3110
LABEL 11	3111
LABEL 12	3112
LABEL 13	3113
LABEL 14	3114
LABEL 15	3115
LABEL 16	3116
LABEL 17	3117
LABEL 18	3118
LABEL 19	3119
LABEL 20	3120
LABEL 21	3121
LABEL 22	3122
LABEL 23	3123
LABEL 24	3124
LABEL 25	3125
LABEL 26	3126
LABEL 27	3127
LABEL 28	3128
LABEL 29	3129
LABEL 30	3130
LABEL 31	3131
SUB-SUBLABEL	3140

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 1

DFI	DUI
DUI NAME	NO. NO.
ACKNOWLEDGEMENT PROTOCOL, 1	3006 001
ACKNOWLEDGEMENT PROTOCOL, 2	3006 002
ACKNOWLEDGEMENT PROTOCOL, 3	3006 003
ACKNOWLEDGEMENT PROTOCOL, 4	3006 004
ACKNOWLEDGEMENT PROTOCOL, 5	3006 005
ACKNOWLEDGEMENT REQUEST FLAG	3002 003
ACTIVE/INACTIVE FLAG	3002 002
ADD/DELETE INDICATOR	3002 001
AGE LIMIT VALUE	3003 001
AIM/WEAPON ENTRY POINT	3050 006
AIRBORNE EARLY WARNING (AEW)	3053 003
ALL FILTERS	3002 019
ALTERNATE NETWORK CONTROLLER	3002 020
ASSIGNMENT FLAG	
ALTERNATE NETWORK CONTROLLER	3002 021
ASSIGNMENT RECOGNITION	
ANTISUBMARINE WARFARE (ASW)	3053 004
FIXED WING	
ANTISUBMARINE WARFARE (ASW)	3053 005
HELICOPTER (HELO)	
APPLICATION BLOCK MESSAGE	3012 001
LENGTH	
APPLICATION DATA	3016 001
APPLICATION PROTOCOL VERSION	3023 001
AREA OF PROBABILITY (ASW)	3057 013
ASCII	3024 001
ASW STATION	3058 003
AVERAGE RECEIVED DATA MEDIA	3003 002
LATENCY	
BOTTOMED NONSUBMARINE	3058 002
BRIEF CONTACT	3057 003
BUFFER ZONE BOUNDARY	3054 006
CHARTED WRECK	3058 001
COMBAT AIR PATROL (CAP)	3053 002
COMMAND AND CONTROL INDICATOR	3002 004
OVERRIDE	
COMPLETION TIMEOUT	3029 001
CONNECTIVITY MATRIX BIT	3019 001
CONTAMINATED	3056 003
CONTROL/RESPONSE INDICATOR	3020 014

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 2

DUI NAME	DFI NO.	DUI NO.
CONTROL/RESPONSE INDICATOR, 1	3020	001
CONTROL/RESPONSE INDICATOR, 10	3020	010
CONTROL/RESPONSE INDICATOR, 11	3020	011
CONTROL/RESPONSE INDICATOR, 12	3020	012
CONTROL/RESPONSE INDICATOR, 13	3020	013
CONTROL/RESPONSE INDICATOR, 2	3020	002
CONTROL/RESPONSE INDICATOR, 3	3020	003
CONTROL/RESPONSE INDICATOR, 4	3020	004
CONTROL/RESPONSE INDICATOR, 5	3020	005
CONTROL/RESPONSE INDICATOR, 6	3020	006
CONTROL/RESPONSE INDICATOR, 7	3020	007
CONTROL/RESPONSE INDICATOR, 8	3020	008
CONTROL/RESPONSE INDICATOR, 9	3020	009
CONTROLLER MODE NC	3025	002
CONTROLLER MODE NP	3025	001
CORRIDOR	3054	004
CORRIDOR TAB	3051	004
COUNT	3033	001
CURRENT ERROR RATE	3015	001
DANGER	3056	002
DATA AGE	3003	003
DATA VALID TIME	3003	004
DATA WORDS	3016	002
DEFENDED AREA	3055	008
DEFENDED ASSET	3051	012
DESTINATION ADDRESS	3036	020
DISPOSITION CENTER	3051	006
DISUSED	3056	005
DISUSED	3057	009
DISUSED	3060	001
DISUSED	3060	002
ELECTRONIC ATTACK (EA) DECOY	3050	008
EMERGENCY INDICATOR OVERRIDE	3002	005
ENGAGEMENT POINT	3050	009
ERROR CODE, 1	3034	001
ERROR CODE, 2	3034	002
ERROR CODE, 3	3034	003
ERROR CODE, 4	3034	004
ERROR CODE, 5	3034	005
ERROR CODE, 6	3034	006

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 3

DUI NAME	DFI NO.	DUI NO.
ERROR CODE, 7	3034	007
ERROR RATE, CURRENT	3015	018
ESTIMATED POSITION (EP)	3057	005
EVENT STROBE, C	3004	004
EVENT STROBE, P	3005	004
EVENT TIME	3003	012
EVENT TIME ACCURACY	3003	005
EVENT TYPE	3022	001
EXERCISE	3055	004
FIGHTER ENGAGEMENT ZONE/ FIGHTER AOR	3055	006
FILTER MESSAGE TYPE	3008	003
FILTER ROCKEET (DI 1)	3060	003
FIRE SUPPORT COORDINATION LINE (FSCL)	3054	009
FIX (ASW)	3057	006
FIXED DELAY, C	3004	003
FIXED DELAY, P	3005	003
FORCE TELL INDICATOR OVERRIDE	3002	006
FORMATION CENTER	3051	007
FORWARD EDGE OF THE BATTLE AREA (FEBA)	3054	002
FORWARD LINE OF OWN TROOPS (FLOT)	3054	010
FRAGMENT NUMBER	3033	002
FRIENDLY WEAPON DANGER AREA (FWDA)	3057	014
GEO FILTER SUBTYPE	3009	001
GEOGRAPHIC FILTER	3002	018
GEOGRAPHIC FILTER INDEX	3031	001
GROUND AREA OF RESPONSIBILITY	3055	007
GROUND ZERO	3050	005
GUN TARGET LINE	3054	003
HEADER TYPE	3007	003
HOSTILE BOUNDARY	3054	005
HOSTILE TACTICAL ZONE	3056	007
HOSTILE WEAPON ZONE	3056	006
IMPACT POINT	3050	004
INTERVAL TIME	3003	013

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 4

DFI	DUI
DUI NAME	NO. NO.
J-SERIES MESSAGE SEQUENCE NUMBER	3032 003
J2.2 AND J2.0 AIR	3087 003
J2.3 AND J2.0 SURFACE	3087 004
J2.4 AND J2.0 SUBSURFACE	3087 005
J2.5, J2.6 AND J2.0 LAND	3087 006
J28.2(0) FILTER FLAG	3002 014
J28.2(X) FILTER FLAG	3002 015
J3.2 AIR, 0	3080 003
J3.2 AIR, 1	3081 003
J3.2 AIR, 2	3082 003
J3.2 AIR, 3	3083 003
J3.2 AIR, 4	3084 003
J3.2 AIR, 5	3085 003
J3.2 AIR, 6	3086 003
J3.3 SURFACE, 0	3080 004
J3.3 SURFACE, 1	3081 004
J3.3 SURFACE, 2	3082 004
J3.3 SURFACE, 3	3083 004
J3.3 SURFACE, 4	3084 004
J3.3 SURFACE, 5	3085 004
J3.3 SURFACE, 6	3086 004
J3.4 AND J5.4 SUBSURFACE, 0	3080 005
J3.4 AND J5.4 SUBSURFACE, 1	3081 005
J3.4 AND J5.4 SUBSURFACE, 2	3082 005
J3.4 AND J5.4 SUBSURFACE, 3	3083 005
J3.4 AND J5.4 SUBSURFACE, 4	3084 005
J3.4 AND J5.4 SUBSURFACE, 5	3085 005
J3.4 AND J5.4 SUBSURFACE, 6	3086 005
J3.5 LAND/GROUND, 0	3080 006
J3.5 LAND/GROUND, 1	3081 006
J3.5 LAND/GROUND, 2	3082 006
J3.5 LAND/GROUND, 3	3083 006
J3.5 LAND/GROUND, 4	3084 006
J3.5 LAND/GROUND, 5	3085 006
J3.5 LAND/GROUND, 6	3086 006
J3.6 SPACE, 0	3080 007
J3.6 SPACE, 1	3081 007
J3.6 SPACE, 2	3082 007
J3.6 SPACE, 3	3083 007

DUI NAME	DFI NO.	DUI NO.
J3.6 SPACE, 4	3084	007
J3.6 SPACE, 5	3085	007
J3.6 SPACE, 6	3086	007
J3.7 AND J14.0 EW PRODUCT INFORMATION, 0	3080	008
J3.7 AND J14.0 EW PRODUCT INFORMATION, 1	3081	008
J3.7 AND J14.0 EW PRODUCT INFORMATION, 2	3082	008
J3.7 AND J14.0 EW PRODUCT INFORMATION, 3	3083	008
J3.7 AND J14.0 EW PRODUCT INFORMATION, 4	3084	008
J3.7 AND J14.0 EW PRODUCT INFORMATION, 5	3085	008
J3.7 AND J14.0 EW PRODUCT INFORMATION, 6	3086	008
JRE NC, C	3004	001
JRE NC, P	3005	001
JRE NETWORK PARTICIPANT	3036	005
JRE SENDER ID	3036	001
JRE SENDER ID, 1	3036	002
JRE SENDER ID, 2	3036	003
JRE SENDER ID, 3	3036	004
JRE SOURCE TRACK NUMBER	3027	003
JRE-NC ERROR RATE	3015	017
JRE-NP ERROR RATE	3015	002
JRE-NP TRANSMIT LIMIT	3035	001
JREAP J-SERIES MESSAGE WORD, 1	3028	001
JREAP J-SERIES MESSAGE WORD, 2	3028	002
JREAP J-SERIES MESSAGE WORD, 3	3028	003
JREAP J-SERIES MESSAGE WORD, 4	3028	004
JREAP J-SERIES MESSAGE WORD, 5	3028	005
JREAP/JTIDS FREE TEXT, 1	3030	001
JREAP/JTIDS FREE TEXT, 10	3030	010
JREAP/JTIDS FREE TEXT, 11	3030	011
JREAP/JTIDS FREE TEXT, 12	3030	012
JREAP/JTIDS FREE TEXT, 13	3030	013
JREAP/JTIDS FREE TEXT, 14	3030	014
JREAP/JTIDS FREE TEXT, 15	3030	015

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 6

DFI	DUI
NO.	NO.
DUI NAME	
JREAP/JTIDS FREE TEXT, 16	3030 016
JREAP/JTIDS FREE TEXT, 17	3030 017
JREAP/JTIDS FREE TEXT, 18	3030 018
JREAP/JTIDS FREE TEXT, 19	3030 019
JREAP/JTIDS FREE TEXT, 2	3030 002
JREAP/JTIDS FREE TEXT, 20	3030 020
JREAP/JTIDS FREE TEXT, 21	3030 021
JREAP/JTIDS FREE TEXT, 22	3030 022
JREAP/JTIDS FREE TEXT, 23	3030 023
JREAP/JTIDS FREE TEXT, 24	3030 024
JREAP/JTIDS FREE TEXT, 25	3030 025
JREAP/JTIDS FREE TEXT, 26	3030 026
JREAP/JTIDS FREE TEXT, 27	3030 027
JREAP/JTIDS FREE TEXT, 28	3030 028
JREAP/JTIDS FREE TEXT, 29	3030 029
JREAP/JTIDS FREE TEXT, 3	3030 003
JREAP/JTIDS FREE TEXT, 30	3030 030
JREAP/JTIDS FREE TEXT, 4	3030 004
JREAP/JTIDS FREE TEXT, 5	3030 005
JREAP/JTIDS FREE TEXT, 6	3030 006
JREAP/JTIDS FREE TEXT, 7	3030 007
JREAP/JTIDS FREE TEXT, 8	3030 008
JREAP/JTIDS FREE TEXT, 9	3030 009
JTIDS/MIDS PARTICIPATION GROUP	3040 001
KILL ZONE	3056 009
LABEL, J-SERIES	3037 001
LAST POINT FLAG	3002 007
LATITUDE, 0.0013 MINUTE	3010 015
LATITUDE, CENTER 0.0013 MINUTE	3010 018
LENGTH OF MESSAGE	3012 002
LIMITING LINE OF APPROACH	3057 012
LINK DESIGNATOR	3021 002
LINK DESIGNATOR TO FILTER	3021 001
LINK INTERFACE UNIT	3036 022
LONGITUDE, 0.0013 MINUTE	3011 015
LONGITUDE, CENTER 0.0013 MINUTE	3011 016
LOW LEVEL TRANSIT ROUTE	3054 007
LOWER ALTITUDE LIMIT	3042 001
LOWER ALTITUDE LIMIT FLAG	3002 013

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 7

DFI	DUI
DUI NAME	NO. NO.
MAJOR AXIS LENGTH	3013 001
MAJOR AXIS ORIENTATION	3043 001
MANAGEMENT MESSAGE LENGTH	3012 003
MANAGEMENT MESSAGE SUBTYPE	3008 002
MANAGEMENT VERSION	3044 001
MARSHALL POINT	3051 002
MAXIMUM LATENCY	3003 007
MESSAGE GROUP HEADER CRC	3039 001
MESSAGE GROUP HEADER TYPE	3007 002
MESSAGE SEQUENCE NUMBER	3032 001
MESSAGE TYPE	3008 001
MINE	3050 003
MINOR AXIS LENGTH	3013 002
MISSILE ENGAGEMENT ZONE	3056 004
MISSILE LAUNCH POINT	3050 007
MOVING HAVEN	3057 008
NAMED AREA OF INTEREST	3056 011
NAVIGATION	3050 002
NETWORK PARTICIPATION GROUP	3040 002
NETWORK PARTICIPATION GROUP	3032 005
MESSAGE SEQUENCE NUMBER	
NETWORK PARTICIPATION GROUP	3040 003
TO FILTER	
NO STATEMENT	3050 001
NO STATEMENT	3051 001
NO STATEMENT	3052 001
NO STATEMENT	3053 001
NO STATEMENT	3054 001
NO STATEMENT	3055 001
NO STATEMENT	3056 001
NO STATEMENT	3057 001
NOTACK AREA	3057 007
NUMBER ADDRESSES THIS	3017 002
DESIGNATOR	
NUMBER DESTINATION ADDRESSES	3017 001
NUMBER DESTINATION ADDRESSES,	3017 003
NON-ZERO	
NUMBER OF BLOCKS	3033 004
NUMBER OF DESIGNATORS	3018 001
SUPPORTED	

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 8

DFI	DUI
DUI NAME	NO. NO.
NUMBER OF J-WORDS	3033 005
OIL RIG	3050 010
ORBIT POINT	3053 013
ORBIT, FIGURE EIGHT	3053 011
ORBIT, RACE TRACK	3053 010
ORBIT, RANDOM CLOSED	3053 012
ORIGINATING J-SERIES JRE	3036 021
SENDER ID	
ORIGINATING J-SERIES MESSAGE	3032 004
SEQUENCE NUMBER	
ORIGINATING MESSAGE SEQUENCE	3032 002
NUMBER	
PERCENT EXCEEDING LATENCY	3000 001
PICKET	3052 003
POSITION AND INTENDED MOVEMENT	3051 005
(PIM)	
PT0, AMP10	3050 011
PT0, AMP11	3050 012
PT0, AMP12	3050 013
PT0, AMP13	3050 014
PT0, AMP14	3050 015
PT0, AMP15	3050 016
PT1, AMP10	3051 011
PT1, AMP12	3051 013
PT1, AMP13	3051 014
PT1, AMP14	3051 015
PT1, AMP15	3051 016
PT10, AMP0	3061 001
PT10, AMP1	3061 002
PT10, AMP10	3061 011
PT10, AMP11	3061 012
PT10, AMP12	3061 013
PT10, AMP13	3061 014
PT10, AMP14	3061 015
PT10, AMP15	3061 016
PT10, AMP2	3061 003
PT10, AMP3	3061 004
PT10, AMP4	3061 005
PT10, AMP5	3061 006
PT10, AMP6	3061 007

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 9

DFI	DUI
NO.	NO.
DUI NAME	
PT10, AMP7	3061 008
PT10, AMP8	3061 009
PT10, AMP9	3061 010
PT11, AMP0	3062 001
PT11, AMP1	3062 002
PT11, AMP10	3062 011
PT11, AMP11	3062 012
PT11, AMP12	3062 013
PT11, AMP13	3062 014
PT11, AMP14	3062 015
PT11, AMP15	3062 016
PT11, AMP2	3062 003
PT11, AMP3	3062 004
PT11, AMP4	3062 005
PT11, AMP5	3062 006
PT11, AMP6	3062 007
PT11, AMP7	3062 008
PT11, AMP8	3062 009
PT11, AMP9	3062 010
PT12, AMP0	3063 001
PT12, AMP1	3063 002
PT12, AMP10	3063 011
PT12, AMP11	3063 012
PT12, AMP12	3063 013
PT12, AMP13	3063 014
PT12, AMP14	3063 015
PT12, AMP15	3063 016
PT12, AMP2	3063 003
PT12, AMP3	3063 004
PT12, AMP4	3063 005
PT12, AMP5	3063 006
PT12, AMP6	3063 007
PT12, AMP7	3063 008
PT12, AMP8	3063 009
PT12, AMP9	3063 010
PT13, AMP0	3064 001
PT13, AMP1	3064 002
PT13, AMP10	3064 011
PT13, AMP11	3064 012
PT13, AMP12	3064 013

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 10

DFI DUI	
NO. NO.	DUI NAME
3064 014	PT13, AMP13
3064 015	PT13, AMP14
3064 016	PT13, AMP15
3064 003	PT13, AMP2
3064 004	PT13, AMP3
3064 005	PT13, AMP4
3064 006	PT13, AMP5
3064 007	PT13, AMP6
3064 008	PT13, AMP7
3064 009	PT13, AMP8
3064 010	PT13, AMP9
3065 001	PT14, AMP0
3065 002	PT14, AMP1
3065 011	PT14, AMP10
3065 012	PT14, AMP11
3065 013	PT14, AMP12
3065 014	PT14, AMP13
3065 015	PT14, AMP14
3065 016	PT14, AMP15
3065 003	PT14, AMP2
3065 004	PT14, AMP3
3065 005	PT14, AMP4
3065 006	PT14, AMP5
3065 007	PT14, AMP6
3065 008	PT14, AMP7
3065 009	PT14, AMP8
3065 010	PT14, AMP9
3066 001	PT15, AMP0
3066 002	PT15, AMP1
3066 011	PT15, AMP10
3066 012	PT15, AMP11
3066 013	PT15, AMP12
3066 014	PT15, AMP13
3066 015	PT15, AMP14
3066 016	PT15, AMP15
3066 003	PT15, AMP2
3066 004	PT15, AMP3
3066 005	PT15, AMP4
3066 006	PT15, AMP5
3066 007	PT15, AMP6

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 11

DFI	DUI
DUI NAME	NO. NO.
PT15, AMP7	3066 008
PT15, AMP8	3066 009
PT15, AMP9	3066 010
PT2, AMP10	3052 011
PT2, AMP11	3052 012
PT2, AMP12	3052 013
PT2, AMP13	3052 014
PT2, AMP14	3052 015
PT2, AMP15	3052 016
PT2, AMP4	3052 005
PT2, AMP7	3052 008
PT2, AMP8	3052 009
PT2, AMP9	3052 010
PT3, AMP13	3053 014
PT3, AMP14	3053 015
PT3, AMP15	3053 016
PT4, AMP10	3054 011
PT4, AMP11	3054 012
PT4, AMP12	3054 013
PT4, AMP13	3054 014
PT4, AMP14	3054 015
PT4, AMP15	3054 016
PT5, AMP10	3055 011
PT5, AMP11	3055 012
PT5, AMP12	3055 013
PT5, AMP13	3055 014
PT5, AMP14	3055 015
PT5, AMP15	3055 016
PT5, AMP8	3055 009
PT5, AMP9	3055 010
PT6, AMP11	3056 012
PT6, AMP12	3056 013
PT6, AMP13	3056 014
PT6, AMP14	3056 015
PT6, AMP15	3056 016
PT7, AMP14	3057 015
PT7, AMP15	3057 016
PT8, AMP10	3058 011
PT8, AMP11	3058 012
PT8, AMP12	3058 013

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 12	
DUI NAME	DFI DUI NO. NO.
PT8, AMP13	3058 014
PT8, AMP14	3058 015
PT8, AMP15	3058 016
PT8, AMP3	3058 004
PT8, AMP4	3058 005
PT8, AMP5	3058 006
PT8, AMP6	3058 007
PT8, AMP7	3058 008
PT8, AMP8	3058 009
PT8, AMP9	3058 010
PT9, AMP0	3059 001
PT9, AMP1	3059 002
PT9, AMP10	3059 011
PT9, AMP11	3059 012
PT9, AMP12	3059 013
PT9, AMP13	3059 014
PT9, AMP14	3059 015
PT9, AMP15	3059 016
PT9, AMP2	3059 003
PT9, AMP3	3059 004
PT9, AMP4	3059 005
PT9, AMP5	3059 006
PT9, AMP6	3059 007
PT9, AMP7	3059 008
PT9, AMP8	3059 009
PT9, AMP9	3059 010
RECTANGLE FLAG	3002 008
RELAY FLAG	3002 009
RENDEZVOUS	3052 004
REPLENISHMENT	3052 006
REPLENISHMENT	3053 006
REQUESTED FILTER MESSAGE TYPE	3008 004
RESCUE	3052 007
RESTRICTED	3055 003
RTIME, C	3004 002
RTIME, P	3005 002
RX JRE RECEIVE TIME (R2)	3003 008
RX JRE TRANSMIT TIME (T2)	3003 010
SEARCH	3055 002
SEARCH AREA	3051 008

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 13

DFI	DUI
DUI NAME	NO. NO.
SEARCH CENTER (ASW)	3057 004
SECONDARY TRACK NUMBER	3027 002
SHORAD	3056 008
SIMULATION INDICATOR FILTER	3002 010
FLAG	
SINKER	3057 002
SONOBUOY PATTERN REFERENCE	3057 011
POSITION	
SONOBUOY POSITION	3057 010
SOURCE LINK DESIGNATOR	3021 003
SOURCE TRACK NUMBER	3027 001
SPARE	3099 001
SPARE	3099 002
SPARE	3099 003
SPARE	3099 004
SPARE	3099 005
SPARE	3099 006
SPARE	3099 007
SPARE	3099 008
SPARE	3099 009
SPARE	3099 010
SPARE	3099 011
SPARE	3099 012
SPARE	3099 013
SPARE	3099 014
SPARE	3099 015
SPARE	3099 016
SPARE	3099 017
SPARE	3099 018
SPARE	3099 019
SPARE	3099 020
SPARE	3099 021
SPARE	3099 022
SPARE	3099 023
SPARE	3099 024
SPARE	3099 025
SPARE	3099 026
SPARE	3099 027
SPARE	3099 028
SPARE	3099 029

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 14

DFI	DUI
DUI NAME	NO. NO.
SPARE	3099 030
SPARE	3099 031
SPECIAL PROCESSING INDICATOR	3002 016
FILTER FLAG	
START OF TRANSMISSION FLAG, 1	3045 001
START OF TRANSMISSION FLAG, 2	3045 002
STRIKE INITIAL POINT (IP)	3053 007
SUB-SUBLABEL 0	3140 001
SUB-SUBLABEL 1	3140 002
SUB-SUBLABEL 10	3140 011
SUB-SUBLABEL 11	3140 012
SUB-SUBLABEL 12	3140 013
SUB-SUBLABEL 13	3140 014
SUB-SUBLABEL 14	3140 015
SUB-SUBLABEL 15	3140 016
SUB-SUBLABEL 16	3140 017
SUB-SUBLABEL 17	3140 018
SUB-SUBLABEL 18	3140 019
SUB-SUBLABEL 19	3140 020
SUB-SUBLABEL 2	3140 003
SUB-SUBLABEL 20	3140 021
SUB-SUBLABEL 21	3140 022
SUB-SUBLABEL 22	3140 023
SUB-SUBLABEL 23	3140 024
SUB-SUBLABEL 24	3140 025
SUB-SUBLABEL 25	3140 026
SUB-SUBLABEL 26	3140 027
SUB-SUBLABEL 27	3140 028
SUB-SUBLABEL 28	3140 029
SUB-SUBLABEL 29	3140 030
SUB-SUBLABEL 3	3140 004
SUB-SUBLABEL 30	3140 031
SUB-SUBLABEL 31	3140 032
SUB-SUBLABEL 4	3140 005
SUB-SUBLABEL 5	3140 006
SUB-SUBLABEL 6	3140 007
SUB-SUBLABEL 7	3140 008
SUB-SUBLABEL 8	3140 009
SUB-SUBLABEL 9	3140 010
SUBLABEL 0, 0	3100 001

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 15

DFI	DUI
DUI NAME	NO. NO.
SUBLABEL 0, 1	3101 001
SUBLABEL 0, 10	3110 001
SUBLABEL 0, 11	3111 001
SUBLABEL 0, 12	3112 001
SUBLABEL 0, 13	3113 001
SUBLABEL 0, 14	3114 001
SUBLABEL 0, 15	3115 001
SUBLABEL 0, 16	3116 001
SUBLABEL 0, 17	3117 001
SUBLABEL 0, 18	3118 001
SUBLABEL 0, 19	3119 001
SUBLABEL 0, 2	3102 001
SUBLABEL 0, 20	3120 001
SUBLABEL 0, 21	3121 001
SUBLABEL 0, 22	3122 001
SUBLABEL 0, 23	3123 001
SUBLABEL 0, 24	3124 001
SUBLABEL 0, 25	3125 001
SUBLABEL 0, 26	3126 001
SUBLABEL 0, 27	3127 001
SUBLABEL 0, 28	3128 001
SUBLABEL 0, 29	3129 001
SUBLABEL 0, 3	3103 001
SUBLABEL 0, 30	3130 001
SUBLABEL 0, 31	3131 001
SUBLABEL 0, 4	3104 001
SUBLABEL 0, 5	3105 001
SUBLABEL 0, 6	3106 001
SUBLABEL 0, 7	3107 001
SUBLABEL 0, 8	3108 001
SUBLABEL 0, 9	3109 001
SUBLABEL 1, 0	3100 002
SUBLABEL 1, 1	3101 002
SUBLABEL 1, 10	3110 002
SUBLABEL 1, 11	3111 002
SUBLABEL 1, 12	3112 002
SUBLABEL 1, 13	3113 002
SUBLABEL 1, 14	3114 002
SUBLABEL 1, 15	3115 002
SUBLABEL 1, 16	3116 002

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 16

DFI	DUI
DUI NAME	NO. NO.
SUBLABEL 1, 17	3117 002
SUBLABEL 1, 18	3118 002
SUBLABEL 1, 19	3119 002
SUBLABEL 1, 2	3102 002
SUBLABEL 1, 20	3120 002
SUBLABEL 1, 21	3121 002
SUBLABEL 1, 22	3122 002
SUBLABEL 1, 23	3123 002
SUBLABEL 1, 24	3124 002
SUBLABEL 1, 25	3125 002
SUBLABEL 1, 26	3126 002
SUBLABEL 1, 27	3127 002
SUBLABEL 1, 28	3128 002
SUBLABEL 1, 29	3129 002
SUBLABEL 1, 3	3103 002
SUBLABEL 1, 30	3130 002
SUBLABEL 1, 31	3131 002
SUBLABEL 1, 4	3104 002
SUBLABEL 1, 5	3105 002
SUBLABEL 1, 6	3106 002
SUBLABEL 1, 7	3107 002
SUBLABEL 1, 8	3108 002
SUBLABEL 1, 9	3109 002
SUBLABEL 2, 0	3100 003
SUBLABEL 2, 1	3101 003
SUBLABEL 2, 10	3110 003
SUBLABEL 2, 11	3111 003
SUBLABEL 2, 12	3112 003
SUBLABEL 2, 13	3113 003
SUBLABEL 2, 14	3114 003
SUBLABEL 2, 15	3115 003
SUBLABEL 2, 16	3116 003
SUBLABEL 2, 17	3117 003
SUBLABEL 2, 18	3118 003
SUBLABEL 2, 19	3119 003
SUBLABEL 2, 2	3102 003
SUBLABEL 2, 20	3120 003
SUBLABEL 2, 21	3121 003
SUBLABEL 2, 22	3122 003
SUBLABEL 2, 23	3123 003

