# FINAL

# SISTIM
# OPERATOR'S MANUAL

## (for Version 6.3.2.0)

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# SISTIM OPERATOR'S MANUAL

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## Prepare SISTIM for Operations

# WARNING

## HIGH VOLTAGE

is used in the operation of this equipment.

## *DEATH* ON CONTACT

may result if personnel fail to observe safety precautions

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# CHAPTER 1.
# OVERVIEW

## SECTION 1
## INTRODUCTION: IDENTIFICATION

SISTIM is a Fire Support training device designed to operate on the CHS2 Family of hardware. It operates on the UCU using external TCIMs and on the CCU2 using TCIMs and SP-TCIMs concurrently. SISTIM is designed to operate on a workstation as a stand-alone product.

### 1-1 System Overview

Simulator/Stimulator (SISTIM) is a message stimulation and simulation product that supports testing and training for fire support systems. It is capable of transmitting and receiving fire support messages using communications protocols, and performing simple message response generation for several common fire support systems; for instance, generating a response of Message To Observer to a Fire Request message when simulating a mortar Fire Direction Center (FDC) unit.

SISTIM also includes a Time-Ordered-Event-List (TOEL) and Event Ordered Event List (EOEL) generation and execution capability, providing the operator with a means of creating and “playing back” a sequence of actions to the live fire support system. This capability then stimulates the fire support system to test system actions. The simulation capabilities are also active to permit the “filling in” of absent systems, permitting testing in a sparse environment.

## SECTION 2
## EXERCISES

### 1-2 Networks and Units

An exercise is created by an operator and consists of a communications structure, a unit hierarchy and a scenario. The communications networks are defined by configuring various network parameters so that later defined units can be assigned to specific communications nets. Units are defined by describing the type of operational facility (OPFAC), command headquarters, and their communication network assignments.

### 1-3 Automatic Target Generation and Messages

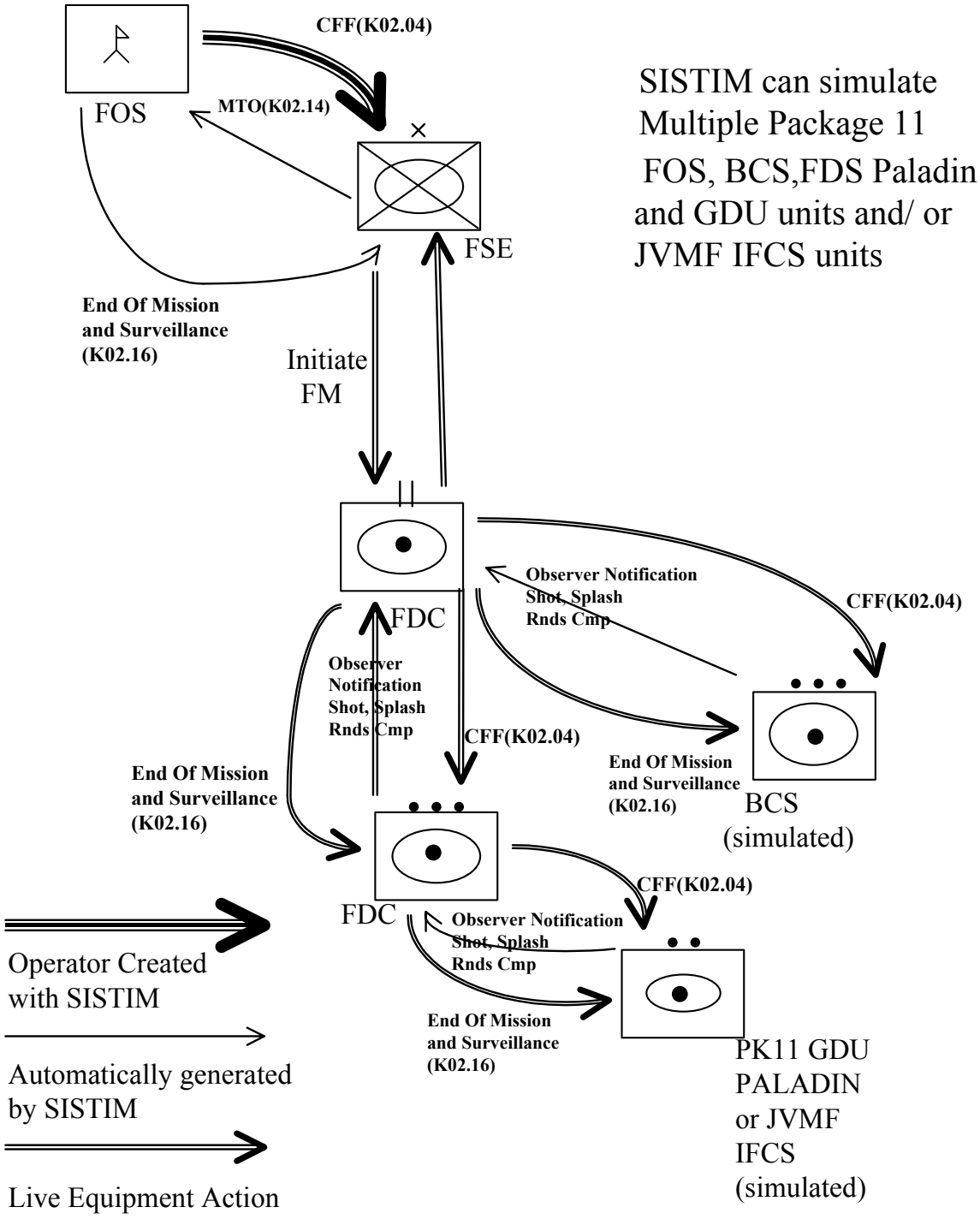
After the units and communications paths are created, then targets can be created. The operator can establish the FLOT location, orientation, target box depth, and target intensity. Targets can automatically be generated using the operator defined target density. These targets are assigned to the observer units previously configured. After the targets are created, additional messages can be inserted into the Event List. After the scenario has been created, it can be saved and run.

### 1-4 Execution

SISTIM operates in three states, Configure, Ready and Running. The “Configure” state represents the capabilities to create, manage, save, delete, and modify exercises. It provides modification capabilities of all aspects of exercises but does not provide the capability to execute exercises or events. The “Ready” state represents the capabilities of SISTIM to manually prepare for the execution of an exercise as well as the “pause” state within an exercise. The “Running” State represents the SISTIM capabilities to execute an exercise with permitted operator interactions.

In order to provide the capability to test Advanced Field Artillery Tactical Data System (AFATDS) mission processing threads, SISTIM provides a mechanism for defining the mission situation, including the participating system roles, and automated message event generation. The collection of mission defining elements is called an exercise. SISTIM provides the capability to set up exercises consisting of a TOEL of external messages arranged to be transmitted on predefined networks, by predefined devices acting in predefined roles, at specified times relative to the initiation of the exercise. Individual message events may be created and executed (transmitted and received) within the TOEL of an exercise, or upon operator command at any time when SISTIM is in the ready or running state.

**SISTIM in ACTION**



# CHAPTER 2.
# SISTIM HARDWARE AND LOAD PROCEDURES

This chapter shows the SISTIM operator how to cable hardware and load software procedures.

## SECTION 1
## CABLE UP A SYSTEM

The SISTIM Compact Disk load software either loads on a UCU or CCU common hardware platforms.

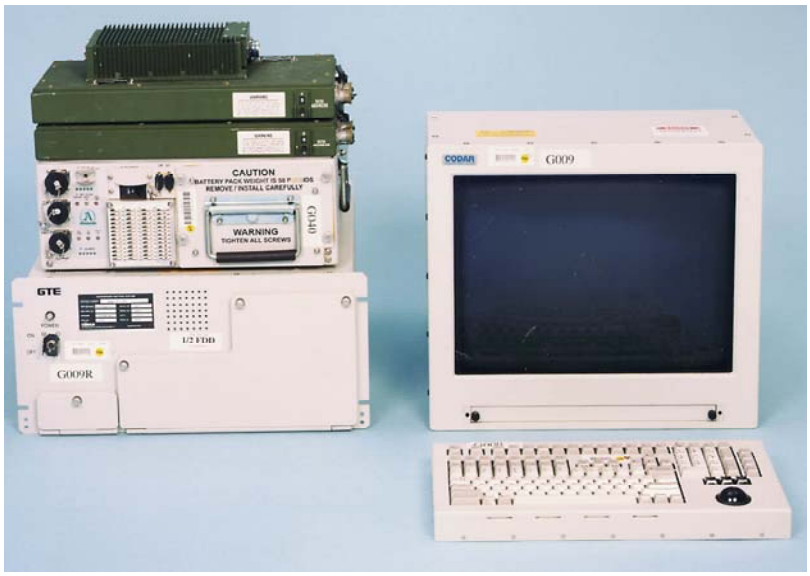



**Figure 2-1 Prepare SISTIM for Operations (UCU)**

### 2-1 Cable a UCU

To cable a UCU insure that the cables are configured correctly:
Start with the Monitor there are two cables, a power cable that connects it to the power strip and a cable from the SHRD to the UCU.
Connect the power cable from the UCU into the power strip.
Connect the SCSI Cable from the UCU into the TCIMS. (Make sure the TCIM addresses are four and five and are properly terminated.)
Connect the power cable and wire line adapter to the TCIM. Connect the TCIM power cord into the power strip.
Connect the LAN cable to the hme0 port. (The LAN port connection is next to the SCSI port on the back of the UCU).
Cable the keyboard and trackball cables. (The printer can also be accessible by the LAN if available. If you are using a local printer connect the cable into the Parallel port and connect the power cord into the power strip.)
Next connect the power strip into the UPS or other power source.

**Figure 2-2 Prepare SISTIM for Operations (CCU2)**

## 2-2 Cable a CCU2

To cable a CCU2 connect the keyboard cable.
Connect the power cable from the CCU2 into power strip.
Connect the SCSI Cable from the CCU2 into the TCIM. Make sure the TCIM address are four and five and is properly terminated.
Connect the power cable and wire line adapter to the TCIM. Connect the TCIM power cord into the power strip.
Connect the PCMIA cards and cables. If you have both TCIM and SPTCIM there are possible 8 communication channels available for use in SISTIM.
Connect the LAN cable to the primary LAN port. If you are using a local printer connect the cable into the Parallel port and connect the printer power cable into the power strip. The printer can also be accessible by the LAN.
Connect the power strip into a 120-Volt power source.

The appropriate Hardware is now ready for power to be applied.

**NOTE**

If SISTIM software is all ready loaded proceed to the SISTIM login screen.

# SECTION 2
# SISTIM LOAD PROCEDURES

## NOTE

Prior to setup diagram your Unit Communication structure to establish the TCIM and LAN IP address and net setup.

## 2-3 SISTIM SOFTWARE INSTALLATION

SISTIM is available on CDROM for installation.

### SISTIM SINGLE CD LOAD/CONFIGURE INSTRUCTIONS

The single CDROM load for SISTIM is compatible for both the CCU2 and the UCU platform. A hard drive of 4GB or larger is required.

**To load the SISTIM follow the procedures listed below:**

**Place the CDROM in the CDROM drive**.

Turn on the computer system. Anytime when the system is coming up, on the keyboard hold down the (Stop) key and then press the (a) key, this will give you an OK prompt on the screen.

**Type "boot cdrom" and press return**.

If you are prompted for a password, use AFATDS.

**The CDROM will boot.**

After the system boots you will be prompted for a **HOST NAME**, the name selected should be unique within the LAN address subnet to be used. Listed below are some examples:

sistim01
sistim02
sistim09

## NOTE

When prompt the operator inputs the LAN IP Address. This will be the **same IP address** that will be used to communicate over the **LAN network** at the Setup UDP/LAN IP Network.

The next input will be for a **LAN IP address**.

IP Information:

**IP Address** - The IP address is the most critical element to a host (your box/machine/platform/computer). This address must be unique for each host in a network. If a user is going to communicate on the global Internet, they must have a unique address for the entire Internet. A systems administrator (USMC = G-6/S-6, Army = Signal Officer (S-6), FDO or FCNCO) will issue an address with this fact in mind.

An IP address is four decimal numbers between 1 and 254 separated by periods. For example, 192.156.2.169. **The user should know the setting of their IP address in case they ever have to call in a network problem.**
Users should never change their IP address without consulting the network administrator as this can easily create problems.

**Subnet Mask** - The Subnet mask is used by the IP routing setup to determine if the station they are trying to reach is on their LAN network, but not necessarily on the same physical LAN, or in a totally different network. Users should never change the Subnet mask without discussing this need with their network administrator.

Once the LAN IP is entered the system will configure. This takes between (30-45 minutes), depending on your platform.

## 2-4 Login to SISTIM

### Login Screen

At the Login Screen: enter "**sistim**".
Next you will be prompted for a password: enter "**sistim**" again.

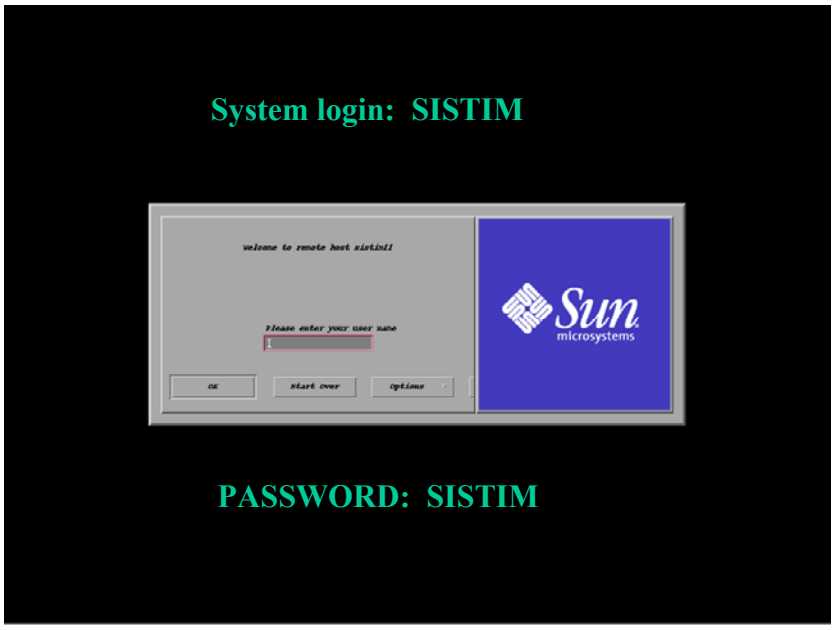



**Figure 2-3 Login Screen**

Wait for X windows to load.

**Windows Desktop**

After Logging-on the SISTIM screen loads in this configuration (Figure 2-4), the operator must Select the number three-mouse button, select exit and confirm exit. This will exit SISTIM. At the log-on screen select Options/Select Sessions/ Select Common Desktop Environment and then re-login into SISTIM. Wait for X windows to load.

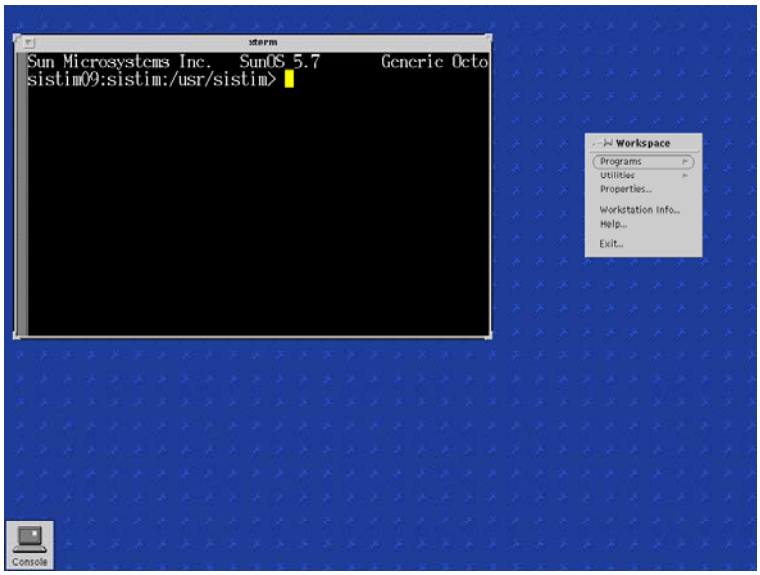



**Figure 2-4 Windows Desktop Screen**

## 2-5 Start SISTIM Program.

There are three ways to start the SISTIM program. (Figure 2-5)
The first way to start is click on SISTIM on the MENU Bar.
The second way is to click on the arrow above the SISTIM and then select the SISTIM application. The third way is right click on the blue background and select SISTIM/SISTIM to launch the application.

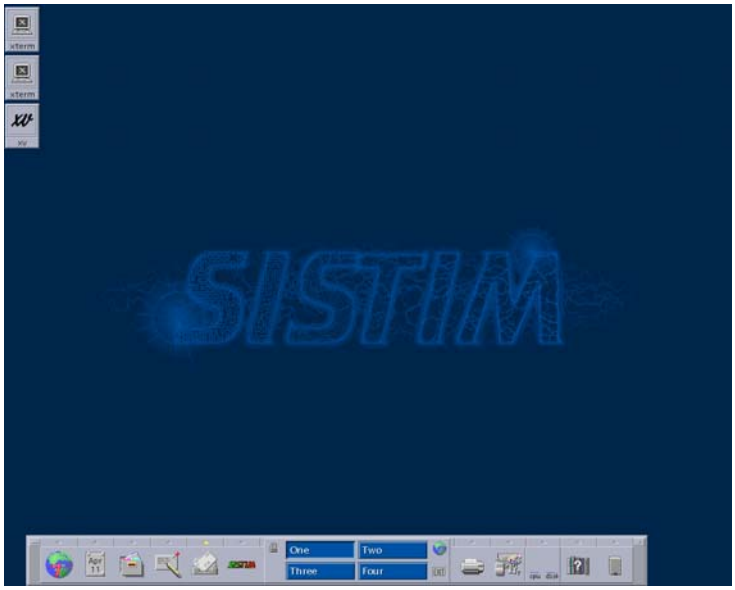



**Figure 2-5 Start SISTIM Program**

## 2-6 Start SISTIM Window

### *Start SISTIM Window Procedure*

In the RUNSISTIM window when the SISTIM is started for the first time, it loads the messages. The Messages types are PK 11, JVMF, USMTF, and GDU. Then configures the TCIM's, SPTCIM's and LAN Interface for use.
SISTIM's user interface is entirely menu driven and window oriented. This makes SISTIM extremely user friendly for both the novice and expert operator.
The Field Types windows displayed by SISTIM consist of different types of fields. The fields require different types of inputs from the operator. Each field type used during operation of SISTIM is discussed in Message Templates.

**NOTE**

Helpful hint, In the RUNSISTIM window there are posted results of the LAN, TCIM and SPTCIM configuration. If any of the above configurations are incomplete check all connections and cables. The operator can select Setup Network List, select Reset TCIM and this button will allow the operator to reset the TCIM/SPTCIM without having to exit SISTIM application. If that did not correct it power down the system and do a "boot –r". SISTIM will find any devices that were not available on the last boot.

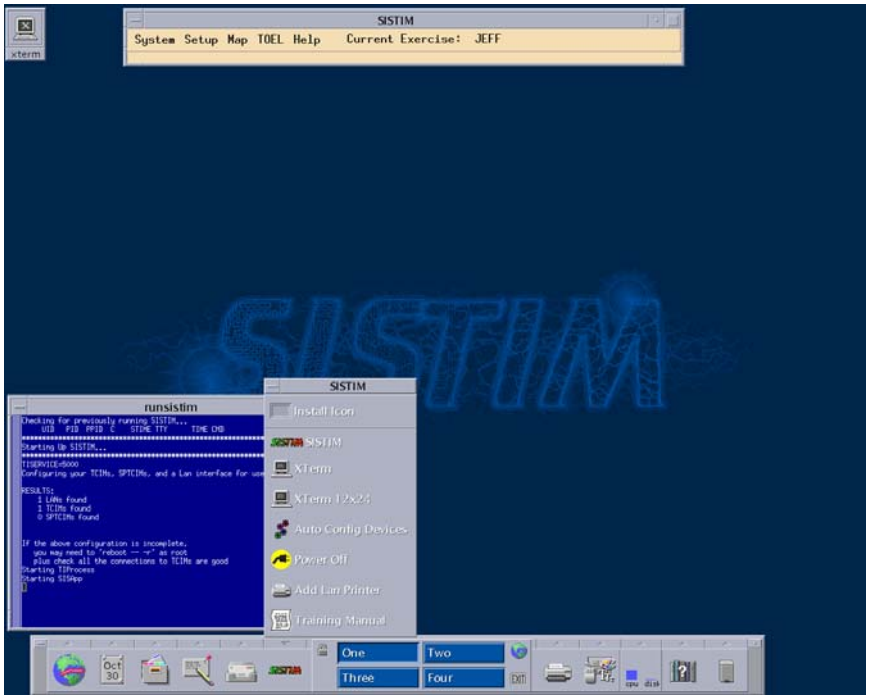



**Figure 2-6 Start SISTIM Window**

There are six items on the top of the SISTIM window.

**1**. **System Pull Down Menu**, this selection is used to manage the Printing, Loading and Saving the Database.

**2**. **Setup Pull Down Menu**, this is one of the most important pull down menus in SISTIM. The Setup pull down menu gives the operator the inputs for building Network Combinations, Units, and Scenario Setups. The output from the setup is used in the Time Ordered Event List (TOEL).

**3. MAP Pull Down Menu**, this function is used for editing and viewing the SISTIM Map.

**4. TOEL Pull Down Menu**, this function is used for editing and running the Exercise Controller. The TOEL is made from the Setup pull down menu.

**5. Help Menu,** has the user's manual and current SISTIM operating version.

**6. Current Exercise** is the name that tells the operator what exercise is in use.

When building a scenario, it is wise to frequently save the data to a database on disk or hard drive. This will reduce data losses due to power failures, etc. To save the current exercise Select System and Save Exercise, this action saves the exercise to the hard drive.

# CHAPTER 3.
# ESTABLISH/BUILD SISTIM COMMUNICATION CONFIGURATIONS

## SECTION 1
## SETUP NETWORKS

**NOTE**

SISTIM software is configured that only one window can be open at any one time.

Available Networks are; UDPLAN Channel (LAN), USMTFMail channel (TBMCS Sendmail), UDP220A Channel (SPTCIMS and TCIM), UDP220C Channel (SPTCIMS and TCIM), GDU/MCA Channel (GDU) and AFCS Channel (Paladin). UDP220C channel setup only works with AFATDS V-6.4 software releases.

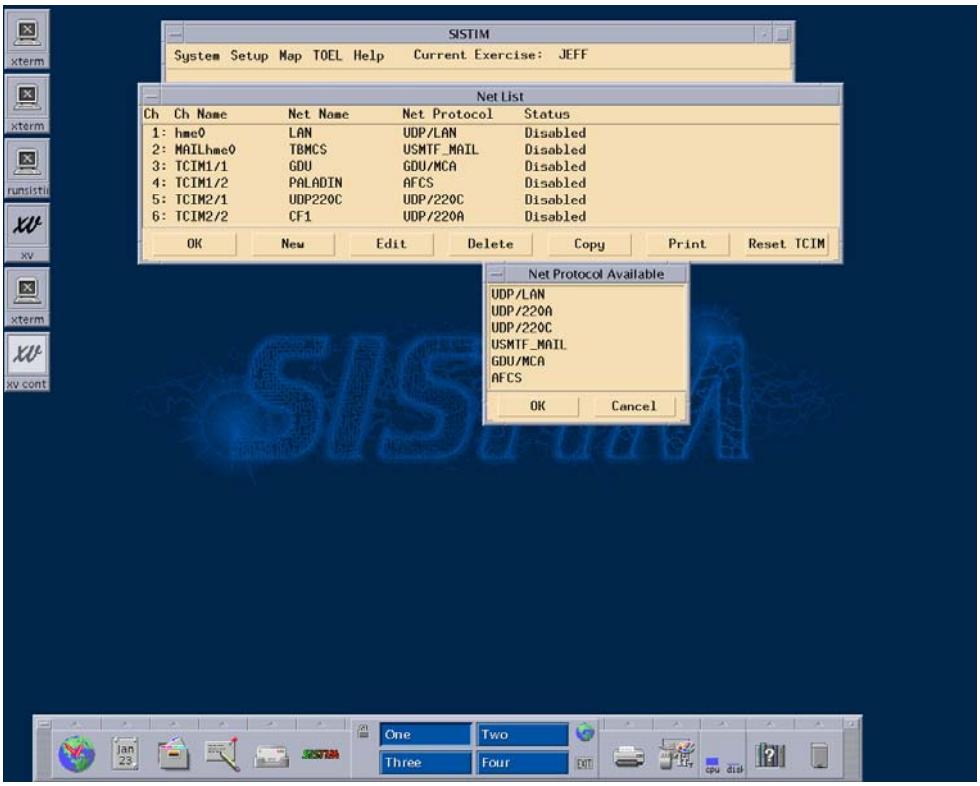



**Figure 3-1 Setup Networks**

**NOTE**

The most import area in SISTIM is the Networks setup. If configured incorrectly the operator will not receive the desired results from the SISTIM Scenario.

**SISTIM Networks setup** (Figure 3-1)
**Ch:** Channel Number
**Ch Name:** Channel Name
**Net Name:** Network Name
**Net Protocol:** The type of network
**Status:** Status of network: Enabled or Disabled & Live or Simulated
**OK** this button closes the Network List window.
**New** this button gives the operator the opportunity to configure a new network. When this button is activated, a window is displayed which allows the operator to choose the type of network protocol to create.
**Edit** this button allows the operator to edit the parameters for an existing network (Note: a network must be highlighted before this button can be activated). When this button is activated, a window is displayed which allows the operator to edit the desired parameters for the highlighted network. (See the appropriate section for the type of network selected: UDPLAN Channel Setup, UDP220 Channel Setup, USMTFMail Channel Setup, GDUMCA Channel Setup, or AFCS Channel Setup). Double clicking on a Network will invoke the Edit function.
**Delete** this button deletes the selected network from the network list (Note: a network must be selected before this button can be activated). When the network has been deleted, the parameters are removed from the network list.
**Copy** this button will allow the operator to copy the highlighted network to a new network name. (Note: the network to be copied must be highlighted before this button can be activated). The “net_id” field must then be specified.
**Print** this button will allow the operator to print the highlighted network,
**Reset TCIM** this button will allow the operator to reset the TCIM without having to exit SISTIM.

## SECTION 2
## SETUP LAN NETWORKS

### 3-1 UDPLAN Setup and LAN ALIAS

This window allows the operator to configure the UDPLAN protocol network within the current exercise. Any unit that can be assigned an IP address can communicate over the LAN network.
To set up a UDPLAN Network the operator will have to name the network and assign it to a channel.

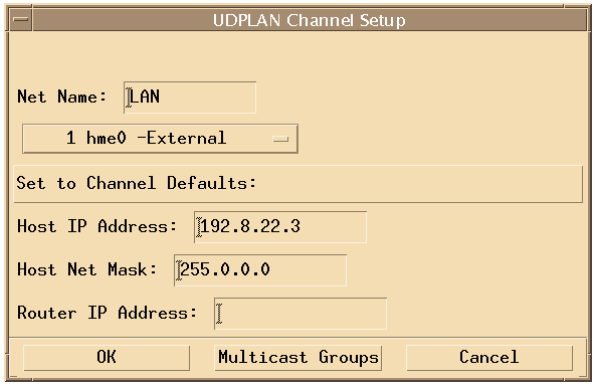



**Figure 3-2 UDPLAN Setup**

In SISTIM channel 1 (Figure 3-2) is the only UDPLAN Channel that is available to communicate on. The operator has the selection to place the UDPLAN on any other channel if so desired to have Host IP address the net simulated. The permanent UDPLAN card is assigned the IP address from the load producers and cannot be changed. This is the selection that was placed in the IP window from the software load procedures. If the Host IP address is changed, communicating over the LAN will not be possible.

***UDPLAN Setup Procedure***

**Net Name** - Any name, up to 12 alpha/numeric characters, is valid in this field.
**Channel** - The channel for this network will either be simulated or external. Once a channel has been chosen for a network, it is grayed-out to ensure no duplications.
**Host IP Address:** - TCP/IP numeric network address for the SISTIM host machine**.** (The same IP name that was used from the load software instructions.)
**Host Net Mask:** - This is used to define the domain for the Host IP Address.
**Router IP Address:** - This is used to define the Router (Gateway) IP Address. (Note: If left blank no Gateway will be used)
**Multicast:** is only available between FBCB2 and AFATDS units. (Figure 3-3) This window displays a list of the multicast groups and allows the operator to create, edit, and delete the groups for the current net.

**NOTE**

The BDE_ALL net in AFATDS is the only net that will send and receive messages. The other MCGroup Name types (BN_EPLRS, BN_ALL, BDE_EPLRS) will only received by AFATDS.

MCGroup Name/MCGroup Type/ Multicast IP is the list of the multicast groups for the net. This information displayed includes the identifying name for each multicast group, its group type and it's multi cast IP address in fig 4-3 it is showing the BDE_ALL with an IP of 225.10.10.25.

**Multicast *Setup Procedure MCGroup list***

***OK* button:** closes the Multicast Group List window.
**New Button:** gives the operator the opportunity to create a new multicast group.
**Edit Button:** gives the operator the opportunity to edit an existing multicast group. A multicast group must be highlighted to be in a activate state.
**Delete:** when a multicast group is highlighted, the group can be deleted from the MCGroup list

**Figure 3-3 Multicast Channel Setup**

**Multicast Group Setup**

This window (Figure 3-4) allows the operator t to configure a multicast group for the current loaded exercise.

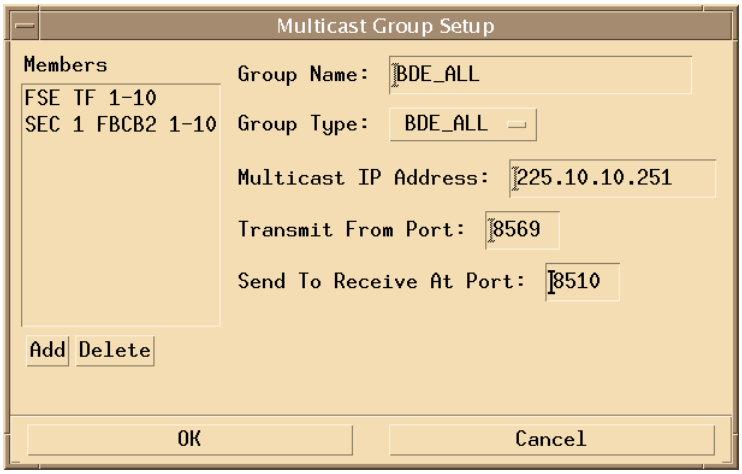



**Figure 3-4 Multicast Group Setup**

**Multicast *Group Setup Procedure***

***Group Name:*** Any name up to 24 alpha/numeric character.
***Group Type:*** indicates whether this is a Battalion EPLRS, Battalion All, Brigade EPLRS, or Brigade All group.
***Multicast IP Address*** indicates the multicast IP address of the group. SISTIM will prompt for the legal IP entry.
***Transmit From Port:*** Indicates the port number of this group will be transmitted. This field is not editable.
***Send To Receive*** At Port: Indicates the port number of this group will be sent and received. This field is not editable.
***Add:*** This button allows selection of a unit to be added to the group that appears in the group name. Only legal units will be presented for selection.

**LAN ALIAS**
When setting up a LAN network at SISTIM you now have the capability to alias the LAN. This will only work one time, this is not like the AFATDS where you can alias the primary LAN card four times. This allows you to edit the LAN IP of the box without having to reconfigure the SISTIM box. Each LAN card has its own unique IP assigned to it. When you alias the LAN you are telling the box to use the IP that you have set for it, not the IP assigned to the LAN card or determined during the initial set up (loading) of SISTIM. In the past this capability has NOT been available, it has now been implemented.

In order to alias the LAN at SISTIM all you have to do is enter a unique IP in the Host IP Address field. Another feature added to SISTIM is the ability to declare a default route. The user may now establish a route with out having to set it manually. This feature is strictly optional. Aliasing the LAN is something that should only be performed by an experienced operator. If not done correctly (i.e. by not ensuring that the IP is unique) messages can be lost and the problem could be quite difficult to find. You must be especially careful when saving a database at one box and restoring it on another. If you are not careful you could end up with two boxes with the same IP, therefore causing you to lose messages. Always be sure to either give the new box a unique IP or select Set to Channel Defaults , this will ensure that the boxes have different IP addresses.

In the past if you put a unique IP in this field, one different from the Set to Channel Defaults option, you were warned when you opened the TOEL, that it was not that of the box and therefore were unable to communicate. Now if you put a unique IP in the Host IP Address field you will be warned with the following: (Figure 3-5)

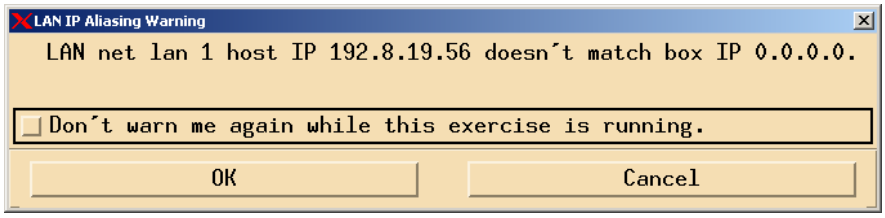



**Figure 3-5 LAN IP Warning**

Communications will be enabled and you will be allowed to continue on with the exercise. As you can see, from above, an option has been added so that the user may disable this alarm within the exercise.

## 3-2 USMTFMAIL Channel Setup

The USMTF Mail network (Figure 3-6) only works on channel 2 in SISTIM. The host IP address is the same as the LAN IP address. This network is used for communicating to the TBMCS device for immediate and preplanned air request. The IP is the same for the UDPLAN for it is associated with the LAN.

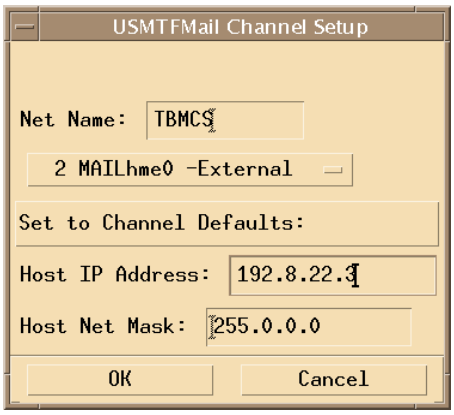



**Figure 3-6 USMTFMAIL Channel Setup**

***USMTFMAIL Channel Setup Procedure***

**Net Name** - Any name, up to 12 alpha/numeric characters, is valid in this field.
**Channel** - The channel for these networks can either be simulated or external.
**Host IP Address** - TCP/IP numeric network address for the SISTIM host machine. This is the same IP name that was used from the load software instructions.
**Host Net Mask** - This is used to define the domain for the Host IP Address.

# SECTION 3
# SETUP WIRE NETWORKS

## 3-3 UDP220A 2 WIRE Channel Setup

**NOTE**

When selecting screen combinations options some entries that are not legal entries and are grayed out for non-selection. The IP address must be unique when setting up the UDP220A Network

On the SPTCIMS the second channel is non-selectable. This TCIM UDP220A channel (Figure 3-7) is used to talk over numerous devices, the most common Devices are 2 wire and SINCGARS Radio.

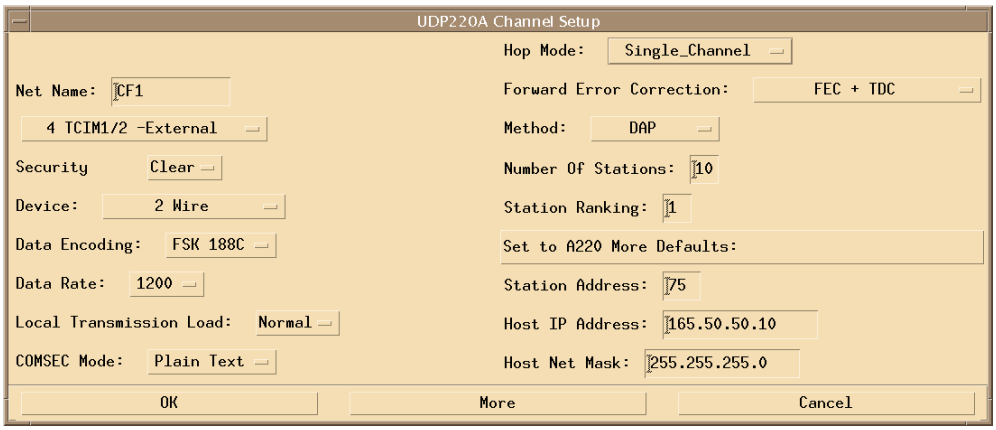



**Figure 3-7 UDP220A 2 WIRE Channel Setup**

***UDP220A 2 WIRE Channel Setup Procedure.***

**Assign** the network a name i.e.: FD1, CF1 etc.
**Select** a disable channel that is available from the pull down.
Selecting a Simulated channel will not let the operator establish AFATDS communication. When the Time Ordered Event List (TOEL) is selected, the networks that the operator selected will go from disable to enable and the TCIMS will be enabled for use.
**Security** is not selectable. In the AFATDS it must be defaulted to Secure.
**Device** - Select the appropriate communication device.
**Data Rate** the Rate of transmission for a device on a TCIM channel. Channel one maximum data rate is 32000 BPS and on Channel two maximum Data Rate is 1200 BPS on a TCIM. The SPTCIM does not have a second channel. Stations and Host IP Address are required entries. When in uncertainty use the AFATDS legal entries as a guide.
**Net Name** - Any name, up to 12 alpha/numeric characters, is valid in this field.
**Channel** - The channel for this network can either be or external.
**Security** - The only option in SISTIM is 'CLEAR'.
**Device** - Selects different device interfaces on each channel.
**Data Encoding** - Selects the type of modulation on each channel.
**Data Rate** - Selects the baud rate on each channel.
**Local Transmission Load** - Estimated amount of network traffic to be expected.
**Hop Mode** - This field informs the TCIM if SINCGARS radio is set for frequency hopping.
**Method** - Select the different NAD methods.
**Stations** - Number of net stations to use for NAD algorithms.
**Set to A220 Defaults** - Sets A220 parameters to defaults values. Selecting this feature will override and customization made on the UDP220 Channel Setup 2 Window.
**Station Address** - The link address for this station.
**Host IP Address** - TCP/IP numeric network address for the SISTIM host machine. This IP address must be unique (different from the LAN IP address).
**More** - Selecting this button will display the UDP220 Channel Setup 2 window allowing the operator to make additional customizations to the UDP220 network.

## 3-4 Available TCIM Channels

Available TCIM Channels to assign to a network. In the case below (Fig 3-8) there are two possible TCIM selections.

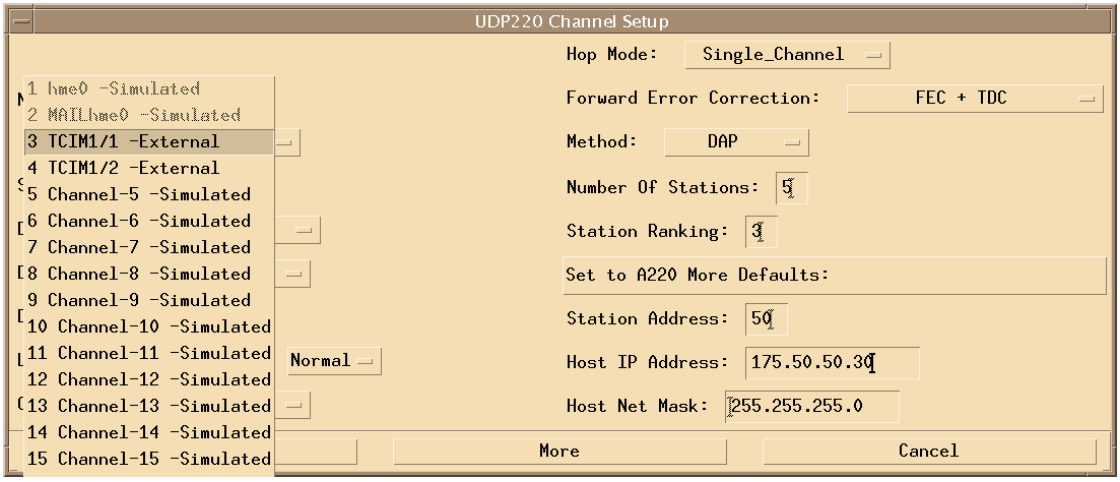



**Figure 3-8 Available TCIM Channels**

## 3-5 UDP220A More Channel Setup

**NOTE**

A good way to tell if the switch settings for wire are correct is by looking at the EPRE, ELAG, and TURN. If they are all zeros then the operator has entered the correct communication settings. Do not edit this window, the default settings are correct. Only if you are told by a communication expert (CECSO, S-6) should you make a selection in this window.

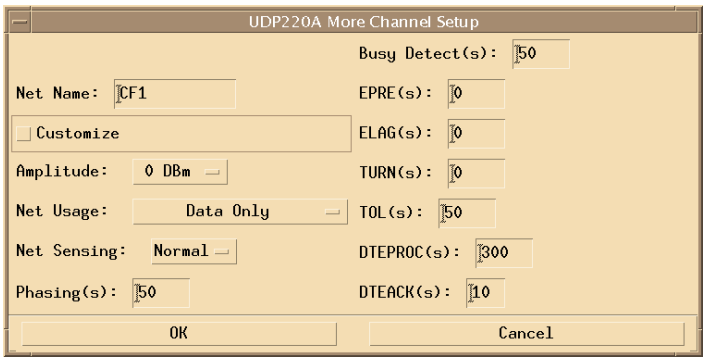



**Figure 3-8.1 UDP220A More Wire Channel Setup**

***UDP220A More Wire Channel Setup Procedure.*** (Figure 3-8.1*)*

**Net Name** - Any name, up to 12 alpha/numeric characters, is valid in this field. (It will be the same "net_id" as main UDP220 Channel Setup window).
**Customize** – By selecting this radio button, the operator has the option to modify the A220 parameters.
**Amplitude** - Amplitude for analog modulations.

**Net Usage** - For radio nets, indicates whether the net will be used for both voice and data or data only.
**Net Sensing** - Indicates whether to sense net busy using all possible means or to use methods that limit false busy indications in noisy nets.
**Phasing(s)** - Time (ms) end of EPRE during which the TCIM sends a one/zero data pattern.
**Busy Detect(s)** - Time from transmit start at any station (PTT) until all stations detect net busy.
**EPRE** - Is the time interval from push to talk (PTT) activation until device has sent its COMSEC or other preamble and is ready to accept data from the TCIM.
**ELAG** – IS the time interval from the time that the transmitting TCIM delivers the last bit of data to the media until the media delivers the same bit to the receiving TCIM.
**TURN** - Is the time interval for transmitter and receiver to be ready for the next operation after the end of ELAG.
**TOL** – Is the time allowed for computing an acknowledgment.
**DTEPRO** – is the time allotted for the receiving station to process data that does not require acknowledgment before the NAD cycle resumes
**DTEACK** – Is the time allotted for the receiving station to process data and transmit an acknowledgment.

## 3-6 UDP220A Radio Channel Setup

These windows (Figure 3-9) and (Figure 3-9.1) allow the operator to configure the UDP220A protocol network within the current exercise using radio.

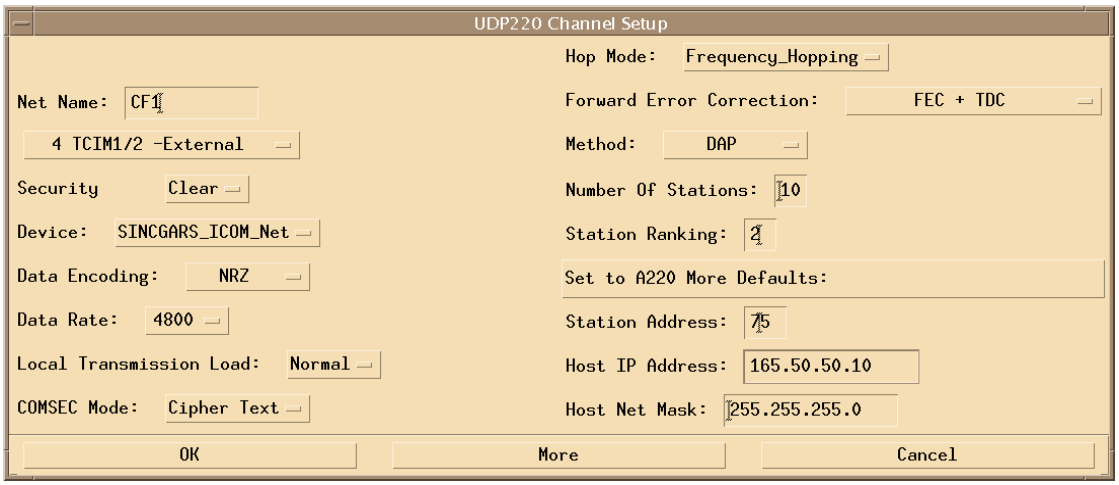



**Figure 3-9 UDP220A Radio Channel Setup**

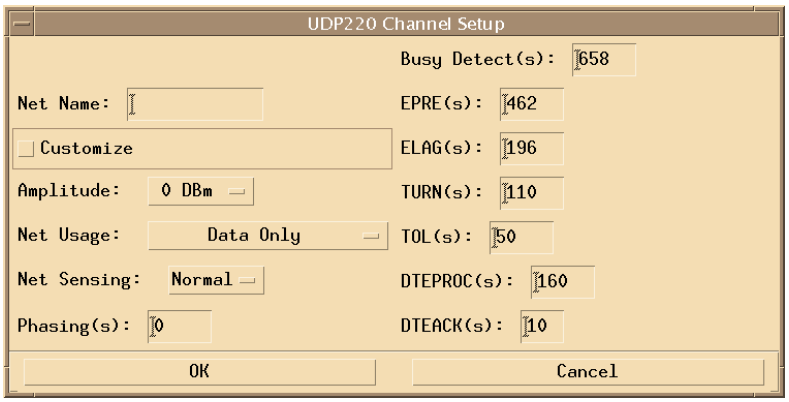



**Figure 3-9.1 More UDP220A Radio Channel Setup**

## 3-7 UDP220C 2 WIRE Channel Setup

UDP220C channel setup only works with AFATDS V 6.4 software releases.

This window (Figure 3-10) allows the operator to configure the UDP220C protocol network within the current exercise.
On the SPTCIMS the second channel is non-selectable. This TCIM UDP220C channel (Figure 3-10) is used to talk over numerous devices, the most common Devices are 2 wire and SINCGARS Radio.

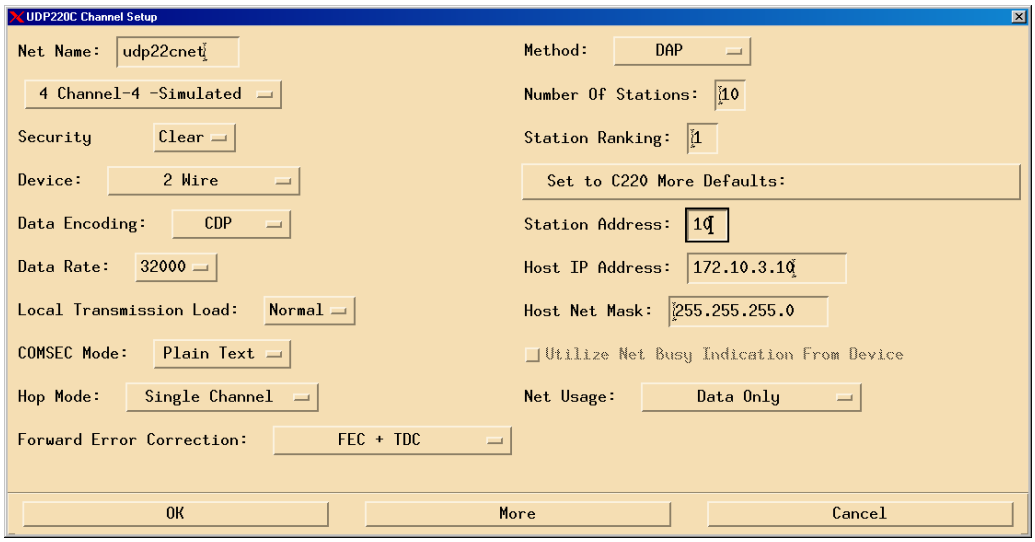



**Figure 3-10 UDP220C 2 WIRE Channel Setup**

***UDP220C 2 WIRE Channel Setup Procedure.***

**Assign** the network a name i.e.: FD1, CF1 etc.
**Select** a disable channel that is available from the pull down.
Selecting a Simulated channel will not let the operator establish AFATDS communication. When the Time Ordered Event List (TOEL) is selected, the networks that the operator selected will go from disable to enable and the TCIMS will be enabled for use.
**Security** is not selectable. In the AFATDS it must be defaulted to Secure.
**Device** - Select the appropriate communication device.
**Data Rate** the Rate of transmission for a device on a TCIM channel. Channel one maximum data rate is 32000 BPS and on Channel two maximum Data Rate is 1200 BPS on a TCIM. The SPTCIM does not have a second channel. Stations and Host IP Address are required entries. When in uncertainty use the AFATDS legal entries as a guide.
**Net Name** - Any name, up to 12 alpha/numeric characters, is valid in this field.
**Channel** - The channel for this network can either be or external.
**Security** - The only option in SISTIM is ‘CLEAR’.
**Device** - Selects different device interfaces on each channel.
**Data Encoding** - Selects the type of modulation on each channel.
**Data Rate** - Selects the baud rate on each channel.
**Local Transmission Load** - Estimated amount of network traffic to be expected.
**Hop Mode** - This field informs the TCIM if SINCGARS radio is set for frequency hopping.
**Method** - Select the different NAD methods.
**Stations** - Number of net stations to use for NAD algorithms.

**Set to A220 Defaults** - Sets A220 parameters to defaults values. Selecting this feature will override and customization made on the UDP220 Channel Setup 2 Window.
**Station Address** - The link address for this station (TCIM Address).
**Host IP Address** - TCP/IP numeric network address for the SISTIM host machine. This IP address must be unique (different from the LAN IP address).
**Host Net Mask** - This is used to define the domain for the Host IP Address. (Note: The SISTIM application will fill this field in with the proper data and should generally not be changed by the operator).
**Utilize Net Busy Indication From Device** – This button allows the operator to select whether or not to utilize net busy indication.
**Net Usage** - For radio nets, indicates whether the net will be used for both voice and data or data only.
**OK** - This button closes the UDP220C Channel Setup window and the new network will appear in the "Net List" window. (Note: at a minimum, the "net_id" field must be specified before this button can be activated).
**More** - Selecting this button will display the UDP220C Channel Setup 2 window allowing the operator to make additional customizations to the UDP220C network.

### 3-7-1 UDP220C More Channel Setup

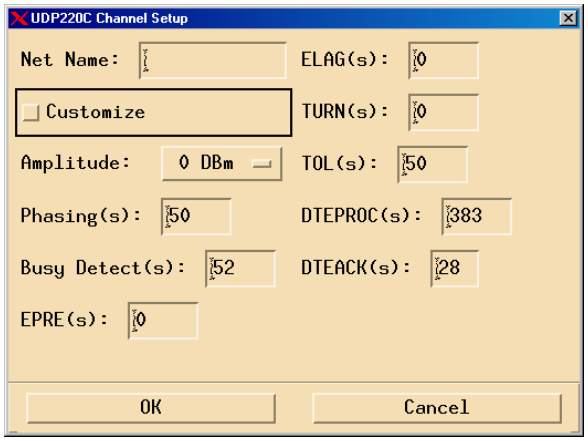



**Figure 3-10.1 UDP220C More Channel Setup**

***UDP220c More Wire Channel Setup Procedure.*** (Figure 3-10.1*)*

**Net Name** - Any name, up to 12 alpha/numeric characters, is valid in this field. (It will be the same "net_id" as main UDP220C Channel Setup window).
**Customize** – By selecting this radio button, the operator has the option to modify the A220 parameters.
**Amplitude** - Amplitude for analog modulations.
**Phasing(s)** - Time (ms) end of EPRE during which the TCIM sends a one/zero data pattern.
**Busy Detect(s)** - Time from transmit start at any station (PTT) until all stations detect net busy.
**EPRE(s)** - Is the time interval from push to talk (PTT) activation until device has sent its COMSEC or other preamble and is ready to accept data from the TCIM.
**ELAG(s)** – IS the time interval from the time that the transmitting TCIM delivers the last bit of data to the media until the media delivers the same bit to the receiving TCIM.
**TURN(s)** - Is the time interval for transmitter and receiver to be ready for the next operation after the end of ELAG.
**TOL(s)** – Is the time allowed for computing an acknowledgment.
**DTEPRO(s)** – is the time allotted for the receiving station to process data that does not require acknowledgment before the NAD cycle resumes

**DTEACK(s)** – Is the time allotted for the receiving station to process data and transmit an acknowledgment.

## 3-8 GDU/MCA Network Setup

This window (Figure 3-11) allows an operator to configure a GDU/MCA network within the current exercise. It is recommended to assign this network on the second TCIM channel because the transmission rate for GDU's is a maximum of 1200 BPS.

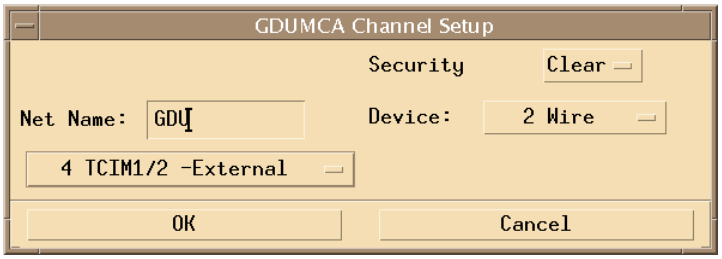



**Figure 3-11 GDU/MCA Network Setup**

***GDU/MCA Network Setup Procedure***

**Net Name** - Any name, up to 12 alpha/numeric characters, is valid in this field.
**Channel** - The channel for this network can either be simulated or external.
**Security** - The only option in SISTIM is 'CLEAR'.
**Device** - Selects different device interfaces on each channel.

## 3-9 AFCS Channel Setup

This window (Figure 3-12) allows an operator to configure an AFCS network within the current exercise. AFCS Networks are used to allow communications between SISTIM simulated Paladins and AFATDS. Some selections may be grayed out based on legality rules of the AFCS network.

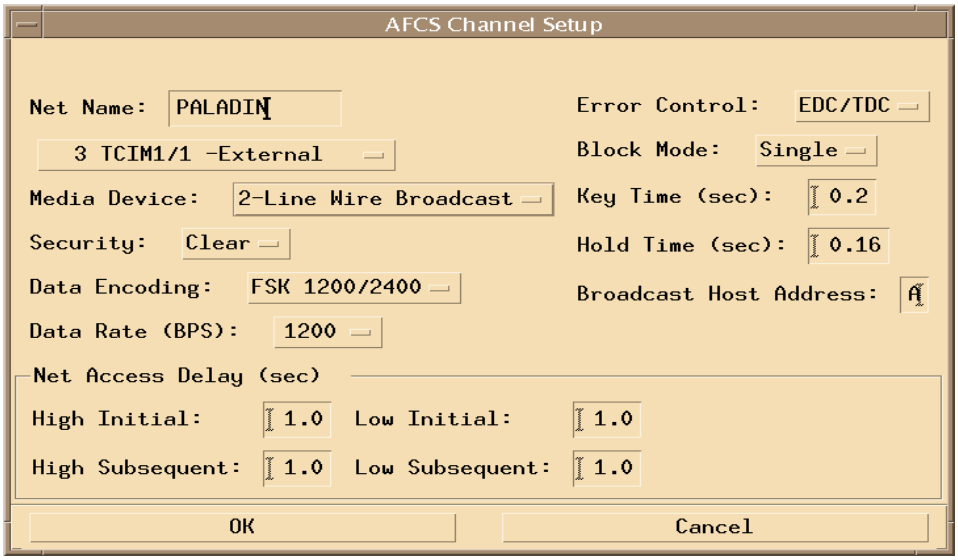



**Figure 3-12 AFCS Channel Setup**

***AFCS Channel Setup Procedure***

**Net Name** - Any name, up to 12 alpha/numeric characters, is valid in this field.
**Channel** - The channel for this network can either be external or simulated external.
**Security** - The only option in SISTIM is 'CLEAR'.
**Device** - Selects different device interfaces on each channel.
**Data Encoding** - Selects the type of modulation on each channel.
**Data Rate** - Selects the baud rate on each channel.
**Broadcast Host Address** - Selects the Tacfire Net Address of the AFCS network for the simulated Paladins on this network.
**Key Time** - Selects the key time delay value. Legal values are between 0 and 255 representing 0.1 to 25.5 seconds.
**Hold Time** - This field designates a constant used in calculating a Hold Time. The time after transmission of a message (or receipt of a message if not transmitter) that a device should wait for a control message to be resent.
**Net Access Delay** - This is the amount of time to delay a transmission after either a Net Busy indication or expiration of a Hold Timer. With this field, it is possible to prioritize the net so that higher priority devices have a shorter Net Access Delay (NAD) than lower priority devices. Its use requires that there be four different values for NAD to insure adequate access to the net.

# CHAPTER 4.
# BUILDING SISTIM UNITS CONFIGURATION

## SECTION 1
## AFATDS FDC UNIT CONFIGURATION

Available Units Configuration

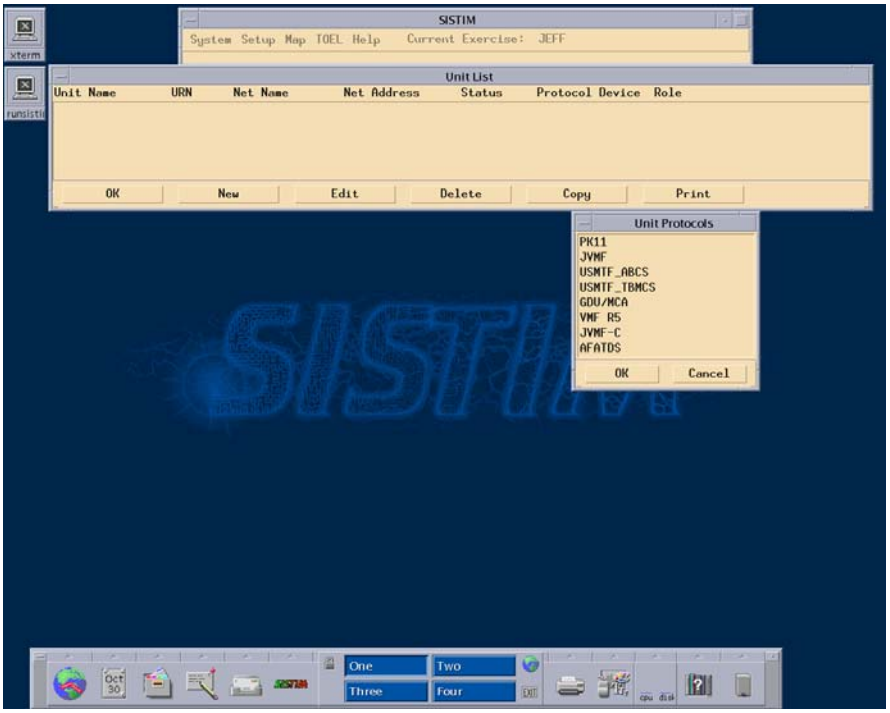



**Figure 4-1 Build SISTIM Units Configuration**

### 4-1 Build AFATDS FDC Unit Configuration

This window (Figure 4-1) allows the operator to view or edit the parameters for live and simulated units.

**NOTE**

SISTIM uses the Unit Reference Number (URN) in the SISTIM database to track all message traffic. The URN for a unit in SISTIM must match the corresponding URN in AFATDS to unsure successful communications

Accessible Windows Unit Protocol Available:

Unit Setup (PK11 Observer)
Unit Setup (PK11 Other)
Unit Setup (PK11 Paladin)
Unit Setup (JVMF Observer)
Unit Setup (JVMF Other)
Unit Setup (USMTF)
Unit Setup (VMF R5-Paladin) Used with AFATDS Version 6.4 software
Unit Setup (JVMF-C Other) Not used in AFATDS

**NOTE**

Build real AFATDS units first then continue with building of other real units. The last units that will be built are the simulated units. The simulated units need an entry in command HQ. This is used in the scenario to generate targets and communications.

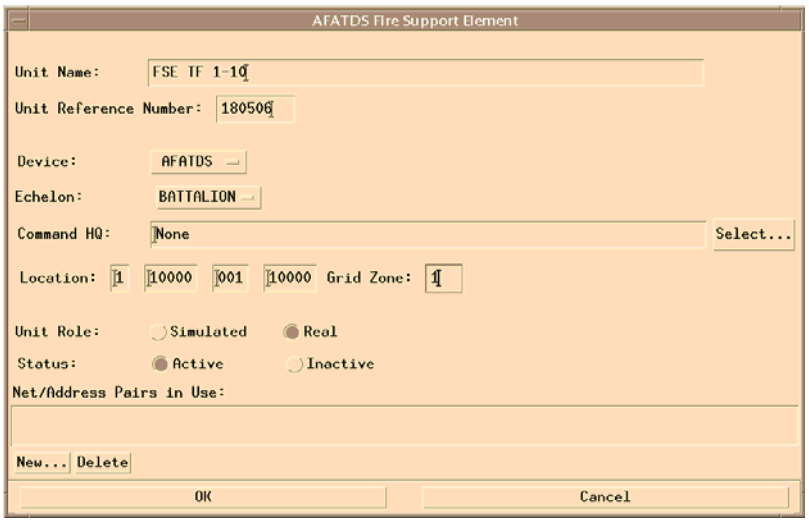



**Figure 4-2 Build AFATDS Unit**

***Build AFATDS Unit Procedure***

**Unit Name** - Any valid unit name up to 64 characters can be entered into this field.
**Unit Reference Number** - The (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique within each unit and exercise.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device. The valid types for an AFATDS are AFATDS.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** - By selecting “Select” a window is displayed that allows the operator to set the command unit.
In most, if not all cases AFATDS devices will have a selection of none in the Command HQ. Fields/Parameters.
In the case of PK11 Paladin and GDU/MCA units they should always have an AFATDS unit assigned as Command HQ.
This window displays a list of the units appropriate for Command HQ.
**Set to None** - This button will insert “NONE” into the Command HQ field on the Unit Setup window.
**OK** - This button closes the window and inserts the highlighted unit into the Command HQ field on the previous Unit Setup window.
**Location** - This is the unit location in the exercise. Any valid (UTM) coordinate is allowed in this field.

**NOTE**

Location position is not used for fire mission processing, but an entry is required in the Location field

**Unit Role** - The operator has the option of setting a unit to simulated (acted by SISTIM) or Real (configured on another device connected to SISTIM).
**Status** - The operator has the option of setting the status of this unit to either Active or Inactive.

**Net/Address Pairs in Use** - A list of the Net/Address pairs that are currently in use by this unit
New - Activation of this button displays a Select Net Address Pair (Figure 4-5) (PK11 UDP220A) that allows the operator to add a new net for this unit.

NOTE

If the operator chooses to add the Net/Address Pairs when the unit is first created the following warning will appear.

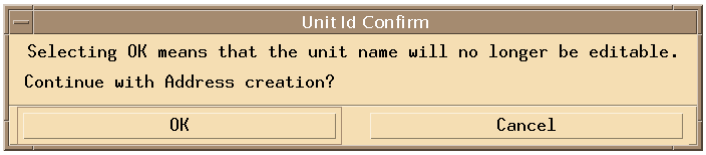



**Figure 4-3 Unit ID Confirm**

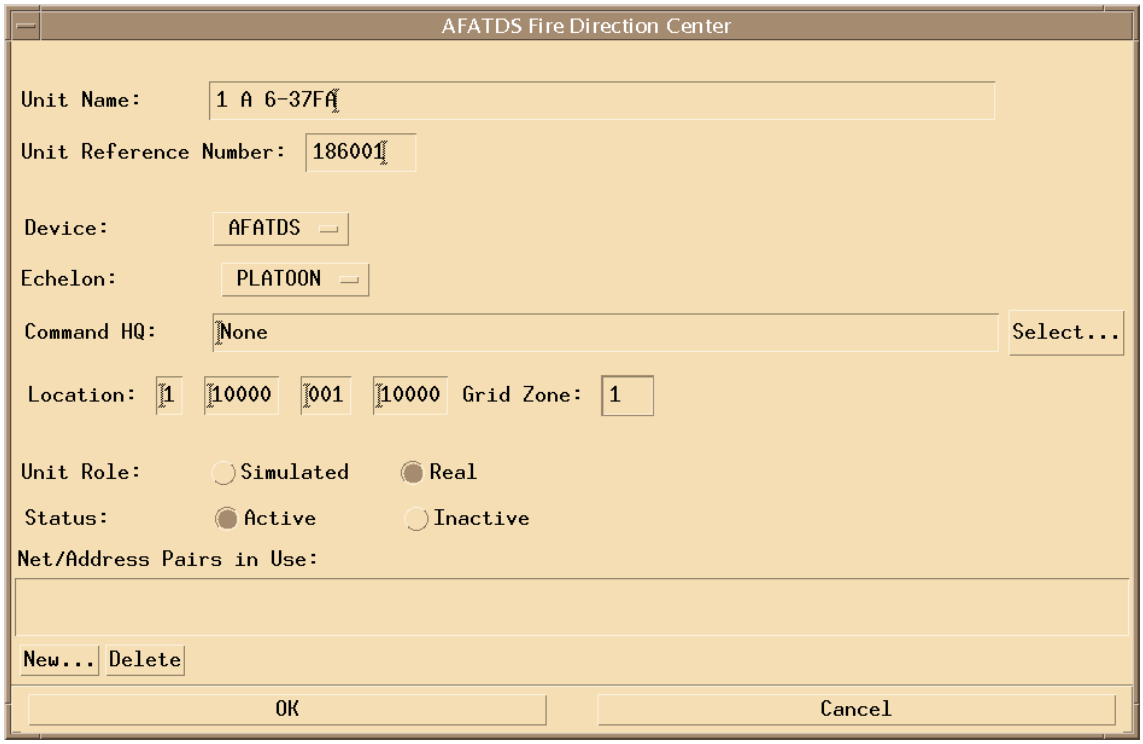



**Figure 4-4 Building AFATDS FDC Unit Configuration**

**NOTE**

The operator has the option to add more then one network to any real or simulated unit.

### 4-1-1. SELECT NET/ADDRESS PAIR (PK11 LAN)

This window (Figure 4-5) allows the operator to select the communications network and the address to be used by this unit. In order to access this window there must be a valid UDP/LAN network in the Network List, and it must be highlighted in the Available Nets field.

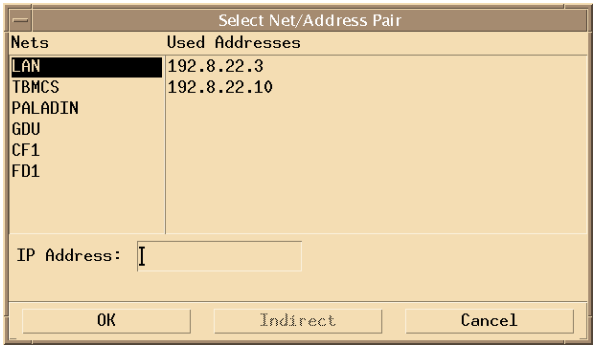



**Figure 4-5 SELECT NET/ADDRESS PAIR (PK11 LAN)**

**Available Nets** - A list of nets available for this unit. When a net is selected, the used address list is displayed.
**Used Addresses** - A list of currently in use net addresses are displayed.

**NOTE**

> In AFATDS to setup a package 11 communications network the AFATDS operator makes the SISTIM unit primary direct on the LAN communications channel. The simulated units on the LAN channel will be setup as primary indirect through the SISTIM unit.

**IP Address** - This field allows the operator to choose the UDP/LAN address to use for this unit. This must be a unique IP. (For simulated units this address is not used outside of SISTIM, for real units this address should match the IP at that device).

**SELECT NET/ADDRESS PAIR (INDIRECT)**

This window (Figure 4-5) allows the operator to setup the communications for a REAL unit that is indirectly connected to SISTIM. In order to do this there must be a direct UDPLAN or UDP220 connection to a Real PK11, JVMF, USMTF_ABCS or AFATDS unit, and the desired Indirect Unit must be properly connected to that “router”. All these units should be properly created in the Current SISTIM Exercise. The proper method to enter an Indirect Unit is to choose the Net that the direct unit is connected on from the Available Nets portion of the window, and then select the Unit to communicate indirectly through from the selection window that is displayed. The most common and useful way to utilize the indirect feature is to communicate to multiple AFATDS through one direct AFATDS “router”.

***ADDING SELECT NET/ADDRESS PAIR (INDIRECT) Procedure***

**Available Nets** - A list of nets available for this unit. When a net is selected, the used address list is displayed. Select a UDP/LAN or UDP220 type network with a valid real unit connected before you attempt to setup indirect communications.
**Used Addresses** - A list of currently in use net addresses are displayed.
**IP Address** - This field allows the operator to choose the address to use for this unit. (This field does not need to be completed, in order to setup indirect communications with a unit the IP is not used).

**OK** - This button closes the Select Net/Address Pair window and makes any changes effective. In the Unit List window any units that are Indirect will now have an (I) by their IP addresses, and those that are routers will have a (D) by their IP addresses.
**Indirect -** Selecting this button is the proper method to create an indirect connection. When depressed a window is display that will allow the operator to select the directly connected REAL unit that SISTIM will communicate through.
When the Proper Direct Unit has been chosen simply select OK to continue.
**Close** - This button closes the Select Net/Address Pair window without saving any changes.

**NOTE**

When an AFATDS unit is used as the routing unit for other AFATDS, it should be noted if the routing unit is deleted communication will be lost with the indirect units. Although if this is attempted the following Warning message will be displayed. If the operator selects “Cancel” the action will be cancelled and the Unit will not be removed. Selecting “Delete” will continue with the deletion.

### 4-1-2. Adding an USMTFMAIL NET to AFATDS Comms Configuration

This window (Figure 4-6) allows the operator to select the communications network and the address to be used by this unit. In order to access this window there must be a valid USMTFMail network in the Network List and it must be highlighted in the Available Nets field. USMTF_TBMCS Units use USMTFMail communications.

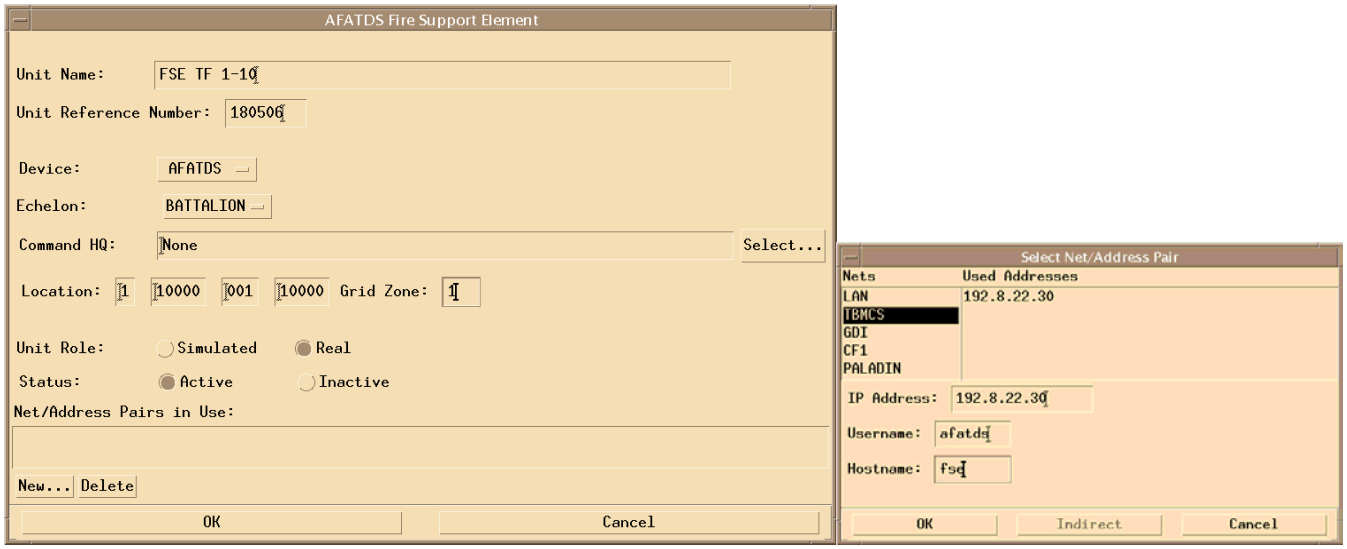



**Figure 4-6 Adding an USMTFMAIL NET to AFATDS**

***Adding USMTFMAIL NET to AFATDS Procedure***

**Available Nets** A list of nets available for this unit. When a net is selected, the used address list is displayed.
**Used Addresses** - A list of currently in use net addresses are displayed.
**IP Address** - This field allows the operator to choose the USMTFMail address to use for this unit. This must be a unique IP. (For simulated units this address is not used outside of SISTIM, for real units this address should match the IP at that device. Select an IP that has not been used.
**Username** - This field (case sensitive) is the user name used by AFATDS for this unit (AFATDS).
**Hostname** - This field is the host name used by AFATDS for this unit (case sensitive). This entry is found on the AFATDS system. Edit the LAN Network that the TBMCS is communicating on and enter the Hostname into the Net address pair Hostname in SISTIM.

### 4-1-3. Adding a GDU/MCA Net to AFATDS Comms Configuration

Select the AFATDS as a HQ Unit and select OK.

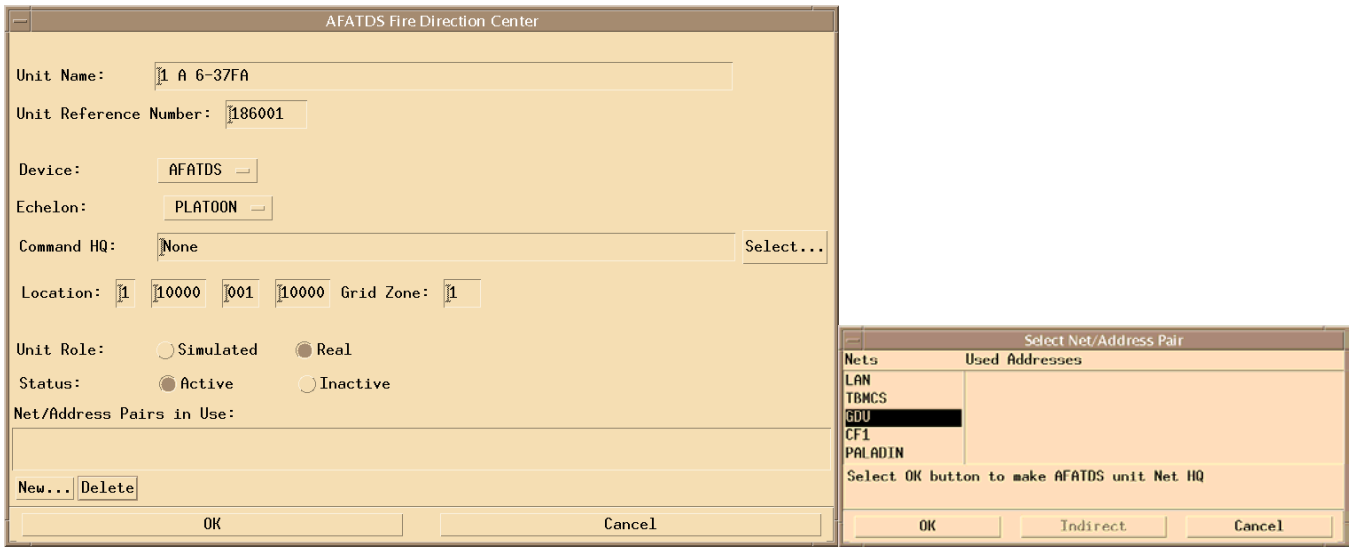



**Figure 4-7 Adding a GDU/MCA net to AFATDS Comms Configuration**

### 4-1-4. Adding a AFCS net to AFATDS Comms Configuration

Select the AFCS Subscriber address of the AFATDS system and select OK

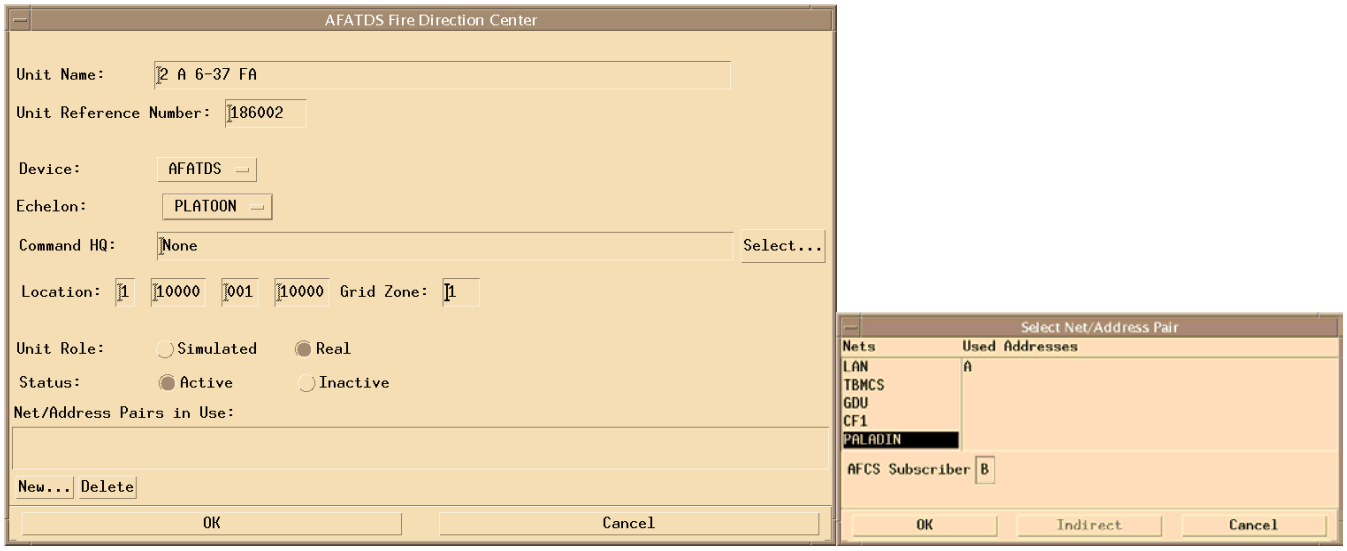



**Figure 4-8 Adding an AFCS net to AFATDS Comms Configuration**

### 4-1-5 Adding a UDPLAN net to AFATDS Comms Configuration

This window allows the operator to select the communications network and the address to be used by this unit. In order to access this window there must be a valid UDPLAN network in the Network List. IP Address - This field allows the operator to choose the UDPLAN address to use for this unit. This must be a unique IP.

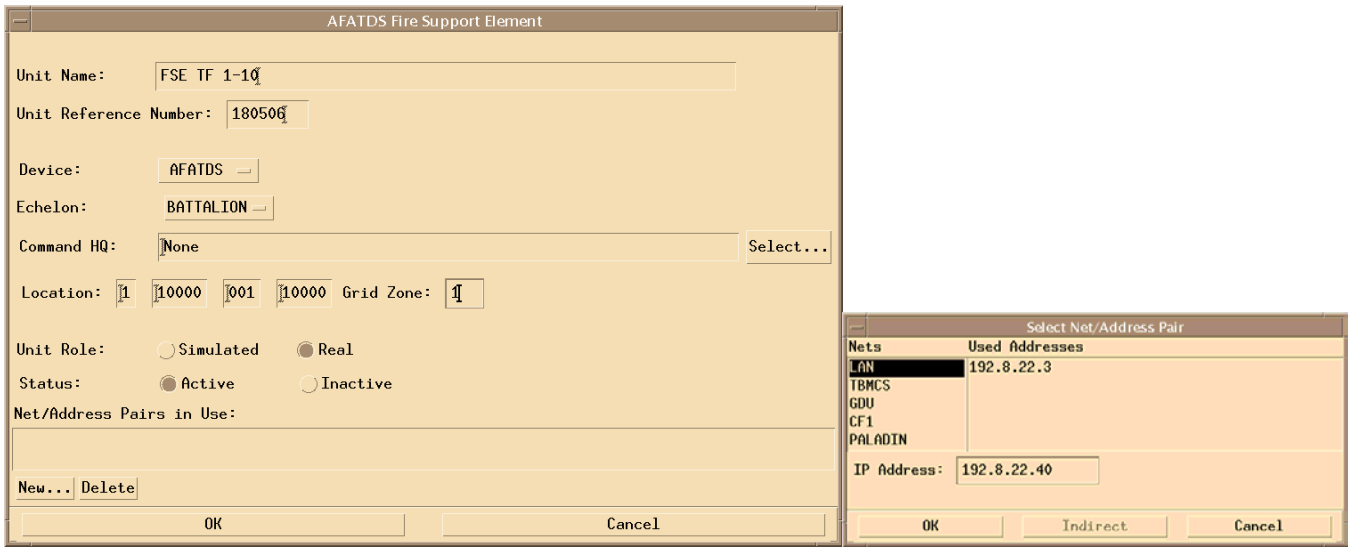



**Figure 4-9 Adding an UDPLAN net to AFATDS Comms Configuration**

## SECTION 2
## AFATDS FSE UNIT CONFIGURATION

This window (Figure 4-10) allows the operator to view or edit the parameters for live and simulated units.

**NOTE**

Build real AFATDS units first then continue with building of other real units. The last units that will be built are the simulated units. The reason for this is when a unit is built in SISTIM the command support of a unit is established.

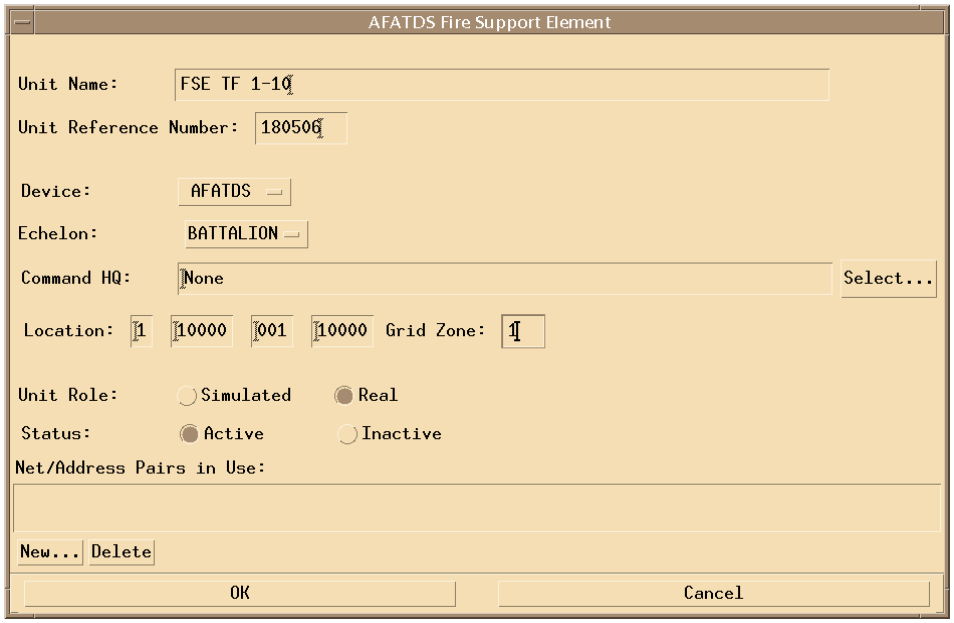



**Figure 4-10 Build AFATDS FSE Unit Configuration**

***Build AFATDS FSE Unit Configuration Procedure***

**Unit Name** - Any valid unit name up to 64 characters can be entered into this field.
**Unit Reference Number** - The (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** - By selecting “Select” a window is displayed that allows the operator to set the command unit.
In most, if not all cases AFATDS will have a selection of None in the Command HQ.
Fields/Parameters.
In the case of PK11 Paladin and GDU/MCA units they should always have an AFATDS unit assigned as Command HQ. This window displays a list of the units appropriate for Command HQ.
**Set to None** - This button will insert “NONE” into the Command HQ field on the Unit Setup window.
**OK** - This button closes the window and inserts the highlighted unit into the Command HQ field on the previous Unit Setup window.
**Location** - This is the unit location in the exercise. Any valid (UTM) coordinate is allowed in this field.

**NOTE**

Location position is not used for fire mission processing, but an entry is required in the Location field. This entry does not need to be within the current map mode.

**Unit Role** - The operator has the option of setting a unit to Simulated (acted by SISTIM) or Real (configured on another machine connected to SISTIM).
**Status** - The operator has the option of setting the status of this unit to either Active or Inactive.
Note: The operator has the option to add more than one network to any real or simulated unit.
**Net/Address Pairs in Use** - A list of the Net/Address pairs that are currently in use by this unit
**New** - Activation of this button displays a Select Net Address Pair (PK11 UDP/220A) that allows the operator to add a new net for this unit.
**IP Address** - This field allows the operator to choose the UDPLAN address to use for this unit. This must be a unique IP.

### 4-1-6. Adding an UDP220A net to AFATDS Comms Configuration

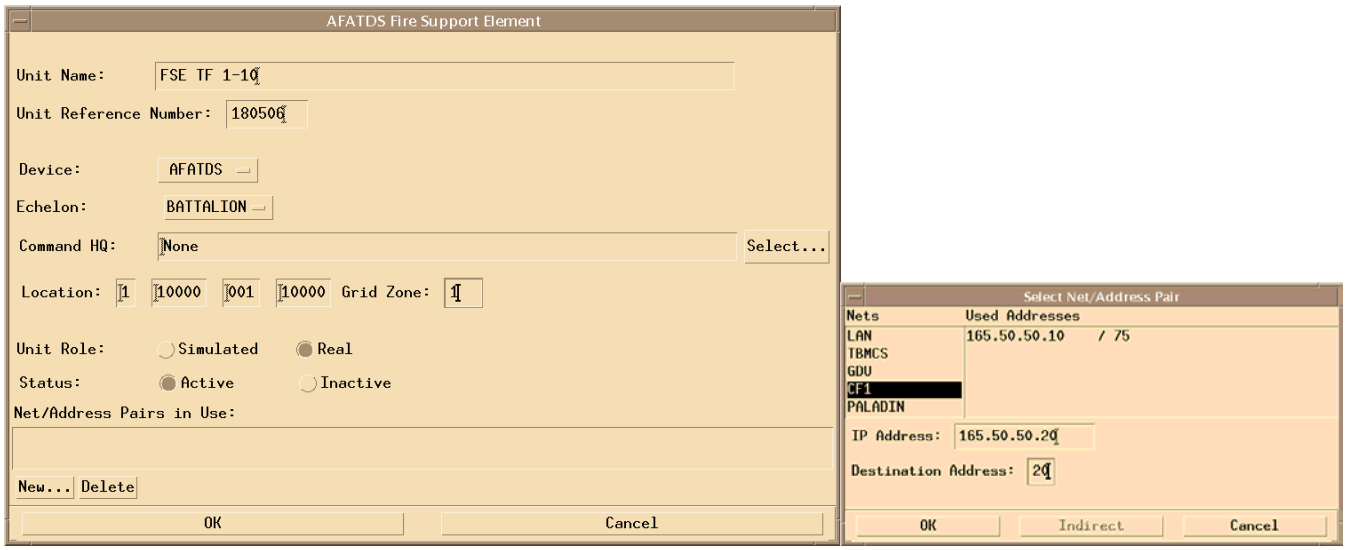



**Figure 4-11 Adding an UDP220A net to AFATDS Comms Configuration**

# SECTION 3
# BUILDING SIMULATED UNIT CONFIGURATION

## 4-2. Building Package 11 Forward Observer System Unit Configuration select PK11

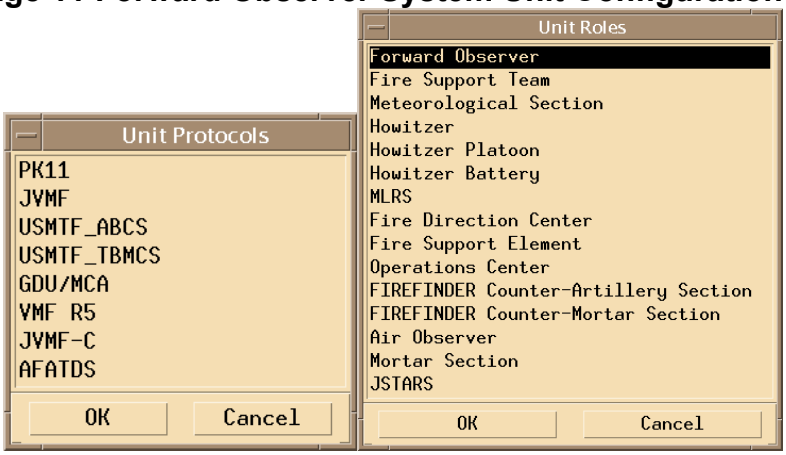



**Figure 4-12 Building Package 11 FOS Unit Configuration select PK11**

### 4-2-1. Building Package 11 FOS Unit Configuration

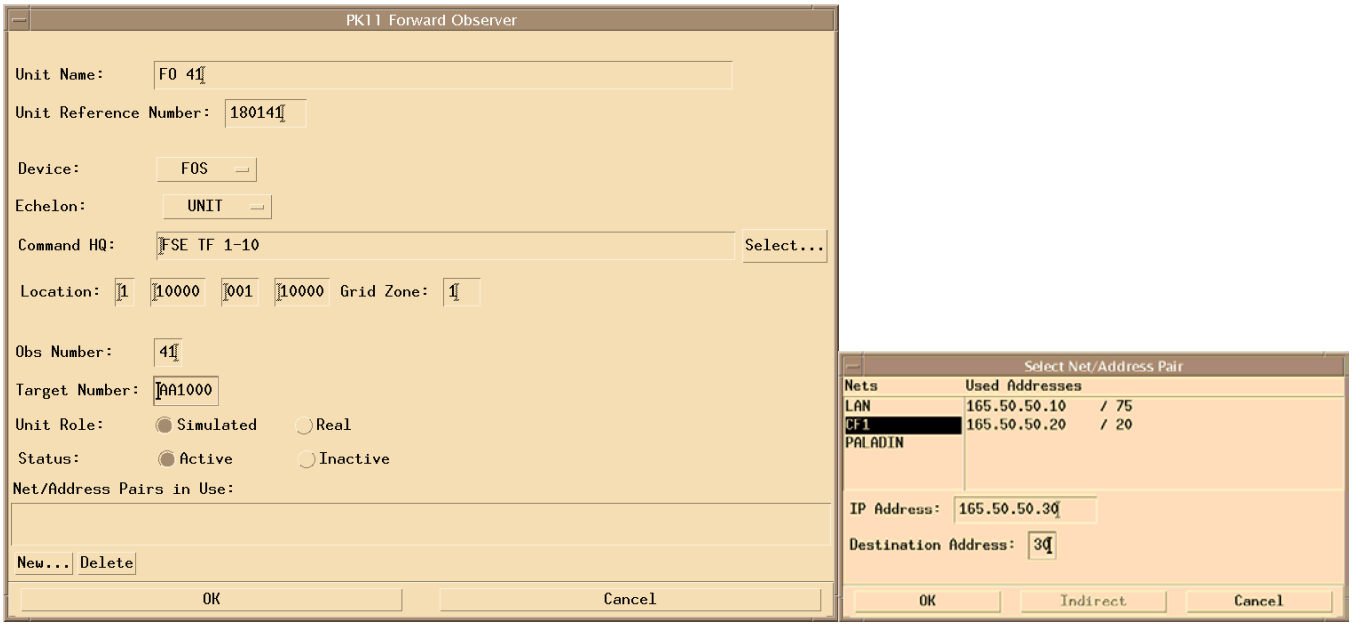



**Figure 4-13 Build Package 11 FOS Unit Configuration**

***Build Package 11 FOS Unit Configuration Procedure (Figure 4-12, 4-13, 4-14, 4-15)***

**Unit Name** - Any valid unit name up to 64 characters can be entered into this field.
**Unit Reference Number** - The (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and

Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** - By selecting “Select” a window is displayed that allows the operator to input the command unit. (Command unit is one of the previously entered AFATDS units)
In the case of PK11 Paladin and GDU/MCA units they should always have an AFATDS unit assigned as Command HQ. This window displays a list of the units appropriate for Command HQ.
**Set to None** - This button will insert “NONE” into the Command HQ field on the Unit Setup window.
**OK** - This button closes the window and inserts the highlighted unit into the Command HQ field on the previous Unit Setup window.
**Location** - This is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field.

**NOTE**

Location position is not used for fire mission processing, but an entry is required in the Location field. This entry does not need to be within the current map mod.

**Obs Number** - The observer number must be an integer between 01 and 99. This number must be unique for each observer.
**Target Number** - Any valid target number can be entered into this field. The format is “AANNNN”, A = Alpha and N = Numeric. Must be unique for each Observer.
**Unit Role** the operator has the option of setting a unit to Simulated (acted by SISTIM) or Real (configured on another machine connected to SISTIM).
**Status** - The operator has the option of setting the status of this unit to either Active or Inactive.
Note: The operator has the option to add more the one network to any real or simulated unit.
**Net/Address Pairs in Use** - A list of the Net/Address pairs that are currently in use by this unit
**New** - Activation of this button displays a Select Net Address Pair (PK11 UDP220A/220C) that allows the operator to add a new net for this unit.

**NOTE**

If the operator chooses to add the Net/Address Pairs when the unit is first created the following warning will appear IP Address - This field allows the operator to choose the UDPLAN address to use for this unit. This must be a unique IP.

### 4-2-2 Net/Address Pairs in Use for Simulated Indirect units.

This window allows the operator to setup the communications for all SIMULATED units that are indirectly connected to AFATDS. In order to do this a simulated unit must be created at AFATDS with the SISTIM network IP to act as the router utilizing UDP220A, or UDP220C. All simulated units on your network can communicate via the router. The window then is only utilized to specify which net you would like to use (UDP220A or UDP220C). The simulated units can still be set up as direct units with an IP address in the Net/Address field.

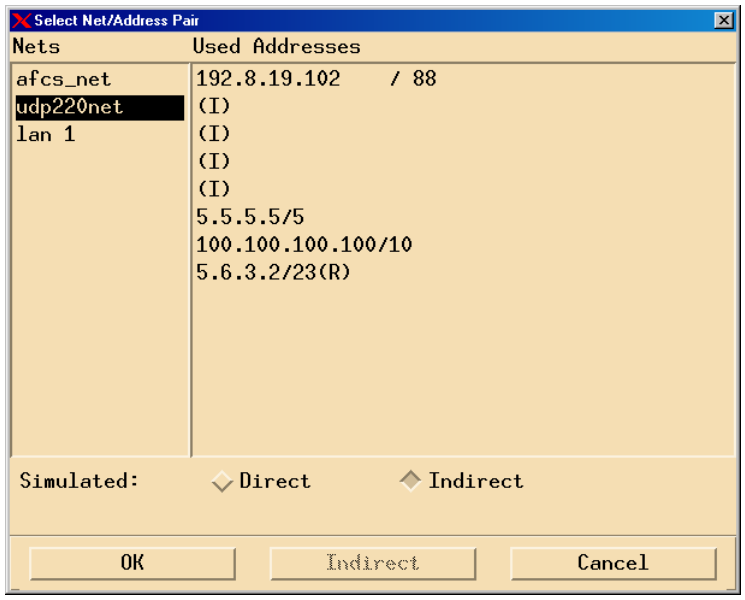



**Figure 4-14 Net/Address Pairs in Use for Simulated Indirect units**

Available Nets a list of nets available for this unit. When a net is selected, the used address list is displayed. Select the UDP220A or UDP220C network that you wish to communicate indirectly through.
Used Addresses is a list of currently in use net addresses that are displayed.
Indirect Button selecting this button will create an indirect connection.

### 4-2-3. Edit Device Package 11 FOS Unit Configuration

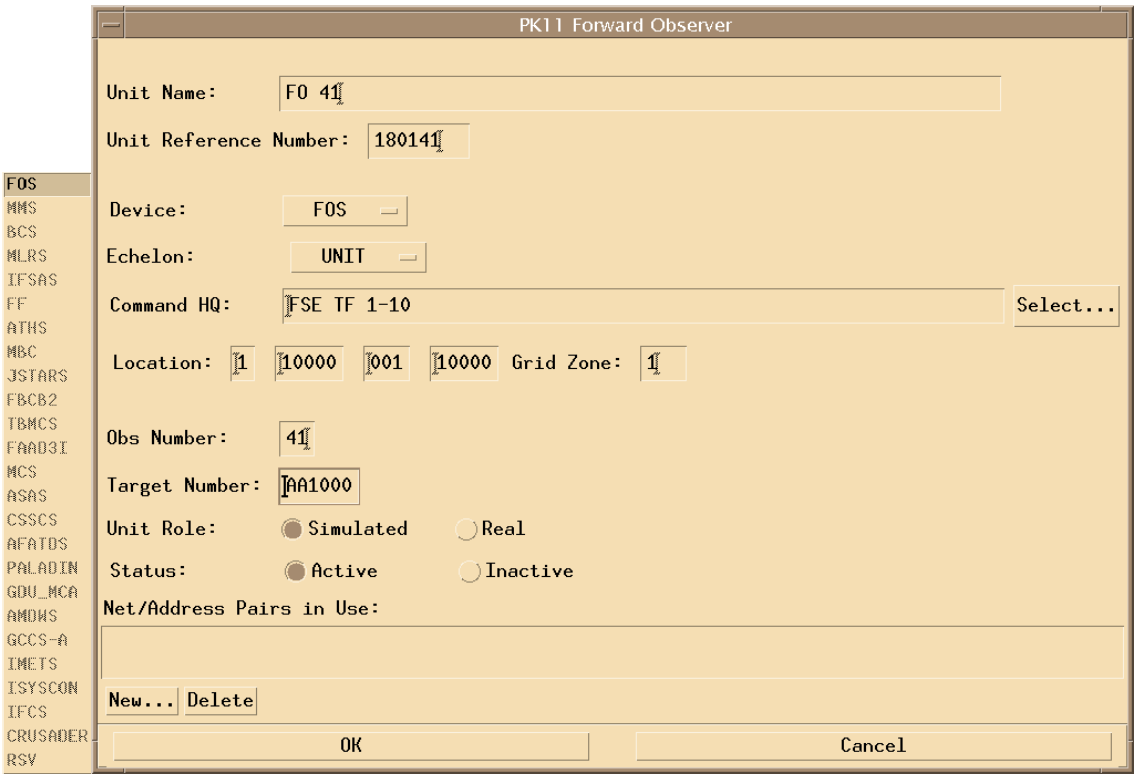



**Figure 4-15 Edit Device Package 11 FOS Unit Configuration**

## 4-3. Build Package 11 FireFinder Unit Configuration

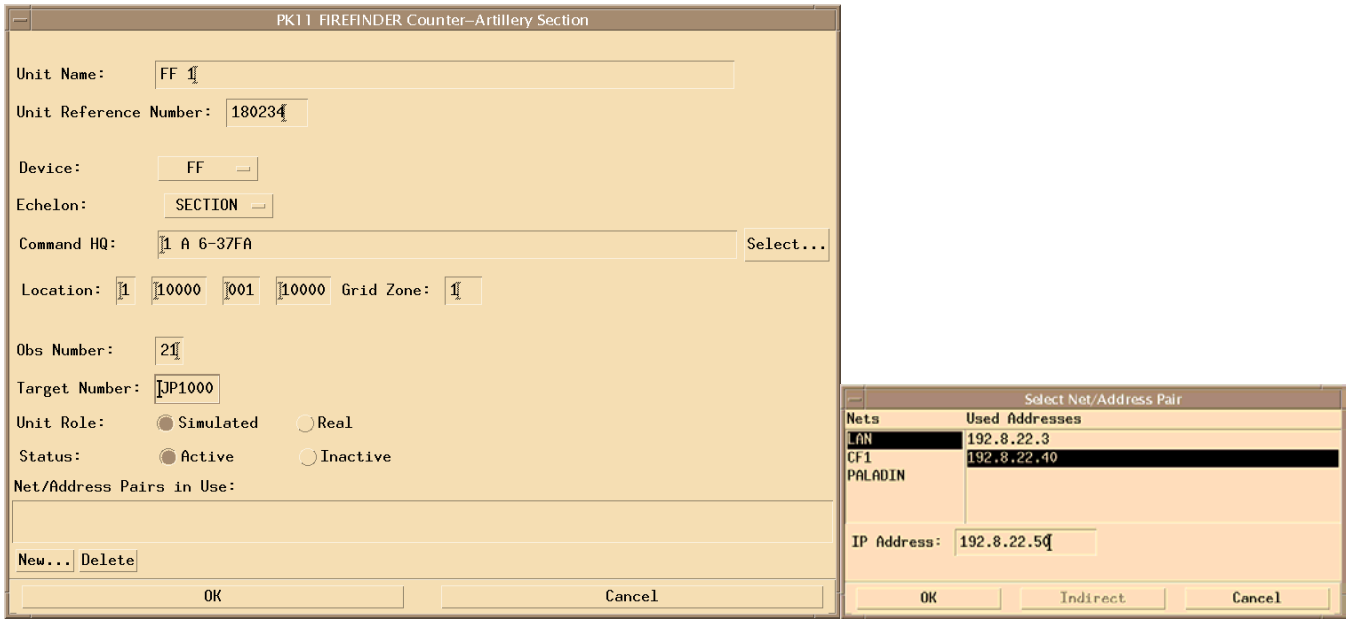



**Figure 4-16 Build Package 11 FF Unit Configuration**

***Build Package 11 FF Unit Configuration Procedure*** (Figure 4-16)

**Unit Name** - Any valid unit name up to 64 characters can be entered into this field.
**Unit Reference Number** - The (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device. The valid types for AFATDS are AFATDS.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** - By selecting “Select” a window is displayed that allows the operator to input the command unit.
In the case of PK11 Paladin, FOS, FF etc… and GDU/MCA units they should always have an AFATDS unit assigned as Command HQ.
This window displays a list of the units appropriate for Command HQ.
**Set to None** - This button will insert “NONE” into the Command HQ field on the Unit Setup window.
**OK** - This button closes the window and inserts the highlighted unit into the Command HQ field on the previous Unit Setup window.
**Location** - This is the unit location in the exercise. Any valid (UTM) coordinate is allowed in this field.

**NOTE**

Location position is not used for fire mission processing, but an entry is required in the Location field.

**Obs Number** - The observer number must be an integer between 01 and 99. This number must be unique for each observer.

**Target Number** - Any valid target number can be entered into this field. The format is “AANNNN”, A = Alpha and N = Numeric. Must be unique for each observer.
**Unit Role** - The operator has the option of setting a unit to Simulated (acted by SISTIM) or Real (configured on another machine connected to SISTIM).
**Status** - The operator has the option of setting the status of this unit to either Active or Inactive.
Note: The operator has the option to add more the one network to any real or simulated unit.
**Net/Address Pairs in Use** - A list of the Net/Address pairs that are currently in use by this unit.

## 4-4. Build Package 11 Paladin Unit Configuration

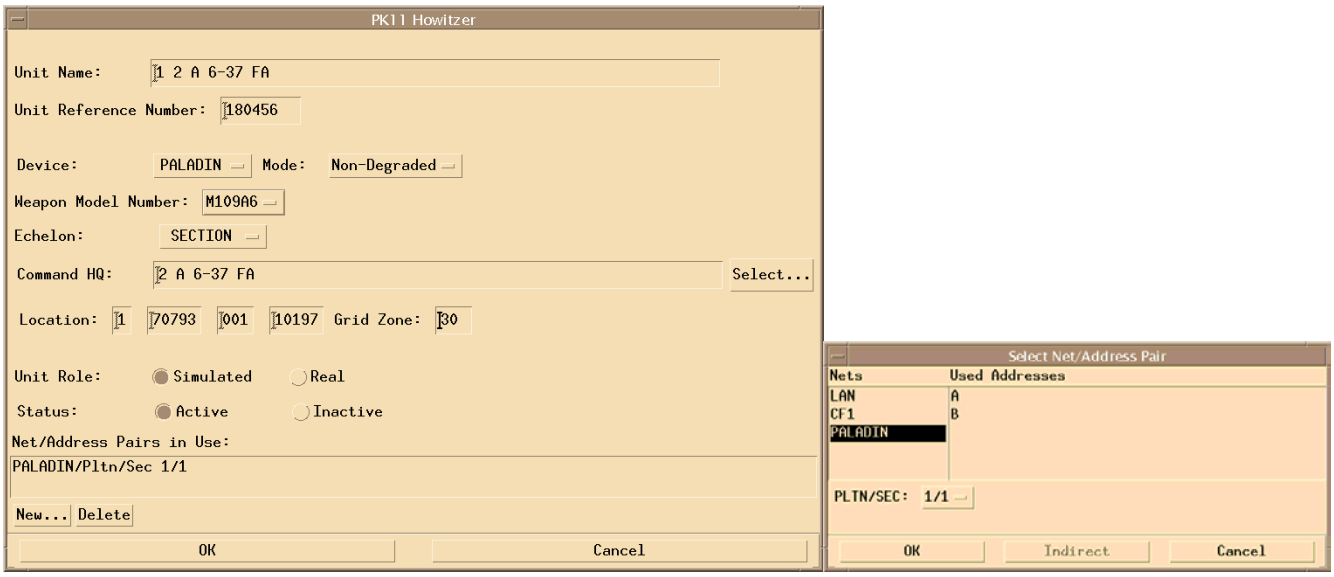



**Figure 4-17 Build Package 11 Paladin Unit Configuration**

***Build Package 11 Paladin Unit Configuration Procedure (Figure 4-17)***

**Unit Name** - Any valid unit name can be entered into this field up to 64 characters.

**NOTE**

SISTIM uses the Unit Reference Number (URN) in the SISTIM database to track all message traffic. The URN in AFATDS is the VMF Unit Reference Number. In AFATDS the AFATDS Unit Number could be the same as the VMF URN but if doubtful edit the unit from the MUL to make sure that VMF URN is correct. If the URN is not correct failure to communicate is the outcome. The only acceptation is with the Gun Display Unit (GDU) it can use any URN.

**Unit Reference Number** - The URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device. The only valid type to create a PK11 Paladin is Paladin.
**Mode** - This is a pull down menu, which enables the operator to choose the current Paladin unit’s mode. Selecting Non-Degraded means the current paladin is simulating a Paladin unit with its ballistics computer enabled. Degraded mode Paladins, are ones that are operating without their ballistics computer. The AFATDS must be set the same as SISTIM. Either NON-DEGRADED or DEGRADED otherwise they will not talk.

**Weapon Model Number** - This is a pull down menu, which enables the operator to choose the Weapon Model Number that corresponds to the type of Howitzer that the operator is creating. The valid options are M109A6 (Paladin) and M777A TAD (Towed Artillery Digitization)
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
(All Package 11 units that are simulated must have a Command HQ established. For the Paladin unit the Command HQ is used to send Ready, Shot, Splash and Rounds Complete to the real AFATDS that was specified in the Command HQ.)
**Command HQ** - By selecting "Select" a window is displayed that allows the operator to set the command unit.

**NOTE**

Location position is not used for fire mission processing, but an entry is required in the Location field.

**Location** - This is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field.
**Net/Address Pairs in Use** - A list of the Net/Address pairs that are currently in use by this unit.

**NOTE**

Name the Paladin's Gun 1 through Gun 8 in sequential order. If there is only six guns (two platoons) in your firing unit, name them Gun 1 through Gun 3 and omit Gun 4 and name the remaining Guns five through seven.

**New** - Activation of this button displays a window Select Net/Address Pair (AFCS) that allows the operator to add a new net for this unit.
**Available Nets** - A list of nets available for this unit. When a net is selected, the used address list is displayed.
**Used Addresses** - A list of currently in use net addresses are displayed.
**Paladin Gun Address or AFCS Subscriber** - This field allows the operator to choose the AFCS address to use for this unit. Paladin Gun Address represented on the top screen of this section should be a unique single numerical value representing the gun address of that unit on the AFCS net. The Paladin Gun Address field appears for PK11 Paladin units only. AFATDS units to represent their Tacfire address on the AFCS net use the AFCS Subscriber field, represented on the bottom screen of this section.

### 4-4-1 Build VMF R5 Paladin Unit Configuration

This window allows the operator to setup a VMF R5 Paladin type unit in the current exercise. In order to create a valid VMF R5 Paladin Unit, the operator must choose VMF R5 on the Unit Protocol Available Screen and Howitzer on the Unit Role Available Screen. VMF R5 Paladins will only work with AFATDS 6.4 version of software.

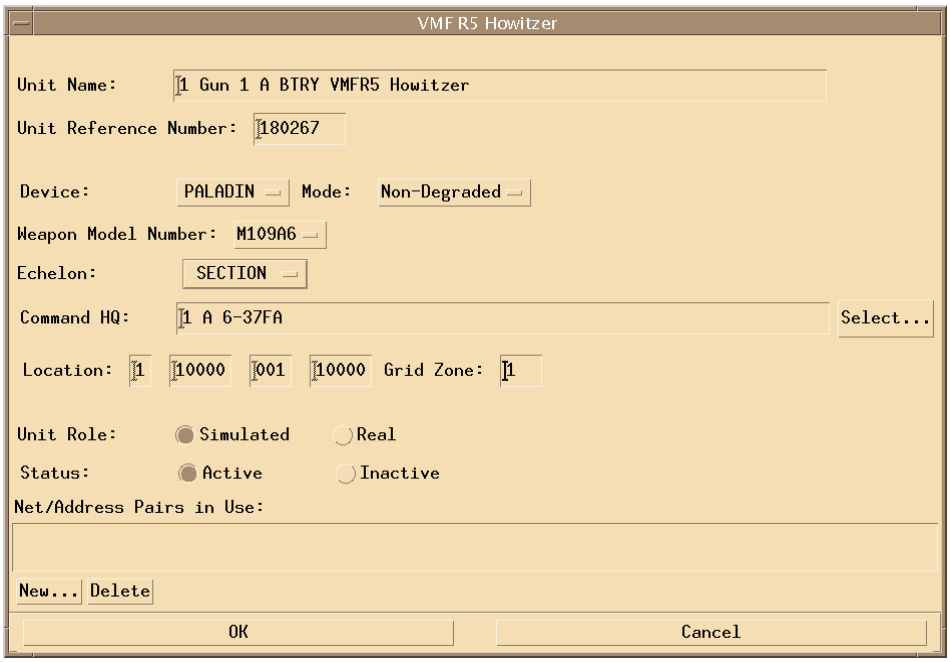



**Figure 4-18 Build VMF R5 Paladin Unit Configuration**

***Build VMF R5 Paladin Unit Configuration Procedure (Figure 4-18)***

**Unit Name** - Any valid unit name can be entered into this field up to 64 characters.

**NOTE**

SISTIM uses the Unit Reference Number (URN) in the SISTIM database to track all message traffic. The URN in AFATDS is the VMF Unit Reference Number. In AFATDS the AFATDS Unit Number could be the same as the VMF URN but if doubtful edit the unit from the MUL to make sure that VMF URN is correct. If the URN is not correct failure to communicate is the outcome. The only acceptation is with the Gun Display Unit (GDU) it can use any URN.

**Unit Reference Number** - The URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device. The only valid type to create a VMF R5 Paladin is Paladin.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed. The only valid echelon for VMF R5 Paladin is SECTION.
**Mode** - This is a pull down menu, which enables the operator to choose the current Paladin unit's mode. Selecting Non-Degraded means the current paladin is simulating a Paladin unit with its ballistics computer enabled. Degraded mode Paladins are ones that are operating without their ballistics computer. The AFATDS must be set the same as SISTIM. NON-DEGRADED or DEGRADED otherwise they will not talk.
(All VMF R5 units that are simulated must have a Command HQ established).
**Weapon Model Number** - This is a pull down menu, which enables the operator to choose the Weapon Model Number that corresponds to the type of Howitzer that the operator is creating. The valid options are M109A6 (Paladin) and M777A TAD (Towed Artillery Digitization)

Command HQ is used to send Ready, Shot, Splash and Rounds Complete to the real AFATDS that was specified in the Command HQ.
**Command HQ** - By selecting “Select” a window is displayed that allows the operator to set the command unit.

**NOTE**

Location position is not used for fire mission processing, but an entry is required in the Location field.

**Location** - This is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field.
**Net/Address Pairs in Use** - A list of the Net/Address pairs that are currently in use by this unit.

**NOTE**

With the AFCS, net name the Paladin’s Gun 1 through Gun 8 in sequential order. If there is only six guns (two platoons) in your firing unit, name them Gun 1 through Gun 3 and omit Gun 4 and name the remaining Guns five through seven.

**New** - Activation of this button displays a window Select Net/Address Pair (AFCS) that allows the operator to add a new net for this unit. The R5 Paladin can also be placed on the 188220C net with an IP direct or indirect through a SISTIM unit. With R5 Paladins units that are direct the operator does not need an entree in destination address field, this is called N layer Bypass.
**Available Nets** - A list of nets available for this unit. When a net is selected, the used address list is displayed.
**Used Addresses** - A list of currently in use net addresses are displayed.
**Paladin Gun Address or AFCS Subscriber** - This field allows the operator to choose the AFCS address to use for this unit. Paladin Gun Address represented on the top screen of this section should be a unique single numerical value representing the gun address of that unit on the AFCS net. The Paladin Gun Address field appears for Paladin units only. AFATDS units to represent their Tacfire address on the AFCS net use the AFCS Subscriber field, represented on the bottom screen of this section.

**VMF R5 MESSAGES**

**Record of Fire**
AFATDS V6.4 software monitors VMF R5 record of fire data. A K02.55 Record of Fire message is unique to the R5 message set. The K02.55 stores all Howitzer Commands received by the Howitzer with the exception of some special cases (i.e. Delete FPF, Do Not Load, etc). A Record of Fire is requested by AFATDS from SISTIM by using a K02.56 Fire Support Data Exchange that specifically requests a Record of Fire. Once the K02.56 is received at SISTIM it will automatically generate and send a K02.55 Record of Fire or several depending on the size of the K02.55, if it exceeds 6 targets a new K02.55 will be generated and sent to the controlling AFATDS unit.

## 4-5. Build GDU/MCA Unit Configuration

This window (Figure 4-19) allows the operator to setup a GDU/MCA type unit in the current exercise. (To create a valid GDU unit the operator should choose Howitzer from the Unit Role Available window.)

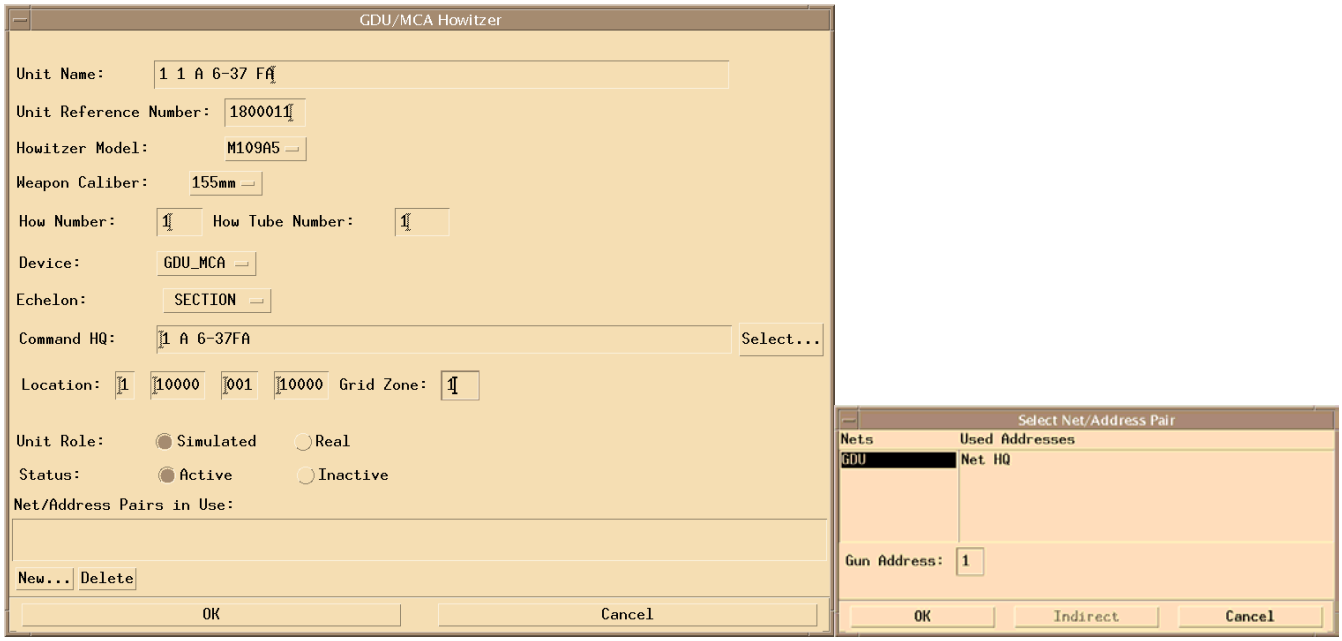



**Figure 4-19 Build GDU/MCA Unit Configuration**

***Build GDU/MCA Unit Configuration Procedure***

**Unit Name** - Any valid unit name can be entered into this field up to 64 characters
**Unit Reference Number** - The (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise.
**Howitzer Model** - This is a pull down menu, which allows the operator to choose the type of Weapon associated with this weapon.
**Weapon Caliber** - This displays the weapon caliber associated with the howitzer model chosen in the previous selection. (This is not an editable field, it is chosen automatically when a Howitzer Model is chosen).
**How Number** - This displays the Howitzer number for this unit.
**How Tube Number** - This displays the Tube number for this unit.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device. The valid type for GDU/MCA is GDU_MCA.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** - By selecting “Select” a window is displayed that allows the operator to set the command unit. GDU units that are simulated must have a Command HQ established. For the GDU unit the Command HQ is used to send Ready, Shot, Splash and Rounds Complete to the real AFATDS that was specified in the Command HQ.
**Location** - This is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field. The Location field is not used for any Fire Mission computations.
Assign Simulated units to a comm channel.

## 4-6. Build USMTF TBMCS Unit Configuration

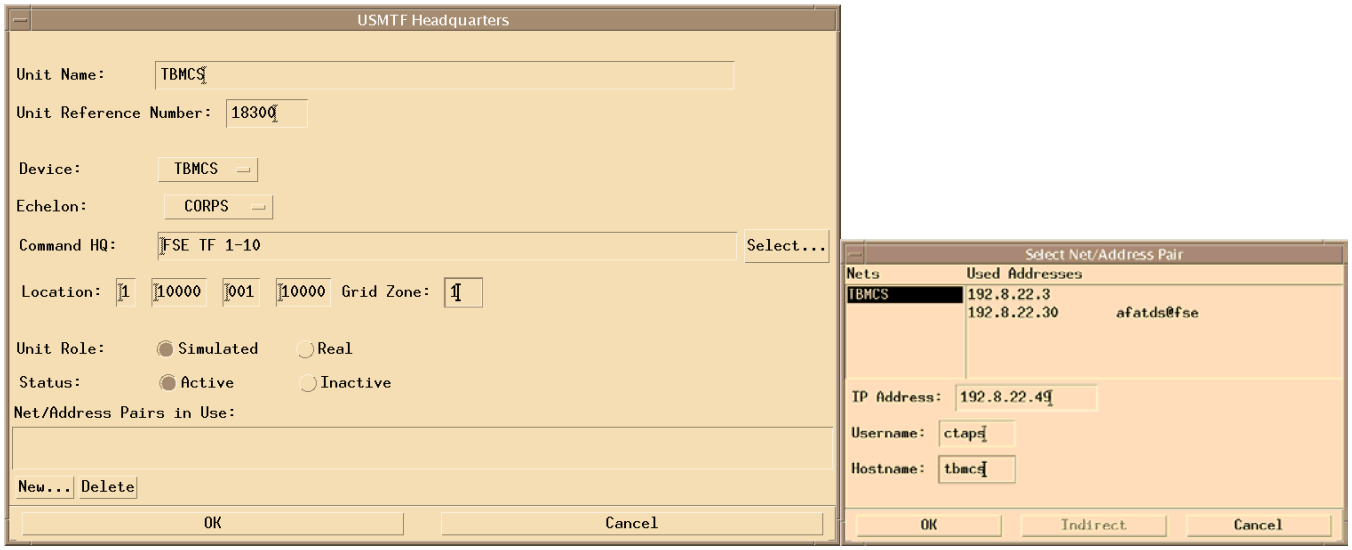



**Figure 4-20 Build USMTF TBMCS Unit Configuration**

***Build USMTF TBMCS Unit Configuration Procedure*** (Figure 4-20)

**Unit Name** - Any valid unit name can be entered into this field up to 64 characters.
**Unit Reference Number** - The (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device. The valid types for TBMCS is TBMCS.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** - By selecting “Select” a window is displayed that allows the operator to set the command unit.
**Location** - This is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field.
This window allows the operator to select the communications network and the address to be used by this unit. In order to access this window there must be a valid USMTFMail network in the Network List and it must be highlighted in the Available Nets field. USMTF_TBMCS Units use USMTFMail communications.
**Available Nets** - A list of nets available for this unit. When a net is selected, the used address list is displayed.
**Used Addresses** - A list of currently in use net addresses are displayed.
**IP Address** - This field allows the operator to choose the USMTFMail address to use for this unit. This must be a unique IP. (For simulated units this address is not used outside of SISTIM, for real units this address should match the IP at that device.)
**Username** - This field is the user name used by CTAPS (case sensitive) for this unit.
**Hostname** - This field is (case sensitive) the host name used by TBMCS for this unit.

## 4-7. Build USMTF ABCS (ASAS) Unit Configuration

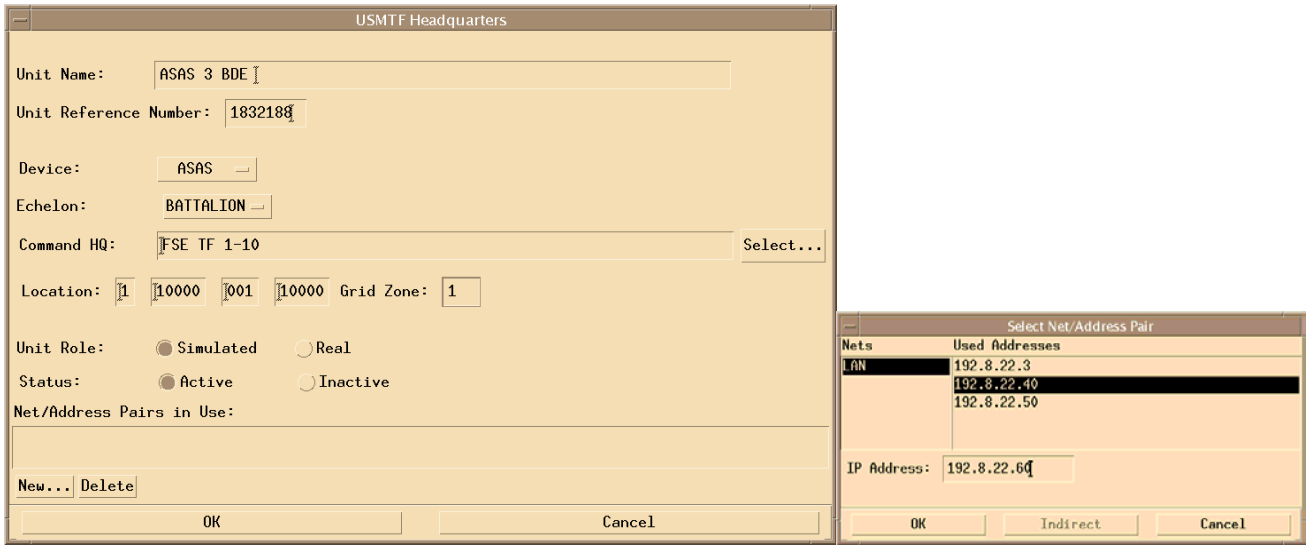



**Figure 4-21 Build USMTF ABCS (ASAS) Unit Configuration**

***Build USMTF ABCS (ASAS) Unit Configuration Procedure*** (Figure 4-21)

**Unit Name** - Any valid unit name can be entered into this field up to 64 characters.
**Unit Reference Number** - The (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device. The valid types for UAMTF are ASAS, MCS, FAAD31, AMDWS, IMETS, ISYSCON, GCCS-A, CSSCS.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** - By selecting “Select” a window is displayed that allows the operator to set the command unit. The error No Net means that the Command HQ was not filled in.
**Location** - This is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field.
**IP Address** - This field allows the operator to choose the UDPLAN address to use for this unit. This must be a unique IP.

## 4-8. Build USMTF ABCS (TES) Unit Configuration

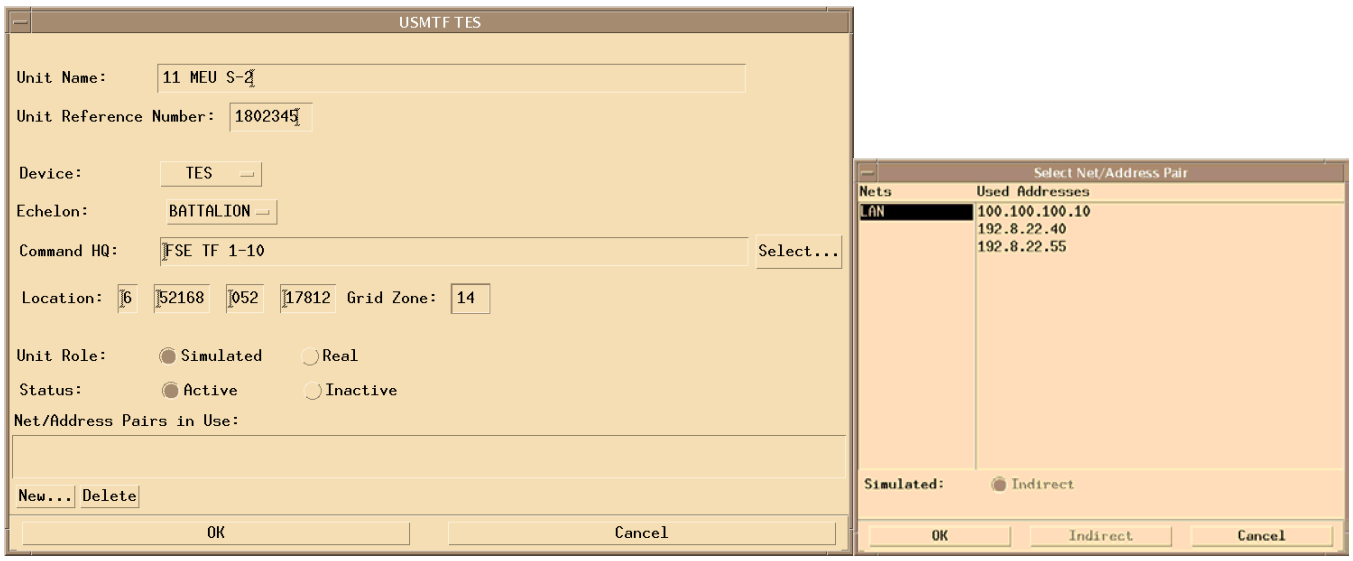



**Figure 4-22 Build USMTF ABCS (TES) Unit Configuration**

***Build USMTF ABCS (TES) Unit Configuration Procedure*** (Figure 4-22)

**Unit Name** - Any valid unit name can be entered into this field up to 64 characters.
**Unit Reference Number** - The (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise.
**Device** - This is a pull-down menu, which enables the operator to choose the type of device. The valid types for UAMTF are TES.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** - By selecting “Select” a window is displayed that allows the operator to set the command unit. The error No Net means that the Command HQ was not filled in.
**Location** - This is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field.
**IP Address** - This field allows the operator to choose the UDPLAN address to use for this unit. This must be a unique IP.

## 4-9. Edit Device JVMF Unit Configuration (Figure 4-23)

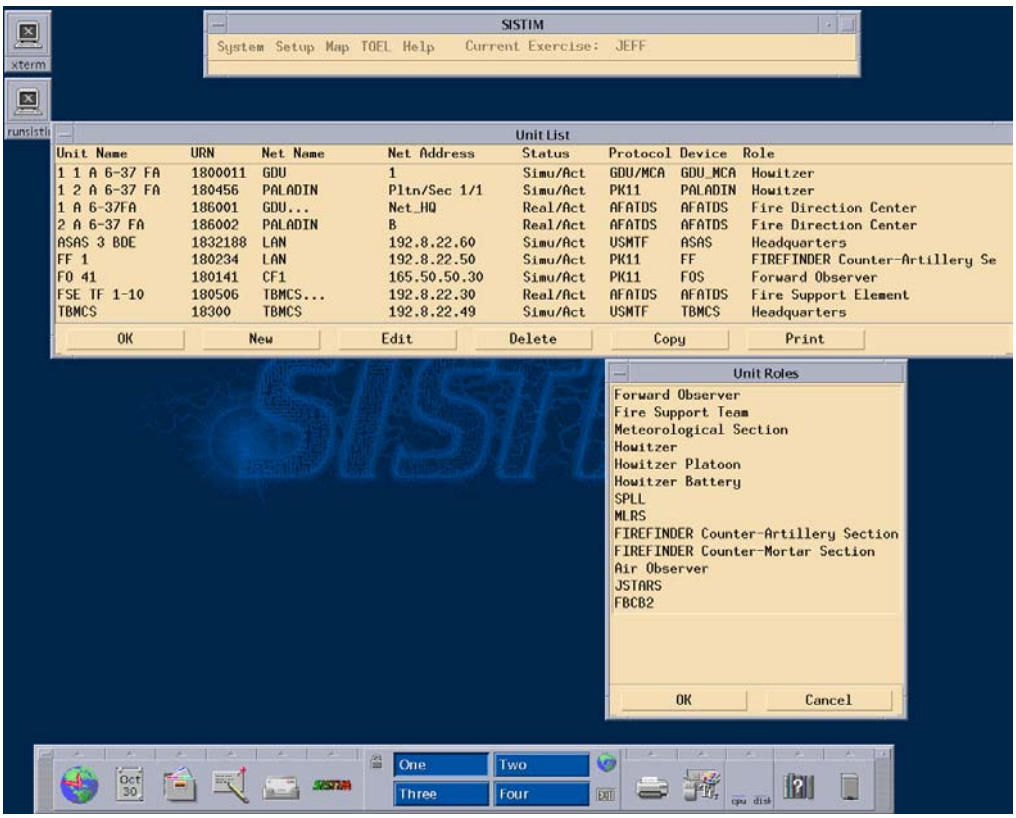



**Figure 4-23 Edit Device JVMF Unit Configuration**

## 4-10. Build JVMF IFCS/HIMARS UNIT SETUP (SPLL) Configuration

This window (Figure 4-24) allows the operator to setup a JVMF SPLL type unit in the current exercise.

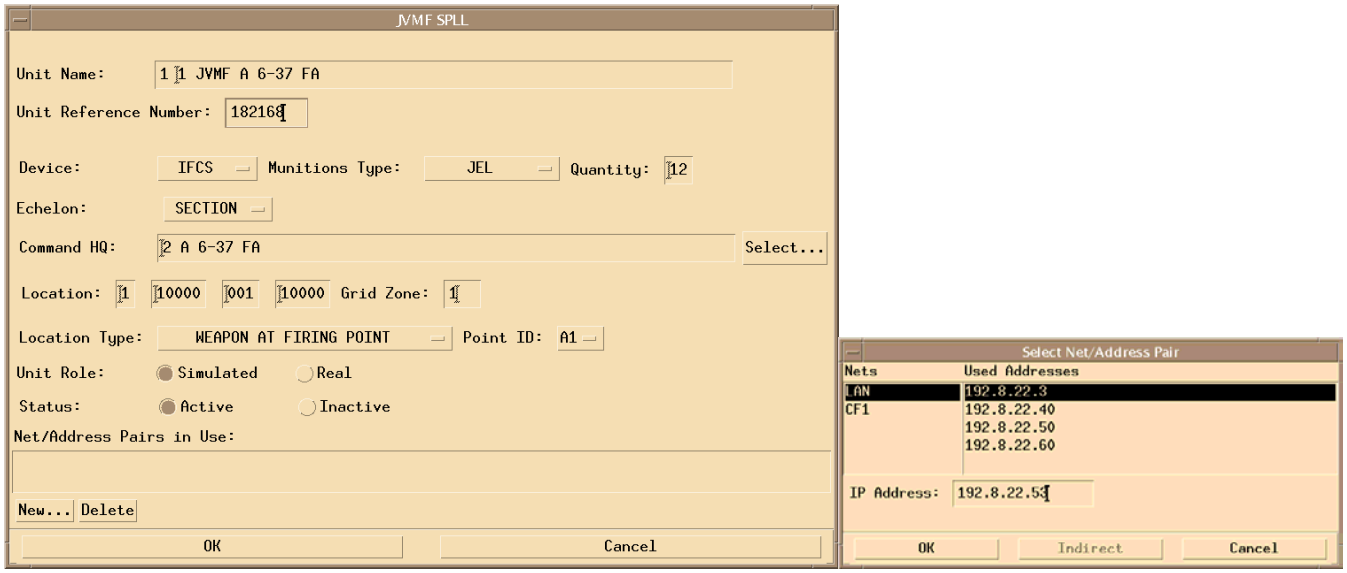



**Figure 4-24 Build JVMF IFCS/HIMARS Unit Configuration**

***Build JVMF IFCS Unit SPLL Configuration Procedure*** (Figure 4-24)

**Unit Name** - any valid unit name can be entered into this field up to 64 characters.
**Unit Reference Number** - the (VMF) URN is a number between 0 – 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise.
**Device – is** a pull-down menu, which enables the operator to choose what type of device to select a device type. The valid type for JVMF SPLL is IFCS or HIMARS.
**Munitions -** Type a pull-down menu, which enables the operator to choose the munitions type. The valid types for JVMF SPLL are: JEG, JEH, JEJ, JEK, JEM, JED, JEE, JEP, JEQ, JER, JML, JTA, JTB, JTD, JTE, JTF, JMT, JTC, JTG, JTH, JTJ, JTK, JTL, JTW, JTM, JEN, JMU, JEL, JNB, JSA, YMGM157B.
**Quantity- any** valid quantity can be entered into this field up to 2 digits. For Munitions Types JEE,JEJ,JEN,JTC,JTQ, or JTH the maximum is 2 rockets for IFCS and 1 rocket for HIMARS. For all other munitions types, the maximum is 12 for IFCS and 6 rocket for HIMARS. SISTIM should start out with the same munitions as AFATDS, if not the first mission sent to the IFCS would likely fail.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ -** selecting "Select" a window is displayed that allows the operator to set the command unit
**Location -** The location of the unit in the exercise, where the unit is located. Any valid (UTM) coordinate is allowed in this field.
**Location Type** - a pull-down menu, which enables the operator to choose the current location type of the JVMF SPLL unit. The valid types are: WEAPON AT FIRING POINT, REARM POINT, RENDEZVOUS POINT, SURVEY CONTROL POINT, WEAPON HIDE POINT, POINT SPECIFIED BY COORDINATES, MOVE POINT, PLATOON CENTER.

**NOTE**

The first time AFATDS sends a Launcher Order with a new location to the simulated launcher unit, SISTIM will update the unit data to that new location.

**Point ID** - a pull-down menu, which enable the operator to choose the Point ID of the current location type for the JVMF SPLL unit. The valid Point ID's are: A1 – A9, B1 – B9, C1 – C9.
**Unit Role** - the operator has the option of setting a unit to Simulated (acted by SISTIM) or Real (configured on another machine connected to SISTIM).
**Status -** the operator has the option of setting the status of this unit to either Active or Inactive.
**Net/Address Pairs in Use** - is a list of the Net/Address pairs that are currently in use by this unit.
**New** activation of this button displays a window Select Net/Address Pair (JVMF LAN)) that allows the operator to add a new net for this unit. (Note: A JVMF unit may also be placed on a UDP 220 net similar to a PK11 Unit Select Net/Address Pair (PK11 UDP/220A).

## 4-10-1. Build VMF R5 Himars / IFCS UNIT SETUP (SPLL) Configuration

This window allows the operator to setup a VMF R5 SPLL type unit in the current exercise

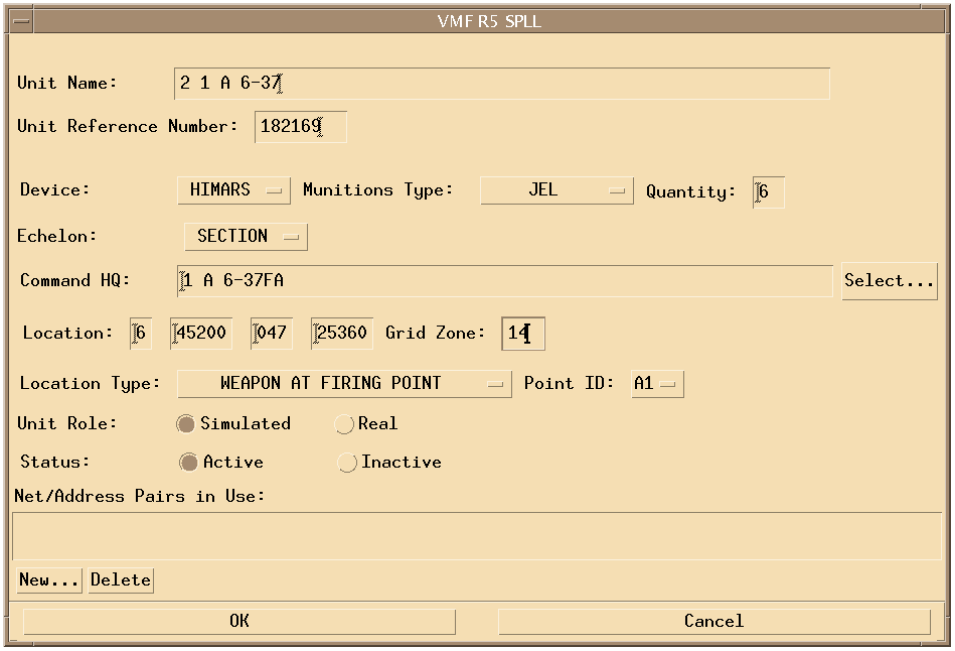



**Figure 4-25 Build VMF R5 Himars/IFCS Unit Configuration**

***Build VMF R5 HIMARS/IFCS Unit SPLL Configuration Procedure*** (Figure 4-25)

**Unit Name** – Any valid unit name can be entered into this field up to 64 characters
**Unit Reference Number** – The URN is a number between 0 – 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise
**Device** - This is a pull-down menu, which enables the operator to choose the type of device. The valid types for VMF R5 SPLL are IFCS (2 pods) and HIMARS (1 pod).
**Echelon** – This is a pull-down menu, which enables the operator to choose the echelon of the device. The only valid echelon for VMF R5 SPLL is SECTION.
**Munitions Type** - This is a pull-down menu, which enables the operator to choose a munition type. The valid types for VMF R5 SPLL are: JEG, JEH, JEJ, JEK, JEM, JED, JEE, JEP, JEQ, JER, JML, JTA, JTB, JTD, JTE, JTF, JMT, JTC, JTG, JTH, JTJ, JTK, JTL, JTW, JTM, JEN, JMU, JEL, JNB, JSA, YMGM157B.
**Quantity** – Any valid quantity can be entered into this field up to 2 digits.
**Command HQ** - By selecting "Select" a window is displayed that allows the operator to set the command unit.
**Location** - This is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field.
**Location Type** – This is a pull-down menu, which enables the operator to choose the current location type of the VMF R5 SPLL unit. The valid types are: WEAPON AT FIRING POINT, REARM POINT, RENDEZVOUS POINT, SURVEY CONTROL POINT, WEAPON HIDE POINT, POINT SPECIFIED BY COORDINATES, MOVE POINT, PLATOON CENTER.
**Point ID** – This is a pull-down menu, which enables the operator to choose the Point ID of the current location type for the VMF R5 SPLL unit. The valid Point ID's are: A1 – A9, B1 – B9, C1 – C9.
**Unit Role** - The operator has the option of setting a unit to Simulated (acted by SISTIM) or Real (configured on another machine connected to SISTIM).
**Status** - The operator has the option of setting the status of this unit to either Active or Inactive.
**Net/Address Pairs in Use** - A list of the Net/Address pairs that are currently in use by this unit.
**New** - allows the operator to add a new net for this unit. (Note: A VMF R5 unit may also be placed on a UDP 220A or UDP220C net similar to a PK11 Unit (See Select Net/Address Pair (PK11 UDP/220A) Simulated Units can be set up to be Indirect.

## 4-11. Build JVMF or Package 11 FDS Unit Configuration

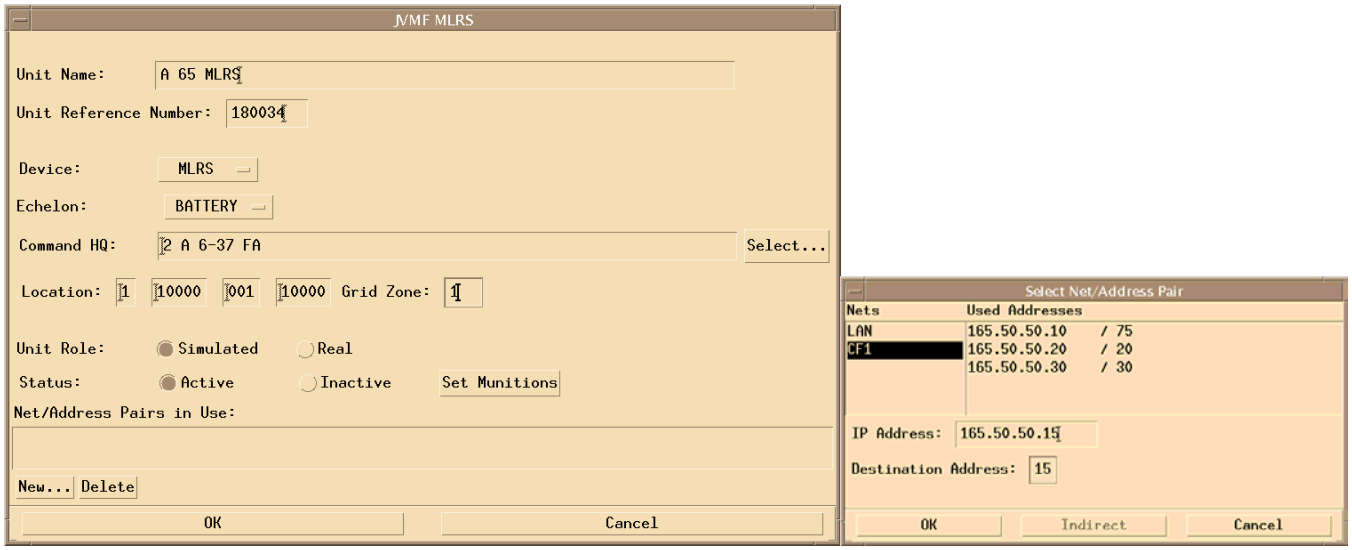



**Figure 4-26 Build JVMF or Package 11 FDS Unit Configuration**

***Build JVMF or Package 11 FDS Unit Configuration Procedure*** (Fig 4-26)

**Unit Name** is any valid unit name can be entered into this field up to 64 characters.
**Unit Reference Number** is the (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise.
**Device** is a pull-down menu, which enables the operator to choose the type of device. The valid types for FDS are MLRS.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** selecting “Select” a window is displayed that allows the operator to set the command unit.
**Location** is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field.
**IP Address** this field allows the operator to choose the UDPLAN address to use for this unit. This must be a unique IP.

### 4-11.1 Set munitions in JVMF or Package 11 FDS Unit Configuration

This window (Fig 4-27) allows the operator to select the MLRS Rocket munitions to be sent to AFATDS from the FDS in the OPSTAT message. This is a one-time entry. After each Fire mission SISTIM will report back with whatever the operator selects from the set munitions rocket type data.

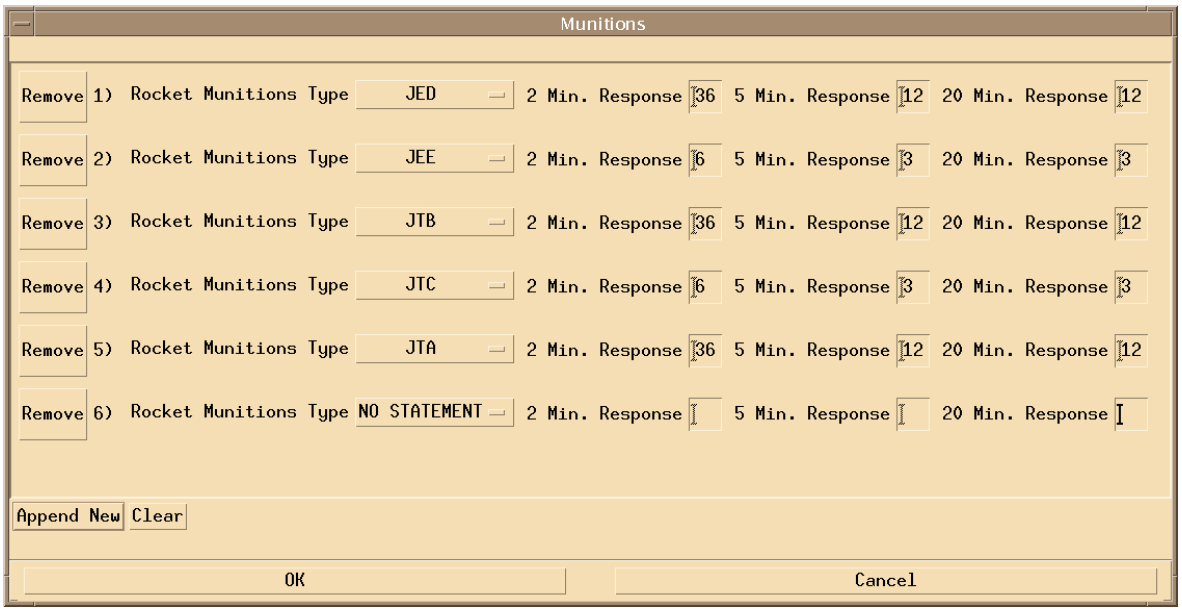



**Figure 4-27 Set munitions in FDS**

## 4-12. Build JVMF FBCB2 (Future XXI Battle Command Brigade and Below) Unit Configuration

This window (Fig 4-28) allows the operator to setup a JVMF FBCB2 type unit in the current exercise. FBCB2's will not automatically generate messages from the scenario generator. There is a work around for this, select one of the JVMF messages, Edit the message and change the originator to be the selected FBCB2. The message is now ready to be transmitted out Multicast over the LAN.

**Figure 4-28 Build JVMF FBCB2 Unit Configuration**

### *Build JVMF FBCB2 Unit Configuration Procedure*

**Unit Name** is any valid unit name can be entered into this field up to 64 characters.
**Unit Reference Number** is the (VMF) URN is a number between 0 - 16777215. This number is used by AFATDS to identify units and it must be unique within each exercise.

**Device** is a pull-down menu, which enables the operator to choose the type of device. The valid type for JVMF is FBCB2.
**Echelon -** This is a pull down menu, which enable the operator to choose the echelon of the device. The valid echelons are Unit, Section, Platoon, Battery, Company, Battalion, Brigade, Division, and Corps. The Echelon that was selected will be displayed on the Map window with the proper echelon displayed.
**Command HQ** selecting “Select” a window is displayed that allows the operator to set the command unit.
**Location** is the location in the exercise at which the unit is located. Any valid (UTM) coordinate is allowed in this field.
**Unit Role** - The operator has the option of setting a unit to Simulated (acted by SISTIM) or Real (configured on another machine connected to SISTIM).
**Status** - The operator has the option of setting the status of this unit to either Active or Inactive.
Note: The operator has the option to add more the one network to any real or simulated unit.
**IP Address** this field allows the operator to choose the UDPLAN address to use for this unit. This must be a unique IP.

# CHAPTER 5.
# ESTABLISH AFATDS UNITS CONFIGURATION

## SECTION 1
## BUILD A UNITS IN AFATDS

### 5-1. Build a SISTIM unit in AFATDS

The SISTIM units (Fig 5-1) will be created as Package 11 units. Name the Unit SISTIM, SISTIM1 or SISTIM2 to that effect. The AFATDS only has one SISTIM unit per network. For each communications network that AFATDS and SISTIM are interfacing over the AFATDS operator must enter a different SISTIM unit on each of the nets. For the AFCS and GDU/MCA nets there is no need for a SISTIM unit. The VMF URN must be unique for each SISTIM device. The SISTIM software simulator does not track the SISTIM URN's

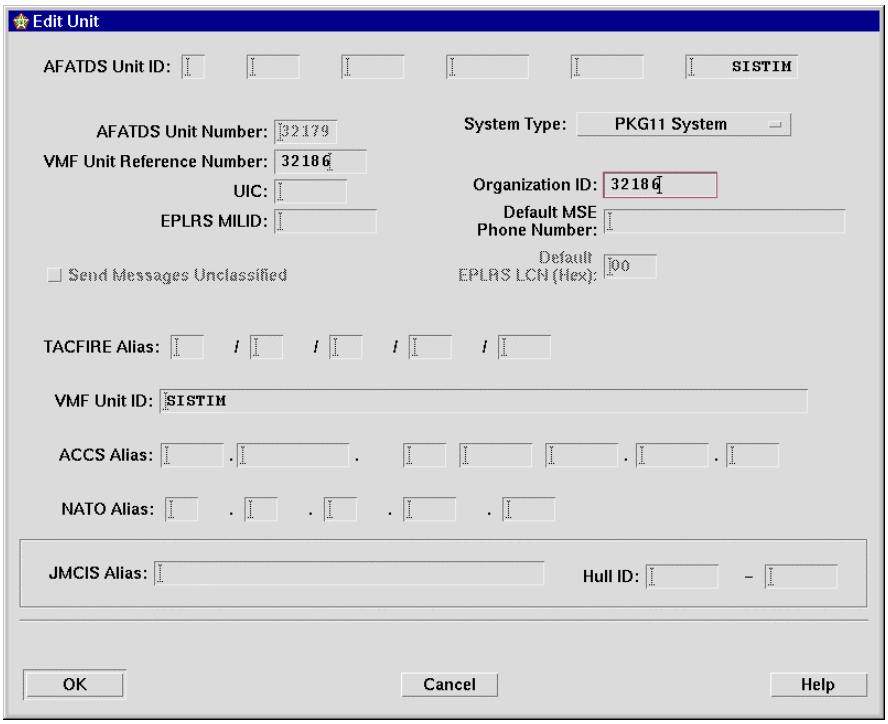



**Figure 5-1 Build a SISTIM unit in AFATDS**

***Build a SISTIM unit in AFATDS Procedure***

Select System / Administration / Master Unit List. This displays the Master Unit List window. Select the New Button to display the Edit Unit window.
**AFATDS UNIT ID:** is any valid unit name can be entered into this field up to 64 characters.
**SYSTEM TYPE**: PKG 11 SYSTEM
**AFATDS UNIT Reference Number** 32186 (This number default in AFATDS to next available.)
**VMF URN** is any valid number must be unique for each device (in SISTIM this is the Unit Reference Number)
**VMF Unit ID**: SISTIM

## 5-2. Building a FOS Unit in AFATDS

Ensure the VMF URN is the same in both the AFATDS and SISTIM for that unit. A FOS unit communicates using Package 11 protocol messages.