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 17

DFI	DUI
DUI NAME	NO. NO.
SUBLABEL 2, 24	3124 003
SUBLABEL 2, 25	3125 003
SUBLABEL 2, 26	3126 003
SUBLABEL 2, 27	3127 003
SUBLABEL 2, 28	3128 003
SUBLABEL 2, 29	3129 003
SUBLABEL 2, 3	3103 003
SUBLABEL 2, 30	3130 003
SUBLABEL 2, 31	3131 003
SUBLABEL 2, 4	3104 003
SUBLABEL 2, 5	3105 003
SUBLABEL 2, 6	3106 003
SUBLABEL 2, 7	3107 003
SUBLABEL 2, 8	3108 003
SUBLABEL 2, 9	3109 003
SUBLABEL 3, 0	3100 004
SUBLABEL 3, 1	3101 004
SUBLABEL 3, 10	3110 004
SUBLABEL 3, 11	3111 004
SUBLABEL 3, 12	3112 004
SUBLABEL 3, 13	3113 004
SUBLABEL 3, 14	3114 004
SUBLABEL 3, 15	3115 004
SUBLABEL 3, 16	3116 004
SUBLABEL 3, 17	3117 004
SUBLABEL 3, 18	3118 004
SUBLABEL 3, 19	3119 004
SUBLABEL 3, 2	3102 004
SUBLABEL 3, 20	3120 004
SUBLABEL 3, 21	3121 004
SUBLABEL 3, 22	3122 004
SUBLABEL 3, 23	3123 004
SUBLABEL 3, 24	3124 004
SUBLABEL 3, 25	3125 004
SUBLABEL 3, 26	3126 004
SUBLABEL 3, 27	3127 004
SUBLABEL 3, 28	3128 004
SUBLABEL 3, 29	3129 004
SUBLABEL 3, 3	3103 004
SUBLABEL 3, 30	3130 004

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 18

DFI	DUI
NO.	NO.
DUI NAME	
SUBLABEL 3, 31	3131 004
SUBLABEL 3, 4	3104 004
SUBLABEL 3, 5	3105 004
SUBLABEL 3, 6	3106 004
SUBLABEL 3, 7	3107 004
SUBLABEL 3, 8	3108 004
SUBLABEL 3, 9	3109 004
SUBLABEL 4, 0	3100 005
SUBLABEL 4, 1	3101 005
SUBLABEL 4, 10	3110 005
SUBLABEL 4, 11	3111 005
SUBLABEL 4, 12	3112 005
SUBLABEL 4, 13	3113 005
SUBLABEL 4, 14	3114 005
SUBLABEL 4, 15	3115 005
SUBLABEL 4, 16	3116 005
SUBLABEL 4, 17	3117 005
SUBLABEL 4, 18	3118 005
SUBLABEL 4, 19	3119 005
SUBLABEL 4, 2	3102 005
SUBLABEL 4, 20	3120 005
SUBLABEL 4, 21	3121 005
SUBLABEL 4, 22	3122 005
SUBLABEL 4, 23	3123 005
SUBLABEL 4, 24	3124 005
SUBLABEL 4, 25	3125 005
SUBLABEL 4, 26	3126 005
SUBLABEL 4, 27	3127 005
SUBLABEL 4, 28	3128 005
SUBLABEL 4, 29	3129 005
SUBLABEL 4, 3	3103 005
SUBLABEL 4, 30	3130 005
SUBLABEL 4, 31	3131 005
SUBLABEL 4, 4	3104 005
SUBLABEL 4, 5	3105 005
SUBLABEL 4, 6	3106 005
SUBLABEL 4, 7	3107 005
SUBLABEL 4, 8	3108 005
SUBLABEL 4, 9	3109 005
SUBLABEL 5, 0	3100 006

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 19

DFI	DUI
DUI NAME	NO. NO.
SUBLABEL 5, 1	3101 006
SUBLABEL 5, 10	3110 006
SUBLABEL 5, 11	3111 006
SUBLABEL 5, 12	3112 006
SUBLABEL 5, 13	3113 006
SUBLABEL 5, 14	3114 006
SUBLABEL 5, 15	3115 006
SUBLABEL 5, 16	3116 006
SUBLABEL 5, 17	3117 006
SUBLABEL 5, 18	3118 006
SUBLABEL 5, 19	3119 006
SUBLABEL 5, 2	3102 006
SUBLABEL 5, 20	3120 006
SUBLABEL 5, 21	3121 006
SUBLABEL 5, 22	3122 006
SUBLABEL 5, 23	3123 006
SUBLABEL 5, 24	3124 006
SUBLABEL 5, 25	3125 006
SUBLABEL 5, 26	3126 006
SUBLABEL 5, 27	3127 006
SUBLABEL 5, 28	3128 006
SUBLABEL 5, 29	3129 006
SUBLABEL 5, 3	3103 006
SUBLABEL 5, 30	3130 006
SUBLABEL 5, 31	3131 006
SUBLABEL 5, 4	3104 006
SUBLABEL 5, 5	3105 006
SUBLABEL 5, 6	3106 006
SUBLABEL 5, 7	3107 006
SUBLABEL 5, 8	3108 006
SUBLABEL 5, 9	3109 006
SUBLABEL 6, 0	3100 007
SUBLABEL 6, 1	3101 007
SUBLABEL 6, 10	3110 007
SUBLABEL 6, 11	3111 007
SUBLABEL 6, 12	3112 007
SUBLABEL 6, 13	3113 007
SUBLABEL 6, 14	3114 007
SUBLABEL 6, 15	3115 007
SUBLABEL 6, 16	3116 007

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 20

DFI	DUI
DUI NAME	NO. NO.
SUBLABEL 6, 17	3117 007
SUBLABEL 6, 18	3118 007
SUBLABEL 6, 19	3119 007
SUBLABEL 6, 2	3102 007
SUBLABEL 6, 20	3120 007
SUBLABEL 6, 21	3121 007
SUBLABEL 6, 22	3122 007
SUBLABEL 6, 23	3123 007
SUBLABEL 6, 24	3124 007
SUBLABEL 6, 25	3125 007
SUBLABEL 6, 26	3126 007
SUBLABEL 6, 27	3127 007
SUBLABEL 6, 28	3128 007
SUBLABEL 6, 29	3129 007
SUBLABEL 6, 3	3103 007
SUBLABEL 6, 30	3130 007
SUBLABEL 6, 31	3131 007
SUBLABEL 6, 4	3104 007
SUBLABEL 6, 5	3105 007
SUBLABEL 6, 6	3106 007
SUBLABEL 6, 7	3107 007
SUBLABEL 6, 8	3108 007
SUBLABEL 6, 9	3109 007
SUBLABEL 7, 0	3100 008
SUBLABEL 7, 1	3101 008
SUBLABEL 7, 10	3110 008
SUBLABEL 7, 11	3111 008
SUBLABEL 7, 12	3112 008
SUBLABEL 7, 13	3113 008
SUBLABEL 7, 14	3114 008
SUBLABEL 7, 15	3115 008
SUBLABEL 7, 16	3116 008
SUBLABEL 7, 17	3117 008
SUBLABEL 7, 18	3118 008
SUBLABEL 7, 19	3119 008
SUBLABEL 7, 2	3102 008
SUBLABEL 7, 20	3120 008
SUBLABEL 7, 21	3121 008
SUBLABEL 7, 22	3122 008
SUBLABEL 7, 23	3123 008

TABLE D-3. ALPHABETICAL LIST OF DATA USE IDENTIFIERS (DUIS)

SHEET 21

DUI NAME	DFI NO.	DUI NO.
SUBLABEL 7, 24	3124	008
SUBLABEL 7, 25	3125	008
SUBLABEL 7, 26	3126	008
SUBLABEL 7, 27	3127	008
SUBLABEL 7, 28	3128	008
SUBLABEL 7, 29	3129	008
SUBLABEL 7, 3	3103	008
SUBLABEL 7, 30	3130	008
SUBLABEL 7, 31	3131	008
SUBLABEL 7, 4	3104	008
SUBLABEL 7, 5	3105	008
SUBLABEL 7, 6	3106	008
SUBLABEL 7, 7	3107	008
SUBLABEL 7, 8	3108	008
SUBLABEL 7, 9	3109	008
SUBLABEL, J-SERIES	3038	001
SUBMARINE PATROL AREA	3055	005
SUBMARINE POSITION AND INTENDED MOVEMENT (SIM)	3051	010
TACAN	3053	008
TACTICAL ACTION LINE	3054	008
TANKER	3053	009
TARGET AREA OF INTEREST	3056	010
TIME ACCURACY	3003	011
TIME ACCURACY (R2)	3003	014
TIME ACCURACY (T1)	3003	015
TIME ACCURACY (T2)	3003	016
TOMCAT	3052	002
TOTAL NUMBER FRAGMENTS	3033	003
TOTAL NUMBER OF ACTIVE DESIGNATORS	3018	002
TRANSMISSION BLOCK HEADER CRC	3039	002
TRANSMISSION BLOCK HEADER LENGTH	3014	001
TRANSMISSION BLOCK HEADER LENGTH, 1	3014	002
TRANSMISSION BLOCK HEADER LENGTH, 2	3014	003

DUI NAME	DFI NO.	DUI NO.
TRANSMISSION BLOCK HEADER LENGTH, 3	3014	004
TRANSMISSION BLOCK HEADER TYPE	3007	001
TRANSMISSION SEQUENCE LIST COUNT	3001	002
TRANSMISSION SEQUENCE NUMBER	3001	001
TRANSMISSION TIME REFERENCE FLAG	3002	011
TRANSMIT LINK DESIGNATOR	3021	004
TRANSPORT DATA WORD COUNT, 1	3016	003
TRANSPORT DATA WORD COUNT, 2	3016	004
TRANSPORT DATA WORD COUNT, 3	3016	005
TX JRE TRANSMIT TIME (T1)	3003	009
TYPE FILTER	3002	017
UNDEFINED	3080	001
UNDEFINED	3080	002
UNDEFINED	3081	001
UNDEFINED	3081	002
UNDEFINED	3082	001
UNDEFINED	3082	002
UNDEFINED	3083	001
UNDEFINED	3083	002
UNDEFINED	3084	001
UNDEFINED	3084	002
UNDEFINED	3085	001
UNDEFINED	3085	002
UNDEFINED	3086	001
UNDEFINED	3086	002
UNDEFINED	3087	001
UNDEFINED	3087	002
UNDEFINED	3087	007
UNDEFINED	3087	008
UPPER ALTITUDE LIMIT	3042	002
UPPER ALTITUDE LIMIT FLAG	3002	012
UTC, C	3004	005
UTC, P	3005	005
VICTOR LIMA (VL)	3051	009
WAYPOINT	3051	003

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 1

DFI	DUI
NO.	NO.
DUI NAME	
PERCENT EXCEEDING LATENCY	3000 001
TRANSMISSION SEQUENCE NUMBER	3001 001
TRANSMISSION SEQUENCE LIST	3001 002
COUNT	
ADD/DELETE INDICATOR	3002 001
ACTIVE/INACTIVE FLAG	3002 002
ACKNOWLEDGEMENT REQUEST FLAG	3002 003
COMMAND AND CONTROL INDICATOR	3002 004
OVERRIDE	
EMERGENCY INDICATOR OVERRIDE	3002 005
FORCE TELL INDICATOR OVERRIDE	3002 006
LAST POINT FLAG	3002 007
RECTANGLE FLAG	3002 008
RELAY FLAG	3002 009
SIMULATION INDICATOR FILTER	3002 010
FLAG	
TRANSMISSION TIME REFERENCE	3002 011
FLAG	
UPPER ALTITUDE LIMIT FLAG	3002 012
LOWER ALTITUDE LIMIT FLAG	3002 013
J28.2(0) FILTER FLAG	3002 014
J28.2(X) FILTER FLAG	3002 015
SPECIAL PROCESSING INDICATOR	3002 016
FILTER FLAG	
TYPE FILTER	3002 017
GEOGRAPHIC FILTER	3002 018
ALL FILTERS	3002 019
ALTERNATE NETWORK CONTROLLER	3002 020
ASSIGNMENT FLAG	
ALTERNATE NETWORK CONTROLLER	3002 021
ASSIGNMENT RECOGNITION	
AGE LIMIT VALUE	3003 001
AVERAGE RECEIVED DATA MEDIA	3003 002
LATENCY	
DATA AGE	3003 003
DATA VALID TIME	3003 004
EVENT TIME ACCURACY	3003 005
MAXIMUM LATENCY	3003 007
RX JRE RECEIVE TIME (R2)	3003 008

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 2

DFI	DUI
NO.	NO.
DUI NAME	
TX JRE TRANSMIT TIME (T1)	3003 009
RX JRE TRANSMIT TIME (T2)	3003 010
TIME ACCURACY	3003 011
EVENT TIME	3003 012
INTERVAL TIME	3003 013
TIME ACCURACY (R2)	3003 014
TIME ACCURACY (T1)	3003 015
TIME ACCURACY (T2)	3003 016
JRE NC, C	3004 001
RTIME, C	3004 002
FIXED DELAY, C	3004 003
EVENT STROBE, C	3004 004
UTC, C	3004 005
JRE NC, P	3005 001
RTIME, P	3005 002
FIXED DELAY, P	3005 003
EVENT STROBE, P	3005 004
UTC, P	3005 005
ACKNOWLEDGEMENT PROTOCOL, 1	3006 001
ACKNOWLEDGEMENT PROTOCOL, 2	3006 002
ACKNOWLEDGEMENT PROTOCOL, 3	3006 003
ACKNOWLEDGEMENT PROTOCOL, 4	3006 004
ACKNOWLEDGEMENT PROTOCOL, 5	3006 005
TRANSMISSION BLOCK HEADER TYPE	3007 001
MESSAGE GROUP HEADER TYPE	3007 002
HEADER TYPE	3007 003
MESSAGE TYPE	3008 001
MANAGEMENT MESSAGE SUBTYPE	3008 002
FILTER MESSAGE TYPE	3008 003
REQUESTED FILTER MESSAGE TYPE	3008 004
GEO FILTER SUBTYPE	3009 001
LATITUDE, 0.0013 MINUTE	3010 015
LATITUDE, CENTER 0.0013 MINUTE	3010 018
LONGITUDE, 0.0013 MINUTE	3011 015
LONGITUDE, CENTER 0.0013 MINUTE	3011 016
APPLICATION BLOCK MESSAGE	3012 001
LENGTH	
LENGTH OF MESSAGE	3012 002

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 3

DFI	DUI
NO.	NO.
DUI NAME	
MANAGEMENT MESSAGE LENGTH	3012 003
MAJOR AXIS LENGTH	3013 001
MINOR AXIS LENGTH	3013 002
TRANSMISSION BLOCK HEADER LENGTH	3014 001
TRANSMISSION BLOCK HEADER LENGTH, 1	3014 002
TRANSMISSION BLOCK HEADER LENGTH, 2	3014 003
TRANSMISSION BLOCK HEADER LENGTH, 3	3014 004
CURRENT ERROR RATE	3015 001
JRE-NP ERROR RATE	3015 002
JRE-NC ERROR RATE	3015 017
ERROR RATE, CURRENT	3015 018
APPLICATION DATA	3016 001
DATA WORDS	3016 002
TRANSPORT DATA WORD COUNT, 1	3016 003
TRANSPORT DATA WORD COUNT, 2	3016 004
TRANSPORT DATA WORD COUNT, 3	3016 005
NUMBER DESTINATION ADDRESSES	3017 001
NUMBER ADDRESSES THIS DESIGNATOR	3017 002
NUMBER DESTINATION ADDRESSES, NON-ZERO	3017 003
NUMBER OF DESIGNATORS SUPPORTED	3018 001
TOTAL NUMBER OF ACTIVE DESIGNATORS	3018 002
CONNECTIVITY MATRIX BIT	3019 001
CONTROL/RESPONSE INDICATOR, 1	3020 001
CONTROL/RESPONSE INDICATOR, 2	3020 002
CONTROL/RESPONSE INDICATOR, 3	3020 003
CONTROL/RESPONSE INDICATOR, 4	3020 004
CONTROL/RESPONSE INDICATOR, 5	3020 005
CONTROL/RESPONSE INDICATOR, 6	3020 006
CONTROL/RESPONSE INDICATOR, 7	3020 007
CONTROL/RESPONSE INDICATOR, 8	3020 008
CONTROL/RESPONSE INDICATOR, 9	3020 009

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 4

DFI	DUI
NO.	NO.
DUI NAME	
CONTROL/RESPONSE INDICATOR, 10	3020 010
CONTROL/RESPONSE INDICATOR, 11	3020 011
CONTROL/RESPONSE INDICATOR, 12	3020 012
CONTROL/RESPONSE INDICATOR, 13	3020 013
CONTROL/RESPONSE INDICATOR	3020 014
LINK DESIGNATOR TO FILTER	3021 001
LINK DESIGNATOR	3021 002
SOURCE LINK DESIGNATOR	3021 003
TRANSMIT LINK DESIGNATOR	3021 004
EVENT TYPE	3022 001
APPLICATION PROTOCOL VERSION	3023 001
ASCII	3024 001
CONTROLLER MODE NP	3025 001
CONTROLLER MODE NC	3025 002
SOURCE TRACK NUMBER	3027 001
SECONDARY TRACK NUMBER	3027 002
JRE SOURCE TRACK NUMBER	3027 003
JREAP J-SERIES MESSAGE WORD, 1	3028 001
JREAP J-SERIES MESSAGE WORD, 2	3028 002
JREAP J-SERIES MESSAGE WORD, 3	3028 003
JREAP J-SERIES MESSAGE WORD, 4	3028 004
JREAP J-SERIES MESSAGE WORD, 5	3028 005
COMPLETION TIMEOUT	3029 001
JREAP/JTIDS FREE TEXT, 1	3030 001
JREAP/JTIDS FREE TEXT, 2	3030 002
JREAP/JTIDS FREE TEXT, 3	3030 003
JREAP/JTIDS FREE TEXT, 4	3030 004
JREAP/JTIDS FREE TEXT, 5	3030 005
JREAP/JTIDS FREE TEXT, 6	3030 006
JREAP/JTIDS FREE TEXT, 7	3030 007
JREAP/JTIDS FREE TEXT, 8	3030 008
JREAP/JTIDS FREE TEXT, 9	3030 009
JREAP/JTIDS FREE TEXT, 10	3030 010
JREAP/JTIDS FREE TEXT, 11	3030 011
JREAP/JTIDS FREE TEXT, 12	3030 012
JREAP/JTIDS FREE TEXT, 13	3030 013
JREAP/JTIDS FREE TEXT, 14	3030 014
JREAP/JTIDS FREE TEXT, 15	3030 015
JREAP/JTIDS FREE TEXT, 16	3030 016

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 5

DFI	DUI
NO.	NO.
DUI NAME	
JREAP/JTIDS FREE TEXT, 17	3030 017
JREAP/JTIDS FREE TEXT, 18	3030 018
JREAP/JTIDS FREE TEXT, 19	3030 019
JREAP/JTIDS FREE TEXT, 20	3030 020
JREAP/JTIDS FREE TEXT, 21	3030 021
JREAP/JTIDS FREE TEXT, 22	3030 022
JREAP/JTIDS FREE TEXT, 23	3030 023
JREAP/JTIDS FREE TEXT, 24	3030 024
JREAP/JTIDS FREE TEXT, 25	3030 025
JREAP/JTIDS FREE TEXT, 26	3030 026
JREAP/JTIDS FREE TEXT, 27	3030 027
JREAP/JTIDS FREE TEXT, 28	3030 028
JREAP/JTIDS FREE TEXT, 29	3030 029
JREAP/JTIDS FREE TEXT, 30	3030 030
GEOGRAPHIC FILTER INDEX	3031 001
MESSAGE SEQUENCE NUMBER	3032 001
ORIGINATING MESSAGE SEQUENCE NUMBER	3032 002
J-SERIES MESSAGE SEQUENCE NUMBER	3032 003
ORIGINATING J-SERIES MESSAGE SEQUENCE NUMBER	3032 004
NETWORK PARTICIPATION GROUP MESSAGE SEQUENCE NUMBER	3032 005
COUNT	3033 001
FRAGMENT NUMBER	3033 002
TOTAL NUMBER FRAGMENTS	3033 003
NUMBER OF BLOCKS	3033 004
NUMBER OF J-WORDS	3033 005
ERROR CODE, 1	3034 001
ERROR CODE, 2	3034 002
ERROR CODE, 3	3034 003
ERROR CODE, 4	3034 004
ERROR CODE, 5	3034 005
ERROR CODE, 6	3034 006
ERROR CODE, 7	3034 007
JRE-NP TRANSMIT LIMIT	3035 001
JRE SENDER ID	3036 001
JRE SENDER ID, 1	3036 002

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 6

DFI	DUI
NO.	NO.
DUI NAME	
JRE SENDER ID, 2	3036 003
JRE SENDER ID, 3	3036 004
JRE NETWORK PARTICIPANT	3036 005
DESTINATION ADDRESS	3036 020
ORIGINATING J-SERIES JRE SENDER ID	3036 021
LINK INTERFACE UNIT	3036 022
LABEL, J-SERIES	3037 001
SUBLABEL, J-SERIES	3038 001
MESSAGE GROUP HEADER CRC	3039 001
TRANSMISSION BLOCK HEADER CRC	3039 002
JTIDS/MIDS PARTICIPATION GROUP	3040 001
NETWORK PARTICIPATION GROUP	3040 002
NETWORK PARTICIPATION GROUP TO FILTER	3040 003
LOWER ALTITUDE LIMIT	3042 001
UPPER ALTITUDE LIMIT	3042 002
MAJOR AXIS ORIENTATION	3043 001
MANAGEMENT VERSION	3044 001
START OF TRANSMISSION FLAG, 1	3045 001
START OF TRANSMISSION FLAG, 2	3045 002
NO STATEMENT	3050 001
NAVIGATION	3050 002
MINE	3050 003
IMPACT POINT	3050 004
GROUND ZERO	3050 005
AIM/WEAPON ENTRY POINT	3050 006
MISSILE LAUNCH POINT	3050 007
ELECTRONIC ATTACK (EA) DECOY	3050 008
ENGAGEMENT POINT	3050 009
OIL RIG	3050 010
PT0, AMP10	3050 011
PT0, AMP11	3050 012
PT0, AMP12	3050 013
PT0, AMP13	3050 014
PT0, AMP14	3050 015
PT0, AMP15	3050 016
NO STATEMENT	3051 001
MARSHALL POINT	3051 002

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 7

DFI NO.	DUI NO.	DUI NAME
3051	003	WAYPOINT
3051	004	CORRIDOR TAB
3051	005	POSITION AND INTENDED MOVEMENT (PIM)
3051	006	DISPOSITION CENTER
3051	007	FORMATION CENTER
3051	008	SEARCH AREA
3051	009	VICTOR LIMA (VL)
3051	010	SUBMARINE POSITION AND INTENDED MOVEMENT (SIM)
3051	011	PT1, AMP10
3051	012	DEFENDED ASSET
3051	013	PT1, AMP12
3051	014	PT1, AMP13
3051	015	PT1, AMP14
3051	016	PT1, AMP15
3052	001	NO STATEMENT
3052	002	TOMCAT
3052	003	PICKET
3052	004	RENDEZVOUS
3052	005	PT2, AMP4
3052	006	REPLENISHMENT
3052	007	RESCUE
3052	008	PT2, AMP7
3052	009	PT2, AMP8
3052	010	PT2, AMP9
3052	011	PT2, AMP10
3052	012	PT2, AMP11
3052	013	PT2, AMP12
3052	014	PT2, AMP13
3052	015	PT2, AMP14
3052	016	PT2, AMP15
3053	001	NO STATEMENT
3053	002	COMBAT AIR PATROL (CAP)
3053	003	AIRBORNE EARLY WARNING (AEW)
3053	004	ANTISUBMARINE WARFARE (ASW) FIXED WING
3053	005	ANTISUBMARINE WARFARE (ASW) HELICOPTER (HELO)

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 8

DFI	DUI
NO.	NO.
DUI NAME	
REPLENISHMENT	3053 006
STRIKE INITIAL POINT (IP)	3053 007
TACAN	3053 008
TANKER	3053 009
ORBIT, RACE TRACK	3053 010
ORBIT, FIGURE EIGHT	3053 011
ORBIT, RANDOM CLOSED	3053 012
ORBIT POINT	3053 013
PT3, AMP13	3053 014
PT3, AMP14	3053 015
PT3, AMP15	3053 016
NO STATEMENT	3054 001
FORWARD EDGE OF THE BATTLE AREA (FEBA)	3054 002
GUN TARGET LINE	3054 003
CORRIDOR	3054 004
HOSTILE BOUNDARY	3054 005
BUFFER ZONE BOUNDARY	3054 006
LOW LEVEL TRANSIT ROUTE	3054 007
TACTICAL ACTION LINE	3054 008
FIRE SUPPORT COORDINATION LINE (FSCL)	3054 009
FORWARD LINE OF OWN TROOPS (FLOT)	3054 010
PT4, AMP10	3054 011
PT4, AMP11	3054 012
PT4, AMP12	3054 013
PT4, AMP13	3054 014
PT4, AMP14	3054 015
PT4, AMP15	3054 016
NO STATEMENT	3055 001
SEARCH	3055 002
RESTRICTED	3055 003
EXERCISE	3055 004
SUBMARINE PATROL AREA	3055 005
FIGHTER ENGAGEMENT ZONE/ FIGHTER AOR	3055 006
GROUND AREA OF RESPONSIBILITY	3055 007
DEFENDED AREA	3055 008

SHEET 9

DUI NAME	DFI NO.	DUI NO.
PT5, AMP8	3055	009
PT5, AMP9	3055	010
PT5, AMP10	3055	011
PT5, AMP11	3055	012
PT5, AMP12	3055	013
PT5, AMP13	3055	014
PT5, AMP14	3055	015
PT5, AMP15	3055	016
NO STATEMENT	3056	001
DANGER	3056	002
CONTAMINATED	3056	003
MISSILE ENGAGEMENT ZONE	3056	004
DISUSED	3056	005
HOSTILE WEAPON ZONE	3056	006
HOSTILE TACTICAL ZONE	3056	007
SHORAD	3056	008
KILL ZONE	3056	009
TARGET AREA OF INTEREST	3056	010
NAMED AREA OF INTEREST	3056	011
PT6, AMP11	3056	012
PT6, AMP12	3056	013
PT6, AMP13	3056	014
PT6, AMP14	3056	015
PT6, AMP15	3056	016
NO STATEMENT	3057	001
SINKER	3057	002
BRIEF CONTACT	3057	003
SEARCH CENTER (ASW)	3057	004
ESTIMATED POSITION (EP)	3057	005
FIX (ASW)	3057	006
NOTACK AREA	3057	007
MOVING HAVEN	3057	008
DISUSED	3057	009
SONOBUOY POSITION	3057	010
SONOBUOY PATTERN REFERENCE POSITION	3057	011
LIMITING LINE OF APPROACH	3057	012
AREA OF PROBABILITY (ASW)	3057	013

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 10

DFI	DUI
NO.	NO.
FRIENDLY WEAPON DANGER AREA (FWDA)	3057 014
PT7, AMP14	3057 015
PT7, AMP15	3057 016
CHARTED WRECK	3058 001
BOTTOMED NONSUBMARINE	3058 002
ASW STATION	3058 003
PT8, AMP3	3058 004
PT8, AMP4	3058 005
PT8, AMP5	3058 006
PT8, AMP6	3058 007
PT8, AMP7	3058 008
PT8, AMP8	3058 009
PT8, AMP9	3058 010
PT8, AMP10	3058 011
PT8, AMP11	3058 012
PT8, AMP12	3058 013
PT8, AMP13	3058 014
PT8, AMP14	3058 015
PT8, AMP15	3058 016
PT9, AMP0	3059 001
PT9, AMP1	3059 002
PT9, AMP2	3059 003
PT9, AMP3	3059 004
PT9, AMP4	3059 005
PT9, AMP5	3059 006
PT9, AMP6	3059 007
PT9, AMP7	3059 008
PT9, AMP8	3059 009
PT9, AMP9	3059 010
PT9, AMP10	3059 011
PT9, AMP11	3059 012
PT9, AMP12	3059 013
PT9, AMP13	3059 014
PT9, AMP14	3059 015
PT9, AMP15	3059 016
DISUED (DIS)	3060 001
DISUED (DIS)	3060 002
FILTER ROCKET (DI 1)	3060 003

DUI	NAME	DFI NO.	DUI NO.
PT10,	AMP0	3061	001
PT10,	AMP1	3061	002
PT10,	AMP2	3061	003
PT10,	AMP3	3061	004
PT10,	AMP4	3061	005
PT10,	AMP5	3061	006
PT10,	AMP6	3061	007
PT10,	AMP7	3061	008
PT10,	AMP8	3061	009
PT10,	AMP9	3061	010
PT10,	AMP10	3061	011
PT10,	AMP11	3061	012
PT10,	AMP12	3061	013
PT10,	AMP13	3061	014
PT10,	AMP14	3061	015
PT10,	AMP15	3061	016
PT11,	AMP0	3062	001
PT11,	AMP1	3062	002
PT11,	AMP2	3062	003
PT11,	AMP3	3062	004
PT11,	AMP4	3062	005
PT11,	AMP5	3062	006
PT11,	AMP6	3062	007
PT11,	AMP7	3062	008
PT11,	AMP8	3062	009
PT11,	AMP9	3062	010
PT11,	AMP10	3062	011
PT11,	AMP11	3062	012
PT11,	AMP12	3062	013
PT11,	AMP13	3062	014
PT11,	AMP14	3062	015
PT11,	AMP15	3062	016
PT12,	AMP0	3063	001
PT12,	AMP1	3063	002
PT12,	AMP2	3063	003
PT12,	AMP3	3063	004
PT12,	AMP4	3063	005
PT12,	AMP5	3063	006
PT12,	AMP6	3063	007