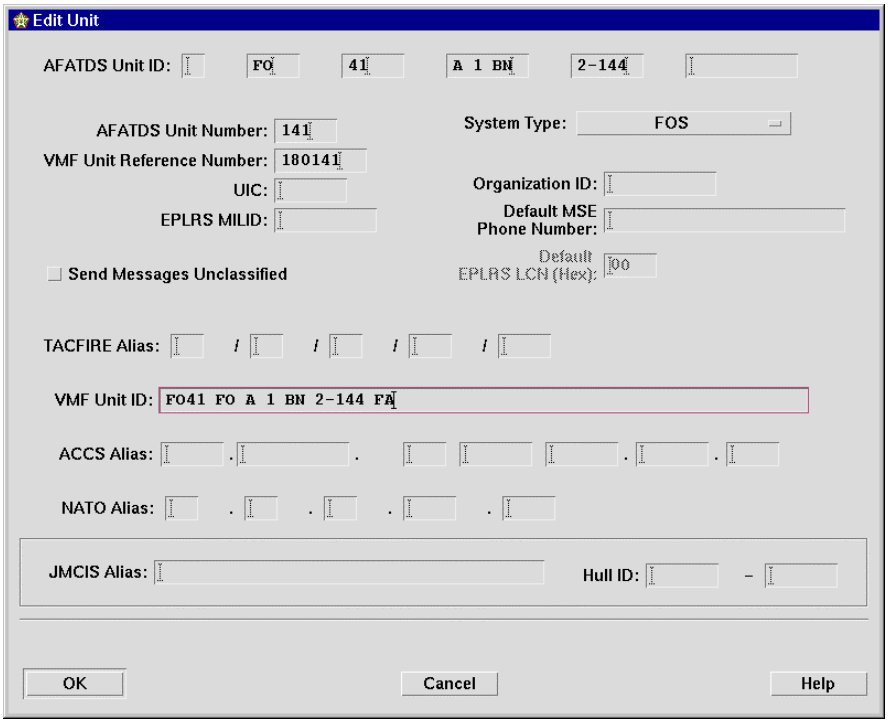



**Figure 5-2 Build a FOS Unit in AFATDS**

***Build a FOS Unit in AFATDS Procedure***

**AFATDS UNIT ID**: is any valid unit name can be entered into this field up to 64 characters.
**Type SYSTEM TYPE**: FOS
**AFATDS UNIT Reference Number** 141
**VMF URN** is any valid number must be unique for each device (in SISTIM this is the Unit Reference Number)

**VMF Unit ID:** FO41 FO A 1 BN 2-144 FA

## 5-3. Build a ABCS Unit in AFATDS

SISTIM simulates all of the ABCS systems. There is no difference in AFATDS building a ABCS00 unit. When building an ABCS unit it must be an ABCS00 System type. Failure to have the correct system type selected will likely cause failure to communicate to that ABCS00 system.

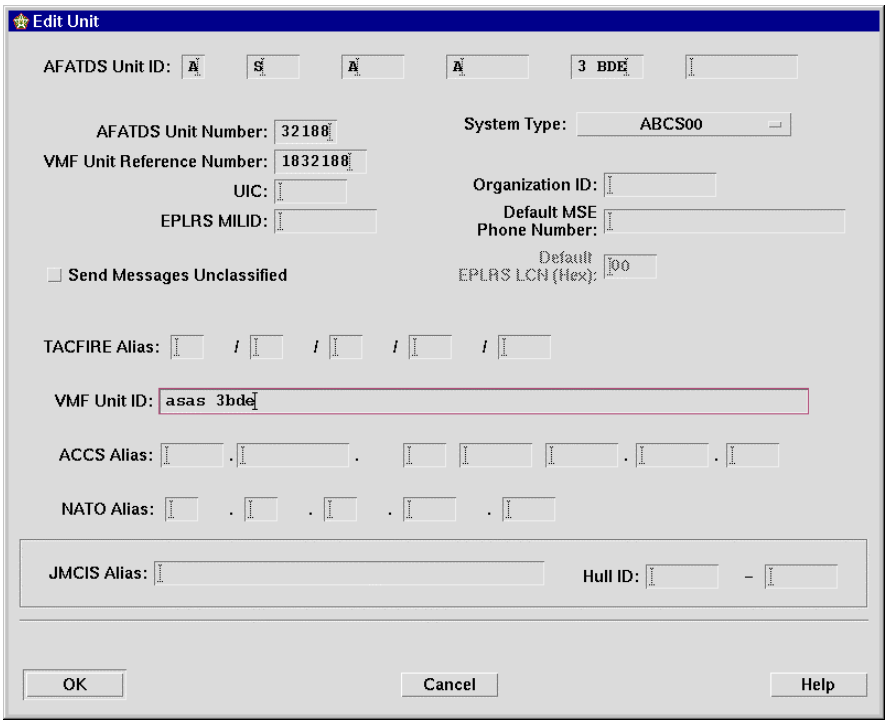



**Figure 5-3 Build a ABCS Unit in AFATDS**

***Build a ABCS Unit in AFATDS Procedure***

**AFATDS UNIT ID:** is any valid unit name can be entered into this field up to 64 characters.
**Type SYSTEM TYPE:** ABCS00
**AFATDS UNIT Reference Number** 32188
**VMF URN** is any valid number must be unique for each device (in SISTIM this is the Unit Reference Number)
**VMF Unit ID:** ASAS 3 BDE

## 5-4. Building a TBMCS Unit in AFATDS

When building a TBMCS unit it must be a TBMCS00 System type. There is no difference in AFATDS building a TBMCS unit. Failure to have the correct system type selected will likely cause failure to communicate.

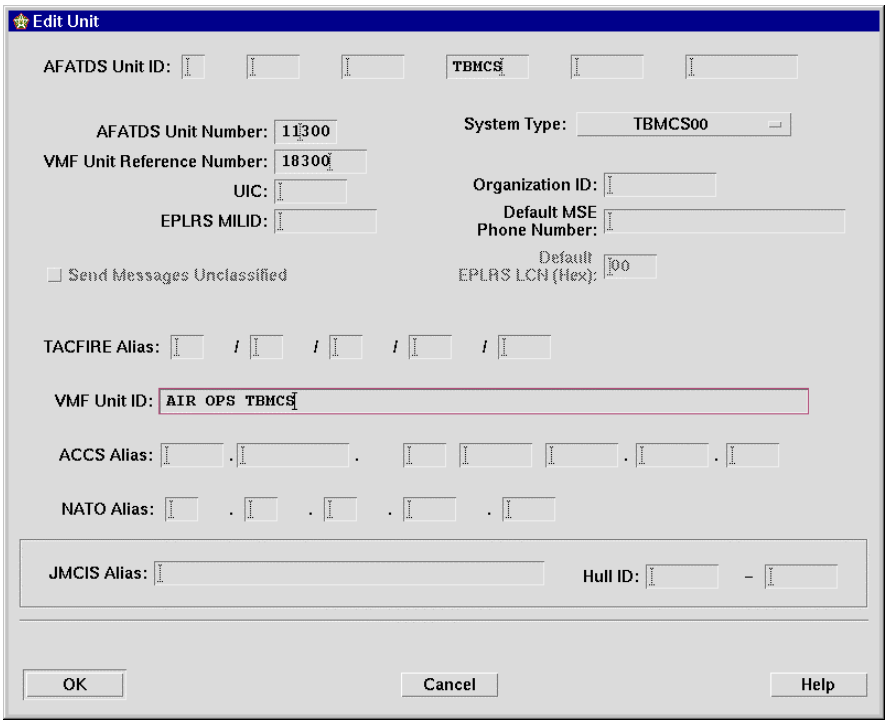



**Figure 5-4 Build a TBMCS Unit in AFATDS**

***Build a TBMCS Unit in AFATDS Procedure***

**AFATDS UNIT ID:** is any valid unit name can be entered into this field up to 64 characters.
**Type SYSTEM TYPE:** TBMCS00
**AFATDS UNIT Reference Number** 11300
**VMF URN** is any valid number must be unique for each device (in SISTIM this is the Unit Reference Number)
**VMF Unit ID:** AIR OPS TBMCS

## 5-5. Building a Package 11 FireFinder Unit in AFATDS

There is no difference in AFATDS building a Package 11 FireFinder RADAR unit. When building a RADAR unit it must be a PK11 Firefinder System type. Failure to have the correct system type selected will likely cause failure to communicate.

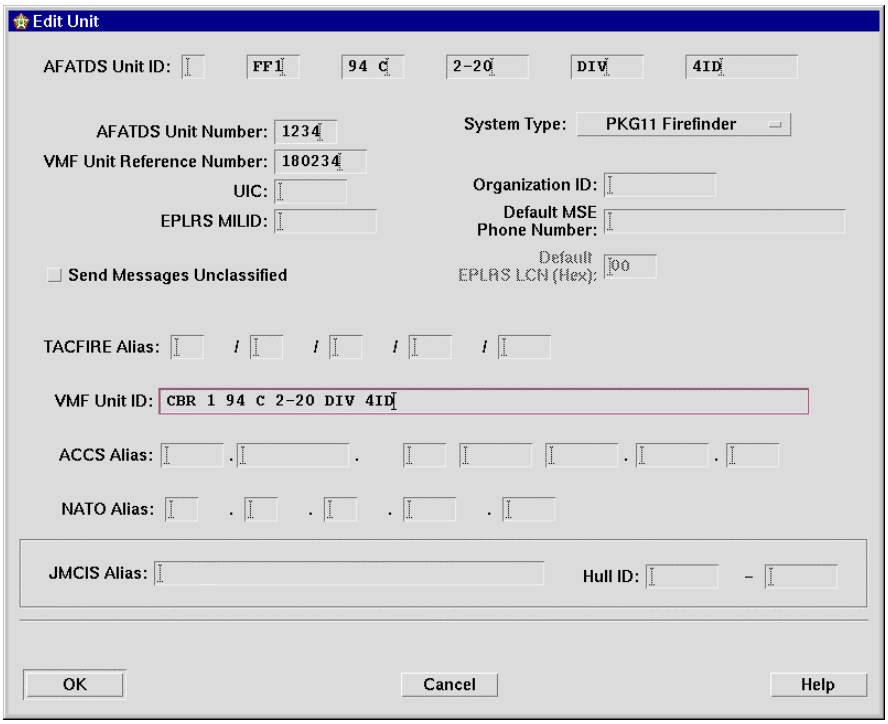



**Figure 5-5 Build a Package 11 FireFinder in AFATDS**

***Build a Package 11FireFinder in AFATDS Procedure***

**AFATDS UNIT ID:** is any valid unit name can be entered into this field up to 64 characters.
**Type SYSTEM TYPE:** PK11 Firefinder
**AFATDS UNIT Reference Number** 1234
**VMF URN** is any valid number must be unique for each device (in SISTIM this is the Unit Reference Number)
**VMF Unit ID:** CBR 1 94 C 2-20 DIV 4ID

## 5-6. Build a Package 11 Paladin Unit in AFATDS

**NOTE**

Paladin Units are created as PK11 Paladin units. There is no difference in AFATDS building a Paladin unit to talk to the simulated Paladins in SISTIM. The GDU/MCA units do not have to be built in the MUL because there are ten GDU's made in the default Master Unit List. All that is needed is for the operator to open the MUL and edit the GDU's. All that is needed from the GDU MUL window is the AFATDS Unit Reference number. That URN is inputted into the SISTIM GDU/MCA unit window.

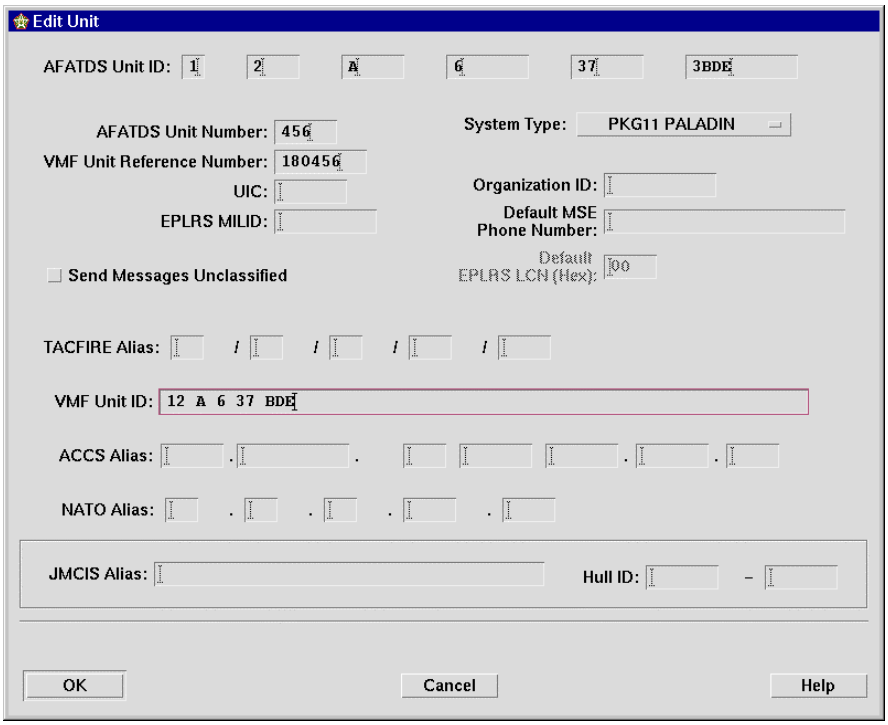



**Figure 5-6 Build a Package 11 Paladin in AFATDS**

***Build a Package 11 Paladin in AFATDS Procedure***

**AFATDS UNIT ID:** is any valid unit name can be entered into this field up to 64 characters.
**Type SYSTEM TYPE:** PK11 Paladin
**AFATDS UNIT Reference Number** 456
**VMF URN** is any valid number must be unique for each device (in SISTIM this is the Unit Reference Number)
**VMF Unit ID:** 12 A 6 37 BDE

## 5-7. Edit a GDU/MCA in AFATDS

**NOTE**

The GDU/MCA units do not have to be built in the MUL because there are ten GDU's made in the default Master Unit List. All that is needed is for the operator to open the MUL and edit the GDU's. All that is needed from the GDU MUL window is the AFATDS Unit Reference number. That URN is inputted into the SISTIM GDU/MCA unit window.

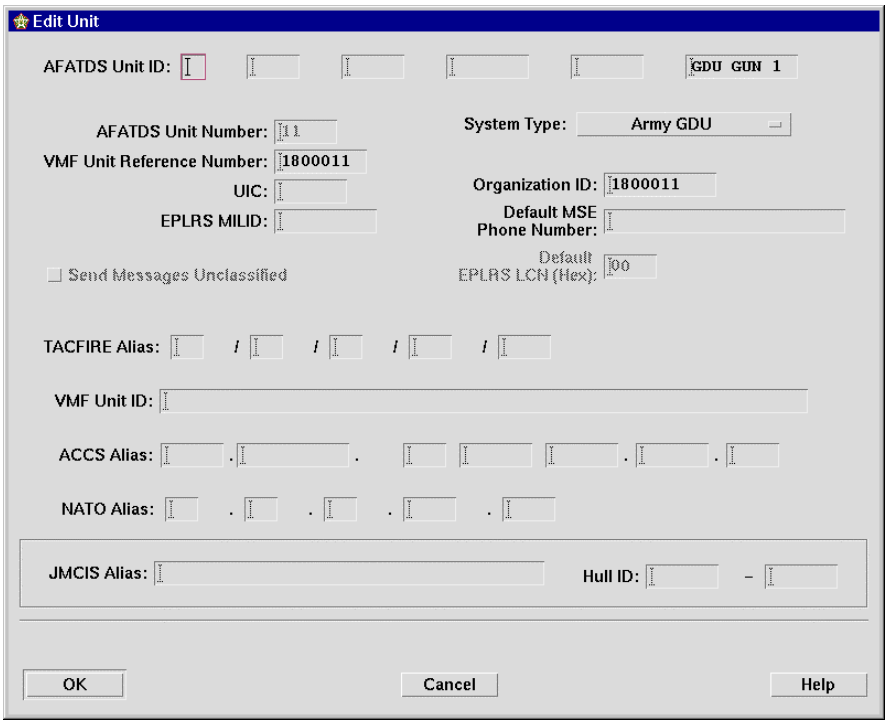



**Figure 5-7 Edit a GDU/MCA in AFATDS**

***Edit a GDU/MCA Unit in AFATDS Procedure***

**AFATDS UNIT ID:** is any valid unit name can be entered into this field up to 64 characters.
**Type SYSTEM TYPE:** ARMY GDU
**AFATDS UNIT Reference Number** 11
**VMF URN** is any valid number must be unique for each device 1800011 (in SISTIM this is the Unit Reference Number)

## 5-8. Build a JVMF IFCS SPLL in AFATDS

When building an IFCS unit it must be built as a JVMF System type. Failure to have the correct system type selected will likely cause failure to communicate. This is the M270A1 Launcher (Figure 5-8).

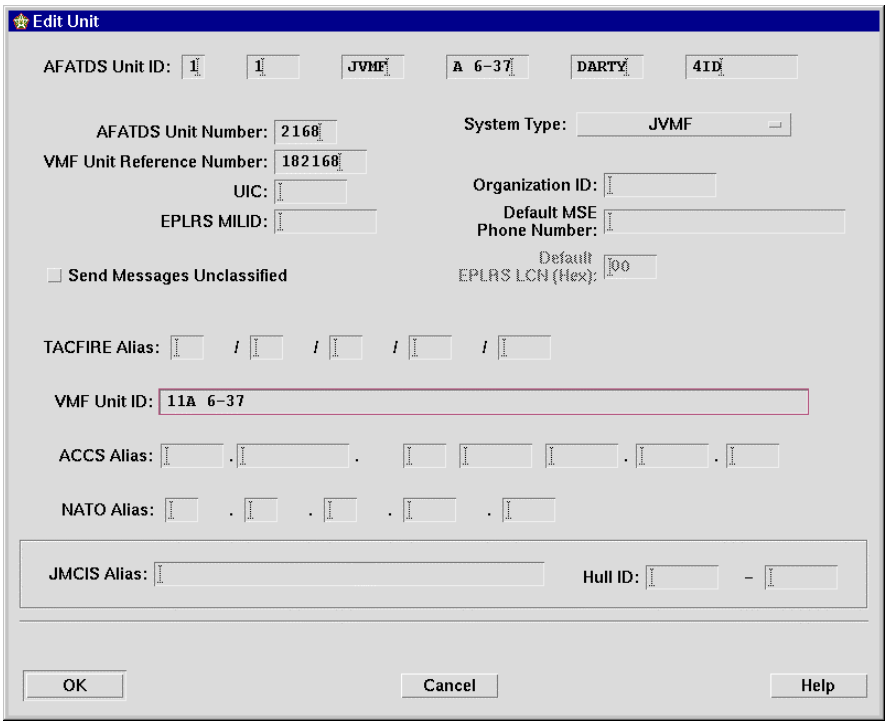



**Figure 5-8 Build a JVMF IFCS SPLL in AFATDS**

***Build a Package JVMF IFCS SPLL in AFATDS Procedure***

**AFATDS UNIT ID:** is any valid unit name can be entered into this field up to 64 characters.
**Type SYSTEM TYPE:** JVMF
**AFATDS UNIT Reference Number** 2168
**VMF URN** is any valid number must be unique for each device (in SISTIM this is the Unit Reference Number)
**VMF Unit ID**: 11A 6-37

## 5-9. Build a JVMF FBCB2 in AFATDS

When building an FBCB2 unit it must be built as an FBCB2 System type. Failure to have the correct system type selected will likely cause failure to communicate.

***Build a Package JVMF FBCB2 in AFATDS Procedure***

**AFATDS UNIT ID:** is any valid unit name can be entered into this field up to 64 characters.
**Type SYSTEM TYPE:** FBCB2
**AFATDS UNIT Reference Number** 455
**VMF URN** is any valid number must be unique for each device (in SISTIM this is the Unit Reference Number)
**VMF Unit ID**: 1SEC FBCB2 1 10

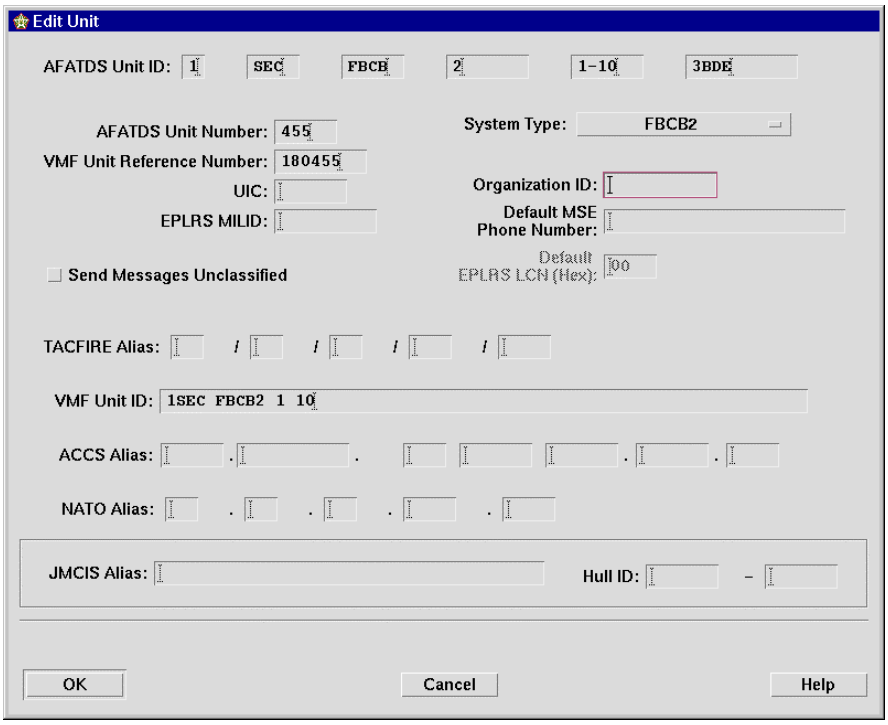



**Figure 5-9 Build a JVMF FBCB2 in AFATDS**

# CHAPTER 6.
# ESTABLISHING AFATDS COMMUNICATION

## SECTION 1
## BUILD A COMMUNICATION NET IN AFATDS

In order to communicate via AFATDS units must be in the Current Situation and on the map. Select Units/New on the current map. The “Create New Unit Window” will open allowing you to select a unit to create. Select a SISTIM unit and for unit type select other. The basic unit window opens. Enter a location and unit symbol information on this window and any other relevant information. Enter No Data for General and Detailed data inputs. Select Apply and OK for each SISTIM unit.

### 6-1. Establishing a AFATDS LAN Network

When establishing a LAN network the AFATDS operator must remember what IP address was loaded in the SISTIM simulator.

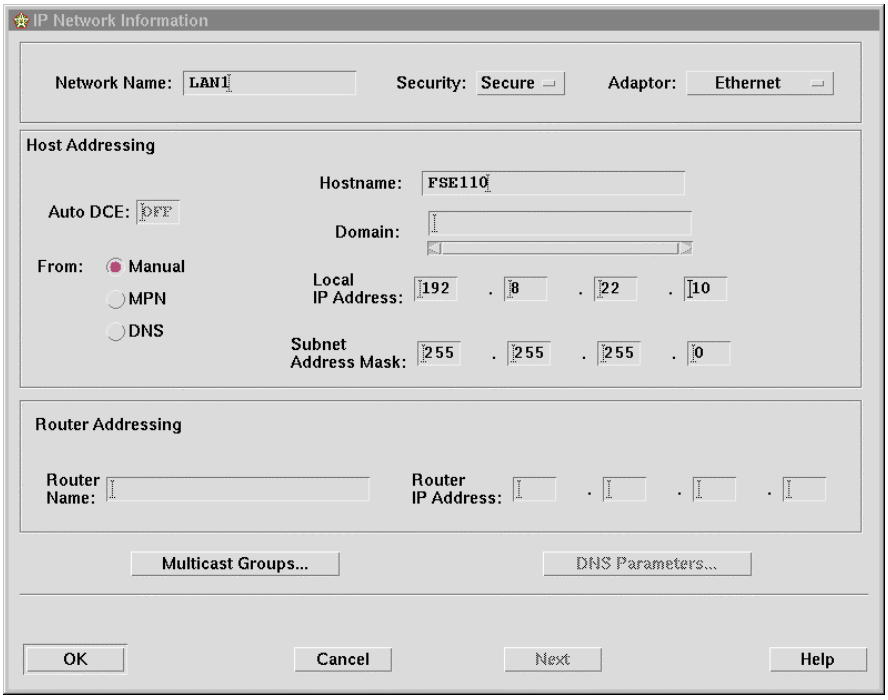



**Figure 6-1 Establishing a AFATDS LAN Network**

***Establishing a LAN Network Procedure***

In order to talk to the over LAN to SISTIM Select System/Communications/Current/Network/NEW IP When selected you will get an IP Network Information window with Ethernet in the upper right corner name the network.
Pre-established Hostname and IP address must be entered. The sub-net mask will fill in automatically.

### 6-1.1 Establishing a AFATDS Multicast Group AFATDS LAN Network

**NOTE**

The BDE_ALL net in AFATDS is the only net that will send and receive messages. The other Group Name types (BN_EPLRS, BN_ALL, BDE_EPLRS) will only receive messages by AFATDS.

This information displayed includes the identifying name for each multicast group, its group type and its multi cast IP address in (fig 6-1-1) it is showing the BDE_ALL with an IP of 225.10.10.251.

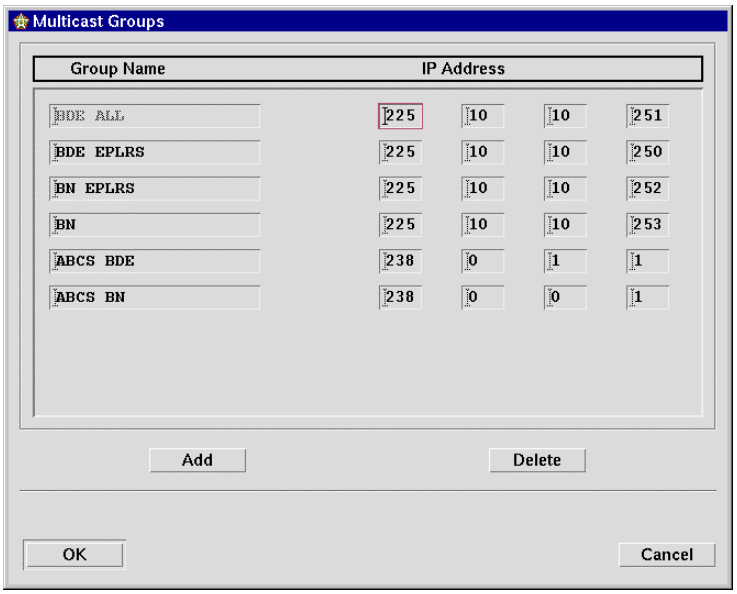



**Figure 6-1-1 Establishing a AFATDS Multicast Group AFATDS LAN Network**

***Establishing a AFATDS Multicast Group AFATDS LAN Network Procedure***

Verify the BDE_ALL IP, this IP will go into the SISTIM UDPLAN multicast IP Address.

## 6-2. Establishing a AFATDS TCIM 188220A Network

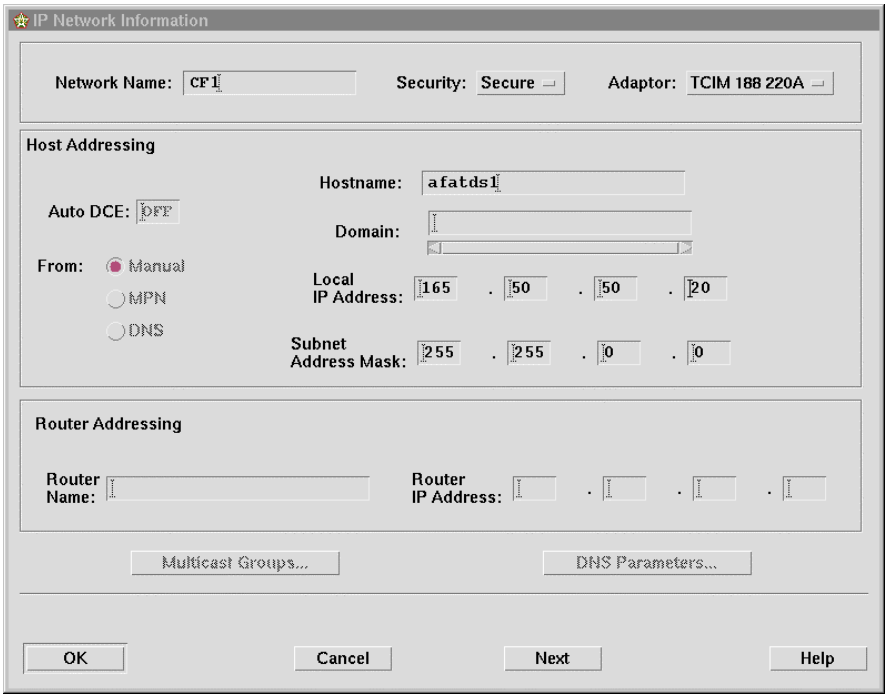



**Figure 6-2 Establish a AFATDS TCIM 188220A Network**

### Establish a AFATDS TCIM 188220A Network Procedure

Select System/Communications/Current/Network/NEW IP
When selected you will get an IP Network Information window with Ethernet in the upper right corner name the network. Click on Ethernet and a 188-220A option will appear, select it. This will gray out some of the options on the window.
Pre-established Hostname and IP address must be entered. The sub-net mask will fill in automatically.

### 6-2-1. Establishing a AFATDS TCIM 188220A Network Next

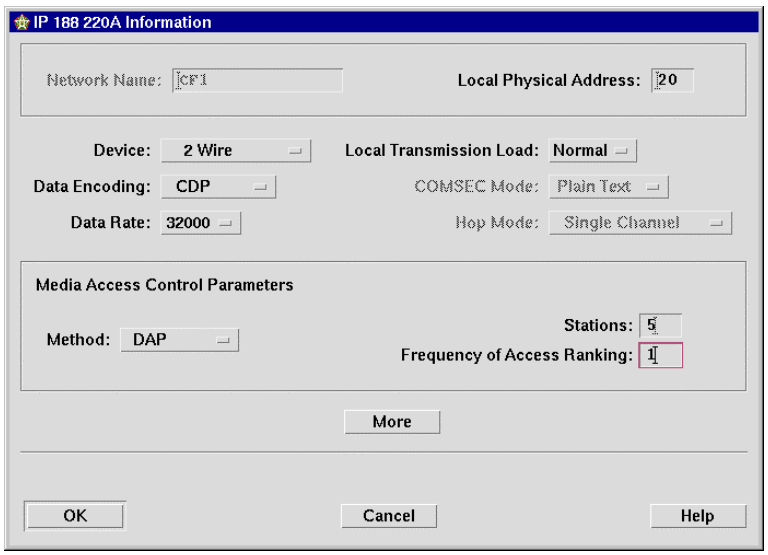



**Figure 6-3 Establishing a AFATDS TCIM 188220A Network Next**

**Establishing a AFATDS TCIM 188220A Network Next procedure**

**Select Next** and choose the device type. Selections are 2 wire, 4 wire Analog Radio, KY57 and SINCGARS. Which ever you choose will dictate the default value generated on the window.
**Data Encoding** selections are NRZ, CDP, FSK188C and FSK 4202A. The encoding choices are available based on the device type chosen.
**Data Rate** ranges from 75 bps to 32000 bps and are again available for selection based on the device chosen Selections should be made for Local Transmission Load, COMSEC Mode, Hop Mode, Media Access Control Parameters, Number of Stations and Frequency of Access.

## 6-3. Establish a AFATDS AFCS TCIM Network and Next

Create an AFCS net using TACFIRE Tunneling for Package 11 Paladins AFATDS has implemented a new communications protocol to be used when communicating with Package 11 Paladin units. The new protocol is a variant of the TACFIRE protocol currently implemented in the AFATDS system and is called AFCS. This protocol uses a process called TACFIRE tunneling. This allows a Package 11 message to be sent with a TACFIRE header.
When editing the routes for Paladin units up to eight guns can be associated using the same destination address. They must also have a unique platoon/gun number associated with it. Host names and IP addresses are not required for the AFCS net.

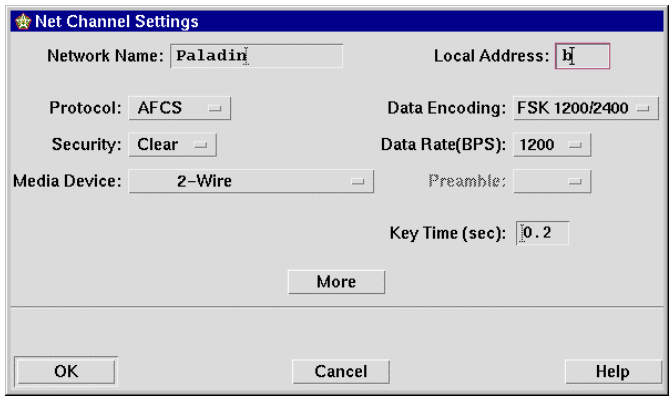



**Figure 6-4 Establish a AFATDS AFCS TCIM Network and Next**

***Establish a AFATDS AFCS TCIM Network and Next Procedure***
**Select Network/New** (AFCS Net)
**Network Name:**CF1
**Local Address:**20
**Protocol**: AFCS
**Data Encoding:** FSK 1200/2400
**Security:** Secure
**Data Rate:** 1200
**Media Device:** SINCGARS Radio
**Preamble:** Default
**Key Time** (sec): 2.1

When MORE is selected the window generated will also have default values entered. However, these entries cannot be changed unless customize is clicked in the upper right corner. When editing the route for the destination unit a Hostname and IP address must also be entered and again the designated destination address must be assigned if you anticipate assigning the unit to a TACFIRE net.
When assigning channels for the 188-220A network the only channels that support this configuration is channel 1 if there is only one TICM or 1 and 3 if there are two TICMs. Pkg. 11 units can be assigned to ELAN EPLRS and TACFIRE nets also just by selecting that unit as a destination unit and editing the route. When using a TACFIRE net no IP address and host name are required.

## 6-4. Establishing a AFATDS GDU Network

GDU units do not need to be added into the GDU communication network. All that is needed is to establish the GDU's from the Weapons Fire Unit window.

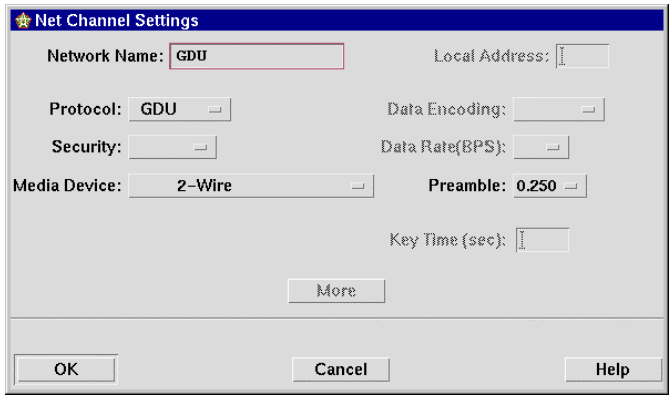



**Figure 6-5 Establishing a AFATDS GDU Network**

***Establishing a AFATDS GDU Network Procedure***

**NETWORK NAME** is the text name assigned to the network. Type GDU.
**PROTOCOL** - Select the field to display a list of AFATDS supported protocols. Click GDU from the list. This causes the majority of the fields as well as the MORE button to become inactive. This is because GDU communications do not require the range of adjustment necessary to tailor a more long range and complex radio communications protocol.
**MEDIA DEVICE** - The most common media device for intra-battery communications is two wire. AFATDS provides the ability to use AN/PRC-68 or AN/PRC-126 radio (Local Radio) or a mix (Two Wire-And-Radio). Select on the field and select TWO wire when talking over wire communications.
**PREAMBLE** is the amount of time after keying the communications device and before the transmission of the first part of the message given in seconds. This setting is heavily dependent upon the communications medium. The default is 0.250 seconds, which is adequate for wire and most radios. Click on the field and select 0.250.
Click OK to store the Network data.

## 6-5. Adding units to a AFATDS Communication Network

Add the Units to your communications unit configuration window.

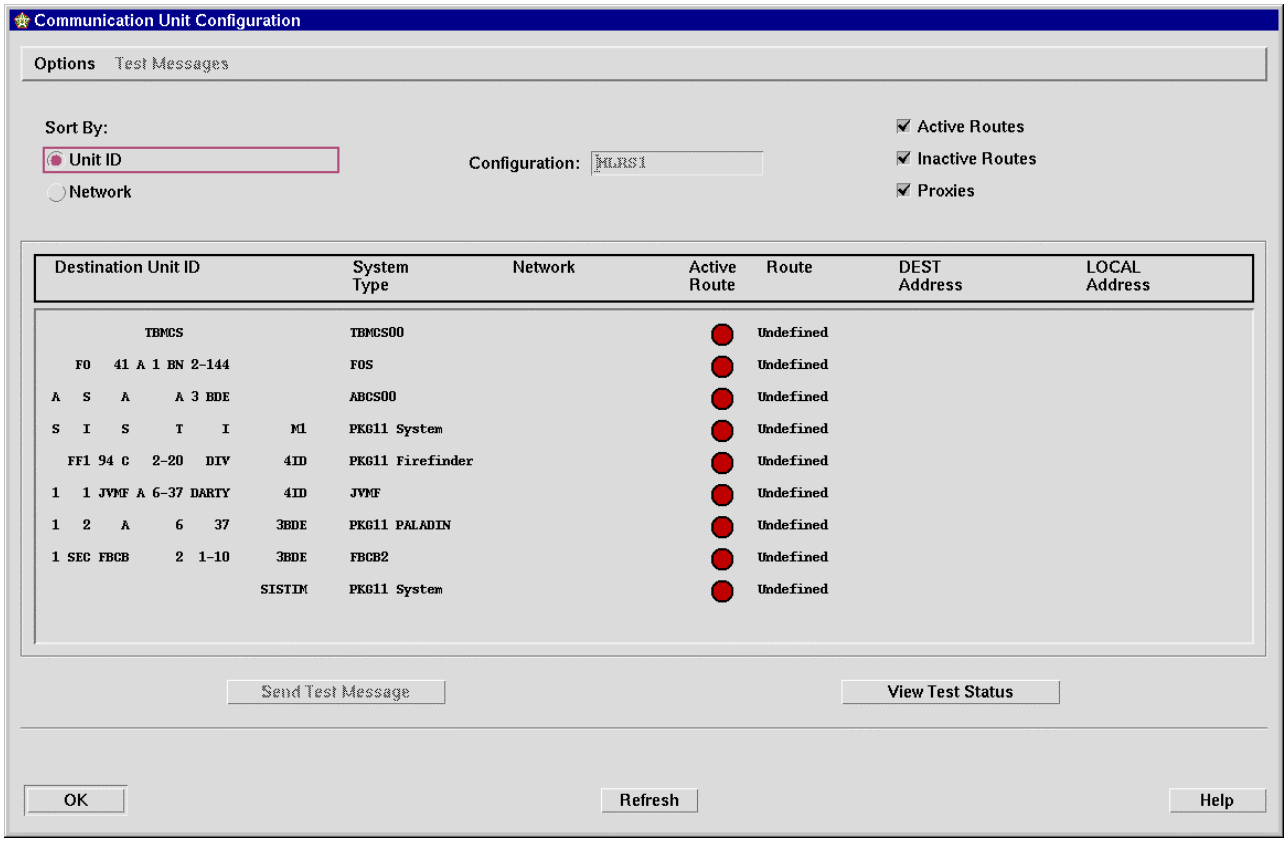



**Figure 6-6 Adding units to a AFATDS Communication Network**

## 6-6. Edit the SISTIM Unit LAN routes in AFATDS

The First unit to assign a channel is the SISTIM unit. The SISTIM unit will always be Primary and Direct in AFATDS. The IP Address used is the same IP address when the SISTIM software was loaded and the IP that was setup in the SISTIM LAN configure settings.

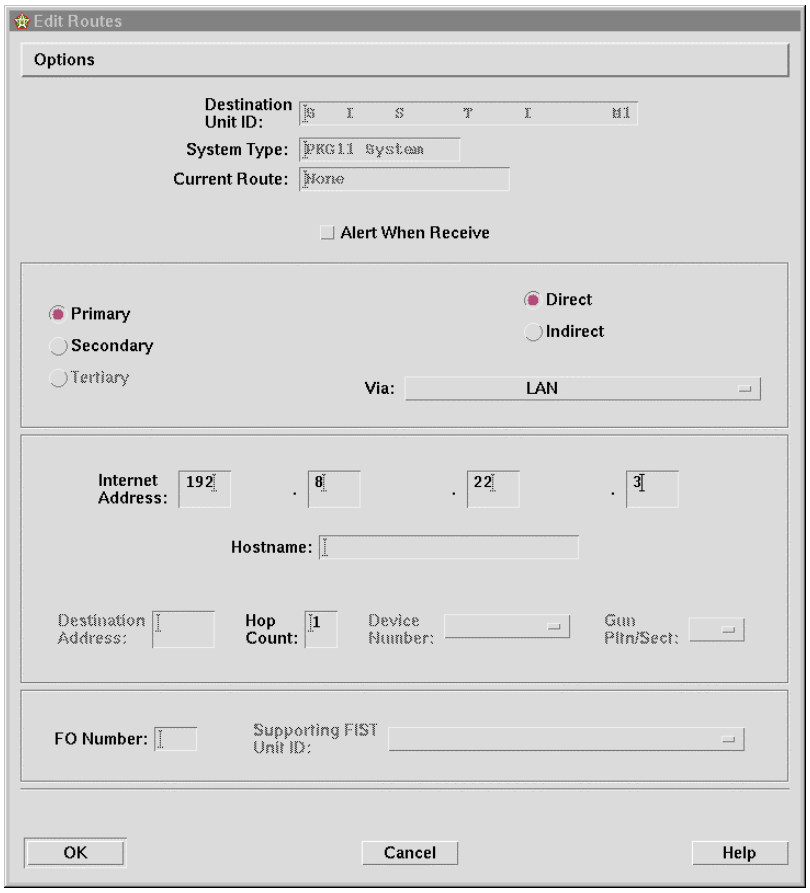



**Figure 6-7 Edit the SISTIM Unit LAN routes in AFATDS**

***Edit the SISTIM Unit LAN routes in AFATDS Procedure***

Select edit routes Window:
**PRIMARY**
**DIRECT**
**VIA**: LAN
**INTERNET ADDRESS:** Input 192.8.22.3

## 6-7. Edit the SISTIM Unit 188220A routes in AFATDS

The IP Address used is the Same IP address that was inputted into SISTIM for the CF1 TCIM 188220A network.

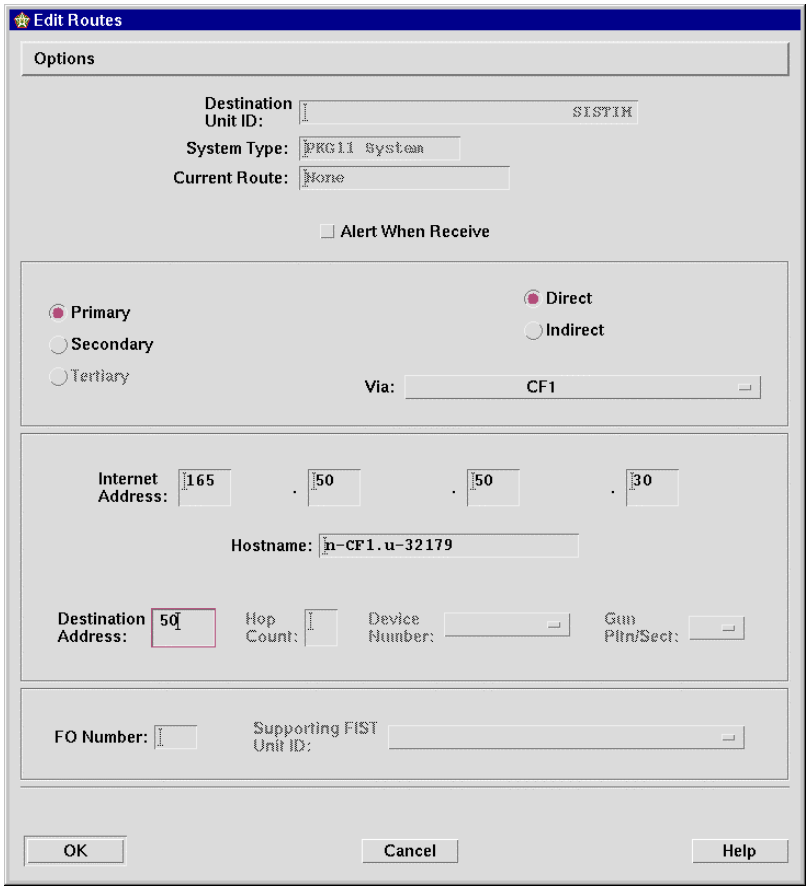



**Figure 6-8 Edit the SISTIM Unit 188220A routes in AFATDS**

### Edit the SISTIM Unit 188220A routes in AFATDS Procedure

Select edit routes Window:
**PRIMARY**
**DIRECT**
**VIA**: CF1
**INTERNET ADDRESS:** Input 165.50.50.30
**HOSTNAME:** Input n-CF1.u-132179
**DESTINATION ADDRESS**: Input 50
To set up the simulated package 11 units they will be set primary indirect

## 6-8 Edit the Package 11 FireFinder Unit LAN routes in AFATDS

Set up the Firefinder (package 11) unit as primary indirect an IP Address will not be used in AFATDS. SISTIM tracks communication messages by units URN's.

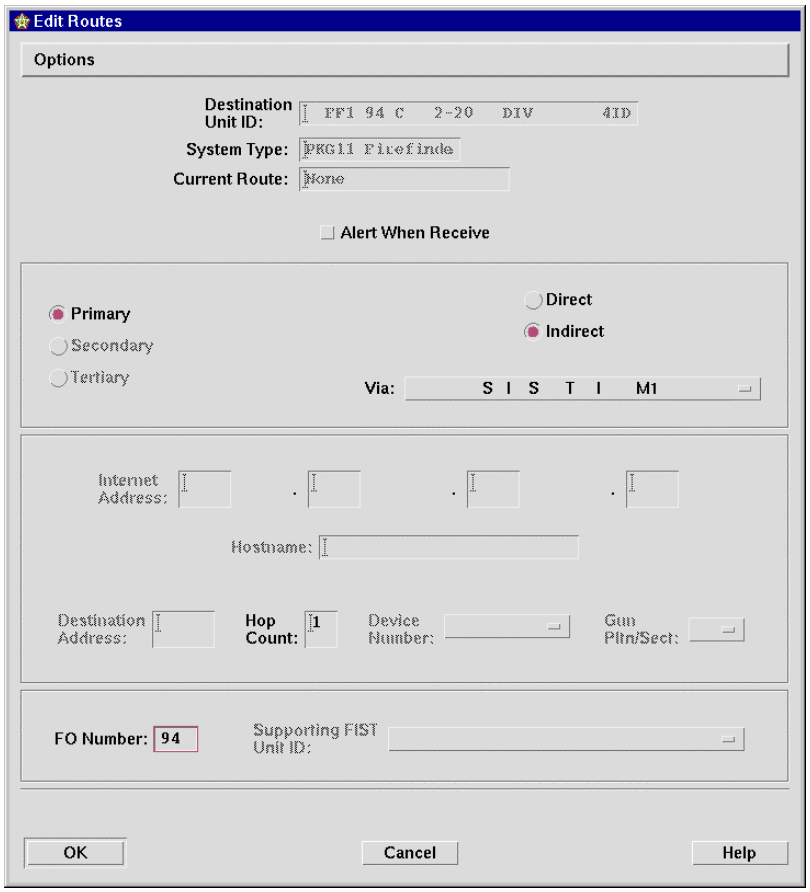



**Figure 6-9 Edit the Package 11 FireFinder Unit LAN routes in AFATDS**

***Edit the Package 11 FireFinder Unit LAN routes in AFATDS Procedure***

Select edit routes Window:
**PRIMARY**
**INDIRECT**
**VIA**: SISTIM
**INTERNET ADDRESS:** Not required
**HOSTNAME:** Not required
**DESTINATION ADDRESS:** Not required
**FO Number:** 2

## 6-9. Edit the Package 11 FOS Unit 188220A routes in AFATDS

Set up the FOS (package 11) unit as primary indirect an IP Address will not be used in AFATDS. SISTIM tracks communication messages by units URN's.

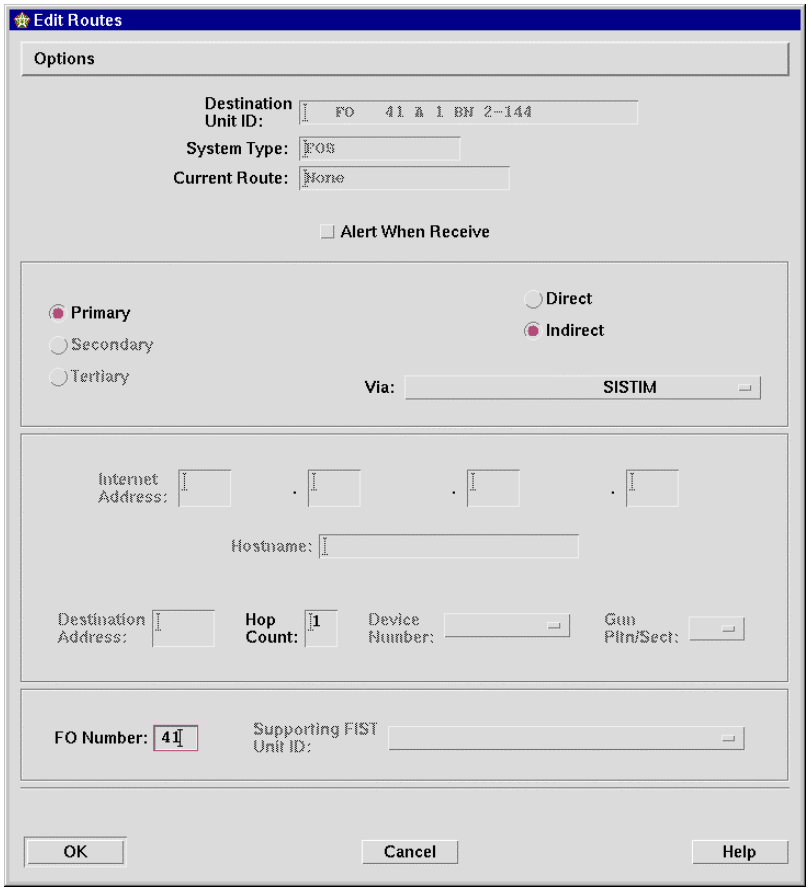



**Figure 6-10 Edit the Package 11 FOS Unit 188220A routes in AFATDS**

***Edit the Package 11 FOS Unit 188220A routes in AFATDS Procedure***

Select edit routes Window:
**PRIMARY**
**INDIRECT**
**VIA: SISTIM1**
**INTERNET ADDRESS**: Not required
**HOSTNAME:** Not required
**DESTINATION ADDRESS:** Not required
**FO Number:** 41

## 6-10. Edit the Package 11 or VMF R-5 Paladin Unit AFCS routes in AFATDS

When editing the routes for Paladin units up to eight guns can be associated using the same destination address. They also must have associated a unique platoon/gun number.

**NOTE**

When Setting up an AFATDS V6.3 VMF R-5 Paladin in order to do this the Destination Address MUST be omitted from the units network setup at AFATDS. The operator must click in the Destination Address and select delete or select backspace twice because if this is not done AFATDS will automatically fill in the Destination Address. This method of communication should only be utilized for simulated Paladins or TADs units.

**Figure 6-11 Edit the Package 11 Paladin Unit AFCS routes in AFATDS**

***Edit the Package 11 Paladin Unit AFCS routes in AFATDS Procedure***

Select edit routes Window:
**PRIMARY**
**DIRECT**
**VIA:** AFCS_PAL
**INTERNET ADDRESS:** Not required
**HOSTNAME:** Not required
**DESTINATION ADDRESS:** b

**Gun/ Plt / Sect:** 1/1

## 6-11. Edit the JVMF IFCS Unit routes in AFATDS

Set up the JVMF SPLL unit as primary indirect an IP Address will not be used in AFATDS. SISTIM tracks communication messages by units URN's.

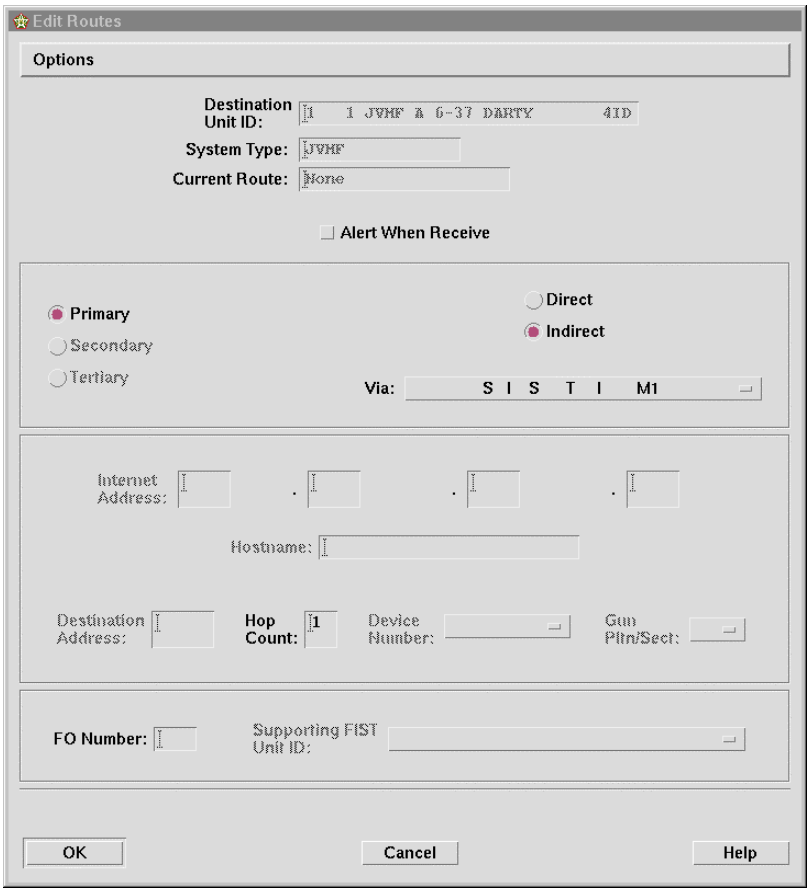



**Figure 6-12 Edit the JVMF IFCS Unit routes in AFATDS**

***Edit the JVMF IFCS Unit 188220A or LAN routes in AFATDS Procedure***

Select edit routes Window:
**PRIMARY**
**INDIRECT**
**VIA**: SYSTIM
**INTERNET ADDRESS:** Not required
**HOSTNAME:** Not required
**DESTINATION ADDRESS:** Not required

## 6-12. Edit the ABCS00 ASAS Unit routes in AFATDS

Set up the ABCS00 unit as primary indirect an IP Address will not be used in AFATDS.

**Figure 6-13 Edit the ABCS00 ASAS Unit routes in AFATDS**

***Edit the ABCS00 ASAS Unit routes in AFATDS Procedure***

Select edit routes Window:
**PRIMARY**
**INDIRECT**
**VIA:** SISTIM 1
**INTERNET ADDRESS:** Not required
**HOSTNAME:** Not required

## 6-13. Edit the TBMCS00 TBMCS Unit routes in AFATDS

In AFATDS setting up the TBMCS communications network is direct. That is because SISTIM has the TBMCS unit in the USMTFMail network, which is indirect. The IP address has to have the same address that was setup in SISTIM in the USMTFMail network.

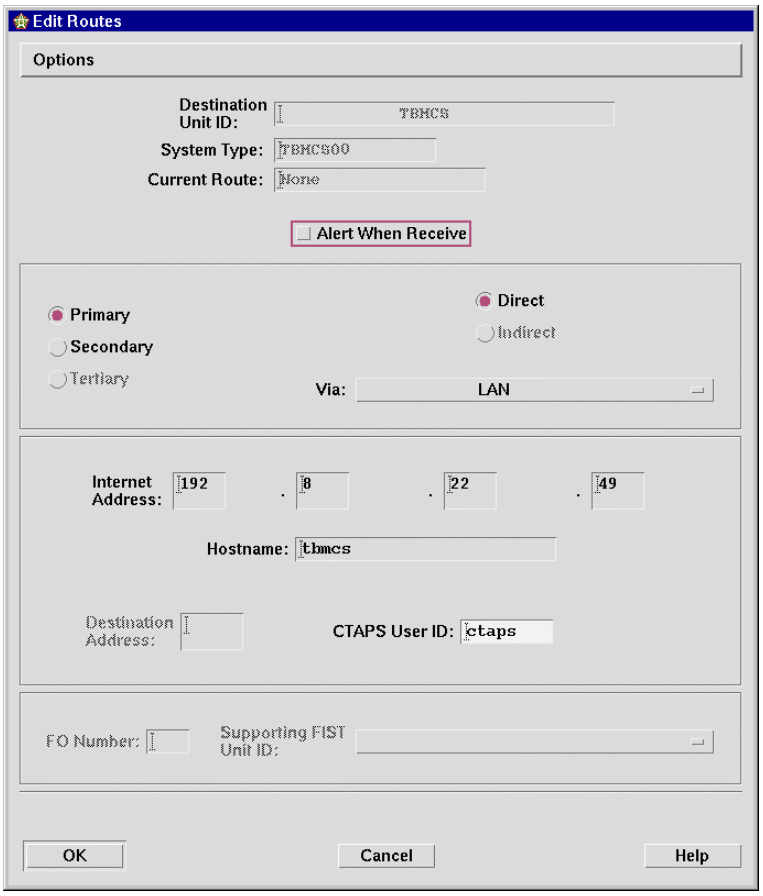



**Figure 6-14 Edit the TBMCS00 TBMCS Unit routes in AFATDS**

***Edit the TBMCS00 TBMCS Unit routes in AFATDS Procedure***

Select edit routes Window select:
**PRIMARY**
**DIRECT**
**VIA:** LAN
**INTERNET ADDRESS:** 192.8.22.49
**HOSTNAME:** tbmcs
**CTAPS USER ID:** CTAPS

## 6-14. Edit the FBCB2 Unit routes in AFATDS

In AFATDS setting up the FBCB2 communications network is direct. That is because SISTIM has the FBCB2 unit in the Multicast network, which is indirect. The IP address has to have the same address that was setup in SISTIM in the UDPLAN network.

**Figure 6-15 Edit the FBCB2 Unit routes in AFATDS**

***Edit theFBCB2 Unit routes in AFATDS Procedure***

Select edit routes Window:
**PRIMARY**
**DIRECT**
**VIA:** LAN
**INTERNET ADDRESS:** 192.8.22.30
**HOSTNAME:** NA
**CTAPS USER ID:** NA

## 6-15 Communications Network setup in AFATDS

This Figure shows the different AFATDS configured networks.

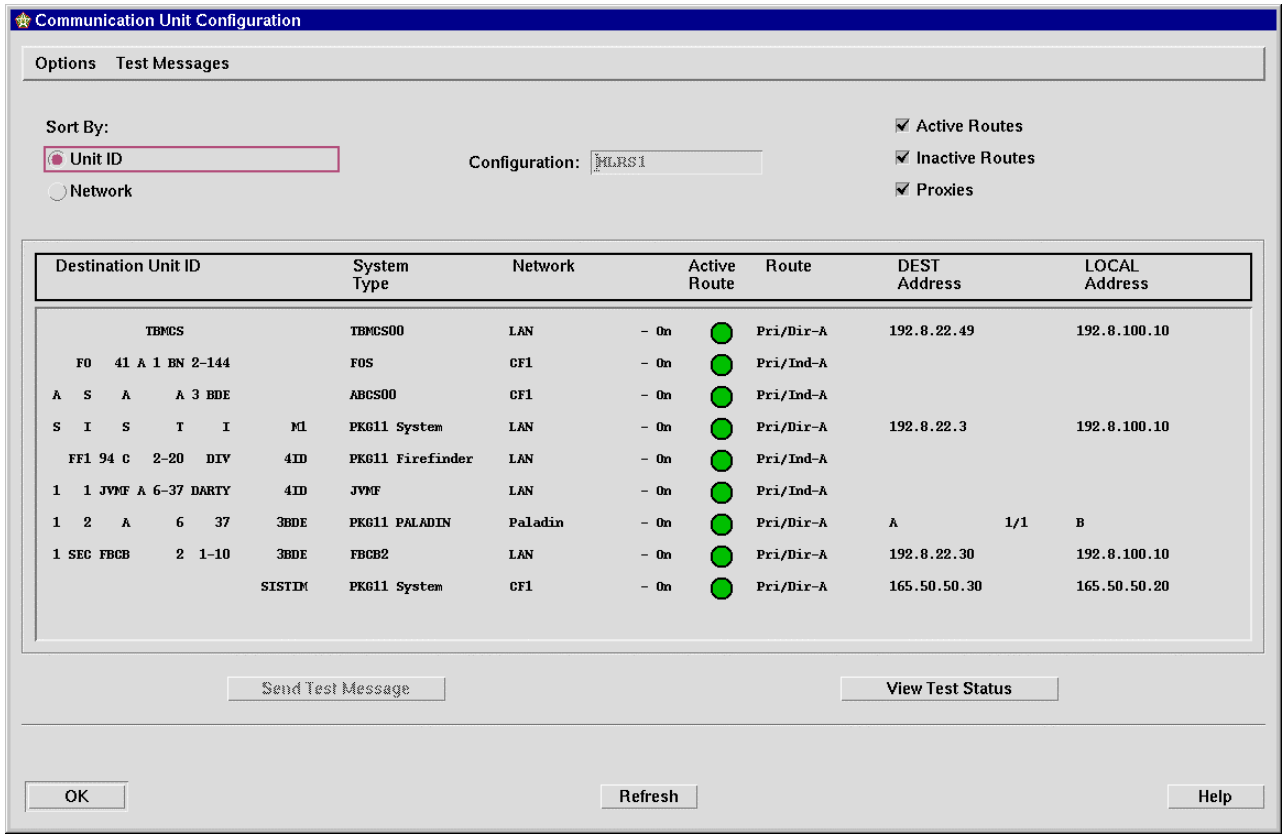



**Figure 6-16 Communication Network setup in AFATDS**

## 6-16. Build IFCS and AFATDS HQ controlling unit Map Symbol

AFATDS HQ controlling the IFCS Map Symbol

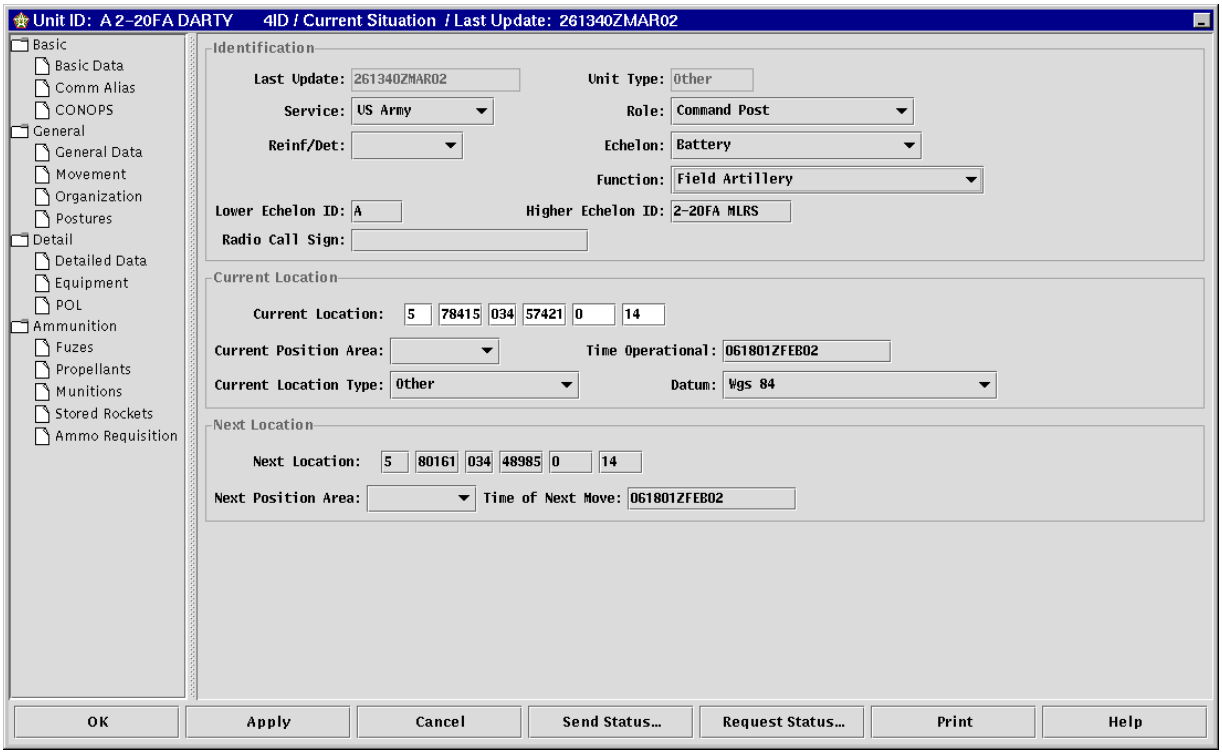



**Figure 6-17 AFATDS Command Post Symbol**

In AFATDS the map symbol must be set up in current situation correctly for Fire Mission processing to flow accurately. The controlling Headquarters unit symbol role, echelon and function must be set to determine valid message interfaces between that unit and other units. This is to communicate with the JVMF IFSC unit; it should not be used with the Army FCS system. The operator must change the controlling HQ unit first and then change the IFCS Map symbol. From the IFCS unit Confirm the settings in the General Data that the command and support of the controlling unit is correct. This will organization the FSC weapon status with the correct IFCSs available for missions. If the FCS weapon status fails to display the IFCS's, edit the JVMF unit General Data; under Command and Support, select a different unit and select OK. Reopen the IFCS unit and select the General Data and in the command and support select AFATDS that is in charge of the IFCS, select OK. Make the changes to the remaining IFCS launchers, and reopen the FCS Weapon Status. It will display the launchers.

***Edit AFATDS controlling the IFSC HQ Unit Procedure***

Edit the unit controlling the IFCS's.
**ROLE:** COMMAND POST
**ECHELON:** BATTERY
**FUNCTION:** FIELD ARTILLERY

### 6-16-1. IFCS Map Symbol

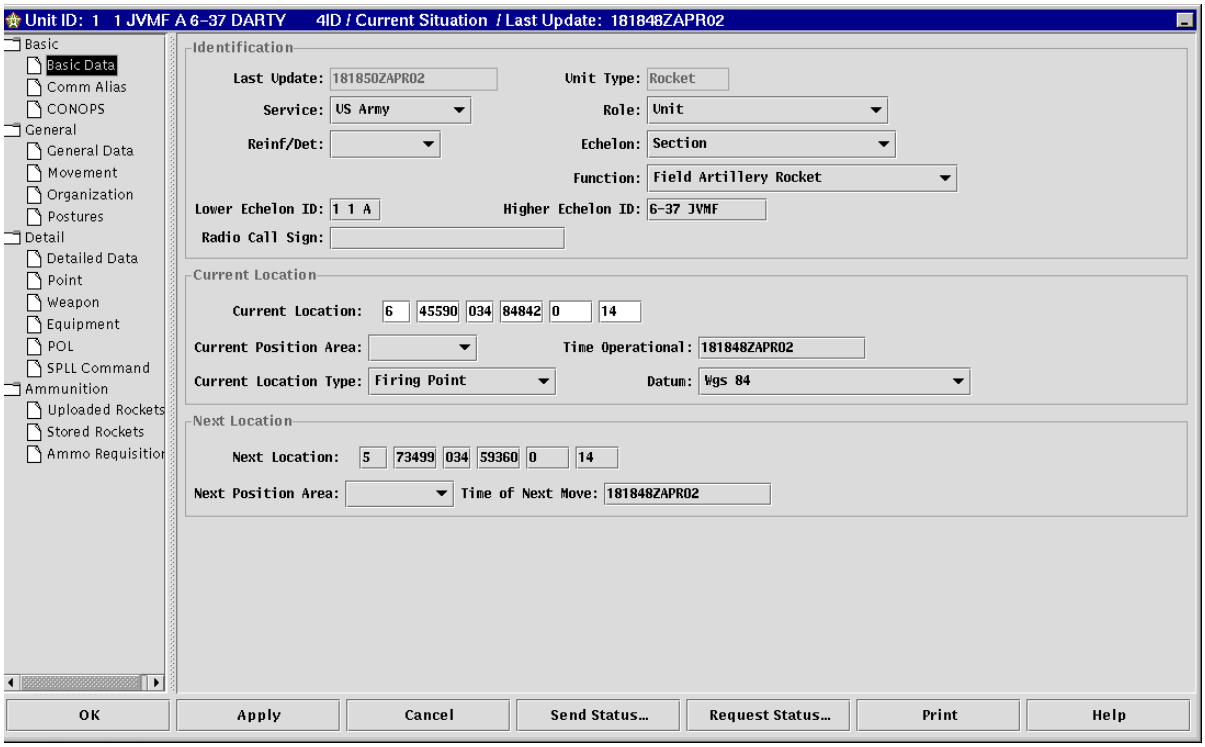



**Figure 6-18 IFCS Unit Symbol**

In AFATDS the map symbol must be set up in current situation correctly for Fire Mission processing to flow accurately. The controlling Headquarters unit symbol role, echelon and function must be set first to determine valid message interfaces between that unit and other units. This is to communicate with the JVMF IFSC unit, it should not be used with the Army FCS system. The operator must change the controlling AFATDS HQ unit first and then change the IFCS Map symbol. From the IFCS unit window Confirm that the General Data of the command and support of the controlling unit is correct. This will set the organization the FSC weapon status with the correct IFCSs available for missions. If the FCS weapon status fails to display the IFCSs, edit the JVMF unit General Data in the command and support select a different unit and select OK. Reopen the IFCS unit and select the General Data and in the command and support select the AFATDS that is in charge of the IFCS. Select OK and Reopen the FCS weapon status it will display the launcher, make the changes to the remaining IFCS launchers and reopen the FCS weapon status. Each IFCS unit must have a associated at list one of each of the following types of geometry's, Firing Point, Hide Point and Rearm Point. This is in order to make the launchers automatically move to the rearm and hide points.

**Edit the IFSC Unit Procedure**

Edit the IFCS:
**ROLE:** UNIT
**ECHELON:** SECTION
**FUNCTION:** FIELD ARTILLERY ROCKET

# CHAPTER 7.
# BUILD A SCENARIO IN SISTIM

## SECTION 1
## BUILD A SCENARIO

Creating a scenario in SISTIM allows for the simulation of FO's and Fire Units as if the actual assets are available to send in target information and shot, splash and rounds complete. SISTIM will create a scenario based on your parameters and the generic capabilities of the simulated sensors you have created. After you create the generic scenario you may access / modify it to better meet the unit training requirements. You may access the Scenario Setup from by clicking on "Setup" on the SISTIM main menu bar and then selecting "Scenario Setup…".

### 7-1. Build a Scenario in SISTIM

This scenario setup screen (Fig 7-2) allows the SISTIM operator to set the configuration parameters in preparation for generating a scenario. The scenario window is divided into major areas.
The first is the Alert area, which prompts the SISTIM operator for incomplete commands.
The second area is the FLOT, Battlefield Setup Area.
The FLOT Center is one point on the map that uses easting/northing (UTM) coordinates. This is used for a starting point in determining where the targets are generated on the battlefield.

**NOTE**

> The only way to enter a FLOT Center location is that there has to be units built (Observer, Firefinder or JSTARS) and there units status, has to be in the "ON" mode. The FLOT Center will not be saved if there are no units built or the units are not in the "ON" mode.

The only way to save the FLOT center is to select Build Target List and select Show Target List or also Add, Replace TOEL or Cancel. From this point onward the FLOT center will be saved when reopening the Scenario setup screen. One way the FLOT center can be changed for each Scenario for certain forward observer in a battalion task force zone is to make only the units (FO's) turned "ON". Then when the operator wants to add another Task Force observer(s), the operator can tailor the targets into his FLOT center and the operator will select add to the TOEL and now have a more realistic battlefield scenario. This instrument can also be used as a time stamp to move potential targets north, south, east, and west to manipulate the battlefield fight.
The Battlefield width and depth is how wide, up to 99 Km's, the operator would like the targets generated on the battlefield. Simulated Units (Figure 7-1) have a maximum range that they will generate targets to. The forward observer PK 11 has the target generator closest to the FLOT with a distance of 4.5 Km. The Air Observer and JSTARS have the target generator with the farthest from the FLOT of up to 99Km.

| Unit Type | Device | Distance From FLOT (Km) |
|---|---|---|
| Forward Observer | FOS | 0.0 - 4.5 |
| Fire Support Team | FOS | 0.0 - 7.5 |
| FIREFINDER Counter-Artillery Section | FF | 10.0 - 50.0 |
| FIREFINDER Counter-Mortar Section | FF | 4.0 - 24.0 |
| Air Observer | ATHS | 0.0 - 99.0 |
| JSTARS | JSTARS | 15.0 - 99.0 |

**Figure 7-1 Units Distance from FLOT**

**Battlefield Orientation (mils)** indicates the direction in which friendly forces are oriented. The value entered here must be between 0 and 6399, with 0 depicting north and 3200 depicting south. If the orientation is reversed either add 3200 if the number is smaller the 3200 or subtract 3200 if the number is greater than 3200. This allows you to establish the area in which your targets will be located. The "FLOT Center" is the midpoint of the side of the rectangular target area closest to the friendly troops. A sensor must be behind the FLOT line for it to be used during Target Generation. Enter a full UTM grid coordinate, including grid zone into the "FLOT Center" field. Enter a value in the "Width" field that meets your requirements. The "Depth" field serves several purposes. If you have long-range sensors, such as JSTARS, you can limit their acquisition by using a depth that is shallower than their capability. The Depth is also used when drawing the Target Map, so a greater depth effectively increases the scale of the Target Map. Enter an appropriate value in the "Depth" field to meet your training requirements. The orientation of the target box is from the perspective of the sensors. Enter an appropriate value in the "Orientation" field.

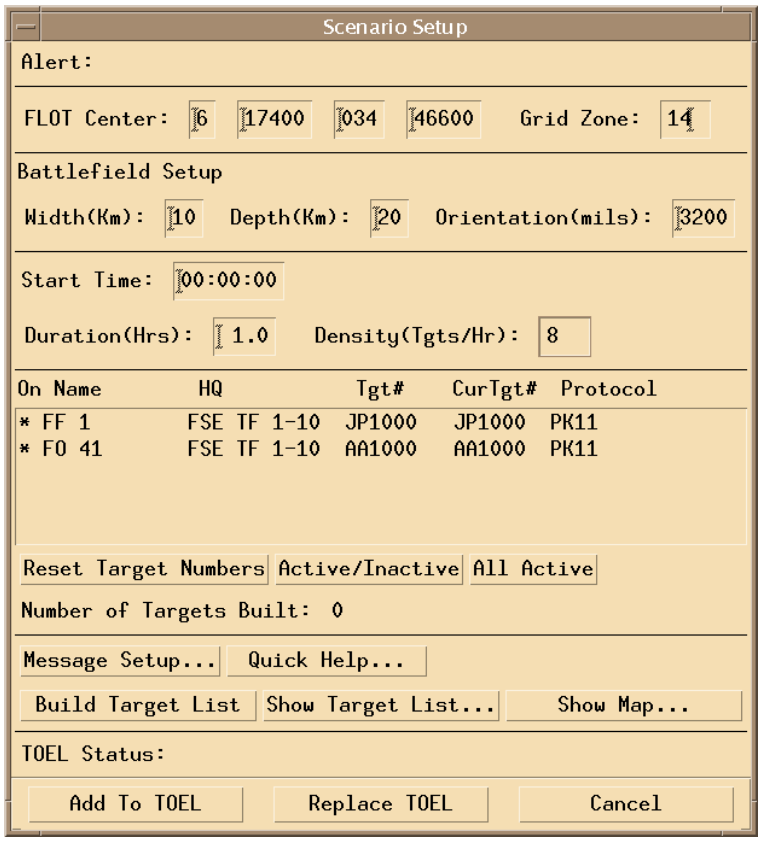



**Figure 7-2 Build a Scenario in SISTIM**

Start Time-Used to set the start time (HH: MM: SS) of the Time Ordered Events List (TOEL) for the current target list. This Time tool has several advantages that the Operator can utilize having certain units generating targets only for certain time blocks in the exercise.
Duration (Hrs) The operator enters the length, in tenth of hours, that the scenario is to last. This value must be between 1 and 99. When making duration over 15 hours the target density should not be over one hundred targets an hour. SISTIM can support up to six thousand targets (fifteen-hour period with 600 targets). There is a way to establish more than six thousand targets with no problem, the operator can link the exercise. When linking exercises the SISTIM program saves memory. When one exercise ends the other exercise starts with no operator intervention. When linking exercises the first exercise will be stopped and the second exercise will be loaded and run automatically.

The units target area is the accessible unit area that will be available to generate targets. The first area in the unit window is the asterisk it tells the operator if that unit is active for building target lists. The name area is the actual unit itself that is simulated. The HQ area is the simulated unit higher headquarters. This area links specific targets to be generated and transmitted to selected AFATDS.

The target number area is the simulated unit target block number. The current target number is the simulated units next targeting number. The protocol area displays the simulated unit and what message protocol type that the unit is assigned.
***Reset Target Numbers*****,** when pressed this button will recycle the target numbers starting with the initial number entered.
***Active/Inactive*****,** this button will change the state of a unit-generating target from Active to Inactive or Inactive to Active.
***All active button*****,** pressing this button will make all units generating targets built in the Scenario Active.
**Number of targets built**, this field will display the number of targets generated in Target List. This field uses the duration and density to come to the calculation of number of targets built.

The **Quick Help button** launches a help document devoted to Scenario Setup only (Fig 7-3). This document is very helpful with pertinent information to assist the operator in creating a new scenario.

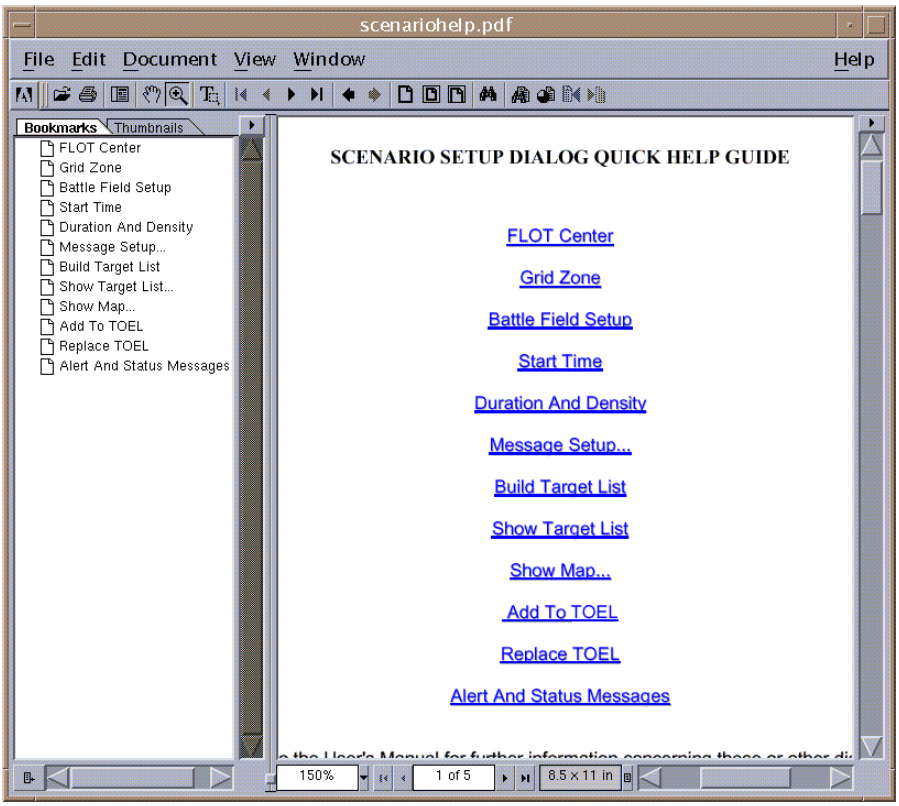



**Figure 7-3 Quick Help**

## 7-2. Message Setup

The next area (Figure 7-4) is the message setup button. Pressing this button launches the Message Setup window. This window allows the user to select/deselect Call For Fire and Target Data messages for both PK11 and JVMF protocols. Each message selection contains a density field that enables the user to select the percentage of each message allocated during target generation. The combined percent values selected must be equal to 100 percent or an error will be generated.

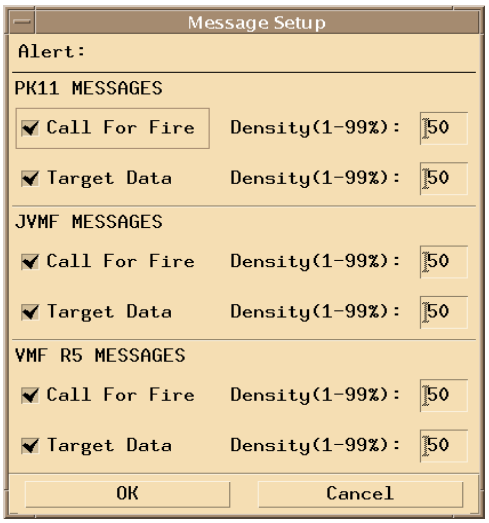



**Figure 7-4 Message Setup**

## 7-3. Build Target List

**Build Target List**, pressing this button automatically generates a new target list (Fig 7-5). After the list is generated a window is displayed showing the target list. Depending on the number of targets being generated may take some time. The "Density" field lets you set the intensity of the scenario. The targets will be evenly distributed between all of the sensors. Enter an appropriate number in the "Density" field. By default, SISTIM will send in all of the targets as fire requests. You can modify this and have a percentage of the targets submitted as intelligence reports. To do this click on "Message Setup…". The Message Setup form lets you set the mix of Calls for Fire and Intelligence inputs. Enter the percentage of each type of input into the appropriate "Density (%)" field. The two numbers must total 100. If you want to revert to all Calls for Fire, either uncheck the Target Data box or click on "Cancel". Set the appropriate values to meet your training requirements and then click on "OK" to close the form.

**The Show Target List button**, allows the operator to view the target list constructed during the automatic scenario generation. When this button is activated, a window is displayed showing the target list. The operator can select a target to edit or move a target by changing the grid.

Target List

| Easting | Northing | Unit Type/Device | Description | Message |
|---|---|---|---|---|
| 6 13250 | 034 42649 | Forward Observer/FOS | Personnel, Patrol | PK11 Call For Fire |
| 6 18250 | 034 33350 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Target Data |
| 6 19150 | 034 44150 | Forward Observer/FOS | Vehicle, Light Wheeled | PK11 Call For Fire |
| 6 13950 | 034 34849 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Call For Fire |
| 6 16850 | 034 43049 | Forward Observer/FOS | Armor, Vehicle | PK11 Call For Fire |
| 6 21350 | 034 28450 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Call For Fire |
| 6 19250 | 034 43650 | Forward Observer/FOS | Armor, Vehicle | PK11 Call For Fire |
| 6 20750 | 034 30550 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Call For Fire |
| 6 18550 | 034 43750 | Forward Observer/FOS | Armor, Vehicle | PK11 Call For Fire |
| 6 14750 | 034 30249 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Call For Fire |
| 6 22350 | 034 46550 | Forward Observer/FOS | Personnel, Patrol | PK11 Target Data |
| 6 19350 | 034 34250 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Target Data |
| 6 16250 | 034 43749 | Forward Observer/FOS | Armor, Vehicle | PK11 Target Data |
| 6 18650 | 034 28650 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Target Data |
| 6 12850 | 034 43049 | Forward Observer/FOS | Mortar, Unknown | PK11 Call For Fire |
| 6 18050 | 034 36150 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Target Data |
| 6 19850 | 034 42950 | Forward Observer/FOS | Artillery, Unknown | PK11 Target Data |
| 6 14650 | 034 35249 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Call For Fire |
| 6 16250 | 034 44149 | Forward Observer/FOS | Vehicle, Light Wheeled | PK11 Call For Fire |
| 6 19550 | 034 35150 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Call For Fire |
| 6 16050 | 034 42349 | Forward Observer/FOS | Personnel, Infantry | PK11 Target Data |
| 6 16250 | 034 36049 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Call For Fire |
| 6 17550 | 034 43050 | Forward Observer/FOS | Mortar, Unknown | PK11 Call For Fire |
| 6 15250 | 034 28549 | FIREFINDER Counter-Arty/FF | Artillery, Medium | PK11 Target Data |
| 6 21750 | 034 45150 | Forward Observer/FOS | Artillery, Medium | PK11 Target Data |

OK | Show Map | New | Edit | Delete | Copy | Print List

**Figure 7-5 Target List**

Each time you want to build a target list you have to click on "Build Target List" This will build a new target list based on the construction parameters you have entered. You can view the Targets as a list, on a map or a combination of both. Normally you should use the combination. To do that you click on "Show Target List…". This will create the Target List form. This shows all of the information for the target. If you click on "Show Map" the graphical map will be created as a child of the Target List. When you do this each target you place your cursor over will highlight the target in the Target List and scroll the list so the target is at the top of the form. To select a target, click on it. The selected target turns red. You can Edit, Copy, or Delete the selected target by clicking the appropriate button. You can change the target's location by either editing it or dragging it. To drag a selected target, click and hold on it with the middle button and then drop it where you want it. The Target List will immediately update to show you the new location. When you are satisfied with your changes, click "OK" on the Target Map

form and on the Target List form to save your changes. Now that you have created a Target List that meets your needs you need to replace your existing TOEL (blank or previous creation) with this one. Click on "Replace TOEL" to implement your changes, click on "Cancel" to discard them. Either button click will close the Scenario Setup form.

The Show Map button allows the operator to view the target list graphically in a window (Fig 7-6). The FLOT orientation, width, and depth using the parameters previously entered by the operator are displayed.

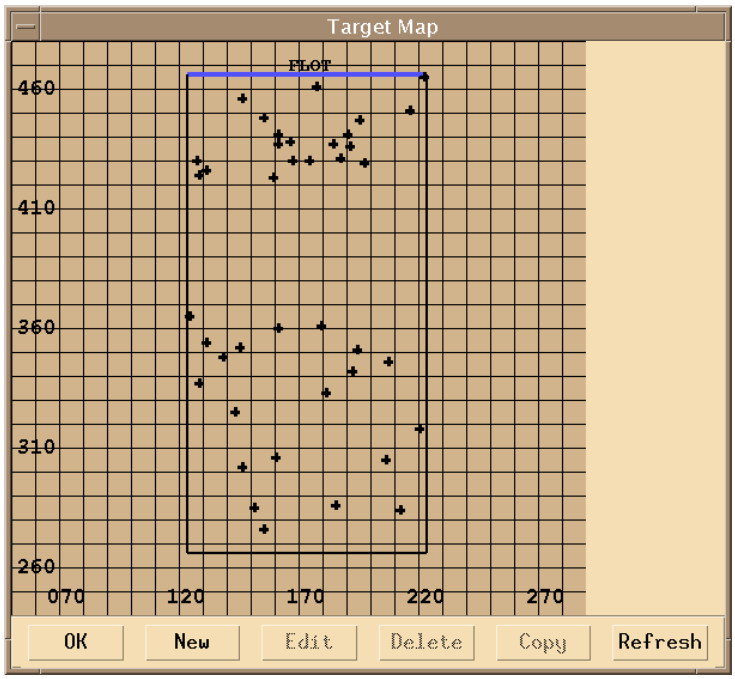



**Figure 7-6 Target Map**

To move a target click and hold the middle mouse/trackball button on the desired target. Move the target to the desired location on the map and release the mouse trackball button.

## 7-4. Edit a Target

To edit a target, double clicking on a target will open the Target Editor window (Fig 7-7). This window allows the operator to view TGT type/subtype and location. The operator can change the target location and modify the target in the database.

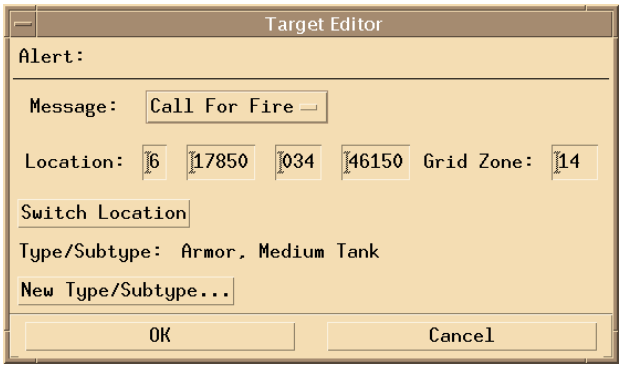



**Figure 7-7 Edit a Target**

The “**Add to**” **TOEL button**, adds new targets to the existing TOEL. This tool is useful when the operator is managing different unit’s targets. The targets will be added to the existing TOEL with the time that was specified above in the start time window.
The **Replace TOEL button**, replaces the current TOEL with a newly implemented TOEL. Information created in the current TOEL will be overwritten with information from the new TOEL.

## 7-5. Configure OPFAC Responses Times

This window (Fig 7-8) allows the operator to view and modify the time that SISTIM will delay a transmission before sending out an OPFAC generated response for the events listed on the window. This window is broken down into three areas. The first area contains response times for PK11/JVMF, e.g., Paladins, GDU. Response times for some messages include Shot, Splash and Rounds Complete to name a few. Response times for IFCS originated messages include MFR and Move Time. The second is the USMTF units that include air units like TBMCS and CTAPS. The ASR Approval radio buttons allow the operator to specify whether ASR missions with odd, even or all request numbers will be approved. The third area is GDU/MCA unit that includes messages as shot, splash, and rounds complete to name a few. When the operator clicks inside any parameter field, a more detailed description of that message will be displayed at the bottom of the OPFAC Response screen.

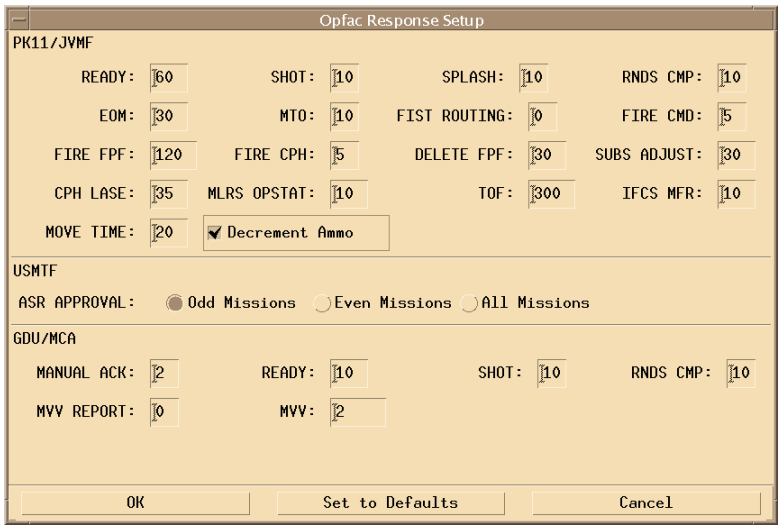



**Figure 7-8 OPFAC Response Times**

# CHAPTER 8.
# RUN/EDIT THE EXERCISE CONTROLLER

## SECTION 1
## EXERCISE CONTROLLER

### 8-1. View Run/Edit the Exercise Controller

Primary selecting either Add or Replace to TOEL from the Scenario Menu window you have the option of editing the event list to add new messages or make changes. Another option is running the scenario that was just created. When selecting the run scenario option the SPTCIMS/TCIMS become available and the exercise controller is ready to be started.

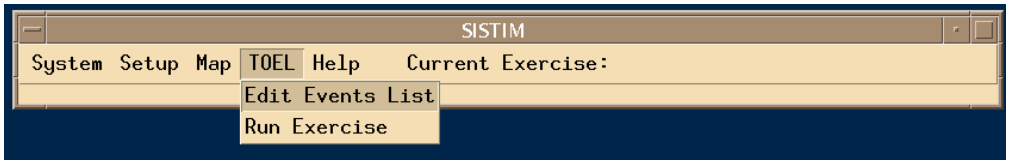



**Figure 8-1 Run / Edit the Exercise Controller**

### 8-2. Edit the Event list

This window (Fig 8-2) allows the operator to edit the event list that has been generated for the scenario. This window also allows the operator to add messages from the new button.
The Time/Net/Originator/Destination/Message shows a list of the messages that have been generated for the current scenario. The list shows the scenario time that the message will be transmitted, on which net it will be transmitted, the originating unit of the message, the destination unit, and a brief synopsis of the message type and message name.

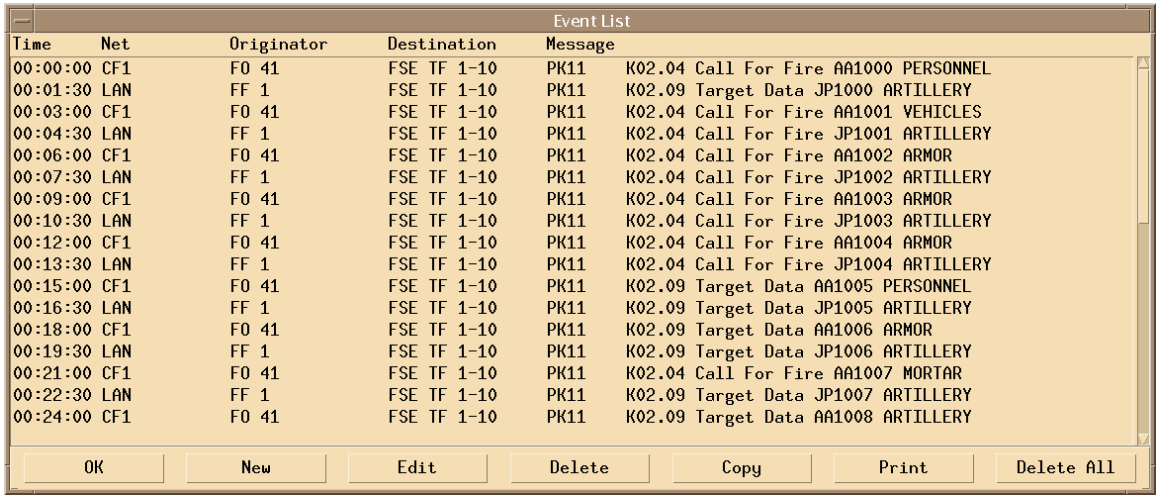



**Figure 8-2 Edit the Event list**

The **New button,** allows the operator to create new events for the scenario. When this button is activated a window is displayed that allows the operator to choose the protocol for the new message.

The **Edit button,** allows the operator to edit an event that currently exists in the Event List

**NOTE**

A message must be highlighted before this button can be activated.

When this button is activated, the appropriate window is displayed depending on the message type and protocol. A double click action defaults to this Edit operation.
The **Delete button,** deletes the highlighted event from the Event List (Note: a message must be highlighted before this button can be activated). When the message has been deleted, the event is removed from the Event List.
The **Copy button,** allows the operator to copy an event that currently exists in the Event List when this button is activated, a copy of the highlighted message is added to the Event List. The copy of the message is added to the Event List in the position immediately following the highlighted message.
The **Delete All button**, allows the operator to remove all of the events from the current Event List for the current exercise. When this button is selected the operator is presented with the following confirmation window (Fig 8-3).

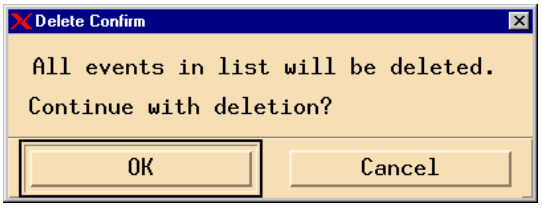



**Figure 8-3 Delete Confirm button**

## 8-3. Package 11 Call for Fire

This section is designed to give an example of how to setup a PK11 message. (Fig 8-4, 8-5, 8-6, 8-7, 8-8 8-9) Common fields are described below, further information on valid data can be obtained from the PK11 Message Specification or by activating the help feature inside each field. Most PK11 messages continue beyond the visible window, therefore be sure to use the scroll bar for additional fields. The **Message Set Quick Link** is a feature on the left side of all message windows. These screens can be resized by dragging a box in the corner of the window. When selecting a link it will take the operator to that field in the message. The PK11 interface will display an error message if the operator attempts to activate the “OK” button with an invalid message.
The **Xmit Time** field shows the time (hh:mm:ss format) at which the message will be transmitted to the destination unit.
The **Origin field** allows the operator to select the transmitting unit for the message. By selecting the “Select” button the Select Units window below (Fig 8-4) is displayed that prompts the operator to select from a list of available units.

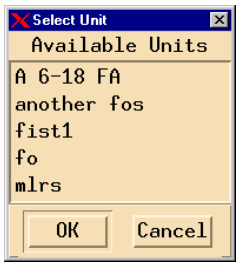



**Figure 8-4 Select Units**

The **Destinations field** allows the operator to select the unit/units that will receive the message. By selecting the “Add” button the Select Units window below is displayed that prompts the operator to select from a list of available units. Selecting the “Delete” button will remove a highlighted unit from the destination list.
The **Message Case PK11** (Fig 8-5) message specification contains many different cases, which allows one message to accomplish several different meanings. Therefore SISTIM has included the Message Case feature to assist an operator in creating a message based on one specific case. By choosing the desired case, SISTIM will assist the operator by specifying the fields that should and should not be used.

The Option List Example (Fig 8-6) has several fields in PK11 messages, which contain pull down buttons. Selecting the button will activate a window that will allow the operator to choose a selection from a list.(Fig 9-6) In this type of window selection once the operator mouse clicks on the desired choice the window closes and that value is entered into the field.

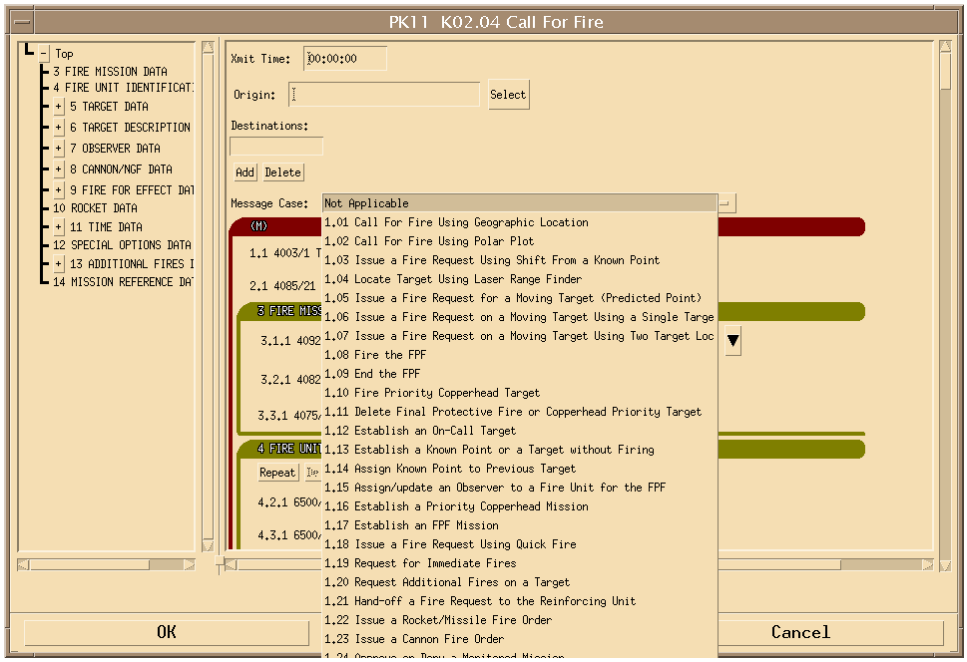



**Figure 8-5 Option List Example**

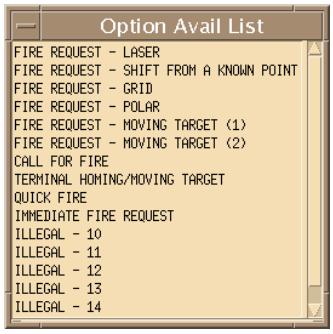



**Figure 8-6 Option List pull down buttons**

The **Coordinate Example** on several PK11 messages contains a location or coordinate field. In order to assist in entering location, the operator can activate the LAT/LONG Setup window by selecting “BUTTON 3” and clicking on the location field.

In order to assist the operator with entering proper data into messages the message templates have a help interface. By activating “SHIFT + BUTTON 3” on a field, a window will be displayed which shows the valid data for that field (Fig 8-7).

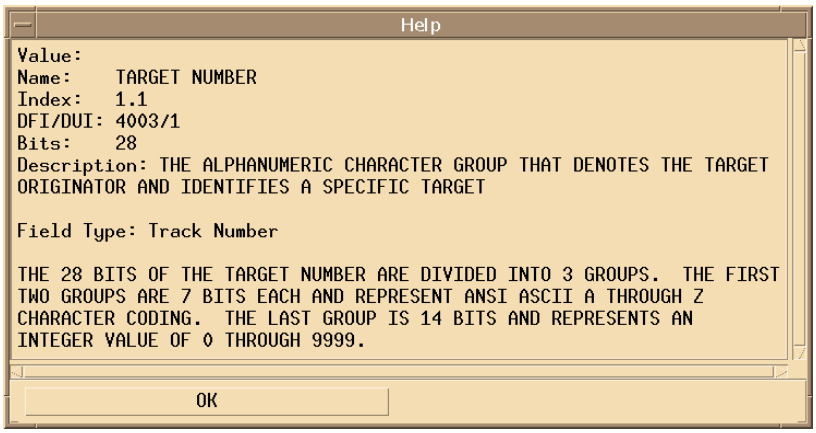



**Figure 8-7 Help Window**

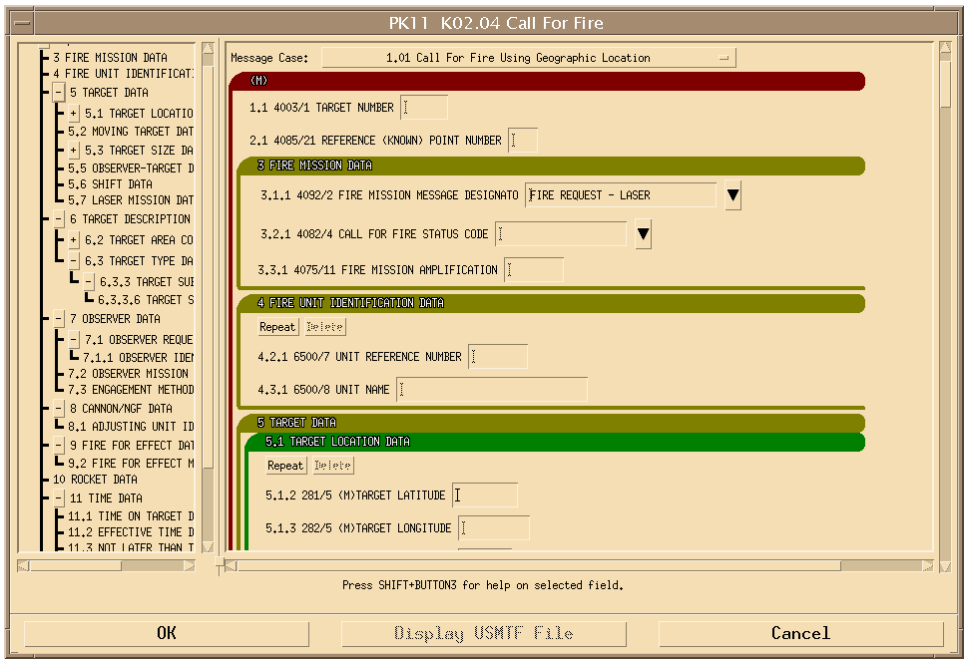



**Figure 8-8 Package 11 Call for Fire**

## 8-4. The Exercise Controller

This window (Fig 8-9) allows the operator to manipulate an exercise that is in process. From this window the operator may start or stop the execution of the exercise, view/edit outgoing messages, view incoming messages, check on failed transmissions, load/reload, and generally control the operation of the exercise.

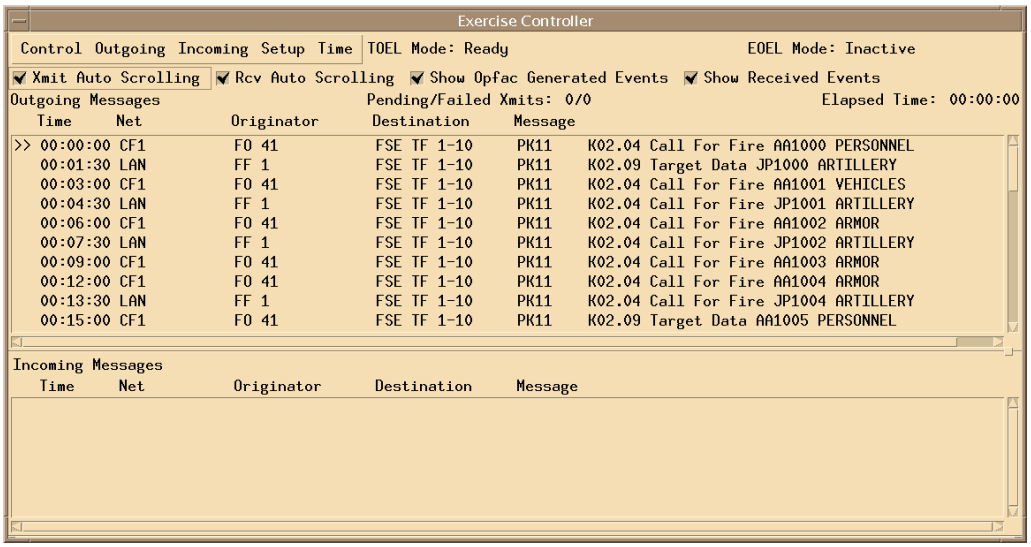



**Figure 8-9 The Exercise Controller**

SISTIM can also be run from a blank scenario with no sensors established. It is used with the units of the TBMCS00, BCS, FDS, GDU's and Paladins. All that is required in this configuration is that the higher headquarters is established for the GDU's, Paladins and the communication networks are configured to support these units.
The **Exercise Controller Window** is broken down onto four major areas.
The first area is the **Menu Bar**, which is broken down into five additional areas. They are the Control, Outgoing, Incoming, Setup and Time.
The Second area is the **Action Buttons/Menu**. These buttons/Menus show the operator the Status of the exercise. They are the Mode, Xmit Auto Scrolling, Rcv Auto Scrolling, Show Opfac Generated Events, Show Received Events, Failed Xmits, Elapsed Time and Event Time.
The Third area is the **Outgoing Messages Area**. This area is broke down into Time, Net, Originator, Destination and Message. The Scenario generator originally initiated these messages but the operator can add or delete messages from this window.
The Fourth area is the **Incoming Messages Area**. This area is broke down into Time, Net, Originator, Destination and Message. These Incoming messages are received from units that were built in the communication networks.
Event changes made with the Exercise Controller are kept in the TOEL until either a new exercise is loaded, or when the operator exits SISTIM. Although when the exercise is saved, changes made become permanent, except OPFAC generated events that are never saved.

## 8-5. Control Menu Window

The **Start button option** begins execution of the exercise (Fig 8-10). Once an exercise has begun, it can be stopped at any time. This option transitions the TOEL mode from ready to run.
The **Stop button option** stops the execution of the exercise. Once an exercise has been stopped the operator can select "Start" to re-start the exercise from the point at which it was stopped. This option transitions from Run to Ready mode.
The **Close button option** will close the Exercise Controller window. The exercise must be stopped to close the Exercise Controller window. This option returns SISTIM to configure mode.
**TOEL/EOEL**, this option displays a pull-down menu that displays the options the operator has when manipulating the TOEL and EOEL.
**Start TOEL And EOEL,** this option allows the operator to put both the TOEL and EOEL into running mode.
**Start EOEL,** this option allows the operator to put only the EOEL into running mode.

**Abort Run EOEL,** this option allows the operator to put the EOEL into Inactive mode without disrupting the TOEL.

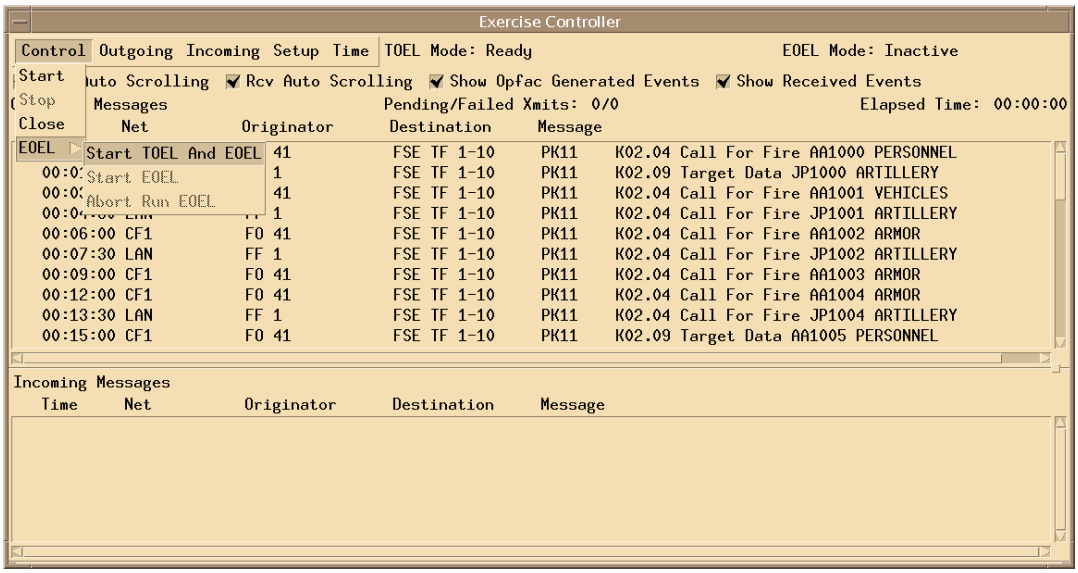



**Figure 8-10 Control Menu Window**

## 8-6. Outgoing Menu Window

The Edit option gives the operator the ability to edit any event in the Outgoing Messages list

**NOTE**

An event must be highlighted before this option can be activated.

When this option is selected (Fig 8-11), the message template for the event highlighted will be displayed. If the transmit time for the event occurs while the message is being edited, the message will be transmitted as soon as the editing is complete. Double clicking the message invokes the Edit function.

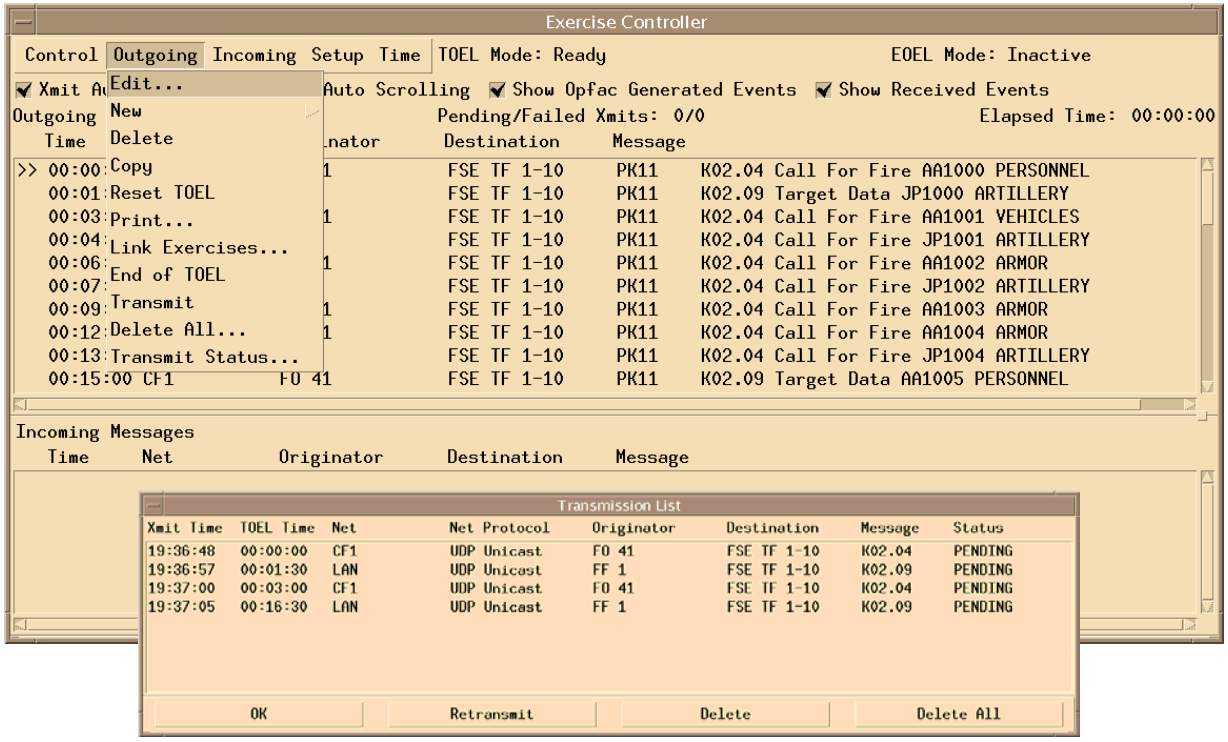



**Figure 8-11 Outgoing Menu Window**

The **New option,** allows the operator to add new message type into the Outgoing Messages list. A cascade menu appears for the operator to select a PK11, JVMF, or USMTF type. Selecting PK11, the PK11 Available Message List window is displayed. Selecting JVMF, the JVMF Available Message List window is displayed. Selecting USMTF, the USMTF Available Message List window is displayed. Selecting GDU/MCA, the GDU/MCA Available Message List window is displayed. Selecting Generic, the Generic Available Message List Window is displayed.
The **Delete option,** allows the operator to delete any event in the Outgoing Messages list (Note: an event must be highlighted before this option can be activated).
The **Copy option** copies a highlighted event and places it in the list immediately following the selected event.
The **Reset TOEL**, option allows the operator to reset the TOEL to the beginning at Elapse Time: 00:00:00.
The **Print option,** allows the operator to print the highlighted event.
The **Link Exercises option**, allows the operator to link two or more exercises together. When exercises are linked, the exercises will run one after the other, to simulate multi-phase exercises. Linking exercises allows the operator to begin execution of a second exercise as soon as the first has completed. If the operator creates multiple exercises with the same units in different locations and then links the exercises, movement of the units can be simulated.
The **End of TOEL option,** allows the operator to go to the end of TOEL.
The **Transmit option** transmits a highlighted message from the Outgoing Message List.
The **Delete All option**, will delete all events in the event list.
The **Transmit Status option,** allows the operator to view messages that have failed transmission. When this option is selected, the Transmission List window is displayed. It notifies the operator of the cause of failure and offers the opportunity to retransmit the message.
**Time/Net/Originator/Destination/Message/Failure** this is a list of messages that failed transmission during the execution of the currently running TOEL. This list will be empty if all the messages have transmitted successfully.

Event Type is the events that originate from the EOEL. They are denoted by *E and events that are prompted by Opfac Logic are denoted by *O on the Exercise Controller window in the Outgoing message section.

## 8-7. Incoming Menu Window

The View option (Fig 8-12) allows the operator to view a highlighted message from the Incoming Message List.

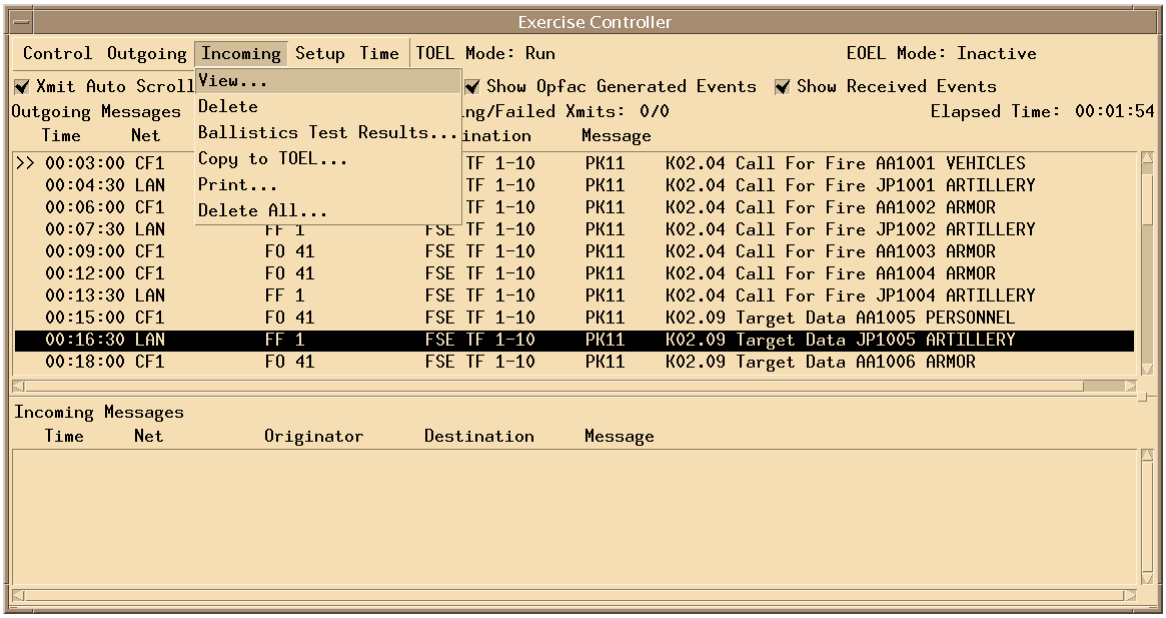



**Figure 8-12 Incoming Menu Window**

These messages are view only. Double clicking an incoming message invokes this function.
The **Ballistics Test Results option,** will display the results of the current Ballistics test. This only works when the controller is in Ballistics test mode only.
The **Copy to TOEL option,** allows the operator to copy a highlighted incoming message to TOEL, by first bringing up the appropriate Message Template and allowing the operator to choose the origin and destination of the new message.
The **Print option,** allows the operator to print incoming events.
The **Delete All option,** clears all messages from the Incoming Messages List.

## 8-8. Setup Menu Window

The **Networks option** (Fig 8-13), allows the operator to edit an existing network. This feature does not allow the operator to create, copy, delete, or print a highlighted network.
If the networks display ENABLE you are now ready to save your configuration, and start your exercise. However, if any Networks fail to enable you must exit the TOEL and reconfigure those Nets, or exit SISTIM and run SISTIM again. See Chapter 14 Troubleshooting SISTIM.
The **Units option**, allows the operator to edit an existing unit. This feature does not allow the operator to create, copy, delete or print a highlighted unit. It does permit the operator to Ping a unit. A ping is a basic internet (wire) program that lets you verify that a particular IP address exists and can accept requests and receive a confirmation response.
EOELs selecting this option will display a window, which allows the operator to setup an EOEL list

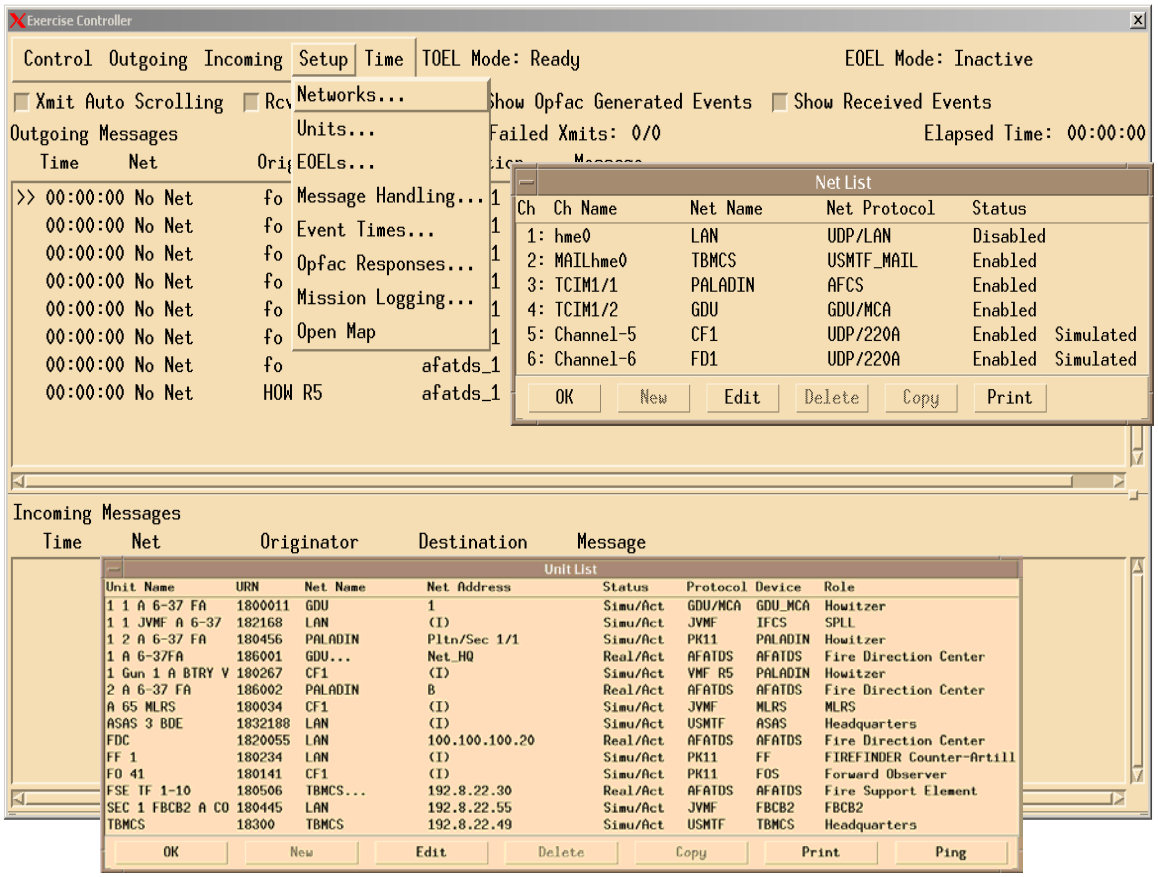



**Figure 8-13 Setup Menu Window**

## 8-8-1 Ping Function

This will ping (fig's 8-13-1, 8-13-2) the unit that is highlighted and on what selected net the transmission (ping) will be sent. The Ping option will only work on UDP220A and UDP220C networks. If the unit is on an UDP/LAN or USMTF_Mail you must use a unix xterm to ping. Reference Chapter 14 Troubleshooting SISTIM, SISTIM Ping feature.

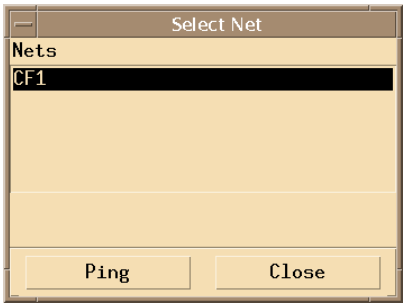



**Figure 8-13-1 Select Net to ping**

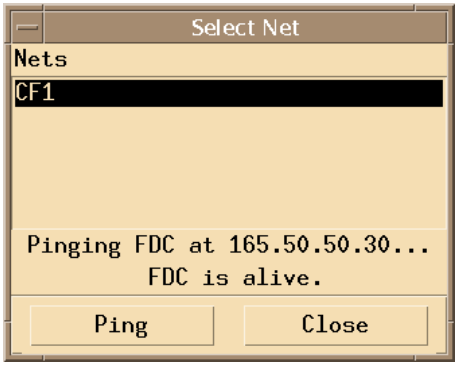



**Figure 8-13-1 Successful Ping from Selected Unit**

## 8-9 Setup Menu Window

The **Event Times option**, displays the Event Times window. This option is not available when SISTIM is in run mode.

## 8-10 Message Handling

The Message Handling option (Fig 8-14) displays the Message Handling Setup window.

**Figure 8-14 Message Handling Setup**

The message handling setup window allows the operator to select how to handle message validation and viewing for both incoming and outgoing messages, of all formats.
The Log 47001B Headers, if selected the command 47001B headers will be written to the message log.
The **Outgoing Messages Hide/Delete Sent Opfac Generated Events**, if selected commands those messages generated by SISTIM for simulated units not to be displayed on the Outgoing TOEL.

The **Incoming Messages Delete Incoming Events**, when selected commands Incoming Events not to be displayed on the TOEL.
The **PK11 Validate Conditions Cases,** these selections, for both incoming and outgoing messages, allow the operator to choose whether to check messages against the PK11 conditions and cases database. Often this can be helpful to assist the operator to ensure a correct message.
The **JVMF Validate Conditions/Cases,** these selections, for both incoming and outgoing messages, allow the operator to choose whether to check messages against the JVMF conditions and cases database. This can be helpful to assist the operator to ensure a correct message.
The **USMTF Validate Conditions,** this selection for both incoming and outgoing messages allows the operator to choose whether to check messages against the USMTF conditions database. Often this can be helpful to assist the operator to ensure a correct message.
The **USMTF View as Text,** this selection allows the operator to view the USMTF Messages in the formatted text only. This is often helpful to quickly view incoming messages and to allow pasting existing text messages for outgoing use.
The **USMTF Prompt for Screen Mode.** This selection allows the operator to choose whether to view a message as text when each message is opened. Each time a USMTF message is opened the following window is displayed. (Although the operator may choose to view USMTF messages in "Screen Mode", SISTIM by default will not display any message over 5000 bytes in screen mode. The message can still be parsed for correctness.)
The **Max Parse Size**, on some occasions SISTIM may receive a very large message, which can sometimes take a lot of time to parse. Therefore SISTIM has included this feature to allow the operator to specify the largest message SISTIM will parse. Any message larger than this size received by SISTIM will not be parsed.
The **Display GDU Requests** selection allows the operator to choose whether to display GDU Requests received from AFATDS. It is often a good idea to turn off this selection since AFATDS sends Requests 1 every 2 to 3 seconds, approximately.
The **Display MCA Commands** this selection allows the operator to choose whether to display MCA Commands received from AFATDS.

## 8-11. OPFAC Responses

The OPFAC Responses window (Fig 8-15) allows the operator to view and modify the time in seconds that SISTIM will delay a transmission before sending out an OPFAC generated response for the events listed on the window.

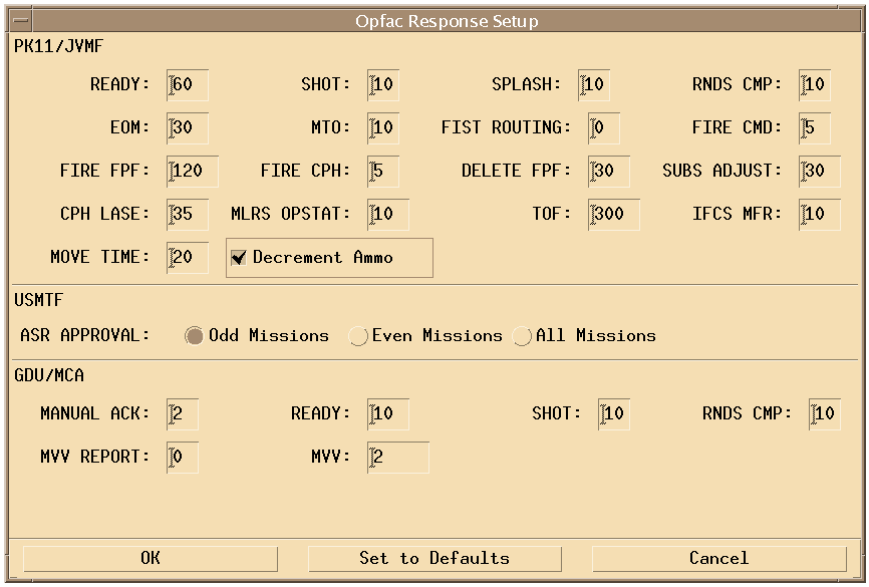



**Figure 8-15 Opfac Responses**

This window is divided into three areas.
The first is area is the **PK11/JVMF**, this area includes Paladins units with some messages i.e. shot, splash and rounds complete. This also includes IFCS messages i.e. IFCS MFR and Move Time.
The second is the **USMTF units** that include air units like TBMCS and CTAPS. The messages that are included are Air Support Request and Request Status Tasking to name a few. The ASR Approval radio buttons allow the operator to specify whether ASR missions with odd, even or all request numbers will be approved.
The third area is **GDU/MCA unit**, that includes messages as shot, splash, and rounds complete to name a few. When the operator clicks inside of any parameter field a more detailed description of that message will be displayed at the bottom of the Opfac Response screen.

## 8-12. Mission Logging

This window (Fig 8-16) allows the operator to log to a file all the messages generated during Opfac Logic. Once the messages are logged they may then be sorted by various unique characteristics.

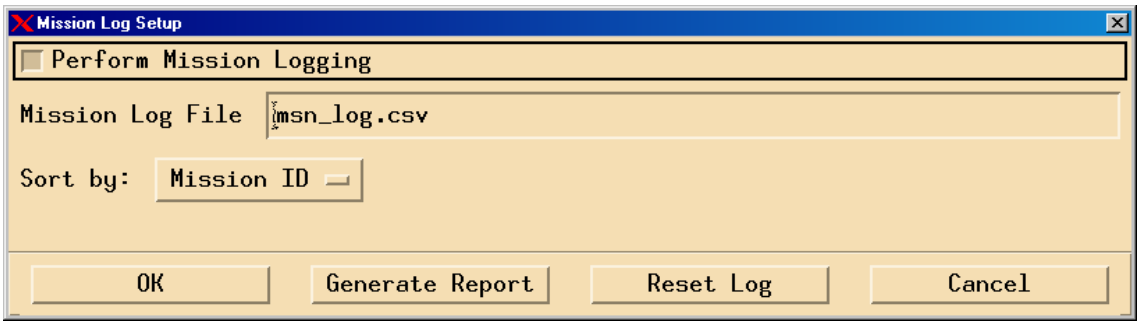



**Figure 8-16 Mission Logging Setup**

**Perform Mission Logging** this button allows the operator to turn Mission Logging On/Off.
**Mission Log File** this field allows the operator to specify a Log Name.
**Sort by** this pull-down allows the operator to select a method of sorting. The options are Mission ID, Source Unit, Dest Unit, Real Time, and TOEL Time.
**OK** this button saves the Mission Logging Setup window setting and closes the window.
**Generate Report** this button allows the operator to select to either Print directly to a file or printer or preview the log generated.
**Reset Log** this button allows the operator to reset or clear the Message Log.
**Cancel** this button closes the window without saving any changes.

## 8-13 Configure Mission Logging Times

**Mission Logging** selecting this option displays the window, which allows the operator to track all messages generated by the opfac logic during the mission.

Preview Dialog

| Real Time | TOEL Time | Source | Dest | Msn ID | Status |
|---|---|---|---|---|---|
| 13:00:44 | 00:02:49 | DA OPS 101ST | COLT01 1BDE 101 | WC2790 | FO received MTO |
| 13:00:41 | 00:02:56 | 3 JVMF MLRS | DA OPS 101ST | WC2790 | IFCS sending RL Opstat, MISSION FIRED REPORT |
| 13:00:41 | 00:02:46 | 3 JVMF MLRS | DA OPS 101ST | WC2790 | IFCS sending RL Opstat, WILL COMPLY |
| 13:00:41 | 00:02:46 | DA OPS 101ST | 3 JVMF MLRS | WC2790 | IFCS received RL Order FFE |
| 13:00:35 | 00:02:40 | COLT01 1BDE 101 | DA OPS 101ST | WC2790 | FO sending CFF |
| 13:05:38 | 00:07:43 | DA OPS 101ST | GUN 2 | WC2791 | Paladin received EOM |
| 13:05:38 | 00:07:43 | DA OPS 101ST | GUN 1 | WC2791 | Paladin received EOM |
| 13:05:29 | 00:07:38 | COLT01 1BDE 101 | DA OPS 101ST | WC2791 | FO sending EOM |
| 13:05:29 | 00:07:33 | DA OPS 101ST | COLT01 1BDE 101 | WC2791 | FO received Rounds Complete command |
| 13:04:46 | 00:07:10 | GUN 3 | DA OPS 101ST | WC2791 | Paladin sending Rounds Complete |
| 13:04:46 | 00:07:05 | GUN 3 | DA OPS 101ST | WC2791 | Paladin sending Splash |
| 13:05:38 | 00:07:43 | DA OPS 101ST | GUN 3 | WC2791 | Paladin received EOM |
| 13:04:36 | 00:06:40 | COLT01 1BDE 101 | DA OPS 101ST | WC2791 | FO sending CFF |
| 13:04:45 | 00:06:50 | DA OPS 101ST | COLT01 1BDE 101 | WC2791 | FO received MTO |
| 13:04:45 | 00:06:50 | DA OPS 101ST | GUN 1 | WC2791 | Paladin received How Mission FFE |
| 13:04:45 | 00:07:00 | GUN 1 | DA OPS 101ST | WC2791 | Paladin sending MTO |
| 13:04:45 | 00:07:00 | GUN 1 | DA OPS 101ST | WC2791 | Paladin sending Shot |
| 13:04:45 | 00:07:05 | GUN 1 | DA OPS 101ST | WC2791 | Paladin sending Splash |
| 13:04:45 | 00:07:10 | GUN 1 | DA OPS 101ST | WC2791 | Paladin sending Rounds Complete |
| 13:04:45 | 00:06:50 | DA OPS 101ST | GUN 2 | WC2791 | Paladin received How Mission FFE |
| 13:04:45 | 00:07:00 | GUN 2 | DA OPS 101ST | WC2791 | Paladin sending MTO |
| 13:04:45 | 00:07:00 | GUN 2 | DA OPS 101ST | WC2791 | Paladin sending Shot |
| 13:05:21 | 00:07:25 | DA OPS 101ST | COLT01 1BDE 101 | WC2791 | FO received Splash command |
| 13:04:45 | 00:07:05 | GUN 2 | DA OPS 101ST | WC2791 | Paladin sending Splash |
| 13:05:02 | 00:07:06 | DA OPS 101ST | COLT01 1BDE 101 | WC2791 | FO received Shot command |
| 13:04:46 | 00:07:00 | GUN 3 | DA OPS 101ST | WC2791 | Paladin sending Shot |
| 13:04:46 | 00:07:00 | GUN 3 | DA OPS 101ST | WC2791 | Paladin sending MTO |
| 13:04:45 | 00:06:50 | DA OPS 101ST | GUN 3 | WC2791 | Paladin received How Mission FFE |
| 13:04:45 | 00:07:10 | GUN 2 | DA OPS 101ST | WC2791 | Paladin sending Rounds Complete |
| 13:00:09 | 00:02:19 | COLT02 1BDE 101 | DA OPS 101ST | WC2840 | FO sending EOM |
| 13:00:18 | 00:02:23 | DA OPS 101ST | GUN 1 | WC2840 | Paladin received EOM |
| 13:00:18 | 00:02:23 | DA OPS 101ST | GUN 2 | WC2840 | Paladin received EOM |
| 13:00:18 | 00:02:23 | DA OPS 101ST | GUN 3 | WC2840 | Paladin received EOM |
| 12:59:26 | 00:01:40 | GUN 1 | DA OPS 101ST | WC2840 | Paladin sending Shot |
| 12:59:26 | 00:01:40 | GUN 1 | DA OPS 101ST | WC2840 | Paladin sending MTO |
| 13:00:09 | 00:02:14 | DA OPS 101ST | COLT02 1BDE 101 | WC2840 | FO received Rounds Complete command |
| 12:59:25 | 00:01:30 | DA OPS 101ST | COLT02 1BDE 101 | WC2840 | FO received MTO |
| 12:59:16 | 00:01:21 | COLT02 1BDE 101 | DA OPS 101ST | WC2840 | FO sending CFF |
| 12:59:54 | 00:01:58 | DA OPS 101ST | COLT02 1BDE 101 | WC2840 | FO received Splash command |
| 12:59:42 | 00:01:47 | DA OPS 101ST | COLT02 1BDE 101 | WC2840 | FO received Shot command |
| 12:59:26 | 00:01:30 | DA OPS 101ST | GUN 1 | WC2840 | Paladin received How Mission FFE |
| 12:59:26 | 00:01:50 | GUN 3 | DA OPS 101ST | WC2840 | Paladin sending Rounds Complete |
| 12:59:26 | 00:01:45 | GUN 3 | DA OPS 101ST | WC2840 | Paladin sending Splash |
| 12:59:26 | 00:01:40 | GUN 3 | DA OPS 101ST | WC2840 | Paladin sending Shot |
| 12:59:26 | 00:01:40 | GUN 3 | DA OPS 101ST | WC2840 | Paladin sending MTO |
| 12:59:26 | 00:01:30 | DA OPS 101ST | GUN 3 | WC2840 | Paladin received How Mission FFE |
| 12:59:26 | 00:01:50 | GUN 2 | DA OPS 101ST | WC2840 | Paladin sending Rounds Complete |
| 12:59:26 | 00:01:45 | GUN 2 | DA OPS 101ST | WC2840 | Paladin sending Splash |
| 12:59:26 | 00:01:40 | GUN 2 | DA OPS 101ST | WC2840 | Paladin sending Shot |
| 12:59:26 | 00:01:40 | GUN 2 | DA OPS 101ST | WC2840 | Paladin sending MTO |
| 12:59:26 | 00:01:30 | DA OPS 101ST | GUN 2 | WC2840 | Paladin received How Mission FFE |
| 12:59:26 | 00:01:50 | GUN 1 | DA OPS 101ST | WC2840 | Paladin sending Rounds Complete |
| 12:59:26 | 00:01:45 | GUN 1 | DA OPS 101ST | WC2840 | Paladin sending Splash |
| 13:04:09 | 00:06:14 | DA OPS 101ST | COLT02 1BDE 101 | WC2841 | FO received Rounds Complete command |
| 13:04:09 | 00:06:19 | COLT02 1BDE 101 | DA OPS 101ST | WC2841 | FO sending EOM |
| 13:04:20 | 00:06:25 | DA OPS 101ST | GUN 1 | WC2841 | Paladin received EOM |
| 13:04:20 | 00:06:25 | DA OPS 101ST | GUN 2 | WC2841 | Paladin received EOM |
| 13:04:20 | 00:06:25 | DA OPS 101ST | GUN 3 | WC2841 | Paladin received EOM |
| 13:03:42 | 00:05:47 | DA OPS 101ST | COLT02 1BDE 101 | WC2841 | FO received Shot command |
| 13:03:26 | 00:05:51 | GUN 3 | DA OPS 101ST | WC2841 | Paladin sending Rounds Complete |
| 13:03:26 | 00:05:46 | GUN 3 | DA OPS 101ST | WC2841 | Paladin sending Splash |
| 13:03:26 | 00:05:41 | GUN 3 | DA OPS 101ST | WC2841 | Paladin sending Shot |
| 13:03:26 | 00:05:41 | GUN 3 | DA OPS 101ST | WC2841 | Paladin sending MTO |
| 13:03:26 | 00:05:31 | DA OPS 101ST | GUN 3 | WC2841 | Paladin received How Mission FFE |
| 13:03:26 | 00:05:50 | GUN 2 | DA OPS 101ST | WC2841 | Paladin sending Rounds Complete |
| 13:03:26 | 00:05:45 | GUN 2 | DA OPS 101ST | WC2841 | Paladin sending Splash |
| 13:03:26 | 00:05:40 | GUN 2 | DA OPS 101ST | WC2841 | Paladin sending Shot |
| 13:03:26 | 00:05:30 | DA OPS 101ST | GUN 2 | WC2841 | Paladin received How Mission FFE |

Print Cancel

**Figure 8-17 Mission Logging**

## 8-13. Map

This window shows a graphical representation of the units, targets, and geometries created by the user as well as received from AFATDS. The elements generated are automatically placed on the map unless otherwise specified. Map elements may be manipulated through the map or through the Event List. (Reference Chapter 10.Managing the SISTIM Map)

## 8-14. Time Menu Window

The Set time option (Fig 8-18) allows the operator to set the exercise time. The operator may select specified times to run an exercise therefore, events scheduled before the specified time may be skipped.

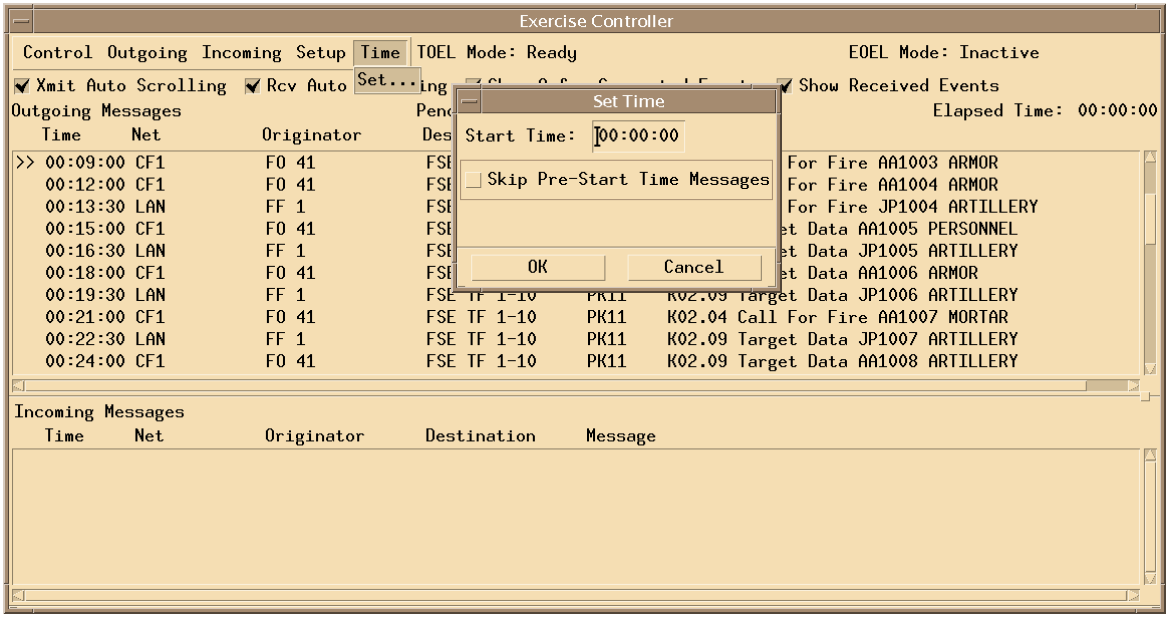



**Figure 8-168 Time Menu Window**

## 8-15 Action Buttons/Menu Window

The **Mode Label,** states whether the Controller is currently in ready or running state.
The **Xmit Auto Scrolling**, when selected the Outgoing Messages list will scroll in the run mode.
The **Rcv Auto Scrolling**, when selected the Incoming Messages list will scroll in the run mode.
The **Show Opfac Generated Events**, when selected messages generated by SISTIM for opfac logic response will be displayed.
The **Show Received Events**, when selected incoming messages will be shown in the Incoming Message list.
The **Failed Xmits**, this number indicates the number of messages that did not reach their destination. The operator can view a list of these messages by Selecting Outing Transmit Status
The Elapsed Time is the time in hours/minutes/seconds that has elapsed in the TOEL

**NOTE**

This may not reflect the time from the beginning of the TOEL if the time has been edited.

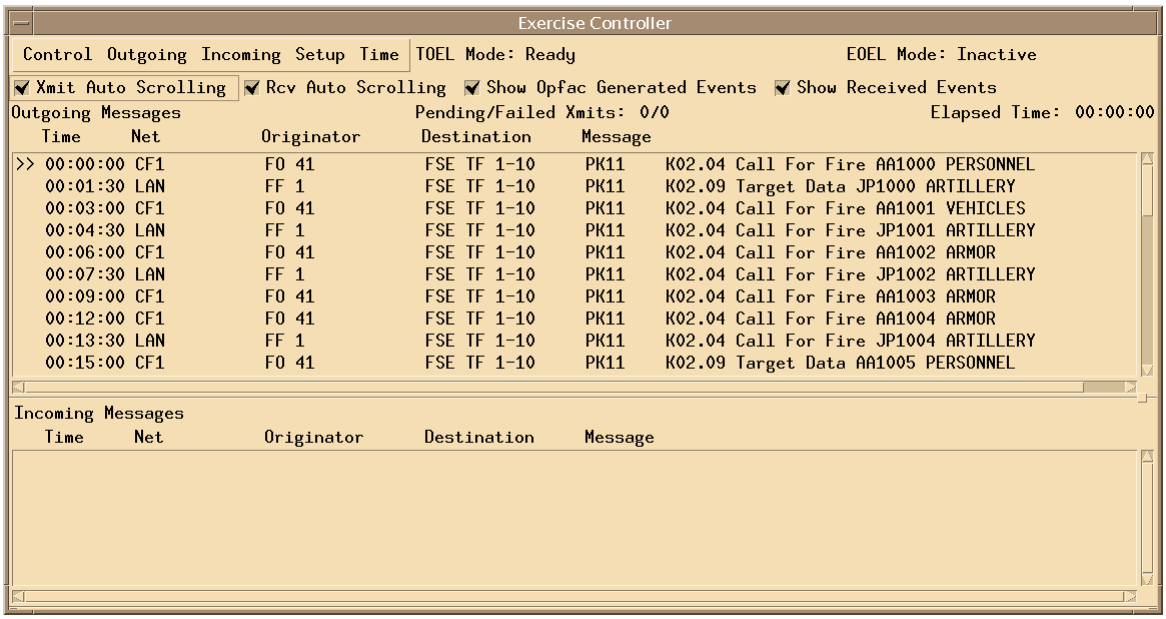



**Figure 8-179 Action Buttons/Menu Window**

## 8-16. Outgoing and Incoming Messages

The Outgoing and Incoming message area (Fig 8-19) shows the Time/Net/Originator/Destination/Message columns with a list of the messages that have been generated for the current running scenario. The list shows the scenario time that the message will be transmitted, on which net it will be transmitted, the originating unit of the message, the destination unit, and a brief synopsis of the message type and message name. To edit the outgoing message the operator must stop the exercise, make changes and then restart the current exercise. It is best to close the run Exercise Control and make changes from the Edit Event List Window. When the changes have been made start the Run Exercise again.

## 8-17 Monitoring the Outgoing Message List

Unlike previous versions of SISTIM, messages that are transmitted are not removed from the outgoing list. The list scrolls so the next message to be transmitted is at the top of the viewable portion of the list. In addition, there is a double “Arrowhead” in the left margin that marks the next message to be transmitted.

## 8-18 Establish Communications

First thing you typically want to do is establish communications from SISTIM to the live units to verify connectivity. From AFATDS you can do a Test Message. From SISTIM you can create and send a Free Text message. You do not want the exercise running. Click on the Outgoing menu and select "New" and then "Package 11". This will create the Package 11 Available Message form. Select Free text from the list and then click on "OK". Select an Origin Unit that is common to as many of the live units as possible and select one of the live units as the Destination, add a short message and then click on "OK". This will place the message into the outgoing list. If you need to communicate with multiple units, highlight the message, click on the Outgoing menu and select "Copy". This will create a copy of the message. Highlight the message again, click on the Outgoing menu and select "Edit". This will open the message in the Package 11 message format. You can change the Origin and Destination units. Click on "OK" to close the message and save the changes. To individually verify communications, highlight the message and then click on the Outgoing menu and select "Transmit".

This will send out the message. When you transmit the message, it is not removed from the list. This allows you to reuse a message if you want to.

## 8-19. Maintain Communications

During the course of the exercise you need to periodically verify that there are no lost messages. Within SISTIM you can monitor if any messages have failed by checking the "Pending/Failed Xmits" counters located above the outgoing message list. The second subfield lists the number of messages that have failed. To review and resend the messages, click on the Outgoing menu and select "Transmit Status…". This will open the Transmission List form. This form shows the status of all messages that have not reached their destination units. When this form is open you can not access any other portions of the Exercise Controller form. If a failed message is in the Transmission List and you want to try and resend it, highlight it and then click on "Retransmit". Before doing this make sure the cause of the communications failure is fixed.

# CHAPTER 9.
# CREATING AN EOEL

## SECTION 1
## BUILD A EOEL

### NOTE

Creating an EOEL is only for an experienced SISTIM operator

Creating an EOEL (Event Ordered Event List) (Fig 9-1) in SISTIM allows the operator to run a complete thread or series of threads without the intrusiveness of Opfac Logic. An EOEL is a thread in which the operator defines both incoming and outgoing messages. When an EOEL is created the operator uses triggers to help control the thread. Triggers place conditions on the messages so that outgoing messages will only be transmitted if and only if they meet the criteria of the triggers set. No Opfac Logic is used during the processing of an EOEL. The EOEL strictly follows the flow predetermined by the operator. EOELs can only be put into the running mode when the TOEL is in fact running. Once the TOEL is placed in running mode the EOEL can be “turned on” as well (It is very important that you verify that the EOELs you want to be “running” are selected). When the observer is placed on the EOEL and excluded from fire missions in the TOEL. When the observer is finished with mission threads from the EOEL the observer will be placed back on the TOEL for Fire Missions.
This window allows the operator to create a list comprised of **E**vent **O**rdered **E**vent **L**ists. After the EOELs have been created they may be ordered to the satisfaction of the operator and then displayed with a brief description of each EOEL

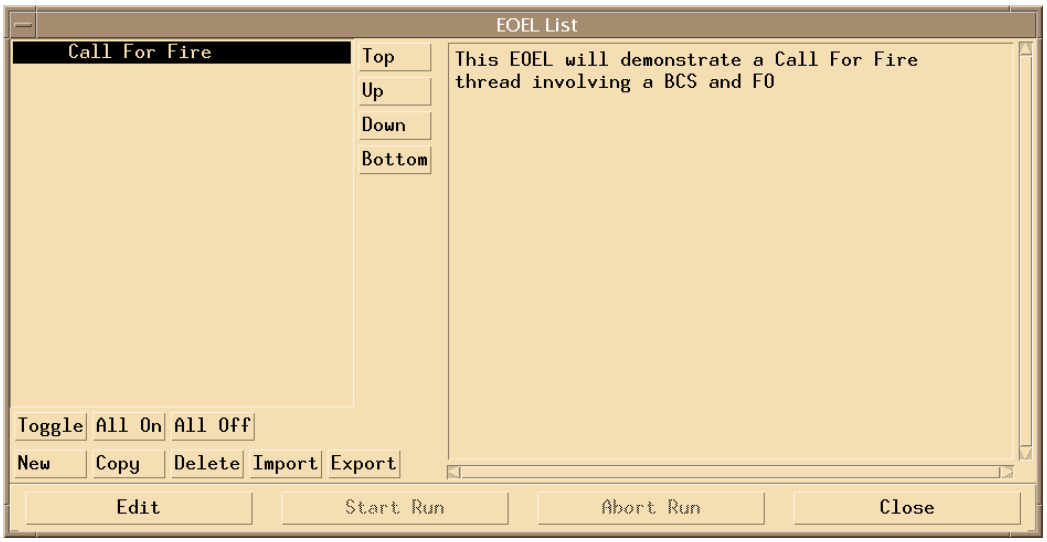



**Figure 9-1 EOEL**

**Name/Description,** The large block on the top left contains the names of each EOEL already created. Each EOEL name must be unique. The large block on the top right contains the brief description of the corresponding (highlighted) EOEL
**Top/Up/Down/Bottom,** selecting these buttons allows the operator to move selected events within the list to perform the desired purpose. To move an EOEL to the top of the list, the EOEL must be highlighted then the “Top” button must be selected. To move an EOEL to the bottom of the list, the EOEL must be highlighted and the “Bottom” button must be selected. The Up and Down buttons allow the EOEL to be moved Up or Down one EOEL at a time.