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 12

DFI	DUI
NO.	NO.
DUI NAME	
PT12, AMP7	3063 008
PT12, AMP8	3063 009
PT12, AMP9	3063 010
PT12, AMP10	3063 011
PT12, AMP11	3063 012
PT12, AMP12	3063 013
PT12, AMP13	3063 014
PT12, AMP14	3063 015
PT12, AMP15	3063 016
PT13, AMP0	3064 001
PT13, AMP1	3064 002
PT13, AMP2	3064 003
PT13, AMP3	3064 004
PT13, AMP4	3064 005
PT13, AMP5	3064 006
PT13, AMP6	3064 007
PT13, AMP7	3064 008
PT13, AMP8	3064 009
PT13, AMP9	3064 010
PT13, AMP10	3064 011
PT13, AMP11	3064 012
PT13, AMP12	3064 013
PT13, AMP13	3064 014
PT13, AMP14	3064 015
PT13, AMP15	3064 016
PT14, AMP0	3065 001
PT14, AMP1	3065 002
PT14, AMP2	3065 003
PT14, AMP3	3065 004
PT14, AMP4	3065 005
PT14, AMP5	3065 006
PT14, AMP6	3065 007
PT14, AMP7	3065 008
PT14, AMP8	3065 009
PT14, AMP9	3065 010
PT14, AMP10	3065 011
PT14, AMP11	3065 012
PT14, AMP12	3065 013
PT14, AMP13	3065 014

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 13

DFI	DUI
NO.	NO.
DUI NAME	
PT14, AMP14	3065 015
PT14, AMP15	3065 016
PT15, AMP0	3066 001
PT15, AMP1	3066 002
PT15, AMP2	3066 003
PT15, AMP3	3066 004
PT15, AMP4	3066 005
PT15, AMP5	3066 006
PT15, AMP6	3066 007
PT15, AMP7	3066 008
PT15, AMP8	3066 009
PT15, AMP9	3066 010
PT15, AMP10	3066 011
PT15, AMP11	3066 012
PT15, AMP12	3066 013
PT15, AMP13	3066 014
PT15, AMP14	3066 015
PT15, AMP15	3066 016
UNDEFINED	3080 001
UNDEFINED	3080 002
J3.2 AIR, 0	3080 003
J3.3 SURFACE, 0	3080 004
J3.4 AND J5.4 SUBSURFACE, 0	3080 005
J3.5 LAND/GROUND, 0	3080 006
J3.6 SPACE, 0	3080 007
J3.7 AND J14.0 EW PRODUCT INFORMATION, 0	3080 008
UNDEFINED	3081 001
UNDEFINED	3081 002
J3.2 AIR, 1	3081 003
J3.3 SURFACE, 1	3081 004
J3.4 AND J5.4 SUBSURFACE, 1	3081 005
J3.5 LAND/GROUND, 1	3081 006
J3.6 SPACE, 1	3081 007
J3.7 AND J14.0 EW PRODUCT INFORMATION, 1	3081 008
UNDEFINED	3082 001
UNDEFINED	3082 002
J3.2 AIR, 2	3082 003

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 14

DFI	DUI
NO.	NO.
J3.3 SURFACE, 2	3082 004
J3.4 AND J5.4 SUBSURFACE, 2	3082 005
J3.5 LAND/GROUND, 2	3082 006
J3.6 SPACE, 2	3082 007
J3.7 AND J14.0 EW PRODUCT INFORMATION, 2	3082 008
UNDEFINED	3083 001
UNDEFINED	3083 002
J3.2 AIR, 3	3083 003
J3.3 SURFACE, 3	3083 004
J3.4 AND J5.4 SUBSURFACE, 3	3083 005
J3.5 LAND/GROUND, 3	3083 006
J3.6 SPACE, 3	3083 007
J3.7 AND J14.0 EW PRODUCT INFORMATION, 3	3083 008
UNDEFINED	3084 001
UNDEFINED	3084 002
J3.2 AIR, 4	3084 003
J3.3 SURFACE, 4	3084 004
J3.4 AND J5.4 SUBSURFACE, 4	3084 005
J3.5 LAND/GROUND, 4	3084 006
J3.6 SPACE, 4	3084 007
J3.7 AND J14.0 EW PRODUCT INFORMATION, 4	3084 008
UNDEFINED	3085 001
UNDEFINED	3085 002
J3.2 AIR, 5	3085 003
J3.3 SURFACE, 5	3085 004
J3.4 AND J5.4 SUBSURFACE, 5	3085 005
J3.5 LAND/GROUND, 5	3085 006
J3.6 SPACE, 5	3085 007
J3.7 AND J14.0 EW PRODUCT INFORMATION, 5	3085 008
UNDEFINED	3086 001
UNDEFINED	3086 002
J3.2 AIR, 6	3086 003
J3.3 SURFACE, 6	3086 004
J3.4 AND J5.4 SUBSURFACE, 6	3086 005
J3.5 LAND/GROUND, 6	3086 006

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 15

DFI	DUI
NO.	NO.
DUI NAME	
J3.6 SPACE, 6	3086 007
J3.7 AND J14.0 EW PRODUCT INFORMATION, 6	3086 008
UNDEFINED	3087 001
UNDEFINED	3087 002
J2.2 AND J2.0 AIR	3087 003
J2.3 AND J2.0 SURFACE	3087 004
J2.4 AND J2.0 SUBSURFACE	3087 005
J2.5, J2.6 AND J2.0 LAND	3087 006
UNDEFINED	3087 007
UNDEFINED	3087 008
SPARE	3099 001
SPARE	3099 002
SPARE	3099 003
SPARE	3099 004
SPARE	3099 005
SPARE	3099 006
SPARE	3099 007
SPARE	3099 008
SPARE	3099 009
SPARE	3099 010
SPARE	3099 011
SPARE	3099 012
SPARE	3099 013
SPARE	3099 014
SPARE	3099 015
SPARE	3099 016
SPARE	3099 017
SPARE	3099 018
SPARE	3099 019
SPARE	3099 020
SPARE	3099 021
SPARE	3099 022
SPARE	3099 023
SPARE	3099 024
SPARE	3099 025
SPARE	3099 026
SPARE	3099 027
SPARE	3099 028

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 16

DFI	DUI
NO.	NO.
DUI NAME	
SPARE	3099 029
SPARE	3099 030
SPARE	3099 031
SUBLABEL 0, 0	3100 001
SUBLABEL 1, 0	3100 002
SUBLABEL 2, 0	3100 003
SUBLABEL 3, 0	3100 004
SUBLABEL 4, 0	3100 005
SUBLABEL 5, 0	3100 006
SUBLABEL 6, 0	3100 007
SUBLABEL 7, 0	3100 008
SUBLABEL 0, 1	3101 001
SUBLABEL 1, 1	3101 002
SUBLABEL 2, 1	3101 003
SUBLABEL 3, 1	3101 004
SUBLABEL 4, 1	3101 005
SUBLABEL 5, 1	3101 006
SUBLABEL 6, 1	3101 007
SUBLABEL 7, 1	3101 008
SUBLABEL 0, 2	3102 001
SUBLABEL 1, 2	3102 002
SUBLABEL 2, 2	3102 003
SUBLABEL 3, 2	3102 004
SUBLABEL 4, 2	3102 005
SUBLABEL 5, 2	3102 006
SUBLABEL 6, 2	3102 007
SUBLABEL 7, 2	3102 008
SUBLABEL 0, 3	3103 001
SUBLABEL 1, 3	3103 002
SUBLABEL 2, 3	3103 003
SUBLABEL 3, 3	3103 004
SUBLABEL 4, 3	3103 005
SUBLABEL 5, 3	3103 006
SUBLABEL 6, 3	3103 007
SUBLABEL 7, 3	3103 008
SUBLABEL 0, 4	3104 001
SUBLABEL 1, 4	3104 002
SUBLABEL 2, 4	3104 003

SHEET 17

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TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 18

DFI	DUI
NO.	NO.
DUI NAME	
SUBLABEL 2, 9	3109 003
SUBLABEL 3, 9	3109 004
SUBLABEL 4, 9	3109 005
SUBLABEL 5, 9	3109 006
SUBLABEL 6, 9	3109 007
SUBLABEL 7, 9	3109 008
SUBLABEL 0, 10	3110 001
SUBLABEL 1, 10	3110 002
SUBLABEL 2, 10	3110 003
SUBLABEL 3, 10	3110 004
SUBLABEL 4, 10	3110 005
SUBLABEL 5, 10	3110 006
SUBLABEL 6, 10	3110 007
SUBLABEL 7, 10	3110 008
SUBLABEL 0, 11	3111 001
SUBLABEL 1, 11	3111 002
SUBLABEL 2, 11	3111 003
SUBLABEL 3, 11	3111 004
SUBLABEL 4, 11	3111 005
SUBLABEL 5, 11	3111 006
SUBLABEL 6, 11	3111 007
SUBLABEL 7, 11	3111 008
SUBLABEL 0, 12	3112 001
SUBLABEL 1, 12	3112 002
SUBLABEL 2, 12	3112 003
SUBLABEL 3, 12	3112 004
SUBLABEL 4, 12	3112 005
SUBLABEL 5, 12	3112 006
SUBLABEL 6, 12	3112 007
SUBLABEL 7, 12	3112 008
SUBLABEL 0, 13	3113 001
SUBLABEL 1, 13	3113 002
SUBLABEL 2, 13	3113 003
SUBLABEL 3, 13	3113 004
SUBLABEL 4, 13	3113 005
SUBLABEL 5, 13	3113 006
SUBLABEL 6, 13	3113 007
SUBLABEL 7, 13	3113 008
SUBLABEL 0, 14	3114 001

DUI	NAME	DFI NO.	DUI NO.
SUBLABEL	1, 14	3114	002
SUBLABEL	2, 14	3114	003
SUBLABEL	3, 14	3114	004
SUBLABEL	4, 14	3114	005
SUBLABEL	5, 14	3114	006
SUBLABEL	6, 14	3114	007
SUBLABEL	7, 14	3114	008
SUBLABEL	0, 15	3115	001
SUBLABEL	1, 15	3115	002
SUBLABEL	2, 15	3115	003
SUBLABEL	3, 15	3115	004
SUBLABEL	4, 15	3115	005
SUBLABEL	5, 15	3115	006
SUBLABEL	6, 15	3115	007
SUBLABEL	7, 15	3115	008
SUBLABEL	0, 16	3116	001
SUBLABEL	1, 16	3116	002
SUBLABEL	2, 16	3116	003
SUBLABEL	3, 16	3116	004
SUBLABEL	4, 16	3116	005
SUBLABEL	5, 16	3116	006
SUBLABEL	6, 16	3116	007
SUBLABEL	7, 16	3116	008
SUBLABEL	0, 17	3117	001
SUBLABEL	1, 17	3117	002
SUBLABEL	2, 17	3117	003
SUBLABEL	3, 17	3117	004
SUBLABEL	4, 17	3117	005
SUBLABEL	5, 17	3117	006
SUBLABEL	6, 17	3117	007
SUBLABEL	7, 17	3117	008
SUBLABEL	0, 18	3118	001
SUBLABEL	1, 18	3118	002
SUBLABEL	2, 18	3118	003
SUBLABEL	3, 18	3118	004
SUBLABEL	4, 18	3118	005
SUBLABEL	5, 18	3118	006
SUBLABEL	6, 18	3118	007
SUBLABEL	7, 18	3118	008

SHEET 20

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SHEET 21

DUI	NAME	DFI NO.	DUI NO.
SUBLABEL	7, 23	3123	008
SUBLABEL	0, 24	3124	001
SUBLABEL	1, 24	3124	002
SUBLABEL	2, 24	3124	003
SUBLABEL	3, 24	3124	004
SUBLABEL	4, 24	3124	005
SUBLABEL	5, 24	3124	006
SUBLABEL	6, 24	3124	007
SUBLABEL	7, 24	3124	008
SUBLABEL	0, 25	3125	001
SUBLABEL	1, 25	3125	002
SUBLABEL	2, 25	3125	003
SUBLABEL	3, 25	3125	004
SUBLABEL	4, 25	3125	005
SUBLABEL	5, 25	3125	006
SUBLABEL	6, 25	3125	007
SUBLABEL	7, 25	3125	008
SUBLABEL	0, 26	3126	001
SUBLABEL	1, 26	3126	002
SUBLABEL	2, 26	3126	003
SUBLABEL	3, 26	3126	004
SUBLABEL	4, 26	3126	005
SUBLABEL	5, 26	3126	006
SUBLABEL	6, 26	3126	007
SUBLABEL	7, 26	3126	008
SUBLABEL	0, 27	3127	001
SUBLABEL	1, 27	3127	002
SUBLABEL	2, 27	3127	003
SUBLABEL	3, 27	3127	004
SUBLABEL	4, 27	3127	005
SUBLABEL	5, 27	3127	006
SUBLABEL	6, 27	3127	007
SUBLABEL	7, 27	3127	008
SUBLABEL	0, 28	3128	001
SUBLABEL	1, 28	3128	002
SUBLABEL	2, 28	3128	003
SUBLABEL	3, 28	3128	004
SUBLABEL	4, 28	3128	005
SUBLABEL	5, 28	3128	006

DUI NAME	DFI NO.	DUI NO.
SUBLABEL 6, 28	3128	007
SUBLABEL 7, 28	3128	008
SUBLABEL 0, 29	3129	001
SUBLABEL 1, 29	3129	002
SUBLABEL 2, 29	3129	003
SUBLABEL 3, 29	3129	004
SUBLABEL 4, 29	3129	005
SUBLABEL 5, 29	3129	006
SUBLABEL 6, 29	3129	007
SUBLABEL 7, 29	3129	008
SUBLABEL 0, 30	3130	001
SUBLABEL 1, 30	3130	002
SUBLABEL 2, 30	3130	003
SUBLABEL 3, 30	3130	004
SUBLABEL 4, 30	3130	005
SUBLABEL 5, 30	3130	006
SUBLABEL 6, 30	3130	007
SUBLABEL 7, 30	3130	008
SUBLABEL 0, 31	3131	001
SUBLABEL 1, 31	3131	002
SUBLABEL 2, 31	3131	003
SUBLABEL 3, 31	3131	004
SUBLABEL 4, 31	3131	005
SUBLABEL 5, 31	3131	006
SUBLABEL 6, 31	3131	007
SUBLABEL 7, 31	3131	008
SUB-SUBLABEL 0	3140	001
SUB-SUBLABEL 1	3140	002
SUB-SUBLABEL 2	3140	003
SUB-SUBLABEL 3	3140	004
SUB-SUBLABEL 4	3140	005
SUB-SUBLABEL 5	3140	006
SUB-SUBLABEL 6	3140	007
SUB-SUBLABEL 7	3140	008
SUB-SUBLABEL 8	3140	009
SUB-SUBLABEL 9	3140	010
SUB-SUBLABEL 10	3140	011
SUB-SUBLABEL 11	3140	012
SUB-SUBLABEL 12	3140	013

TABLE D-4. NUMERICAL LIST OF DATA USE IDENTIFIERS (DUIS)
WITHIN DATA FIELD IDENTIFIER (DFI)

SHEET 23

DUI NAME	DFI	DUI
	NO.	NO.
SUB-SUBLABEL 13	3140	014
SUB-SUBLABEL 14	3140	015
SUB-SUBLABEL 15	3140	016
SUB-SUBLABEL 16	3140	017
SUB-SUBLABEL 17	3140	018
SUB-SUBLABEL 18	3140	019
SUB-SUBLABEL 19	3140	020
SUB-SUBLABEL 20	3140	021
SUB-SUBLABEL 21	3140	022
SUB-SUBLABEL 22	3140	023
SUB-SUBLABEL 23	3140	024
SUB-SUBLABEL 24	3140	025
SUB-SUBLABEL 25	3140	026
SUB-SUBLABEL 26	3140	027
SUB-SUBLABEL 27	3140	028
SUB-SUBLABEL 28	3140	029
SUB-SUBLABEL 29	3140	030
SUB-SUBLABEL 30	3140	031
SUB-SUBLABEL 31	3140	032

DFI NAME DEFINITION
3000 JREAP PERFORMANCE INDICATES THE VARIOUS JREAP NETWORK MONITORING AND PERFORMANCE
PARAMETERS.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 PERCENT EXCEEDING LATENCY [7 BIT] (%EXCLAT)	THE PERCENTAGE OF PACKETS EXCEEDING THE SPECIFIED MAXIMUM LATENCY LIMITS OVER THE SAME INTERVAL OF TIME.	X0.14.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
LATENCY	0 THROUGH 100	THE PERCENTAGE OF PACKETS EXCEEDING THE SPECIFIED MAXIMUM LATENCY LIMITS OVER THE SAME INTERVAL OF TIME IN ONE PERCENT INCREMENTS.
ILLEGAL	101 THROUGH 127	

DFI NAME DEFINITION
3001 TRANSMISSION SEQUENCE DATA TO SUPPORT DEVELOPMENT AND TRANSMISSION OF THE
TRANSMISSION SEQUENCE LIST.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 TRANSMISSION SEQUENCE NUMBER [8 BIT] (TSN)	A ONE BYTE FIELD THAT INCREMENTS BY ONE FOR EACH PACKET TRANSMITTED BY A JREAP PROCESSOR ON A JREAP TOKEN PASSING NETWORK.	FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0
002 TRANSMISSION SEQUENCE LIST COUNT [7 BIT] (TSLC)	THE NUMBER OF ENTRIES IN THE TRANSMISSION SEQUENCE LIST.	FSTBH.A.NC.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
RESET	0	INDICATES THE NUMBER OF A PACKETS TRANSMITTED EXCEEDED 255 AND THE COUNT IS BEING RESET.
TRANSMISSION SEQUENCE NUMBER	1 THROUGH 255	THE SEQUENCE NUMBER OF A PACKET BROADCAST ON A TOKEN PASSING JREAP NETWORK.
----- FOR DUI 002 -----		
0 - 127 ENTRIES	0 THROUGH 127	THE NUMBER OF ENTRIES IN THE TSL.

DFI NAME
3002 INDICATOR/FLAG

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 ADD/DELETE INDICATOR [1 BIT] (A/D)	INDICATES THE ADDITION OR DELETION OF SECONDARY TRACK NUMBERS FROM THE SECONDARY TRACK NUMBER LIST MAINTAINED BY A JREAP PROCESSOR.	X0.11.0
002 ACTIVE/INACTIVE FLAG [1 BIT] (A/I)	INDICATES WHETHER A GEOGRAPHIC FILTER IS ACTIVE OR INACTIVE.	X0.10.5 X0.10.6
003 ACKNOWLEDGEMENT REQUEST FLAG [1 BIT] (ACKREQ)	INDICATES IF THE MESSAGE IS TO BE ACKNOWLEDGED BY THE RECEIVING JRE PROCESSOR.	X1.0.0 FSMGH.3
004 COMMAND AND CONTROL INDICATOR OVERRIDE [1 BIT] (CC OVR)	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.	X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.13
005 EMERGENCY INDICATOR OVERRIDE [1 BIT] (EMG OVR)	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.	X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.13
006 FORCE TELL INDICATOR OVERRIDE [1 BIT] (FTI OVR)	INDICATES WHETHER TO OVERRIDE AN ACTIVE FILTER.	X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.12 X0.10.13
007 LAST POINT FLAG [1 BIT] (LP FLG)	INDICATES THE LAST POINT IN A SERIES OF GEOGRAPHIC POINTS.	X0.10.6
008 RECTANGLE FLAG [1 BIT] (RECFLG)	INDICATES WHETHER THE AREA SPECIFIED IS A RECTANGLE.	X0.10.5
009 RELAY FLAG [1 BIT] (R FLG)	INDICATES WHETHER THE JRE PROCESSOR TRANSMITTING THE MESSAGE IS DIRECTLY CONNECTED TO THE SOURCE TACTICAL DATA NETWORK.	X1.0.0 FSMGH.3
010 SIMULATION INDICATOR FILTER FLAG [1 BIT] (SIM FLG)	INDICATES WHETHER SIMULATION MESSAGES ARE TO BE FILTERED.	X0.10.11

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APPENDIX D

MIL-STD-3011D

DFI NAME
3002 INDICATOR/FLAG

DUI NAME	EXPLANATION	APPLICABILITY
011 TRANSMISSION TIME REFERENCE FLAG [1 BIT] (TTR)	INDICATES WHETHER THE DVT FIELD CORRESPONDS TO THE TIME AT WHICH THE DATA IS TRANSMITTED OUT OF THE PHYSICAL INTERFACE.	AH.0 FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0
012 UPPER ALTITUDE LIMIT FLAG [1 BIT] (UA LT)	INDICATES WHETHER THE POINT IS THE UPPER ALTITUDE LIMIT.	X0.10.5 X0.10.6
013 LOWER ALTITUDE LIMIT FLAG [1 BIT] (LAL LMT)	INDICATES WHETHER THE POINT IS THE LOWER ALTITUDE LIMIT.	X0.10.5 X0.10.6
014 J28.2(0) FILTER FLAG [1 BIT] (J28 20)	INDICATES WHETHER J28.2(0) MESSAGES ARE TO BE FILTERED.	X0.10.9
015 J28.2(X) FILTER FLAG [1 BIT] (J28 2X)	INDICATES WHETHER J28.2(X) MESSAGES OTHER THAN THE J28.2(0) ARE TO BE FILTERED.	X0.10.9
016 SPECIAL PROCESSING INDICATOR FILTER FLAG [1 BIT] (SPI FLG)	INDICATES WHETHER SPI MESSAGES ARE TO BE FILTERED.	X0.10.8
017 TYPE FILTER [1 BIT] (TYP FLT)	INDICATES A REQUEST FOR THE CURRENT SETTINGS FOR ALL FILTERS OF THE SPECIFIED TYPE.	X0.10.0
018 GEOGRAPHIC FILTER [1 BIT] (GEO FLT)	INDICATES A REQUEST FOR THE CURRENT SETTINGS FOR ALL GEOGRAPHIC FILTERS.	X0.10.0
019 ALL FILTERS [1 BIT] (ALL FLT)	INDICATES A REQUEST FOR THE CURRENT SETTINGS FOR ALL FILTERS.	X0.10.0
020 ALTERNATE NETWORK CONTROLLER ASSIGNMENT FLAG [1 BIT] (AAF)	SET BY THE JRE-NC TO ASSIGN A JRE-NP AS THE JRE-ANC.	FSTBH.A.NC.0
021 ALTERNATE NETWORK CONTROLLER ASSIGNMENT RECOGNITION [1 BIT] (ANC ARF)	SET BY THE JRE-NP THAT HAS BEEN ASSIGNED AS THE JRE-ANC TO ACKNOWLEDGE IT IS THE JRE-ANC.	FSTBH.A.NC.0

DFI NAME
3002 INDICATOR/FLAG

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
DELETE	0	
ADD	1	
----- FOR DUI 002 -----		
INACTIVE	0	
ACTIVE	1	
----- FOR DUI 003 -----		
ACKNOWLEDGEMENT NOT REQUESTED	0	
ACKNOWLEDGEMENT REQUESTED	1	
----- FOR DUIS 004 - 006 -----		
FILTER	0	
OVERRIDE FILTER	1	
----- FOR DUI 007 -----		
NOT LAST POINT	0	
LAST POINT	1	
----- FOR DUI 008 -----		
ELLIPSE	0	
RECTANGLE	1	
----- FOR DUI 009 -----		
MESSAGE DIRECTLY RECEIVED	0	
RELAYED MESSAGE	1	

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MIL-STD-3011D
APPENDIX D

DFI NAME
3002 INDICATOR/FLAG

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
----- FOR DUI 010 -----		
ACCEPT SIMULATED MESSAGES	0	
FILTER SIMULATED MESSAGES	1	
----- FOR DUI 011 -----		
DVT DOES NOT CORRESPOND TO TIME OF TRANSMISSION	0	
DVT CORRESPONDS TO TIME OF TRANSMISSION	1	
----- FOR DUI 012 -----		
NO LIMIT	0	
UPPER ALTITUDE LIMIT	1	
----- FOR DUI 013 -----		
NO LIMIT	0	
LOWER ALTITUDE LIMIT	1	
----- FOR DUI 014 -----		
ACCEPT ALL J28.2(0) MESSAGES	0	
FILTER ALL J28.2(0) MESSAGES	1	
----- FOR DUI 015 -----		
ACCEPT ALL J28.2(X) MESSAGES EXCEPT THE J28.2(0)	0	
FILTER ALL J28.2(X) MESSAGES EXCEPT THE J28.2(0)	1	

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APPENDIX D

DFI NAME
3002 INDICATOR/FLAG

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
----- FOR DUI 016 -----		
ACCEPT SPI MESSAGES	0	
FILTER SPI MESSAGES	1	
----- FOR DUI 017 -----		
NOT SPECIFIED	0	
REQUEST TRANSMIT FILTER	1	
SETTINGS OF SPECIFIED		
TYPE(S)		
----- FOR DUI 018 -----		
NO REQUEST	0	
REQUEST TRANSMIT	1	
SETTINGS OF ALL		
GEOGRAPHIC FILTERS		
----- FOR DUI 019 -----		
NO REQUEST	0	
REQUEST TRANSMIT	1	
SETTINGS OF ALL		
FILTERS		
----- FOR DUIS 020 AND 21 -----		
NOT ASSIGNED AS ANC	0	
ASSIGNED AS ANC	1	

DFI	NAME	DEFINITION
3003	JREAP TIME FUNCTION	TIME FUNCTIONS USED BY THE JREAP FOR NETWORK MAINTENANCE AND DATA VALIDATION.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 AGE LIMIT VALUE [8 BIT] (AGE LIMIT)	SPECIFIED IN ONE SECOND INCREMENTS. MESSAGES OLDER THAN THIS LIMIT WILL BE FILTERED BY THE DATA AGE FILTER.	X0.10.10
002 AVERAGE RECEIVED DATA MEDIA LATENCY [16 BIT] (AVG REC LTNCY)	THE CALCULATED MEAN LATENCY OVER A SPECIFIC INTERVAL ON THE DATA THAT THE JRE PROCESSOR IS RECEIVING FROM THE SOURCE MEASURED IN 1/32 SECOND INCREMENTS.	X0.14.0
003 DATA AGE [13 BIT] (DATA AGE)	LENGTH OF TIME THAT A J-SERIES MESSAGE HAS BEEN IN THE JRE PROCESS RELATIVE TO THE DVT. MEASURED IN 1/32 SECOND INCREMENTS.	X1.0.0 FSMGH.3
004 DATA VALID TIME [28 BIT] (DVT)	SUPPORTS DATA EXTRAPOLATION, LATENCY DETERMINATION, AND DETECTION OF STALE DATA. THE DVT FIELD REPRESENTS THE TIME TO WHICH DATA HAS BEEN EXTRAPOLATED (AS APPLICABLE) AND SHALL BE THE NUMBER OF SECONDS PAST MIDNIGHT WITH A LEAST SIGNIFICANT BIT OF 1/1024 OF A SECOND.	AH.0 FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0
005 EVENT TIME ACCURACY [4 BIT] (EVNT TIME ACCY)	MEASURE OF THE UNCERTAINTY IN THE TIME VALUES PROVIDED BY THE JRE PROCESSOR, WITH RESPECT TO THE NEGOTIATED COMMON TIME REFERENCE.	X0.8.0
007 MAXIMUM LATENCY [16 BIT] (MAX LTNCY)	THE MAXIMUM LATENCY THRESHOLD FOR A LINK.	X0.5.0 X0.6.0
008 RX JRE RECEIVE TIME (R2) [28 BIT] (R2)	THE TIME AT WHICH THE RECEIVING JRE PROCESSOR, REFERENCING ITS OWN TIME SOURCE, RECEIVES THE MESSAGE.	X0.2.0

DFI NAME
3003 JREAP TIME FUNCTION

DUI NAME	EXPLANATION	APPLICABILITY
009 TX JRE TRANSMIT TIME (T1) [28 BIT] (T1)	THE TIME, USING THE LOCAL TIME SOURCE, AT WHICH THE TRANSMITTING JRE PROCESSOR SENDS THE INITIAL MESSAGE.	X0.2.0
010 RX JRE TRANSMIT TIME (T2) [28 BIT] (T2)	THE TIME THAT THE RECEIVING JRE PROCESSOR RETRANSMITS THE MESSAGE.	X0.2.0
011 TIME ACCURACY [4 BIT] (TA)	THE MEASURE OF THE UNCERTAINTY IN THE TIME VALUES PROVIDED BY THE JRE PROCESSOR, WITH RESPECT TO THE NEGOTIATED COMMON TIME REFERENCE.	AH.0 FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0
012 EVENT TIME [28 BIT]	THE TIME AT WHICH THE ORIGINATOR OF THE MESSAGE DETECTED THE EVENT IN THEIR OWN SYSTEM TIME REFERENCE.	X0.8.0
013 INTERVAL TIME [10 BIT]	THE TIME INTERVAL (IN SECONDS) OVER WHICH THE PACKETS EXCEEDING THE LATENCY ARE COUNTED.	X0.5.0
014 TIME ACCURACY (R2) [4 BIT] (TA R2)	THE MEASURE OF THE UNCERTAINTY IN THE TIME VALUES IN THE RX JRE RECEIVE TIME (R2).	X0.2.0
015 TIME ACCURACY (T1) [4 BIT] (TA T1)	THE MEASURE OF THE UNCERTAINTY IN THE TIME VALUES IN THE TX JRE TRANSMIT TIME (T1).	X0.2.0
016 TIME ACCURACY (T2) [4 BIT] (TA T2)	THE MEASURE OF THE UNCERTAINTY IN THE TIME VALUES IN THE TX JRE TRANSMIT TIME (T2).	X0.2.0
DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
NO LIMIT	0	
1 THROUGH 255 SECONDS	1 THROUGH 255	AGE LIMIT MEASURED IN ONE SECOND INTERVALS.

DFI NAME
3003 JREAP TIME FUNCTION

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
----- FOR DUIS 002 AND 007 -----		
0 THROUGH 2047 AND 31/32 SECONDS	0 THROUGH 65535	NUMBER OF SECONDS MEASURED IN 1/32 OF A SECOND INCREMENTS.
----- FOR DUI 003 -----		
0 THROUGH 255 AND 31/32 SECONDS	0 THROUGH 8191	NUMBER OF SECONDS MEASURED IN 1/32 SECOND INCREMENTS.
----- FOR DUIS 004, 008 - 010, AND 012 -----		
0 - 86399 AND 1023/1024 SECONDS	0 THROUGH 88473599	NUMBER OF SECONDS ELAPSED PAST MIDNIGHT MEASURED IN 1/1024 SECOND INCREMENTS.
ILLEGAL	88473600 THROUGH 268435455	
----- FOR DUIS 005, 011, AND 14 - 16 -----		
NO STATEMENT	0	EITHER ACCURACY EXCEEDS 16.834 SECONDS OR ACCURACY CANNOT BE CALCULATED.
LESS THAN OR EQUAL TO 1 MS	1	FOR DI'S 1 - 15: TIME ACCURACY = 1 MILLISECOND X 2 ^(N - 1) , WHERE 15 <GE> N <LE> 1 MEASURED IN MILLISECONDS.
GREATER THAN 1 MS, LESS THAN OR EQUAL TO 2 MS	2	
GREATER THAN 2 MS, LESS THAN OR EQUAL TO 4 MS	3	
GREATER THAN 4 MS, LESS THAN OR EQUAL TO 8 MS	4	
GREATER THAN 8 MS, LESS THAN OR EQUAL TO 16 MS	5	
GREATER THAN 16 MS, LESS THAN OR EQUAL TO 32 MS	6	
GREATER THAN 32 MS, LESS THAN OR EQUAL TO 64 MS	7	

DFI NAME
3003 JREAP TIME FUNCTION

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
GREATER THAN 64 MS, LESS THAN OR EQUAL TO 128 MS	8	
GREATER THAN 128 MS, LESS THAN OR EQUAL TO 256 MS	9	
GREATER THAN 256 MS, LESS THAN OR EQUAL TO 512 MS	10	
GREATER THAN 512 MS, LESS THAN OR EQUAL TO 1024 MS	11	
GREATER THAN 1024 MS, LESS THAN OR EQUAL TO 2048 MS	12	
GREATER THAN 2048 MS, LESS THAN OR EQUAL TO 4096 MS	13	
GREATER THAN 4096 MS, LESS THAN OR EQUAL TO 8192 MS	14	
GREATER THAN 8192 MS, LESS THAN OR EQUAL TO 16,384 MS.	15	
----- FOR DUI 013 -----		
NO INTERVAL	0	RESULTS IN THE LATENCY COUNT NOT BEING RESET ON A TIMED BASIS
1 THROUGH 1023 SECONDS	1 THROUGH 1023	INTERVAL IN 1 SECOND INCREMENTS

DFI NAME DEFINITION
3004 CAPABLE TIME STANDARD THE TIME REFERENCE A JRE PROCESSOR IS CAPABLE OF SUPPORTING ON
THE JRE LINK IT IS PARTICIPATING ON/IN.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 JRE NC, C [1 BIT] (NC)	JRE NETWORK CONTROLLER (JRE-NC) BASED TIME REFERENCE.	X0.1.0
002 RTIME, C [1 BIT] (RC)	ROUND TRIP TIME BASED TIME REFERENCE.	X0.1.0
003 FIXED DELAY, C [1 BIT] (FC)	FIXED DELAY TIME BASED REFERENCE.	X0.1.0
004 EVENT STROBE, C [1 BIT] (EC)	EVENT STROBE BASED TIME REFERENCE.	X0.1.0
005 UTC, C [1 BIT] (GC)	COORDINATED UNIVERSAL TIME BASED TIME REFERENCE.	X0.1.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 005 -----		
NOT CAPABLE	0	
CAPABLE	1	

DFI NAME DEFINITION
3005 PREFERRED TIME STANDARD THE PREFERRED TIME REFERENCE A JRE PROCESSOR IS CAPABLE OF
SUPPORTING ON THE JRE LINK IT IS PARTICIPATING ON/IN.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 JRE NC, P [1 BIT] (NP)	JRE NETWORK CONTROLLER (JRE-NC) BASED TIME REFERENCE.	X0.1.0
002 RTIME, P [1 BIT] (RP)	ROUND TRIP TIME BASED TIME REFERENCE.	X0.1.0
003 FIXED DELAY, P [1 BIT] (FP)	FIXED DELAY TIME BASED REFERENCE.	X0.1.0
004 EVENT STROBE, P [1 BIT] (EP)	EVENT STROBE BASED TIME REFERENCE.	X0.1.0
005 UTC, P [1 BIT] (GP)	COORDINATED UNIVERSAL TIME BASED TIME REFERENCE.	X0.1.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 005 -----		
NOT PREFERRED	0	
PREFERRED	1	

DFI NAME DEFINITION
3006 RECEIPT/COMPLIANCE THE RECEIPT/COMPLIANCE (R/C) FIELD IS USED IN MESSAGES THAT ARE SUBJECT TO MACHINE AND/OR OPERATOR ACKNOWLEDGEMENT. THIS FIELD EXPRESSES THE CONTROL DATA FOR THE ACKNOWLEDGEMENT FUNCTIONS, IDENTIFIES MESSAGES AS EITHER ORIGINAL OR RESPONSE MESSAGES, AND CONVEYS THE MACHINE AND OPERATOR RESPONSES TO THE RECEIPT OF ORIGINAL MESSAGES.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 ACKNOWLEDGEMENT PROTOCOL, 1 [4 BIT] (AP1)	SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.	X0.1.0 X0.2.0 X0.3.0 X0.4.0 X0.6.0 X0.8.0 X0.10 X0.12.0 X0.13.0 X0.14.0
002 ACKNOWLEDGEMENT PROTOCOL, 2 [4 BIT] (AP2)	SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.	X0.0.0 X0.5.0 X0.9.0
003 ACKNOWLEDGEMENT PROTOCOL, 3 [4 BIT] (AP3)	SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.	X0.7.0 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.11.0 MMSH.0
004 ACKNOWLEDGEMENT PROTOCOL, 4 [4 BIT] (AP4)	SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.	X0.10.1 X0.10.0
005 ACKNOWLEDGEMENT PROTOCOL, 5 [4 BIT] (AP5)	SPECIFIES THE METHOD OF MESSAGE ACKNOWLEDGMENT THAT IS REQUIRED BY THE TRANSMITTING JRE PROCESSOR.	

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
ILLEGAL	1 THROUGH 2	
UNDEFINED	3 THROUGH 15	

DFI NAME
3006 RECEIPT/COMPLIANCE

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
----- FOR DUI 002 -----		
NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S) .
ILLEGAL	2	
UNDEFINED	3 THROUGH 15	
----- FOR DUI 003 -----		
NORMAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S) .
OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S) .
UNDEFINED	3 THROUGH 15	
----- FOR DUI 004 -----		
ILLEGAL	0	
PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S) .
ILLEGAL	2	
UNDEFINED	3 THROUGH 15	
----- FOR DUI 005 -----		
ILLEGAL	0	INDICATES NO ACKNOWLEDGMENT IS REQUESTED.
PROCESSOR ACKNOWLEDGMENT	1	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES ACKNOWLEDGMENT

DFI NAME
3006 RECEIPT/COMPLIANCE

DATA ITEM (CONTINUED) (CONTINUED)	BIT CODE	EXPLANATION FROM THE RECEIVING JRE PROCESSOR(S) .
OPERATOR ACKNOWLEDGMENT	2	INDICATES THAT THE TRANSMITTING JRE PROCESSOR REQUIRES BOTH PROCESSOR AND OPERATOR ACKNOWLEDGMENT FROM THE RECEIVING JRE PROCESSOR(S) .
UNDEFINED	3 THROUGH 15	

DFI NAME DEFINITION
3007 HEADER TYPE ALLOWS THE JRE PROCESSOR TO DETERMINE HEADER TYPE AND DATA
STRUCTURE OF A JRE MESSAGE.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 TRANSMISSION BLOCK HEADER TYPE [4 BIT] (TBH TYPE)	BASED UPON THE VALUE IN THIS FIELD, THE JRE PROCESSOR CAN DETERMINE THE HEADER STRUCTURE AND LOCATE THE MESSAGE TYPE FIELD, WHICH DETERMINES THE CONTENTS OF THE DATA PORTION OF THE MESSAGE.	FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0
002 MESSAGE GROUP HEADER TYPE [2 BIT] (MGH TYPE)	THE MESSAGE GROUP HEADER TYPE FIELD DEFINES WHICH OF THE DATA PACKING FORMATS IS BEING USED FOR EACH JREAP MESSAGE GROUP HEADER THAT FOLLOWS THE JREAP FULL STACK TRANSMISSION BLOCK HEADER.	FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0 FSMGH.3
003 HEADER TYPE [4 BIT] (HT)	IDENTIFIES THE HEADER FORMAT TO FOLLOW.	AH.0
DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 AND 003 -----		
UNDEFINED	0	
ANNOUNCED TOKEN PASSING	1	INDICATES USE OF ANNOUNCED TOKEN PASSING PROTOCOL (APPENDIX A).
POINT-TO-POINT	2	INDICATES USE OF POINT-TO-POINT PROTOCOL (APPENDIX B).
APPLICATION LAYER	3	INDICATES USE OF APPLICATION LAYER PROTOCOL (APPENDIX C).
UNDEFINED	4 THROUGH 14	
RESERVED FOR EXPANSION	15	
----- FOR DUI 002 -----		
TYPE 0	0	RESERVED FOR FUTURE GROWTH.
TYPE 1	1	RESERVED FOR FUTURE GROWTH.
TYPE 2	2	RESERVED FOR FUTURE GROWTH.
TYPE 3	3	THE JREAP FULL STACK MESSAGE GROUP HEADER (TYPE 3) CONTAINS BOTH

DFI NAME
3007 HEADER TYPE

DATA ITEM (CONTINUED)
(CONTINUED)

BIT CODE

EXPLANATION
INFORMATION THAT IS COMMON TO THE
APPLICATION DATA THAT FOLLOWS AND
A CRC VALUE FOR THE JREAP FULL
STACK MESSAGE GROUP HEADER AND
ASSOCIATED APPLICATION DATA. THE
DESIGN PROVIDES FOR RECOVERY FROM
DATA CORRUPTION BY MAKING THE
JREAP FULL STACK MESSAGE GROUP
HEADER AN INTEGER MULTIPLE OF THE
APPLICATION LAYER LENGTH.

APPENDIX D

DFI	NAME	DEFINITION
3008	MESSAGE TYPE	DETERMINES THE CONTENTS OF THE DATA PORTION OF THE MESSAGE.
DATA STANDARD USAGE: JREAP		STATUS:
DUI NAME	EXPLANATION	APPLICABILITY
001 MESSAGE TYPE [4 BIT] (MT)	IDENTIFIES THE TYPE OF MESSAGE THAT IS CONTAINED WITHIN THE DATA PORTION OF THE JREAP MESSAGE.	AH.0 FSMGH.3
002 MANAGEMENT MESSAGE SUBTYPE [8 BIT]	IDENTIFIES THE FORMAT OF THE SUBTYPE OF THE MANAGEMENT MESSAGE BODY THAT FOLLOWS.	X0.0.0 X0.1.0 X0.2.0 X0.3.0 X0.4.0 X0.5.0 X0.6.0 X0.7.0 X0.8.0 X0.9.0 X0.10 X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0 X0.11.0 X0.12.0 X0.13.0 X0.14.0 MMSH.0
003 FILTER MESSAGE TYPE [8 BIT] (FMT)	FILTER MESSAGE TYPES SUPPORTED BY THE JRE PROCESSOR AND THE REMOTE FILTER MESSAGE.	X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0
004 REQUESTED FILTER MESSAGE TYPE [8 BIT]	THE TYPE OF THE FILTER THAT IS BEING REQUESTED.	X0.10.0
DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
MANAGEMENT	0	
JREAP J-SERIES	1	
JTIDS/MIDS JREAP FREE TEXT (CODED)	2	
JTIDS/MIDS JREAP FREE TEXT (UNCODED)	3	
VMF	4	
LINK 22	5	
CMF IBS	6	
JREAP J SERIES WITH NPG ASSIGNMENT	7	
UNDEFINED	8 THROUGH 14	
RESERVED FOR EXPANSION	15	

DFI NAME
3008 MESSAGE TYPE

DATA ITEM (CONTINUED) ----- FOR DUI 002 -----	BIT CODE	EXPLANATION
ECHO	0	USED TO TEST CONNECTIVITY BETWEEN JRE PROCESSORS.
COMMON TIME REFERENCE	1	USED TO NEGOTIATE A TIME REFERENCE BETWEEN TWO JRE PROCESSORS.
ROUND-TRIP TIME DELAY	2	USED TO DETERMINE THE ROUND-TRIP DELAY OVER A LINK.
JREAP J-SERIES ACKNOWLEDGMENT (FULL STACK)	3	ACKNOWLEDGES RECEIPT OF A J-SERIES MESSAGE (IN FULL STACK OPERATION).
JREAP J-SERIES ACKNOWLEDGMENT (APPLICATION)	4	ACKNOWLEDGES RECEIPT OF A J-SERIES MESSAGE (IN APPLICATION OPERATION).
LATENCY THRESHOLD	5	USED TO SPECIFY THE MAXIMUM ACCEPTABLE LATENCY PARAMETERS FOR TRANSMISSIONS THAT ARE RECEIVED FROM THE ORIGINATING JRE PROCESSOR.
LATENCY EXCEEDED	6	USED TO REPORT RECEIVED MESSAGE LATENCIES IN EXCESS OF THE VALUE ESTABLISHED WITH THE LATENCY MONITORING MESSAGE.
OPERATOR-TO-OPERATOR	7	USED BY JRE PROCESSOR OPERATORS TO EXCHANGE SHORT TEXTUAL MESSAGES.
SPECIAL EVENT	8	USED TO COMMUNICATE THE TIME OF OCCURRENCE OF INFREQUENT PERIODIC EVENTS.
TERMINATE LINK	9	USED TO TERMINATE COMMUNICATION ON A LINK BETWEEN JRE PROCESSORS.
REMOTE FILTER	10	USED TO VIEW AND MODIFY TRANSMIT FILTER SETTINGS FOR A REMOTE JRE PROCESSOR.
SECONDARY TRACK NUMBER LIST	11	USED BY JRE PROCESSORS TO EXCHANGE AND MANAGE THE SECONDARY TRACK NUMBER (TN) LIST OF THE LINK 16 TERMINAL CONNECTED TO A REMOTE JRE PROCESSOR.
DIRECT CONNECTION LIST	12	GENERATED BY A JRE PROCESSOR TO INDICATE IUS WITH WHICH IT HAS DIRECT CONNECTIVITY ON A GIVEN

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APPENDIX D

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DFI NAME
3008 MESSAGE TYPE

DATA ITEM (CONTINUED) (CONTINUED)	BIT CODE	EXPLANATION
NETWORK CONNECTIVITY MATRIX	13	LINK/PORT. USED TO PROVIDE JRE PROCESSORS WITH THE MEANS TO SHARE CONNECTIVITY INFORMATION.
CONNECTIVITY FEEDBACK	14	USED TO PROVIDE A JRE PROCESSOR WITH INFORMATION ON HOW IT IS RECEIVING DATA FROM OTHER JRE PROCESSORS.
UNDEFINED	15 THROUGH 199	
RESERVED FOR USA PROTOTYPING EFFORTS	200 THROUGH 209	
RESERVED FOR USAF PROTOTYPING EFFORTS	210 THROUGH 219	
RESERVED FOR USMC PROTOTYPING EFFORTS	220 THROUGH 229	
RESERVED FOR USN PROTOTYPING EFFORTS	230 THROUGH 239	
RESERVED FOR MDA PROTOTYPING EFFORTS	240 THROUGH 249	
UNDEFINED	250 THROUGH 254	
RESERVED FOR EXPANSION	255	
----- FOR DUIS 003 AND 004 -----		
ALL FILTER TYPES	0	USED TO REQUEST CURRENT FILTER SETTINGS (ALL TYPES) FROM A REMOTE JRE PROCESSOR.
FILTER SETTINGS SUMMARY	1	PROVIDE AN OVERALL SUMMARY OF THE CURRENT SETTINGS (ALL FILTERS) OF THE ORIGINATING JRE PROCESSOR.
CATEGORY/IDENTITY FILTER	2	FILTER SETTINGS APPLIED TO PPLI AND SURVEILLANCE MESSAGES.
LABEL/SUBLABEL FILTER	3	REPRESENTS THE FILTER SETTINGS APPLIED TO ALL LINK 16 MESSAGES, BASED UPON MESSAGE TYPE, AS SPECIFIED IN THE LABEL/SUBLABEL FIELDS OF THE LINK 16 MESSAGE.
POINT TYPE/POINT AMPLIFICATION FILTER	4	ALLOWS A FILTER TO BE SPECIFIED BASED UPON POINT TYPE AND POINT AMPLIFICATION FIELDS IN J3.0 REFERENCE POINT MESSAGES.

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APPENDIX D

DFI NAME
3008 MESSAGE TYPE

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
ELLIPSE-RECTANGLE GEOGRAPHIC FILTER	5	USED TO SPECIFY AN ELLIPSE (OR CIRCLE) OR RECTANGLE (OR SQUARE) TO BE USED AS A FILTER.
CLOSED POLYGON GEOGRAPHIC FILTER	6	USED TO SPECIFY AN AREA DEFINED BY 3 - 15 POINTS TO BE USED AS A FILTER.
SOURCE TRACK NUMBER FILTER	7	CONTAINS ONE OR A SERIES OF STNS THAT ARE TO BE FILTERED. ALL MESSAGES FROM THESE STNS, INCLUDING THE PPLI OF THE SOURCE, SHALL BE FILTERED FROM TRANSMISSION ON THE INTERFACE LINK.
SPECIAL PROCESSING INDICATOR FILTER	8	CONTAINS A FLAG THAT IS SET IF SPI MESSAGES ARE TO BE FILTERED.
J28.2(X) FILTER	9	CONTROLS THE FILTERING OF J28.2(0) MESSAGES AND J28.2 MESSAGES THAT ARE NOT THE J28.2(0).
DATA AGE FILTER	10	CONTROLS THE FILTERING OF MESSAGES THAT HAVE LATENCIES WITHIN THE JRE FORWARDING PROCESS GREATER THAN A SPECIFIED AMOUNT OF TIME, AS MEASURED BY THE DATA AGE OF THE MESSAGE.
SIMULATION FILTER	11	CONTAINS A FLAG THAT IS SET IF SIMULATION MESSAGES ARE TO BE FILTERED.
J3.6 ROCKET FILTER	12	USED TO FILTER THE REPORTING OF SPACE SPECIFIC TYPE J3.6 DFI 749/DUI 002 VALUES 2043 AND 2044 MEDIUM AND LONG RANGE ROCKETS FROM TRANSMISSION.
NATIONAL USE SUB-SUBLABEL FILTER	13	USED TO FILTER THE REPORTING OF NATIONAL USE MESSAGES BY SUB-SUBLABEL.
NETWORK PARTIICIPATION GROUP FILTER	14	USED TO SET AND REPORT NETWORK PARTICIPATION GROUP FILTERS ON A SPECIFIED JRE NETWORK.
UNDEFINED	15 THROUGH 255	

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APPENDIX D

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DFI NAME DEFINITION
3009 GEOGRAPHIC FILTER SUBTYPE SPECIFIES THE MODE OF THE APPLICATION OF THE FILTER.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 GEO FILTER SUBTYPE [3 BIT]	INDICATES THE ATTRIBUTES OF THE SURVEILLANCE (J3.X) MESSAGES TO WHICH THE FILTER APPLIES, AND THE SEMANTIC (FILTER OR EXCEPTION TO FILTER) FOR EVALUATION OF EACH GEOGRAPHIC FILTER AS IT APPLIES TO A SURVEILLANCE MESSAGE.	X0.10.5 X0.10.6

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
CATEGORY/IDENTITY, EXCEPTION TO FILTER	0	
CATEGORY/IDENTITY, FILTER	1	
POINT TYPE/POINT AMPLIFICATION, EXCEPTION TO FILTER	2	
POINT TYPE/POINT AMPLIFICATION, FILTER	3	
UNDEFINED	4 THROUGH 7	

DFI NAME DEFINITION
3010 LATITUDE THE ANGULAR DISTANCE NORTH OR SOUTH FROM THE EQUATOR TO A
POINT ON THE EARTH'S SURFACE, MEASURED IN DEGREES, FROM 0
DEGREES AT THE EQUATOR UP TO, BUT NOT EXCEEDING, THE 90 DEGREE
ANGLES NORTH AND SOUTH BETWEEN THE EQUATOR AND THE POLES.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
015 LATITUDE, 0.0013 MINUTE [23 BIT]	THE PRECISION IS APPROXIMATELY 8 FEET.	X0.10.6
018 LATITUDE, CENTER 0.0013 MINUTE [23 BIT]	SPECIFIES THE CENTER COORDINATE OF AN ELLIPSE (OR CIRCLE). THE PRECISION IS APPROXIMATELY 8 FEET.	X0.10.5

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 015 AND 018 -----		IN 90/4,194,303 DEGREE INCREMENTS.
0 DEGREES	0	
+90/4,194,303 THROUGH +90 DEGREES NORTH	1 THROUGH 4194303	
NO STATEMENT	4194304	
-90 THROUGH -90/4,194,303 DEGREES SOUTH	4194305 THROUGH 8388607	

DFI NAME DEFINITION
3011 LONGITUDE THE ANGULAR DISTANCE EAST OR WEST FROM THE PRIME OR ZERO
MERIDIAN TO A POINT ON THE EARTH'S SURFACE, MEASURED IN
DEGREES, FROM 0 DEGREES AT THE PRIME OR ZERO MERIDIAN UP TO,
BUT NOT EXCEEDING, THE 180 DEGREE ANGLES EAST AND WEST BETWEEN
THE PRIME OR ZERO MERIDIAN AND THE 180 DEGREE MERIDIAN.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
015 LONGITUDE, 0.0013 MINUTE [24 BIT]	THE PRECISION IS APPROXIMATELY 8 FEET.	X0.10.6
016 LONGITUDE, CENTER 0.0013 MINUTE [24 BIT]	SPECIFIES THE CENTER COORDINATE OF AN ELLIPSE (OR CIRCLE). THE PRECISION IS APPROXIMATELY 8 FEET.	X0.10.5

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 015 AND 016 -----		
0 DEGREES	0	
+180/8,388,607 THROUGH +180 DEGREES EAST	1 THROUGH 8388607	
NO STATEMENT	8388608	
-180 THROUGH -180/8,388,607 DEGREES WEST	8388609 THROUGH 16777215	

DFI NAME DEFINITION
3012 MESSAGE LENGTH THE NUMBER OF BYTES IN A MESSAGE.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 APPLICATION BLOCK MESSAGE LENGTH [16 BIT] (ABML)	INDICATES THE TOTAL NUMBER OF BYTES IN THIS JREAP APPLICATION BLOCK.	X0.10.9 AH.0
002 LENGTH OF MESSAGE [16 BIT] (LM)	INDICATES THE LENGTH OF THE MESSAGE (IN BYTES).	X0.14.0
003 MANAGEMENT MESSAGE LENGTH [16 BIT] (MML)	THE NUMBER OF BYTES (INCLUDING THE SUBHEADER) CONTAINED WITHIN EACH MANAGEMENT MESSAGE (OR, WHEN FRAGMENTATION IS EMPLOYED, WITHIN THE FRAGMENT).	X0.0.0 X0.1.0 X0.2.0 X0.3.0 X0.4.0 X0.5.0 X0.6.0 X0.7.0 X0.8.0 X0.9.0 X0.10 X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0 X0.11.0 X0.12.0 X0.13.0 X0.14.0 MMSH.0

DATA ITEM	BIT CODE	EXPLANATION
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----- FOR DUIS 001 - 003 -----

0 THROUGH 65535 BYTES	0 THROUGH 65535
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DFI NAME DEFINITION
3013 AXIS LENGTH THE LENGTH OF GEOGRAPHIC AXIS.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 MAJOR AXIS LENGTH [12 BIT] (MAJ AL)	LENGTH (IN DATA MILES) OF THE MAJOR AXIS OF A GEOGRAPHIC MESSAGE FILTER.	X0.10.5
002 MINOR AXIS LENGTH [12 BIT] (MIN AL)	LENGTH (IN DATA MILES) OF THE MINOR AXIS OF A GEOGRAPHIC MESSAGE FILTER.	X0.10.5

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 AND 002 -----		
ILLEGAL	0	
1 THROUGH 4095 DATA MILES	1 THROUGH 4095	IN ONE DATA MILE INCREMENTS.

DFI NAME DEFINITION
3014 HEADER LENGTH

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 TRANSMISSION BLOCK HEADER LENGTH [8 BIT] (TBHL1)	INDICATES THE TOTAL NUMBER OF 16-BIT WORDS (EXCLUDING THE STF) CONTAINED IN THE JREAP FULL STACK TRANSMISSION BLOCK HEADER.	FSTBH.B.0
002 TRANSMISSION BLOCK HEADER LENGTH, 1 [8 BIT] (TBHL1)	INDICATES THE TOTAL NUMBER OF 16-BIT WORDS (EXCLUDING THE STF) CONTAINED IN THE JREAP FULL STACK TRANSMISSION BLOCK HEADER.	FSTBH.A.NP.0 FSTBH.A.NC.0
003 TRANSMISSION BLOCK HEADER LENGTH, 2 [8 BIT] (TBHL2)	INDICATES THE TOTAL NUMBER OF 16-BIT WORDS (EXCLUDING THE STF) CONTAINED IN THE JREAP FULL STACK TRANSMISSION BLOCK HEADER.	FSTBH.A.NP.0 FSTBH.A.NC.0
004 TRANSMISSION BLOCK HEADER LENGTH, 3 [8 BIT] (TBHL3)	INDICATES THE TOTAL NUMBER OF 16-BIT WORDS (EXCLUDING THE STF) CONTAINED IN THE JREAP FULL STACK TRANSMISSION BLOCK HEADER.	FSTBH.A.NP.0 FSTBH.A.NC.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 003 -----		
NO STATEMENT	0	
1 THROUGH 255 WORDS	1 THROUGH 255	IN ONE DATA WORD (16- BIT) INCREMENTS.

DFI NAME DEFINITION
3015 CURRENT ERROR RATE

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 CURRENT ERROR RATE [7 BIT] (CER)	INDICATES THE CURRENT ERROR RATE OF A REMOTE JRE PROCESSOR (SEE 5.6.14).	FSTBH.B.0
002 JRE-NP ERROR RATE [7 BIT] (JNP ER1)	THE JRE-NC'S CURRENT ERROR RATE FOR THIS JRE-NP (5.6.14(1)).	FSTBH.A.NC.0
017 JRE-NC ERROR RATE [7 BIT] (JNC ER)	JRE-NC ERROR RATE.	FSTBH.A.NP.0
018 ERROR RATE, CURRENT [16 BIT] (ERC)	INDICATES THE CURRENT ERROR RATE OF A REMOTE JRE PROCESSOR (SEE 5.6.14)	X0.14.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001, 002 AND 017 -----		
ERROR RATE	0 THROUGH 126	THE CURRENT CALCULATED ERROR RATE BEING REPORTED.
ERROR RATE GREATER THAN 126	127	
----- FOR DUI 018 -----		
ERROR RATE	0 THROUGH 65534	THE CURRENT CALCULATED ERROR RATE BEING REPORTED.
ERROR RATE GREATER THAN 65534	65535	

DFI NAME
3016 DATA

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 APPLICATION DATA [32 BIT] (APPDATA)	DATA PAYLOAD TRANSMITTED IN THE JREAP ECHO MESSAGE.	X0.0.0
002 DATA WORDS [10 BIT] (DW)	INDICATES NUMBER OF 9 BYTE DATA WORDS TO FOLLOW.	FSMGH.3
003 TRANSPORT DATA WORD COUNT, 1 [16 BIT] (TDWC1)	IN ONE BYTE INCREMENTS.	FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0
004 TRANSPORT DATA WORD COUNT, 2 [16 BIT] (TDWC2)	INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF A PACKET.	FSTBH.A.NP.0 FSTBH.A.NC.0
005 TRANSPORT DATA WORD COUNT, 3 [16 BIT] (TDWC3)	INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF A PACKET.	FSTBH.A.NP.0 FSTBH.A.NC.0
DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
0 THROUGH 4294967295	0 THROUGH 4294967295	
----- FOR DUI 002 -----		
ILLEGAL	0	
NUMERIC	1 THROUGH 165	THE NUMBER OF DATA WORDS TO FOLLOW THE MGH.
UNDEFINED	166 THROUGH 1023	
----- FOR DUIS 003 - 005 -----		
NO STATEMENT	0	
1 THROUGH 65535 BYTES	1 THROUGH 65535	INDICATES THE NUMBER OF BYTES THAT ARE CONTAINED IN THE TRANSPORT AND DATA PORTIONS OF THIS PACKET.