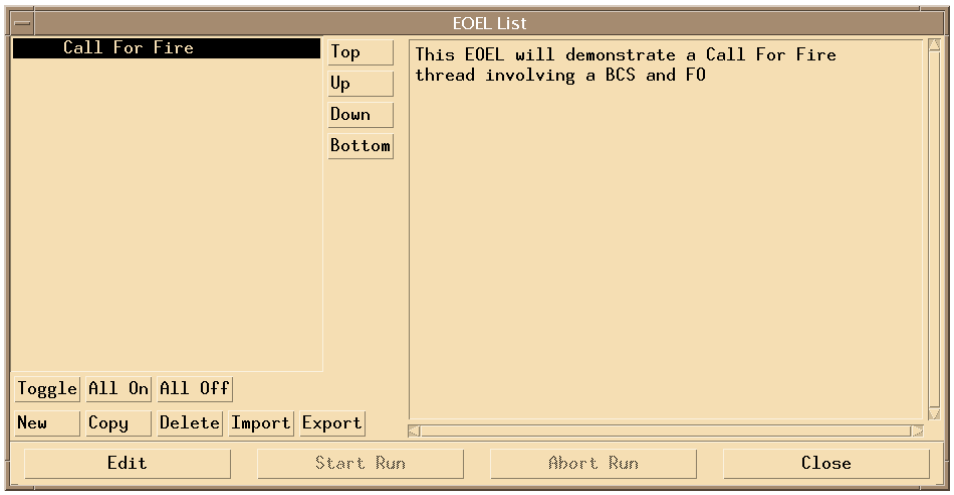



**Figure 9-2 Toggle Switches**

**Toggle**, selecting this button allows the operator to enable an EOEL. The operator must highlight the desired EOEL then select Toggle this will select that EOEL so that once the TOEL and EOEL are started the selected EOEL will be enabled. Once an EOEL is selected it is marked with an "X".
**All On,** allows the operator to enable all the EOELs on the EOEL List.
**All Off**, allows the operator to disable all the EOELs on the EOEL List.
**New,** starts the procedure so that the operator can add a new EOEL to the list.
**Copy,** allows the operator to copy the contents of an existing EOEL into a new EOEL with a unique name.
**Delete,** allows the operator to delete an EOEL from the EOEL List.
**Edit,** allows the operator to edit an existing EOEL on the list.
**Start Run,** allows the operator to put the EOEL in running mode (This button will only activate if the TOEL is already in run mode).
**Abort Run,** allows the operator to put the EOEL in inactive mode (This button will only activate if the TOEL and EOEL are already in run mode).
**Close,** allows the operator to close the EOEL List window.
**Export,** starts a procedure similar to the Export TOEL. Export EOEL allows the operator to export a current EOEL into a formatted text file.
**Import,** this button starts a procedure similar to the Import TOEL. Import EOEL allows the operator to choose a pre-formatted text file and create a new EOEL with a unique name.

## 9-1. EOEL SETUP

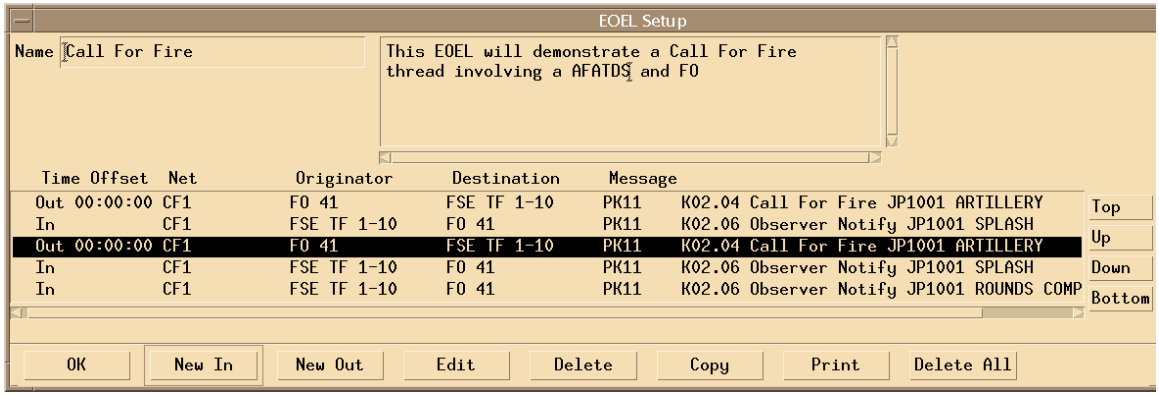



**Figure 9-3 EOEL SETUP**

**EOEL Setup Procedure** (Fig 9-3)
**Name**, up to 30 alpha/numeric characters, is valid in this field.
**Description,** this text field allows the operator to input a brief functional description of the EOELs.
**OK,** closes the EOEL Setup window and the new EOEL will appear in the EOEL List window.
**New In**, gives the operator the opportunity to configure a new Incoming event with the option of specifying triggers. When this button is activated a window is displayed (See Message Protocol Available) that allows the operator to choose the protocol for the new message. Once a Message Protocol is selected an Available Message List will appear allowing the operator to view and select the valid message for PKG11, JVMF, USMTF, GDU/MCA, and Generic. Once a message has been selected the template will appear (See EOEL IN-Event Setup).
**New Out,** gives the operator the opportunity to configure a new Outgoing event. When this button is activated a window is displayed (See Message Protocol Available) that allows the operator to choose the protocol for the new message. Once a Message Protocol is selected an Available Message List will appear allowing the operator to view and select the valid message for PKG11, JVMF, USMTF, GDU/MCA, and Generic. Once a message has been selected the message template will appear.
**Edit,** allows the operator to edit an event that currently exists in the EOEL (A message must be highlighted before this button can be activated). When this button is activated, the appropriate window is displayed depending on the message type and protocol.
**Delete,** deletes the highlighted event from the EOEL (Note: a message must be highlighted before this button can be activated). When the message has been deleted, the event is removed from the EOEL.
**Copy,** allows the operator to copy an event that currently exits in the EOEL (A message must be highlighted before this button can be activated). When this button is activated, a Message Format window appears allowing the operator to specify whether or not they want the same protocol as the original (highlighted) message or a Generic copy of the highlighted message added to the EOEL. The copy of the message is added to the bottom of the EOEL.
**Top/Up/Down/Bottom.** Selecting these buttons allows the operator to arrange their list to suit their desired purpose. To move an event to the top of the list, the event must be highlighted then the “Top” button must be selected. To move an event to the bottom of the list, the event must be highlighted and the “Bottom” button must be selected. The Up and Down buttons allow the event to be moved Up or Down one event at a time.

## 9-2. EOEL in-Event Setup

This section is designed to give an example of how to setup an EOEL In-Event.(Fig 9-4) The setup is extremely similar to composing an In/Outgoing message in the TOEL (PK11 Message Template), the distinct difference is the introduction of the “trigger”.

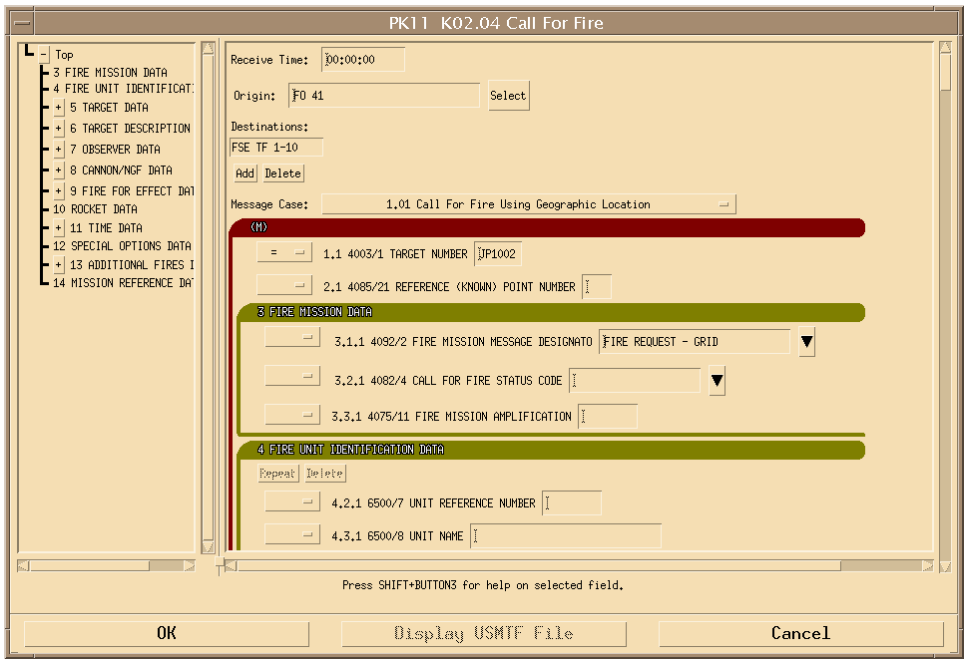



**Figure 9-4 EOEL CFF**

**Trigger**, the button located to the left of each field is called a trigger.(Fig 9-5) Triggers are conditions placed on incoming messages. When an incoming message meets all the criteria set by the operator's trigger, the next outgoing message is transmitted. Example: If the Target Number field has a trigger of "=" that means that no outgoing events will be transmitted until a message of the same protocol and message template comes in with the same Target Number.

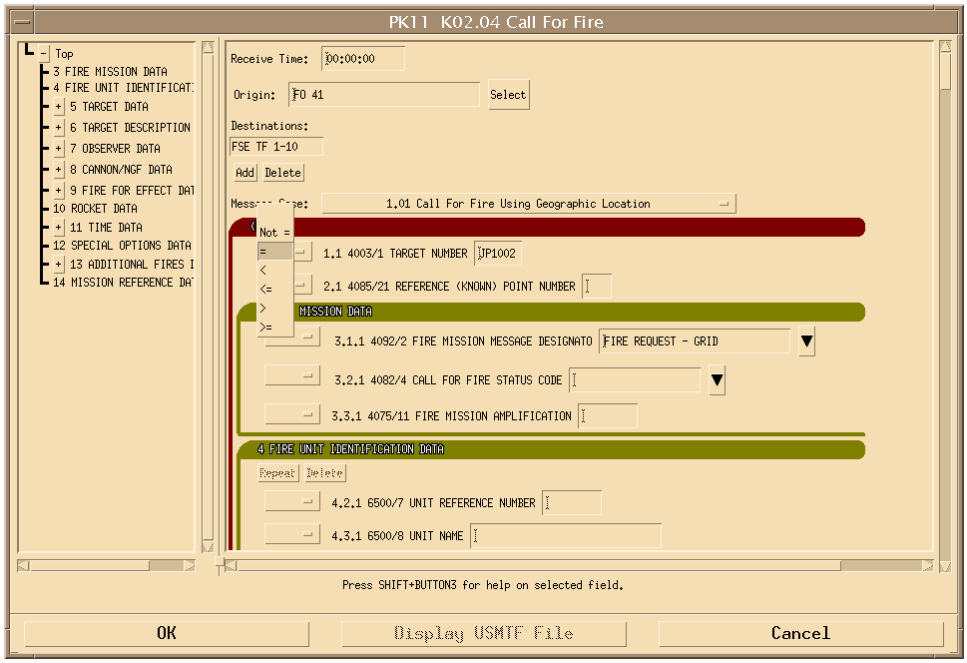



**Figure 9-5 Trigger Options**

Trigger Options EOEL In-Events give you the options to set a trigger or condition from the preceding list.

# CHAPTER 10.
# MANAGING THE SISTIM MAP

## SECTION 1
## MANAGING THE MAP

### 10-1. SISTIM MAP

This window shows a graphical representation of the units, targets, and geometries created by the user as well as received from AFATDS. The elements generated are automatically placed on the map unless otherwise specified. Map elements may be manipulated through the map or through the Event List. By selecting the Outgoing / New / Generic / Geometry message creates geometries. On the Generic Geometry message insure that the “add to map toggle” is checked to have the geometry displayed on the map.

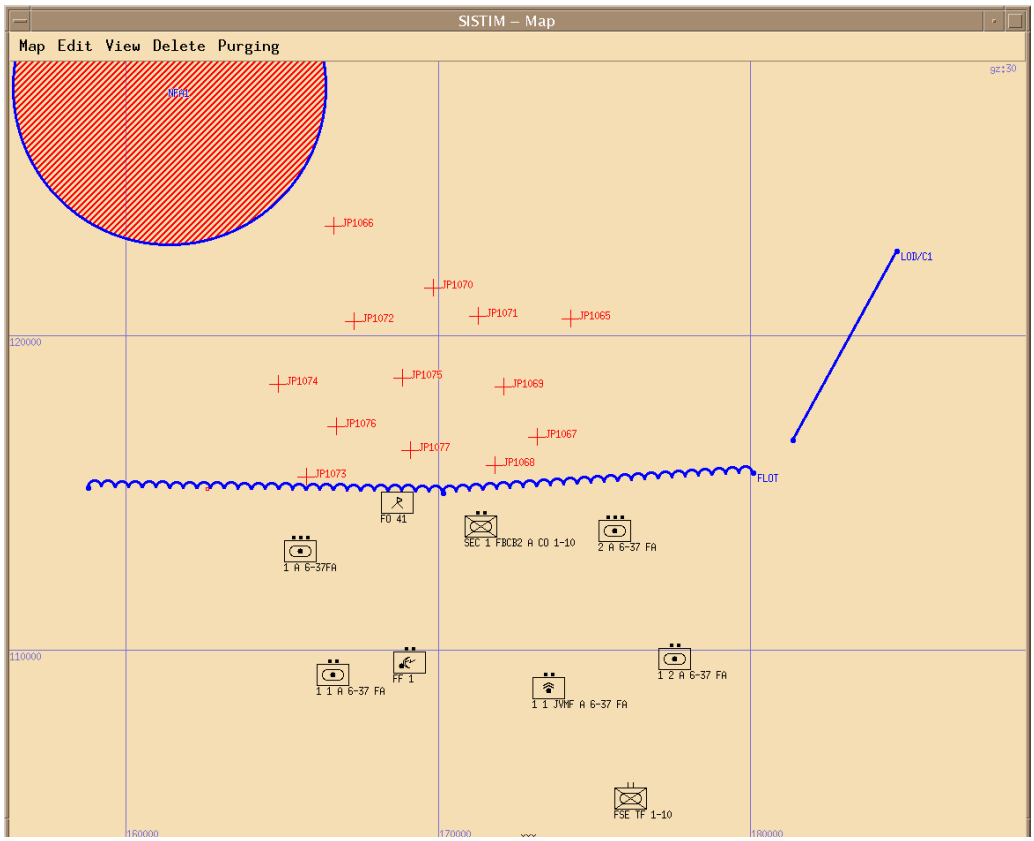



**Figure 10-1. SISTIM MAP**

#### MAP HOT KEYS

In order to operate in the map window display, below are a list of hot keys and their functions.

**Left Mouse Button** By selecting the left mouse button while operating within the map will simply relocate the focus of your selection indicator (the small red circle). The selection indicator allows you to highlight elements on the map.

**Middle Mouse Button** By depressing (and holding down) the middle mouse button allows you to drag the map.
**Right Mouse Button** The right mouse button is only effective if an element on the map has already been selected (See Left Mouse Button). Once an element has been selected from the map it can be Edited and Deleted from the map via a pop-up that is activated by depressing the right mouse button.
**Shift + Right Mouse Button** Depressing both the shift key and the right mouse button allows the operator to grab a location off the map. This location can either be used to center the map or to specify a target or unit location.
**Shift + Left Mouse Button** Depressing both the shift key and the left mouse button allows the operator to paste a location taken from the map into its respective field (See Shift + Right Mouse Button).

**10-2. Record/Playback** This option displays a Record/Playback Controller dialog**.**
This window allows the operator to record a sequence of events from the map as well as play them back at various speeds. The Record/Playback feature will capture geometry, unit, and target creation as well as moves/updates.

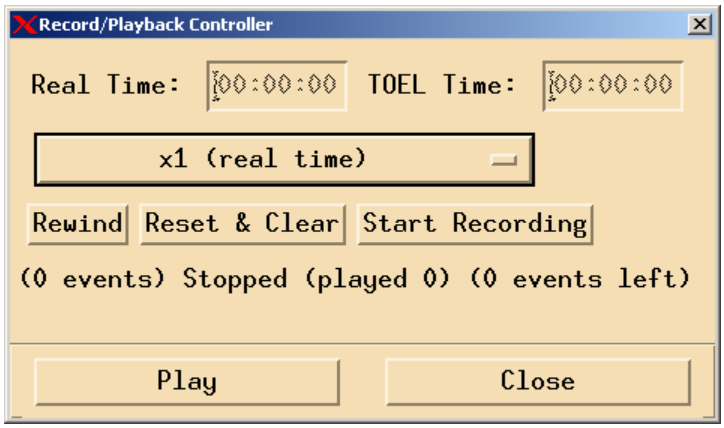



**Figure 10-2 Record/Playback**

**Real Time** This field represents the “real” time of the events reproduced.
**TOEL Time** This field represents the TOEL time of the events reproduced.
**Playback Scale Pull down** This pull-down allows the operator to specify the rate at which the events are played back.
**Rewind** This button allows the operator to rewind the events.
**Reset & Clear** This button will clear the Record/Playback buffer.
**Start Recording** This button must be depressed in order to begin recording.
**Stopped (Events, Played, Events Left) Play** This fields track the progress of the playback.
**Play** This button will play as well as pause the playback sequence.
**Close** This option will close the Record/Playback Controller.

## 10-3. EDIT

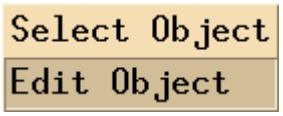



**Figure 10-3 Edit**

**Select Map Object**
This window displays all the targets, units and geometries displayed on the map. Through the use of this window the operator has the capability to highlight and center the map around the selected map element.
**Center** This option will allow you to center the map according to the highlighted element.
**Close** This option will close the Select Map Object
**Select Map Object** This option displays a window that allows the operator to select an element from a list. Once an element is selected it will be highlighted on the map.
**Edit Map Object** This option allows the operator the edit the element highlighted on the map..

## 10-4. VIEW MENU

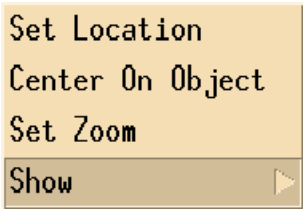



**Figure 10-4 View Menu**

**Set Location** This option displays the following dialog so that the operator may specify the center of the map.
**Center On Object** This option allows the operator the center the map according to the location of the highlighted element.
**Set Zoom** This option provides a pop-up menu for the operator to use that allows the operator to set the resolution of the map by zooming in or out from the map.

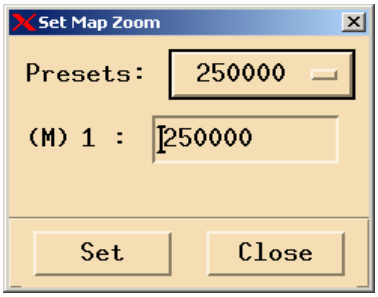



**Figure 10-5 Set Map Zoom**

**Show** This options provides a pull-down that displays the various layers that can be displayed on the map

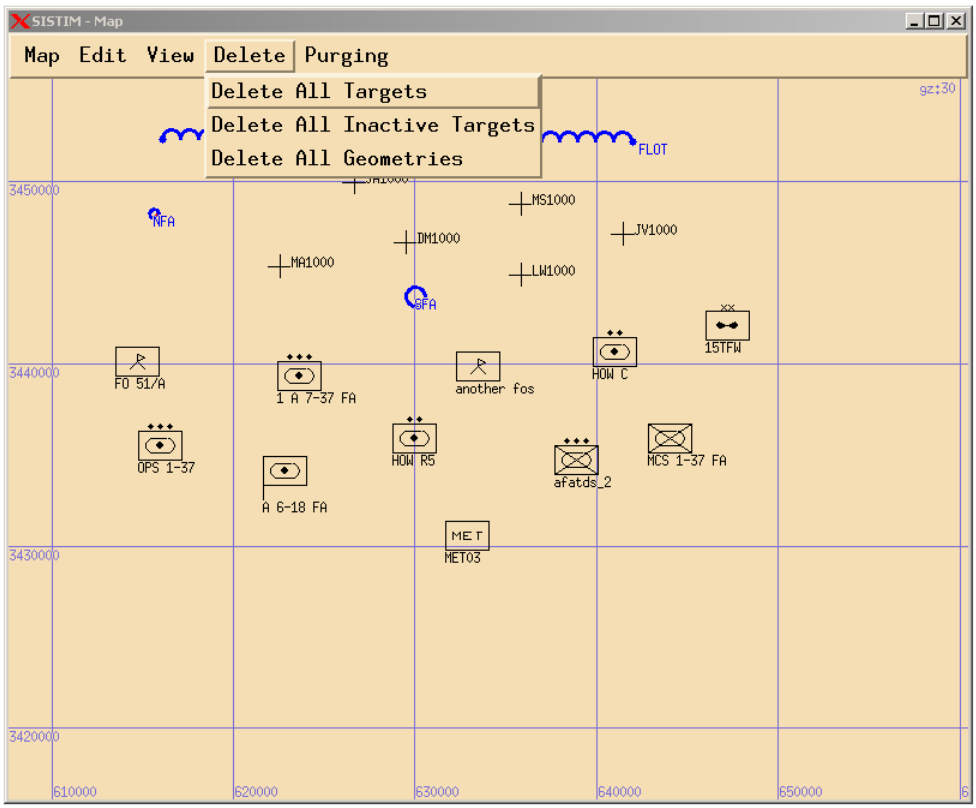



**Figure 10-6 Delete Menu**

## 10-5. DELETE MENU

**Delete All Targets** This option allows the operator to delete all targets from the map.
**Delete All Inactive Targets** This option allows the operator to delete inactive targets only, from the map.
**Delete All Geometries** This option allows the operator to delete all geometries from the map

## 10-6. Purging

**Inactive Targets** This option will the operator the option to purge targets from the map as they become inactive**.**

# CHAPTER 11.
# INCORPORATE THE LAN/LOCAL PRINTER

## SECTION 1
## INSTALL A NETWORK PRINTER

The network printer must be installed with no other SISTIM programs running e.g., SISTIM. All that should be available is the Toolbar at the bottom of the SISTIM screen. (Figure 11-1)
There is an advantage to loading the LAN printer over a Local Printer. The first reason is that any system can print over the LAN printer and the second reason is that the LAN Printer can print postscript graphics or screen captures.

### 11-1. Add LAN Printer

Select on the menu of the SISTIM window ADD LAN printer.

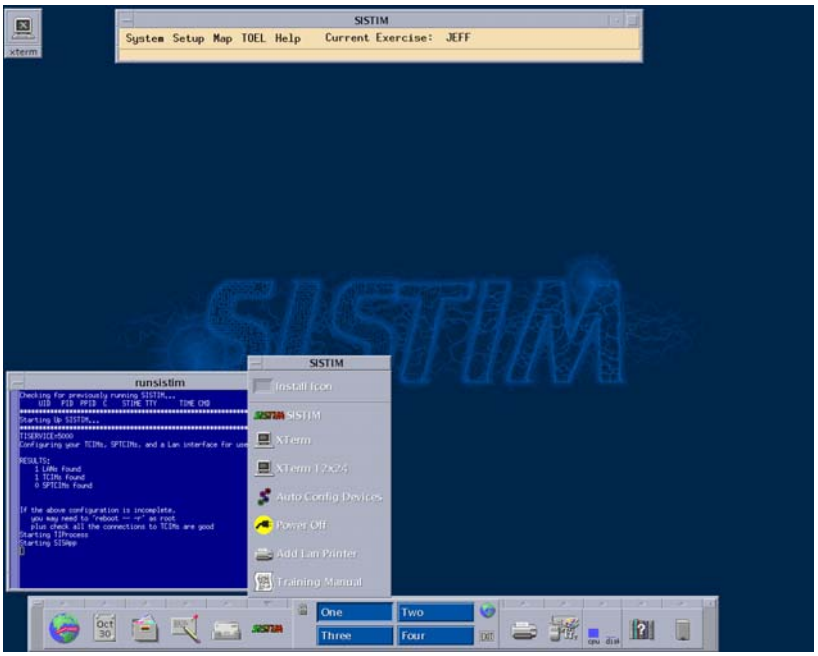



**Figure 11-1 Add LAN Printer**

### 11-1-1 Add the IP to the LAN Printer

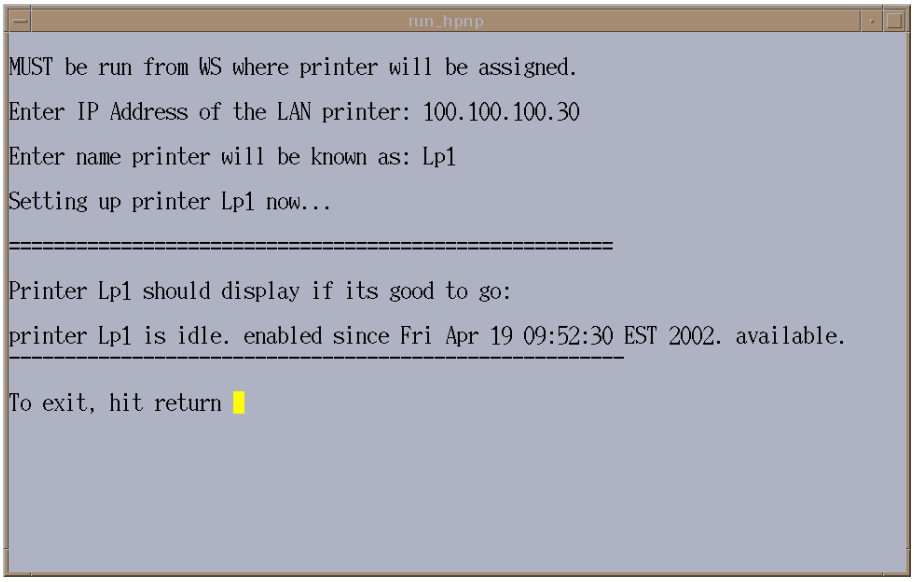



**Figure 11-2 Add the IP to the LAN Printer**

**Add the IP to the LAN Printer Procedure** (Figure 11-2)
Enter the LAN Printer IP address and printer name. The name must begin with Lp.
Select KEYBOARD Enter. The LAN Printer IP and the printer default gateway must have the same IP set if this does not happen failure to print will be the outcome. The IP address of the printer can be any octets as long as the IP and the default gateway are the same.
The response that the operator should see is “printer Name is Good to GO” and on the next line say IDLE.
The operator should now hit Enter or carriage return and the window will go away. The operator now must start the SISTIM program.

### 10-1-2. Add LAN Printer to Setup

After the SISTIM program is up and running, the operator must associate the SISTIM Program with the printer. The operator will select System/Print and Setup. (Figure 11-3)

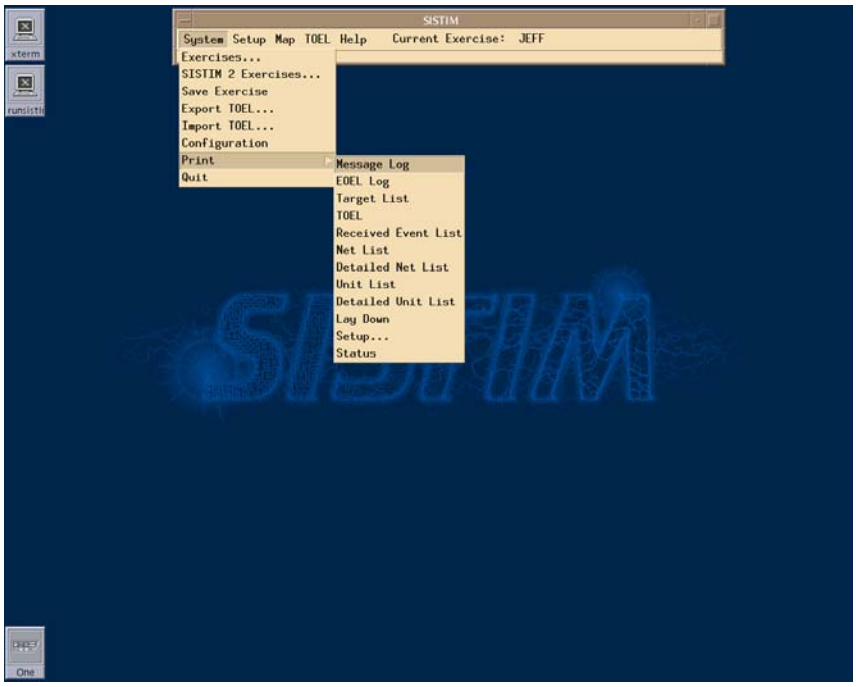



**Figure 11-3 Add LAN Printer to Setup**

### 11-1-3. Add LAN Printer Setup

At the Print Setup window (Figure 11-4) select the Postscript button and select the print command *a2ps –1 –Mletter –l120 –P(*printername.) The LAN printer is now associated with SISTIM.

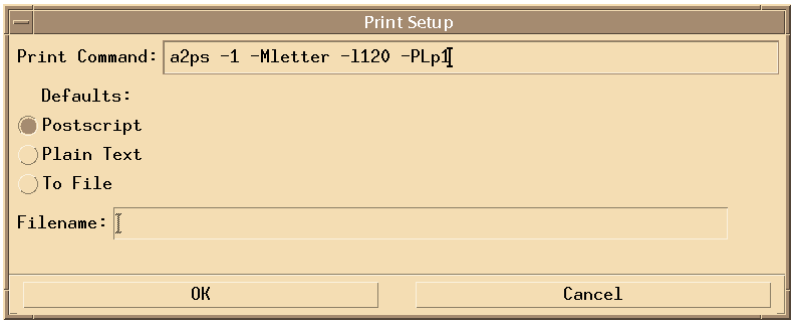



**Figure 11-4 Add LAN Printer Setup**

### 11-1-4. Print Files

There are numerous ways to print files to manage the database with reviewing Units and communications Networks. (The operator can print from the TOEL the Outgoing and Incoming message logs. Also the operator can print from the System/Print window. The following messages from the print window can be printed: The Message Log, Target List, TOEL, Received Event List, Net List, Detailed Net List, Unit List, Detailed Units List and Lay Down the Status of the printer shows the current print jobs.)

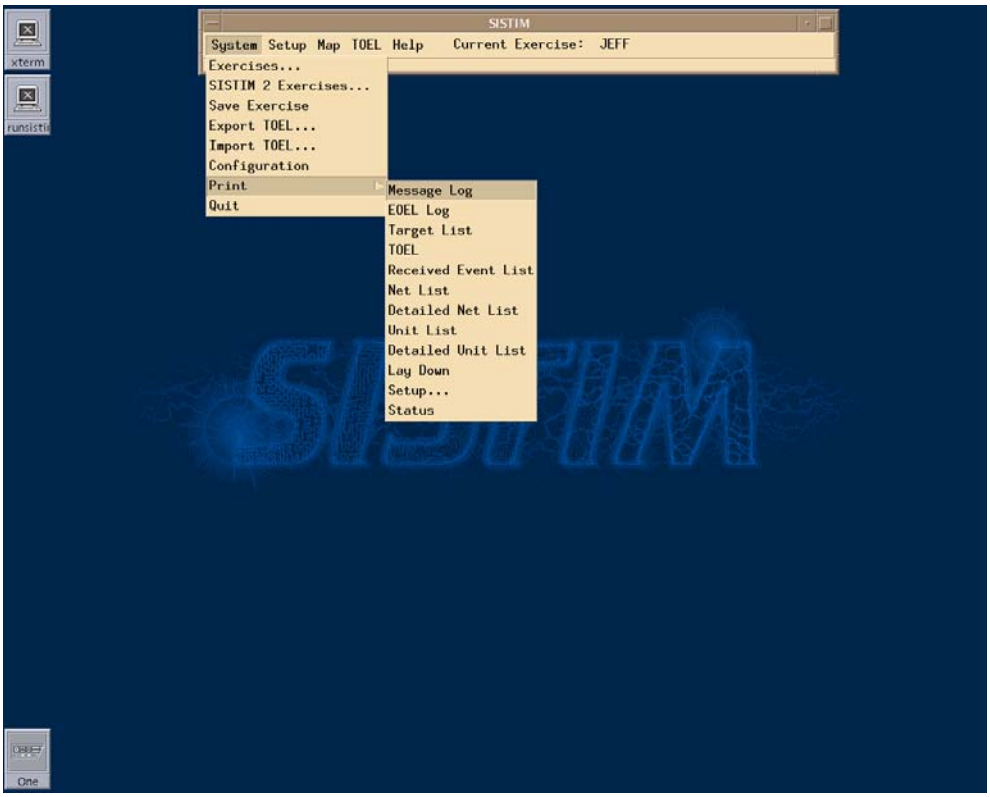



**Figure 11-5 Print Unit Files**

### 11-1-5. Print Unit Event List

One of the files from the print window that can be printed is the unit event list. (Figure 11-5) Before the file is printed there is a preview print command that allows the operator to show all the information in the window. The information that is shown (Figure 11-6) was input from the unit list. In this case it has the Unit Name, URN, Net Name, Net Address, Status, Protocol, Device and Role.

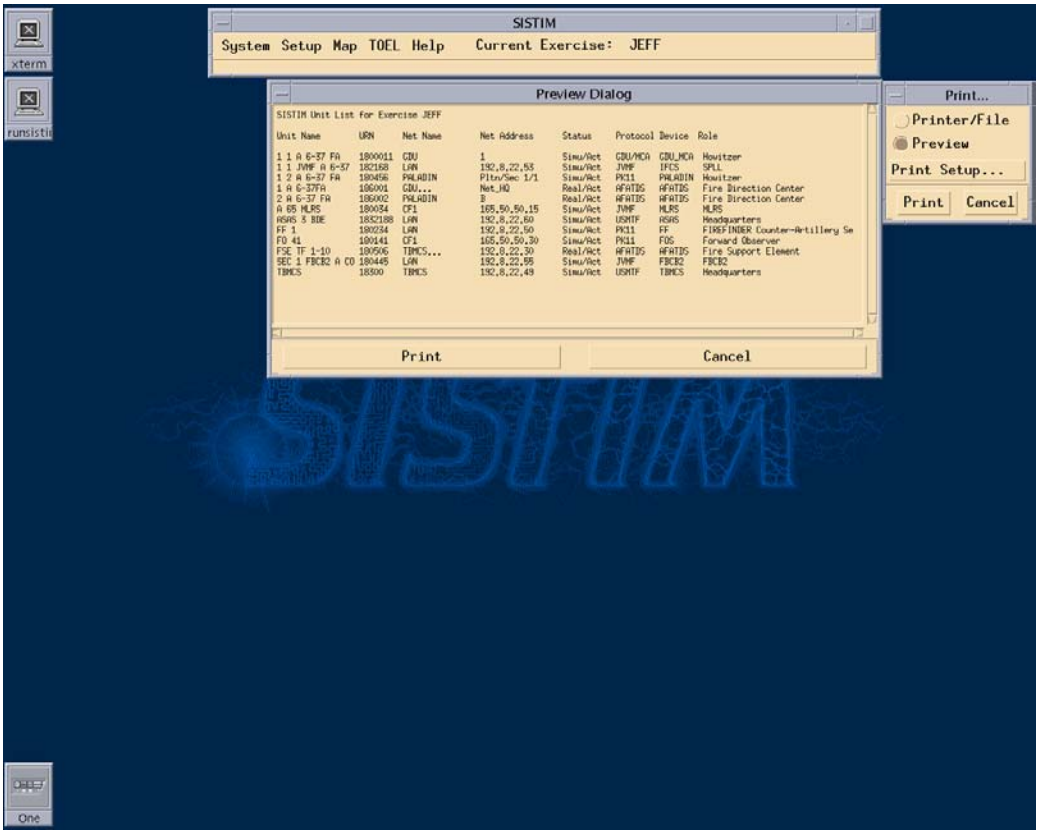



**Figure 11-6 Print Unit Event List**

### 11-1-6. Print Detailed Unit Event List

This option prints a detailed description of all of the Units in the current exercise. (Figure 11-7)
One of the files from the print window that can be printed is the detailed unit event list. Before the file is printed there is a preview print command that allows the operator to show all the information in the window. The information that is shown was input from the unit list.

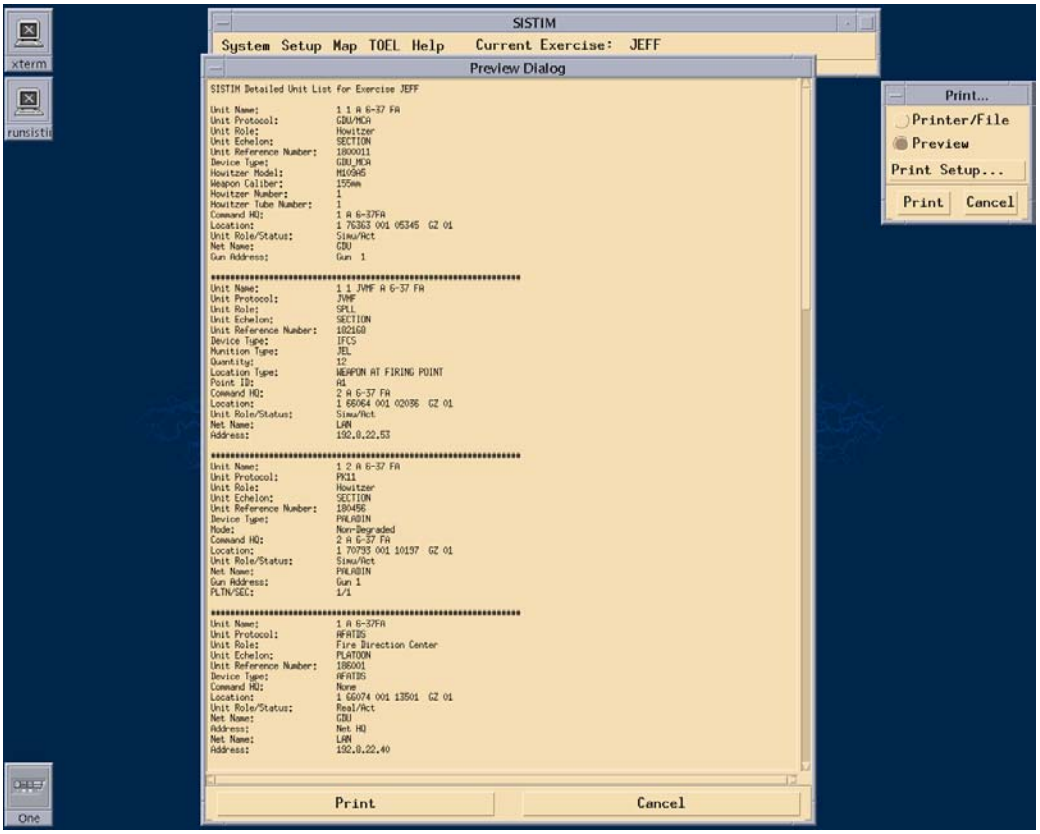



**Figure 11-7 Print Detailed Unit Event List**

### 11-1-7. Print Network Lay Down list

Another one of the files from the print window that can be printed is the SISTIM Network Lay Down Report. (Figure 11-8) The operator has the choice of what communication networks to print. Before the file is printed there is a preview print command that allows the operator to view all the information in the window. The information that is shown was input from the network window. In this case the Network Names, IP's Unit Name, Command HQ, Tactical role/Device, Protocol, Role/status, OB and IP Address.

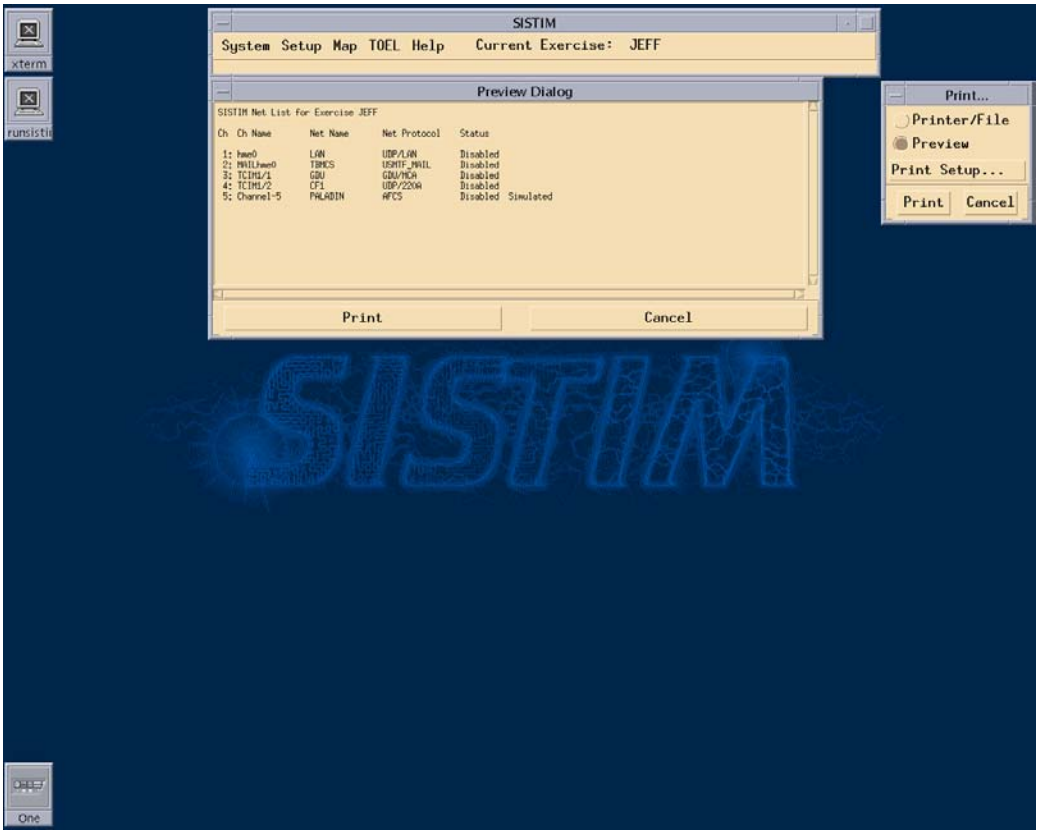



**Figure 11-8 Print Network Lay Down list**

### 11-1-8. Detailed Net List.

This options (Figure 11-9) prints a detailed description of all of the Networks in the current exercise. Another one of the files from the print window that can be printed is the SISTIM Detailed Network Lay Down Report. Before the file is printed there is a preview print command that allows the operator to show all the information in the window. The information that is shown was input from the detailed network window. In this case the Network Names, IP's Unit Name, Command HQ, Tactical role/Device, Protocol, Role/status, OB and IP Address.

```
Preview Dialog

SISTIM Detailed Net List for Exercise JEFF

Net Name:         LAN
Net Protocol:     UDP/LAN
Channel Name:     1 hme0
Status:           Disabled
Host IP Address:  100.100.100.10
Host Net Mask:    255.255.0.0

Net Name: LAN IP Address: 100.100.100.10
Unit Name            Command HQ           Tactical Role/Device       Protocol   Role/Sta   Ob   IP Address
---------            ----------           --------------------       --------   --------   --   ----------
2 A 6-37 FA          None                 Fire Direction Center/AF   AFATDS     Real/Act        192.8.22.40
ASAS 3 BDE           FSE TF 1-10          Headquarters/ASAS          ABCS       Simu/Act        192.8.22.60
FF 1                 FSE TF 1-10          FIREFINDER Counter-Artil   PK11       Simu/Act   21   192.8.22.50
FSE TF 1-10          None                 Fire Support Element/AFA   AFATDS     Real/Act        192.8.22.10
SEC 1 FBCB2 1-10     FSE TF 1-10          FBCB2/FBCB2                JVMF       Simu/Act        192.8.22.55

MCGroup Name      MCGroup Type    Multicast IP
------------      ------------    ------------
 BDE_ALL           BDE_ALL         225.10.10.251
   Group Members
  FSE TF 1-10


#################################################################
Net Name:         TBMCS
Net Protocol:     USMTF_MAIL
Channel Name:     2 MAILhme0
Status:           Disabled
Host IP Address:  192.8.22.3
Host Net Mask:    255.0.0.0

Net Name: TBMCS IP Address: 192.8.22.3
Unit Name            Command HQ           Tactical Role/Device       Protocol   Role/Sta   Ob   IP Address
---------            ----------           --------------------       --------   --------   --   ----------
FSE TF 1-10          None                 Fire Support Element/AFA   AFATDS     Real/Act        192.8.22.30
..afatds@fse
TBMCS                FSE TF 1-10          Headquarters/TBMCS         TBMCS      Simu/Act        192.8.22.49
..ctaps@tbmcs

#################################################################
Net Name:                PALADIN
Net Protocol:            AFCS
Channel Name:            3 TCIM1/1
Status:                  Disabled
Media Device:            2-Line Wire Broadcast
Security:                Clear
Data Encoding:           FSK 1200/2400
Data Rate (BPS):         1200
Error Control:           EDC/TDC
Block Mode:              Single
Key Time (sec):          0.2
Hold Time (sec):         0.16
Broadcast Host Address:  A
High Initial:            1.00
Low Initial:             1.00
High Subsequent:         1.00
Low Subsequent:          1.00

Print                                   Cancel
```

**Figure 11-9 Detailed Net List**

# SECTION 2
# INSTALL A LOCAL PRINTER

## 11-2 Add Local Printer

The advantage of adding a local printer is that it’s only for the SISTIM and it only prints plain text not graphic images.

First open a Xterm from the Programs Menu. In the Xterm type the following commands.(Figure 11-10 and 11-10.1) These Xterm commands will work from either a UCU or CCU2. This opens the Admintool Window. (Fig 11-11)

| DISPLAY | COMMAND | ACTION |
|---|---|---|
| | | |
| | su | (enter) |
| Password: | root | (enter) |
| | export DISPLAY=:0 | (enter) |
| | admintool | (enter) |

**Figure 11-10 Open the Admintool Window**

**Figure 11-10.1 Add a Local Printer**

At the Admintool Window follow the procedure listed below: (Figure 11-11)

**Figure 11-11 Admintool: Printers**

Select Browse, Select Printers. Then select Edit, Select Add, Local Printer. Next you will enter the appropriate data for the type of machine you are on (UCU, CCU2). (Figure 11-12 and 11-12.1)

| UCU | | CCU2 (AXI) | |
|---|---|---|---|
| Printer Name: | *Lp* | Printer Name: | *lp* |
| Description: | *Lp* | Description: | *lp* |
| Printer Port: | */dev/bpp0* | Printer Port: | */dev/ecpp0* |
| Printer Type: | *HP Printer* | Printer Type: | *HP Printer* |
| File Contents: | *ASCII* | File Contents: | *ASCII* |
| Fault Notification: | *Mail Superuser* | Fault Notification: | *Mail Superuser* |

**Figure 11-12 Admin tool Commands**

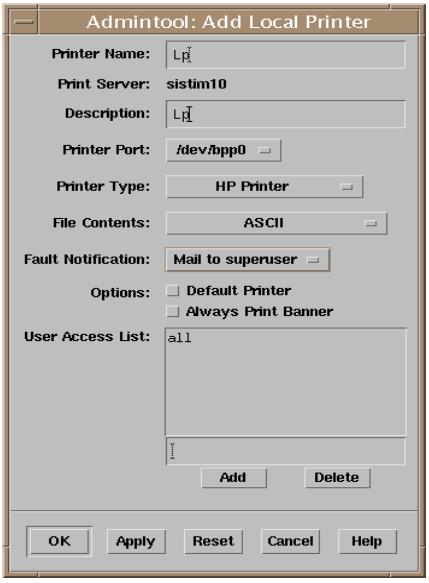



**Figure 11-12.1 UCU Admin tool Commands**

No other modifications are needed, so press OK. On the Admintool: Printers window Select: *File, Exit*.

### 11-2-1 Local Printer Added

The Admintools Printers screen (Figure 11-13) now shows a LAN and Local Printer. At the Menu Select: *File, Exit*.

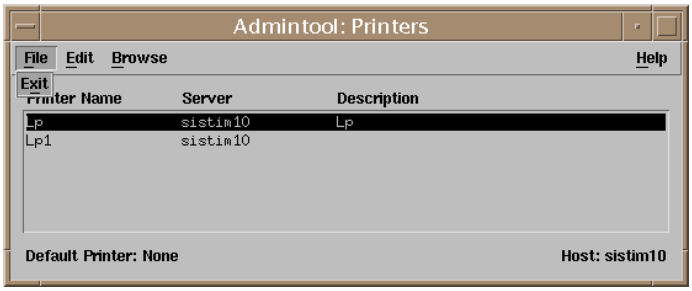



**Figure 11-13 Printer Added**

The xterm window screen (Figure 11-14) type *exit* and the text shows SISTIM10:sistim:/usr/sistim>. SISTIM can now be closed. At the Menu Select: *File, Close*.

**Figure 11-14 Exit xterm**

### 11-2-1. Add Local Printer Setup

The operator will select System/Print and Setup. At the Print Setup window (Figure 11-15) select the Plaintext button and select the print command *pr | lp –d(*printername.) The Local printer is now associated with the SISTIM software program. There are no different procedures for printing the text windows from the LAN or Local port. If SISTIM has two different printers available, just remember to change back to the LAN printer to print graphics.

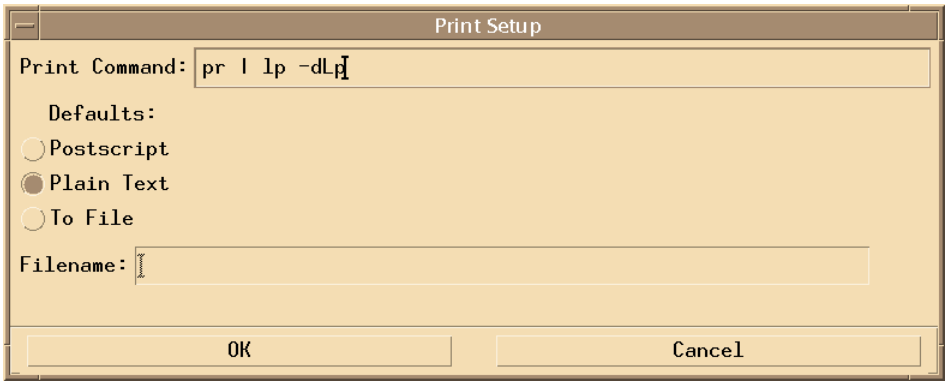



**Figure 11-15**

# CHAPTER 12.
# LOAD/SAVE AN SISTIM EXERCISE

## SECTION 1
## SAVE AN EXERCISE

The system exercises pull down menu window (Figure 12-1) allows the operator to manage SISTIM exercises. The option allows the operator to display and select from a list of the exercises that have already been created to load into the current data base.

### 12-1. Save a SISTIM Exercise

The default database now is loaded with communication networks, units and targets but the name is still default. To change the name of the database, select System Exercise. The Exercise List window will be launched. Highlight the Default database and select the copy button that will open a message screen. Rename the default SISTIM exercise. A good idea how to name an exercise, is what the exercise was made for or what special units are in the database and date. An example is 15 Jan III CORPS RADAR and JSTAR or something to the effect.
The “New” button gives the operator the opportunity to create a new exercise. When activated a window is displayed asking for the name of the new exercise. When selected a message window is displayed asking whether the changes should be saved before the new exercise is created.
The “Delete” button deletes the highlighted exercise from the exercise list

**NOTE**

An exercise must be highlighted before this button can be activated. When the exercise has been deleted, the exercise name is removed from the list.

**CAUTION**:

Make sure you have a backup copy of your exercises before deleting any exercises. The exercise cannot be retrieved after it is removed.

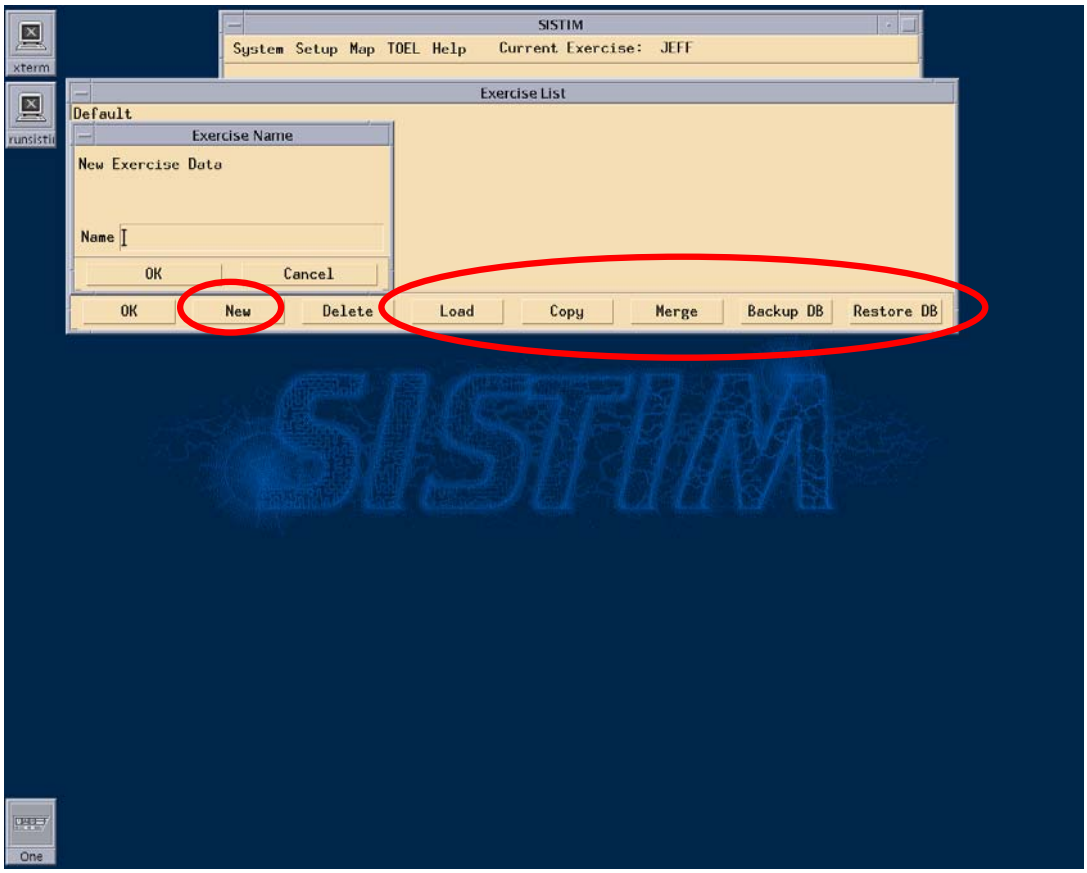



**Figure 12-1 Load/Save a SISTIM Exercise**

## 12-2. Load a SISTIM Exercise

The load button loads the highlighted exercise for execution or editing. If a currently loaded exercise has been edited when another exercise is highlighted for loading, a message screen is displayed asking whether the changes should be saved before the new exercise is loaded. When the loading of the exercise is complete, the Current Exercise label on the main window bar changes to reflect the new exercise name. The old exercise will return to the exercise list to be loaded at a later date.

**NOTE**

If using the LAN to communicate, the SISTIM box IP (from the software load) and the current exercise IP must match in order to communicate over the LAN.

## 12-3. Copy a SISTIM Exercise

The Copy button when selected, displays a window asking for the name of the copied exercise. Then a message window is displayed asking whether the changes to the currently loaded exercise should be saved before the newly selected exercise is copied.

## 12-4. Merge a SISTIM Exercise

The Merge button allows the operator to add one exercise at a time from another database into the current database. (Note: This operation requires a 3.5” floppy disk that already has a SISTIM database on it). The merge will only move one file at a time from the floppy into the Exercise List.

## 12-5. Backup a SISTIM Exercise

The **Backup DataBase** button activates the SISTIM Data Backup Procedure. This procedure saves the exercise to 3.5” floppy disk. Follow the on-screen instructions. This takes all of the exercises from the exercise list and saves them to floppy.

To backup a floppy the operator enters the selection of four “Archive Database to Formatted Floppy”. Once the backup is complete, enter the selection one to eject the floppy.

## 12-6. Restore a SISTIM Exercise

The Restore DB button allows the operator to reload a previously saved exercise from the floppy. This command will overwrite all of the existing exercise in the exercise list.

**NOTE**

If restoring from an older database, channels must be reassigned as follows: LAN channel one, Sendmail channel two, and SPTCIMS and TCIMS channel 3 through 18 or, however many channels remaining that are disabled. If using the LAN to communicate, the SISTIM box IP (from the software load) and the current exercise IP must match in order to communicate over the LAN and remember to change the unit Net/Address Pairs for each of the units that are communicating on the LAN channel.

# CHAPTER 13.
# SHUTDOWN THE COMPUTER

To shut down the computer select Power-Off from the SISTIM menu bar.(Figure 13-1) SISTIM will go to the boot prompt and the operator can power off the computer unit.
The **Exit Button,** on the SISTIM menu bar will take the operator to the SISTIM log on screen.
The **File Quit button,** will shut down the current SISTIM program. This can be used when operator has to load a printer.
Another way to reach the **Shut Down and Exit button**, is to right click (on the track ball or mouse) on the blue background. From that selection the Workspace Menu has the selections of Power Off and Exit menu.

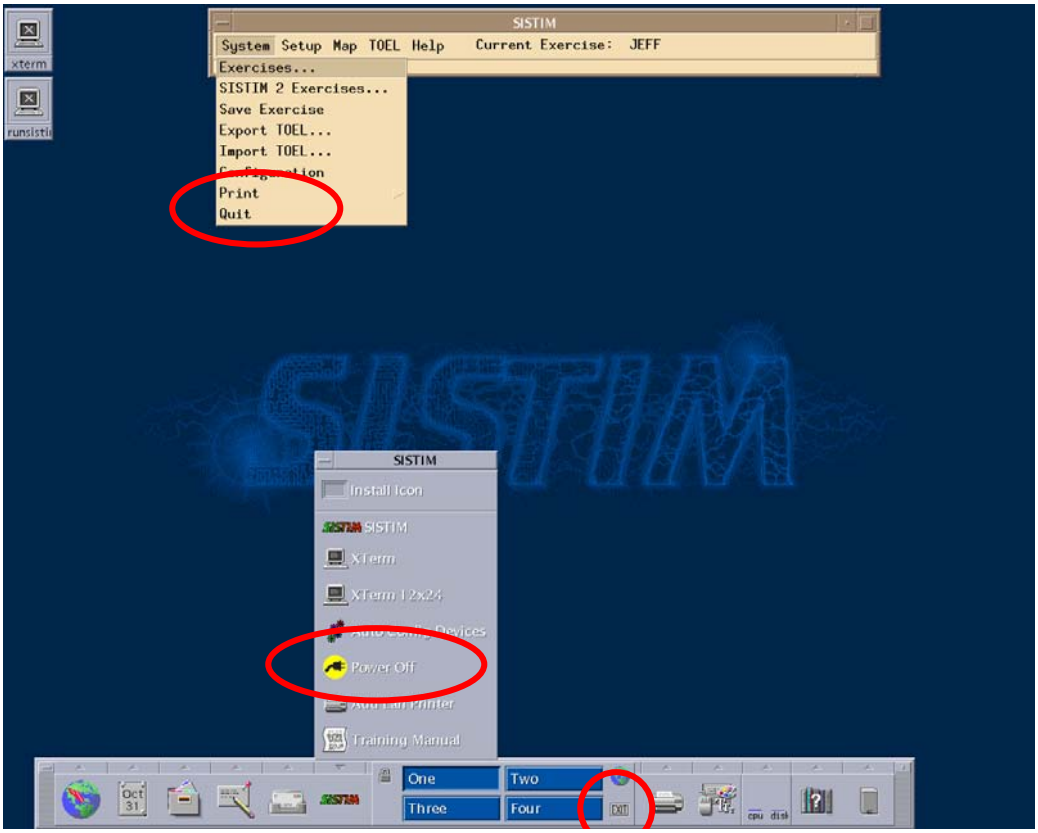



**Figure 13-1 Shutdown the Computer**

# CHAPTER 14.
# TROUBLESHOOT THE SISTIM

## SECTION 1
## TROUBLESHOOT COMMS

### 14-1. No TCIMS / SPTCIMS

The SISTIM operator started the SISTIM program and found that there were no TCIMS or SPTCIMS loaded. There is no need to reload software: 1. On TCIMS check all cables, terminators and cycle power. For the SPTCIMS eject and reseat the SPTCIMS. 2. Select Setup/Networks and select Reset TCIM. This button will allow the operator to reset the TCIM without having to exit SISTIM. 3. If number two did not find the correct TCIMs/SPTCIMs then open a Xterm window by selecting the arrow above the SISTIM menu and select Xterm 12.x24. This will bring up an Xterm window. Enter *su* and select keyboard enter. The next line will be asking for the Password enter *root* and keyboard enter. The last step is to enter or type the command of "***reboot -- -r***." This will cause the system to reboot and locate any external devices. Log on to and restart the SISTIM application, in the RUNSISTIM window there will now be the SPTCIMS and TCIMS. The second channel of the SPTCIM is not used.

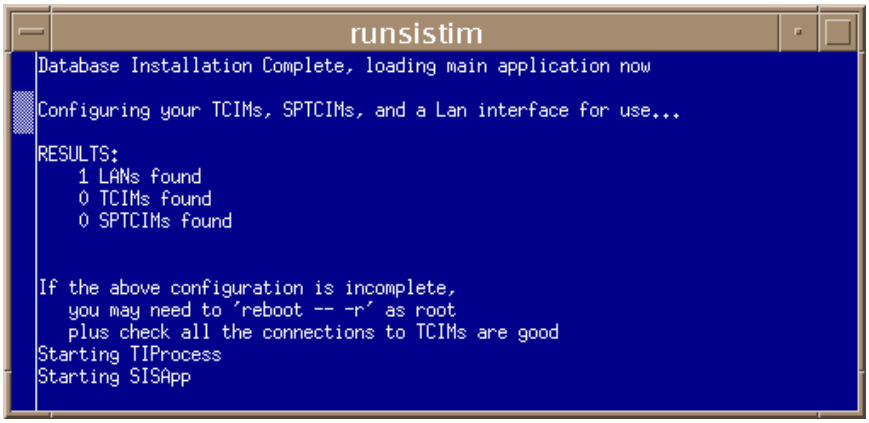



**Figure 14-1 No TCIMS / SPTCIMS**

### 14-2. LAN is Simulated

LAN is Simulated or Disable. Check the IP of LAN, it has to have the same IP from the software load procedures. There might be another type of net built on the first channel. If that is the case, move that net on Channel One to the appropriate network. To check the LAN IP, call up a Xterm and input netstat –nr. The *Gateway IP address* is on the second line that is the LAN card ID address. The first line of the Gateway IP address if different is operator selectable from what is currently entered from the setup LAN IP. Input the LAN IP form the Gateway IP in the LAN communication network. The operator can also select Set to Channel Defaults and the IP will change to the LAN card ID address. Now select 1 hme0 channel one for the LAN channel. The LAN should now display External.

### 14-3. SISTIM Ping feature

A ping is a basic internet (wire) program that lets you verify that a particular IP address exists and can accept requests and receive a confirmation response. Sistim has two different ways to ping a live unit; the first way is to use an Xterm that only works on UDP/LAN or USMTF_Mail networks, the second way is open the Run exercise and select Unit Option/Ping this only works on UDP220A or UDP220C

networks. To Ping a Live unit that is on an UDP/LAN or USMTF_Mail network you must use a unix xterm to ping. Open an Xterm window by selecting the arrow above the SISTIM menu on the MENU bar and select Xterm 12.x24. This will bring up an Xterm window. Type ping and the IP address. The response (Figure 14-2) should be that the IP address is alive. To Ping a unit that is on an UDP220A or UDP220C network you must use the Unit Option to ping that live unit. First open the Run Exercise window; select the Setup Menu window and select Unit Option window. Second highlight the Live unit that the operator would like to ping and select the ping command. This brings up a Select Network window (Figure 14-3), Select from the choices of Network to ping The response (Figure 14-4) should be that the IP address at the unit is alive. If there is no response return to steps 14-2 or 14-4.

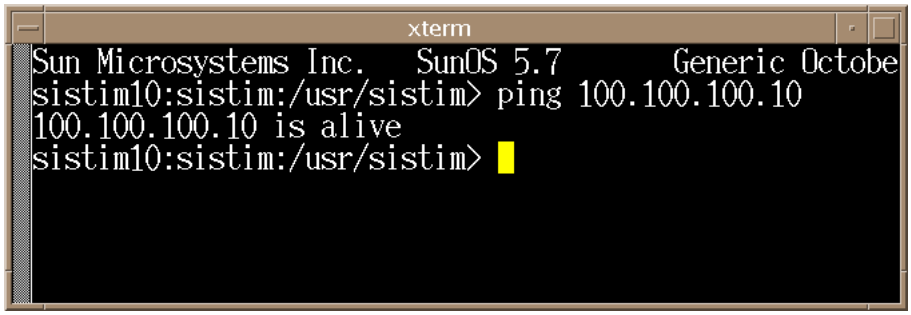



**Figure 14-2 Xterm Ping**

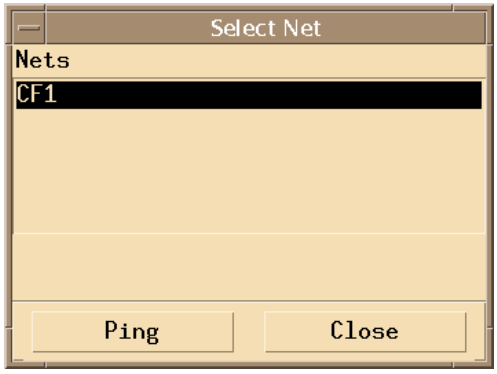



**Figure 14-3 Select Network Window**

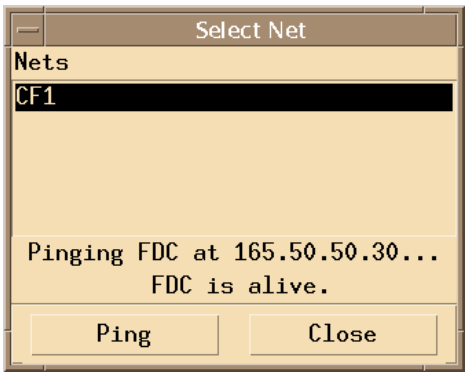



**Figure 14-4 IP address at the unit Ping Window**

## 14-4 AFATDS test message fails

AFATDS test message fails when transmitted to a simulated unit in SISTIM. Check that the URN in AFATDS is the VMF Unit Reference Number. In AFATDS the AFATDS Unit Number can be the same as the VMF URN but if doubtful edit the unit from the MUL to make sure that VMF URN is correct at both the AFATDS and SISTIM computers.

AFATDS can send a test message to a unit made in SISTIM but the message fails to be received in AFATDS. In AFATDS the UNIT was not built as a Package 11 Unit. Delete the unit and rebuild it as a PK11 unit.

## 14-5. GDU ring message fails

GDU ring message fails in AFATDS. In SISTIM check the AFATDS unit that is controlling the GDU's. Make the AFATDS in net address the Net HQ and ring gun again.

## 14-6. TBMCS00 can not communicate

TBMCS00 cannot communicate with the AFATDS unit. In SISTIM insure that the TBMCS was built as a TBMCS00 unit and is on the second channel, the Mailhme0 net. The Host IP address of Mailhme0 net has to be the same as the LAN channel IP address. Insure that the controlling AFATDS and the TBMCS00 is on the Mailheo0 network and has the correct user and host name for each system. The example that is correct of a user ID for AFATDS is "AFATDS". For TBMCS "CTAPS" and an example of a hostname for AFATDS is "fse". This entry is found on the AFATDS system under Comms Network Edit. Edit the LAN Network that the TBMCS is communicating on and enter the Hostname into the Net address pair Hostname in SISTIM. For TBMCS is "tbmcs". In order to communicate the same user and host name has to match what was built in the AFTDS. Retry to send a test or USMTF F002 Genadmin message to communicate with the TBMCS00 device.

## 14-7. Scenario generator is blank or no targets

Check to ensure that the real AFATDS is on the same net that the simulated unit is on. Verify that on the simulated units that the command support relationship is established and that the Command headquarters has a unit selected. Ensure that both units are on the same net.

## 14-8. ASAS/MCS can not communicate

ASAS/MCS cannot communicate with the AFATDS unit. Insure in AFATDS that the units were built as ABCS00 units and are set up indirect through the SISTIM unit.

## 14-9. AFCS transmit message fails

AFCS transmit message fails in AFATDS. Check the local and destination address in AFATDS. Confirm that they are unique for each unit. In the SISTIM, check the broadcast host address in the AFCS net. In AFATDS this goes into the edit routes for the Paladin. Again check in SISTIM the controlling FDC unit Net/Address pairs in use. The AFCS Subscriber is the same as the AFCS net in AFATDS. Retry a test message.

## 14-10. One Paladin unit transmission/fire order fails

One Paladin unit transmission/fire order fails in AFATDS. Check the way the Paladin units were built in AFATDS. Confirm in AFATDS the communications; edit routes, the Gun/Platoon Section number for each Paladin unit. If one FDC is in charge of 6 guns the numbering in AFATDS is 1/1, 2/1 and 3/1 for three guns and 1/2 , 2/2 and 3/2 for the second three guns. In SISTIM the Paladins are made as one to

three skip number four because of the FDC is in charge of only six guns (three from each platoon) and continue with guns five to seven. Refire the unit and retransmit all six Paladins guns fire commands.

## 14-11. SPTCIM not communicating

SPTCIM is not communicating on the second channel. Change to the first channel because the SPTCIM of the second channel is not enabled.

## 14-12. No IFCS Weapon Status

If the FCS weapon status fails to display the IFCSs, edit the JVMF unit General Data in the command and support select a different unit and select OK. Reopen the IFCS unit and select the General Data and in the Command and Support select the AFATDS that is in charge of the IFCS. Select "**OK.**" Reopen the FCS weapon status it will display the launcher, make the changes to the remaining IFCS launchers and reopen the FCS weapon status.

## 14-13. Adding a TCIM to a SISTIM box that already has two SPTCIMS working

SISTIM login must be "CDE"

Troubleshooting for a tcim

Close SISTIM
Open xterm
SU
Root password
Turn off tcim for 10 secs.
Turn tcim back on
Reboot -- -r

Or

Close SISTIM
Stop A
Turn off tcim for 10 secs
Turn tcim back on
Boot -r

# CHAPTER 15.
# MESSAGES

## SECTION 1
## PK11/JVMF/USMTF/GDU MESSAGES

There is two was to access messages, the first way is to Select TOEL / Edit Events List and Select New or Select TOEL / Run Exercise and Select Outing and Select New That will bring up (fig 15-1) Messages Protocol window. From this message window allows the operator to select the protocol desired for the Event List.

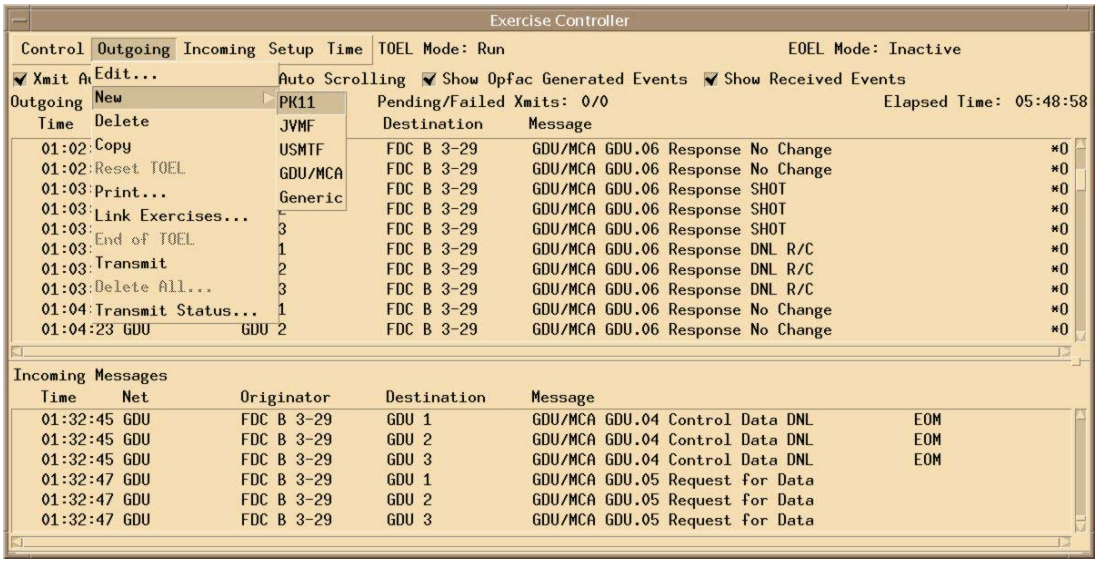



**Figure 15-1 Message Protocol**

This message window shows the operator the Protocol Available List window and displays the Available Message List window associated with the protocol type highlighted.

### 15-1. Package 11 Messages

Mostly the SISTIM operator will create new messages. To create a new message select from two ways to access the messages. The first way is to Select TOEL / Edit Events List and Select New or Select TOEL / Run Exercise and Select Outing and select "New", which will create the Message Protocol Available form. Highlight Package 11 and then on "OK", which will open the Package 11 Available Message List window. The actual message creation is almost identical to using the CMP within AFATDS. For SISTIM messages you need create an "Origin"(sender) and "Destinations" (receivers). They both must be on the same network. To set the Origin click on "Select" to create the Select Unit Form. Highlight the simulated unit you want to initiate the message and then click on "OK". To set the destination unit(s) you click on "Add" which creates the Select Unit form again. Highlight the unit and then click on "OK". If you select multiple units and want to review them, click on the Destination Units field and use the up and down arrows to "scroll" through the list. If there are multiple destination units, on the Event List you will see a "**...**" after the first unit listed. You should also establish the transmit (Xmit) Time, hours, minutes, and seconds, that you want the message sent out. The time will default to 00:00:00, which is the beginning of the scenario.

**Figure 15-2 Package 11 Messages**

Message Case is the PK11 message specification contains many different cases, which allows one message to accomplish several different meanings. Therefore SISTIM has included the Message Case feature to assist an operator in creating a message based on one specific case. By choosing the desired case SISTIM will assist the operator by specifying the fields that should and should not be used.