DFI NAME DEFINITION
3017 NUMBER OF ADDRESSES THE NUMBER OF IU ADDRESSES.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NUMBER DESTINATION ADDRESSES [8 BIT]	SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.	X0.1.0 X0.6.0 X0.7.0 X0.8.0 X0.9.0 X0.11.0 X0.12.0 X0.13.0 X0.14.0 MMSH.0
002 NUMBER ADDRESSES THIS DESIGNATOR [8 BIT]	THE TOTAL NUMBER OF IU NUMBERS (UP TO 255) ASSOCIATED WITH THE LINK BEING REPORTED BY THIS PARTICULAR DESIGNATOR. USED TO DETERMINE THE LENGTH OF THE MESSAGE.	X0.12.0
003 NUMBER DESTINATION ADDRESSES, NON-ZERO [8 BIT]	SPECIFIES THE NUMBER OF DESTINATION ADDRESSES THAT ARE CONTAINED IN THIS SUBHEADER.	X0.0.0 X0.2.0 X0.3.0 X0.4.0 X0.5.0 X0.10 X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
BROADCAST	0	
1 THROUGH 255 ADDRESSES	1 THROUGH 255	
----- FOR DUI 002 -----		
0 THROUGH 255 ADDRESSES	0 THROUGH 255	
----- FOR DUI 003 -----		
ILLEGAL	0	
1 THROUGH 255 ADDRESSES	1 THROUGH 255	

DFI NAME DEFINITION
3018 NUMBER OF DESIGNATORS NUMBER OF DESIGNATORS.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NUMBER OF DESIGNATORS SUPPORTED [8 BIT] (NDS)	INDICATES THE NUMBER OF LINKS THAT THE JRE PROCESSOR IS SUPPORTING.	X0.13.0
002 TOTAL NUMBER OF ACTIVE DESIGNATORS [8 BIT] (TND)	INDICATES THE NUMBER OF LINKS ACTIVE FOR THIS JRE PROCESSOR.	X0.12.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 AND 002 -----		
NO STATEMENT	0	
1 THROUGH 255 DESIGNATORS	1 THROUGH 255	

DFI NAME
3019 CONNECTIVITY MATRIX

DEFINITION
A MATRIX THAT INDICATES THE DATA FLOW BETWEEN NETWORKS.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
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001 CONNECTIVITY MATRIX BIT [1 BIT] (CMB)	A BIT SET TO 1 AT THE INTERSECTION OF A ROW AND COLUMN INDICATES ONE-WAY DATA FLOW FROM THE SOURCE ROW NETWORK TO THE DESTINATION COLUMN NETWORK. TWO WAY FLOW WOULD BE INDICATED BY SETTING THE BIT IN THE CORRESPONDING COLUMN AND ROW TO 1. A VALUE OF 0 DESIGNATES NO FLOW. A NETWORK NEVER FORWARDS TO ITSELF; THEREFORE, BITS ON THE DIAGONAL OF THE MATRIX ARE ALWAYS SET TO 0.	X0.13.0
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DATA ITEM	BIT CODE	EXPLANATION
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----- For DUI 001 -----

NO DATA FLOW	0	
DATA FLOW	1	

DFI NAME
3020 CONTROL/RESPONSE

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 CONTROL/RESPONSE INDICATOR, 1 [8 BIT] (CR1)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.0.0 X0.2.0
002 CONTROL/RESPONSE INDICATOR, 2 [8 BIT] (CR2)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.1.0
003 CONTROL/RESPONSE INDICATOR, 3 [8 BIT] (CR3)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.3.0 X0.4.0
004 CONTROL/RESPONSE INDICATOR, 4 [8 BIT] (CR4)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.5.0
005 CONTROL/RESPONSE INDICATOR, 5 [8 BIT] (CR5)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A	X0.7.0

DFI NAME
3020 CONTROL/RESPONSE

DUI NAME	EXPLANATION	APPLICABILITY
005 (CONTINUED)	PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	
006 CONTROL/RESPONSE INDICATOR, 6 [8 BIT] (CR6)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.9.0
007 CONTROL/RESPONSE INDICATOR, 7 [8 BIT] (CR7)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.10.0
008 CONTROL/RESPONSE INDICATOR, 8 [8 BIT] (CR8)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.10.1
009 CONTROL/RESPONSE INDICATOR, 9 [8 BIT] (CR9)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13

DFI NAME
3020 CONTROL/RESPONSE

DUI NAME	EXPLANATION	APPLICABILITY
010 CONTROL/RESPONSE INDICATOR, 10 [8 BIT] (CR10)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.11.0
011 CONTROL/RESPONSE INDICATOR, 11 [8 BIT] (CR11)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.10
012 CONTROL/RESPONSE INDICATOR, 12 [8 BIT] (CR12)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.6.0 X0.12.0 X0.13.0 X0.14.0
013 CONTROL/RESPONSE INDICATOR, 13 [8 BIT] (CR13)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE ORIGINAL MESSAGES. VALUES OF 128 THROUGH 255 ARE USED FOR RESPONSES TO ORIGINAL MESSAGES.	X0.8.0
014 CONTROL/RESPONSE INDICATOR [8 BIT] (CR)	USED TO REQUEST A PARTICULAR ACTION IN AN ORIGINAL MANAGEMENT MESSAGE TRANSMISSION, OR TO RESPOND TO A PRIOR TRANSMISSION. DI VALUES FROM 0 THROUGH 127 INDICATE	MMSH.0

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DFI NAME
3020 CONTROL/RESPONSE

DUI NAME
014 (CONTINUED)

EXPLANATION
ORIGINAL MESSAGES. VALUES OF 128
THROUGH 255 ARE USED FOR RESPONSES
TO ORIGINAL MESSAGES.

APPLICABILITY

DATA ITEM

BIT CODE

EXPLANATION

----- FOR DUI 001 -----

QUERY	0	USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S).
ILLEGAL	1 THROUGH 2	
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ILLEGAL	128 THROUGH 129	
CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
ILLEGAL	132 THROUGH 133	
UNDEFINED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL	192 THROUGH 197	
UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.

----- FOR DUI 002 -----

QUERY	0	USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S).
COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ILLEGAL	128 THROUGH 129	
CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A

DFI NAME
3020 CONTROL/RESPONSE

DATA ITEM (CONTINUED) (CONTINUED)	BIT CODE	EXPLANATION QUERY OR COMMAND.
ILLEGAL REJECT	131 THROUGH 132 133	USED TO INDICATE THAT A COMMAND HAS BEEN REJECTED.
RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 003 -----		
ILLEGAL INFORMATION	0 THROUGH 1 2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ILLEGAL RESERVED	128 THROUGH 133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 004 -----		
ILLEGAL COMMAND	0 1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
ILLEGAL UNDEFINED	2 3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ILLEGAL CANTPRO	128 THROUGH 129 130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
ILLEGAL ACCEPT	131 132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.

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DFI NAME
3020 CONTROL/RESPONSE

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
ILLEGAL	133	
RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL	192 THROUGH 197	
UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 005 -----		
ILLEGAL INFORMATION	0 THROUGH 1 2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ACK	128	USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE.
NACK	129	USED TO NEGATIVELY ACKNOWLEDGE RECEIPT OF A MANAGEMENT MESSAGE FRAGMENT.
CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
ILLEGAL RESERVED	131 THROUGH 133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL UNSTAFFED	192 THROUGH 193 194	USED BY THE JRE PROCESSOR TO REPLY TO MANAGEMENT MESSAGE THAT REQUESTS OPERATOR ACKNOWLEDGMENT WHEN IT HAS NO OPERATOR PRESENT (THIS IS A SPECIFIC CASE OF CANTPRO).
NOT SUPPORTED	195	USED BY THE JRE PROCESSOR TO INDICATE THAT IT DOES NOT SUPPORT OPERATOR ACKNOWLEDGMENT OF THIS MESSAGE SUBTYPE.
TIMEOUT	196	USED BY THE JRE PROCESSOR TO REPLY THAT THE OPERATOR DID NOT REPLY WITHIN THE COMPLETION TIMEOUT INTERVAL.
OPERATOR RECEIPT	197	USED TO INDICATE THAT THE MESSAGE

DFI NAME
3020 CONTROL/RESPONSE

DATA ITEM (CONTINUED) (CONTINUED)	BIT CODE	EXPLANATION HAS BEEN DISPLAYED TO THE OPERATOR.
UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 006 -----		
ILLEGAL COMMAND	0 1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ACK	128	USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE.
ILLEGAL ACCEPT	129 THROUGH 131 132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.
ILLEGAL RESERVED	133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 007 -----		
QUERY	0	USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S).
ILLEGAL UNDEFINED	1 THROUGH 2 3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ILLEGAL RESERVED	128 THROUGH 133 134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL UNDEFINED	192 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.

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APPENDIX D

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DFI NAME
3020 CONTROL/RESPONSE

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
----- FOR DUI 008 -----		
ILLEGAL	0 THROUGH 2	
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ILLEGAL	128 THROUGH 130	
REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
ILLEGAL	132 THROUGH 133	
RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL	192 THROUGH 197	
UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 009 -----		
ILLEGAL	0	
COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
ILLEGAL	2	
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ILLEGAL	128 THROUGH 130	
REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
ILLEGAL	132 THROUGH 133	
RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL	192 THROUGH 197	
UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 010 -----		
QUERY	0	USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S).
COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING

DFI NAME
3020 CONTROL/RESPONSE

DATA ITEM (CONTINUED) (CONTINUED)	BIT CODE	EXPLANATION THE SETTINGS SPECIFIED IN A MESSAGE.
INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ACK	128	USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE.
ILLEGAL CANTPRO	129 130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
ACCEPT	132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.
REJECT	133	USED TO INDICATE THAT A COMMAND HAS BEEN REJECTED.
RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL CANTCO	192 193	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND CANNOT COMPLY.
ILLEGAL NOT SUPPORTED	194 195	USED BY THE JRE PROCESSOR TO INDICATE THAT IT DOES NOT SUPPORT OPERATOR ACKNOWLEDGMENT OF THIS MESSAGE SUBTYPE.
ILLEGAL UNDEFINED	196 THROUGH 197 198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 011 -----		
ILLEGAL UNDEFINED	0 THROUGH 2 3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ACK	128	USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE.
NACK	129	USED TO NEGATIVELY ACKNOWLEDGE RECEIPT OF A MANAGEMENT MESSAGE FRAGMENT.
CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A

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APPENDIX D

DFI NAME
3020 CONTROL/RESPONSE

DATA ITEM (CONTINUED) (CONTINUED)	BIT CODE	EXPLANATION QUERY OR COMMAND.
ILLEGAL	131	
ACCEPT	132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.
REJECT	133	USED TO INDICATE THAT A COMMAND HAS BEEN REJECTED.
RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
WILCO	192	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND WILL COMPLY.
CANTCO	193	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND CANNOT COMPLY.
UNSTAFFED	194	USED BY THE JRE PROCESSOR TO REPLY TO MANAGEMENT MESSAGE THAT REQUESTS OPERATOR ACKNOWLEDGMENT WHEN IT HAS NO OPERATOR PRESENT (THIS IS A SPECIFIC CASE OF CANTPRO).
ILLEGAL	195	
TIMEOUT	196	USED BY THE JRE PROCESSOR TO REPLY THAT THE OPERATOR DID NOT REPLY WITHIN THE COMPLETION TIMEOUT INTERVAL.
OPERATOR RECEIPT	197	USED TO INDICATE THAT THE MESSAGE HAS BEEN DISPLAYED TO THE OPERATOR.
UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 012 -----		
ILLEGAL INFORMATION	0 THROUGH 1 2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ILLEGAL CANTPRO	128 THROUGH 129 130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A

DFI NAME
3020 CONTROL/RESPONSE

DATA ITEM (CONTINUED) (CONTINUED)	BIT CODE	EXPLANATION QUERY OR COMMAND.
ILLEGAL	131 THROUGH 133	
RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL	192 THROUGH 197	
UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 013 -----		
ILLEGAL	0	
COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
ILLEGAL	2	
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.
ILLEGAL	128 THROUGH 129	
CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
ILLEGAL	131 THROUGH 133	
RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
ILLEGAL	192 THROUGH 197	
UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.
----- FOR DUI 014 -----		
QUERY	0	USED TO REQUEST INFORMATION FROM A JRE PROCESSOR(S).
COMMAND	1	USED TO DIRECT A JRE PROCESSOR(S) TO TAKE SOME ACTION, SUCH AS APPLYING THE SETTINGS SPECIFIED IN A MESSAGE.
INFORMATION	2	USED TO TRANSMIT DATA OTHER THAN QUERY OR COMMAND.
UNDEFINED	3 THROUGH 127	RESERVED FOR ADDITIONAL CONTROL CODES.

DFI NAME
3020 CONTROL/RESPONSE

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
ACK	128	USED TO ACKNOWLEDGE THE RECEIPT OF A MANAGEMENT MESSAGE.
NACK	129	USED TO NEGATIVELY ACKNOWLEDGE RECEIPT OF A MANAGEMENT MESSAGE FRAGMENT.
CANTPRO	130	USED BY THE JRE PROCESSOR TO INDICATE THAT IT CANNOT PROCESS A QUERY OR COMMAND.
REPORT	131	USED BY THE JRE PROCESSOR TO REPORT INFORMATION REQUESTED BY A QUERY.
ACCEPT	132	USED TO INDICATE THAT A COMMAND HAS BEEN ACCEPTED.
REJECT	133	USED TO INDICATE THAT A COMMAND HAS BEEN REJECTED.
RESERVED	134 THROUGH 191	RESERVED FOR ADDITIONAL PROCESSOR RESPONSE CODES.
WILCO	192	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND WILL COMPLY.
CANTCO	193	USED TO INDICATE THAT THE OPERATOR HAS RECEIVED THE MESSAGE AND CANNOT COMPLY.
UNSTAFFED	194	USED BY THE JRE PROCESSOR TO REPLY TO MANAGEMENT MESSAGE THAT REQUESTS OPERATOR ACKNOWLEDGMENT WHEN IT HAS NO OPERATOR PRESENT (THIS IS A SPECIFIC CASE OF CANTPRO).
NOT SUPPORTED	195	USED BY THE JRE PROCESSOR TO INDICATE THAT IT DOES NOT SUPPORT OPERATOR ACKNOWLEDGMENT OF THIS MESSAGE SUBTYPE.
TIMEOUT	196	USED BY THE JRE PROCESSOR TO REPLY THAT THE OPERATOR DID NOT REPLY WITHIN THE COMPLETION TIMEOUT INTERVAL.
OPERATOR RECEIPT	197	USED TO INDICATE THAT THE MESSAGE HAS BEEN DISPLAYED TO THE OPERATOR.
UNDEFINED	198 THROUGH 255	RESERVED FOR ADDITIONAL OPERATOR RESPONSE CODES.

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APPENDIX D

MIL-STD-3011D

DFI NAME
3021 DESIGNATOR

DEFINITION
A UNIQUE NUMERIC IDENTIFIER ASSIGNED TO EVERY JREAP LINK AND TDL NETWORK. A SINGLE DESIGNATOR WILL BE USED FOR A JRE MEDIUM THAT CONNECTS SEVERAL JRE PROCESSORS OVER A MULTICAST OR BROADCAST LINK.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY		
001 LINK DESIGNATOR TO FILTER [16 BIT] (DTF)	THE UNIQUE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THIS FILTER WILL APPLY TO.	X0.10.2 X0.10.5 X0.10.8 X0.10.11	X0.10.3 X0.10.6 X0.10.9 X0.10.12	X0.10.4 X0.10.7 X0.10.10 X0.10.13
002 LINK DESIGNATOR [16 BIT]	THE UNIQUE DESIGNATOR FOR EACH OF A JRE PROCESSOR'S CAPABLE JRE LINKS OR TDL NETWORKS	X0.10.1 X0.13.0	X0.10.0 X0.14.0	X0.12.0
003 SOURCE LINK DESIGNATOR [16 BIT]	THE DESIGNATOR OF THE JRE LINK OR TDL NETWORK THE DATA ORIGINATED FROM.	X0.10.14	X7.0.0	X7.1.0
004 TRANSMIT LINK DESIGNATOR [16 BIT]	THE DESIGNATOR OF THE JRE LINK OR TDL NETWORK ON WHICH THE DATA IS TO BE TRANSMITTED.	X7.0.0	X7.1.0	

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 004 -----		
NO STATEMENT	0	
ASSIGNED DESIGNATOR	1 THROUGH 65535	UNIQUE NUMERIC DESIGNATOR ASSIGNED TO A JRE LINK OR TDL NETWORK.

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MIL-STD-3011D
APPENDIX D

DFI NAME DEFINITION
3022 SPECIAL EVENT USED TO COMMUNICATE THE TYPE OF INFREQUENT PERIODIC EVENTS.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 EVENT TYPE [5 BIT]	INDICATES THE TYPE OF EVENT.	X0.8.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
EHF SATELLITE EPOCH STROBE	0	
UNDEFINED	1 THROUGH 31	

DFI NAME DEFINITION
3023 PROTOCOL VERSION JREAP PROTOCOL VERSION.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 APPLICATION PROTOCOL VERSION [4 BIT] (APV)	INDICATES THE VERSION OF THE JREAP PROTOCOL THAT IS IN USE.	AH.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
ILLEGAL	0	
PROTOCOL VERSION NUMBER	1 THROUGH 15	

DFI NAME DEFINITION
3024 TEXT TEXT CHARACTERS.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 ASCII [8 BIT] (ASCII)	8-BIT ASCII CHARACTERS.	X0.7.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
ASCII 8-BIT CHARACTER SET	0 THROUGH 255	

DFI NAME
3025 MODE DEFINITION
OPERATING MODE OF THE JRE PROCESSOR.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 CONTROLLER MODE NP [2 BIT] (CM NP)	USED TO REPORT THE CONTROLLER ROLE OR CAPABILITIES FOR THIS JRE PROCESSOR.	FSTBH.A.NP.0
002 CONTROLLER MODE NC [2 BIT] (CM NC)	USED TO REPORT THE CONTROLLER ROLE OR CAPABILITIES FOR THIS JRE PROCESSOR.	FSTBH.A.NC.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
NOT JRE-ANC-CAPABLE	0	
JRE-ANC-CAPABLE	1	
JRE-ANC	2	
UNDEFINED	3	
----- FOR DUI 002 -----		
UNDEFINED	0	
JRE-ANC-CAPABLE	1	
UNDEFINED	2	
JRE-NCB	3	

DFI NAME
3027 TRACK NUMBER

DEFINITION
THE LINK 16 UNIT IDENTIFICATION NUMBER.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SOURCE TRACK NUMBER [15 BIT]		X0.10.7
002 SECONDARY TRACK NUMBER [15 BIT]		X0.11.0
003 JRE SOURCE TRACK NUMBER [16 BIT]		X1.0.0 X2.0.0 X3.0.0 FSMGH.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
ILLEGAL	0	
NUMERIC	00001 THROUGH 00076 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
ILLEGAL	00077 (OCTAL)	
NUMERIC	00100 THROUGH 00175 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
NUMERIC	00176 (OCTAL)	RESERVED FOR USE AS THE PSEUDO SOURCE TRACK NUMBER ADDRESS.
NUMERIC	00177 (OCTAL)	COLLECTIVE ADDRESS.
NUMERIC	00200 THROUGH 07776 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
ILLEGAL	07777 (OCTAL)	
NUMERIC	10000 THROUGH 77776 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
NUMERIC	77777 (OCTAL)	USED AS AN STN TO IDENTIFY THE LINK 16 NETWORK MANAGER.

----- FOR DUI 002 -----		
ILLEGAL	0	
NUMERIC	00001 THROUGH 00076 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
ILLEGAL	00077 (OCTAL)	
NUMERIC	00100 THROUGH 00175 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
NUMERIC	00176 (OCTAL)	RESERVED FOR USE AS THE PSEUDO

DFI NAME
3027 TRACK NUMBER

DATA ITEM (CONTINUED) (CONTINUED)	BIT CODE	EXPLANATION
NUMERIC	00177 (OCTAL)	SOURCE TRACK NUMBER ADDRESS.
NUMERIC	00200 THROUGH 07776 (OCTAL)	COLLECTIVE ADDRESS.
ILLEGAL	07777 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
NUMERIC	10000 THROUGH 77776 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.
NUMERIC	77777 (OCTAL)	USED AS AN STN TO IDENTIFY THE LINK 16 NETWORK MANAGER.
----- FOR DUI 003 -----		
NUMERIC	000000 THROUGH 177777 (OCTAL)	A RANGE OF VALID TRACK NUMBERS.

DFI NAME
3028 JREAP J-SERIES MESSAGE

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 JREAP J-SERIES MESSAGE WORD, 1 [16 BIT]	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .	X1.0.0 X1.1.0
002 JREAP J-SERIES MESSAGE WORD, 2 [16 BIT]	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .	X1.0.0 X1.1.0
003 JREAP J-SERIES MESSAGE WORD, 3 [16 BIT]	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .	X1.0.0 X1.1.0
004 JREAP J-SERIES MESSAGE WORD, 4 [16 BIT]	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .	X1.0.0 X1.1.0
005 JREAP J-SERIES MESSAGE WORD, 5 [6 BIT]	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES WORD. THE J-SERIES WORD FIELD IS DIVIDED INTO 8-BIT BYTES AND THE ENDIANNESS OF THE DATA BITS IN THE J-SERIES WORD IS SWAPPED AS SHOWN IN FIGURE 5.5-1 .	X1.0.0 X1.1.0

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APPENDIX D

DFI NAME
3028 JREAP J-SERIES MESSAGE

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 004 -----		
DATA, 1	0 THROUGH 65535	DATA
----- FOR DUI 005 -----		
DATA	0 THROUGH 63	

DFI NAME DEFINITION
3029 TIMEOUT SPECIFIES AN AMOUNT OF TIME FOR AN ACTION TO BE TAKEN.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY			
001 COMPLETION TIMEOUT [8 BIT]	SPECIFIES THE AMOUNT OF TIME (IN SECONDS) THAT THE RECEIVING JRE PROCESSOR RETAINS THIS MESSAGE.	X0.0.0	X0.1.0	X0.2.0	X0.3.0
		X0.4.0	X0.5.0	X0.6.0	X0.7.0
		X0.8.0	X0.9.0	X0.10	X0.10.1
		X0.10.2	X0.10.3	X0.10.4	
		X0.10.5	X0.10.6	X0.10.7	
		X0.10.8	X0.10.9	X0.10.10	
		X0.10.11	X0.10.12	X0.10.13	
		X0.10.0	X0.11.0	X0.12.0	
		X0.13.0	X0.14.0	MMSH.0	

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
NO STATEMENT	0	
1 THROUGH 255 SECONDS	1 THROUGH 255	IN ONE SECOND INCREMENTS

DFI NAME
3030 FREE TEXT

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY			
001 JREAP/JTIDS FREE TEXT, 1 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
002 JREAP/JTIDS FREE TEXT, 2 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
003 JREAP/JTIDS FREE TEXT, 3 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
004 JREAP/JTIDS FREE TEXT, 4 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
005 JREAP/JTIDS FREE TEXT, 5 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
006 JREAP/JTIDS FREE TEXT, 6 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
007 JREAP/JTIDS FREE TEXT, 7 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
008 JREAP/JTIDS FREE TEXT, 8 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
009 JREAP/JTIDS FREE TEXT, 9 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
010 JREAP/JTIDS FREE TEXT, 10 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
011 JREAP/JTIDS FREE TEXT, 11 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
012 JREAP/JTIDS FREE TEXT, 12 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0
013 JREAP/JTIDS FREE TEXT, 13 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0	X2.1.0	X3.0.0	X3.1.0

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APPENDIX D

DFI NAME
3030 FREE TEXT

DUI NAME	EXPLANATION	APPLICABILITY
014 JREAP/JTIDS FREE TEXT, 14 [16 BIT]	USED TO TRANSFER BINARY DATA.	X2.0.0 X2.1.0 X3.0.0 X3.1.0
015 JREAP/JTIDS FREE TEXT, 15 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
016 JREAP/JTIDS FREE TEXT, 16 [1 BIT] (JFT 1BT)	USED TO TRANSFER BINARY DATA.	X2.0.0 X2.1.0 X3.0.0 X3.1.0
017 JREAP/JTIDS FREE TEXT, 17 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
018 JREAP/JTIDS FREE TEXT, 18 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
019 JREAP/JTIDS FREE TEXT, 19 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
020 JREAP/JTIDS FREE TEXT, 20 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
021 JREAP/JTIDS FREE TEXT, 21 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
022 JREAP/JTIDS FREE TEXT, 22 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
023 JREAP/JTIDS FREE TEXT, 23 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
024 JREAP/JTIDS FREE TEXT, 24 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
025 JREAP/JTIDS FREE TEXT, 25 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
026 JREAP/JTIDS FREE TEXT, 26 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
027 JREAP/JTIDS FREE TEXT, 27 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0

DFI NAME
3030 FREE TEXT

DUI NAME	EXPLANATION	APPLICABILITY
028 JREAP/JTIDS FREE TEXT, 28 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
029 JREAP/JTIDS FREE TEXT, 29 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0
030 JREAP/JTIDS FREE TEXT, 30 [16 BIT]	USED TO TRANSFER BINARY DATA.	X3.0.0 X3.1.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 015 -----		
DATA	0 THROUGH 65535	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .
----- FOR DUI 016 -----		
DATA	0 THROUGH 1	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .
----- FOR DUIS 017 - 030 -----		
DATA	0 THROUGH 65535	USED IN CONJUNCTION WITH OTHER DATA FIELDS IN A MESSAGE TO FORM A J- SERIES FREE TEXT MESSAGE. SEE FIGURES 5.5-4 and 5.5-5 .

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APPENDIX D

DFI NAME
3031 INDEX

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 GEOGRAPHIC FILTER INDEX [5 BIT]	INDICATES THE INDEX NUMBER OF A GEOGRAPHIC FILTER.	X0.10.1 X0.10.5 X0.10.6 X0.10.0
DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
INDEX NUMBER OF FILTER	0 THROUGH 31	

DFI NAME
3032 SEQUENCE NUMBER

DEFINITION
NUMBER FOR TRACKING MESSAGES.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 MESSAGE SEQUENCE NUMBER [16 BIT]	THE SEQUENCE NUMBER OF A JRE MANAGEMENT MESSAGE.	X0.0.0 X0.1.0 X0.2.0 X0.3.0 X0.4.0 X0.5.0 X0.6.0 X0.7.0 X0.8.0 X0.9.0 X0.10 X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0 X0.11.0 X0.12.0 X0.13.0 X0.14.0 MMSH.0
002 ORIGINATING MESSAGE SEQUENCE NUMBER [16 BIT]	THE MESSAGE SEQUENCE NUMBER OF THE MANAGEMENT MESSAGE BEING RESPONDED TO.	X0.0.0 X0.1.0 X0.2.0 X0.3.0 X0.4.0 X0.5.0 X0.6.0 X0.7.0 X0.8.0 X0.9.0 X0.10 X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0 X0.11.0 X0.12.0 X0.13.0 X0.14.0 MMSH.0
003 J-SERIES MESSAGE SEQUENCE NUMBER [16 BIT]	THE SEQUENCE NUMBER OF EACH JREAP J- SERIES MESSAGE TRANSMITTED BY A JRE PROCESSOR ON EACH JRE LINK.	X1.0.0
004 ORIGINATING J-SERIES MESSAGE SEQUENCE NUMBER [16 BIT]	THE SEQUENCE NUMBER OF THE ORIGINATING J-SERIES MESSAGE THAT AN ACKNOWLEDGEMENT MESSAGE IN RESPONSE TO EACH JREAP J-SERIES MESSAGE REQUIRING ACKNOWLEDGMENT IS BEING TRANSMITTED TO.	X0.4.0
005 NETWORK PARTICIPATION GROUP MESSAGE SEQUENCE NUMBER [16 BIT]	THE SEQUENCE NUMBER OF EACH JREAP J-SERIES WITH NPG ASSIGNMENT MESSAGE TRANSMITTED BY A JRE PROCESSOR ON EACH JRE LINK.	X7.0.0
DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
NUMERIC	1 THROUGH 65535	THE SEQUENCE NUMBER OF THE MESSAGE.

DFI NAME
3032 SEQUENCE NUMBER

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
----- FOR DUI 002 -----		
NUMERIC	0	SET TO 0 IN ORIGINAL (NON-RESPONSE) MESSAGES OR RESPONDING TO A MESSAGE SEQUENCE NUMBER OF 0.
NUMERIC	1 THROUGH 65535	MESSAGE SEQUENCE NUMBER OF THE ORIGINAL MESSAGE BEING RESPONDED TO.
----- FOR DUI 003 AND 005 -----		
NUMERIC	0	INDICATES A ROLLOVER IN THE COUNT OF SEQUENCE NUMBERS.
NUMERIC	1 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF A JREAP J-SERIES MESSAGE.
----- FOR DUI 004 -----		
NUMERIC	0 THROUGH 65535	THE MESSAGE SEQUENCE NUMBER OF THE JREAP J-SERIES MESSAGE BEING ACKNOWLEDGED.

DFI NAME
3033 NUMBER DEFINITION
DEFINES A NUMBER OF OCCURRENCES.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 COUNT [8 BIT]	INDICATES THE THRESHOLD NUMBER OF TIMES WITHIN THE TIME INTERVAL SPECIFIED THAT THE MAXIMUM LATENCY MAY BE EXCEEDED BEFORE BEING REPORTED BY THE JRE PROCESSOR.	X0.5.0
002 FRAGMENT NUMBER [8 BIT]	USED TO UNIQUELY IDENTIFY MESSAGE FRAGMENTS.	X0.0.0 X0.1.0 X0.2.0 X0.3.0 X0.4.0 X0.5.0 X0.6.0 X0.7.0 X0.8.0 X0.9.0 X0.10 X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0 X0.11.0 X0.12.0 X0.13.0 X0.14.0 MMSH.0
003 TOTAL NUMBER FRAGMENTS [8 BIT]	THE ACTUAL NUMBER OF FRAGMENTS THAT COMPRISE THE COMPLETE FRAGMENTED MESSAGE.	X0.0.0 X0.1.0 X0.2.0 X0.3.0 X0.4.0 X0.5.0 X0.6.0 X0.7.0 X0.8.0 X0.9.0 X0.10 X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0 X0.11.0 X0.12.0 X0.13.0 X0.14.0 MMSH.0
004 NUMBER OF BLOCKS [7 BIT]	DEFINES THE NUMBER OF JREAP FREE TEXT BLOCKS THAT FOLLOW (ARE CONTAINED) IN THE MESSAGE.	X2.0.0 X2.1.0 X3.0.0 X3.1.0
005 NUMBER OF J-WORDS [12 BIT]	INDICATES THE NUMBER OF J-WORDS CONTAINED WITHIN THE FOLLOWING J-SERIES MESSAGE(S).	X1.0.0

DFI NAME
3033 NUMBER

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
NUMERIC	0 THROUGH 255	THE NUMBER OF TIMES THE ERROR THRESHOLD MAY BE EXCEEDED ON THE DESIGNATED LINK BEFORE A LATENCY EXCEEDED MESSAGE IS TRANSMITTED.
----- FOR DUI 002 -----		
NUMERIC	0 THROUGH 255	THE MESSAGE FRAGMENT NUMBER.
----- FOR DUI 003 -----		
NO FRAGMENTS	0	
ILLEGAL	1	
NUMBER FRAGMENTS	2 THROUGH 255	
----- FOR DUI 004 -----		
ILLEGAL	0	
NUMERIC	1 THROUGH 127	
----- FOR DUI 005 -----		
ILLEGAL	0	
NUMERIC	1 THROUGH 4095	

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APPENDIX D

DFI NAME
3034 ERROR

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 ERROR CODE, 1 [8 BIT] (EC1)	INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.	X0.6.0 X0.9.0 X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0
002 ERROR CODE, 2 [8 BIT] (EC2)	INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.	X0.0.0 X0.2.0 X0.5.0 X0.8.0
003 ERROR CODE, 3 [8 BIT] (EC3)	INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.	X0.1.0
004 ERROR CODE, 4 [8 BIT] (EC4)	INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.	X0.3.0 X0.4.0 X0.12.0 X0.13.0 X0.14.0
005 ERROR CODE, 5 [8 BIT] (EC5)	INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.	X0.7.0
006 ERROR CODE, 6 [8 BIT] (EC6)	INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.	X0.11.0
007 ERROR CODE, 7 [8 BIT] (EC7)	INDICATES THE ERROR CONDITION THAT OCCURS WHEN A JRE PROCESSOR RECEIVES AND PROCESSES A MANAGEMENT MESSAGE.	X0.10 MMSH.0

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MIL-STD-3011D
APPENDIX D

DFI NAME
3034 ERROR

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
NO ERROR	0	INDICATES NO ERROR CONDITION.
ILLEGAL	1 THROUGH 6	
COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
SUBTYPE SPECIFIC UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
----- FOR DUI 002 -----		
NO ERROR	0	INDICATES NO ERROR CONDITION.
ILLEGAL	1	
NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.
ILLEGAL	3 THROUGH 6	
COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
----- FOR DUI 003 -----		
NO ERROR	0	INDICATES NO ERROR CONDITION.
ILLEGAL	1 THROUGH 4	
RESOURCE NOT AVAILABLE	5	INDICATES THAT THE RESOURCE AFFECTED BY THE COMMAND OR QUERY IS OFFLINE OR NOT AVAILABLE (FOR INSTANCE, A LINK 16 TERMINAL THAT IS OFFLINE AND CANNOT ACCEPT SECONDARY TN CHANGES).
ILLEGAL	6	
COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.

DFI NAME
3034 ERROR

DATA ITEM (CONTINUED) SUBTYPE SPECIFIC OR UNUSED	BIT CODE 32 THROUGH 255	EXPLANATION VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
----- FOR DUI 004 -----		
NO ERROR	0	INDICATES NO ERROR CONDITION.
MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
ILLEGAL PROCESSING TIMEOUT	2 THROUGH 5 6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
----- FOR DUI 005 -----		
NO ERROR	0	INDICATES NO ERROR CONDITION.
MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.
ILLEGAL PROCESSING TIMEOUT	3 THROUGH 5 6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT

DFI NAME
3034 ERROR

DATA ITEM (CONTINUED) (CONTINUED)	BIT CODE	EXPLANATION MESSAGE SUBTYPES.
----- FOR DUI 006 -----		
NO ERROR	0	INDICATES NO ERROR CONDITION.
MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.
LOCKOUT/RESTRICTED	3	INDICATES THAT THE REQUESTED OPERATION IS NOT PERMITTED DUE TO AN OPERATOR-INITIATED LOCKOUT.
ILLEGAL	4	INDICATES THAT THE RESOURCE AFFECTED BY THE COMMAND OR QUERY IS OFFLINE OR NOT AVAILABLE (FOR INSTANCE, A LINK 16 TERMINAL THAT IS OFFLINE AND CANNOT ACCEPT SECONDARY TN CHANGES).
RESOURCE NOT AVAILABLE	5	
PROCESSING TIMEOUT	6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.
----- FOR DUI 007 -----		
NO ERROR	0	INDICATES NO ERROR CONDITION.
MISSING FRAGMENT	1	INDICATES THAT THE FRAGMENT SPECIFIED IN THIS SUBHEADER WAS NOT RECEIVED.
NOT IMPLEMENTED	2	INDICATES THAT THE JRE PROCESSOR DOES NOT IMPLEMENT THE RECEIVED MESSAGE.

DFI NAME
3034 ERROR

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
LOCKOUT/RESTRICTED	3	INDICATES THAT THE REQUESTED OPERATION IS NOT PERMITTED DUE TO AN OPERATOR-INITIATED LOCKOUT.
MESSAGE ERROR	4	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT CONSIDER THE MESSAGE TO BE VALID.
RESOURCE NOT AVAILABLE	5	INDICATES THAT THE RESOURCE AFFECTED BY THE COMMAND OR QUERY IS OFFLINE OR NOT AVAILABLE (FOR INSTANCE, A LINK 16 TERMINAL THAT IS OFFLINE AND CANNOT ACCEPT SECONDARY TN CHANGES).
PROCESSING TIMEOUT	6	INDICATES THAT THE RECEIVING JRE PROCESSOR DID NOT COMPLETE THE OPERATION WITHIN THE SPECIFIED TIME.
COMMON UNUSED	7 THROUGH 31	RESERVED FOR FUTURE USE FOR ERROR CODES THAT ARE COMMON TO ALL MANAGEMENT MESSAGE SUBTYPES.
SUBTYPE SPECIFIC OR UNUSED	32 THROUGH 255	VALUES AVAILABLE FOR DEFINITION AND USE BY A SPECIFIC MANAGEMENT MESSAGE SUBTYPES.

DFI	NAME	DEFINITION	
3035	TRANSMIT LIMIT	LIMIT OF THE NUMBER OF SECONDS A JRE-NP MAY USE TO TRANSMIT	
DATA STANDARD USAGE: JREAP		STATUS:	
	DUI NAME	EXPLANATION	APPLICABILITY
001	JRE-NP TRANSMIT LIMIT [4 BIT] (JNP TL)	THE NUMBER OF SECONDS THAT THE JRE- NP MAY USE FOR ITS NEXT TRANSMISSION.	FSTBH.A.NC.0
	DATA ITEM	BIT CODE	EXPLANATION
	----- FOR DUI 001 -----		
	ILLEGAL	0	
	1 THROUGH 10 SECONDS	1 THROUGH 10	IN ONE SECOND INCREMENTS.
	ILLEGAL	11 THROUGH 15	

DFI	NAME	DEFINITION	
3036	SENDER ID	THE INTERFACE UNIT (IU) NUMBER OF A JRE PROCESSOR.	
DATA STANDARD USAGE: JREAP		STATUS:	
DUI	NAME	EXPLANATION	APPLICABILITY
001	JRE SENDER ID [16 BIT] (JRE SI)	THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER.	X0.6.0 X0.14.0 AH.0 FSTBH.B.0
002	JRE SENDER ID, 1 [16 BIT] (JRE SI1)	THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER.	FSTBH.A.NP.0 FSTBH.A.NC.0
003	JRE SENDER ID, 2 [16 BIT] (JRE SI2)	THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER.	FSTBH.A.NP.0 FSTBH.A.NC.0
004	JRE SENDER ID, 3 [16 BIT] (JRE SI3)	THE INTERFACE UNIT (IU) NUMBER OF THE JRE PROCESSOR THAT IS GENERATING THE MESSAGE HEADER.	FSTBH.A.NP.0 FSTBH.A.NC.0
005	JRE NETWORK PARTICIPANT [16 BIT] (JRE NP)	THE INTERFACE UNIT (IU) NUMBER OF FIRST JRE PROCESSOR IN THE TSL.	FSTBH.A.NC.0
020	DESTINATION ADDRESS [16 BIT] (DA)	THE INTERFACE UNIT (IU) NUMBER WHICH IS ADDRESSED.	X0.0.0 X0.1.0 X0.2.0 X0.3.0 X0.4.0 X0.5.0 X0.6.0 X0.7.0 X0.8.0 X0.9.0 X0.10 X0.10.1 X0.10.2 X0.10.3 X0.10.4 X0.10.5 X0.10.6 X0.10.7 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.12 X0.10.13 X0.10.0 X0.11.0 X0.12.0 X0.13.0 X0.14.0 MMSH.0
021	ORIGINATING J-SERIES JRE SENDER ID [16 BIT]	THE INTERFACE UNIT (IU) NUMBER OF THE REMOTE JRE PROCESSOR THAT TRANSMITTED THE JRE J-SERIES MESSAGE ONTO THE LINK.	X0.4.0
022	LINK INTERFACE UNIT [16 BIT]	THE UNIQUE NUMBER FOR EACH UNIT PARTICIPATING ON THE LINK.	X0.12.0 X0.14.0

DFI NAME
3036 SENDER ID

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 005 AND 020 - 022 -----		
NUMERIC	000000 THROUGH 177777 (OCTAL)	INTERFACE UNIT NUMBER.

DFI NAME
3037 LABEL

DEFINITION
DEFINES THE GENERAL MESSAGE CLASSIFICATION AS A CRITERION FOR
SELECTIVE ACCESS OF INFORMATION.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 LABEL, J-SERIES [5 BIT]	PROVIDES A LABEL FOR J-SERIES MESSAGES.	X0.10.10

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
SYSTEM INFORMATION	0	
EXCHANGE AND NETWORK MANAGEMENT		
SYSTEM INFORMATION	1	
EXCHANGE AND NETWORK MANAGEMENT		
PRECISE PARTICIPANT LOCATION AND IDENTIFICATION (PPLI)	2	
SURVEILLANCE	3	
UNDEFINED	4	
ANTISUBMARINE WARFARE	5	
AMPLIFICATION	6	
INFORMATION MANAGEMENT	7	
INFORMATION MANAGEMENT	8	
WEAPONS COORDINATION AND MANAGEMENT	9	
WEAPONS COORDINATION AND MANAGEMENT	10	
MISSION SUPPORT	11	
CONTROL	12	
PLATFORM AND SYSTEM STATUS	13	
CONTROL	14	
THREAT WARNING	15	
MISSION SUPPORT	16	
MISCELLANEOUS	17	
UNDEFINED	18 THROUGH 26	
NATIONAL USE	27 THROUGH 30	
MISCELLANEOUS	31	

DFI	NAME	DEFINITION	
3038	SUBLABEL	SUBDIVIDES A MESSAGE LABEL TO PROVIDE A FINER SET OF CRITERIA FOR ACCESS OF INFORMATION.	
DATA STANDARD USAGE: JREAP		STATUS:	
DUI	NAME	EXPLANATION	APPLICABILITY
001	SUBLABEL, J-SERIES [3 BIT]	PROVIDES A SUBLABEL FOR FURTHER DIVISION OF LABEL, J-SERIES.	X0.10.10
	DATA ITEM	BIT CODE	EXPLANATION
	----- FOR DUI 001 -----		
	NUMERIC	0 THROUGH 7	DENOTES SUBLABEL ASSOCIATED WITH LABEL, J-SERIES.

DFI NAME DEFINITION
3039 CRC CYCLIC REDUNDANCY CHECK.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 MESSAGE GROUP HEADER CRC [16 BIT]	MESSAGE GROUP HEADER CYCLIC REDUNDANCY CHECK FIELD.	X0.3.0 FSMGH.3
002 TRANSMISSION BLOCK HEADER CRC [16 BIT]	TRANSMISSION BLOCK HEADER CYCLIC REDUNDANCY CHECK FIELD.	FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0

DATA ITEM	BIT CODE	EXPLANATION
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----- FOR DUI 001 AND 002 -----

NUMERIC	0 THROUGH 65535	THE CALCULATED CRC VALUE.
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DFI NAME DEFINITION
3040 PARTICIPATION GROUP

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 JTIDS/MIDS PARTICIPATION GROUP [9 BIT]	THE PARTICIPATION GROUP (PG) FROM WHICH THE FREE TEXT (CODED) MESSAGE WAS RECEIVED ON JTIDS/MIDS OR THAT WAS SUPPLIED BY THE TRANSMITTING UNIT FOR DATA ORIGINATING AT THE JRE PROCESSOR.	X2.0.0 X2.1.0 X3.0.0 X3.1.0
002 NETWORK PARTICIPATION GROUP [9 BIT]	THE PARTICIPATION GROUP (PG) ON WHICH A J-SERIES MESSAGE IS TO BE TRANSMITTED.	X7.0.0, X7.1.0
003 NETWORK PARTICIPATION GROUP TO FILTER [9 BIT]	THE DESTINATION PARTICIPATION GROUP (PG) SELECTED FOR FILTERING.	X0.10.14

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 003 -----		
NO STATEMENT	0	
INITIAL ENTRY	1	
RTT A	2	
RTT B	3	
NETWORK MANAGEMENT	4	
PPLI AND STATUS GROUP A	5	
PPLI AND STATUS GROUP B	6	
SURVEILLANCE	7	
MISSION MANAGEMENT/ WEAPONS COORDINATION	8	
CONTROL	9	
ELECTRONIC WARFARE	10	
IMAGE TRANSFER	11	
VOICE GROUP A	12	
VOICE GROUP B	13	
PARTICIPATION GROUPS 14 THROUGH 18	14 THROUGH 18	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
NONC2 JU-TO-NONC2 JU A	19	
NONC2 JU-TO-NONC2 JU B	20	
BMD OPERATIONS	21	
COMPOSITE A	22	

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DFI NAME
3040 PARTICIPATION GROUP

DATA ITEM (CONTINUED)	BIT CODE	EXPLANATION
COMPOSITE B	23	
PARTICIPATION GROUPS 24 THROUGH 26	24 THROUGH 26	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
JOINT NET PPLI	27	
DISTRIBUTED NETWORK MANAGEMENT	28	
RESIDUAL MESSAGES	29	
IJMS POSITION AND STATUS	30	
OTHER IJMS	31	
PARTICIPATION GROUPS 32 THROUGH 509	32 THROUGH 509	DEFINED BY INTERFACE OPERATING PROCEDURES AND TACTICAL COMMUNICATIONS PLAN.
NET CONTROL NEEDLINE	510	
NET STATUS NEEDLINE	511	

DFI NAME DEFINITION
3042 ALTITUDE (HEIGHT) THE ALTITUDE (HEIGHT) OF AN OBJECT AS MEASURED RADIALLY
OUTWARD FROM THE EARTH AS A POSITIVE QUANTITY ABOVE MEAN SEA
LEVEL (MSL) .

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 LOWER ALTITUDE LIMIT [13 BIT]	INDICATES THE LOWER ALTITUDE LIMIT OF A GEOGRAPHIC FILTER.	X0.10.5 X0.10.6
002 UPPER ALTITUDE LIMIT [13 BIT]	INDICATES THE UPPER ALTITUDE LIMIT OF A GEOGRAPHIC FILTER.	X0.10.5 X0.10.6

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 AND 002 -----		
0 THROUGH 204,750 FEET ALTITUDE UNKNOWN	0 THROUGH 8190 8191	IN 25 FOOT INCREMENTS.

DFI NAME DEFINITION
3043 AXIS ORIENTATION THE AXIS ORIENTATION IS THE OFFSET FROM TRUE NORTH AND IS USED
TO ORIENT THE MAJOR AXIS.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 MAJOR AXIS ORIENTATION [8 BIT]	THE MAJOR AXIS ORIENTATION IS AN EIGHT BIT FIELD THAT SPECIFIES THE ORIENTATION OF THE MAJOR AXIS IN ONE DEGREE INCREMENTS FROM 0 TO 179 MEASURED CLOCKWISE FROM TRUE NORTH.	X0.10.5

DATA ITEM	BIT CODE	EXPLANATION
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----- FOR DUI 001 -----

0 THROUGH 179 DEGREES	0 THROUGH 179	IN ONE DEGREE INCREMENTS.
ILLEGAL	180 THROUGH 254	
NO STATEMENT	255	

DFI NAME DEFINITION
3044 VERSION INDICATES A VERSION.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY			
001 MANAGEMENT VERSION [4 BIT]	INDICATES THE VERSION OF THE MANAGEMENT MESSAGE SUBHEADER THAT IS IN USE.	X0.0.0	X0.1.0	X0.2.0	X0.3.0
		X0.4.0	X0.5.0	X0.6.0	X0.7.0
		X0.8.0	X0.9.0	X0.10	X0.10.1
		X0.10.2	X0.10.3	X0.10.4	
		X0.10.5	X0.10.6	X0.10.7	
		X0.10.8	X0.10.9	X0.10.10	
		X0.10.11	X0.10.12	X0.10.13	
		X0.10.0	X0.11.0	X0.12.0	
		X0.13.0	X0.14.0	MMSH.0	

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 001 -----		
NUMERIC	0 THROUGH 15	

DFI NAME DEFINITION
3045 TRANSMISSION FLAG IDENTIFIES THE BEGINNING OF EACH JRE PROCESSOR TRANSMISSION.
IT SHALL CONSIST OF TWO BYTES (SYNCHRONIZATION CHARACTERS),
EACH HAVING A HEX VALUE OF 16 (22 DECIMAL).

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 START OF TRANSMISSION FLAG, 1 [8 BIT]		FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0
002 START OF TRANSMISSION FLAG, 2 [8 BIT]		FSTBH.A.NP.0 FSTBH.A.NC.0 FSTBH.B.0

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 AND 002 -----		
ILLEGAL	0 THROUGH 21	
NUMERIC	22	
ILLEGAL	23 THROUGH 255	

DFI NAME DEFINITION
 3050 POINT TYPE 0 (HAZARD)

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NO STATEMENT [1 BIT] (NS)		X0.10.4 X0.10.5b X0.10.6b
002 NAVIGATION [1 BIT] (NAV)		X0.10.4 X0.10.5b X0.10.6b
003 MINE [1 BIT] (MNE)		X0.10.4 X0.10.5b X0.10.6b
004 IMPACT POINT [1 BIT] (IMP PT)		X0.10.4 X0.10.5b X0.10.6b
005 GROUND ZERO [1 BIT] (GND ZER)		X0.10.4 X0.10.5b X0.10.6b
006 AIM/WEAPON ENTRY POINT [1 BIT] (AIM PT)		X0.10.4 X0.10.5b X0.10.6b
007 MISSILE LAUNCH POINT [1 BIT] (MSL LP)		X0.10.4 X0.10.5b X0.10.6b
008 ELECTRONIC ATTACK (EA) DECOY [1 BIT] (EA DEC)		X0.10.4 X0.10.5b X0.10.6b
009 ENGAGEMENT POINT [1 BIT] (ENG PT)		X0.10.4 X0.10.5b X0.10.6b
010 OIL RIG [1 BIT]		X0.10.4 X0.10.5b X0.10.6b
011 PT0, AMP10 [1 BIT] (PT0 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT0, AMP11 [1 BIT] (PT0 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT0, AMP12 [1 BIT] (PT0 A12)		X0.10.4 X0.10.5b X0.10.6b

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DFI NAME
3050 POINT TYPE 0 (HAZARD)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT0, AMP13 [1 BIT] (PT0 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT0, AMP14 [1 BIT] (PT0 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT0, AMP15 [1 BIT] (PT0 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
 3051 POINT TYPE 1 (REFERENCE POINT
 - GENERAL)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NO STATEMENT [1 BIT] (NS)		X0.10.4 X0.10.5b X0.10.6b
002 MARSHALL POINT [1 BIT] (MAR PT)		X0.10.4 X0.10.5b X0.10.6b
003 WAYPOINT [1 BIT] (WAY PT)		X0.10.4 X0.10.5b X0.10.6b
004 CORRIDOR TAB [1 BIT] (COR TAB)		X0.10.4 X0.10.5b X0.10.6b
005 POSITION AND INTENDED MOVEMENT (PIM) [1 BIT] (PIM)		X0.10.4 X0.10.5b X0.10.6b
006 DISPOSITION CENTER [1 BIT] (DIS CTR)		X0.10.4 X0.10.5b X0.10.6b
007 FORMATION CENTER [1 BIT] (FRM CTR)		X0.10.4 X0.10.5b X0.10.6b
008 SEARCH AREA [1 BIT] (SCH ARE)		X0.10.4 X0.10.5b X0.10.6b
009 VICTOR LIMA (VL) [1 BIT] (VL)		X0.10.4 X0.10.5b X0.10.6b
010 SUBMARINE POSITION AND INTENDED MOVEMENT (SIM) [1 BIT] (SIM)		X0.10.4 X0.10.5b X0.10.6b
011 PT1, AMP10 [1 BIT] (PT1 A10)		X0.10.4 X0.10.5b X0.10.6b
012 DEFENDED ASSET [1 BIT] (DEF AST)		X0.10.4 X0.10.5b X0.10.6b

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DFI NAME
3051 POINT TYPE 1 (REFERENCE POINT
- GENERAL)

DUI NAME	EXPLANATION	APPLICABILITY
013 PT1, AMP12 [1 BIT] (PT1 A12)		X0.10.4 X0.10.5b X0.10.6b
014 PT1, AMP13 [1 BIT] (PT1 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT1, AMP14 [1 BIT] (PT1 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT1, AMP15 [1 BIT] (PT1 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3052 POINT TYPE 2 (STATION -
GENERAL)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NO STATEMENT [1 BIT] (NS)		X0.10.4 X0.10.5b X0.10.6b
002 TOMCAT [1 BIT]		X0.10.4 X0.10.5b X0.10.6b
003 PICKET [1 BIT]		X0.10.4 X0.10.5b X0.10.6b
004 RENDEZVOUS [1 BIT] (RVS)		X0.10.4 X0.10.5b X0.10.6b
005 PT2, AMP4 [1 BIT] (PT2 A4)		X0.10.4 X0.10.5b X0.10.6b
006 REPLENISHMENT [1 BIT] (REP)		X0.10.4 X0.10.5b X0.10.6b
007 RESCUE [1 BIT]		X0.10.4 X0.10.5b X0.10.6b
008 PT2, AMP7 [1 BIT] (PT2 A7)		X0.10.4 X0.10.5b X0.10.6b
009 PT2, AMP8 [1 BIT] (PT2 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT2, AMP9 [1 BIT] (PT2 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT2, AMP10 [1 BIT] (PT2 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT2, AMP11 [1 BIT] (PT2 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT2, AMP12 [1 BIT] (PT2 A12)		X0.10.4 X0.10.5b X0.10.6b

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DFI NAME
3052 POINT TYPE 2 (STATION -
GENERAL)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT2, AMP13 [1 BIT] (PT2 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT2, AMP14 [1 BIT] (PT2 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT2, AMP15 [1 BIT] (PT2 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3053 POINT TYPE 3 (STATION - AIR)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NO STATEMENT [1 BIT] (NS)		X0.10.4 X0.10.5b X0.10.6b
002 COMBAT AIR PATROL (CAP) [1 BIT] (CAP)		X0.10.4 X0.10.5b X0.10.6b
003 AIRBORNE EARLY WARNING (AEW) [1 BIT] (AEW)		X0.10.4 X0.10.5b X0.10.6b
004 ANTISUBMARINE WARFARE (ASW) FIXED WING [1 BIT] (ASW FW)		X0.10.4 X0.10.5b X0.10.6b
005 ANTISUBMARINE WARFARE (ASW) HELICOPTER (HELO) [1 BIT] (ASW HEL)		X0.10.4 X0.10.5b X0.10.6b
006 REPLENISHMENT [1 BIT] (RPL)		X0.10.4 X0.10.5b X0.10.6b
007 STRIKE INITIAL POINT (IP) [1 BIT] (STK IP)		X0.10.4 X0.10.5b X0.10.6b
008 TACAN [1 BIT] (TAC)		X0.10.4 X0.10.5b X0.10.6b
009 TANKER [1 BIT] (TKR)		X0.10.4 X0.10.5b X0.10.6b
010 ORBIT, RACE TRACK [1 BIT] (ORB RT)		X0.10.4 X0.10.5b X0.10.6b
011 ORBIT, FIGURE EIGHT [1 BIT] (ORB F8)		X0.10.4 X0.10.5b X0.10.6b
012 ORBIT, RANDOM CLOSED [1 BIT] (ORB RC)		X0.10.4 X0.10.5b X0.10.6b

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APPENDIX D

MIL-STD-3011D

DFI NAME
3053 POINT TYPE 3 (STATION - AIR)

DUI NAME	EXPLANATION	APPLICABILITY
013 ORBIT POINT [1 BIT] (ORB PT)		X0.10.4 X0.10.5b X0.10.6b
014 PT3, AMP13 [1 BIT] (PT3 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT3, AMP14 [1 BIT] (PT3 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT3, AMP15 [1 BIT] (PT3 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 012 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3054 POINT TYPE 4 (LINE) DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NO STATEMENT [1 BIT] (NS)		X0.10.4 X0.10.5b X0.10.6b
002 FORWARD EDGE OF THE BATTLE AREA (FEBA) [1 BIT] (FEBA)		X0.10.4 X0.10.5b X0.10.6b
003 GUN TARGET LINE [1 BIT] (GTL)		X0.10.4 X0.10.5b X0.10.6b
004 CORRIDOR [1 BIT] (CORDR)		X0.10.4 X0.10.5b X0.10.6b
005 HOSTILE BOUNDARY [1 BIT] (HOS BND)		X0.10.4 X0.10.5b X0.10.6b
006 BUFFER ZONE BOUNDARY [1 BIT] (BZ BND)		X0.10.4 X0.10.5b X0.10.6b
007 LOW LEVEL TRANSIT ROUTE [1 BIT] (LLTR)		X0.10.4 X0.10.5b X0.10.6b
008 TACTICAL ACTION LINE [1 BIT] (TAL)		X0.10.4 X0.10.5b X0.10.6b
009 FIRE SUPPORT COORDINATION LINE (FSCL) [1 BIT] (FSCL)		X0.10.4 X0.10.5b X0.10.6b
010 FORWARD LINE OF OWN TROOPS (FLOT) [1 BIT] (FLOT)		X0.10.4 X0.10.5b X0.10.6b
011 PT4, AMP10 [1 BIT] (PT4 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT4, AMP11 [1 BIT] (PT4 A11)		X0.10.4 X0.10.5b X0.10.6b