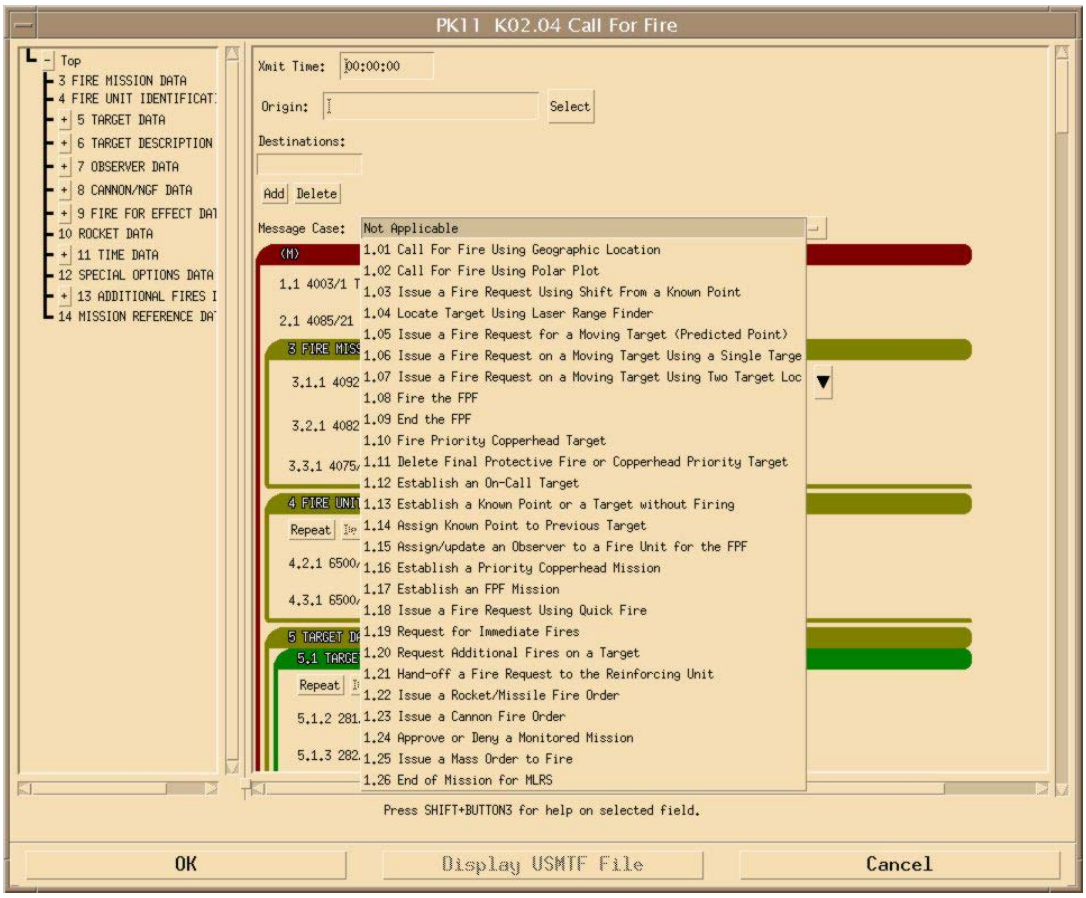



**Figure 15-3 Message Case**

### 15-1-1 Validate Message

One of the ways to select the required entries when filling out a window is to select the OK button (1st) on the bottom of the message window (Figure 15-4). The failed test case (2nd) will display the next entry, which in this case the selection would be 4.2 the Crater Location Data (3rd). Continue by following the failed test case entry until the window returns to the Event List Window. This is the minimal required enters for this message. This message is now ready to transmit.

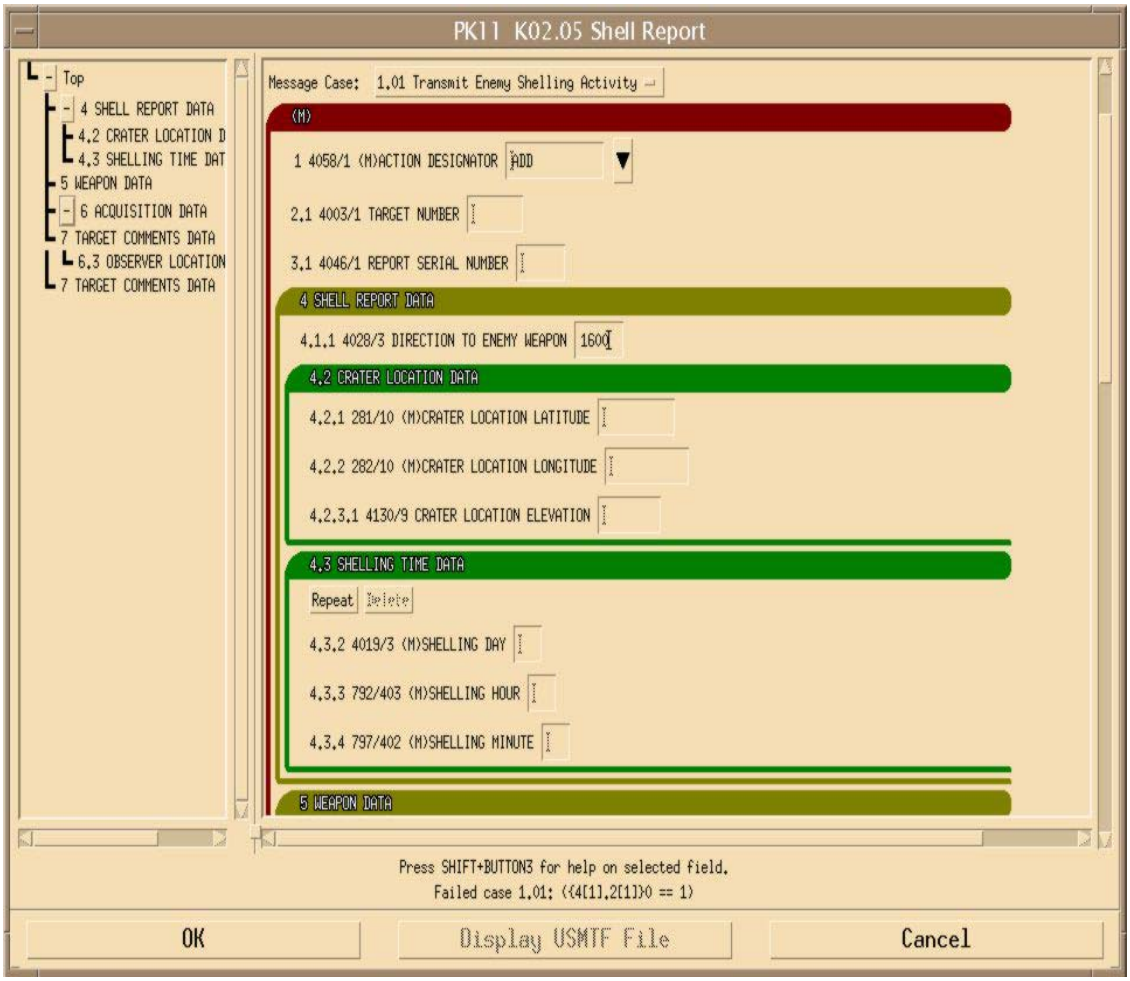



**Figure 15-4 Validate Message**

The Package 11 Case Messages are broke down with the minimal required entries. Remember that some entries for the specific message cases will not work in other messages cases.

```
PK11      K01.50 Free text
Index          DFI/DUI  Data Field Label            Data Value
1.2            4075/001 COMMENTS                 : This is a Free Text Message

PK11      K02.01 Check Fire
Message Case 1.01 Check Fire or Cancel Check Fire by Target Number
Index          DFI/DUI  Data Field Label            Data Value
4001/001 CHECK FIRE/CANCEL CHECK F: CHECK FIRE ORDER
3.1            4003/001 TARGET NUMBER            : AA1000

Message:
PK11      K02.01 Check Fire
Message Case 1.02 Check Fire or Cancel Check Fire by Fire Unit
Index          DFI/DUI  Data Field Label            Data Value
4001/001 CHECK FIRE/CANCEL CHECK F: CHECK FIRE ORDER
```

```
6.1.1         6500/007 UNIT REFERENCE NUMBER    : 6000
6.2.1         6500/008 UNIT NAME                : AFATDS OPS 6-37
```

K02.01 Check Fire

```
Message Case 1.03  Check Fire or Cancel Check Fire on a Target by Fire Unit
Index         DFI/DUI  Data Field Label            Data Value
4001/001 CHECK FIRE/CANCEL CHECK F: CHECK FIRE ORDER
3.1           4003/001 TARGET NUMBER            : AA1000
6.1.1         6500/007 UNIT REFERENCE NUMBER    : 6000
6.2.1         6500/008 UNIT NAME                : AFATDS OPS 6-37
```

```
PK11      K02.01 Check Fire
Message Case 1.04 Check Fire All or Cancel Check Fire All
Index         DFI/DUI  Data Field Label            Data Value
4001/001 CHECK FIRE/CANCEL CHECK F: CHECK FIRE ALL
```

```
PK11      K02.01 Check Fire
Message Case 1.05 Check Fire All or Cancel Check Fire All
Index         DFI/DUI  Data Field Label            Data Value
4001/001 CHECK FIRE/CANCEL CHECK F: CANCEL CHECK FIRE
```

***PK11 K02.02 Reg Data***

```
Message Case 1.01  Add Transmit Registration Data
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : ADD
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
4.1.1         6500/007 UNIT REFERENCE NUMBER    : 6000
4005/004 REGISTRATION PROJECTILE  : HEA - 105MM, 155MM, 203MM
4006/001 PROJECTILE LOT DESIGNATOR: A
5.1.3         4008/001 PROPELLANT CHARGE        : 7
5.1.4         4010/001 TRAJECTORY TYPE          : LOW
5.1.9.1       4013/002 REGISTRATION FUZE        : TIB - M577, M577A1
5.2.1         0757/401 REGISTRATION RANGE       : 12000
5.2.2         4106/001 RANGE CORRECTION         : 100
5.2.3         4009/001 DEFLECTION CORRECTION    : 2
5.2.4         4015/001 STANDARD MET             : CURRENT MET
0380/401 FUZE SETTING CORRECTION  : 2
5.3.2         0380/004 FINAL FUZE SETTING       : 3
```

```
Message:
PK11      K02.02 Reg Data
Message Case 1.02  Delete Registration Data
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : DELETE
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
4.1.1         6500/007 UNIT REFERENCE NUMBER    : 6000
4005/004 REGISTRATION PROJECTILE  : HEA - 105MM, 155MM, 203MM
4006/001 PROJECTILE LOT DESIGNATOR: A
5.1.3         4008/001 PROPELLANT CHARGE        : 7
5.1.4         4010/001 TRAJECTORY TYPE          : LOW
5.1.9.1       4013/002 REGISTRATION FUZE        : TIB - M577, M577A1
5.2.1         0757/401 REGISTRATION RANGE       : 12000
5.2.2         4106/001 RANGE CORRECTION         : 100
5.2.3         4009/001 DEFLECTION CORRECTION    : 2
5.2.4         4015/001 STANDARD MET             : CURRENT MET
0380/401 FUZE SETTING CORRECTION  : 2
5.3.2         0380/004 FINAL FUZE SETTING       : 3
```

```
Message:
PK11      K02.02 Reg Data
Message Case 1.03 Delete All Registration Data For A Fire Unit
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : DELETE
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
4.1.1         6500/007 UNIT REFERENCE NUMBER    : 6000
```

***PK11 K02.03 Met Data***

```
Message Case 1.01  Computer MET Data
Index         DFI/DUI  Data Field Label            Data Value
1             4168/001 MET DATA DESIGNATOR      : COMPUTER MET
2.1           4016/001 GLOBAL OCTANT            : NINE OCTANT
3.1           4020/001 MET VALIDITY DURATION    : 3
3.2           4019/005 MET VALIDITY START DAY   : 1
0792/401 MET VALIDITY START HOUR  : 6
```

```
6.1           4130/002 MET STATION ELEVATION    : 300
4018/001 MET STATION ATMOSPHERIC P: 898
8.1           4054/016 MET STATION NAME         : 111112
4021/001 COMPUTER MET ALTITUDE ZON: ZONE 0
10.3          4028/013 MET WIND DIRECTION       : 180
10.4          0367/401 MET WIND SPEED           : 5
4023/001 AIR VIRTUAL TEMPERATURE  : 300
10.6          4018/002 AIR PRESSURE             : 898
4021/001 COMPUTER MET ALTITUDE ZON: ZONE 1
10.3          4028/013 MET WIND DIRECTION       : 181
10.4          0367/401 MET WIND SPEED           : 6
4023/001 AIR VIRTUAL TEMPERATURE  : 301
10.6          4018/002 AIR PRESSURE             : 898
4021/001 COMPUTER MET ALTITUDE ZON: ZONE 2
10.3          4028/013 MET WIND DIRECTION       : 180
10.4          0367/401 MET WIND SPEED           : 5
4023/001 AIR VIRTUAL TEMPERATURE  : 303
10.6          4018/002 AIR PRESSURE             : 899
4021/001 COMPUTER MET ALTITUDE ZON: ZONE 3
10.3          4028/013 MET WIND DIRECTION       : 183
10.4          0367/401 MET WIND SPEED           : 9
4023/001 AIR VIRTUAL TEMPERATURE  : 305
10.6          4018/002 AIR PRESSURE             : 900

Message:
PK11      K02.03 Met Data
Message Case 1.02  Forecast MET Data
Index         DFI/DUI  Data Field Label            Data Value
1             4168/001 MET DATA DESIGNATOR      : FORECAST MET
3.1           4020/001 MET VALIDITY DURATION    : 3
3.2           4019/005 MET VALIDITY START DAY   : 1
0792/401 MET VALIDITY START HOUR  : 6
6.1           4130/002 MET STATION ELEVATION    : 300
4018/001 MET STATION ATMOSPHERIC P: 898
11.1.1        4115/004 TEMPERATURE GRADIENT     : LAPSE
11.8.1        4019/004 EFFECTIVE DAY            : 1
11.8.2        0792/404 EFFECTIVE HOUR           : 1
11.8.3        0797/403 EFFECTIVE MINUTE         : 6
11.9.1        0281/021 MET STATION LATITUDE     : 2400186
11.9.2        0282/021 MET STATION LONGITUDE    : -18342457
4130/020 FORECAST MET STATION ELEV: 120
11.10.2       0365/006 SURFACE WIND ALTITUDE    : 15 METERS
11.10.3       0372/010 SURFACE WIND DIRECTION   : 10
11.10.4       0367/003 SURFACE WIND SPEED       : 6
4021/003 FORECAST MET ALTITUDE ZON: ZONE 0
11.11.3       0367/405 EFFECTIVE WIND SPEED     : 7
0372/006 FORECAST WIND DIRECTION  : 10
4021/003 FORECAST MET ALTITUDE ZON: ZONE 1
11.11.3       0367/405 EFFECTIVE WIND SPEED     : 8
0372/006 FORECAST WIND DIRECTION  : 11
4021/003 FORECAST MET ALTITUDE ZON: ZONE 2
11.11.3       0367/405 EFFECTIVE WIND SPEED     : 10
0372/006 FORECAST WIND DIRECTION  : 13

PK11      K02.03 Met Data
Message Case 1.03  Fallout MET Data
Index         DFI/DUI  Data Field Label            Data Value
1             4168/001 MET DATA DESIGNATOR      : FALLOUT MET
2.1           4016/001 GLOBAL OCTANT            : NINE OCTANT
3.1           4020/001 MET VALIDITY DURATION    : 3
3.2           4019/005 MET VALIDITY START DAY   : 1
0792/401 MET VALIDITY START HOUR  : 6
6.1           4130/002 MET STATION ELEVATION    : 300
4018/001 MET STATION ATMOSPHERIC P: 898
8.1           4054/016 MET STATION NAME         : 111112
4021/002 FALLOUT MET ALTITUDE ZONE: ZONE 0
14.3          4028/013 MET WIND DIRECTION       : 12
14.4          0367/405 EFFECTIVE WIND SPEED     : 15
4021/002 FALLOUT MET ALTITUDE ZONE: ZONE 1
14.3          4028/013 MET WIND DIRECTION       : 13
14.4          0367/405 EFFECTIVE WIND SPEED     : 15
4021/002 FALLOUT MET ALTITUDE ZONE: ZONE 2
14.3          4028/013 MET WIND DIRECTION       : 14
14.4          0367/405 EFFECTIVE WIND SPEED     : 16
4021/002 FALLOUT MET ALTITUDE ZONE: ZONE 3
```

```
14.3          4028/013 MET WIND DIRECTION       : 16
14.4          0367/405 EFFECTIVE WIND SPEED     : 17

PK11      K02.03 Met Data
Message 1.04  Target Acquisition MET Data
Index         DFI/DUI  Data Field Label            Data Value
1             4168/001 MET DATA DESIGNATOR      : TARGET ACQUISITION MET
2.1           4016/001 GLOBAL OCTANT            : NINE OCTANT
3.1           4020/001 MET VALIDITY DURATION    : 3
3.2           4019/005 MET VALIDITY START DAY   : 1
0792/401 MET VALIDITY START HOUR  : 6
6.1           4130/002 MET STATION ELEVATION    : 300
4018/001 MET STATION ATMOSPHERIC P: 898
8.1           4054/016 MET STATION NAME         : 111112
13.1.1.1      6500/007 UNIT REFERENCE NUMBER    : 6000
13.1.2.1      6500/008 UNIT NAME                : AFATDS OPS 6-37
13.3.2        4021/004 TA MET ALTITUDE ZONE     : ZONE 0
13.3.3        4028/013 MET WIND DIRECTION       : 120
13.3.4        0367/401 MET WIND SPEED           : 5
4023/001 AIR VIRTUAL TEMPERATURE  : 300
13.3.6        4142/002 RELATIVE HUMIDITY        : 89
13.3.2        4021/004 TA MET ALTITUDE ZONE     : ZONE 1
13.3.3        4028/013 MET WIND DIRECTION       : 121
13.3.4        0367/401 MET WIND SPEED           : 7
4023/001 AIR VIRTUAL TEMPERATURE  : 302
13.3.6        4142/002 RELATIVE HUMIDITY        : 90

Message:
PK11      K02.03 Met Data
Message Case 1.05  Target Area Low Level MET Data
Index         DFI/DUI  Data Field Label            Data Value
1             4168/001 MET DATA DESIGNATOR      : TARGET AREA LOW LEVEL MET
2.1           4016/001 GLOBAL OCTANT            : NINE OCTANT
3.1           4020/001 MET VALIDITY DURATION    : 3
3.2           4019/005 MET VALIDITY START DAY   : 1
0792/401 MET VALIDITY START HOUR  : 6
6.1           4130/002 MET STATION ELEVATION    : 300
4018/001 MET STATION ATMOSPHERIC P: 898
8.1           4054/016 MET STATION NAME         : 111112
4114/001 TALL MET IDENTIFICATION  : 21
4058/009 MET TALL ACTION DESIGNATO: FIRST IN/FIRST OUT
12.3.1        4115/008 PRECIPITATION TYPE       : SNOW
12.3.2        4144/005 PRECIPITATION RATE       : 3
12.3.3        0365/007 MET CLOUD BASE HEIGHT    : 150
12.3.4        4170/001 MEAN REFRACTIVE INDEX    : 25
12.3.5.2      4021/006 TALL MET ALTITUDE ZONE   : ZONE 0
12.3.5.3      4028/013 MET WIND DIRECTION       : 140
12.3.5.4      0367/401 MET WIND SPEED           : 10
4023/001 AIR VIRTUAL TEMPERATURE  : 299
12.3.5.6      4142/002 RELATIVE HUMIDITY        : 98
12.3.5.2      4021/006 TALL MET ALTITUDE ZONE   : ZONE 1
12.3.5.3      4028/013 MET WIND DIRECTION       : 142
12.3.5.4      0367/401 MET WIND SPEED           : 12
4023/001 AIR VIRTUAL TEMPERATURE  : 298
12.3.5.6      4142/002 RELATIVE HUMIDITY        : 99
12.3.5.2      4021/006 TALL MET ALTITUDE ZONE   : ZONE 2
12.3.5.3      4028/013 MET WIND DIRECTION       : 141
12.3.5.4      0367/401 MET WIND SPEED           : 13
4023/001 AIR VIRTUAL TEMPERATURE  : 297
12.3.5.6      4142/002 RELATIVE HUMIDITY        : 99

K11      K02.03 Met Data
Message Case 1.06  Firing Point Low Level MET Data
Index         DFI/DUI  Data Field Label            Data Value
1             4168/001 MET DATA DESIGNATOR      : FIRING POINT LOW LEVEL MET
3.1           4020/001 MET VALIDITY DURATION    : 3
3.2           4019/005 MET VALIDITY START DAY   : 1
0792/401 MET VALIDITY START HOUR  : 6
6.1           4130/002 MET STATION ELEVATION    : 300
4018/001 MET STATION ATMOSPHERIC P: 898
15.1          4079/045 DELETE INDICATOR         : NO STATEMENT
4011/001 FIRING POINT IDENTIFIER  : A1
15.3.1.1      6500/007 UNIT REFERENCE NUMBER    : 6000
15.3.2.1      6500/008 UNIT NAME                : AFATDS OPS 6-37
4085/064 FPLL MET IDENTIFICATION  : 1
```

```
15.5.2        4021/005 FPLL MET ALTITUDE ZONE   : ZONE 0
15.5.3        4028/013 MET WIND DIRECTION       : 14
15.5.4        0367/004 HORIZONTAL WIND SPEED    : 7
15.5.5        0367/005 VERTICAL WIND SPEED      : 10
15.5.2        4021/005 FPLL MET ALTITUDE ZONE   : ZONE 1
15.5.3        4028/013 MET WIND DIRECTION       : 15
15.5.4        0367/004 HORIZONTAL WIND SPEED    : 8
15.5.5        0367/005 VERTICAL WIND SPEED      : 11
15.5.2        4021/005 FPLL MET ALTITUDE ZONE   : ZONE 2
15.5.3        4028/013 MET WIND DIRECTION       : 15
15.5.4        0367/004 HORIZONTAL WIND SPEED    : 9
15.5.5        0367/005 VERTICAL WIND SPEED      : 12

K11      K02.03 Met Data
Message Case 1.07  Surface Observation MET Data
Index         DFI/DUI  Data Field Label            Data Value
1             4168/001 MET DATA DESIGNATOR      : SURFACE OBSERVATION MET
2.1           4016/001 GLOBAL OCTANT            : NINE OCTANT
3.1           4020/001 MET VALIDITY DURATION    : 3
3.2           4019/005 MET VALIDITY START DAY   : 1
0792/401 MET VALIDITY START HOUR  : 6
6.1           4130/002 MET STATION ELEVATION    : 300
4018/001 MET STATION ATMOSPHERIC P: 898
8.1           4054/016 MET STATION NAME         : 111112
16.1          4115/009 CLOUD TOTAL AMOUNT       : OVERCAST
16.2          0371/405 SURFACE WIND HEADING     : EAST
16.3          4115/010 WIND FORCE               : LIGHT BREEZE
16.4          4175/003 SURFACE VISIBILITY       : 10 - 20 KM
16.5          4115/011 PRESENT WEATHER          : NO SIGNIFICANT WEATHER
4115/012 PRESENT WEATHER AMPLIFICA: NO PRECIPITATION OCCURRING
16.7          4115/013 ROAD STATE               : WET
16.8          4115/014 TERRAIN STATE            : WET
16.9          4115/015 WATER SURFACE STATE      : WATER LEVEL HIGH, BUT NOT OV
16.10         4023/004 AIR TEMPERATURE          : 34
16.11         4018/003 SURFACE PRESSURE         : 899
16.12         0372/007 WIND DIRECTION           : 15
16.13         0367/008 WIND SPEED               : 10
16.14         4029/076 CLOUD AMOUNT             : 6/8
16.15         0365/011 LOWEST CLOUD HEIGHT      : 800 - 899 METERS
16.16.1       4115/016 BREAKER AVERAGE HEIGHT   : 1 - 2 METERS
16.16.2       4037/016 BREAKER INTERVAL         : 20 - 30 SECONDS
4115/017 WAVE APPROACH DIRECTION  : RIGHT
16.16.4       4033/004 SURF ZONE WIDTH          : 20 - 30 METERS
```

***PK11 K02.04 Call For Fire***

```
Message Case 1.01  Call For Fire Using Geographic Location
Index         DFI/DUI  Data Field Label            Data Value
5.1.2         0281/005 TARGET LATITUDE          : 2377089
5.1.3         0282/005 TARGET LONGITUDE         : 23382000
5.1.4.1       4130/004 TARGET ELEVATION         : 100
4079/026 GUN-TARGET LINE INDICATOR: NO STATEMENT

Message:
PK11      K02.04 Call For Fire
Message Case 1.02  Call For Fire Using Polar Plot
Index         DFI/DUI  Data Field Label            Data Value
4079/026 GUN-TARGET LINE INDICATOR: NO STATEMENT
4028/001 OBSERVER-TARGET AZIMUTH  : 121
0757/402 OBSERVER ESTIMATED DISTAN: 2000
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.1.1.2.1     6500/008 UNIT NAME                : F01
7.2.1.1       4085/048 OBSERVER NUMBER          : 1

Message:
PK11      K02.04 Call For Fire
Message Case 1.03  Issue a Fire Request Using Shift From a Known Point
Index         DFI/DUI  Data Field Label            Data Value
4085/021 REFERENCE (KNOWN) POINT N: 1
4079/026 GUN-TARGET LINE INDICATOR: NO STATEMENT
4028/001 OBSERVER-TARGET AZIMUTH  : 121
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.1.1.2.1     6500/008 UNIT NAME                : F01
7.2.1.1       4085/048 OBSERVER NUMBER          : 1

Message:
```

```
PK11      K02.04 Call For Fire
Message Case 1.04  Locate Target Using Laser Range Finder
Index         DFI/DUI  Data Field Label            Data Value
4079/026 GUN-TARGET LINE INDICATOR: NO STATEMENT
4028/001 OBSERVER-TARGET AZIMUTH  : 121
5.7.1.1       4108/001 LASER MISSION TYPE       : STATIONARY TARGET
5.7.2.1       0757/404 SLANT RANGE              : 1500
5.7.3.1       4028/011 VERTICAL ANGLE           : 10
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.1.1.2.1     6500/008 UNIT NAME                : F01
7.2.1.1       4085/048 OBSERVER NUMBER          : 1

PK11      K02.04 Call For Fire
Message Case 1.05  Issue a Fire Request for a Moving Target
Index         DFI/DUI  Data Field Label            Data Value
4092/002 FIRE MISSION MESSAGE DESI: FIRE REQUEST - MOVING TARGET
5.1.2         0281/005 TARGET LATITUDE          : 2399935
5.1.3         0282/005 TARGET LONGITUDE         : 24239767
5.1.4.1       4130/004 TARGET ELEVATION         : 100
5.2.1         4028/010 MOVING TARGET AZIMUTH    : 1400
5.2.2         0367/402 MOVING TARGET SPEED      : 15
4079/026 GUN-TARGET LINE INDICATOR: NO STATEMENT
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.3.7.1       4040/001 METHOD OF ATTACK         : TIME ON TARGET
11.1.2        0792/402 HOUR ON TARGET           : 6
11.1.3        0797/401 MINUTE ON TARGET         : 0
11.1.4.1      4019/002 DAY ON TARGET            : 1

PK11      K02.04 Call For Fire
Message Case 1.06 Issue a Fire Request on a Moving Target Using a Single Target Location
Index         DFI/DUI  Data Field Label            Data Value
4092/002 FIRE MISSION MESSAGE DESI: FIRE REQUEST - MOVING TARGET
5.1.2         0281/005 TARGET LATITUDE          : 2381354
5.1.3         0282/005 TARGET LONGITUDE         : 23896208
5.1.4.1       4130/004 TARGET ELEVATION         : 100
5.1.5.1       0792/416 FIXED POINT HOUR         : 5
5.1.5.2       0797/415 FIXED POINT MINUTE       : 0
5.1.5.3       0380/402 FIXED POINT SECOND       : 0
5.2.1         4028/010 MOVING TARGET AZIMUTH    : 1500
5.2.2         0367/402 MOVING TARGET SPEED      : 20

Message:
PK11      K02.04 Call For Fire
Message Case 1.07  Issue a Fire Request on a Moving Target Using Two Target Locations
Index         DFI/DUI  Data Field Label            Data Value
5.1.2         0281/005 TARGET LATITUDE          : 2379108
5.1.3         0282/005 TARGET LONGITUDE         : 23553481
5.1.4.1       4130/004 TARGET ELEVATION         : 90
5.1.5.1       0792/416 FIXED POINT HOUR         : 6
5.1.5.2       0797/415 FIXED POINT MINUTE       : 5
5.1.5.3       0380/402 FIXED POINT SECOND       : 0
5.1.2         0281/005 TARGET LATITUDE          : 2379110
5.1.3         0282/005 TARGET LONGITUDE         : 23553483
5.1.4.1       4130/004 TARGET ELEVATION         : 95
5.1.5.1       0792/416 FIXED POINT HOUR         : 6
5.1.5.2       0797/415 FIXED POINT MINUTE       : 7
5.1.5.3       0380/402 FIXED POINT SECOND       : 0
5.2.1         4028/010 MOVING TARGET AZIMUTH    : 1700
5.2.2         0367/402 MOVING TARGET SPEED      : 13

PK11      K02.04 Call For Fire
Message Case 1.08 Fire the FPF
Index         DFI/DUI  Data Field Label            Data Value
7.2.1.1       4085/048 OBSERVER NUMBER          : 1
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT
12.9.1        4058/003 FPF DESIGNATOR           : FIRE FINAL PROTECTIVE FIRE

PK11      K02.04 Call For Fire
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Message Case 1.09  End the FPF
Index         DFI/DUI  Data Field Label            Data Value
7.2.1.1       4085/048 OBSERVER NUMBER          : 1
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT
12.9.1        4058/003 FPF DESIGNATOR           : END FINAL PROTECTIVE FIRE

PK11      K02.04 Call For Fire
Message Case 1.10  Fire Priority Copperhead Target
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : AS1000
7.2.1.1       4085/048 OBSERVER NUMBER          : 1
12.1          4079/010 QUICK FIRE INDICATOR     : FIRE THE SPECIFIED TARGET
4079/009 COPPERHEAD PRIORITY MISSI: COPPERHEAD MISSION
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT

PK11      K02.04 Call For Fire
Message Case 1.11  Delete Final Protective Fire or Copperhead Priority Target
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : JJ1000
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.2.1.1       4085/048 OBSERVER NUMBER          : 1
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : DELETE
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT

PK11      K02.04 Call For Fire
Message Case 1.12  Establish an On-Call Target
Index         DFI/DUI  Data Field Label            Data Value
5.1.2         0281/005 TARGET LATITUDE          : 2381581
5.1.3         0282/005 TARGET LONGITUDE         : 24068545
6.3.2         4025/001 TARGET GENERIC TYPE      : SPECIAL
6.3.3.2       4026/001 TARGET SUBTYPE           : ON CALL

PK11      K02.04 Call For Fire
Message Case 1.13  Establish a Known Point or a Target without Firing
Index         DFI/DUI  Data Field Label            Data Value
5.1.2         0281/005 TARGET LATITUDE          : 2381581
5.1.3         0282/005 TARGET LONGITUDE         : 24068545
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: END OF MISSION - RECORD AS T
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT

PK11      K02.04 Call For Fire
Message Case 1.14 Assign Known Point to Previous Target
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : JJ1001
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: END OF MISSION - ASSIGN KNOW
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
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4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT

PK11      K02.04 Call For Fire
Message Case 1.15  Assign/update an Observer to a Fire Unit for the FPF
Index         DFI/DUI  Data Field Label            Data Value
4.2.1         6500/007 UNIT REFERENCE NUMBER    : 1232
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 6000
7.1.1.2.1     6500/008 UNIT NAME                : AFATDS OPS 6-37
7.2.1.1       4085/048 OBSERVER NUMBER          : 1
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT
12.9.1        4058/003 FPF DESIGNATOR           : UPDATE FINAL PROTECTIVE FIRE

PK11      K02.04 Call For Fire
Message Case 1.16  Establish a Priority Copperhead Mission
Index         DFI/DUI  Data Field Label            Data Value
5.1.2         0281/005 TARGET LATITUDE          : 8772396
5.1.3         0282/005 TARGET LONGITUDE         : -18670103
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.1.1.2.1     6500/008 UNIT NAME                : F01
7.2.1.1       4085/048 OBSERVER NUMBER          : 1
7.3.2.1       4036/001 METHOD OF FIRE           : FIRE FOR EFFECT
9.1.1         4029/003 NUMBER OF MUNITIONS      : 1
4005/003 FIRE FOR EFFECT PROJECTIL: CPH - 155MM
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT
12.9.1        4058/003 FPF DESIGNATOR           : ASSIGN FINAL PROTECTIVE FIRE

PK11      K02.04 Call For Fire
Message Case 1.17  Establish an FPF Mission
Index         DFI/DUI  Data Field Label            Data Value
5.1.2         0281/005 TARGET LATITUDE          : 2381356
5.1.3         0282/005 TARGET LONGITUDE         : 23896800
5.1.4.1       4130/004 TARGET ELEVATION         : 100
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.1.1.2.1     6500/008 UNIT NAME                : F01
7.2.1.1       4085/048 OBSERVER NUMBER          : 1
9.1.1         4029/003 NUMBER OF MUNITIONS      : 3
4005/003 FIRE FOR EFFECT PROJECTIL: HEA - 105MM, 155MM, 203MM
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT
12.9.1        4058/003 FPF DESIGNATOR           : ASSIGN FINAL PROTECTIVE FIRE

PK11      K02.04 Call For Fire
Message Case 1.18 Issue a Fire Request Using Quick Fire
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : JJ1001
12.1          4079/010 QUICK FIRE INDICATOR     : FIRE THE SPECIFIED TARGET
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT

PK11      K02.04 Call For Fire
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Message Case 1.19 Request for Immediate Fires
Index         DFI/DUI  Data Field Label            Data Value
5.1.2         0281/005 TARGET LATITUDE          : 2549019
5.1.3         0282/005 TARGET LONGITUDE         : -18778372
5.1.4.1       4130/004 TARGET ELEVATION         : 100
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.1.1.2.1     6500/008 UNIT NAME                : F01
4112/002 OBSERVER EFFECTS REQUEST : IMMEDIATE SUPPRESSION

Message:
PK11      K02.04 Call For Fire
Message Case 1.20 Request Additional Fires on a Target
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : AQ1234
4082/004 CALL FOR FIRE STATUS CODE: CANNOT COMPLY
5.1.2         0281/005 TARGET LATITUDE          : 1
5.1.3         0282/005 TARGET LONGITUDE         : 2
5.1.4.1       4130/004 TARGET ELEVATION         : 3
5.3.1.1       4032/001 LENGTH                   : 2
5.3.1.2       4033/001 WIDTH                    : 3
5.3.1.3.1     4028/002 ATTITUDE                 : 4
6.3.2         4025/001 TARGET GENERIC TYPE      : ARTILLERY
6.3.3.2       4026/001 TARGET SUBTYPE           : LIGHT
7.3.1.1       4041/001 METHOD OF CONTROL        : ADJUST FIRE
7.3.2.1       4036/001 METHOD OF FIRE           : ADJUST FIRE
7.3.4.1       4068/003 EFFECTS DESIRED          : 5
4068/002 FIRE UNIT EFFECTS ACHIEVE: 5

PK11      K02.04 Call For Fire
Message case 1.21 Hand-off a Fire Request to the Reinforcing Unit
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : JJ1001
4092/002 FIRE MISSION MESSAGE DESI: CALL FOR FIRE
4082/004 CALL FOR FIRE STATUS CODE: HAND-OFF MISSION
5.1.2         0281/005 TARGET LATITUDE          : 2380531
5.1.3         0282/005 TARGET LONGITUDE         : -18777182
5.1.4.1       4130/004 TARGET ELEVATION         : 75
5.3.2.1       4031/001 RADIUS                   : 100
6.3.2         4025/001 TARGET GENERIC TYPE      : ARTILLERY
6.3.3.2       4026/001 TARGET SUBTYPE           : MEDIUM
7.3.1.1       4041/001 METHOD OF CONTROL        : FIRE WHEN READY
7.3.2.1       4036/001 METHOD OF FIRE           : FIRE FOR EFFECT

Message:
PK11      K02.04 Call For Fire
Message Case 1.22  Issue a Rocket/Missile Fire Order
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : JJ1001
4.2.1         6500/007 UNIT REFERENCE NUMBER    : 6000
4.3.1         6500/008 UNIT NAME                : AFATDS OPS 6-37
5.1.2         0281/005 TARGET LATITUDE          : 2380531
5.1.3         0282/005 TARGET LONGITUDE         : -18777182
5.1.4.1       4130/004 TARGET ELEVATION         : 100
5.3.1.1       4032/001 LENGTH                   : 1200
5.3.1.2       4033/001 WIDTH                    : 1400
5.3.1.3.1     4028/002 ATTITUDE                 : 1600
6.3.2         4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILE
6.3.3.2       4026/001 TARGET SUBTYPE           : MEDIUM
7.3.1.1       4041/001 METHOD OF CONTROL        : FIRE WHEN READY
7.3.2.1       4036/001 METHOD OF FIRE           : FIRE FOR EFFECT
10.1.1        4005/007 ROCKET MUNITIONS TYPE    : JED
4029/014 NUMBER OF ROCKET MUNITION: 4

Message:
PK11      K02.04 Call For Fire
Message case 1.23 Issue a Cannon Fire Order
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : JP1000
4082/004 CALL FOR FIRE STATUS CODE: FIRE ORDER
```

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4.2.1         6500/007 UNIT REFERENCE NUMBER    : 6000
4.3.1         6500/008 UNIT NAME                : AFATFS OPS 6-37
5.1.2         0281/005 TARGET LATITUDE          : 2381356
5.1.3         0282/005 TARGET LONGITUDE         : 23896800
5.1.4.1       4130/004 TARGET ELEVATION         : 100
5.3.2.1       4031/001 RADIUS                   : 100
6.1.1         4034/001 TARGET AIR DEFENSES      : NOT DEFENDED
6.3.2         4025/001 TARGET GENERIC TYPE      : ARTILLERY
6.3.3.2       4026/001 TARGET SUBTYPE           : MEDIUM
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.1.1.2.1     6500/008 UNIT NAME                : F01
7.3.1.1       4041/001 METHOD OF CONTROL        : FIRE WHEN READY
7.3.2.1       4036/001 METHOD OF FIRE           : FIRE FOR EFFECT
9.1.1         4029/003 NUMBER OF MUNITIONS      : 4
4005/003 FIRE FOR EFFECT PROJECTIL: HEA - 105MM, 155MM, 203MM
4006/001 PROJECTILE LOT DESIGNATOR: A
9.2.4.1       4007/001 PROPELLANT TYPE          : WHITE BAG
4006/002 PROPELLANT LOT DESIGNATOR: W

Message:
PK11      K02.04 Call For Fire
Message Case 1.24  Approve or Deny a Monitored Mission
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : JP1000
4082/004 CALL FOR FIRE STATUS CODE: MONITORED MISSION
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: MISSION APPROVED

K02.04 Call For Fire
Message Case 1.25 Issue a Mass Order to Fire
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : JP1222
4082/004 CALL FOR FIRE STATUS CODE: MASS FIRE ORDER
4.2.1         6500/007 UNIT REFERENCE NUMBER    : 6000
4.3.1         6500/008 UNIT NAME                : AFATDS OPS 6-37
5.1.2         0281/005 TARGET LATITUDE          : 2381356
5.1.3         0282/005 TARGET LONGITUDE         : 23896800
5.3.2.1       4031/001 RADIUS                   : 250
6.3.2         4025/001 TARGET GENERIC TYPE      : ARTILLERY
6.3.3.2       4026/001 TARGET SUBTYPE           : MEDIUM
7.1.1.1.1     6500/007 UNIT REFERENCE NUMBER    : 1232
7.1.1.2.1     6500/008 UNIT NAME                : F01
7.3.1.1       4041/001 METHOD OF CONTROL        : FIRE WHEN READY
7.3.2.1       4036/001 METHOD OF FIRE           : FIRE FOR EFFECT

Message:
PK11      K02.04 Call For Fire
Message Case 1.26  End of Mission for MLRS
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : JP1234
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
12.3          4079/045 DELETE INDICATOR         : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: END OF MISSION
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4058/025 MISSION APPROVAL DESIGNAT: NO STATEMENT
```

***PK11 K02.05 Shell Report***

```
Message Case 1.01  Transmit Enemy Shelling Activity
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : ADD
2.1           4003/001 TARGET NUMBER            : JP1000
4028/003 DIRECTION TO ENEMY WEAPON: 1640
0281/010 CRATER LOCATION LATITUDE : 2380531
0282/010 CRATER LOCATION LONGITUDE: 23725097
4130/009 CRATER LOCATION ELEVATION: 50
5.2.1         0700/402 WEAPON USED              : ARTILLERY
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5.3.1         4048/001 HOSTILE WEAPON SUBTYPE   : MEDIUM
5.4.1         4049/001 WEAPON CALIBER           : 122MM
6.7.1         4119/001 TARGET LOCATION ERROR    : 2

Message:
PK11      K02.05 Shell Report
Message Case 1.02  Update Shell Report
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : CHANGE
2.1           4003/001 TARGET NUMBER            : JP2000

Message:
PK11      K02.05 Shell Report
Message Case 1.03 Delete Shell Report
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : DELETE
2.1           4003/001 TARGET NUMBER            : JP2000
```

***PK11 K02.06 Observer Notify***

```
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : JP1111
2             4053/001 OBSERVER NOTIFICATION    : END OF MISSION
3.1           4085/048 OBSERVER NUMBER          : 1
4.1.1         6500/007 UNIT REFERENCE NUMBER    : 1232
```

***PK11 K02.07 Survey Control Point***

```
Message Case 1.01  Add Survey Data or Responses to Level III Requests
Index         DFI/DUI  Data Field Label            Data Value
4092/026 SURVEY MESSAGE DESIGNATOR: SURVEY POINT
2             4079/051 LAST SCP INDICATOR       : NO STATEMENT
3.1           4058/001 ACTION DESIGNATOR        : ADD
4168/013 SURVEY POINT TYPE DESIGNA: SURVEY CONTROL POINT
7.3           4054/001 SCP NAME                 : surveypoint0001
7.5.1         0281/002 LATITUDE                 : 152406763
7.5.2         0282/002 LONGITUDE                : -1190750692
7.5.3.1       0283/001 GRID ZONE DESIGNATOR     : 14
7.5.4.1       4130/012 SCP ELEVATION            : 75

Message:
PK11      K02.07 Survey Control Point
Message Case 1.02  Delete Survey Data
Index         DFI/DUI  Data Field Label            Data Value
4092/026 SURVEY MESSAGE DESIGNATOR: SURVEY POINT
2             4079/051 LAST SCP INDICATOR       : LAST SCP
3.1           4058/001 ACTION DESIGNATOR        : DELETE

Message:
PK11      K02.07 Survey Control Point
Message Case 1.03  Update Survey Data
Index         DFI/DUI  Data Field Label            Data Value
4092/026 SURVEY MESSAGE DESIGNATOR: SURVEY POINT
2             4079/051 LAST SCP INDICATOR       : LAST SCP
3.1           4058/001 ACTION DESIGNATOR        : CHANGE
4168/013 SURVEY POINT TYPE DESIGNA: SURVEY CONTROL POINT
7.3           4054/001 SCP NAME                 : surveypoint0001
7.4.1.1       4055/001 ORDER OF SURVEY          : FIRST ORDER SURVEY
```

***PK11 K02.08 Schedule of Fires***

```
Message Case 1.01  Establish Preliminary Fire Plan Targets
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : SEAD01
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: TARGET UPDATE
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
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9.11.2        4003/001 TARGET NUMBER            : JP0001

Message:
PK11      K02.08 Schedule of Fires
Message Case 1.02 Delete Preliminary Fire Plan Targets
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : SEAD01
2             4058/001 ACTION DESIGNATOR        : DELETE
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: TARGET UPDATE
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
9.11.2        4003/001 TARGET NUMBER            : JP1000

Message:
PK11      K02.08 Schedule of Fires
Message Case 1.03  Provide Scheduling Instructions for Fire Plan Targets
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : SEAD01
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: TARGET INSTRUCTIONS
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: SCHEDULE AS FIRE PLAN TARGET
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
9.11.2        4003/001 TARGET NUMBER            : JP1001

Message:
PK11      K02.08 Schedule of Fires
Message Case Message Case 1.04 Delete Targets from TISF or FPTGT or ONCALL List
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : SEAD01
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: TARGET INSTRUCTIONS
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: SCHEDULE AS FIRE PLAN TARGET
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
9.11.2        4003/001 TARGET NUMBER            : JP1001

Message:
PK11      K02.08 Schedule of Fires
Message Case 1.05  Compute a FASCAM Minefield
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : MINE01
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: FASCAM
4054/027 COORDINATING AGENCY NAME : JSTAR
8.1           0792/023 H-HOUR                   : 6
8.2           0797/023 H-HOUR MINUTE            : 0
8.3.1         4019/022 H-HOUR DAY               : 1
```

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4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : ARTILLERY MINEFIELD
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
9.19.1        0281/005 TARGET LATITUDE          : 2380531
9.19.2        0282/005 TARGET LONGITUDE         : -18777182
9.19.3.1      4130/004 TARGET ELEVATION         : 100
9.22.1.1      4032/001 LENGTH                   : 200
9.22.1.2      4033/001 WIDTH                    : 200
9.22.1.3      4028/002 ATTITUDE                 : 100
10.1.1        4162/001 MINEFIELD DENSITY        : LOW
10.2.1        0792/414 NOT LATER THAN HOUR      : 6
10.2.2        0797/413 NOT LATER THAN MINUTE    : 20
10.2.3.1      4019/011 NOT LATER THAN DAY       : 1
4005/017 MINEFIELD MUNITIONS TYPE : AMS - 155MM
10.3.3        4013/001 FUZE TYPE                : TIME
4005/017 MINEFIELD MUNITIONS TYPE : APS - 155MM
10.3.3        4013/001 FUZE TYPE                : TIME

Message:
PK11      K02.08 Schedule of Fires
Message Case 1.06 Alter a FASCAM Minefield
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : FASCA1
2             4058/001 ACTION DESIGNATOR        : CHANGE
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: FASCAM
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : ARTILLERY MINEFIELD
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT

PK11      K02.08 Schedule of Fires
Message Case 1.07 Reserve a Selected Fire Unit for a Fire Plan
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : HAPPY1
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: RESERVE FIRE UNIT
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4060/001 TIME RELATIVE TO H-HOUR  : 5
9.32.2.1.1    6500/007 UNIT REFERENCE NUMBER    : 6000
9.32.2.2.1    6500/008 UNIT NAME                : AFATDS OPS 6-37

K02.08 Schedule of Fires
Message Case 1.08 Delete a Reserved Fire Unit for a Fire Plan
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : Happy1
2             4058/001 ACTION DESIGNATOR        : DELETE
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: RESERVE FIRE UNIT
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
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4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4060/001 TIME RELATIVE TO H-HOUR  : 10
9.32.2.1.1    6500/007 UNIT REFERENCE NUMBER    : 6000
9.32.2.2.1    6500/008 UNIT NAME                : AFATDS OPS 6-37

PK11      K02.08 Schedule of Fires
Message Case 1.09  Reserve All Fire Units for a Fire Plan
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : Happy2
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: RESERVE FIRE UNIT
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4060/001 TIME RELATIVE TO H-HOUR  : 15

PK11      K02.08 Schedule of Fires
Message Case 1.10  Delete All Reserved Fire Units for a Fire Plan
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : Happy2
2             4058/001 ACTION DESIGNATOR        : DELETE
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: RESERVE FIRE UNIT
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
4060/001 TIME RELATIVE TO H-HOUR  : 0

PK11      K02.08 Schedule of Fires
Message Case 1.11  Transmit a Preliminary Fire Plan Target List
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : Happy1
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: TARGET DATA TRANSMISSION
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
9.11.2        4003/001 TARGET NUMBER            : JP1000
9.13.1        4129/005 TARGET PRIORITY          : PRIORITY 1
9.14.1        4119/001 TARGET LOCATION ERROR    : 10
9.19.1        0281/005 TARGET LATITUDE          : 2381356
9.19.2        0282/005 TARGET LONGITUDE         : 23896800
9.19.3.1      4130/004 TARGET ELEVATION         : 100
9.22.2.1      4031/001 RADIUS                   : 150
9.23.2        4025/001 TARGET GENERIC TYPE      : ARTILLERY
9.23.3.2      4026/001 TARGET SUBTYPE           : MEDIUM
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Message:
PK11      K02.08 Schedule of Fires
Message Case 1.12  Transmit Fire Plan Target Scheduling Data
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : GOLD01
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: TARGET DATA TRANSMISSION
4079/027 ON-CALL TARGET INDICATOR : TARGET IS ON-CALL
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
9.11.2        4003/001 TARGET NUMBER            : JP2005
9.13.1        4129/005 TARGET PRIORITY          : PRIORITY 1
9.14.1        4119/001 TARGET LOCATION ERROR    : 10
9.19.1        0281/005 TARGET LATITUDE          : 2381581
9.19.2        0282/005 TARGET LONGITUDE         : -18433735
9.22.2.1      4031/001 RADIUS                   : 150
9.23.2        4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILE
9.23.3.2      4026/001 TARGET SUBTYPE           : MEDIUM MISSILE

Message:
PK11      K02.08 Schedule of Fires
Message Case 1.13  Transmit Schedule of Fires Data
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : green1
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: TARGET DATA TRANSMISSION
4079/027 ON-CALL TARGET INDICATOR : TARGET IS ON-CALL
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: TARGET SCHEDULED AS FIRE PLA
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
9.11.2        4003/001 TARGET NUMBER            : AA1000
9.13.1        4129/005 TARGET PRIORITY          : PRIORITY 1
9.14.1        4119/001 TARGET LOCATION ERROR    : 5
9.19.1        0281/005 TARGET LATITUDE          : 2380531
9.19.2        0282/005 TARGET LONGITUDE         : -18777182
9.22.2.1      4031/001 RADIUS                   : 200
9.23.2        4025/001 TARGET GENERIC TYPE      : ARTILLERY
9.23.3.2      4026/001 TARGET SUBTYPE           : MEDIUM
9.27.2.1      4068/004 REQUIRED EFFECTS         : 2
9.32.2.1.1    6500/007 UNIT REFERENCE NUMBER    : 6000
9.32.2.2.1    6500/008 UNIT NAME                : AFATDS OPS 6-37
9.32.3.1      0700/401 WEAPON TYPE              : 155MM
4068/002 FIRE UNIT EFFECTS ACHIEVE: 2
9.32.6.1      4010/002 FU TRAJECTORY TYPE       : LOW
9.32.7.1      4037/003 REACTION TIME            : 1
9.32.9.1      4005/007 ROCKET MUNITIONS TYPE    : NO STATEMENT
4029/014 NUMBER OF ROCKET MUNITION: 0

PK11      K02.08 Schedule of Fires
Message Case 1.14  Transmit an MLRS Fire Order
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : GOLD01
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: TARGET DATA TRANSMISSION
8.1           0792/023 H-HOUR                   : 6
8.2           0797/023 H-HOUR MINUTE            : 0
8.3.1         4019/022 H-HOUR DAY               : 1
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
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4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
9.16.2        4085/033 PHASE NUMBER             : PHASE 1
9.19.1        0281/005 TARGET LATITUDE          : 2381586
9.19.2        0282/005 TARGET LONGITUDE         : 24045221
9.22.2.1      4031/001 RADIUS                   : 200
9.23.2        4025/001 TARGET GENERIC TYPE      : ARTILLERY
9.23.3.2      4026/001 TARGET SUBTYPE           : MEDIUM
4060/001 TIME RELATIVE TO H-HOUR  : 10
9.32.2.1.1    6500/007 UNIT REFERENCE NUMBER    : 6000
9.32.2.2.1    6500/008 UNIT NAME                : AFATDS OPS 6-37
9.32.9.1      4005/007 ROCKET MUNITIONS TYPE    : NO STATEMENT
4029/014 NUMBER OF ROCKET MUNITION: 0

K11      K02.08 Schedule of Fires
Message Case 1.15  End a Mission
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : Green1
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: END OF MISSION
4092/003 FIRE PLAN MESSAGE DESIGNA: TARGET DATA TRANSMISSION
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT

Message:
PK11      K02.08 Schedule of Fires
Message Case 1.16  Transmit a Cannon Fire Order
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : Black1
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
3             4079/024 LAST TARGET INDICATOR    : NO STATEMENT
4058/002 END OF MISSION DESIGNATOR: NO STATEMENT
4092/003 FIRE PLAN MESSAGE DESIGNA: CALL FOR FIRE
8.1           0792/023 H-HOUR                   : 6
8.2           0797/023 H-HOUR MINUTE            : 0
8.3.1         4019/022 H-HOUR DAY               : 1
4079/027 ON-CALL TARGET INDICATOR : SCHEDULED
4079/015 MISSION FIRED INDICATOR  : NO STATEMENT
4079/063 FIRE PLAN TARGET INDICATO: NO STATEMENT
4079/064 TARGET IN SCHEDULE OF FIR: NO STATEMENT
9.6           4079/031 MINEFIELD INDICATOR      : NO STATEMENT
4079/079 SADARM SEGMENTATION INDIC: NO STATEMENT
4079/060 RECORD AS TARGET INDICATO: NO STATEMENT
4079/030 TARGET LOCATION STATUS IN: CONFIRMED LOCATION
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT
9.11.2        4003/001 TARGET NUMBER            : JP2222
9.16.2        4085/033 PHASE NUMBER             : PHASE 1
9.19.1        0281/005 TARGET LATITUDE          : 2381356
9.19.2        0282/005 TARGET LONGITUDE         : -18605479
9.19.3.1      4130/004 TARGET ELEVATION         : 150
9.22.2.1      4031/001 RADIUS                   : 150
4060/001 TIME RELATIVE TO H-HOUR  : 15
9.32.2.1.1    6500/007 UNIT REFERENCE NUMBER    : 6000
9.32.2.2.1    6500/008 UNIT NAME                : AFATDS OPS 6-37
4005/003 FIRE FOR EFFECT PROJECTIL: HEA - 105MM, 155MM, 203MM
9.32.8.3.1    4029/003 NUMBER OF MUNITIONS      : 6
9.32.8.4.1    4013/004 FIRE FOR EFFECT FUZE     : POINT DETONATING
```

***PK11 K02.09 Target Data***

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Message Case 1.01 Report Target Using Geographic Coordinates
Index         DFI/DUI  Data Field Label            Data Value
```

```
4092/019 TARGET DATA MESSAGE DESIG: COORDINATE REPORT
2.1           4058/001 ACTION DESIGNATOR        : ADD
4.4.2.1       0281/005 TARGET LATITUDE          : 2381356
4.4.2.2       0282/005 TARGET LONGITUDE         : 23896800
4.4.3.1       4130/004 TARGET ELEVATION         : 100
4.10.2.1      4119/001 TARGET LOCATION ERROR    : 0

Message:
PK11      K02.09 Target Data
Message Case 1.02 Report Target Using Direction and Distance from Observer
Index         DFI/DUI  Data Field Label            Data Value
4092/019 TARGET DATA MESSAGE DESIG: AZIMUTH REPORT
2.1           4058/001 ACTION DESIGNATOR        : ADD
4.10.2.1      4119/001 TARGET LOCATION ERROR    : 0
0281/007 OBSERVER LOCATION LATITUD: 2381356
0282/007 OBSERVER LOCATION LONGITU: 23896800
0757/402 OBSERVER ESTIMATED DISTAN: 1500
4028/001 OBSERVER-TARGET AZIMUTH  : 1200

Message:
PK11      K02.09 Target Data
Message Case 1.03  Update or Delete Target Information
Index         DFI/DUI  Data Field Label            Data Value
4092/019 TARGET DATA MESSAGE DESIG: AZIMUTH REPORT
2.1           4058/001 ACTION DESIGNATOR        : CHANGE
4.2.1         4003/001 TARGET NUMBER            : JP2002
4.5.2         4025/001 TARGET GENERIC TYPE      : ARTILLERY
4.5.3.2       4026/001 TARGET SUBTYPE           : UNKNOWN

Message:
PK11      K02.09 Target Data
Message case 1.04  Update Target Attribute(s) by Mission Fired Report Method
Index         DFI/DUI  Data Field Label            Data Value
4092/019 TARGET DATA MESSAGE DESIG: TARGET INTELLIGENCE MISSION
4.2.1         4003/001 TARGET NUMBER            : AB1000
4.4.1.1       0281/023 IMPACT POINT LATITUDE    : 2381356
4.4.1.2       0282/023 IMPACT POINT LONGITUDE   : 23896800
4.4.2.1       0281/005 TARGET LATITUDE          : 2381356
4.4.2.2       0282/005 TARGET LONGITUDE         : -17486998

Message:
PK11      K02.09 Target Data
Message Case 1.05  Full Report of NON-THMTGT Target or Shell Data
Index         DFI/DUI  Data Field Label            Data Value
4.2.1         4003/001 TARGET NUMBER            : AB1234
4.3.1         4168/003 TARGET DESCRIPTOR        : TARGET REPORT
4.4.1.1       0281/023 IMPACT POINT LATITUDE    : 2381356
4.4.1.2       0282/023 IMPACT POINT LONGITUDE   : -17486998
4.4.2.1       0281/005 TARGET LATITUDE          : 2381337
4.4.2.2       0282/005 TARGET LONGITUDE         : -17486998
4.4.3.1       4130/004 TARGET ELEVATION         : 75
4.5.2         4025/001 TARGET GENERIC TYPE      : ARTILLERY
4.5.3.2       4026/001 TARGET SUBTYPE           : UNKNOWN
4.9.2.1       4031/001 RADIUS                   : 50
4.10.2.1      4119/001 TARGET LOCATION ERROR    : 0
4050/001 TARGET ACQUISITION SOURCE: COUNTER BATTERY RADAR

Message:
PK11      K02.09 Target Data
Message Case 1.06 Full Report of a THMTGT Target Data
Index         DFI/DUI  Data Field Label            Data Value
4.2.1         4003/001 TARGET NUMBER            : JM1000
4.3.1         4168/003 TARGET DESCRIPTOR        : COORDINATE REPORT (SINGLE)
4.4.3.1       4130/004 TARGET ELEVATION         : 100
4.5.2         4025/001 TARGET GENERIC TYPE      : ARTILLERY
4.5.3.2       4026/001 TARGET SUBTYPE           : UNKNOWN
4.9.2.1       4031/001 RADIUS                   : 100
4.10.2.1      4119/001 TARGET LOCATION ERROR    : 0
4050/001 TARGET ACQUISITION SOURCE: SHELL REPORT
4.13.1.1      4085/048 OBSERVER NUMBER          : 1
4.14.1.1      4028/012 ATTACK DIRECTION         : 1200
```

***PK11 K02.10 Mission/Cancellation***

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Index         DFI/DUI  Data Field Label            Data Value
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1.2           4054/003 FIRE PLAN NAME           : GOLD01
1.3.2         4003/001 TARGET NUMBER            : AA1000
```

***PK11 K02.11 Ammo Inventory***

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Message Case 1.01  Transmit Cannon Data Munitions
Index         DFI/DUI  Data Field Label            Data Value
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
2             4079/045 DELETE INDICATOR         : NO STATEMENT
3.1.1         6500/007 UNIT REFERENCE NUMBER    : 6000
3.2.1         6500/008 UNIT NAME                : AFATDS OPS 6-37
4058/006 INVENTORY CODE DESIGNATOR: ON-HAND
8.2           4005/001 MUNITIONS TYPE           : HEA - 81MM, 105MM, 107MM, 12
8.3           4029/003 NUMBER OF MUNITIONS      : 100
4006/001 PROJECTILE LOT DESIGNATOR: H
4176/001 PROJECTILE COUNTRY OF ORI: US
9.2           4013/001 FUZE TYPE                : QUICK
9.3           4029/004 NUMBER OF FUZES          : 100
10.2          4007/001 PROPELLANT TYPE          : WHITE BAG
4006/002 PROPELLANT LOT DESIGNATOR: W
10.4          4029/010 NUMBER OF PROPELLANTS    : 100

PK11      K02.11 Ammo Inventory
Message Case 1.02 Transmit Rocket/Missile Ammunition Storage Site Data
Index         DFI/DUI  Data Field Label            Data Value
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
2             4079/045 DELETE INDICATOR         : NO STATEMENT
3.1.1         6500/007 UNIT REFERENCE NUMBER    : 6000
3.2.1         6500/008 UNIT NAME                : AFATDS OPS 6-37
11.1.1        4085/030 AMMUNITION SITE NUMBER   : 1
4011/003 PLATOON OPERATIONAL AREA : AREA A
0281/024 AMMUNITION SITE LATITUDE : 2381356
0282/024 AMMUNITION SITE LONGITUDE: -18605479
4130/007 AMMUNITION SITE ELEVATION: 50
11.3.2        4005/007 ROCKET MUNITIONS TYPE    : JED
4029/027 NUMBER OF MUNITIONS ON TH: 60
4029/028 NUMBER OF MUNITIONS ON WH: 30
4037/008 ON GROUND RESPONSE TIME  : 10
4037/009 ON WHEELS RESPONSE TIME  : 20

Message:
PK11      K02.11 Ammo Inventory
Message Case 1.03  Delete Ammunition Storage Site Data for a Specific Site
Index         DFI/DUI  Data Field Label            Data Value
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
2             4079/045 DELETE INDICATOR         : DELETE
3.1.1         6500/007 UNIT REFERENCE NUMBER    : 6000
3.2.1         6500/008 UNIT NAME                : AFATDS OPS 6-37
11.1.1        4085/030 AMMUNITION SITE NUMBER   : 1
4011/003 PLATOON OPERATIONAL AREA : AREA A

Message:
PK11      K02.11 Ammo Inventory
Message Case 1.04  Delete All Ammunition Storage Site Information by Unit or Plan
Index         DFI/DUI  Data Field Label            Data Value
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
2             4079/045 DELETE INDICATOR         : DELETE
3.1.1         6500/007 UNIT REFERENCE NUMBER    : 180148
3.2.1         6500/008 UNIT NAME                : A 2-18 FA
```

***PK11 K02.12 On-Call Fire Req***

```
Message Case 1.01  Fire an On-Call Fire Plan Target|
Index         DFI/DUI  Data Field Label            Data Value
2.1           4054/003 FIRE PLAN NAME           : sead01
3.2           4003/001 TARGET NUMBER            : AA1000

Message:
PK11      K02.12 On-Call Fire Req
Message Case 1.02  Fire an At My Command Mission
Index         DFI/DUI  Data Field Label            Data Value
4092/024 FIRE COMMAND MESSAGE DESI: FIRE
3.2           4003/001 TARGET NUMBER            : AA1000
```

***PK11 K02.13 Mission Clearance***

```
Message Case 1.01
Index         DFI/DUI  Data Field Label            Data Value
```

```
1             4063/001 DISPOSITION ACTION       : APPROVED
2             4003/001 TARGET NUMBER            : AA1000
```

***PK11 K02.14 MTO***

```
Message Case 1.01  Transmit Radar Adjustment MTO
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1000
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
6.1.1         4058/003 FPF DESIGNATOR           : NO STATEMENT
6.1.7.1       4041/001 METHOD OF CONTROL        : ADJUST FIRE
6.1.12.1      4037/002 TIME OF FLIGHT           : 34
6.1.13.1      4037/005 TIME BETWEEN ROUNDS      : 30
6.1.14.1      0365/009 RADAR MAXIMUM ORDINATE   : 5000
4028/046 RADAR QUADRANT ELEVATION : 1600
6.1.14.3      4041/002 RADAR SUBMODE CONTROL    : ARTILLERY AIR BURST
6.2.1         0281/005 TARGET LATITUDE          : 5749870
6.2.2         0282/005 TARGET LONGITUDE         : -18430767
6.2.3.1       4130/004 TARGET ELEVATION         : 120
6.4.2.1       4005/002 ADJUSTING PROJECTILE     : HEA - 105MM, 155MM, 203MM
6.4.2.2.1     4013/003 ADJUSTING FUZE           : TIME
4029/013 NUMBER OF ADJUSTING ROUND: 2
0281/025 ADJUSTING PIECE LATITUDE : 5768428
0282/025 ADJUSTING PIECE LONGITUDE: -18430845
4130/011 ADJUSTING PIECE ELEVATION: 80

Message:
PK11      K02.14 MTO
Message Case 1.02 Transmit Copperhead Fire Mission MTO
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1231
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4.1           4085/048 OBSERVER NUMBER          : 41
6.1.1         4058/003 FPF DESIGNATOR           : FINAL PROTECTIVE FIRE/COPPER
4085/023 OBSERVER FIRE MISSION NUM: MISSION NUMBER 1
6.1.7.1       4041/001 METHOD OF CONTROL        : AT MY COMMAND
6.1.10.1      4010/001 TRAJECTORY TYPE          : LOW
6.5.3.2       4005/001 MUNITIONS TYPE           : CPH - 155MM
4029/002 NUMBER OF FIRE FOR EFFECT: 4
6.5.5.1       4029/006 NUMBER OF FIRE UNITS     : 1
4151/001 GUN OBSERVER-TARGET RELAT: RIGHT
6.6.2         0757/007 GUN-TARGET RANGE         : 650
6.6.3         4028/015 COPPERHEAD ANGLE T       : 50 - 149 MILS
6.6.4         4037/015 LASER ALERT TIME         : 30

Message:
PK11      K02.14 MTO
Message Case 1.03  Transmit Final Protective Fires MTO
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1234
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
6.1.1         4058/003 FPF DESIGNATOR           : ASSIGN FINAL PROTECTIVE FIRE
6.1.10.1      4010/001 TRAJECTORY TYPE          : LOW

Message:
PK11      K02.14 MTO
Message Case 1.04  Transmit HB/MPI Orienting Data
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1000
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
4.1           4085/048 OBSERVER NUMBER          : 41
4079/016 REGISTRATION TYPE INDICAT: MEAN POINT OF IMPACT REGISTR
4079/034 VERTICAL ANGLE INDICATOR : REPORT VERTICAL ANGLE
6.3.3.1       4028/021 REFERENCE DIRECTION      : 120
4028/019 REFERENCE VERTICAL ANGLE : 150

Message:
PK11      K02.14 MTO
Message Case 1.05 Transmit MTO
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA2345
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
6.1.1         4058/003 FPF DESIGNATOR           : NO STATEMENT
6.1.7.1       4041/001 METHOD OF CONTROL        : AT MY COMMAND
6.1.8.1       4036/001 METHOD OF FIRE           : FIRE FOR EFFECT
6.1.10.1      4010/001 TRAJECTORY TYPE          : LOW
```

```
6.5.3.2       4005/001 MUNITIONS TYPE           : HEA - 81MM, 105MM, 107MM, 12
6.5.3.3.1     4013/004 FIRE FOR EFFECT FUZE     : PDA - M557, M524, M567, M51A
4029/002 NUMBER OF FIRE FOR EFFECT: 2
6.5.5.1       4029/006 NUMBER OF FIRE UNITS     : 2

Message:
PK11      K02.14 MTO
Message Case 1.06  Transmit Known Point Number to the Observer
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA2222
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
6.1.1         4058/003 FPF DESIGNATOR           : NO STATEMENT
4085/021 REFERENCE (KNOWN) POINT N: 1

Message:
PK11      K02.14 MTO
Message Case 1.07 Transmit Mission Denied MTO
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1212
4079/023 MISSION DENIED INDICATOR : DENIED

Message:
PK11      K02.14 MTO
Message Case 1.08  Transmit Mission Air MTO
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : JP1005
4079/023 MISSION DENIED INDICATOR : NO STATEMENT
6.1.1         4058/003 FPF DESIGNATOR           : NO STATEMENT
6.1.11.1      4040/001 METHOD OF ATTACK         : AIR
```

***PK11 K02.15 Coord Measures***

```
Message Case 1.01  Define a Battlefield Geometry (Non-ACA)
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : ADD
4079/033 PROPOSED/APPROVED INDICAT: APPROVED POINT
4079/052 PRESENT/PROPOSED LOCATION: PRESENT
4079/056 FRIENDLY/ENEMY INDICATOR : FRIEND
4079/087 INCOMPLETE GEOMETRY INDIC: NO STATEMENT
7.1           4065/001 COORDINATION MEASURE     : FORWARD LINE OWN TROOPS
12.2.1.1      6500/007 UNIT REFERENCE NUMBER    : 180156
12.2.2.1      6500/008 UNIT NAME                : FO 42
4085/028 COORDINATE POINT NUMBER  : 1
0281/018 POINT LOCATION LATITUDE  : 714097
0282/018 POINT LOCATION LONGITUDE : -18602103
13.1.5.1      0283/001 GRID ZONE DESIGNATOR     : 14
4130/003 POINT LOCATION ELEVATION : 120
4085/028 COORDINATE POINT NUMBER  : 2
0281/018 POINT LOCATION LATITUDE  : 714110
0282/018 POINT LOCATION LONGITUDE : -18602150
13.1.5.1      0283/001 GRID ZONE DESIGNATOR     : 14
4130/003 POINT LOCATION ELEVATION : 130
13.3.1        4054/002 LINE OR AREA NAME        : FLOT

Message:
PK11      K02.15 Coord Measures
Message Case 1.02  Define an Airspace Coordination Measure
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : ADD
4079/033 PROPOSED/APPROVED INDICAT: APPROVED POINT
4079/052 PRESENT/PROPOSED LOCATION: PRESENT
4079/056 FRIENDLY/ENEMY INDICATOR : FRIEND
4079/087 INCOMPLETE GEOMETRY INDIC: NO STATEMENT
13.11.2       0281/019 ACA LATITUDE             : 5749186
13.11.3       0282/019 ACA LONGITUDE            : -18625812
0365/402 UPPER ALTITUDE FLIGHT LEV: 3000
0365/403 LOWER ALTITUDE FLIGHT LEV: 1500
13.11.4.3     4033/002 ACA WIDTH                : 1000
13.11.2       0281/019 ACA LATITUDE             : 5749590
13.11.3       0282/019 ACA LONGITUDE            : -18625812
0365/402 UPPER ALTITUDE FLIGHT LEV: 3000
0365/403 LOWER ALTITUDE FLIGHT LEV: 1500
13.11.4.3     4033/002 ACA WIDTH                : 1000

K11      K02.15 Coord Measures
Message Case 1.03  Delete a Battlefield Geometry
```

```
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : DELETE
4079/033 PROPOSED/APPROVED INDICAT: APPROVED POINT
4079/052 PRESENT/PROPOSED LOCATION: PRESENT
4079/056 FRIENDLY/ENEMY INDICATOR : FRIEND
4079/087 INCOMPLETE GEOMETRY INDIC: NO STATEMENT
7.1           4065/001 COORDINATION MEASURE     : NO FIRE AREA
12.2.1.1      6500/007 UNIT REFERENCE NUMBER    : 180123
12.2.2.1      6500/008 UNIT NAME                : FO 02
4085/028 COORDINATE POINT NUMBER  : 1
0281/018 POINT LOCATION LATITUDE  : 5749186
0282/018 POINT LOCATION LONGITUDE : -18625812
13.1.5.1      0283/001 GRID ZONE DESIGNATOR     : 14
13.2.1        4031/001 RADIUS                   : 600
13.3.1        4054/002 LINE OR AREA NAME        : NFA1
```

***PK11 K02.16 EOM***

```
Message Case 1.01
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1221
4058/002 END OF MISSION DESIGNATOR: END OF MISSION
```

***PK11 K02.17 Mission Summary***

```
Message Case 1.01
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : AA1221
3.1           4085/048 OBSERVER NUMBER          : 41
6.1           0281/005 TARGET LATITUDE          : 2381356
6.2           0282/005 TARGET LONGITUDE         : -18605479
6.3.1         4130/004 TARGET ELEVATION         : 120
9.2           4025/001 TARGET GENERIC TYPE      : ARTILLERY
9.3.2         4026/001 TARGET SUBTYPE           : MEDIUM MISSILE
11.4.2        4005/001 MUNITIONS TYPE           : JEN - ROCKET
11.4.3        4029/003 NUMBER OF MUNITIONS      : 14
```

**PK11 K02.18 Fire Unit Cap**

```
Message Case 1.01  Transmit Cannon/Mortar/Naval Fire Unit Data
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : ADD
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
4.1.1         6500/007 UNIT REFERENCE NUMBER    : 12345
4.2.1         6500/008 UNIT NAME                : 1 A 2-18 FA
6.1           4071/001 FIRE UNIT MISSION        : DIRECT SUPPORT
8.1           4028/009 AZIMUTH OF FIRE          : 1600
11.1.1        0700/401 WEAPON TYPE              : SELF PROPELLED 155MM HOWITZE
11.2.1        4070/002 WEAPON MODEL             : M109A6
4029/008 NUMBER OF FIRE SUPPORT WE: 1
4005/008 PROJECTILE TYPE DESIGNATO: ALL
12.1          4079/029 GUN ORDER INDICATOR      : GUN ORDER COMPUTED BY PLATOO
4005/012 AMMUNITION IDENTITY CODE : HIGH EXPLOSIVE, NORMAL
0757/012 PROJECTILE MAXIMUM RANGE : 1800
13.2.1        0281/026 FIRE UNIT LATITUDE       : 5749186
13.2.2        0282/026 FIRE UNIT LONGITUDE      : -18625812
13.2.3.1      0283/001 GRID ZONE DESIGNATOR     : 14
13.2.4.1      4130/005 FIRE UNIT ELEVATION      : 85
13.2.5.1      0757/005 MINIMUM RANGE            : 500
15.1.1        4054/015 ZONE OF RESPONSIBILITY   : 3 BDE

Message:
PK11      K02.18 Fire Unit Cap
Message Case 1.02 Transmit MLRS Fire Unit Data
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : CHANGE
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
4.1.1         6500/007 UNIT REFERENCE NUMBER    : 12345
4.2.1         6500/008 UNIT NAME                : 1 A 65
6.1           4071/001 FIRE UNIT MISSION        : GENERAL SUPPORT
11.1.1        0700/401 WEAPON TYPE              : MULTIPLE LAUNCH ROCKET SYSTE
11.2.1        4070/002 WEAPON MODEL             : M270
4029/008 NUMBER OF FIRE SUPPORT WE: 3
13.2.1        0281/026 FIRE UNIT LATITUDE       : 2381356
13.2.2        0282/026 FIRE UNIT LONGITUDE      : -18605479
13.2.3.1      0283/001 GRID ZONE DESIGNATOR     : 14
13.2.4.1      4130/005 FIRE UNIT ELEVATION      : 120
15.1.1        4054/015 ZONE OF RESPONSIBILITY   : 3 BDE
```

```
K02.18 Fire Unit Cap
Message Case 1.04 Delete Fire Unit(s) by Name or Weapon Type
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : DELETE
4079/059 MUTUAL SUPPORT INDICATOR : NO STATEMENT
4.1.1         6500/007 UNIT REFERENCE NUMBER    : 180146
4.2.1         6500/008 UNIT NAME                : A 65
```

***PK11 K02.19 Arty Intel Qry***

```
Message Case 1.01  Transmit Prepare Fire Plan Targets Criteria
Index         DFI/DUI  Data Field Label            Data Value
4058/005 RETRIEVAL LEVEL DESIGNATO: NO STATEMENT
2             4058/031 SRI STATUS DESIGNATOR    : NO STATEMENT
3.1.1         6500/007 UNIT REFERENCE NUMBER    : 180467
3.2.1         6500/008 UNIT NAME                : 1 A 2-18 FA
4092/007 TARGET QUERY MESSAGE DESI: PREPARE A FIREPLAN
5.1           4058/001 ACTION DESIGNATOR        : ADD
7.1           4054/003 FIRE PLAN NAME           : SEAD01
8.1           4003/001 TARGET NUMBER            : AA1232
9.2           4025/001 TARGET GENERIC TYPE      : ARTILLERY
9.3.2         4026/001 TARGET SUBTYPE           : MEDIUM
0281/018 POINT LOCATION LATITUDE  : 5749166
0282/018 POINT LOCATION LONGITUDE : -18625812
```

***PK11 K02.20 Survey Control Point***

```
Message Case 1.01 Transmit a Request to Search for All Points
Index         DFI/DUI  Data Field Label            Data Value
1.1           4055/001 ORDER OF SURVEY          : FIRST ORDER SURVEY
4168/002 SEARCH COMMAND DESIGNATOR: ALL

Message:
PK11      K02.20 Survey Control Point
Message Case 1.02  Transmit a Request to Search by Survey Control Point Name
Index         DFI/DUI  Data Field Label            Data Value
1.1           4055/001 ORDER OF SURVEY          : FIRST ORDER SURVEY
2.2           4054/001 SCP NAME                 : SCP1A218FA00011
4168/002 SEARCH COMMAND DESIGNATOR: SINGLE POINT

Message:
PK11      K02.20 Survey Control Point
Message Case 1.03  Transmit a Request for a Circular Search
Index         DFI/DUI  Data Field Label            Data Value
1.1           4055/001 ORDER OF SURVEY          : FIRST ORDER SURVEY
4168/002 SEARCH COMMAND DESIGNATOR: CIRCULAR
8.1.1         4031/003 POINT LOCATION RADIUS    : 7000
0281/018 POINT LOCATION LATITUDE  : 2381356
0282/018 POINT LOCATION LONGITUDE : -18605479
```

***PK11 K02.21 Clearance to Fire***

```
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AB1212
2             0281/005 TARGET LATITUDE          : 2381356
3             0282/005 TARGET LONGITUDE         : 23896800
4.2           0700/401 WEAPON TYPE              : SELF PROPELLED 155MM HOWITZE
4.5.2         4005/001 MUNITIONS TYPE           : ICM DUAL PURPOSE
```

***PK11 K02.22 Subsequent Adjust***

```
Message Case 1.03  Subsequent Adjustments with Shift Adjustments
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1001
4079/035 SHIFT CORRECTION INDICATO: NO STATEMENT
4079/026 GUN-TARGET LINE INDICATOR: NO STATEMENT
8.4.1.1       4012/001 LATERAL SHIFT            : 200
8.4.2.1       4106/002 RANGE SHIFT              : 100

Message:
PK11      K02.22 Subsequent Adjust
Message Case 1.04 Subsequent Adjustments with Coordinate Adjustment
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1000
4079/035 SHIFT CORRECTION INDICATO: NO STATEMENT
9.1           0281/005 TARGET LATITUDE          : 2383218
9.2           0282/005 TARGET LONGITUDE         : -18605485
```

```
9.3.1         4130/004 TARGET ELEVATION         : 120
```

***PK11 K02.23 Execute Fire Plan***

```
Message Case 1.01 Compute On-Call Targets
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : SEAD01
2             4079/126 FIRE ORDERS INDICATOR    : NO STATEMENT
4092/023 FIRE PLAN ORDERS MESSAGE : COMPUTE FIRE PLAN
4079/067 COMPUTE ON-CALL TARGETS I: ONLY ON-CALL TARGETS
4079/066 PRELIMINARY TARGET LIST I: NO STATEMENT
4079/068 CURRENT SITUATION INDICAT: USE CURRENT RESOURCES
4079/085 SPECIAL APPLICATIONS INDI: SPECIAL APPLICATIONS PREVIOU

Message:
PK11      K02.23 Execute Fire Plan
Message Case 1.02  Compute EPTGT and On-Call Targets
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : SEAD01
2             4079/126 FIRE ORDERS INDICATOR    : GENERATE FIRE ORDER
4092/023 FIRE PLAN ORDERS MESSAGE : COMPUTE FIRE PLAN
4.1           0792/404 EFFECTIVE HOUR           : 6
4.2           0797/403 EFFECTIVE MINUTE         : 0
4.3.1         4019/004 EFFECTIVE DAY            : 1
4079/067 COMPUTE ON-CALL TARGETS I: NO STATEMENT
4079/066 PRELIMINARY TARGET LIST I: NO STATEMENT
4079/068 CURRENT SITUATION INDICAT: USE CURRENT RESOURCES
4079/085 SPECIAL APPLICATIONS INDI: SPECIAL APPLICATIONS PREVIOU

Message:
PK11      K02.23 Execute Fire Plan
Message Case 1.04  Compute All Targets in Plan
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : SEAD03
2             4079/126 FIRE ORDERS INDICATOR    : GENERATE FIRE ORDER
4092/023 FIRE PLAN ORDERS MESSAGE : COMPUTE FIRE PLAN
4.1           0792/404 EFFECTIVE HOUR           : 5
4.2           0797/403 EFFECTIVE MINUTE         : 0
4.3.1         4019/004 EFFECTIVE DAY            : 1
4079/067 COMPUTE ON-CALL TARGETS I: NO STATEMENT
4079/066 PRELIMINARY TARGET LIST I: ALL TARGETS USED FOR LIST
4079/068 CURRENT SITUATION INDICAT: USE CURRENT RESOURCES
4079/085 SPECIAL APPLICATIONS INDI: NO STATEMENT

Message:
PK11      K02.23 Execute Fire Plan
Message Case 1.05  Direct Fire Plan Execution for Non-Minefield Plan
Index         DFI/DUI  Data Field Label            Data Value
1             4054/003 FIRE PLAN NAME           : SEAD05
2             4079/126 FIRE ORDERS INDICATOR    : GENERATE FIRE ORDER
4092/023 FIRE PLAN ORDERS MESSAGE : EXECUTE FIRE PLAN
4.1           0792/404 EFFECTIVE HOUR           : 5
4.2           0797/403 EFFECTIVE MINUTE         : 0
4.3.1         4019/004 EFFECTIVE DAY            : 1
```

***PK11 K02.24 Mission Notification***

```
Message Case 1.01  Transmit Fire Unit Air Warning
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1001
4.2.1.1       6500/007 UNIT REFERENCE NUMBER    : 1800120
5.1           4005/007 ROCKET MUNITIONS TYPE    : JEN
0365/013 AIR WARNING AREA CEILING : 20000
5.3.1         0757/026 PERIMETER DISTANCE       : 500
4029/080 NUMBER OF ROUNDS TO BE FI: 4
5.5.1         0281/028 PLATOON LATITUDE         : 5749186
5.5.2         0282/028 PLATOON LONGITUDE        : -18625812
0281/030 AIR WARNING AREA LATITUDE: 5749190
0282/030 AIR WARNING AREA LONGITUD: -18625813
4168/014 DISPERSAL PATTERN DESIGNA: DISPERSAL PATTERN AREA A
4068/014 DISPERSAL PATTERN EFFECTS: 15

Message:
PK11      K02.24 Mission Notification
Message Case 1.02  Transmit Target Air Warning
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1002
```

```
4092/014 MISSION NOTIFICATION MESS: FIRE UNIT AIR WARNING
3.1           0281/005 TARGET LATITUDE          : 5765632
3.2           0282/005 TARGET LONGITUDE         : -18625969
4.2.1.1       6500/007 UNIT REFERENCE NUMBER    : 180121
5.1           4005/007 ROCKET MUNITIONS TYPE    : JED
0365/013 AIR WARNING AREA CEILING : 20000
5.6.1         0281/029 BURST POINT LATITUDE     : 5747020
5.6.2         0282/029 BURST POINT LONGITUDE    : -18820726
0281/030 AIR WARNING AREA LATITUDE: 5747019
0282/030 AIR WARNING AREA LONGITUD: -18820681
```

***PK11 K02.25 EOM Notification***

```
Index         DFI/DUI  Data Field Label            Data Value
1             4003/001 TARGET NUMBER            : AA1001
2.2.1         6500/007 UNIT REFERENCE NUMBER    : 180123
```

***PK11 K02.27 TAR***

```
Index         DFI/DUI  Data Field Label            Data Value
1             4003/002 TACAIR REQUEST NUMBER    : AAA55
4058/007 IMMEDIATE/PREPLANNED DESI: IMMEDIATE
6.1           0281/005 TARGET LATITUDE          : 16777215
6.2           0282/005 TARGET LONGITUDE         : -17571619
7.2.1         4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILE
7.4.2.1       4026/001 TARGET SUBTYPE           : HEAVY MISSILE
```

***PK11 K02.31 Mission Req/Rej***

```
Index         DFI/DUI  Data Field Label            Data Value
2.2           4003/002 TACAIR REQUEST NUMBER    : ASW12
2.3.1         4003/001 TARGET NUMBER            : AS1234
```

***PK11 K02.32 TAR Acceptance***

```
Index         DFI/DUI  Data Field Label            Data Value
1             4003/002 TACAIR REQUEST NUMBER    : AAQ12
4.2           4003/003 MISSION NUMBER           : 12345
4.3.1         4029/011 NUMBER OF AIRCRAFT       : 2
4132/001 CLOSE AIR SUPPORT AIRCRAF: A-10 WARTHOG
```

***K02.33 Aircrew Briefing***

```
Index         DFI/DUI  Data Field Label            Data Value
1.1           0281/033 CONTACT POINT LATITUDE   : 5737985
0282/033 CONTACT POINT LONGITUDE  : -19209876
3.1           0281/038 INITIAL POINT LATITUDE   : 5747021
0282/038 INITIAL POINT LONGITUDE  : -18820681
4.1           4054/004 INITIAL POINT NAME       : GREEN
0372/003 INITIAL POINT TO TARGET D: 20
6.1           4109/002 NAUTICAL DISTANCE        : 30
7.2.1         4025/001 TARGET GENERIC TYPE      : ARTILLERY
7.4.2.1       4026/001 TARGET SUBTYPE           : HEAVY MISSILE
8.1           0281/005 TARGET LATITUDE          : 5739298
8.2           0282/005 TARGET LONGITUDE         : -19166689
8.3.1         4130/001 ELEVATION                : 120
4105/002 TARGET POSITION MARKING  : COLORED SMOKE
16.1          4118/003 TARGET MARKING COLOR     : BLUE
0371/402 DIRECTION OF FRIENDLIES  : SOUTHEAST
20.1          0757/011 DISTANCE TO FRIENDLIES   : 3000
21.1          0371/403 EGRESS                   : SOUTHEAST
22.1          0371/404 PULL-OUT DIRECTION       : RIGHT
25            4003/003 MISSION NUMBER           : AAQ12
```

***PK11 K02.34 Aircraft On-Station***

```
Index         DFI/DUI  Data Field Label            Data Value
1             4003/003 MISSION NUMBER           : AAQ12
4132/001 CLOSE AIR SUPPORT AIRCRAF: OA-10 WARTHOG
3.1           4029/011 NUMBER OF AIRCRAFT       : 4
4             4037/004 STATION TIME             : 50
5.1           4054/006 ABORT CODE               : 22
7.2.1         4005/005 ORDNANCE TYPE            : MK-81
7.3.1         4029/001 QUANTITY OF ORDNANCE     : 300
```

***11 K02.35 Aircraft Depart IP***

```
Index         DFI/DUI  Data Field Label            Data Value
1             4003/003 MISSION NUMBER           : AQA12
2.1           4054/006 ABORT CODE               : 22
```

***PK11 K02.36 Air Mission Update***

```
Index         DFI/DUI  Data Field Label            Data Value
1             4003/003 MISSION NUMBER           : AAQ12
2             4003/002 TACAIR REQUEST NUMBER    : AQA12
3             4134/001 MISSION CHANGE ORDER     : CONTINUE
```

***PK11 K02.40 Launcher Orders***

```
Message Case 1.02  Stationary Target Fire Order
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : AA1200
5.1           0281/005 TARGET LATITUDE          : 5580987
5.2           0282/005 TARGET LONGITUDE         : -18624258
10.10.1.1     4029/034 NUMBER OF AIMPOINTS      : 2
10.10.2.2     4012/002 AIMPOINT EASTING SHIFT   : 120
4106/003 AIMPOINT NORTHING SHIFT  : 120
10.10.2.4     4130/015 AIMPOINT ELEVATION       : 80
4029/032 NUMBER OF AIMPOINT MUNITI: 2
4011/010 FIRING POINT LOCATION TYP: FIRING POINT

Message:
PK11      K02.40 Launcher Orders
Message Case 1.03 Fire Orders With Movement Command
Index         DFI/DUI  Data Field Label            Data Value
1.1           4003/001 TARGET NUMBER            : AA1003
5.1           0281/005 TARGET LATITUDE          : 5747021
5.2           0282/005 TARGET LONGITUDE         : -18820681
10.10.1.1     4029/034 NUMBER OF AIMPOINTS      : 2
10.10.2.2     4012/002 AIMPOINT EASTING SHIFT   : 400
4106/003 AIMPOINT NORTHING SHIFT  : 400
10.10.2.4     4130/015 AIMPOINT ELEVATION       : 150
4029/032 NUMBER OF AIMPOINT MUNITI: 2
4011/010 FIRING POINT LOCATION TYP: FIRING POINT
4011/001 FIRING POINT IDENTIFIER  : A1
10.14.1.1     4011/006 MOVE LOCATION TYPE       : REARM POINT
4011/007 MOVE LOCATION IDENTIFIER : A2
10.14.3.1     0281/032 MOVE LOCATION LATITUDE   : 2379108
0282/032 MOVE LOCATION LONGITUDE  : -18948800
4130/016 MOVE LOCATION ELEVATION  : 120
```

***PK11 K02.41 Geographic Ref***

```
Message Case 1.01 Transmit Map Orientation Data
Index         DFI/DUI  Data Field Label            Data Value
1             4079/078 EXTENDED MAP INDICATOR   : EXTENDED MAP AREA
0281/003 MAP MOD NORTH EDGE LATITU: 4325415
0281/004 MAP MOD SOUTH EDGE LATITU: 4356483
0282/003 MAP MOD EAST EDGE LONGITU: 2088453
0282/004 MAP MOD WEST EDGE LONGITU: 2084736
5.2           0283/001 GRID ZONE DESIGNATOR     : 14
6.1           4165/002 ELLIPSOID                : WE WGS 1984
7.1           4165/001 GEOGRAPHIC DATUM         : WE: WORLD GEODETIC SYSTEM 19
```

***PK11 K02.42 Fire Unit Guidance***

```
Message Case 1.01  Transmit Positioning and Ammunition Mix Guidance
Index         DFI/DUI  Data Field Label            Data Value
1             4058/001 ACTION DESIGNATOR        : CHANGE
4079/040 CRITICAL LEVELS INDICATOR: NO STATEMENT
4.1.1         6500/007 UNIT REFERENCE NUMBER    : 180123
7.1           4046/002 POSTURE REPORT NUMBER    : 3
14.2          4005/001 MUNITIONS TYPE           : JED - ROCKET
4029/022 NUMBER OF MUNITIONS 2 MIN: 12
4029/023 NUMBER OF MUNITIONS 5 MIN: 6
4029/024 NUMBER OF MUNITIONS 20 MI: 6
4029/025 NUMBER OF MUNITIONS GREAT: 12

Message:
PK11      K02.42 Fire Unit Guidance
Message Case 1.03  Transmit Ammunition Supply Rate Guidance
Index         DFI/DUI  Data Field Label            Data Value
```

```
1             4058/001 ACTION DESIGNATOR        : ADD
4079/040 CRITICAL LEVELS INDICATOR: NO STATEMENT
4.1.1         6500/007 UNIT REFERENCE NUMBER    : 180123
8.1           4029/035 CONTROLLED SUPPLY RATE   : 12
```

***PK11 K02.43 Fire Mission Guide***

```
Message Case 1.01  Transmit Standard Mission Criteria Change
Index         DFI/DUI  Data Field Label            Data Value
4079/041 IGNORE AMMUNITION INDICAT: NO STATEMENT
2             4079/083 PURGE INDICATOR          : NO STATEMENT
4092/010 FIRE MISSION GUIDANCE MES: FIRE DIRECTION SYSTEM MODIFI
5.1.2.1       6500/007 UNIT REFERENCE NUMBER    : 180233
14.5.1        4079/061 RELOAD LEVEL INDICATOR   : RELOAD WHEN BOTH PODS EMPTY
14.5.8.1      4037/012 UPDATE REPORT TIME       : 20

K11      K02.43 Fire Mission Guide
Message Case 1.02  Delete Modifications to Rocket Mission Criteria
Index         DFI/DUI  Data Field Label            Data Value
4079/041 IGNORE AMMUNITION INDICAT: NO STATEMENT
2             4079/083 PURGE INDICATOR          : NO STATEMENT
3.1           4058/001 ACTION DESIGNATOR        : DELETE
4092/010 FIRE MISSION GUIDANCE MES: FIRE DIRECTION SYSTEM MODIFI

Message:
PK11      K02.43 Fire Mission Guide
Message Case 1.04 Transmit Modifications to Rocket Selection Criteria
Index         DFI/DUI  Data Field Label            Data Value
4079/041 IGNORE AMMUNITION INDICAT: NO STATEMENT
2             4079/083 PURGE INDICATOR          : NO STATEMENT
4092/010 FIRE MISSION GUIDANCE MES: SELECTION CRITERIA
12.2          4025/001 TARGET GENERIC TYPE      : ARTILLERY
12.3          4026/001 TARGET SUBTYPE           : HEAVY MISSILE
4005/010 ROCKET MUNITIONS SELECTIO: JED

Message:
PK11      K02.43 Fire Mission Guide
Message Case 1.09  Transmit Attack Method Criteria
Index         DFI/DUI  Data Field Label            Data Value
4079/041 IGNORE AMMUNITION INDICAT: NO STATEMENT
2             4079/083 PURGE INDICATOR          : NO STATEMENT
3.1           4058/001 ACTION DESIGNATOR        : ADD
4092/010 FIRE MISSION GUIDANCE MES: ATTACK METHOD

Message:
PK11      K02.43 Fire Mission Guide
Message Case 1.16  Transmit Maximum Volleys/Rockets Criteria
Index         DFI/DUI  Data Field Label            Data Value
4079/041 IGNORE AMMUNITION INDICAT: NO STATEMENT
2             4079/083 PURGE INDICATOR          : NO STATEMENT
4092/010 FIRE MISSION GUIDANCE MES: FIRE UNIT SELECTION
6.1           0700/401 WEAPON TYPE              : MULTIPLE LAUNCH ROCKET SYSTE
4029/038 NUMBER OF VOLLEYS, MAXIMU: 6

K11      K02.43 Fire Mission Guide
Message Case 1.19  Transmit Munitions Exclusion Criteria
Index         DFI/DUI  Data Field Label            Data Value
4079/041 IGNORE AMMUNITION INDICAT: NO STATEMENT
2             4079/083 PURGE INDICATOR          : NO STATEMENT
3.1           4058/001 ACTION DESIGNATOR        : ADD
4092/010 FIRE MISSION GUIDANCE MES: FIRE UNIT EXCLUSION
5.1.2.1       6500/007 UNIT REFERENCE NUMBER    : 180122
11.2.1        4005/001 MUNITIONS TYPE           : JEK - ROCKET

Message:
PK11      K02.43 Fire Mission Guide
Message Case 1.21 Transmit Fire Unit/Weapons Exclusion Criteria
Index         DFI/DUI  Data Field Label            Data Value
4079/041 IGNORE AMMUNITION INDICAT: NO STATEMENT
2             4079/083 PURGE INDICATOR          : NO STATEMENT
3.1           4058/001 ACTION DESIGNATOR        : CHANGE
4092/010 FIRE MISSION GUIDANCE MES: FIRE UNIT EXCLUSION
5.1.2.1       6500/007 UNIT REFERENCE NUMBER    : 180134
```

***PK11 K02.44 Target Acquire Guide***

```
Message Case 1.01  Establish or Change Commander's Target Guidance
```

```
Index          DFI/DUI  Data Field Label            Data Value
1              4058/001 ACTION DESIGNATOR        : ADD
3.1.1          6500/007 UNIT REFERENCE NUMBER    : 180121
4079/022 TARGET INTELLIGENCE FILE : TARGET INTELLIGENCE FILE
4.2.2          4054/019 TARGET VALUE AREA NAME   : 10
4.6.1          4079/047 FIRE MISSION INDICATOR   : NO STATEMENT
4.6.2          4085/040 REQUEST NUMBER           : 1
7.1            4019/004 EFFECTIVE DAY            : 1
7.2            0792/404 EFFECTIVE HOUR           : 5
7.3            0797/403 EFFECTIVE MINUTE         : 1

Message:
PK11      K02.44 Target Acquire Guide
Message Case 1.02  Delete Commander's Target Guidance
Index          DFI/DUI  Data Field Label            Data Value
1              4058/001 ACTION DESIGNATOR        : DELETE
3.1.1          6500/007 UNIT REFERENCE NUMBER    : 180111
4079/022 TARGET INTELLIGENCE FILE : TARGET INTELLIGENCE FILE
4.2.2          4054/019 TARGET VALUE AREA NAME   : 25
4.6.1          4079/047 FIRE MISSION INDICATOR   : NO STATEMENT
4.6.2          4085/040 REQUEST NUMBER           : 1
7.1            4019/004 EFFECTIVE DAY            : 1
7.2            0792/404 EFFECTIVE HOUR           : 5
7.3            0797/403 EFFECTIVE MINUTE         : 0

Message:
PK11      K02.44 Target Acquire Guide
Message Case 1.04  Transmit Radar Search Parameters
Index          DFI/DUI  Data Field Label            Data Value
1              4058/001 ACTION DESIGNATOR        : ADD
3.1.1          6500/007 UNIT REFERENCE NUMBER    : 180123
5.1            4028/035 SEARCH AZIMUTH           : 1600
4104/005 RADAR FREQUENCY LIMIT, MI: 3
4104/006 RADAR FREQUENCY LIMIT,MAX: 5
5.4            4028/036 SECTOR EDGE, LEFT        : 100
5.5            4028/037 SECTOR EDGE, RIGHT       : 700
5.6            0757/019 SEARCH RANGE, MINIMUM    : 10
5.7            0757/020 SEARCH RANGE, MAXIMUM    : 60
7.1            4019/004 EFFECTIVE DAY            : 5
7.2            0792/404 EFFECTIVE HOUR           : 1
7.3            0797/403 EFFECTIVE MINUTE         : 0
```

***PK11 K02.45 Howitzer Command***

```
Message Case 1.01  Howitzer Firing Order
Index          DFI/DUI  Data Field Label            Data Value
1.1            4003/001 TARGET NUMBER            : AA1001
4058/028 RECORD AS TARGET DESIGNAT: NO STATEMENT
3.2.1          0281/005 TARGET LATITUDE          : 5749186
3.2.2          0282/005 TARGET LONGITUDE         : -18625812
3.2.3.1        4130/004 TARGET ELEVATION         : 120
3.3.1          4025/001 TARGET GENERIC TYPE      : ARTILLERY
3.3.2          4026/001 TARGET SUBTYPE           : HEAVY
3.7.2.1        6500/007 UNIT REFERENCE NUMBER    : 180340
3.9.1          4043/001 DISTRIBUTION OF FIRE     : BATTERY

Message:
PK11      K02.45 Howitzer Command
Message Case 1.02  Howitzer Firing Commands
Index          DFI/DUI  Data Field Label            Data Value
1.1            4003/001 TARGET NUMBER            : AA1002
4092/022 HOWITZER COMMAND MESSAGE : FIRING COMMANDS
4058/028 RECORD AS TARGET DESIGNAT: NO STATEMENT
7.2            4041/001 METHOD OF CONTROL        : FIRE WHEN READY
7.3            4029/045 NUMBER OF ROUNDS         : 3
4005/003 FIRE FOR EFFECT PROJECTIL: HEA - 105MM, 155MM, 203MM
4006/001 PROJECTILE LOT DESIGNATOR: A
4006/002 PROPELLANT LOT DESIGNATOR: A
7.7            4008/001 PROPELLANT CHARGE        : 6
7.8            4028/024 DEFLECTION               : 3200
7.9            4028/014 QUADRANT ELEVATION       : 1800
7.14.1.1       6500/007 UNIT REFERENCE NUMBER    : 180123
Message Case 1.03  Howitzer/Observer Dedication Data
DFI/DUI  Data Field Label            Data Value
1.1            4003/001 TARGET NUMBER            : AA1003
4.3.1.1        6500/007 UNIT REFERENCE NUMBER    : 180234
```

```
8.1.1          6500/007 UNIT REFERENCE NUMBER    : 180234
4067/004 SUBSCRIBER FUNCTIONS REST: NO RESTRICTION
10.2           4003/012 FIRST TARGET NUMBER      : AB1003

Message:
PK11      K02.45 Howitzer Command
Message Case 1.04  Forward Observer Command
Index          DFI/DUI  Data Field Label            Data Value
1.1            4003/001 TARGET NUMBER            : AA1004
9.1            4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
4079/009 COPPERHEAD PRIORITY MISSI: NO STATEMENT
9.3            4079/036 CEASE LOAD INDICATOR     : NO STATEMENT
9.4            4079/062 REPORT INDICATOR         : NO STATEMENT
9.5            4079/045 DELETE INDICATOR         : NO STATEMENT
4079/124 DELETE ALL TARGETS INDICA: NO STATEMENT
```

***PK11 K02.46 Reply/Remarks***

```
Message Case 1.01  Transmit Target Signature Data
Index          DFI/DUI  Data Field Label            Data Value
1              4079/062 REPORT INDICATOR         : NO STATEMENT
5.1            4003/001 TARGET NUMBER            : AA1001
6.1.1          6500/007 UNIT REFERENCE NUMBER    : 180234
4029/048 TARGET SIGNATURE DATA SIZ: 10
13.2           4075/001 COMMENTS                 : COMMENTS AREA

Message:
PK11      K02.46 Reply/Remarks
Message Case 1.02  Transmit Time on Target Extension
Index          DFI/DUI  Data Field Label            Data Value
1              4079/062 REPORT INDICATOR         : NO STATEMENT
4058/010 TIME ON TARGET REQUEST DE: REQUEST TIME ON TARGET EXTEN
5.1            4003/001 TARGET NUMBER            : AA1002
12.1           4019/002 DAY ON TARGET            : 1
12.2           0792/402 HOUR ON TARGET           : 6
12.3           0797/401 MINUTE ON TARGET         : 0
```

***PK11 K02.47 R/M Ops Update***

```
Message Case 1.01  Update Rocket Operational Status
Index          DFI/DUI  Data Field Label            Data Value
1.1            4079/045 DELETE INDICATOR         : NO STATEMENT
1.2.1          6500/007 UNIT REFERENCE NUMBER    : 180122
4085/043 NUMBER OF PRIORITY MISSIO: 1
4085/044 NUMBER OF NORMAL MISSIONS: 2
5.2            4005/007 ROCKET MUNITIONS TYPE    : JED
4029/022 NUMBER OF MUNITIONS 2 MIN: 12
4029/023 NUMBER OF MUNITIONS 5 MIN: 6
4029/024 NUMBER OF MUNITIONS 20 MI: 6
```

***PK11 K02.48 Assignment Data***

```
Message Case 1.01  Build Ammunition and Fire Unit Data into a Fire Plan or Current Situation
Index          DFI/DUI  Data Field Label            Data Value
4079/075 NEW CURRENT SITUATION IND: BUILD NEW CURRENT SITUATION
4079/076 DEFAULT CRITERIA INDICATO: NO STATEMENT
4079/077 CRITERIA MODIFICATION IND: NO STATEMENT
4              4079/083 PURGE INDICATOR          : NO STATEMENT
4092/013 FIRE PLAN ASSIGNMENT MESS: AMMUNITION AND FIRE UNIT ASS
6.1            4054/003 FIRE PLAN NAME           : SEAD01
4058/004 AMMUNITION STORAGE SITE D: AMMUNITION STORAGE SITE DATA
8.2.1.1        6500/007 UNIT REFERENCE NUMBER    : 180123
8.3.1          0700/401 WEAPON TYPE              : SELF PROPELLED 155MM HOWITZE
4005/008 PROJECTILE TYPE DESIGNATO: ALL
8.5.1.1        6500/007 UNIT REFERENCE NUMBER    : 180123

Message:
PK11      K02.48 Assignment Data
Message Case 1.02  Build Coordination Measures Data into a Fire Plan or Current Situation
Index          DFI/DUI  Data Field Label            Data Value
4079/075 NEW CURRENT SITUATION IND: BUILD NEW CURRENT SITUATION
4079/076 DEFAULT CRITERIA INDICATO: NO STATEMENT
4079/077 CRITERIA MODIFICATION IND: NO STATEMENT
4              4079/083 PURGE INDICATOR          : NO STATEMENT
4092/013 FIRE PLAN ASSIGNMENT MESS: GEOMETRY ASSETS
6.1            4054/003 FIRE PLAN NAME           : SEAD02
4079/094 AIRSPACE COORDINATION ARE: AIRSPACE COORDINATION AREA
4079/095 COORDINATED FIRE LINE IND: COORDINATED FIRE LINE
```

```
4079/096 CHEMICAL HAZARD AREA INDI: NO STATEMENT
4079/097 CROSSOVER GEOMETRY INDICA: CROSSOVER GEOMETRY
4079/098 DEAD SPACE AREA INDICATOR: NO STATEMENT
4079/099 FORWARD LINE OWN TROOPS I: FORWARD LINE OF OWN TROOPS
4079/100 FIRE SUPPORT COORDINATION: NO STATEMENT
4079/101 LAID MINE SAFETY ZONE IND: NO STATEMENT
4079/102 PLANNED MINE SAFETY ZONE : PLANNED MINE SAFETY ZONE
4079/103 RESTRICTIVE FIRE AREA IND: RESTRICTIVE FIRE AREA
4079/104 RESTRICTIVE FIRE LINE IND: NO STATEMENT
4079/105 TARGET GEOMETRY INDICATOR: TARGET GEOMETRY
4079/106 TARGET VALUE AREA INDICAT: TARGET VALUE AREA
4079/107 ZONE OF RESPONSIBILITY IN: ZONE OF RESPONSIBILITY
9.15          4079/108 PHASE LINE INDICATOR     : PHASE LINE
4079/109 LINE OF DEPARTURE INDICAT: NO STATEMENT
4079/110 LINE OF CONTACT INDICATOR: NO STATEMENT
4079/111 OBJECTIVE AREA INDICATOR : OBJECTIVE AREA
9.19          4079/112 LANDING ZONE INDICATOR   : NO STATEMENT
9.20          4079/114 MINED AREA INDICATOR     : NO STATEMENT
9.21          4079/115 MINEFIELD INDICATOR      : MINEFIELD
4079/116 LINE OF DEPARTURE/LINE OF: LINE OF DEPARTURE IS LINE OF
4079/119 BOUNDARY LINE INDICATOR  : NO STATEMENT
4079/120 FORWARD EDGE OF BATTLE AR: FORWARD EDGE OF BATTLE AREA

Message:
PK11      K02.48 Assignment Data
Message Case 1.03  Build Commander's Criteria into a Fire Plan or Current Situation
Index         DFI/DUI  Data Field Label            Data Value
4079/075 NEW CURRENT SITUATION IND: BUILD NEW CURRENT SITUATION
4079/076 DEFAULT CRITERIA INDICATO: NO STATEMENT
4079/077 CRITERIA MODIFICATION IND: BUILD MODIFICATION DATA
4             4079/083 PURGE INDICATOR          : NO STATEMENT
4092/013 FIRE PLAN ASSIGNMENT MESS: COMMANDER'S CRITERIA
6.1           4054/003 FIRE PLAN NAME           : SEAD03
```

***PK11 K02.50 Observer Status***

```
Message Case 1.01 Report the Status of an Observer or Radar
Index         DFI/DUI  Data Field Label            Data Value
1.1           4085/048 OBSERVER NUMBER          : 41
0281/007 OBSERVER LOCATION LATITUD: 2381356
0282/007 OBSERVER LOCATION LONGITU: -18605479
3.3.1         0283/001 GRID ZONE DESIGNATOR     : 14

Message:
PK11      K02.50 Observer Status
Message Case 1.02  Transmit a Location Order
Index         DFI/DUI  Data Field Label            Data Value
1.1           4085/048 OBSERVER NUMBER          : 42
0281/007 OBSERVER LOCATION LATITUD: 2380531
0282/007 OBSERVER LOCATION LONGITU: -18777182
3.3.1         0283/001 GRID ZONE DESIGNATOR     : 14
5.1           4019/004 EFFECTIVE DAY            : 5
5.2           0792/404 EFFECTIVE HOUR           : 12
5.3           0797/403 EFFECTIVE MINUTE         : 15
```

***PK11 K02.51 Unit SitRep***

```
Message Case 1.05  Transmit a Unit Situation Report
Index         DFI/DUI  Data Field Label            Data Value
1             4079/045 DELETE INDICATOR         : NO STATEMENT
2.1.1         6500/007 UNIT REFERENCE NUMBER    : 189022
0281/018 POINT LOCATION LATITUDE  : 5749186
0282/018 POINT LOCATION LONGITUDE : -18625812
4.4.1.2       4019/004 EFFECTIVE DAY            : 5
4.4.1.3       0792/404 EFFECTIVE HOUR           : 6
4.4.1.4       0797/403 EFFECTIVE MINUTE         : 15
4.4.1.2       4019/004 EFFECTIVE DAY            : 5
4.4.1.3       0792/404 EFFECTIVE HOUR           : 6
4.4.1.4       0797/403 EFFECTIVE MINUTE         : 45
5.1           4079/055 HEADQUARTERS INDICATOR   : NOT HEADQUARTERS
4079/056 FRIENDLY/ENEMY INDICATOR : FRIEND
4079/052 PRESENT/PROPOSED LOCATION: PRESENT
4168/012 SUPPORTED UNIT EQUIPMENT : NO STATEMENT
0700/004 SUPPORTED UNIT EQUIPMENT : TANK

Message:
```

**PK11 K02.52 Request for Report**

```
Message Case 1.06  Request Fire Unit Status Information
Index         DFI/DUI  Data Field Label            Data Value
4079/084 AMMUNITION STORAGE SITE I: NO STATEMENT
4079/092 TARGET REPORT RESET INDIC: NO STATEMENT
4079/093 TRANSMIT ALL SCHEDULED TA: NO STATEMENT
4058/032 ACTIVE TARGET DESIGNATOR : NO STATEMENT
4092/016 REQUEST MESSAGE DESIGNATO: AMMUNITION/FIRE UNIT COMMAND
10.1          4058/022 REQUEST DESIGNATOR       : AMMUNITION DATA
11.1.1        6500/007 UNIT REFERENCE NUMBER    : 18023

Message:
PK11      K02.52 Request for Report
Message Case 1.11  Request Fire Mission Reports
Index         DFI/DUI  Data Field Label            Data Value
4079/084 AMMUNITION STORAGE SITE I: NO STATEMENT
4079/092 TARGET REPORT RESET INDIC: NO STATEMENT
4079/093 TRANSMIT ALL SCHEDULED TA: NO STATEMENT
4058/032 ACTIVE TARGET DESIGNATOR : NO STATEMENT
4092/016 REQUEST MESSAGE DESIGNATO: FIRE MISSION COMMAND
6.1           4085/048 OBSERVER NUMBER          : 42
```

***PK11 K02.53 Target Data Entry***

```
Message Case 1.01  To Add or Update Target Element Data
Index         DFI/DUI  Data Field Label            Data Value
1             4079/083 PURGE INDICATOR          : NO STATEMENT
4.1           4025/001 TARGET GENERIC TYPE      : ARTILLERY
4.2.1         4026/001 TARGET SUBTYPE           : MEDIUM MISSILE
4110/006 PRIMARY TARGET SUBTYPE EL: X  - 122MM MRL RM70
4029/012 NUMBER OF TARGET SUBTYPE : 3

Message:
PK11      K02.53 Target Data Entry
Message Case 1.02  To Delete Selected Target Element Data
Index         DFI/DUI  Data Field Label            Data Value
1             4079/083 PURGE INDICATOR          : NO STATEMENT
2.1           4058/001 ACTION DESIGNATOR        : DELETE
4.1           4025/001 TARGET GENERIC TYPE      : ARTILLERY
4.2.1         4026/001 TARGET SUBTYPE           : HEAVY
4110/006 PRIMARY TARGET SUBTYPE EL: S  - 203MM GUN M1975
4029/012 NUMBER OF TARGET SUBTYPE : 3

Message:
PK11      K02.53 Target Data Entry
Message Case 1.03  To Purge Target Type Data
Index         DFI/DUI  Data Field Label            Data Value
1             4079/083 PURGE INDICATOR          : PURGE
4.1           4025/001 TARGET GENERIC TYPE      : ARTILLERY
```

***PK11 K02.54 Deployment Command***

```
Message Case 1.01  Firing Area
Index         DFI/DUI  Data Field Label            Data Value
1             4079/062 REPORT INDICATOR         : NO STATEMENT
2             4079/045 DELETE INDICATOR         : NO STATEMENT
4.2           0281/032 MOVE LOCATION LATITUDE   : 2380531
0282/032 MOVE LOCATION LONGITUDE  : -18777182
4058/023 MOVEMENT TYPE DESIGNATOR : FIRING AREA
6.1           4031/007 FIRING AREA RADIUS       : 400
6.2           4028/043 CENTER OF SECTOR         : 300
7.1           4019/004 EFFECTIVE DAY            : 1
7.2           0792/404 EFFECTIVE HOUR           : 6
7.3           0797/403 EFFECTIVE MINUTE         : 15

Message:
PK11      K02.54 Deployment Command
Message Case 1.02  Initialization Point
Index         DFI/DUI  Data Field Label            Data Value
1             4079/062 REPORT INDICATOR         : NO STATEMENT
2             4079/045 DELETE INDICATOR         : NO STATEMENT
4.2           0281/032 MOVE LOCATION LATITUDE   : 2380531
0282/032 MOVE LOCATION LONGITUDE  : -18777182
4058/023 MOVEMENT TYPE DESIGNATOR : INITIALIZATION POINT
7.1           4019/004 EFFECTIVE DAY            : 6
7.2           0792/404 EFFECTIVE HOUR           : 5
7.3           0797/403 EFFECTIVE MINUTE         : 30
```

```
Message:
PK11      K02.54 Deployment Command
Message Case 1.03  Logistics Re-Supply Point
Index         DFI/DUI  Data Field Label            Data Value
1             4079/062 REPORT INDICATOR         : NO STATEMENT
2             4079/045 DELETE INDICATOR         : NO STATEMENT
4.2           0281/032 MOVE LOCATION LATITUDE   : 3915297
0282/032 MOVE LOCATION LONGITUDE  : -18771572
4058/023 MOVEMENT TYPE DESIGNATOR : LOGISTICS RESUPPLY POINT
7.1           4019/004 EFFECTIVE DAY            : 10
7.2           0792/404 EFFECTIVE HOUR           : 6
7.3           0797/403 EFFECTIVE MINUTE         : 15

Message:
PK11      K02.54 Deployment Command
Message Case 1.04  Stationary Point
Index         DFI/DUI  Data Field Label            Data Value
1             4079/062 REPORT INDICATOR         : NO STATEMENT
2             4079/045 DELETE INDICATOR         : NO STATEMENT
4058/023 MOVEMENT TYPE DESIGNATOR : STAY

Message:
PK11      K02.54 Deployment Command
Message Case 1.05  Continue Suspended Move
Index         DFI/DUI  Data Field Label            Data Value
1             4079/062 REPORT INDICATOR         : NO STATEMENT
2             4079/045 DELETE INDICATOR         : NO STATEMENT
```

***PK11 K02.55 Mutual Data Xchange***

```
Message Case 1.01  Transmit Mutual Support Functions for a Cannon Unit
Index         DFI/DUI  Data Field Label            Data Value
4.2           4085/054 SUBSCRIBER NUMBER        : 20
4.3           4082/007 SUBSCRIBER STATUS CODE   : ON
4085/055 SUBSCRIBER NET ADDRESS NU: 2
4054/026 SUBSCRIBER PHYSICAL ADDRE: 1
4.6           4177/001 SUBSCRIBER DEVICE TYPE   : IFSAS/LT TACFIRE
4085/056 SUBSCRIBER RECEIVE SERIAL: 0
4085/057 SUBSCRIBER TRANSMIT SERIA: 0
4082/008 SUBSCRIBER COMSEC DEVICE : SUBSCRIBER USING KY DEVICE
4.10          4050/002 SUBSCRIBER AGENCY TYPE   : FORWARD OBSERVER WITHOUT LAS
4.11.1.1      6500/007 UNIT REFERENCE NUMBER    : 183123

Message:
PK11      K02.55 Mutual Data Xchange
Message Case 1.02  Transmit Message of Interest Data
Index         DFI/DUI  Data Field Label            Data Value
6.1           4177/003 MEMBER DEVICE TYPE       : AFATDS
6.2           4054/023 MEMBER ADDRESS           : 2
```

***PK11 K02.56 Fire Unit Tac Sched***

```
Message Case 1.01  Transmit Fire Unit Assets For Scheduling
Index         DFI/DUI  Data Field Label            Data Value
1.1.1         6500/007 UNIT REFERENCE NUMBER    : 183123
2.1           4079/045 DELETE INDICATOR         : NO STATEMENT
4029/047 NUMBER OF ASSOCIATED ASSE: 2
2.3           4005/007 ROCKET MUNITIONS TYPE    : JEE
2.4.2         4019/019 TASK DAY                 : 5
2.4.3         0792/027 TASK HOUR                : 6
2.4.4         0797/027 TASK MINUTE              : 0
4054/031 CONTINGENCY FIRE MISSION : JB0001
2.12.1.1      6500/007 UNIT REFERENCE NUMBER    : 18323

Message:
PK11      K02.56 Fire Unit Tac Sched
Message Case 1.02  Transmit Software Configuration Data
Index         DFI/DUI  Data Field Label            Data Value
3.2.1.1       6500/007 UNIT REFERENCE NUMBER    : 180234
3.3.2         4005/007 ROCKET MUNITIONS TYPE    : JED

Message:
PK11      K02.56 Fire Unit Tac Sched
Message Case 1.03 Delete Scheduled Fire Unit Assets
Index         DFI/DUI  Data Field Label            Data Value
```

```
1.1.1         6500/007 UNIT REFERENCE NUMBER    : 16782
2.1           4079/045 DELETE INDICATOR         : DELETE
4029/047 NUMBER OF ASSOCIATED ASSE: 2
2.3           4005/007 ROCKET MUNITIONS TYPE    : JED
2.4.2         4019/019 TASK DAY                 : 7
2.4.3         0792/027 TASK HOUR                : 6
2.4.4         0797/027 TASK MINUTE              : 0
4054/031 CONTINGENCY FIRE MISSION : AQ1234
2.12.1.1      6500/007 UNIT REFERENCE NUMBER    : 181233
```

***PK11 K02.58 Abrn Fire Mission***

```
Message Case 1.01 Call For Fire on a Target Using Airborne Munition Hellfire
Index         DFI/DUI  Data Field Label            Data Value
4092/025 AIRBORNE FIRE MISSION MES: AIRBORNE FIRE REQUEST
4085/036 OBSERVER MISSION NUMBER  : 1
5.1           0281/005 TARGET LATITUDE          : 185175
5.2           0282/005 TARGET LONGITUDE         : -19104051
5.3.1         4130/004 TARGET ELEVATION         : 120
6.1           4025/001 TARGET GENERIC TYPE      : ARTILLERY
4029/085 NUMBER OF AIR ATTACK TARG: 2
8.1           4117/001 TARGET ACTIVITY          : STATIONARY

4058/030 HELLFIRE MISSION TYPE DES: RIPPLE
4079/122 HELLFIRE MISSION INDICATO: HELLFIRE MISSION
11.3          4058/027 LOCK MODE DESIGNATOR     : LOCK ON BEFORE LAUNCH, DIREC
4079/123 AIR FIRE CONTROL INDICATO: AT MY COMMAND
12.2          4085/050 AIRBORNE LASER CODE      : 1234
4058/029 G/VLLD CONTROL DESIGNATOR: OBSERVER LASING
4029/015 NUMBER OF AIRBORNE MUNITI: 5
17.1          0281/017 ORIGINATOR LATITUDE      : 186878
17.2          0282/017 ORIGINATOR LONGITUDE     : -19085480
17.3          4130/017 ORIGINATOR ELEVATION     : 130

Message:
PK11      K02.58 Abrn Fire Mission
Message Case 1.02  Update Airborne Target Data
Index         DFI/DUI  Data Field Label            Data Value
4092/025 AIRBORNE FIRE MISSION MES: AIRBORNE MISSION UPDATE
4085/036 OBSERVER MISSION NUMBER  : 1
5.1           0281/005 TARGET LATITUDE          : 16777215
5.2           0282/005 TARGET LONGITUDE         : -19807705

Message:
PK11      K02.58 Abrn Fire Mission
Message Case 1.03  Transmit Airborne Mission Commands
Index         DFI/DUI  Data Field Label            Data Value
4092/025 AIRBORNE FIRE MISSION MES: AIRBORNE MISSION COMMAND
4085/036 OBSERVER MISSION NUMBER  : 1
4053/002 AIRBORNE MISSION COMMAND : SHOT
```

***PK11 K05.02 NBC1***

```
Message Case 1.06  Transmit Geographic Location of a Biological/Chemical Attack
Index         DFI/DUI  Data Field Label            Data Value
1             4155/002 NBC EVENT TYPE           : BIOLOGICAL
2             1768/001 TYPE OF BURST            : AIR
3.2           4019/032 ATTACK DAY               : 5
3.3           0792/424 ATTACK HOUR              : 5
3.4           0797/422 ATTACK MINUTE            : 30
3.2           4019/032 ATTACK DAY               : 5
3.3           0792/424 ATTACK HOUR              : 7
3.4           0797/422 ATTACK MINUTE            : 45
6.1           4079/117 LOCATION QUALIFIER       : ACTUAL
0281/415 ATTACK LOCATION LATITUDE : 2040996
0282/415 ATTACK LOCATION LONGITUDE: -19078073
7.1.1         4115/002 TERRAIN DESCRIPTION      : WOODS
7.2.1         4115/005 VEGETATION TYPE          : SHRUB
```

***PK11 K05.03 NBC2***

```
Message Case 1.01  Transmit Nuclear Evaluation Data
Index         DFI/DUI  Data Field Label            Data Value
1             4155/002 NBC EVENT TYPE           : CHEMICAL
2             4003/013 STRIKE SERIAL NUMBER     : chem1
3.2           4019/032 ATTACK DAY               : 5
3.3           0792/424 ATTACK HOUR              : 6
3.4           0797/422 ATTACK MINUTE            : 30
```

```
3.2           4019/032 ATTACK DAY               : 5
3.3           0792/424 ATTACK HOUR              : 7
3.4           0797/422 ATTACK MINUTE            : 45
4.1           1768/001 TYPE OF BURST            : AIR
4.2           4079/117 LOCATION QUALIFIER       : ACTUAL
0281/415 ATTACK LOCATION LATITUDE : 226751
0282/415 ATTACK LOCATION LONGITUDE: -18752590
5.1.1         4115/002 TERRAIN DESCRIPTION      : SAND
5.2.1         4115/005 VEGETATION TYPE          : BARE
5.3.2         4138/002 AGENT TYPE               : BLISTER AGENT
5.4.2         4138/003 AGENT PERSISTENCY TYPE   : PERSISTENT
4079/118 SUSPECTED/OBSERVED INDICA: OBSERVED EVENT
7.2.2         0700/404 DELIVERY MEANS           : AIRCRAFT (AIR)
9.1           4115/018 AIR STABILITY            : STABLE
9.2           4023/004 AIR TEMPERATURE          : 17
9.3           4142/001 NBC RELATIVE HUMIDITY    : 78
9.4           4115/019 WEATHER PHENOMENA        : RAIN
9.5           4115/007 CLOUD COVER              : BROKEN CLOUDS

Message:
PK11      K05.04 NBC3
Message Case 1.02  Transmit Biological/Chemical Hazard Area
Index         DFI/DUI  Data Field Label            Data Value
1             4155/002 NBC EVENT TYPE           : BIOLOGICAL
2             4003/013 STRIKE SERIAL NUMBER     : BIO1
3.2           4019/032 ATTACK DAY               : 6
3.3           0792/424 ATTACK HOUR              : 6
3.4           0797/422 ATTACK MINUTE            : 0
3.2           4019/032 ATTACK DAY               : 6
3.3           0792/424 ATTACK HOUR              : 7
3.4           0797/422 ATTACK MINUTE            : 45
4.1           4079/117 LOCATION QUALIFIER       : ACTUAL
0281/415 ATTACK LOCATION LATITUDE : 5743078
0282/415 ATTACK LOCATION LONGITUDE: -18820601
5.1           1768/001 TYPE OF BURST            : AIR
5.2.2         4138/002 AGENT TYPE               : NERVE AGENT
5.3.2         4138/003 AGENT PERSISTENCY TYPE   : NON-PERSISTENT
6.1.1         4031/012 HAZARD AREA RADIUS       : 1000
7.2           4019/033 ATTACK AREA HAZARD DAY   : 5
0792/425 ATTACK AREA HAZARD HOUR  : 7
0797/423 ATTACK AREA HAZARD MINUTE: 30
4019/035 HAZARD AREA HAZARD DAY.  : 5
0792/426 HAZARD AREA HAZARD HOUR  : 8
0797/426 HAZARD AREA HAZARD MINUTE: 15
0371/407 NBC CLOUD DOWNWIND DIRECT: 12
9.2           0367/404 DOWNWIND SPEED           : 5
11.1          4115/018 AIR STABILITY            : SLIGHTLY STABLE
11.2          4023/004 AIR TEMPERATURE          : 18
11.3          4142/001 NBC RELATIVE HUMIDITY    : 65
11.4          4115/019 WEATHER PHENOMENA        : RAIN
11.5          4115/007 CLOUD COVER              : BROKEN CLOUDS
```

***PK11 K05.05 NBC4***

```
Message Case 1.02  Transmit Nuclear Monitoring Results
Index         DFI/DUI  Data Field Label            Data Value
1             4155/002 NBC EVENT TYPE           : CHEMICAL
2.1           4003/013 STRIKE SERIAL NUMBER     : CHEM02
0281/418 READING LOCATION LATITUDE: 2380522
0282/418 READING LOCATION LONGITUD: -18777191
3.4.1         1768/001 TYPE OF BURST            : AIR
3.4.2         4115/002 TERRAIN DESCRIPTION      : ROCKY
3.4.3         4115/005 VEGETATION TYPE          : SHRUB
3.4.4.2       4138/002 AGENT TYPE               : BLISTER LEWISITE
3.4.5.2       4138/003 AGENT PERSISTENCY TYPE   : PERSISTENT
3.6.1         4019/034 READING/SAMPLE DAY       : 5
3.6.2         0792/427 READING/SAMPLE HOUR      : 5
3.6.3         0797/424 READING/SAMPLE MINUTE    : 30

Message
K11      K05.06 NBC5
Message Case 1.02  Transmit Biological/Chemical Survey Results
Index         DFI/DUI  Data Field Label            Data Value
1             4155/002 NBC EVENT TYPE           : BIOLOGICAL
2.1           4003/013 STRIKE SERIAL NUMBER     : BIO11
3.1           1768/001 TYPE OF BURST            : AIR
```

```
3.2.2         4138/002 AGENT TYPE               : NERVE G AGENT
3.3.2         4138/003 AGENT PERSISTENCY TYPE   : NON-PERSISTENT
8.1           4098/011 LATEST SURVEY YEAR       : 95
8.2           4099/011 LATEST SURVEY MONTH      : AUGUST
8.3           4019/027 LATEST SURVEY DAY        : 15
8.4           0792/423 LATEST SURVEY HOUR       : 20
8.5           0797/420 LATEST SURVEY MINUTE     : 15
0281/422 BLACK/YELLOW CONTOUR LATI: 185502
0282/422 BLACK/YELLOW CONTOUR LONG: -18601805
```

***PK11 K05.07 NBC6***

```
Message Case 1.02  Transmit Chemical Data Information
Index         DFI/DUI  Data Field Label            Data Value
1             4155/002 NBC EVENT TYPE           : BIOLOGICAL
2             4003/013 STRIKE SERIAL NUMBER     : BIO13
5.2           4075/001 COMMENTS                 : THIS IS A BIO ATTACK FOR
```

***PK11 K05.08 BWR***

```
Message Case 1.02  Transmit Basic Wind Report
Index         DFI/DUI  Data Field Label            Data Value
4079/125 FORECAST/REPORT INDICATOR: REPORT
2             4054/054 VALIDITY AREA            : CITY
3             4019/029 OBSERVATION DAY          : 5
4             0792/419 OBSERVATION HOUR         : 5
5             0797/418 OBSERVATION MINUTE       : 30
7.2           4021/008 BWR MET ALTITUDE ZONE    : ZONE 0
7.3           0371/408 BWR MET WIND DIRECTION   : 12
7.4           0367/401 MET WIND SPEED           : 5
```

***PK11 K05.11 STRIKEWARN***

```
Index         DFI/DUI  Data Field Label            Data Value
4079/072 CONVENTIONAL/NUCLEAR WARN: NUCLEAR
2.2           4019/026 STRIKE DAY               : 5
2.3           0792/420 STRIKE HOUR              : 5
2.4           0797/419 STRIKE MINUTE            : 15
2.2           4019/026 STRIKE DAY               : 5
2.3           0792/420 STRIKE HOUR              : 7
2.4           0797/419 STRIKE MINUTE            : 45
3.1           4054/037 WARNING CODEWORD         : BIGBANG
4031/008 MINIMUM SAFE DISTANCE (MS: 5
0281/414 GROUND ZERO LOCATION LATI: 185329
0282/414 GROUND ZERO LOCATION LONG: -18936814
4031/009 MINIMUM SAFE DISTANCE (MS: 4
4031/010 MINIMUM SAFE DISTANCE (MS: 3
```

***PK11 K05.15 FIELD ORDERS***

```
Index         DFI/DUI  Data Field Label            Data Value
1             4054/058 PLAN NAME                : SEAD01
2             4054/059 OPLAN/OPORD NAME         : BIGATTACKWITHBIGBANG00000000
3.1           4075/016 PARAGRAPH 1, SITUATION   : CURRENT
```

## 15-2. JVMF Messages

This window shows the JVMF Available Message List window and displays the message template. These windows work the same as the Package 11 windows.

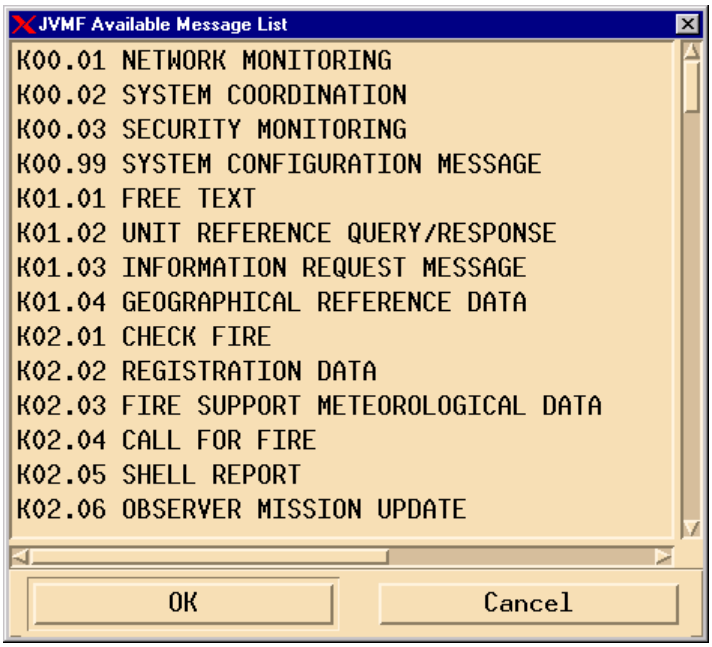


**Figure 15-5 JVMF Available Message**

The JVMF Case Messages are broke down with the minimal required entries. Remember that some entries for the specific message cases will not work in other messages cases.

```
Message
JVMF      K00.01 NETWORK MONITORING
Message Case:  1.01 Network Monitoring Message Type is Keep Alive
Index          DFI/DUI  Data Field Label           Data Value
1              4029/125 NUMBER OF SUB-NETWORKS   : 2
2              4093/042 NETWORK MONITORING MESSAG: KEEP ALIVE MESSAGE
3              4004/012 REPORTING STATION        : 1111
4.2            4085/059 NETWORK IDENTIFICATION NU: 2
4.3.2          4019/044 DATA COLLECTION DAY      : 1
4.3.3          0792/452 DATA COLLECTION HOUR     : 1
4.3.4          0797/449 DATA COLLECTION MINUTE   : 1
4.3.5          0380/417 DATA COLLECTION SECOND   : 1

Message:
JVMF      K00.01 NETWORK MONITORING
Message Case:  1.02 Network Monitoring Message Type is Server to Local Network
Index          DFI/DUI  Data Field Label           Data Value
1              4029/125 NUMBER OF SUB-NETWORKS   : 2
2              4093/042 NETWORK MONITORING MESSAG: SERVER TO LOCAL NMS
3              4004/012 REPORTING STATION        : 112
4.2            4085/059 NETWORK IDENTIFICATION NU: 12
4.3.2          4019/044 DATA COLLECTION DAY      : 1
4.3.3          0792/452 DATA COLLECTION HOUR     : 1
4.3.4          0797/449 DATA COLLECTION MINUTE   : 1
4.3.5          0380/417 DATA COLLECTION SECOND   : 1
4.4.1          4093/044 DATA MEASURMENT INDICATOR: KILOBITS
4.4.2.2        4093/045 PROTOCOL TYPE            : X.25 MSG
4.4.2.3.2      4093/046 TRAFFIC TYPE             : C2
4.4.2.3.3      4082/012 CURRENT NETWORK LOAD     : 25 < LOAD <= 31.25 PERCENT
4.4.2.3.4      4082/013 AVERAGE NETWORK LOAD     : 18.75 < LOAD <= 25 PERCENT
4.4.4          4082/014 NETWORK STATUS           : NETWORK OK
4.4.5.1        4029/116 QUANTITY OF SA DATA DOWN : 14
4.4.5.2        4029/117 QUANTITY OF C2 DATA DOWN : 31
4.4.5.3        4029/118 QUANTITY OF LOCAL CSMA SA: 30
4.4.5.4        4029/119 QUANTITY OF LOCAL CSMA  C: 27
4.4.5.5        4029/123 NUMBER OF SERVER CLIENTS : 7
4.4.5.6.2      4004/012 CLIENT                   : 112
4.4.5.6.3      4093/043 CLIENT CONFIGURATION     : DATA ONLY RADIO EQUIPPED BUT
4.4.7.1        4029/121 QUANTITY OF SVC C2 DATA U: 12
```

```
4.4.7.2       4029/122 NUMBER OF SVCS UP        : 21
4.4.8.1       4029/124 NUMBER OF MULTICAST GROUP: 1
4.4.8.2.2  4085/061 MULTICAST GROUP IDENTIFIC: 111

Message:
JVMF      K00.01 NETWORK MONITORING
Message Case:  1.03 Network Monitoring Message Type is Local Area to Wide Area Network
Index         DFI/DUI  Data Field Label           Data Value
1             4029/125 NUMBER OF SUB-NETWORKS   : 2
2             4093/042 NETWORK MONITORING MESSAG: LOCAL AREA NMS TO WIDE AREA
3             4004/012 REPORTING STATION        : 1111
4.2           4085/059 NETWORK IDENTIFICATION NU: 111
4.3.2         4019/044 DATA COLLECTION DAY      : 1
4.3.3         0792/452 DATA COLLECTION HOUR     : 1
4.3.4         0797/449 DATA COLLECTION MINUTE   : 1
4.3.5         0380/417 DATA COLLECTION SECOND   : 1
4.4.1         4093/044 DATA MEASURMENT INDICATOR: KILOBITS
4.4.2.2       4093/045 PROTOCOL TYPE            : X.25 MSG
4.4.2.3.2     4093/046 TRAFFIC TYPE             : SA
4.4.2.3.3     4082/012 CURRENT NETWORK LOAD     : 50 < LOAD <=56.25 PERCENT
4.4.2.3.4     4082/013 AVERAGE NETWORK LOAD     : 25 < LOAD <= 31.25 PERCENT
4.4.3.1       4004/012 SERVER                   : 2
4.4.4         4082/014 NETWORK STATUS           : NETWORK OK
4.4.6.1       4029/120 QUANTITY OF WIDE AREA CSM: 12
4.4.6.2.1     4029/141 QUANTITY OF WIDE AREA CSM: 5
4.4.7.1       4029/121 QUANTITY OF SVC C2 DATA U: 10
4.4.7.2       4029/122 NUMBER OF SVCS UP        : 10
```

**JVMF K00.02 SYSTEM COORDINATION**

```
Message Case:  1.01 System Coordination Message Type is Server Coordination
Index         DFI/DUI  Data Field Label           Data Value
1             4170/004 SYSTEM COORDINATION MESSA: SERVER COORDINATION
2.1           4085/059 NETWORK IDENTIFICATION NU: 10
2.2           4004/012 STATION UNIT REFERENCE NU: 112
2.3           4004/012 SERVER                   : 11
2.4           4203/001 SERVER CAPABILITY RANKING: 2
2.5           4037/018 TRANSMISSION DELAY TIME  : 12
2.6           4029/115 NUMBER OF SERVICED CLIENT: 8
2.7           4170/901 SERVER COORDINATION MESSA: SINCGARS TRANSITION SERVER C
2.9.2         0281/402 UNIT LATITUDE            : 5416071
2.9.3         0282/402 UNIT LONGITUDE           : -18410129

Message:
JVMF      K00.02 SYSTEM COORDINATION
Message Case:  1.02 System Coordination Message Type is Client Registration

Index         DFI/DUI  Data Field Label           Data Value
1             4170/004 SYSTEM COORDINATION MESSA: CLIENT REGISTRATION
3.1           4085/059 NETWORK IDENTIFICATION NU: 12
3.2           4004/012 CLIENT                   : 112
3.3           4203/002 CLIENT CAPABITITY RANKING: 12
3.4           4093/041 DATA RADIO INDICATOR     : NTDR
3.5           4037/021 TIME FILTER              : 14
3.6           4123/011 MOTION FILTER            : 20
3.8           4077/002 REPORT MODE              : AUTOMATIC
```

**JVMF K00.03 SECURITY MONITORING**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4152/003 SECURITY EVENT           : CHANGE OF USER SENSITIVITY L
2             4099/001 MONTH                    : JANUARY
3             4019/001 DAY OF MONTH             : 2
4             0792/001 HOUR                     : 1
5             0797/004 MINUTE                   : 1
6.1           0380/001 SECOND                   : 1
7             0281/402 UNIT LATITUDE            : 2381132
8             0282/402 UNIT LONGITUDE           : -18262073
9             4004/403 USER LOGIN ID            : afatds
10            4004/012 NETWORK USER'S URN       : 112
11            4085/005 INTERNET ADDRESS NUMBER P: 100
12            4085/006 INTERNET ADDRESS NUMBER P: 100
13            4085/007 INTERNET ADDRESS NUMBER P: 90
14            4085/008 INTERNET ADDRESS NUMBER P: 10
15            4083/001 SECURITY CLASSIFICATION  : UNCLASSIFIED
```

**JVMF K00.99 SYSTEM CONFIGURATION MESSAGE**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4170/902 SYSTEM CONFIGURATION MESS: UNIT TASK ORGANIZATION (UTO)
4.2            4079/903 CURRENT UTO INDICATOR    : CURRENT UTO
4.3            4085/901 UTO MAJOR REVISION NUMBER: 12
4.4            4085/902 UTO MINOR REVISION NUMBER: 12
```

**JVMF K01.01 FREE TEXT**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1.2            4075/001 COMMENTS                 : This is a free text message from FSE
```

**JVMF K01.02 UNIT REFERENCE QUERY/RESPONSE**

```
Message Case:  1.01 VERIFY
Index          DFI/DUI  Data Field Label           Data Value
1.2            4093/008 URN ACTION TYPE          : VERIFY
1.3.1          4004/012 URN                      : 1111
1.4.1          4004/013 UNIT NAME                : FSE 1-10

Message:
JVMF      K01.02 UNIT REFERENCE QUERY/RESPONSE
Message Case:  1.02 REQUEST
Index          DFI/DUI  Data Field Label           Data Value
1.2            4093/008 URN ACTION TYPE          : REQUEST
1.3.1          4004/012 URN                      : 112
```

**JVMF K01.03 INFORMATION REQUEST MESSAGE**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4093/009 METHOD OF RESPONSE       : VMF MESSAGE
2.2            4004/012 URN                      : 112
3.1.2.1        4170/001 REPORT/MESSAGE/OVERLAY TY: CALL FOR FIRE
3.1.3.1        4004/012 ORIGINATOR ID OF INFORMAT: 1111
3.1.4.1        4098/015 MESSAGE YEAR             : 3
3.1.4.2        4099/017 MESSAGE MONTH            : JANUARY
3.1.4.3        4019/035 MESSAGE DAY              : 2
3.1.4.4        0792/440 MESSAGE HOUR             : 1
3.1.4.5        0797/439 MESSAGE MINUTE           : 1
3.1.4.6        0380/406 MESSAGE SECOND           : 1
5.1.2          0281/406 POINT LOCATION LATITUDE  : 2043547
5.1.3          0282/406 POINT LOCATION LONGITUDE : -18756212
8.1            4057/022 REQUEST MESSAGE TYPE     : FIRE MISSION COMMAND
8.18.1         4025/001 TARGET GENERIC TYPE      : ARTILLERY
8.18.2.1       4026/001 TARGET SUBTYPE           : MEDIUM SELF-PROPELLED
8.18.3.1       4110/001 TARGET SUBTYPE ELEMENT   : 152MM HOWITZER D20
```

**JVMF K01.04 GEOGRAPHICAL REFERENCE DATA**

```
Message Case:  1.01 Transmit Map Orientation Data
Index          DFI/DUI  Data Field Label           Data Value
1              4079/085 EXTENDED MAP INDICATOR   : EXTENDED MAP AREA
3.1            4004/012 SUBSCRIBER IDENTIFICATION: 112
3.2            0281/402 UNIT LATITUDE            : 2380454
3.3            0282/402 UNIT LONGITUDE           : -18777259
4.1            0281/446 MAP NORTH EDGE LATITUDE  : 2271759
4.2            0281/447 MAP SOUTH EDGE LATITUDE  : 2088401
4.3            0282/446 MAP EAST EDGE LONGITUDE  : 2271811
4.4      0282/447 MAP WEST EDGE LONGITUDE  : 2088504

Message:
JVMF      K01.04 GEOGRAPHICAL REFERENCE DATA
Message Case:  1.02 Transmit Subscriber Datum
Index          DFI/DUI  Data Field Label           Data Value
1              4079/085 EXTENDED MAP INDICATOR   : NO STATEMENT
2.1            4004/012 OBSERVER IDENTIFICATION  : 1111
6.1            4192/001 GEODETIC DATUM           : NAH-C NAHRWAN - SAUDI ARABIA
```

**JVMF K02.01 CHECK FIRE**

```
Message Case:  1.01 CHECK FIRE BY TARGET NUMBER
Index          DFI/DUI  Data Field Label           Data Value
1              4057/001 CHECK FIRE TYPE          : CHECK FIRING
2              4001/001 CHECK FIRE/CANCEL CHECK F: CHECK FIRE ORDER
3.1            4003/001 TARGET NUMBER            : JJ1007

Message:
```

```
JVMF      K02.01 CHECK FIRE
Message Case:  1.02 CHECK FIRE BY AN AIR FIRE UNIT
Index         DFI/DUI  Data Field Label           Data Value
1             4057/001 CHECK FIRE TYPE          : COMMAND CHECK FIRE
2             4001/001 CHECK FIRE/CANCEL CHECK F: CHECK FIRE ORDER
5.1      4004/012 AIR FIRE UNIT IDENTIFICAT: 112

Message:
JVMF      K02.01 CHECK FIRE
Message Case:  1.03 CHECK FIRE ALL
Index         DFI/DUI  Data Field Label           Data Value
1             4057/001 CHECK FIRE TYPE          : COMMAND CHECK ALL
2.            4001/001 CHECK FIRE/CANCEL CHECK F: CHECK FIRE ALL

Message:
JVMF      K02.01 CHECK FIRE
Message Case:  1.04 CANCEL CHECK FIRE BY TARGET NUMBER
Index         DFI/DUI  Data Field Label           Data Value
1             4057/001 CHECK FIRE TYPE          : COMMAND CHECK FIRE
2             4001/001 CHECK FIRE/CANCEL CHECK F: CANCEL CHECK FIRE
3.1           4003/001 TARGET NUMBER            : JJ1004

Message:
JVMF      K02.01 CHECK FIRE
Message Case:  1.05 CANCEL CHECK FIRE BY AN AIR FIRE UNIT
Index         DFI/DUI  Data Field Label           Data Value
1             4057/001 CHECK FIRE TYPE          : COMMAND CHECK FIRE
2             4001/001 CHECK FIRE/CANCEL CHECK F: CANCEL CHECK FIRE
5.1      4004/012 AIR FIRE UNIT IDENTIFICAT: 112

Message:
JVMF      K02.01 CHECK FIRE
Message Case:  1.06 CANCEL CHECK FIRE ALL
Index         DFI/DUI  Data Field Label           Data Value
1             4057/001 CHECK FIRE TYPE          : COMMAND CANCEL CHECK ALL
2             4001/001 CHECK FIRE/CANCEL CHECK F: CANCEL CHECK FIRE ALL
6.1           0792/404 EFFECTIVE HOUR           : 5
6.2           0797/403 EFFECTIVE MINUTE         : 10
6.3           0380/403 EFFECTIVE SECOND         : 1
```

**JVMF K02.02 REGISTRATION DATA**

```
Message Case:  1.01 Add Registration Data
Index         DFI/DUI  Data Field Label           Data Value
1             4058/001 ACTION DESIGNATOR        : ADD
2             4004/012 FIRE UNIT IDENTIFICATION : 112
4.1.1         4005/004 REGISTRATION PROJECTILE  : HEA - 105MM, 155MM, 203MM
4.1.2         4006/001 PROJECTILE  LOT DESIGNATO: 12
4.1.3         4008/001 PROPELLANT CHARGE        : 10
4.1.4         4010/001 TRAJECTORY TYPE          : LOW
4.1.5.1       4127/006 PROJECTILE COUNTRY OF ORI: UNITED STATES
4.1.6.1       4007/001 PROPELLANT TYPE          : 155MM PROPELLANT DM42
4.1.7.1       4006/002 PROPELLANT LOT DESIGNATOR: 14
4.1.8.1       4127/007 PROPELLANT COUNTRY OF ORI: UNITED STATES
4.1.9.1       4013/002 REGISTRATION FUZE        : TIA - M564
4.1.10.1      4127/002 FUZE COUNTRY OF ORIGIN   : UNITED STATES
4.3.1         0380/401 FUZE SETTING CORRECTION  : 5
4.3.2         0380/407 FINAL FUZE SETTING       : 10

Message:
JVMF      K02.02 REGISTRATION DATA
Message Case:  1.02 Delete Specific Registration Data
Index         DFI/DUI  Data Field Label           Data Value
1             4058/001 ACTION DESIGNATOR        : DELETE
2             4004/012 FIRE UNIT IDENTIFICATION : 112
4.1.1         4005/004 REGISTRATION PROJECTILE  : HEA - 105MM, 155MM, 203MM
4.1.2         4006/001 PROJECTILE  LOT DESIGNATO: 13
4.1.3         4008/001 PROPELLANT CHARGE        : 5
4.1.4         4010/001 TRAJECTORY TYPE          : LOW
```

**JVMF K02.03 FIRE SUPPORT METEOROLOGICAL DATA**

```
Message Case:  1.01 Transmit Computer MET
Index         DFI/DUI  Data Field Label           Data Value
1             4093/010 MET MESSAGE DESIGNATOR   : COMPUTER MET
2.1           4020/001 MET VALIDITY DURATION    : 2
2.2           4019/005 MET VALIDITY START DAY   : 2
```

```
2.3           0792/401 MET VALIDITY START HOUR  : 14
5.1           0281/438 MET STATION LATITUDE     : 5786057
5.2           0282/438 MET STATION LONGITUDE    : -18235571
5.3           4130/002 MET STATION ELEVATION    : 75
6.1           4018/001 MET STATION PRESSURE     : 985
7.1.2         4021/001 COMPUTER MET ALTITUDE ZON: ZONE 5
7.1.3         4028/024 MET WIND DIRECTION       : 3
7.1.4         0367/401 MET WIND SPEED           : 4
7.1.5         4023/001 AIR VIRTUAL TEMPERATURE  : 3456
7.1.6         4018/002 AIR PRESSURE             : 985
7.1.2         4021/001 COMPUTER MET ALTITUDE ZON: ZONE 5
7.1.3         4028/024 MET WIND DIRECTION       : 4
7.1.4         0367/401 MET WIND SPEED           : 5
7.1.5         4023/001 AIR VIRTUAL TEMPERATURE  : 3455
7.1.6         4018/002 AIR PRESSURE             : 984
7.1.2         4021/001 COMPUTER MET ALTITUDE ZON: ZONE 5
7.1.3         4028/024 MET WIND DIRECTION       : 5
7.1.4         0367/401 MET WIND SPEED           : 7
7.1.5         4023/001 AIR VIRTUAL TEMPERATURE  : 3454
7.1.6         4018/002 AIR PRESSURE             : 983