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MIL-STD-3011D
APPENDIX D

DFI NAME
3054 POINT TYPE 4 (LINE)

DUI NAME	EXPLANATION	APPLICABILITY
013 PT4, AMP12 [1 BIT] (PT4 A12)		X0.10.4 X0.10.5b X0.10.6b
014 PT4, AMP13 [1 BIT] (PT4 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT4, AMP14 [1 BIT] (PT4 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT4, AMP15 [1 BIT] (PT4 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3055 POINT TYPE 5 (AREA - GENERAL)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NO STATEMENT [1 BIT] (NS)		X0.10.4 X0.10.5b X0.10.6b
002 SEARCH [1 BIT] (SEA RCH)		X0.10.4 X0.10.5b X0.10.6b
003 RESTRICTED [1 BIT] (RTD)		X0.10.4 X0.10.5b X0.10.6b
004 EXERCISE [1 BIT] (EX)		X0.10.4 X0.10.5b X0.10.6b
005 SUBMARINE PATROL AREA [1 BIT] (SUB PTL)		X0.10.4 X0.10.5b X0.10.6b
006 FIGHTER ENGAGEMENT ZONE/ FIGHTER AOR [1 BIT] (FEZ)		X0.10.4 X0.10.5b X0.10.6b
007 GROUND AREA OF RESPONSIBILITY [1 BIT] (GND AOR)		X0.10.4 X0.10.5b X0.10.6b
008 DEFENDED AREA [1 BIT] (DEF AR)		X0.10.4 X0.10.5b X0.10.6b
009 PT5, AMP8 [1 BIT] (PT5 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT5, AMP9 [1 BIT] (PT5 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT5, AMP10 [1 BIT] (PT5 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT5, AMP11 [1 BIT] (PT5 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT5, AMP12 [1 BIT] (PT5 A12)		X0.10.4 X0.10.5b X0.10.6b

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APPENDIX D

DFI NAME
3055 POINT TYPE 5 (AREA - GENERAL)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT5, AMP13 [1 BIT] (PT5 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT5, AMP14 [1 BIT] (PT5 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT5, AMP15 [1 BIT] (PT5 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3056 POINT TYPE 6 (AREA - HAZARD)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NO STATEMENT [1 BIT] (NS)		X0.10.4 X0.10.5b X0.10.6b
002 DANGER [1 BIT] (DGR)		X0.10.4 X0.10.5b X0.10.6b
003 CONTAMINATED [1 BIT] (CTMNTD)		X0.10.4 X0.10.5b X0.10.6b
004 MISSILE ENGAGEMENT ZONE [1 BIT] (MEZ)		X0.10.4 X0.10.5b X0.10.6b
005 DISUSED [1 BIT] (DIS)		X0.10.4 X0.10.5b X0.10.6b
006 HOSTILE WEAPON ZONE [1 BIT] (HOS WZ)		X0.10.4 X0.10.5b X0.10.6b
007 HOSTILE TACTICAL ZONE [1 BIT] (HOS TZ)		X0.10.4 X0.10.5b X0.10.6b
008 SHORAD [1 BIT]		X0.10.4 X0.10.5b X0.10.6b
009 KILL ZONE [1 BIT] (KIL ZNE)		X0.10.4 X0.10.5b X0.10.6b
010 TARGET AREA OF INTEREST [1 BIT] (TGT AOI)		X0.10.4 X0.10.5b X0.10.6b
011 NAMED AREA OF INTEREST [1 BIT] (NMD AOI)		X0.10.4 X0.10.5b X0.10.6b
012 PT6, AMP11 [1 BIT] (PT6 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT6, AMP12 [1 BIT] (PT6 A12)		X0.10.4 X0.10.5b X0.10.6b

DFI NAME
3056 POINT TYPE 6 (AREA - HAZARD)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT6, AMP13 [1 BIT] (PT6 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT6, AMP14 [1 BIT] (PT6 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT6, AMP15 [1 BIT] (PT6 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3057 POINT TYPE 7 (ASW)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 NO STATEMENT [1 BIT] (NS)		X0.10.4 X0.10.5b X0.10.6b
002 SINKER [1 BIT] (SKR)		X0.10.4 X0.10.5b X0.10.6b
003 BRIEF CONTACT [1 BIT] (BRF CTC)		X0.10.4 X0.10.5b X0.10.6b
004 SEARCH CENTER (ASW) [1 BIT] (SC ASW)		X0.10.4 X0.10.5b X0.10.6b
005 ESTIMATED POSITION (EP) [1 BIT] (EP)		X0.10.4 X0.10.5b X0.10.6b
006 FIX (ASW) [1 BIT] (FIX ASW)		X0.10.4 X0.10.5b X0.10.6b
007 NOTACK AREA [1 BIT] (NOT ACK)		X0.10.4 X0.10.5b X0.10.6b
008 MOVING HAVEN [1 BIT] (MOV HAV)		X0.10.4 X0.10.5b X0.10.6b
009 DISUSED [1 BIT] (DIS)		X0.10.4 X0.10.5b X0.10.6b
010 SONOBUOY POSITION [1 BIT] (SBY POS)		X0.10.4 X0.10.5b X0.10.6b
011 SONOBUOY PATTERN REFERENCE POSITION [1 BIT] (SBY PRP)		X0.10.4 X0.10.5b X0.10.6b
012 LIMITING LINE OF APPROACH [1 BIT] (LIM LOA)		X0.10.4 X0.10.5b X0.10.6b
013 AREA OF PROBABILITY (ASW) [1 BIT] (AOP ASW)		X0.10.4 X0.10.5b X0.10.6b

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APPENDIX D

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DFI NAME
3057 POINT TYPE 7 (ASW)

DUI NAME	EXPLANATION	APPLICABILITY		
014 FRIENDLY WEAPON DANGER AREA (FWDA) [1 BIT] (FW DA)		X0.10.4	X0.10.5b	X0.10.6b
015 PT7, AMP14 [1 BIT] (PT7 A14)		X0.10.4	X0.10.5b	X0.10.6b
016 PT7, AMP15 [1 BIT] (PT7 A15)		X0.10.4	X0.10.5b	X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3058 POINT TYPE 8 (ASW, 1)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 CHARTED WRECK [1 BIT] (CHD WRK)		X0.10.4 X0.10.5b X0.10.6b
002 BOTTOMED NONSUBMARINE [1 BIT] (BTM NSB)		X0.10.4 X0.10.5b X0.10.6b
003 ASW STATION [1 BIT] (ASW STN)		X0.10.4 X0.10.5b X0.10.6b
004 PT8, AMP3 [1 BIT] (PT8 A3)		X0.10.4 X0.10.5b X0.10.6b
005 PT8, AMP4 [1 BIT] (PT8 A4)		X0.10.4 X0.10.5b X0.10.6b
006 PT8, AMP5 [1 BIT] (PT8 A5)		X0.10.4 X0.10.5b X0.10.6b
007 PT8, AMP6 [1 BIT] (PT8 A6)		X0.10.4 X0.10.5b X0.10.6b
008 PT8, AMP7 [1 BIT] (PT8 A7)		X0.10.4 X0.10.5b X0.10.6b
009 PT8, AMP8 [1 BIT] (PT8 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT8, AMP9 [1 BIT] (PT8 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT8, AMP10 [1 BIT] (PT8 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT8, AMP11 [1 BIT] (PT8 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT8, AMP12 [1 BIT] (PT8 A12)		X0.10.4 X0.10.5b X0.10.6b

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APPENDIX D

DFI NAME
3058 POINT TYPE 8 (ASW, 1)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT8, AMP13 [1 BIT] (PT8 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT8, AMP14 [1 BIT] (PT8 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT8, AMP15 [1 BIT] (PT8 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3059 POINT TYPE 9 (UNDEFINED)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 PT9, AMP0 [1 BIT] (PT9 A0)		X0.10.4 X0.10.5b X0.10.6b
002 PT9, AMP1 [1 BIT] (PT9 A1)		X0.10.4 X0.10.5b X0.10.6b
003 PT9, AMP2 [1 BIT] (PT9 A2)		X0.10.4 X0.10.5b X0.10.6b
004 PT9, AMP3 [1 BIT] (PT9 A3)		X0.10.4 X0.10.5b X0.10.6b
005 PT9, AMP4 [1 BIT] (PT9 A4)		X0.10.4 X0.10.5b X0.10.6b
006 PT9, AMP5 [1 BIT] (PT9 A5)		X0.10.4 X0.10.5b X0.10.6b
007 PT9, AMP6 [1 BIT] (PT9 A6)		X0.10.4 X0.10.5b X0.10.6b
008 PT9, AMP7 [1 BIT] (PT9 A7)		X0.10.4 X0.10.5b X0.10.6b
009 PT9, AMP8 [1 BIT] (PT9 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT9, AMP9 [1 BIT] (PT9 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT9, AMP10 [1 BIT] (PT9 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT9, AMP11 [1 BIT] (PT9 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT9, AMP12 [1 BIT] (PT9 A12)		X0.10.4 X0.10.5b X0.10.6b

DFI NAME
3059 POINT TYPE 9 (UNDEFINED)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT9, AMP13 [1 BIT] (PT9 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT9, AMP14 [1 BIT] (PT9 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT9, AMP15 [1 BIT] (PT9 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME DEFINITION
3060 ROCKET FIELD INDICATOR FOR A J3.6 ROCKET FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 DISUSED [1 BIT] (DIS)		X0.10.12
002 DISUSED [1 BIT] (DIS)		X0.10.12
003 FILTER ROCKET (DI 1) [1 BIT] (FRG)	FOR J3.6 ROCKET FILTER MATRIX	X0.10.12

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUI 003 -----		
OFF	0	DO NOT FILTER J3.6 MESSAGES BASED ON ROCKET INDICATOR SETTING.
FILTERED	1	J3.6 MESSAGES WITH ROCKET INDICATOR SET TO 1 (ROCKET) SHALL BE FILTERED.

DFI NAME
3061 POINT TYPE 10 (UNDEFINED)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 PT10, AMP0 [1 BIT] (PT10 A0)		X0.10.4 X0.10.5b X0.10.6b
002 PT10, AMP1 [1 BIT] (PT10 A1)		X0.10.4 X0.10.5b X0.10.6b
003 PT10, AMP2 [1 BIT] (PT10 A2)		X0.10.4 X0.10.5b X0.10.6b
004 PT10, AMP3 [1 BIT] (PT10 A3)		X0.10.4 X0.10.5b X0.10.6b
005 PT10, AMP4 [1 BIT] (PT10 A4)		X0.10.4 X0.10.5b X0.10.6b
006 PT10, AMP5 [1 BIT] (PT10 A5)		X0.10.4 X0.10.5b X0.10.6b
007 PT10, AMP6 [1 BIT] (PT10 A6)		X0.10.4 X0.10.5b X0.10.6b
008 PT10, AMP7 [1 BIT] (PT10 A7)		X0.10.4 X0.10.5b X0.10.6b
009 PT10, AMP8 [1 BIT] (PT10 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT10, AMP9 [1 BIT] (PT10 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT10, AMP10 [1 BIT] (PT10 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT10, AMP11 [1 BIT] (PT10 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT10, AMP12 [1 BIT] (PT10 A12)		X0.10.4 X0.10.5b X0.10.6b

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APPENDIX D

DFI NAME
3061 POINT TYPE 10 (UNDEFINED)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT10, AMP13 [1 BIT] (PT10 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT10, AMP14 [1 BIT] (PT10 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT10, AMP15 [1 BIT] (PT10 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3062 POINT TYPE 11 (UNDEFINED)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 PT11, AMP0 [1 BIT] (PT11 A0)		X0.10.4 X0.10.5b X0.10.6b
002 PT11, AMP1 [1 BIT] (PT11 A1)		X0.10.4 X0.10.5b X0.10.6b
003 PT11, AMP2 [1 BIT] (PT11 A2)		X0.10.4 X0.10.5b X0.10.6b
004 PT11, AMP3 [1 BIT] (PT11 A3)		X0.10.4 X0.10.5b X0.10.6b
005 PT11, AMP4 [1 BIT] (PT11 A4)		X0.10.4 X0.10.5b X0.10.6b
006 PT11, AMP5 [1 BIT] (PT11 A5)		X0.10.4 X0.10.5b X0.10.6b
007 PT11, AMP6 [1 BIT] (PT11 A6)		X0.10.4 X0.10.5b X0.10.6b
008 PT11, AMP7 [1 BIT] (PT11 A7)		X0.10.4 X0.10.5b X0.10.6b
009 PT11, AMP8 [1 BIT] (PT11 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT11, AMP9 [1 BIT] (PT11 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT11, AMP10 [1 BIT] (PT11 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT11, AMP11 [1 BIT] (PT11 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT11, AMP12 [1 BIT] (PT11 A12)		X0.10.4 X0.10.5b X0.10.6b

DFI NAME
3062 POINT TYPE 11 (UNDEFINED)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT11, AMP13 [1 BIT] (PT11 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT11, AMP14 [1 BIT] (PT11 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT11, AMP15 [1 BIT] (PT11 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3063 POINT TYPE 12 (UNDEFINED)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 PT12, AMP0 [1 BIT] (PT12 A0)		X0.10.4 X0.10.5b X0.10.6b
002 PT12, AMP1 [1 BIT] (PT12 A1)		X0.10.4 X0.10.5b X0.10.6b
003 PT12, AMP2 [1 BIT] (PT12 A2)		X0.10.4 X0.10.5b X0.10.6b
004 PT12, AMP3 [1 BIT] (PT12 A3)		X0.10.4 X0.10.5b X0.10.6b
005 PT12, AMP4 [1 BIT] (PT12 A4)		X0.10.4 X0.10.5b X0.10.6b
006 PT12, AMP5 [1 BIT] (PT12 A5)		X0.10.4 X0.10.5b X0.10.6b
007 PT12, AMP6 [1 BIT] (PT12 A6)		X0.10.4 X0.10.5b X0.10.6b
008 PT12, AMP7 [1 BIT] (PT12 A7)		X0.10.4 X0.10.5b X0.10.6b
009 PT12, AMP8 [1 BIT] (PT12 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT12, AMP9 [1 BIT] (PT12 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT12, AMP10 [1 BIT] (PT12 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT12, AMP11 [1 BIT] (PT12 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT12, AMP12 [1 BIT] (PT12 A12)		X0.10.4 X0.10.5b X0.10.6b

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APPENDIX D

DFI NAME
3063 POINT TYPE 12 (UNDEFINED)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT12, AMP13 [1 BIT] (PT12 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT12, AMP14 [1 BIT] (PT12 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT12, AMP15 [1 BIT] (PT12 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3064 POINT TYPE 13 (UNDEFINED)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 PT13, AMP0 [1 BIT] (PT13 A0)		X0.10.4 X0.10.5b X0.10.6b
002 PT13, AMP1 [1 BIT] (PT13 A1)		X0.10.4 X0.10.5b X0.10.6b
003 PT13, AMP2 [1 BIT] (PT13 A2)		X0.10.4 X0.10.5b X0.10.6b
004 PT13, AMP3 [1 BIT] (PT13 A3)		X0.10.4 X0.10.5b X0.10.6b
005 PT13, AMP4 [1 BIT] (PT13 A4)		X0.10.4 X0.10.5b X0.10.6b
006 PT13, AMP5 [1 BIT] (PT13 A5)		X0.10.4 X0.10.5b X0.10.6b
007 PT13, AMP6 [1 BIT] (PT13 A6)		X0.10.4 X0.10.5b X0.10.6b
008 PT13, AMP7 [1 BIT] (PT13 A7)		X0.10.4 X0.10.5b X0.10.6b
009 PT13, AMP8 [1 BIT] (PT13 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT13, AMP9 [1 BIT] (PT13 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT13, AMP10 [1 BIT] (PT13 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT13, AMP11 [1 BIT] (PT13 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT13, AMP12 [1 BIT] (PT13 A12)		X0.10.4 X0.10.5b X0.10.6b

DFI NAME
3064 POINT TYPE 13 (UNDEFINED)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT13, AMP13 [1 BIT] (PT13 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT13, AMP14 [1 BIT] (PT13 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT13, AMP15 [1 BIT] (PT13 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3065 POINT TYPE 14 (UNDEFINED)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 PT14, AMP0 [1 BIT] (PT14 A0)		X0.10.4 X0.10.5b X0.10.6b
002 PT14, AMP1 [1 BIT] (PT14 A1)		X0.10.4 X0.10.5b X0.10.6b
003 PT14, AMP2 [1 BIT] (PT14 A2)		X0.10.4 X0.10.5b X0.10.6b
004 PT14, AMP3 [1 BIT] (PT14 A3)		X0.10.4 X0.10.5b X0.10.6b
005 PT14, AMP4 [1 BIT] (PT14 A4)		X0.10.4 X0.10.5b X0.10.6b
006 PT14, AMP5 [1 BIT] (PT14 A5)		X0.10.4 X0.10.5b X0.10.6b
007 PT14, AMP6 [1 BIT] (PT14 A6)		X0.10.4 X0.10.5b X0.10.6b
008 PT14, AMP7 [1 BIT] (PT14 A7)		X0.10.4 X0.10.5b X0.10.6b
009 PT14, AMP8 [1 BIT] (PT14 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT14, AMP9 [1 BIT] (PT14 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT14, AMP10 [1 BIT] (PT14 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT14, AMP11 [1 BIT] (PT14 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT14, AMP12 [1 BIT] (PT14 A12)		X0.10.4 X0.10.5b X0.10.6b

DFI NAME
3065 POINT TYPE 14 (UNDEFINED)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT14, AMP13 [1 BIT] (PT14 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT14, AMP14 [1 BIT] (PT14 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT14, AMP15 [1 BIT] (PT14 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3066 POINT TYPE 15 (UNDEFINED)

DEFINITION

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 PT15, AMP0 [1 BIT] (PT15 A0)		X0.10.4 X0.10.5b X0.10.6b
002 PT15, AMP1 [1 BIT] (PT15 A1)		X0.10.4 X0.10.5b X0.10.6b
003 PT15, AMP2 [1 BIT] (PT15 A2)		X0.10.4 X0.10.5b X0.10.6b
004 PT15, AMP3 [1 BIT] (PT15 A3)		X0.10.4 X0.10.5b X0.10.6b
005 PT15, AMP4 [1 BIT] (PT15 A4)		X0.10.4 X0.10.5b X0.10.6b
006 PT15, AMP5 [1 BIT] (PT15 A5)		X0.10.4 X0.10.5b X0.10.6b
007 PT15, AMP6 [1 BIT] (PT15 A6)		X0.10.4 X0.10.5b X0.10.6b
008 PT15, AMP7 [1 BIT] (PT15 A7)		X0.10.4 X0.10.5b X0.10.6b
009 PT15, AMP8 [1 BIT] (PT15 A8)		X0.10.4 X0.10.5b X0.10.6b
010 PT15, AMP9 [1 BIT] (PT15 A9)		X0.10.4 X0.10.5b X0.10.6b
011 PT15, AMP10 [1 BIT] (PT15 A10)		X0.10.4 X0.10.5b X0.10.6b
012 PT15, AMP11 [1 BIT] (PT15 A11)		X0.10.4 X0.10.5b X0.10.6b
013 PT15, AMP12 [1 BIT] (PT15 A12)		X0.10.4 X0.10.5b X0.10.6b

DFI NAME
3066 POINT TYPE 15 (UNDEFINED)

DUI NAME	EXPLANATION	APPLICABILITY
014 PT15, AMP13 [1 BIT] (PT15 A13)		X0.10.4 X0.10.5b X0.10.6b
015 PT15, AMP14 [1 BIT] (PT15 A14)		X0.10.4 X0.10.5b X0.10.6b
016 PT15, AMP15 [1 BIT] (PT15 A15)		X0.10.4 X0.10.5b X0.10.6b

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 016 -----		
NOT FILTERED	0	
FILTERED	1	

APPENDIX D

DFI NAME DEFINITION
3080 ID 1 PENDING J-SERIES MESSAGE IDENTITY

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 UNDEFINED [1 BIT] (UND)		
002 UNDEFINED [1 BIT] (UND)		
003 J3.2 AIR, 0 [1 BIT] (J32 0)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
004 J3.3 SURFACE, 0 [1 BIT] (J33 0)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
005 J3.4 AND J5.4 SUBSURFACE, 0 [1 BIT] (J34 0)	MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
006 J3.5 LAND/GROUND, 0 [1 BIT] (J35 0)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
007 J3.6 SPACE, 0 [1 BIT] (J36 0)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
008 J3.7 AND J14.0 EW PRODUCT INFORMATION, 0 [1 BIT] (J37 0)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME DEFINITION
3081 ID 2 UNKNOWN J-SERIES MESSAGE IDENTITY

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 UNDEFINED [1 BIT] (UND)		
002 UNDEFINED [1 BIT] (UND)		
003 J3.2 AIR, 1 [1 BIT] (J32 1)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
004 J3.3 SURFACE, 1 [1 BIT] (J33 1)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
005 J3.4 AND J5.4 SUBSURFACE, 1 [1 BIT] (J34 1)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
006 J3.5 LAND/GROUND, 1 [1 BIT] (J35 1)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
007 J3.6 SPACE, 1 [1 BIT] (J36 1)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
008 J3.7 AND J14.0 EW PRODUCT INFORMATION, 1 [1 BIT] (J37 1)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME DEFINITION
3082 ID 3 ASSUMED FRIEND J-SERIES MESSAGE IDENTITY

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 UNDEFINED [1 BIT] (UND)		
002 UNDEFINED [1 BIT] (UND)		
003 J3.2 AIR, 2 [1 BIT] (J32 2)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
004 J3.3 SURFACE, 2 [1 BIT] (J33 2)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
005 J3.4 AND J5.4 SUBSURFACE, 2 [1 BIT] (J34 2)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
006 J3.5 LAND/GROUND, 2 [1 BIT] (J35 2)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
007 J3.6 SPACE, 2 [1 BIT] (J36 2)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
008 J3.7 AND J14.0 EW PRODUCT INFORMATION, 2 [1 BIT] (J37 2)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME DEFINITION
3083 ID 4 FRIEND J-SERIES MESSAGE IDENTITY

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 UNDEFINED [1 BIT] (UND)		
002 UNDEFINED [1 BIT] (UND)		
003 J3.2 AIR, 3 [1 BIT] (J32 3)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
004 J3.3 SURFACE, 3 [1 BIT] (J33 3)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
005 J3.4 AND J5.4 SUBSURFACE, 3 [1 BIT] (J34 3)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
006 J3.5 LAND/GROUND, 3 [1 BIT] (J35 3)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
007 J3.6 SPACE, 3 [1 BIT] (J36 3)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
008 J3.7 AND J14.0 EW PRODUCT INFORMATION, 3 [1 BIT] (J37 3)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a

DATA ITEM	BIT CODE	EXPLANATION
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----- FOR DUIS 001 - 008 -----

NOT FILTERED	0
FILTERED	1

DFI NAME DEFINITION
3084 ID 5 NEUTRAL J-SERIES MESSAGE IDENTITY

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY		
001 UNDEFINED [1 BIT] (UND)				
002 UNDEFINED [1 BIT] (UND)				
003 J3.2 AIR, 4 [1 BIT] (J32 4)	J-SERIES MESSAGE CATEGORY	X0.10.2	X0.10.5a	X0.10.6a
004 J3.3 SURFACE, 4 [1 BIT] (J33 4)	J-SERIES MESSAGE CATEGORY	X0.10.2	X0.10.5a	X0.10.6a
005 J3.4 AND J5.4 SUBSURFACE, 4 [1 BIT] (J34 4)	J-SERIES MESSAGE CATEGORY	X0.10.2	X0.10.5a	X0.10.6a
006 J3.5 LAND/GROUND, 4 [1 BIT] (J35 4)	J-SERIES MESSAGE CATEGORY	X0.10.2	X0.10.5a	X0.10.6a
007 J3.6 SPACE, 4 [1 BIT] (J36 4)	J-SERIES MESSAGE CATEGORY	X0.10.2	X0.10.5a	X0.10.6a
008 J3.7 AND J14.0 EW PRODUCT INFORMATION, 4 [1 BIT] (J37 4)	J-SERIES MESSAGE CATEGORY	X0.10.2	X0.10.5a	X0.10.6a

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME DEFINITION
3085 ID 6 SUSPECT J-SERIES MESSAGE IDENTITY

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 UNDEFINED [1 BIT] (UND)		
002 UNDEFINED [1 BIT] (UND)		
003 J3.2 AIR, 5 [1 BIT] (J32 5)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
004 J3.3 SURFACE, 5 [1 BIT] (J33 5)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
005 J3.4 AND J5.4 SUBSURFACE, 5 [1 BIT] (J34 5)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
006 J3.5 LAND/GROUND, 5 [1 BIT] (J35 5)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
007 J3.6 SPACE, 5 [1 BIT] (J36 5)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
008 J3.7 AND J14.0 EW PRODUCT INFORMATION, 5 [1 BIT] (J37 5)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME DEFINITION
3086 ID 7 HOSTILE J-SERIES MESSAGE IDENTITY

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 UNDEFINED [1 BIT] (UND)		
002 UNDEFINED [1 BIT] (UND)		
003 J3.2 AIR, 6 [1 BIT] (J32 6)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
004 J3.3 SURFACE, 6 [1 BIT] (J33 6)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
005 J3.4 AND J5.4 SUBSURFACE, 6 [1 BIT] (J34 6)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
006 J3.5 LAND/GROUND, 6 [1 BIT] (J35 6)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
007 J3.6 SPACE, 6 [1 BIT] (J36 6)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
008 J3.7 AND J14.0 EW PRODUCT INFORMATION, 6 [1 BIT] (J37 6)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME DEFINITION
3087 ID 8 PPLI J-SERIES MESSAGE IDENTITY

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 UNDEFINED [1 BIT] (UND)		
002 UNDEFINED [1 BIT] (UND)		
003 J2.2 AND J2.0 AIR [1 BIT] (J22)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
004 J2.3 AND J2.0 SURFACE [1 BIT] (J23)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
005 J2.4 AND J2.0 SUBSURFACE [1 BIT] (J24)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
006 J2.5, J2.6 AND J2.0 LAND [1 BIT] (J25)	J-SERIES MESSAGE CATEGORY	X0.10.2 X0.10.5a X0.10.6a
007 UNDEFINED [1 BIT] (UND)		
008 UNDEFINED [1 BIT] (UND)		

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	
FILTERED	1	

DFI NAME
3099 SPARE BIT

DEFINITION
SPARE BITS ARE USED IN BIT ORIENTED MESSAGES THAT DO NOT NEED ALL THE INFORMATION BITS TO TRANSFER DATA. ALTHOUGH A SPARE BIT DOES NOT CONVEY ANY DATA, IT IS USED AS A DATA FIELD IDENTIFIER TO MAINTAIN CORRECT BIT POSITIONS AND TOTALS IN FIXED FORMAT BIT ORIENTED MESSAGES.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SPARE [1 BIT] (SP)		X0.10.5 X0.10.6 X0.10.7 X1.0.0
002 SPARE [2 BIT] (SP)		X0.10.2 X0.10.5a X0.10.6a X1.0.0 X1.1.0 FSTBH.B.0 FSMGH.3
003 SPARE [3 BIT] (SP)		X0.10.1 X0.10.5 AH.0 FSTBH.A.NC.0 FSMGH.3
004 SPARE [4 BIT] (SP)		X0.10.5 X1.0.0 FSMGH.3
005 SPARE [5 BIT] (SP)		X0.10.2 X0.10.3 X0.10.4 X0.10.7 X0.10.13
006 SPARE [6 BIT] (SP)		X0.5.0
007 SPARE [7 BIT] (SP)		X0.10.12 X2.0.0 X2.1.0 X3.0.0 X3.1.0
008 SPARE [8 BIT] (SP)		X0.5.0 X0.10.1 X0.10.5 X0.10.6 X0.10.8 X0.10.9 X0.10.10 X0.10.11 X0.10.0 X0.13.0
009 SPARE [9 BIT] (SP)		X0.14.0
010 SPARE [10 BIT] (SP)		
011 SPARE [11 BIT] (SP)		X0.1.0 X0.8.0

DFI NAME
3099 SPARE BIT

DUI NAME	EXPLANATION	APPLICABILITY
012 SPARE [12 BIT] (SP)		
013 SPARE [13 BIT] (SP)		
014 SPARE [14 BIT] (SP)		X0.10.9 X0.10.12
015 SPARE [15 BIT] (SP)		X0.10.8 X0.10.11
016 SPARE [16 BIT] (SP)		
017 SPARE (17 BIT) (SP)		X7.1.0
018 SPARE [18 BIT] (SP)		
019 SPARE [19 BIT] (SP)		
020 SPARE [20 BIT] (SP)		
021 SPARE [21 BIT] (SP)		
022 SPARE [22 BIT] (SP)		
023 SPARE [23 BIT] (SP)		
024 SPARE [24 BIT] (SP)		

DFI NAME
3099 SPARE BIT

DUI NAME	EXPLANATION	APPLICABILITY
025 SPARE [25 BIT] (SP)		
026 SPARE [26 BIT] (SP)		
027 SPARE [27 BIT] (SP)		
028 SPARE [28 BIT] (SP)		
029 SPARE [29 BIT] (SP)		
030 SPARE [30 BIT] (SP)		
031 SPARE (31 BIT) (SP)		X7.1.0
032 SPARE [32 BIT] (SP)		

DFI NAME DEFINITION
3100 LABEL 0 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 0 [1 BIT] (SL0 0)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 0 [1 BIT] (SL1 0)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 0 [1 BIT] (SL2 0)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 0 [1 BIT] (SL3 0)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 0 [1 BIT] (SL4 0)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 0 [1 BIT] (SL5 0)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 0 [1 BIT] (SL6 0)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 0 [1 BIT] (SL7 0)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES LABEL/SULABEL IS NOT FILTERED.
FILTERED	1	INDICATES LABEL/SULABEL IS FILTERED.

DFI NAME DEFINITION
3101 LABEL 1 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 1 [1 BIT] (SL0 1)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 1 [1 BIT] (SL1 1)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 1 [1 BIT] (SL2 1)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 1 [1 BIT] (SL3 1)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 1 [1 BIT] (SL4 1)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 1 [1 BIT] (SL5 1)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 1 [1 BIT] (SL6 1)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 1 [1 BIT] (SL7 1)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3102 LABEL 2 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 2 [1 BIT] (SL0 2)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 2 [1 BIT] (SL1 2)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 2 [1 BIT] (SL2 2)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 2 [1 BIT] (SL3 2)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 2 [1 BIT] (SL4 2)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 2 [1 BIT] (SL5 2)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 2 [1 BIT] (SL6 2)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 2 [1 BIT] (SL7 2)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3103 LABEL 3 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 3 [1 BIT] (SL0 3)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 3 [1 BIT] (SL1 3)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 3 [1 BIT] (SL2 3)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 3 [1 BIT] (SL3 3)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 3 [1 BIT] (SL4 3)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 3 [1 BIT] (SL5 3)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 3 [1 BIT] (SL6 3)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 3 [1 BIT] (SL7 3)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3104 LABEL 4 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 4 [1 BIT] (SL0 4)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 4 [1 BIT] (SL1 4)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 4 [1 BIT] (SL2 4)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 4 [1 BIT] (SL3 4)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 4 [1 BIT] (SL4 4)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 4 [1 BIT] (SL5 4)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 4 [1 BIT] (SL6 4)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 4 [1 BIT] (SL7 4)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME
3105 LABEL 5

DEFINITION
FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 5 [1 BIT] (SL0 5)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 5 [1 BIT] (SL1 5)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 5 [1 BIT] (SL2 5)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 5 [1 BIT] (SL3 5)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 5 [1 BIT] (SL4 5)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 5 [1 BIT] (SL5 5)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 5 [1 BIT] (SL6 5)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 5 [1 BIT] (SL7 5)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3106 LABEL 6 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 6 [1 BIT] (SL0 6)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 6 [1 BIT] (SL1 6)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 6 [1 BIT] (SL2 6)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 6 [1 BIT] (SL3 6)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 6 [1 BIT] (SL4 6)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 6 [1 BIT] (SL5 6)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 6 [1 BIT] (SL6 6)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 6 [1 BIT] (SL7 6)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3107 LABEL 7 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 7 [1 BIT] (SL0 7)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 7 [1 BIT] (SL1 7)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 7 [1 BIT] (SL2 7)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 7 [1 BIT] (SL3 7)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 7 [1 BIT] (SL4 7)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 7 [1 BIT] (SL5 7)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 7 [1 BIT] (SL6 7)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 7 [1 BIT] (SL7 7)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME
3108 LABEL 8

DEFINITION
FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 8 [1 BIT] (SL0 8)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 8 [1 BIT] (SL1 8)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 8 [1 BIT] (SL2 8)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 8 [1 BIT] (SL3 8)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 8 [1 BIT] (SL4 8)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 8 [1 BIT] (SL5 8)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 8 [1 BIT] (SL6 8)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 8 [1 BIT] (SL7 8)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3109 LABEL 9 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 9 [1 BIT] (SL0 9)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 9 [1 BIT] (SL1 9)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 9 [1 BIT] (SL2 9)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 9 [1 BIT] (SL3 9)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 9 [1 BIT] (SL4 9)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 9 [1 BIT] (SL5 9)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 9 [1 BIT] (SL6 9)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 9 [1 BIT] (SL7 9)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME
3110 LABEL 10

DEFINITION
FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 10 [1 BIT] (SL0 10)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 10 [1 BIT] (SL1 10)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 10 [1 BIT] (SL2 10)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 10 [1 BIT] (SL3 10)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 10 [1 BIT] (SL4 10)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 10 [1 BIT] (SL5 10)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 10 [1 BIT] (SL6 10)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 10 [1 BIT] (SL7 10)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME
3111 LABEL 11

DEFINITION
FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 11 [1 BIT] (SL0 11)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 11 [1 BIT] (SL1 11)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 11 [1 BIT] (SL2 11)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 11 [1 BIT] (SL3 11)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 11 [1 BIT] (SL4 11)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 11 [1 BIT] (SL5 11)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 11 [1 BIT] (SL6 11)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 11 [1 BIT] (SL7 11)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME
3112 LABEL 12

DEFINITION
FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 12 [1 BIT] (SL0 12)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 12 [1 BIT] (SL1 12)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 12 [1 BIT] (SL2 12)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 12 [1 BIT] (SL3 12)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 12 [1 BIT] (SL4 12)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 12 [1 BIT] (SL5 12)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 12 [1 BIT] (SL6 12)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 12 [1 BIT] (SL7 12)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3113 LABEL 13 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 13 [1 BIT] (SL0 13)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 13 [1 BIT] (SL1 13)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 13 [1 BIT] (SL2 13)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 13 [1 BIT] (SL3 13)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 13 [1 BIT] (SL4 13)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 13 [1 BIT] (SL5 13)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 13 [1 BIT] (SL7 13)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 13 [1 BIT] (SL7 13)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3114 LABEL 14 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 14 [1 BIT] (SL0 14)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 14 [1 BIT] (SL1 14)	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.	X0.10.3
003 SUBLABEL 2, 14 [1 BIT] (SL2 14)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 14 [1 BIT] (SL3 14)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 14 [1 BIT] (SL4 14)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 14 [1 BIT] (SL5 14)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 14 [1 BIT] (SL6 14)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 14 [1 BIT] (SL7 14)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME
3115 LABEL 15

DEFINITION
FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 15 [1 BIT] (SL0 15)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 15 [1 BIT] (SL1 15)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 15 [1 BIT] (SL2 15)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 15 [1 BIT] (SL3 15)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 15 [1 BIT] (SL4 15)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 15 [1 BIT] (SL5 15)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 15 [1 BIT] (SL6 15)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 15 [1 BIT] (SL7 15)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME
3116 LABEL 16

DEFINITION
FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 16 [1 BIT] (SL0 16)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 16 [1 BIT] (SL1 16)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 16 [1 BIT] (SL2 16)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 16 [1 BIT] (SL4 16)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 16 [1 BIT] (SL4 16)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 16 [1 BIT] (SL5 16)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 16 [1 BIT] (SL6 16)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 16 [1 BIT] (SL7 16)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3117 LABEL 17 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 17 [1 BIT] (SL0 17)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 17 [1 BIT] (SL1 17)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 17 [1 BIT] (SL2 17)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 17 [1 BIT] (SL3 17)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 17 [1 BIT] (SL4 17)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 17 [1 BIT] (SL5 17)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 17 [1 BIT] (SL6 17)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 17 [1 BIT] (SL7 17)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME
3118 LABEL 18

DEFINITION
FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 18 [1 BIT] (SL0 18)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 18 [1 BIT] (SL1 18)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 18 [1 BIT] (SL2 18)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 18 [1 BIT] (SL3 18)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 18 [1 BIT] (SL4 18)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 18 [1 BIT] (SL5 18)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 18 [1 BIT] (SL6 18)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 18 [1 BIT] (SL7 18)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3119 LABEL 19 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 19 [1 BIT] (SL0 19)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 19 [1 BIT] (SL1 19)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 19 [1 BIT] (SL2 19)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 19 [1 BIT] (SL3 19)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 19 [1 BIT] (SL4 19)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 19 [1 BIT] (SL5 19)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 19 [1 BIT] (SL6 19)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 19 [1 BIT] (SL7 19)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3120 LABEL 20 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 20 [1 BIT] (SL0 20)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 20 [1 BIT] (SL1 20)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 20 [1 BIT] (SL2 20)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 20 [1 BIT] (SL3 20)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 20 [1 BIT] (SL4 20)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 20 [1 BIT] (SL5 20)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 20 [1 BIT] (SL6 20)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 20 [1 BIT] (SL7 20)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3121 LABEL 21 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 21 [1 BIT] (SL0 21)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 21 [1 BIT] (SL1 21)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 21 [1 BIT] (SL2 21)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 21 [1 BIT] (SL3 21)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 21 [1 BIT] (SL4 21)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 21 [1 BIT] (SL5 21)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 21 [1 BIT] (SL6 21)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 21 [1 BIT] (SL7 21)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3122 LABEL 22 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 22 [1 BIT] (SL0 22)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 22 [1 BIT] (SL1 22)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 22 [1 BIT] (SL2 22)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 22 [1 BIT] (SL3 22)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 22 [1 BIT] (SL4 22)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 22 [1 BIT] (SL5 22)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 22 [1 BIT] (SL6 22)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 22 [1 BIT] (SL7 22)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3123 LABEL 23 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 23 [1 BIT] (SL0 23)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 23 [1 BIT] (SL1 23)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 23 [1 BIT] (SL2 23)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 23 [1 BIT] (SL3 23)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 23 [1 BIT] (SL4 23)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 23 [1 BIT] (SL5 23)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 23 [1 BIT] (SL6 23)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 23 [1 BIT] (SL7 23)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3124 LABEL 24 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 24 [1 BIT] (SL0 24)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 24 [1 BIT] (SL1 24)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 24 [1 BIT] (SL2 24)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 24 [1 BIT] (SL3 24)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 24 [1 BIT] (SL4 24)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 24 [1 BIT] (SL5 24)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 24 [1 BIT] (SL6 24)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 24 [1 BIT] (SL7 24)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3125 LABEL 25 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 25 [1 BIT] (SL0 25)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 25 [1 BIT] (SL1 25)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 25 [1 BIT] (SL2 25)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 25 [1 BIT] (SL3 25)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 25 [1 BIT] (SL4 25)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 25 [1 BIT] (SL5 25)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 25 [1 BIT] (SL6 25)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 25 [1 BIT] (SL7 25)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3126 LABEL 26 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 26 [1 BIT] (SL0 26)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 26 [1 BIT] (SL1 26)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 26 [1 BIT] (SL2 26)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 26 [1 BIT] (SL3 26)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 26 [1 BIT] (SL4 26)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 26 [1 BIT] (SL5 26)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 26 [1 BIT] (SL6 26)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 26 [1 BIT] (SL7 26)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3127 LABEL 27 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 27 [1 BIT] (SL0 27)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 27 [1 BIT] (SL1 27)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 27 [1 BIT] (SL2 27)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 27 [1 BIT] (SL3 27)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 27 [1 BIT] (SL4 27)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 27 [1 BIT] (SL5 27)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 27 [1 BIT] (SL6 27)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 27 [1 BIT] (SL7 27)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3128 LABEL 28 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 28 [1 BIT] (SL0 28)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 28 [1 BIT] (SL1 28)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 28 [1 BIT] (SL2 28)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 28 [1 BIT] (SL3 28)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 28 [1 BIT] (SL4 28)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 28 [1 BIT] (SL5 28)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 28 [1 BIT] (SL6 28)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 28 [1 BIT] (SL7 28)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3129 LABEL 29 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 29 [1 BIT] (SL0 29)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 29 [1 BIT] (SL1 29)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 29 [1 BIT] (SL2 29)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 29 [1 BIT] (SL3 29)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 29 [1 BIT] (SL4 29)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 29 [1 BIT] (SL5 29)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 29 [1 BIT] (SL6 29)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 29 [1 BIT] (SL7 29)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3130 LABEL 30 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 30 [1 BIT] (SL0 30)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 30 [1 BIT] (SL1 30)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 30 [1 BIT] (SL2 30)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 30 [1 BIT] (SL3 30)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 30 [1 BIT] (SL4 30)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 30 [1 BIT] (SL5 30)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 30 [1 BIT] (SL6 30)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 30 [1 BIT] (SL7 30)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE LABEL/SUBLABEL IS FILTERED.

DFI NAME DEFINITION
3131 LABEL 31 FIELD INDICATOR FOR LABEL/SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUBLABEL 0, 31 [1 BIT] (SL0 31)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
002 SUBLABEL 1, 31 [1 BIT] (SL1 31)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
003 SUBLABEL 2, 31 [1 BIT] (SL2 31)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
004 SUBLABEL 3, 31 [1 BIT] (SL3 31)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
005 SUBLABEL 4, 31 [1 BIT] (SL4 31)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
006 SUBLABEL 5, 31 [1 BIT] (SL5 31)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
007 SUBLABEL 6, 31 [1 BIT] (SL6 31)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3
008 SUBLABEL 7, 31 [1 BIT] (SL7 31)	FOR LABEL/SUBLABEL FILTER MATRIX.	X0.10.3

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 008 -----		
NOT FILTERED	0	INDICATES THE LABEL/SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES LABEL/SULABEL IS FILTERED.

DFI	NAME	DEFINITION
3140	SUB-SUBLABEL	FIELD INDICATOR FOR THE SUB-SUBLABEL FILTER MATRIX.

DATA STANDARD USAGE: JREAP

STATUS:

DUI NAME	EXPLANATION	APPLICABILITY
001 SUB-SUBLABEL 0 [1 BIT] (SSL0)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
002 SUB-SUBLABEL 1 [1 BIT] (SSL1)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
003 SUB-SUBLABEL 2 [1 BIT] (SSL2)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
004 SUB-SUBLABEL 3 [1 BIT] (SSL3)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
005 SUB-SUBLABEL 4 [1 BIT] (SSL4)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
006 SUB-SUBLABEL 5 [1 BIT] (SSL5)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
007 SUB-SUBLABEL 6 [1 BIT] (SSL6)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
008 SUB-SUBLABEL 7 [1 BIT] (SSL7)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
009 SUB-SUBLABEL 8 [1 BIT] (SSL8)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
010 SUB-SUBLABEL 9 [1 BIT] (SSL9)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
011 SUB-SUBLABEL 10 [1 BIT] (SSL10)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
012 SUB-SUBLABEL 11 [1 BIT] (SSL11)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
013 SUB-SUBLABEL 12 [1 BIT] (SSL12)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13

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DFI NAME
3140 SUB-SUBLABEL

DUI NAME	EXPLANATION	APPLICABILITY
014 SUB-SUBLABEL 13 [1 BIT] (SSL13)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
015 SUB-SUBLABEL 14 [1 BIT] (SSL14)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
016 SUB-SUBLABEL 15 [1 BIT] (SSL15)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
017 SUB-SUBLABEL 16 [1 BIT] (SSL16)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
018 SUB-SUBLABEL 17 [1 BIT] (SSL17)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
019 SUB-SUBLABEL 18 [1 BIT] (SSL18)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
020 SUB-SUBLABEL 19 [1 BIT] (SSL19)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
021 SUB-SUBLABEL 20 [1 BIT] (SSL20)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
022 SUB-SUBLABEL 21 [1 BIT] (SSL21)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
023 SUB-SUBLABEL 22 [1 BIT] (SSL22)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
024 SUB-SUBLABEL 23 [1 BIT] (SSL23)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
025 SUB-SUBLABEL 24 [1 BIT] (SSL24)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
026 SUB-SUBLABEL 25 [1 BIT] (SSL25)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
027 SUB-SUBLABEL 26 [1 BIT] (SSL26)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13

DFI NAME
3140 SUB-SUBLABEL

DUI NAME	EXPLANATION	APPLICABILITY
028 SUB-SUBLABEL 27 [1 BIT] (SSL27)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
029 SUB-SUBLABEL 28 [1 BIT] (SSL28)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
030 SUB-SUBLABEL 29 [1 BIT] (SSL29)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
031 SUB-SUBLABEL 30 [1 BIT] (SSL30)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13
032 SUB-SUBLABEL 31 [1 BIT] (SSL31)	FOR SUB-SUBLABEL FILTER MATRIX.	X0.10.13

DATA ITEM	BIT CODE	EXPLANATION
----- FOR DUIS 001 - 032 -----		
NOT FILTERED	0	INDICATES THE SUB-SUBLABEL IS NOT FILTERED.
FILTERED	1	INDICATES THE SUB-SUBLABEL IS FILTERED.

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APPENDIX D

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**NOT MEASUREMENT
SENSITIVE**

**MIL-STD-3011D
26 JUN 2019
SUPERSEDING
MIL-STD-3011C
10 JUN 2016**

DEPARTMENT OF DEFENSE INTERFACE STANDARD

FOR THE JOINT RANGE EXTENSION APPLICATION PROTOCOL (JREAP)

APPENDIX E – IMPLEMENTATION REQUIREMENTS



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APPENDIX E

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APPENDIX E

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APPENDIX E

E.1 SCOPE

E.1.1 Purpose. This appendix describes the implementation requirements for JRE processors.

E.1.2 Background. The JREAP may be used by systems performing various roles in numerous network architectures. It is also likely that in the future the JREAP will be used to provide transport services to Tactical Data Links other than Link 16. At the present time, this appendix only addresses implementation requirements for JRE processors passing J-series messages to other JRE processors on a joint interface that may include both JRE networks and JTIDS/MIDS links.

E.2 APPLICABLE DOCUMENTS

The references in [Section 2](#) of this standard apply to this appendix.

E.3 DEFINITIONS

The definitions in [Section 3](#) of this standard apply to this appendix.

E.4 GENERAL REQUIREMENTS

E.4.1 Roles and Capabilities. Implementation requirements include those X series messages needed to ensure a minimum level of interoperability between systems that implement the JREAP while meeting the requirements of the Tactical Data Link being supported.

a. JRE Processors have various capabilities and assume various roles and functions in a network. For the purposes of message implementation requirements, these include the following:

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(1) FJUG: A Forwarding JTIDS Unit Generic used to provide forwarding between Link 16 and one or more JRE links.

(2) JRE JU: A host with both JRE and Link 16 capabilities that is using either or both, but is doing no forwarding between the two.

(3) JREU: A host that has one or more non-JTIDS/MIDS links and may be providing forwarding between links.

(4) JRE NET MGT: The JRE Net Management function used to manage the JRE network and individual links.

(5) Network Controller (JREAP A only).

(6) Network Participant.

b. JRE Processors may operate as manned or unmanned systems. Operational requirements and specifications will determine if a JRE Processor must support manned or unmanned operations or both. The decision to support manned or unmanned operations will impact the implementation requirements for a JRE Processor.

E.5 DETAILED REQUIREMENTS

E.5.1 Waivers. In order for a JRE Processor to participate on a JREAP interface, it must meet the implementation requirements for the role or function it has been assigned. Waiver of these requirements may be obtained by submitting a request for exemption to the configuration management body that has cognizance over the TDL message standard(s) that the JRE Processor will support.

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E.5.2 J2.0 Indirect Interface Unit PPLI. JRE Processors that will operate independent of a host Link 16 Terminal shall implement the J2.0 Indirect Interface Unit PPLI.

E.5.3 Filters. Filters will be implemented in accordance with paragraph E.4.5 of MIL-STD-6020. If the intended role of a JREAP implementation does not require filters but the system will participate in a joint interface, a waiver must be obtained.

E.5.4 DISUSED.

E.5.5 Symbol Definitions. [Table E.5.5-1](#) below defines the symbols used in the implementation requirement tables.

Table E.5.5-1 Implementation Symbol Definitions

IMPLEMENTATION SYMBOLS	
Symbol	
T	This symbol is used to specify that a message is mandatory for transmission.
R	This symbol is used to specify that a message is mandatory for reception.
-	This symbol (hyphen) is used to specify that the message is not applicable to the function and shall not be implemented for transmission or reception as specified within the context of the function.
#	This symbol is used to specify that implementation is optional.

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E.6 JREAP ROLE AND FUNCTION SPECIFIC MINIMUM IMPLEMENTATION.

E.6.1 JRE Interfaces. Paragraph E.4.1 (JRE Interface) of MIL-STD-6020 defines the JRE Interfaces that a JRE Processor may be required to support. These include the JRE interface between Link 16 Networks; the JRE interface between a Link 16 Network and a JREU; the JREU to JREU JRE interface, and the Concurrent Operating Unit JRE Interface. The tables below define the implementation requirements to support these interfaces and the roles stated in [E.4.1.a.](#) above.

E.6.2 JREAP Headers. Implementation of JREAP Headers is dependent upon the media that will be used to support the JRE Interface. These are summarized by Appendix in [Table E.6.2-1](#) below. JRE Processors shall implement the headers required for each media type that is to be supported.

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Table E.6.2-1 JREAP Header Implementation by Appendix

Header Type	Appendix A	Appendix B	Appendix C
Application Header	N/A	N/A	T/R
Full Stack Transmission Block Header (Network Controller) (FSTBH.A.NC)	T/R	N/A	N/A
Full Stack Transmission Block Header (Network Participant) (FSTBH.A.NP)	T/R	N/A	N/A
Full Stack Transmission Block Header (FSTBH.B)	N/A	T/R	N/A
Full Stack Message Group Header (FSMGH)	T/R	T/R	N/A
Management Message Subheader (MMSH)	T/R	T/R	T/R

E.6.3 JREAP X-series Messages. Implementation of JREAP messages is dependent upon the roles and capabilities that the JRE Processor must support or provide. A JRE Processor shall implement the messages required for one or more of the roles or functions shown in [Table E.6.3-1](#) below. A JRE Processor that is to perform more than one role or function shall implement the combined set of messages required for those roles or functions.

Table E.6.3-1 JREAP Message Implementation by Role and Function (1 of 6)

Message Number	Message	FJUG (L16 and JREAP)	JRE JU (L16 and JREAP, not forwarding)	JREU (Single JRE connection)
X0.0	Echo	T/R	T/R	T/R
X0.1	Common Time Reference	T/R	T/R	T/R
X0.2	Round-Trip Time Delay	T/R	T/R	T/R
X0.3	JREAP J-Series Acknowledgment (Full Stack)	T/R	T/R	T/R
X0.4	JREAP J-Series Acknowledgment (Application)	T/R	T/R	T/R
X0.5	Latency Threshold	T/R	T/R	T/R
X0.6	Latency Exceeded	T/R	T/R	T/R
X0.7	Operator-to-Operator	T/R	T/R	T/R
X0.8	Special Event	#/#	#/#	#/#
X0.9	Terminate Link	T/R	T/R	T/R
X0.10	Filter Response	T/R	T/R	T/R
X0.10.0	Filter Settings Request	# (1) /R	#/R	#/R
X0.10.1	Filter Settings Summary	T/#	T/#	T/#
X0.10.2	Category/Identity Filter	# (1) /R	#/R	#/R
X0.10.3	Label/Sublabel Filter	# (1) /R	#/R	#/R

Table E.6.3-1 JREAP Message Implementation by Role and Function (2 of 6)

Message Number	Message	FJUG (L16 and JREAP)	JRE JU (L16 and JREAP, not forwarding)	JREU (Single JRE connection)
X0.10.4	Point Type/Point Amplification Filter	# (1) /R	#/R	#/R
X0.10.5	Ellipse-Rectangle Geographic Filter	# (1) /R	#/R	#/R
X0.10.6	Closed Polygon Geographic Filter	# (1) /R	#/R	#/R
X0.10.7	Source Track Number Filter	# (1) /R	#/#	#/#
X0.10.8	Special Processing Indicator Filter	# (1) /R	#/R	#/R
X0.10.9	J28.2(x) Filter	# (1) /R	#/R	#/R
X0.10.10	Data Age Filter	# (1) /R	#/R	#/R
X0.10.11	Simulation Filter	# (1) /R	#/R	#/R
X0.10.12	J3.6 Rocket Filter	# (1) /R	#/R	#/R
X0.10.13	National Use Sub-Sublabel Filter	# (1) /R	#/R	#/R
X0.10.14	Network Participation Group Filter	# (1) /R	#/R	#/R
X0.11	Secondary Track Number List	T/R	-/-	-/-
X0.12	Direct Connection List	T/R	T/R	T/R
X0.13	Network Connectivity Matrix	T/R	T/R	T/R

Table E.6.3-1 JREAP Message Implementation by Role and Function (3 of 6)

Message Number	Message	FJUG (L16 and JREAP)	JRE JU (L16 and JREAP, not forwarding)	JREU (Single JRE connection)
X0.14	Connectivity Feedback	T/R	T/R	T/R
X1	JREAP J-Series Message	T/R	T/R	T/R
X2/X3	JREAP JTIDS/MIDS Free Text	#/#	#/#	#/#
X7	JREAP J-Series with NPG Assignment	T/R	T/R	T/R

Table E.6.3-1 JREAP Message Implementation by Role and Function (4 of 6)

Message Number	Message	JRE NET MGT	Multiple manned JRE networks (Forwarding)	Multiple Unmanned JRE networks. (Forwarding)
X0.0	Echo	T/R	T/R	T/R
X0.1	Common Time Reference	T/R	T/R	T/R
X0.2	Round-Trip Time Delay	T/R	T/R	T/R
X0.3	JREAP J-Series Acknowledgment (Full Stack)	T/R	T/R	T/R
X0.4	JREAP J-Series Acknowledgment (Application)	T/R	T/R	T/R
X0.5	Latency Threshold	T/R	T/R	#/R
X0.6	Latency Exceeded	T/R	T/R	T/#
X0.7	Operator-to-Operator	T/R	T/R	#/#
X0.8	Special Event	##	##	##
X0.9	Terminate Link	T/R	T/R	T/R
X0.10	Filter Response	T/R	T/R	T/R
X0.10.0	Filter Settings Request	T/# (2)	#/R	-/R
X0.10.1	Filter Settings Summary	#/R	T/#	T/#
X0.10.2	Category/Identity Filter	T/# (2)	#/R	#/R
X0.10.3	Label/Sublabel Filter	T/# (2)	#/R	#/R

Table E.6.3-1 JREAP Message Implementation by Role and Function (5 of 6)

Message Number	Message	JRE NET MGT	Multiple manned JRE networks (Forwarding)	Multiple Unmanned JRE networks. (Forwarding)
X0.10.4	Point Type/Point Amplification Filter	T/# (2)	#/R	#/R
X0.10.5	Ellipse-Rectangle Geographic Filter	T/# (2)	#/R	#/R
X0.10.6	Closed Polygon Geographic Filter	T/# (2)	#/R	#/R
X0.10.7	Source Track Number Filter	T/# (2)	#/R	#/R
X0.10.8	Special Processing Indicator Filter	T/# (2)	#/R	#/R
X0.10.9	J28.2(x) Filter	T/# (2)	#/R	#/R
X0.10.10	Data Age Filter	T/# (2)	#/R	#/R
X0.10.11	Simulation Filter	T/# (2)	#/R	#/R
X0.10.12	J3.6 Rocket Filter	T/# (2)	#/R	#/R
X0.10.13	National Use Sub-Sublabel Filter	T/# (2)	#/R	#/R
X0.10.14	Network Participation Group Filter	T/# (2)	#/R	#/R
X0.11	Secondary Track Number List	T/R	#/#	#/#
X0.12	Direct Connection List	T/R	T/R	T/R
X0.13	Network Connectivity Matrix	T/R	T/R	T/R

Table E.6.3-1 JREAP Message Implementation by Role and Function (6 of 6)

Message Number	Message	JRE NET MGT	Multiple manned JRE networks (Forwarding)	Multiple Unmanned JRE networks. (Forwarding)
X0.14	Connectivity Feedback	T/R	T/R	T/R
X1	JREAP J-Series Message	T/R	T/R	T/R
X2/X3	JREAP JTIDS/MIDS Free Text	#/#	#/#	#/#
X7	JREAP J-Series with NPG Assignment)	T/R	T/R	T/R

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Notes:

(1) Systems in the FJUG role shall implement reception and processing of this message, and transmission of the message as a response to a Filter Settings Request Message (X.0.10.0). Originating and sending of this message for the purpose of changing filter settings in another JRE processor is optional for implementation.

(2) Systems fulfilling the JRE Net Mgt function shall implement reception and processing of this message in response to a previously transmitted Filter Settings Request Message (X.0.10.0). Reception of this message when sent by another JRE processor as a command to change filter settings is optional for implementation.

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force - 44
NSA - NS

Preparing Activity:

DISA - DC2
(TCSS-2019-007)

Review Activities:

None

Civil Agency Coordinating Activities:

None

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.