Message:
JVMF      K02.03 FIRE SUPPORT METEOROLOGICAL DATA
Message Case:  1.02 Transmit Target Area MET
Index         DFI/DUI  Data Field Label           Data Value
1             4093/010 MET MESSAGE DESIGNATOR   : TARGET AREA WIND MET
2.1           4020/001 MET VALIDITY DURATION    : 3
2.2           4019/005 MET VALIDITY START DAY   : 5
2.3           0792/401 MET VALIDITY START HOUR  : 25
5.1           0281/438 MET STATION LATITUDE     : 2418869
5.2           0282/438 MET STATION LONGITUDE    : -18376558
5.3           4130/002 MET STATION ELEVATION    : 80
6.1           4018/001 MET STATION PRESSURE     : 936
8.1           4114/001 TARGET AREA  MET IDENTIFI: 11
8.2.1         4058/013 TARGET AREA  MET ACTION D: NO STATEMENT
8.3.1         4175/003 PRECIPITATION TYPE       : LIGHT SNOW
8.3.2         4144/005 PRECIPITATION RATE       : 345
8.3.3         0365/414 MET CLOUD BASE HEIGHT    : 499
8.3.4         4088/004 MEAN REFRACTIVE INDEX    : 345
8.3.5.2       4021/007 TARGET AREA MET ALTITUDE : ZONE 5
8.3.5.3       4028/024 MET WIND DIRECTION       : 180
8.3.5.4       0367/401 MET WIND SPEED           : 6
8.3.5.5       4023/001 AIR VIRTUAL TEMPERATURE  : 3567
8.3.5.6       4142/001 RELATIVE HUMIDITY        : 98
```

**JVMF K02.04 CALL FOR FIRE**

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Message Case:  1.01 Call for Fire - Geographic Location
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : GEOGRAPHIC LOCATION
2.1           4003/001 TARGET NUMBER            : JJ7891
5.1.1.2       0281/407 TARGET LATITUDE          : 2249847
5.1.1.3       0282/407 TARGET LONGITUDE         : -18224573
5.1.1.4.1     4130/004 TARGET ELEVATION         : 130
6.2.1.2       4025/001 TARGET GENERIC TYPE      : ARTILLERY
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : MEDIUM
6.2.1.3.1.4.1 4117/002 TARGET FORMATION         : OFF ROAD
6.2.1.3.1.5.1 4029/005 NUMBER OF TARGET ELEMENTS: 3
7.8.1.1       4041/001 METHOD OF CONTROL        : FIRE WHEN READY
7.8.1.2       4041/900 METHOD OF FIRE           : FIRE FOR EFFECT
9.3.1.2.1  4005/003 FIRE FOR EFFECT PROJECTIL: HEF - 105MM, 155MM, 203MM

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.02 Call for Fire - Polar Location
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : POLAR LOCATION
5.5.1         4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
5.5.2.1       4028/001 OBSERVER-TARGET AZIMUTH  : 1400
5.5.3.1       0757/403 OBSERVER ESTIMATED DISTAN: 1200
5.5.4.1       4072/002 VERTICAL INTERVAL        : 3
6.2.1.2       4025/001 TARGET GENERIC TYPE      : ARMOR, COMBAT
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : MECHANIZED TROOPS
7.3.1         4004/012 OBSERVER IDENTIFICATION  : 1111
7.4.1         4004/012 FIRE SUPPORT TEAM IDENTIF: 1111
7.5.1         4119/001 TARGET LOCATION ACCURACY : 20
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7.6.1         4129/004 FIRE MISSION PRIORITY    : NORMAL MISSION PROCESSING
7.7.1    4085/023 OBSERVER FIRE MISSION NUM: MISSION NUMBER 1

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.03 Call for Fire - Shift from a Known Point
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : SHIFT FROM A KNOWN POINT
3.1           4085/021 REFERENCE (KNOWN) POINT N: 2
5.5.1         4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
5.5.2.1       4028/001 OBSERVER-TARGET AZIMUTH  : 1200
5.6.1.1       4012/001 LATERAL SHIFT            : 1200
5.6.2.1       4106/001 RANGE SHIFT              : 2000

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.04 Call for Fire - Laser Range Finder
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : LASER RANGE FINDER
5.5.1         4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
5.5.2.1       4028/001 OBSERVER-TARGET AZIMUTH  : 110
5.7.1         4108/001 LASER MISSION TYPE       : STATIONARY TARGET
5.7.2         0757/405 SLANT RANGE              : 30
5.7.3         4028/011 VERTICAL ANGLE           : 1200
7.3.1    4004/012 OBSERVER IDENTIFICATION  : 1111

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.05 Call for Fire - Known Point or Previous Target (Quick Fire)
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : KNOWN POINT OR PREVIOUS TARG
3.1           4085/021 REFERENCE (KNOWN) POINT N: 2
12.1          4079/010 QUICK FIRE INDICATOR     : FIRE THE SPECIFIED TARGET
12.2          4079/009 COPPERHEAD MISSION INDICA: NO STATEMENT
12.3          4079/038 DELETE INDICATOR         : NO STATEMENT
12.4          4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
12.5          4079/028 CAS REQUEST INDICATOR    : NO STATEMENT

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.06 Call for Fire - Rocket/Missile Fire Order
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : ROCKET/MISSILE FIRE ORDER
2.1           4003/001 TARGET NUMBER            : JP1198
5.1.1.2       0281/407 TARGET LATITUDE          : 2227906
5.1.1.3       0282/407 TARGET LONGITUDE         : -19080389
5.1.1.4.1     4130/004 TARGET ELEVATION         : 150
6.2.1.2       4025/001 TARGET GENERIC TYPE      : ARTILLERY
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : HEAVY MISSILE
7.8.1.1       4041/001 METHOD OF CONTROL        : FIRE WHEN READY
7.8.1.2       4041/900 METHOD OF FIRE           : FIRE FOR EFFECT
9.2.2         4004/012 FIRE FOR EFFECT UNIT IDEN: 112
10.1.1        4005/007 ROCKET MUNITIONS TYPE    : JEG
10.2.1        4029/014 NUMBER OF ROCKET MUNITION: 2
10.3.1        4114/001 TARGET AREA  MET IDENTIFI: 15
10.4.1        4028/012 ATTACK DIRECTION         : 1400
10.6.1        4037/007 ROCKET TIME OF FLIGHT    : 28
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
12.2          4079/009 COPPERHEAD MISSION INDICA: NO STATEMENT
12.3          4079/038 DELETE INDICATOR         : NO STATEMENT
12.4          4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
12.5          4079/028 CAS REQUEST INDICATOR    : NO STATEMENT

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.07 Call for Fire - Moving Target, One Location
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : MOVING TARGET, ONE LOCATION
5.1.1.2       0281/407 TARGET LATITUDE          : 2044022
5.1.1.3       0282/407 TARGET LONGITUDE         : -20500235
5.1.1.4.1     4130/004 TARGET ELEVATION         : 150
5.1.1.5.1     0792/417 FIXED POINT HOUR         : 5
5.1.1.5.2     0797/416 FIXED POINT MINUTE       : 58
5.1.1.5.3     0380/402 FIXED POINT SECOND       : 10
5.2.1         4028/010 MOVING TARGET AZIMUTH    : 3100
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5.2.2         0367/402 MOVING TARGET SPEED      : 20
6.2.1.2       4025/001 TARGET GENERIC TYPE      : ARMOR, COMBAT
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : TANK
6.2.1.3.1.4.1 4117/002 TARGET FORMATION         : OFF ROAD
6.2.1.3.1.5.1 4029/005 NUMBER OF TARGET ELEMENTS: 12

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.08 Call for Fire - Moving Target, Two Locations
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : MOVING TARGET, TWO LOCATIONS
5.1.1.2       0281/407 TARGET LATITUDE          : 185170
5.1.1.3       0282/407 TARGET LONGITUDE         : -19107973
5.1.1.4.1     4130/004 TARGET ELEVATION         : 150
5.1.1.5.1     0792/417 FIXED POINT HOUR         : 6
5.1.1.5.2     0797/416 FIXED POINT MINUTE       : 20
5.1.1.5.3     0380/402 FIXED POINT SECOND       : 0
5.1.1.2       0281/407 TARGET LATITUDE          : 190221
5.1.1.3       0282/407 TARGET LONGITUDE         : -19107978
5.1.1.4.1     4130/004 TARGET ELEVATION         : 160
5.1.1.5.1     0792/417 FIXED POINT HOUR         : 6
5.1.1.5.2     0797/416 FIXED POINT MINUTE       : 30
5.1.1.5.3     0380/402 FIXED POINT SECOND       : 0

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.09 Call for Fire - Moving Target Predicted Point
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : MOVING TARGET PREDICTED POIN
5.1.1.2       0281/407 TARGET LATITUDE          : 2043641
5.1.1.3       0282/407 TARGET LONGITUDE         : -18605077
5.1.1.4.1     4130/004 TARGET ELEVATION         : 75
5.2.1         4028/010 MOVING TARGET AZIMUTH    : 1600
5.2.2         0367/402 MOVING TARGET SPEED      : 25
6.2.1.2       4025/001 TARGET GENERIC TYPE      : ARMOR, COMBAT
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : TROOPS AND VEHICLES
8.1.1         4005/002 ADJUSTING PROJECTILE     : OTHER

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.10 Establish Final Protective fires
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : ESTABLISH FINAL PROTECTIVE F
5.1.1.2       0281/407 TARGET LATITUDE          : 2248517
5.1.1.3       0282/407 TARGET LONGITUDE         : -18776903
5.1.1.4.1     4130/004 TARGET ELEVATION         : 120
6.2.1.2       4025/001 TARGET GENERIC TYPE      : TERRAIN FEATURE
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : JUNCTION ROAD
7.3.1         4004/012 OBSERVER IDENTIFICATION  : 1111
13.1.1        4058/003 FPF DESIGNATOR           : ASSIGN FINAL PROTECTIVE FIRE

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.11 Fire or End Final Protective Fires
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : FIRE OR END FINAL PROTECTIVE
7.3.1         4004/012 OBSERVER IDENTIFICATION  : 1111
13.1.1        4058/003 FPF DESIGNATOR           : FIRE FINAL PROTECTIVE FIRE

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.12 Establish a Priority Copperhead Mission
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : ESTABLISH A PRIORITY COPPERH
5.1.1.2       0281/407 TARGET LATITUDE          : 2376576
5.1.1.3       0282/407 TARGET LONGITUDE         : -18777748
5.1.1.4.1     4130/004 TARGET ELEVATION         : 75
7.3.1         4004/012 OBSERVER IDENTIFICATION  : 1111
9.3.1.2.1     4005/003 FIRE FOR EFFECT PROJECTIL: CPH - 155MM
13.1.1        4058/003 FPF DESIGNATOR           : ASSIGN FINAL PROTECTIVE FIRE

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.13 Fire a Copperhead Priority Target
Index         DFI/DUI  Data Field Label           Data Value
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1             4057/002 FIRE MISSION TYPE        : FIRE A COPPERHEAD PRIORITY T
2.1           4003/001 TARGET NUMBER            : JJ1000
7.3.1         4004/012 OBSERVER IDENTIFICATION  : 1111
12.1          4079/010 QUICK FIRE INDICATOR     : FIRE THE SPECIFIED TARGET
12.2          4079/009 COPPERHEAD MISSION INDICA: COPPERHEAD MISSION
12.3          4079/038 DELETE INDICATOR         : NO STATEMENT
12.4          4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
12.5          4079/028 CAS REQUEST INDICATOR    : NO STATEMENT

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.14 Delete Final Protective Fire or Copperhead Priority Target
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : DELETE FINAL PROTECTIVE FIRE
2.1           4003/001 TARGET NUMBER            : JP1008
7.3.1         4004/012 OBSERVER IDENTIFICATION  : 1111
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
12.2          4079/009 COPPERHEAD MISSION INDICA: NO STATEMENT
12.3          4079/038 DELETE INDICATOR         : DELETE
12.4          4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
12.5          4079/028 CAS REQUEST INDICATOR    : NO STATEMENT

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.15 Establish a Known Point or Target Without Firing
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : ESTABLISH A KNOWN POINT OR T
5.1.1.2       0281/407 TARGET LATITUDE          : 4121284
5.1.1.3       0282/407 TARGET LONGITUDE         : -18593377
5.1.1.4.1     4130/004 TARGET ELEVATION         : 50
6.2.1.2       4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : HEAVY MISSILE
12.1          4079/010 QUICK FIRE INDICATOR     : NO STATEMENT
12.2          4079/009 COPPERHEAD MISSION INDICA: NO STATEMENT
12.3          4079/038 DELETE INDICATOR         : NO STATEMENT
12.4          4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
12.5          4079/028 CAS REQUEST INDICATOR    : NO STATEMENT
12.6.1    4058/002 END OF MISSION DESIGNATOR: END OF MISSION - RECORD AS T

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.16 Call For Fire - Immediate Suppression/Smoke
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : IMMEDIATE SUPPRESSION/SMOKE
5.1.1.2       0281/407 TARGET LATITUDE          : 2381279
5.1.1.3       0282/407 TARGET LONGITUDE         : -18605556
5.1.1.4.1     4130/004 TARGET ELEVATION         : 45
7.8.2.1       4002/001 METHOD OF ENGAGEMENT     : IMMEDIATE SUPPRESSION

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.18 Hand-Off Mission to Reinforcing Battalion
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : HAND-OFF MISSION TO REINFORC
2.1           4003/001 TARGET NUMBER            : JJ2230
4.1           4082/004 FIRE MISSION PROCESSING C: HAND-OFF MISSION
5.1.1.2       0281/407 TARGET LATITUDE          : 5746430
5.1.1.3       0282/407 TARGET LONGITUDE         : -18821342
5.1.1.4.1     4130/004 TARGET ELEVATION         : 75
5.3.1.1       4032/001 LENGTH                   : 2000
5.3.1.2       4033/001 WIDTH                    : 250
5.3.1.3       4028/002 ATTITUDE                 : 1600
6.2.1.2       4025/001 TARGET GENERIC TYPE      : ARTILLERY
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : HEAVY SELF-PROPELLED
7.8.1.1       4041/001 METHOD OF CONTROL        : FIRE WHEN READY
7.8.1.2       4041/900 METHOD OF FIRE           : FIRE FOR EFFECT

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.19 Cannon Fire Order
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : CANNON FIRE ORDER
2.1           4003/001 TARGET NUMBER            : JP4102
4.1           4082/004 FIRE MISSION PROCESSING C: SADARM/SEGMENT
5.1.1.2       0281/407 TARGET LATITUDE          : 2412204
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5.1.1.3       0282/407 TARGET LONGITUDE         : -18949223
5.1.1.4.1     4130/004 TARGET ELEVATION         : 35
5.3.1.1       4032/001 LENGTH                   : 1800
5.3.1.2       4033/001 WIDTH                    : 300
5.3.1.3       4028/002 ATTITUDE                 : 3200
6.2.1.2       4025/001 TARGET GENERIC TYPE      : ARTILLERY
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : MEDIUM
7.8.1.1       4041/001 METHOD OF CONTROL        : FIRE WHEN READY
7.8.1.2       4041/900 METHOD OF FIRE           : FIRE FOR EFFECT
9.1.1         4029/041 NUMBER OF FIRE FOR EFFECT: 16
9.3.1.2.1  4005/003 FIRE FOR EFFECT PROJECTIL: HEA - 105MM, 155MM, 203MM

Message:
JVMF      K02.04 CALL FOR FIRE
Message Case:  1.20 Mass Fire Order
Index         DFI/DUI  Data Field Label           Data Value
1             4057/002 FIRE MISSION TYPE        : MASS FIRE ORDER
2.1           4003/001 TARGET NUMBER            : JJ8103
4.1           4082/004 FIRE MISSION PROCESSING C: MASS FIRE ORDER
5.1.1.2       0281/407 TARGET LATITUDE          : 5748601
5.1.1.3       0282/407 TARGET LONGITUDE         : -18626479
5.1.1.4.1     4130/004 TARGET ELEVATION         : 75
5.3.1.1       4032/001 LENGTH                   : 400
5.3.1.2       4033/001 WIDTH                    : 150
5.3.1.3       4028/002 ATTITUDE                 : 4800
6.2.1.2       4025/001 TARGET GENERIC TYPE      : COMMAND CENTER
6.2.1.3.1.2   4026/001 TARGET SUBTYPE           : REGIMENT/GROUP
7.8.1.1       4041/001 METHOD OF CONTROL        : NO STATEMENT
7.8.1.2       4041/900 METHOD OF FIRE           : FIRE FOR EFFECT
9.2.2    4004/012 FIRE FOR EFFECT UNIT IDEN: 112

Message:
JVMF      K02.05 SHELL REPORT
Message Case:  1.01 Transmit Initial Shell Report.
Index         DFI/DUI  Data Field Label           Data Value
1             4058/001 ACTION DESIGNATOR        : ADD
4.1           0281/405 CRATER LOCATION LATITUDE : 5820397
4.2           0282/405 CRATER LOCATION LONGITUDE: -18822864
4.3.1         4130/005 CRATER LOCATION ELEVATION: 21
5.1.1         4004/012 OBSERVER IDENTIFICATION  : 1111
6.1.2         4019/003 SHELLING DAY             : 10
6.1.3         0792/403 SHELLING HOUR            : 5
6.1.4         0797/402 SHELLING MINUTE          : 45
7.1.1         0757/403 OBSERVER ESTIMATED DISTAN: 2500
7.2.1         0700/402 WEAPON USED              : ARTILLERY
7.3.1         4048/001 HOSTILE WEAPONS SUBTYPE  : UNKNOWN
7.5.1         4029/009 NUMBER OF ENEMY ROUNDS   : 12
7.6.1         4029/008 NUMBER OF WEAPONS        : 4

Message:
JVMF      K02.05 SHELL REPORT
Message Case:  1.02 Update a Shell Report
Index         DFI/DUI  Data Field Label           Data Value
1             4058/001 ACTION DESIGNATOR        : CHANGE
4.1           0281/405 CRATER LOCATION LATITUDE : 2411112
4.2           0282/405 CRATER LOCATION LONGITUDE: -18606167
5.1.1         4004/012 OBSERVER IDENTIFICATION  : 1111
5.2.1         0281/404 OBSERVER LOCATION LATITUD: 2427820
5.2.2         0282/404 OBSERVER LOCATION LONGITU: -18262397
6.1.2         4019/003 SHELLING DAY             : 10
6.1.3         0792/403 SHELLING HOUR            : 5
6.1.4         0797/402 SHELLING MINUTE          : 50

Message:
JVMF      K02.06 OBSERVER MISSION UPDATE
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4003/001 TARGET NUMBER            : JP2110
2             4053/001 OBSERVER NOTIFICATION    : PREDICTED LOCATION
4.1           0281/431 PREDICTED LATITUDE       : 2415566
4.2           0282/431 PREDICTED LONGITUDE      : -16503255
4.3      4130/007 PREDICTED POINT ELEVATION: 200

Message:
JVMF      K02.07 SURVEY CONTROL POINT
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Message Case:  1.01 Add a Survey Control Point
Index          DFI/DUI  Data Field Label           Data Value
1              4057/024 SURVEY MESSAGE TYPE      : SURVEY POINT
2              4079/039 LAST SCP INDICATOR       : NO STATEMENT
3              4058/001 ACTION DESIGNATOR        : ADD
7.1.2          4079/069 RECORDED SURVEY POINT    : SURVEY CONTROL POINT
7.1.3          4054/001 SURVEY CONTROL POINT NAME: SCP1200
7.1.5.1        0281/403 SURVEY LATITUDE          : 227673729
7.1.5.2        0282/403 SURVEY LONGITUDE         : -1213734351
7.1.5.3.1      4130/010 SURVEY ELEVATION         : 120

Message:
JVMF      K02.07 SURVEY CONTROL POINT
Message Case:  1.02 Delete a Survey Control Point
Index          DFI/DUI  Data Field Label           Data Value
1              4057/024 SURVEY MESSAGE TYPE      : SURVEY POINT
2              4079/039 LAST SCP INDICATOR       : NO STATEMENT
3              4058/001 ACTION DESIGNATOR        : DELETE
7.1.2          4079/069 RECORDED SURVEY POINT    : SURVEY CONTROL POINT
7.1.3     4054/001 SURVEY CONTROL POINT NAME: SCP110

Message:
JVMF      K02.07 SURVEY CONTROL POINT
Message Case:  1.03 Update a Survey Control Point
Index          DFI/DUI  Data Field Label           Data Value
1              4057/024 SURVEY MESSAGE TYPE      : SURVEY POINT
2              4079/039 LAST SCP INDICATOR       : NO STATEMENT
3              4058/001 ACTION DESIGNATOR        : CHANGE
7.1.2          4079/069 RECORDED SURVEY POINT    : SURVEY CONTROL POINT
7.1.3          4054/001 SURVEY CONTROL POINT NAME: SCP10
7.1.5.1        0281/403 SURVEY LATITUDE          : 36633202
7.1.5.2        0282/403 SURVEY LONGITUDE         : -1866137165
7.1.5.3.1      4130/010 SURVEY ELEVATION         : 120

Message:
JVMF      K02.07 SURVEY CONTROL POINT
Message Case:  1.04 Transmit a Count of Survey Control Points
Index          DFI/DUI  Data Field Label           Data Value
1              4057/024 SURVEY MESSAGE TYPE      : SURVEY LIST
2              4079/039 LAST SCP INDICATOR       : NO STATEMENT
3              4058/001 ACTION DESIGNATOR        : NO STATEMENT
6.1      4029/067 NUMBER OF SCP'S MEETING C: 2

Message:
JVMF      K02.07 SURVEY CONTROL POINT
Message Case:  1.05 Transmit SCPs Based on Search Criteria (K02.20)
Index          DFI/DUI  Data Field Label           Data Value
1              4057/024 SURVEY MESSAGE TYPE      : SURVEY LIST
2              4079/039 LAST SCP INDICATOR       : NO STATEMENT
3              4058/001 ACTION DESIGNATOR        : NO STATEMENT
7.1.2          4079/069 RECORDED SURVEY POINT    : SURVEY CONTROL POINT
7.1.3          4054/001 SURVEY CONTROL POINT NAME: SCP11
7.1.5.1        0281/403 SURVEY LATITUDE          : 261365804
7.1.5.2        0282/403 SURVEY LONGITUDE         : -354109535
7.1.5.3.1      4130/010 SURVEY ELEVATION         : 120
7.1.2          4079/069 RECORDED SURVEY POINT    : SURVEY CONTROL POINT
7.1.3          4054/001 SURVEY CONTROL POINT NAME: SCP14
7.1.5.1        0281/403 SURVEY LATITUDE          : 239610542
7.1.5.2        0282/403 SURVEY LONGITUDE         : -497116765
7.1.5.3.1      4130/010 SURVEY ELEVATION         : 125

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.01 Transmit a Preliminary Fire Plan Target
Index          DFI/DUI  Data Field Label           Data Value
1              4057/008 SCHEDULE OF FIRES TYPE   : TRANSMIT A PRELIMINARY FIRE
2              4054/003 FIRE PLAN NAME           : SEAD1
3              4058/001 ACTION DESIGNATOR        : ADD
4              4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2            4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3            4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4            4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5            4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6            4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7            4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
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8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.11.2        4003/001 TARGET NUMBER            : JP1001

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.02 Delete Preliminary Fire Plan Targets
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : DELETE PRELIMINARY FIRE PLAN
2             4054/003 FIRE PLAN NAME           : SEAD2
3             4058/001 ACTION DESIGNATOR        : DELETE
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.11.2        4003/001 TARGET NUMBER            : JP1001
8.11.2        4003/001 TARGET NUMBER            : JF1002

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.03 Transmit Preliminary Fire Plan Target List
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : TRANSMIT PRELIMINARY FIRE PL
2             4054/003 FIRE PLAN NAME           : JEFF1
3             4058/001 ACTION DESIGNATOR        : NO STATEMENT
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.11.2        4003/001 TARGET NUMBER            : AG1212
8.13.1        4129/005 TARGET SCHEDULING PRIORIT: PRIORITY 1
8.14.1        4119/001 TARGET LOCATION ACCURACY : 100
8.19.1        0281/407 TARGET LATITUDE          : 372370
8.19.2        0282/407 TARGET LONGITUDE         : -21156077
8.19.3.1      4130/004 TARGET ELEVATION         : 125
8.21.2.1      4031/001 RADIUS                   : 250
8.22.1.2      4025/001 TARGET GENERIC TYPE      : AIR DEFENSE ARTILLERY
8.22.1.3.1.2  4026/001 TARGET SUBTYPE           : SURFACE-TO-AIR MISSILE

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.04 Transmit Scheduling Instructions for Fire Plan Targets
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : TRANSMIT SCHEDULING INSTRUCT
2             4054/003 FIRE PLAN NAME           : KILLIT
3             4058/001 ACTION DESIGNATOR        : ADD
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: SCHEDULE TARGET
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.11.2        4003/001 TARGET NUMBER            : AJ1000
8.23.2        4060/001 TIME RELATIVE TO H-HOUR  : 15
8.24.1        4020/002 DURATION OF FIRE         : 2
8.25.1        4037/005 TIME BETWEEN ROUNDS      : 1

Message:
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JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.05 Transmit Fire Plan Target Scheduling List
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : TRANSMIT FIRE PLAN TARGET SC
2             4054/003 FIRE PLAN NAME           : BLOOD1
3             4058/001 ACTION DESIGNATOR        : ADD
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: SCHEDULE TARGET
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.11.2        4003/001 TARGET NUMBER            : AT1000
8.13.1        4129/005 TARGET SCHEDULING PRIORIT: PRIORITY 2
8.14.1        4119/001 TARGET LOCATION ACCURACY : 150
8.19.1        0281/407 TARGET LATITUDE          : 2097613
8.19.2        0282/407 TARGET LONGITUDE         : -18909103
8.19.3.1      4130/004 TARGET ELEVATION         : 120
8.21.2.1      4031/001 RADIUS                   : 200
8.22.1.2      4025/001 TARGET GENERIC TYPE      : PERSONNEL
8.22.1.3.1.2  4026/001 TARGET SUBTYPE           : INFANTRY

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.06 Transmit Schedule of Fires
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : TRANSMIT SCHEDULE OF FIRES
2             4054/003 FIRE PLAN NAME           : SEAD1
3             4058/001 ACTION DESIGNATOR        : NO STATEMENT
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : ON-CALL TARGET
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: TARGET SCHEDULED
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.11.2        4003/001 TARGET NUMBER            : AQ1234
8.13.1        4129/005 TARGET SCHEDULING PRIORIT: PRIORITY 1
8.14.1        4119/001 TARGET LOCATION ACCURACY : 4097613
8.19.1        0281/407 TARGET LATITUDE          : 3097613
8.19.2        0282/407 TARGET LONGITUDE         : -18919103
8.19.3.1      4130/004 TARGET ELEVATION         : 100
8.21.2.1      4031/001 RADIUS                   : 150
8.22.1.2      4025/001 TARGET GENERIC TYPE      : ARTILLERY
8.22.1.3.1.2  4026/001 TARGET SUBTYPE           : MEDUIM

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.07 Delete Targets from the Schedule of Fires, Fire Plan Target List, or
Index         DFI/DUI  Data Field Label           Data Value
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : DELETE TARGETS FROM THE SCHE
2             4054/003 FIRE PLAN NAME           : FASCA2
3             4058/001 ACTION DESIGNATOR        : DELETE
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: SCHEDULE TARGET
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
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8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.11.2        4003/001 TARGET NUMBER            : JJ1101

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.08 Transmit a Field Artillery Scatterable Minefield (FASCAM)
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : TRANSMIT A FIELD ARTILLERY S
2             4054/003 FIRE PLAN NAME           : FASCA2
3             4058/001 ACTION DESIGNATOR        : ADD
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
7.1           4019/038 H-HOUR DAY               : 2
7.2           0792/443 H-HOUR                   : 5
7.3           0797/442 H-HOUR MINUTE            : 55
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : ARTILLERY MINEFIELD
8.19.1        0281/407 TARGET LATITUDE          : 1200745
8.19.2        0282/407 TARGET LONGITUDE         : -18771826
8.19.3.1      4130/004 TARGET ELEVATION         : 120
8.21.1.1      4032/001 LENGTH                   : 200
8.21.1.2      4033/001 WIDTH                    : 200
8.21.1.3      4028/002 ATTITUDE                 : 3200
9.1           4038/002 FASCAM MINEFIELD DENSITY : LOW DENSITY
9.2.1         4004/012 ESTABLISHING UNIT IDENTIF: 112
9.3.1.2.1     4005/009 ARTILLERY MINE MUNITIONS : AMS - 155MM
9.3.1.3.1     4013/901 ARTILLERY MINE FUZE      : TIB - M577, M577A1, M548
9.3.1.2.1     4005/009 ARTILLERY MINE MUNITIONS : APS - 155MM
9.3.1.3.1     4013/901 ARTILLERY MINE FUZE      : TIB - M577, M577A1, M548
9.4.1         4019/011 NOT LATER THAN DAY       : 2
9.4.2         0792/415 NOT LATER THAN HOUR      : 6
9.4.3         0797/414 NOT LATER THAN MINUTE    : 10

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.09 Reserve a Selected Fire Unit for a Fire Plan
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : RESERVE A SELECTED FIRE UNIT
2             4054/003 FIRE PLAN NAME           : GREEN1
3             4058/001 ACTION DESIGNATOR        : ADD
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.23.2        4060/001 TIME RELATIVE TO H-HOUR  : 15
8.23.2        4060/001 TIME RELATIVE TO H-HOUR  : 20
8.29.1.2.1 4004/012 FIRE UNIT IDENTIFICATION (URN): 113

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.10 Delete a Reserved Fire Unit from a Fire Plan
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : DELETE A RESERVED FIRE UNIT
2             4054/003 FIRE PLAN NAME           : PREP1
3             4058/001 ACTION DESIGNATOR        : DELETE
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
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8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.23.2        4060/001 TIME RELATIVE TO H-HOUR  : 15
8.23.2        4060/001 TIME RELATIVE TO H-HOUR  : 20
8.29.1.2.1 4004/012 FIRE UNIT IDENTIFICATION : 113

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.11 Reserve all Fire Units for a Fire Plan
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : RESERVE ALL FIRE UNITS FOR A
2             4054/003 FIRE PLAN NAME           : PREP3
3             4058/001 ACTION DESIGNATOR        : ADD
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.23.2        4060/001 TIME RELATIVE TO H-HOUR  : 5
8.23.2    4060/001 TIME RELATIVE TO H-HOUR  : 10

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.12 Delete all Reserved Fire Units from a Fire Plan
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : DELETE ALL RESERVED FIRE UNI
2             4054/003 FIRE PLAN NAME           : PREP1
3             4058/001 ACTION DESIGNATOR        : DELETE
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.23.2        4060/001 TIME RELATIVE TO H-HOUR  : 15
8.23.2    4060/001 TIME RELATIVE TO H-HOUR  : 20

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.15 End a Fire Plan Mission
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : END A FIRE PLAN MISSION
2             4054/003 FIRE PLAN NAME           : PREP2
3             4058/001 ACTION DESIGNATOR        : ADD
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
5.1           4058/002 END OF MISSION DESIGNATOR: END OF MISSION
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT
8.11.2        4003/001 TARGET NUMBER            : AD1200

Message:
JVMF      K02.08 SCHEDULE OF FIRES
Message Case:  1.16 Alter a FASCAM Minefield
Index         DFI/DUI  Data Field Label           Data Value
1             4057/008 SCHEDULE OF FIRES TYPE   : ALTER A FASCAM MINEFIELD
2             4054/003 FIRE PLAN NAME           : FASCA3
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3             4058/001 ACTION DESIGNATOR        : CHANGE
4             4079/048 LAST TARGET INDICATOR    : NO STATEMENT
8.2           4079/063 ON-CALL TARGET INDICATOR : NO STATEMENT
8.3           4079/041 MISSION FIRED INDICATOR  : NO STATEMENT
8.4           4079/064 FIRE PLAN TARGET INDICATO: NO STATEMENT
8.5           4079/065 TARGET IN SCHEDULE INDICA: NO STATEMENT
8.6           4079/066 SADARM SEGMENT INDICATOR : NO STATEMENT
8.7           4079/044 RECORD AS TARGET INDICATO: NO STATEMENT
8.8           4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
8.9           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
8.10          4079/067 MINEFIELD INDICATOR      : NO STATEMENT

Message:
JVMF      K02.09 TARGET DATA
Message Case:  1.01 Radar Report
Index         DFI/DUI  Data Field Label           Data Value
1             4057/009 TARGET REPORT TYPE       : TARGET REPORT
2             4058/001 ACTION DESIGNATOR        : ADD
4.1.2.1       4003/001 TARGET NUMBER            : JJ1000
4.1.4.1.1     0281/456 PREDICTED IMPACT LATITUDE: 370678
4.1.4.1.2     0282/456 PREDICTED IMPACT LONGITUD: -18924136
4.1.4.2.1     0281/407 TARGET LATITUDE          : 385841
4.1.4.2.2     0282/407 TARGET LONGITUDE         : -18924160
4.1.4.2.3.1   4130/004 TARGET ELEVATION         : 200
4.1.5.1.2     4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
4.1.5.1.3.1.2 4026/001 TARGET SUBTYPE           : MEDIUM MISSILE

Message:
JVMF      K02.09 TARGET DATA
Message Case:  1.02 Report Stationary Target Using Geographic Coordinates
Index         DFI/DUI  Data Field Label           Data Value
1             4057/009 TARGET REPORT TYPE       : COORDINATE REPORT
2             4058/001 ACTION DESIGNATOR        : ADD
4.1.4.2.1     0281/407 TARGET LATITUDE          : 193587
4.1.4.2.2     0282/407 TARGET LONGITUDE         : -19107982
4.1.4.2.3.1   4130/004 TARGET ELEVATION         : 14
4.1.10.1      4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
4.1.10.2.1    4034/001 TARGET AIR DEFENSES      : UNKNOWN
4.1.10.5.1 4119/001 TARGET LOCATION ACCURACY : 100

Message:
JVMF      K02.09 TARGET DATA
Message Case:  1.03 Report a Target Using Direction and Distance
Index         DFI/DUI  Data Field Label           Data Value
1             4057/009 TARGET REPORT TYPE       : AZIMUTH REPORT
2             4058/001 ACTION DESIGNATOR        : ADD
4.1.10.1      4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
4.1.10.5.1    4119/001 TARGET LOCATION ACCURACY : 100
4.1.11.1.1    4004/012 OBSERVER IDENTIFICATION  : 1111
4.1.11.3.1    0757/403 OBSERVER ESTIMATED DISTAN: 3500
4.1.11.3.2    4028/001 OBSERVER-TARGET AZIMUTH  : 4800
4.1.11.3.3.1  4072/002 VERTICAL INTERVAL        : 2

Message:
JVMF      K02.09 TARGET DATA
Message Case:  1.04 Update or Delete Target Information
Index         DFI/DUI  Data Field Label           Data Value
1             4057/009 TARGET REPORT TYPE       : AZIMUTH REPORT
2             4058/001 ACTION DESIGNATOR        : CHANGE
4.1.2.1       4003/001 TARGET NUMBER            : AJ1005

Message:
JVMF      K02.09 TARGET DATA
Message Case:  1.05 Transmit Complete SRI/Query Target Information
Index         DFI/DUI  Data Field Label           Data Value
1             4057/009 TARGET REPORT TYPE       : NO STATEMENT
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
4.1.2.1       4003/001 TARGET NUMBER            : AD1006
4.1.3.1       4093/013 TARGET REPORT DESIGNATOR : SHELL REPORT
4.1.4.2.1     0281/407 TARGET LATITUDE          : 185170
4.1.4.2.2     0282/407 TARGET LONGITUDE         : -19107973
4.1.4.2.3.1   4130/004 TARGET ELEVATION         : 150
4.1.5.1.2     4025/001 TARGET GENERIC TYPE      : ARTILLERY
4.1.5.1.3.1.2 4026/001 TARGET SUBTYPE           : MEDIUM
4.1.5.1.3.1.3 4027/001 DEGREE OF PROTECTION     : UNKNOWN
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4.1.5.1.3.1.5 4029/005 NUMBER OF TARGET ELEMENTS: 4
4.1.9.2.1     4031/001 RADIUS                   : 300
4.1.10.1      4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
4.1.10.5.1    4119/001 TARGET LOCATION ACCURACY : 50

Message:
JVMF      K02.09 TARGET DATA
Message Case:  1.06 Transmit Terminal Homing Munitions Target Engagement Data
Index         DFI/DUI  Data Field Label           Data Value
1             4057/009 TARGET REPORT TYPE       : NO STATEMENT
2             4058/001 ACTION DESIGNATOR        : NO STATEMENT
4.1.2.1       4003/001 TARGET NUMBER            : AD1007
4.1.4.2.1     0281/407 TARGET LATITUDE          : 190224
4.1.4.2.2     0282/407 TARGET LONGITUDE         : -19104633
4.1.4.2.3.1   4130/004 TARGET ELEVATION         : 10
4.1.5.1.2     4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
4.1.5.1.3.1.2 4026/001 TARGET SUBTYPE           : MEDIUM MISSILE
4.1.5.1.3.1.5 4029/005 NUMBER OF TARGET ELEMENTS: 2
4.1.9.2.1     4031/001 RADIUS                   : 300
4.1.10.1      4079/040 TARGET LOCATION STATUS IN: CONFIRMED TARGET LOCATION
4.1.10.5.1    4119/001 TARGET LOCATION ACCURACY : 80
4.1.12.1.1    4028/012 ATTACK DIRECTION         : 4800

Message:
JVMF      K02.09 TARGET DATA
Message Case:  1.07 Update Target Data Based on Fire Mission Completion

Index         DFI/DUI  Data Field Label           Data Value
1             4057/009 TARGET REPORT TYPE       : TARGET MISSION FIRED REPORT
2             4058/001 ACTION DESIGNATOR        : CHANGE
4.1.2.1       4003/001 TARGET NUMBER            : JJ5570
4.1.4.2.1     0281/407 TARGET LATITUDE          : 193587
4.1.4.2.2     0282/407 TARGET LONGITUDE         : -19107982
4.1.5.1.2     4025/001 TARGET GENERIC TYPE      : ARTILLERY
4.1.5.1.3.1.2 4026/001 TARGET SUBTYPE           : MEDIUM
4.1.9.2.1     4031/001 RADIUS                   : 200

Message:
JVMF      K02.10 FIRE PLAN MISSION/FIRE PLAN CANCELLATION
Message Case:  1.01 Cancel a Fire Plan Target
Index         DFI/DUI  Data Field Label           Data Value
1.2           4054/003 FIRE PLAN NAME           : PREP1
1.3.2         4003/001 TARGET NUMBER            : JJ1004

Message:
JVMF      K02.10 FIRE PLAN MISSION/FIRE PLAN CANCELLATION
Message Case:  1.02 Cancel a Fire Plan
Index         DFI/DUI  Data Field Label           Data Value
1.2           4054/003 FIRE PLAN NAME           : PREP2
1.4.1    4004/012 FIRE UNIT IDENTIFICATION : 115

Message:
JVMF      K02.11 AMMUNITION INVENTORY
Message Case:  1.01 Transmit Cannon Munitions
Index         DFI/DUI  Data Field Label           Data Value
1             4057/010 AMMUNITION INVENTORY TYPE: AMMUNITION STATUS
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
6.1           4058/015 INVENTORY CODE DESIGNATOR: RECEIVED
8.1.2         4005/001 MUNITIONS TYPE           : HIGH EXPLOSIVE
8.1.3         4029/003 NUMBER OF MUNITIONS      : 300
8.1.4         4006/001 PROJECTILE  LOT DESIGNATO: 5
9.1.2         4013/001 FUZE TYPE                : TIME
9.1.3         4029/004 NUMBER OF FUZES          : 320

Message:
JVMF      K02.11 AMMUNITION INVENTORY
Message Case:  1.02 Transmit Rocket/Missile Ammunition Storage Site Data
Index         DFI/DUI  Data Field Label           Data Value
1             4057/010 AMMUNITION INVENTORY TYPE: AMMUNITION STORAGE SITE
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
11.1.1        4085/034 AMMUNITION SITE NUMBER   : 1
11.1.2.1      4011/002 FIRING PLATOON OPERATIONA: AREA B
11.2.1        0281/439 FRIENDLY AMMUNITION SITE : 188699
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11.2.2        0282/439 FRIENDLY AMMUNITION SITE : -18937319
11.3.1.2      4005/007 ROCKET MUNITIONS TYPE    : JEN
11.3.1.3      4029/069 NUMBER OF MUNITIONS ON TH: 20
11.3.1.4      4029/070 NUMBER OF MUNITIONS ON VE: 10
11.4.1        4037/009 ON GROUND RESPONSE TIME  : 30
11.5.1    4037/010 ON VEHICLE RESPONSE TIME : 45

Message:
JVMF      K02.11 AMMUNITION INVENTORY
Message Case:  1.03 Delete Ammunition Storage Site Data by Unit or Plan
Index         DFI/DUI  Data Field Label           Data Value
1             4057/010 AMMUNITION INVENTORY TYPE: AMMUNITION STORAGE SITE
2             4079/038 DELETE INDICATOR         : DELETE
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
11.1.1        4085/034 AMMUNITION SITE NUMBER   : 5

Message:
JVMF      K02.11 AMMUNITION INVENTORY
Message Case:  1.04 Delete Ammunition Storage Site Data for a Specific Site
Index         DFI/DUI  Data Field Label           Data Value
1             4057/010 AMMUNITION INVENTORY TYPE: AMMUNITION STORAGE SITE
2             4079/038 DELETE INDICATOR         : DELETE
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
11.1.1        4085/034 AMMUNITION SITE NUMBER   : 3

Message:
JVMF      K02.11 AMMUNITION INVENTORY
Message Case:  1.05 Transmit ASR Munitions Expended
Index         DFI/DUI  Data Field Label           Data Value
1             4057/010 AMMUNITION INVENTORY TYPE: AMMUNITION INPUT
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
5.1           4029/015 ASR MUNITIONS EXPENDED   : 1200

Message:
JVMF      K02.12 ON-CALL FIRE COMMAND
Message Case:  1.01 FIRE AN ON-CALL FIRE PLAN TARGET
Index         DFI/DUI  Data Field Label           Data Value
1             4057/011 FIRE COMMAND TYPE        : FIRE
2.1           4054/003 FIRE PLAN NAME           : PREP1
3.2           4003/001 TARGET NUMBER            : JJ1215

Message:
JVMF      K02.12 ON-CALL FIRE COMMAND
Message Case:  1.02 FIRE AT MY COMMAND
Index         DFI/DUI  Data Field Label           Data Value
1             4057/011 FIRE COMMAND TYPE        : FIRE
3.2           4003/001 TARGET NUMBER            : JJ2111

Message:
JVMF      K02.13 MISSION CLEARANCE
Message Case:  1.01 Fire Mission Disposition
Index         DFI/DUI  Data Field Label           Data Value
1             4063/001 DISPOSITION ACTION       : APPROVED
2.1           4003/001 TARGET NUMBER            : JJ0004

Message:
JVMF      K02.13 MISSION CLEARANCE
Message Case:  1.02 Medical Evacuation Request Disposition
Index         DFI/DUI  Data Field Label           Data Value
1             4063/001 DISPOSITION ACTION       : APPROVED
3.1           4003/005 MEDEVAC REQUEST NUMBER   : 12321

Message:
JVMF      K02.13 MISSION CLEARANCE
Message Case:  1.03 Close Air Support Request Disposition
Index         DFI/DUI  Data Field Label           Data Value
1             4063/001 DISPOSITION ACTION       : APPROVED
4.1           4003/002 REQUEST NUMBER           : BIG12312

Message:
JVMF      K02.14 MESSAGE TO OBSERVER
Message Case:  1.01 Transmit MTO - Naval Surface Fire Support
Index         DFI/DUI  Data Field Label           Data Value
1             4057/003 MESSAGE TO OBSERVER TYPE : MTO - NAVAL SURFACE FIRE SUP
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2             4003/001 TARGET NUMBER            : JP1235
3             4058/005 MISSION APPROVED/DENIED D: MISSION APPROVED
4.1           4004/012 OBSERVER IDENTIFICATION  : 1111
5.5.1         4028/005 GUN-TARGET LINE AZIMUTH  : 1100
10.1          0281/432 ADJUSTING PIECE LATITUDE : 186854
10.2          0282/432 ADJUSTING PIECE LONGITUDE: -19107975
11.1.1.1   4029/042 NUMBER OF NAVAL SURFACE W: 6

Message:
JVMF      K02.14 MESSAGE TO OBSERVER
Message Case:  1.02 Transmit MTO - Radar Orientation
Index         DFI/DUI  Data Field Label           Data Value
1             4057/003 MESSAGE TO OBSERVER TYPE : MTO - RADAR ORIENTATION
2             4003/001 TARGET NUMBER            : JG1215
3             4058/005 MISSION APPROVED/DENIED D: MISSION APPROVED
5.2.1         4085/023 OBSERVER FIRE MISSION NUM: MISSION NUMBER 1
5.11.1        4037/002 TIME OF FLIGHT           : 41
5.12.1        4037/005 TIME BETWEEN ROUNDS      : 21
6.1           0365/406 RADAR MAXIMUM ORDINATE   : 41
6.2           4028/015 RADAR QUADRANT ELEVATION : 31
6.3           4041/002 RADAR METHOD OF CONTROL  : ARTILLERY AIR BURST
7.1           0281/407 TARGET LATITUDE          : 1873399
7.2           0282/407 TARGET LONGITUDE         : -19114599
7.3.1         4130/004 TARGET ELEVATION         : 120
9.1.1         4004/012 ADJUSTING UNIT IDENTIFICA: 115
9.4.1         4029/114 NUMBER OF ADJUSTING ROUND: 3
10.1          0281/432 ADJUSTING PIECE LATITUDE : 183487
10.2          0282/432 ADJUSTING PIECE LONGITUDE: -19107971
10.3.1    4130/008 ADJUSTING PIECE ELEVATION: 120

Message:
JVMF      K02.14 MESSAGE TO OBSERVER
Message Case:  1.03 Transmit MTO - Copperhead Mission
Index         DFI/DUI  Data Field Label           Data Value
1             4057/003 MESSAGE TO OBSERVER TYPE : MTO - COPPERHEAD MISSION
2             4003/001 TARGET NUMBER            : AD1001
3             4058/005 MISSION APPROVED/DENIED D: MISSION APPROVED
4.1           4004/012 OBSERVER IDENTIFICATION  : 1111
5.2.1         4085/023 OBSERVER FIRE MISSION NUM: MISSION NUMBER 1
5.7.1.2       4041/001 METHOD OF CONTROL        : AT MY COMMAND
5.7.2         4041/900 METHOD OF FIRE           : FIRE FOR EFFECT
5.10.1        4010/001 TRAJECTORY TYPE          : LOW
11.2.1        4029/002 NUMBER OF FIRE FOR EFFECT: 3
11.4.1.4.1.2  4005/003 FIRE FOR EFFECT PROJECTIL: CPH - 155MM
12.1          4017/001 GUN OBSERVER-TARGET RELAT: RIGHT
12.2          0757/408 GUN-TARGET RANGE         : 800
12.3          4028/018 COPPERHEAD ANGLE T       : 50 THROUGH 149 MILS
12.4          4037/008 LASER ALERT TIME         : 30

Message:
JVMF      K02.14 MESSAGE TO OBSERVER
Message Case:  1.04 Transmit MTO - Final Protective Fires
Index         DFI/DUI  Data Field Label           Data Value
1             4057/003 MESSAGE TO OBSERVER TYPE : MTO - FINAL PROTECTIVE FIRES
2             4003/001 TARGET NUMBER            : JP1005
3             4058/005 MISSION APPROVED/DENIED D: MISSION APPROVED
5.1.1         4058/003 FPF DESIGNATOR           : ASSIGN FINAL PROTECTIVE FIRE
5.10.1        4010/001 TRAJECTORY TYPE          : LOW

Message:
JVMF      K02.14 MESSAGE TO OBSERVER
Message Case:  1.05 Transmit Observer MTO - High Burst/Mean Point of Impact Registration
Index         DFI/DUI  Data Field Label           Data Value
Index         DFI/DUI  Data Field Label           Data Value
1             4057/003 MESSAGE TO OBSERVER TYPE : MTO - HB/MPI
2             4003/001 TARGET NUMBER            : JL8000
3             4058/005 MISSION APPROVED/DENIED D: MISSION APPROVED
4.1           4004/012 OBSERVER IDENTIFICATION  : 1111
8.1           4079/004 REGISTRATION TYPE INDICAT: HIGH BURST
8.2           4079/005 VERTICAL ANGLE INDICATOR : REPORT VERTICAL ANGLE
8.3.1         4028/016 REFERENCE DIRECTION      : 1600
8.4.1    4028/017 REFERENCE VERTICAL ANGLE : 2

Message:
JVMF      K02.14 MESSAGE TO OBSERVER
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Message Case:  1.06 Transmit Message to Observer
Index          DFI/DUI  Data Field Label           Data Value
1              4057/003 MESSAGE TO OBSERVER TYPE : MESSAGE TO OBSERVER - MTO
2              4003/001 TARGET NUMBER            : JP2135
3              4058/005 MISSION APPROVED/DENIED D: MISSION APPROVED
5.7.1.2        4041/001 METHOD OF CONTROL        : FIRE WHEN READY
5.7.2          4041/900 METHOD OF FIRE           : FIRE FOR EFFECT
5.10.1         4010/001 TRAJECTORY TYPE          : LOW
11.2.1         4029/002 NUMBER OF FIRE FOR EFFECT: 2
11.3.1         4029/006 NUMBER OF FIRE UNITS     : 3
11.4.1.4.1.2  4005/003 FIRE FOR EFFECT PROJECTIL: HEA - 105MM, 155MM, 203MM

Message:
JVMF      K02.14 MESSAGE TO OBSERVER
Message Case:  1.07 Transmit MTO - Fire Mission Denied
Index          DFI/DUI  Data Field Label           Data Value
1              4057/003 MESSAGE TO OBSERVER TYPE : MTO - FIRE MISSION DENIED
2              4003/001 TARGET NUMBER            : JJ2115
2         4058/005 MISSION APPROVED/DENIED D: MISSION DENIED

Message:
JVMF      K02.14 MESSAGE TO OBSERVER
Message Case:  1.08 Transmit Reference (Known) Point Number to an Observer
Index          DFI/DUI  Data Field Label           Data Value
1              4057/003 MESSAGE TO OBSERVER TYPE : TRANSMIT REFERENCE (KNOWN) P
2              4003/001 TARGET NUMBER            : JP4115
3              4058/005 MISSION APPROVED/DENIED D: MISSION APPROVED
5.3.1     4085/021 REFERENCE (KNOWN) POINT N: 2

Message:
JVMF      K02.15 FIRE SUPPORT COORDINATION MEASURES
Message Case:  1.01 Add Coordination Measures
Index          DFI/DUI  Data Field Label           Data Value
1              4057/004 COORDINATION MEASURE TYPE: FRONT LINE TRACE
2              4079/038 DELETE INDICATOR         : NO STATEMENT
3              4079/006 PRESENT/PROPOSED LOCATION: PRESENT LOCATION
4              4065/001 FIRE SUPPORT COORDINATION: FORWARD LINE OF OWN TROOPS
5              4054/002 LINE OR AREA NAME        : FLOT1CAV
9.1            4004/012 ESTABLISHING UNIT IDENTIF: 112
10.1.1.2       4085/029 POINT LOCATION NUMBER    : 1
10.1.1.3       0281/406 POINT LOCATION LATITUDE  : 185170
10.1.1.4       0282/406 POINT LOCATION LONGITUDE : -22463416
10.1.1.5.1     4130/003 POINT LOCATION ELEVATION : 75
10.1.1.2       4085/029 POINT LOCATION NUMBER    : 2
10.1.1.3       0281/406 POINT LOCATION LATITUDE  : 188537
10.1.1.4       0282/406 POINT LOCATION LONGITUDE : -33554431
10.1.1.5.1  4130/003 POINT LOCATION ELEVATION : 75

Message:
JVMF      K02.15 FIRE SUPPORT COORDINATION MEASURES
Message Case:  1.02 Add an Air Coordination Area
Index          DFI/DUI  Data Field Label           Data Value
1              4057/004 COORDINATION MEASURE TYPE: AIRSPACE COORDINATION AREA
2              4079/038 DELETE INDICATOR         : NO STATEMENT
3              4079/006 PRESENT/PROPOSED LOCATION: PRESENT LOCATION
4              4065/001 FIRE SUPPORT COORDINATION: AIRSPACE COORDINATION AREA
5              4054/002 LINE OR AREA NAME        : ACA10
9.1            4004/012 ESTABLISHING UNIT IDENTIF: 112
11.1.2         0281/433 ACA LATITUDE             : 185170
11.1.3         0282/433 ACA LONGITUDE            : -33554431
11.1.4.1       0365/402 UPPER ALTITUDE, FLIGHT LE: 500
11.1.4.2       0365/403 LOWER ALTITUDE, FLIGHT LE: 50
11.1.4.3       4033/002 ACA WIDTH                : 300
11.1.2         0281/433 ACA LATITUDE             : 200338
11.1.3         0282/433 ACA LONGITUDE            : -33554431
11.1.4.1       0365/402 UPPER ALTITUDE, FLIGHT LE: 500
11.1.4.2       0365/403 LOWER ALTITUDE, FLIGHT LE: 50
11.1.4.3       4033/002 ACA WIDTH                : 300

Message:
JVMF      K02.15 FIRE SUPPORT COORDINATION MEASURES
Message Case:  1.03 Delete a Coordination Measure or Airspace Coordination Area
Index          DFI/DUI  Data Field Label           Data Value
1              4057/004 COORDINATION MEASURE TYPE: AIRSPACE COORDINATION AREA
2              4079/038 DELETE INDICATOR         : DELETE
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3             4079/006 PRESENT/PROPOSED LOCATION: PRESENT LOCATION
4             4065/001 FIRE SUPPORT COORDINATION: AIRSPACE COORDINATION AREA
5             4054/002 LINE OR AREA NAME        : ACA10

Message:
JVMF      K02.16 END OF MISSION AND SURVEILLANCE
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4057/005 END OF MISSION TYPE      : END OF MISSION AND SURVEILLA
2             4003/001 TARGET NUMBER            : JL2001
3             4058/002 END OF MISSION DESIGNATOR: END OF MISSION
3         4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT

Message:
JVMF      K02.18 FIRE UNIT STATUS
Message Case:  1.01 Transmit Cannon/Mortar Fire Unit Data
Index         DFI/DUI  Data Field Label           Data Value
1             4057/012 FIRE UNIT DATA TYPE      : FIRE UNIT UPDATE
2             4058/001 ACTION DESIGNATOR        : CHANGE
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
5.1           4131/002 FIRE UNIT MISSION        : DIRECT SUPPORT
7.1           4028/009 AZIMUTH OF FIRE          : 3200
10.1.1        0700/401 WEAPON TYPE              : 155MM
10.2.1        4070/001 WEAPON MODEL             : M109A6
10.3.1        4029/008 NUMBER OF WEAPONS        : 4
10.4.2        4093/014 MUNITIONS TYPE DESIGNATOR: HIGH EXPLOSIVE
11.1          4079/050 FIRE COMMANDS INDICATOR  : FIRING PLATOON COMPUTE FIRIN
11.9.1.2      4093/015 MUNITIONS RANGE DESIGNATO: HIGH EXPLOSIVE, NORMAL
11.9.1.3      0757/416 MUNITION  MAXIMUM RANGE  : 20000
12.1          0281/408 FIRE UNIT LATITUDE       : 190221
12.2          0282/408 FIRE UNIT LONGITUDE      : -22463421
12.3          4130/012 FIRE UNIT ELEVATION      : 80
12.4.1        0757/417 FIRE UNIT MINIMUM RANGE  : 250
14.1          4054/024 ZONE OF RESPONSIBILITY   : 3BDEZONE

Message:
JVMF      K02.18 FIRE UNIT STATUS
Message Case:  1.02 Transmit Fire Unit Mask Data
Index         DFI/DUI  Data Field Label           Data Value
1             4057/012 FIRE UNIT DATA TYPE      : FIRE UNIT MASK
2             4058/001 ACTION DESIGNATOR        : ADD
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
10.2.1        4070/001 WEAPON MODEL             : M109A6
11.1          4079/050 FIRE COMMANDS INDICATOR  : FIRING PLATOON COMPUTE FIRIN
13.1.2        4085/036 DOWN RANGE MASK NUMBER   : 1
13.1.3        4028/026 MASK AZIMUTH LEFT        : 1200
13.1.4        4028/027 MASK AZIMUTH RIGHT       : 1600
13.1.5        0757/418 MASK RANGE               : 200
13.1.6        4028/028 MASK VERTICAL ANGLE      : 2

Message:
JVMF      K02.18 FIRE UNIT STATUS
Message Case:  1.03 Transmit Muzzle Velocity Data
Index         DFI/DUI  Data Field Label           Data Value
1             4057/012 FIRE UNIT DATA TYPE      : FIRE UNIT MUZZLE VELOCITY
2             4058/001 ACTION DESIGNATOR        : ADD
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
10.2.1        4070/001 WEAPON MODEL             : M109A6
11.1          4079/050 FIRE COMMANDS INDICATOR  : FIRING PLATOON COMPUTE FIRIN
11.3.1.2      4005/001 MUNITIONS TYPE           : HIGH EXPLOSIVE
11.3.1.3      4007/001 PROPELLANT TYPE          : 155MM PROPELLANT M119A1
11.3.1.4      4008/001 PROPELLANT CHARGE        : 5
11.3.1.5      4006/002 PROPELLANT LOT DESIGNATOR: 8
11.3.1.6      4088/005 MUZZLE VELOCITY VARIATION: 12
11.3.1.7      4093/016 MUZZLE VELOCITY SOURCE DE: MEASURED
11.3.1.8      4079/038 DELETE INDICATOR         : NO STATEMENT

Message:
JVMF      K02.18 FIRE UNIT STATUS
Message Case:  1.04 Transmit Rocket/Missile Fire Unit Data
Index         DFI/DUI  Data Field Label           Data Value
1             4057/012 FIRE UNIT DATA TYPE      : FIRE UNIT UPDATE
2             4058/001 ACTION DESIGNATOR        : ADD
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
5.1           4131/002 FIRE UNIT MISSION        : GENERAL SUPPORT REINFORCING
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10.1.1        0700/401 WEAPON TYPE              : MULTIPLE LAUNCH ROCKET SYSTE
10.2.1        4070/001 WEAPON MODEL             : M270A1
10.3.1        4029/008 NUMBER OF WEAPONS        : 9
12.1          0281/408 FIRE UNIT LATITUDE       : 1868314
12.2          0282/408 FIRE UNIT LONGITUDE      : -22473383
12.3          4130/012 FIRE UNIT ELEVATION      : 150
12.4.1        0757/417 FIRE UNIT MINIMUM RANGE  : 250
14.1          4054/024 ZONE OF RESPONSIBILITY   : 3DIV

Message:
JVMF      K02.18 FIRE UNIT STATUS
Message Case:  1.05 Transmit Additions or Changes to Weapon Status
Index         DFI/DUI  Data Field Label           Data Value
1             4057/012 FIRE UNIT DATA TYPE      : FIRE UNIT STATUS
2             4058/001 ACTION DESIGNATOR        : CHANGE
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
4.1           0753/401 FIRE SUPPORT OPERATIONAL : OPERATIONAL/READY
7.1           4028/009 AZIMUTH OF FIRE          : 1200
10.2.1        4070/001 WEAPON MODEL             : M109A6
10.3.1        4029/008 NUMBER OF WEAPONS        : 5
11.1          4079/050 FIRE COMMANDS INDICATOR  : FIRING PLATOON COMPUTE FIRIN
11.6.1        4028/025 MAXIMUM QUADRANT ELEVATIO: 1200
11.7.1        4023/006 PROPELLANT TEMPERATURE   : 80
12.1          0281/408 FIRE UNIT LATITUDE       : 188537
12.2          0282/408 FIRE UNIT LONGITUDE      : -21344938
12.3          4130/012 FIRE UNIT ELEVATION      : 150
12.4.1        0757/417 FIRE UNIT MINIMUM RANGE  : 250
17.2.1        4019/004 EFFECTIVE DAY            : 1
17.2.2        0792/404 EFFECTIVE HOUR           : 5
17.2.3        0797/403 EFFECTIVE MINUTE         : 55

Message:
JVMF      K02.18 FIRE UNIT STATUS
Message Case:  1.06 Delete Fire Unit by URN or Weapon type
Index         DFI/DUI  Data Field Label           Data Value
1             4057/012 FIRE UNIT DATA TYPE      : FIRE UNIT STATUS
2             4058/001 ACTION DESIGNATOR        : DELETE
3.1      4004/012 FIRE UNIT IDENTIFICATION : 115

Message:
JVMF      K02.18 FIRE UNIT STATUS
Message Case:  1.07 Delete all Fire Units from a Fire Plan
Index         DFI/DUI  Data Field Label           Data Value
1             4057/012 FIRE UNIT DATA TYPE      : FIRE UNIT STATUS
2             4058/001 ACTION DESIGNATOR        : DELETE
6.1           4054/003 FIRE PLAN NAME           : PREP1

Message:
JVMF      K02.19 TARGET QUERY/STANDING REQUEST FOR INFORMATION
Message Case:  1.01 Transmit Query Targets Criteria
Index         DFI/DUI  Data Field Label           Data Value
1             4057/013 TARGET QUERY TYPE        : QUERY
2             4058/014 RETRIEVAL LEVEL DESIGNATO: SUMMARY
3             4058/016 SRI STATUS DESIGNATOR    : NO STATEMENT
4             4058/001 ACTION DESIGNATOR        : NO STATEMENT
5              4004/012 DESTINATION UNIT IDENTIFI: 112

Message:
JVMF      K02.19 TARGET QUERY/STANDING REQUEST FOR INFORMATION
Message Case:  1.02 Transmit a Standing Request for Information
Index         DFI/DUI  Data Field Label           Data Value
1             4057/013 TARGET QUERY TYPE        : STANDING REQUEST FOR INFORMA
2             4058/014 RETRIEVAL LEVEL DESIGNATO: SUMMARY
3             4058/016 SRI STATUS DESIGNATOR    : ACTIVATE SRI
4             4058/001 ACTION DESIGNATOR        : ADD
5             4004/012 DESTINATION UNIT IDENTIFI: 115
6.1           4085/037 SRI NUMBER               : 2

Message:
JVMF      K02.19 TARGET QUERY/STANDING REQUEST FOR INFORMATION
Message Case:  1.03 Transmit an Update to an Established SRI
Index         DFI/DUI  Data Field Label           Data Value
1             4057/013 TARGET QUERY TYPE        : STANDING REQUEST FOR INFORMA
2             4058/014 RETRIEVAL LEVEL DESIGNATO: SUMMARY
3             4058/016 SRI STATUS DESIGNATOR    : NO STATEMENT
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4             4058/001 ACTION DESIGNATOR        : CHANGE
5             4004/012 DESTINATION UNIT IDENTIFI: 115
6.1           4085/037 SRI NUMBER               : 3

Message:
JVMF      K02.19 TARGET QUERY/STANDING REQUEST FOR INFORMATION
Message Case:  1.04 Delete an SRI
Index         DFI/DUI  Data Field Label           Data Value
1             4057/013 TARGET QUERY TYPE        : STANDING REQUEST FOR INFORMA
2             4058/014 RETRIEVAL LEVEL DESIGNATO: COUNT
3             4058/016 SRI STATUS DESIGNATOR    : NO STATEMENT
4             4058/001 ACTION DESIGNATOR        : DELETE
5             4004/012 DESTINATION UNIT IDENTIFI: 115
6.1           4085/037 SRI NUMBER               : 2

Message:
JVMF      K02.19 TARGET QUERY/STANDING REQUEST FOR INFORMATION
Message Case:  1.05 Deactivate an SRI
Index         DFI/DUI  Data Field Label           Data Value
1             4057/013 TARGET QUERY TYPE        : STANDING REQUEST FOR INFORMA
2             4058/014 RETRIEVAL LEVEL DESIGNATO: COMPLETE REPORT
3             4058/016 SRI STATUS DESIGNATOR    : DEACTIVATE SRI
4             4058/001 ACTION DESIGNATOR        : NO STATEMENT
5             4004/012 DESTINATION UNIT IDENTIFI: 115
6.1           4085/037 SRI NUMBER               : 1

Message:
JVMF      K02.19 TARGET QUERY/STANDING REQUEST FOR INFORMATION
Message Case:  1.06 Transmit Prepare Fire Plan Target Criteria
Index         DFI/DUI  Data Field Label           Data Value
1             4057/013 TARGET QUERY TYPE        : PREPARE FIRE PLAN
2             4058/014 RETRIEVAL LEVEL DESIGNATO: COMPLETE REPORT
3             4058/016 SRI STATUS DESIGNATOR    : NO STATEMENT
4             4058/001 ACTION DESIGNATOR        : NO STATEMENT
5             4004/012 DESTINATION UNIT IDENTIFI: 115
7.1           4054/003 FIRE PLAN NAME           : PREP1

Message:
JVMF      K02.20 SURVEY CONTROL POINT INFORMATION REQUEST
Message Case:  1.01 Transmit a Request for All Points
Index         DFI/DUI  Data Field Label           Data Value
1             4058/014 RETRIEVAL LEVEL DESIGNATO: SUMMARY
4.1           4093/011 SCP SEARCH DESIGNATOR    : ALL SURVEY CONTROL POINTS
5.1      4093/012 SURVEY POINT DESIGNATOR  : SURVEY CONTROL POINT

Message:
JVMF      K02.20 SURVEY CONTROL POINT INFORMATION REQUEST
Message Case:  1.02 Transmit a Request to Search by SCP Name
Index         DFI/DUI  Data Field Label           Data Value
1             4058/014 RETRIEVAL LEVEL DESIGNATO: NO STATEMENT
3.2           4054/001 SURVEY CONTROL POINT NAME: SCP221BDE4ID
4.1           4093/011 SCP SEARCH DESIGNATOR    : SINGLE POINT

Message:
JVMF      K02.20 SURVEY CONTROL POINT INFORMATION REQUEST
Message Case:  1.03 Transmit a Request for a Circular Search
Index         DFI/DUI  Data Field Label           Data Value
1             4058/014 RETRIEVAL LEVEL DESIGNATO: COUNT
4.1           4093/011 SCP SEARCH DESIGNATOR    : CIRCULAR SEARCH
5.1           4093/012 SURVEY POINT DESIGNATOR  : SURVEY CONTROL POINT
7.1.1         4031/001 RADIUS                   : 5000
7.3.2         0281/406 POINT LOCATION LATITUDE  : 185170
7.3.2    0282/406 POINT LOCATION LONGITUDE : -22463416

Message:
JVMF      K02.20 SURVEY CONTROL POINT INFORMATION REQUEST
Message Case:  1.04 Transmit a Request for a Rectangular Search
Index         DFI/DUI  Data Field Label           Data Value
1             4058/014 RETRIEVAL LEVEL DESIGNATO: COUNT
4.1           4093/011 SCP SEARCH DESIGNATOR    : RECTANGULAR SEARCH
5.1           4093/012 SURVEY POINT DESIGNATOR  : SURVEY CONTROL POINT
7.3.2         0281/406 POINT LOCATION LATITUDE  : 355196
7.3.3         0282/406 POINT LOCATION LONGITUDE : -22460331
7.3.2         0281/406 POINT LOCATION LATITUDE  : 365196
7.3.3    0282/406 POINT LOCATION LONGITUDE : -22360331
```

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Message:
JVMF      K02.20 SURVEY CONTROL POINT INFORMATION REQUEST
Message Case:  1.05 Transmit a Request for a Four Point Search
Index         DFI/DUI  Data Field Label           Data Value
1             4058/014 RETRIEVAL LEVEL DESIGNATO: COUNT
4.1           4093/011 SCP SEARCH DESIGNATOR    : FOUR POINT SEARCH
5.1           4093/012 SURVEY POINT DESIGNATOR  : SURVEY CONTROL POINT
7.3.2         0281/406 POINT LOCATION LATITUDE  : 185170
7.3.3         0282/406 POINT LOCATION LONGITUDE : -33554431
7.3.2         0281/406 POINT LOCATION LATITUDE  : 184170
7.3.3         0282/406 POINT LOCATION LONGITUDE : -33544431
7.3.2         0281/406 POINT LOCATION LATITUDE  : 184270
7.3.3         0282/406 POINT LOCATION LONGITUDE : -33544431
7.3.2         0281/406 POINT LOCATION LATITUDE  : 185170
7.3.4    0282/406 POINT LOCATION LONGITUDE : -33554321

Message:
JVMF      K02.20 SURVEY CONTROL POINT INFORMATION REQUEST
Message Case:  1.06 Transmit a Request for a Thrust Search
Index         DFI/DUI  Data Field Label           Data Value
1             4058/014 RETRIEVAL LEVEL DESIGNATO: COUNT
4.1           4093/011 SCP SEARCH DESIGNATOR    : THRUST SEARCH
5.1           4093/012 SURVEY POINT DESIGNATOR  : SURVEY CONTROL POINT
7.2.2         0757/419 THRUST DISTANCE          : 5000
7.2.2         0757/419 THRUST DISTANCE          : 2500
7.3.2         0281/406 POINT LOCATION LATITUDE  : 185170
7.3.3         0282/406 POINT LOCATION LONGITUDE : -33554431
7.3.2         0281/406 POINT LOCATION LATITUDE  : 186270
7.3.3    0282/406 POINT LOCATION LONGITUDE : -33454432

Message:
JVMF      K02.20 SURVEY CONTROL POINT INFORMATION REQUEST
Message Case:  1.07 Transmit a Request for a Search by Order of Survey
Index         DFI/DUI  Data Field Label           Data Value
1.             4058/014 RETRIEVAL LEVEL DESIGNATO: COUNT

Message:
JVMF      K02.21 REQUEST FOR CLEARANCE TO FIRE
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4003/001 TARGET NUMBER            : JJ1000
2             0281/407 TARGET LATITUDE          : 185170
3             0282/407 TARGET LONGITUDE         : -22463416
4.1.2.1   4004/012 FIRE UNIT IDENTIFICATION : 112

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.01 Transmit Subsequent Shift Adjustments
Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: SUBSEQUENT SHIFT ADJUSTMENTS
2             4003/001 TARGET NUMBER            : CM1015
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: ADJUST AIMPOINT
8.1.1         4012/001 LATERAL SHIFT            : 200
8.2.1         4106/001 RANGE SHIFT              : 200

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.02 Transmit Precision Registration Data
Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: PRECISION REGISTRATION DATA
2             4003/001 TARGET NUMBER            : JL2001
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: ADJUST AIMPOINT
12.1.1        4028/016 REFERENCE DIRECTION      : 1200
12.2.1        4028/019 DIRECTION ERROR          : 5
14.1          4079/027 TIME REPEAT INDICATOR    : NO STATEMENT
14.3.1.2      4041/001 METHOD OF CONTROL        : AT MY COMMAND
14.3.2        4041/900 METHOD OF FIRE           : ADJUST FIRE
14.4.1        4002/001 METHOD OF ENGAGEMENT     : REGISTRATION

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.03 HB/MPI Registration (Observer Not Reporting Vertical Angle)
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Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: HB/MPI REGISTRATION DATA (OB
2             4003/001 TARGET NUMBER            : JJ1245
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: ADJUST AIMPOINT
6.1           4004/012 OBSERVER IDENTIFICATION  : 1111
7.1           4069/003 OBSERVATION OF ROUNDS    : GOOD ROUND
12.1.1        4028/016 REFERENCE DIRECTION      : 1800
12.2.1        4028/019 DIRECTION ERROR          : 200

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.04 HB/MPI Registration (Observer Reporting Vertical Angle)
Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: HB/MPI REGISTRATION DATA (OB
2             4003/001 TARGET NUMBER            : AS1456
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: ADJUST AIMPOINT
6.1           4004/012 OBSERVER IDENTIFICATION  : 1111
7.1           4069/003 OBSERVATION OF ROUNDS    : GOOD ROUND
12.1.1        4028/016 REFERENCE DIRECTION      : 50
12.2.1        4028/019 DIRECTION ERROR          : 50
12.4.1        4028/020 VERTICAL ANGLE ERROR     : 3

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.05 Transmit Laser Adjustments
Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: LASER ADJUSTMENTS
2             4003/001 TARGET NUMBER            : AA1275
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: ADJUST AIMPOINT
5.1           4028/001 OBSERVER-TARGET AZIMUTH  : 300
10.1          4028/011 VERTICAL ANGLE           : 200
10.2          4069/004 LASER ADJUSTMENT         : TARGET OK
10.3          0757/405 SLANT RANGE              : 600

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.06 Subsequent Adjustment - Destruction Mission
Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: SUBSEQUENT ADJUST - DESTRUCT
2             4003/001 TARGET NUMBER            : AJ1245
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: ADJUST AIMPOINT
14.1          4079/027 TIME REPEAT INDICATOR    : NO STATEMENT
14.3.1.2      4041/001 METHOD OF CONTROL        : AT MY COMMAND
14.3.2        4041/900 METHOD OF FIRE           : ADJUST FIRE
14.4.1        4002/001 METHOD OF ENGAGEMENT     : DESTRUCT

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.07 Subsequent Adjustment - Coordinates
Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: SUBSEQUENT ADJUST - COORDINA
2             4003/001 TARGET NUMBER            : AW1232
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: ADJUST AIMPOINT
11.1          0281/407 TARGET LATITUDE          : 185170
11.2          0282/407 TARGET LONGITUDE         : -22463416
11.3.1        4130/004 TARGET ELEVATION         : 125

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.08 Subsequent Adjust Data
Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: SUBSEQUENT ADJUST DATA
2             4003/001 TARGET NUMBER            : AQ1232
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: ADJUST AIMPOINT
7.1           4069/003 OBSERVATION OF ROUNDS    : GOOD ROUND
13.1          4025/001 TARGET GENERIC TYPE      : ARTILLERY
13.2          4026/001 TARGET SUBTYPE           : UNKNOWN
14.1          4079/027 TIME REPEAT INDICATOR    : NO STATEMENT
14.3.1.2      4041/001 METHOD OF CONTROL        : FIRE WHEN READY
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14.3.2        4041/900 METHOD OF FIRE           : FIRE FOR EFFECT

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.09 Transmit Radar Orientation Data
Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: RADAR ORIENTATION DATA
2             4003/001 TARGET NUMBER            : RD2135
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: DO NOT ADJUST AIMPOINT
9.1      4079/902 OBSERVER STATUS INDICATOR: READY

Message:
JVMF      K02.22 SUBSEQUENT ADJUST
Message Case:  1.10 Subsequent Adjust - Radar
Index         DFI/DUI  Data Field Label           Data Value
1             4057/006 SUBSEQUENT ADJUSTMENT TYP: SUBSEQUENT ADJUST -  RADAR
2             4003/001 TARGET NUMBER            : QA1232
3             4079/007 GUN-TARGET LINE INDICATOR: NO STATEMENT
4             4079/901 ADJUST AIMPOINT INDICATOR: ADJUST AIMPOINT
7.1           4069/003 OBSERVATION OF ROUNDS    : GOOD ROUND
11.1          0281/407 TARGET LATITUDE          : 572394
11.2          0282/407 TARGET LONGITUDE         : -29158392
11.3.1        4130/004 TARGET ELEVATION         : 120
14.1          4079/027 TIME REPEAT INDICATOR    : NO STATEMENT
14.3.1.2      4041/001 METHOD OF CONTROL        : AT MY COMMAND
14.3.2        4041/900 METHOD OF FIRE           : FIRE FOR EFFECT

Message:
JVMF      K02.23 FIRE PLAN ORDERS
Message Case:  1.01 Compute the On-Call Target List
Index         DFI/DUI  Data Field Label           Data Value
1             4057/014 FIRE PLAN ORDERS TYPE    : COMPUTE FIRE PLAN
2             4079/103 FIRE ORDERS INDICATOR    : NO STATEMENT
3             4054/003 FIRE PLAN NAME           : PREP1
7.1           4079/058 COMPUTE ON-CALL TARGETS I: COMPUTE ON-CALL TARGETS
7.2           4079/059 PRELIMINARY TARGET LIST I: NO STATEMENT
7.3           4079/060 CURRENT SITUATION INDICAT: NO STATEMENT
7.4      4079/002 SPECIAL APPLICATIONS INDI: SPECIAL APPLICATIONS APPLIED

Message:
JVMF      K02.23 FIRE PLAN ORDERS
Message Case:  1.02 Compute High Priority Targets
Index         DFI/DUI  Data Field Label           Data Value
1             4057/014 FIRE PLAN ORDERS TYPE    : COMPUTE FIRE PLAN
2             4079/103 FIRE ORDERS INDICATOR    : NO STATEMENT
3             4054/003 FIRE PLAN NAME           : PREP2
7.1           4079/058 COMPUTE ON-CALL TARGETS I: NO STATEMENT
7.2           4079/059 PRELIMINARY TARGET LIST I: NO STATEMENT
7.3           4079/060 CURRENT SITUATION INDICAT: NO STATEMENT
7.4           4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT
7.5.1    4129/005 TARGET SCHEDULING PRIORIT: PRIORITY 1

Message:
JVMF      K02.23 FIRE PLAN ORDERS
Message Case:  1.03 Compute All Targets (Preliminary/Fire Plan/On-Call Targets)
Index         DFI/DUI  Data Field Label           Data Value
1             4057/014 FIRE PLAN ORDERS TYPE    : COMPUTE FIRE PLAN
2             4079/103 FIRE ORDERS INDICATOR    : NO STATEMENT
3             4054/003 FIRE PLAN NAME           : PREP3
7.1           4079/058 COMPUTE ON-CALL TARGETS I: NO STATEMENT
7.2           4079/059 PRELIMINARY TARGET LIST I: COMPUTE PRELIMINARY TARGET L
7.3           4079/060 CURRENT SITUATION INDICAT: NO STATEMENT
7.5      4079/002 SPECIAL APPLICATIONS INDI: NO STATEMENT

Message:
JVMF      K02.23 FIRE PLAN ORDERS
Message Case:  1.04 Direct Execution of a Non-Minefield Fire Plan
Index         DFI/DUI  Data Field Label           Data Value
1             4057/014 FIRE PLAN ORDERS TYPE    : EXECUTE FIRE PLAN
2             4079/103 FIRE ORDERS INDICATOR    : GENERATE FIRE ORDERS
3             4054/003 FIRE PLAN NAME           : PREP1
4.1           4019/038 H-HOUR DAY               : 2
4.2           0792/443 H-HOUR                   : 5
4.3           0797/442 H-HOUR MINUTE            : 57
```

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Message:
JVMF      K02.23 FIRE PLAN ORDERS
Message Case:  1.05 Direct Execution of a Minefield Fire Plan
Index         DFI/DUI  Data Field Label           Data Value
1             4057/014 FIRE PLAN ORDERS TYPE    : EXECUTE FIRE PLAN
2             4079/103 FIRE ORDERS INDICATOR    : GENERATE FIRE ORDERS
3             4054/003 FIRE PLAN NAME           : FSCA11

Message:
JVMF      K02.23 FIRE PLAN ORDERS
Message Case:  1.06 Compute the Fire Plan and On-Call Target Lists
Index         DFI/DUI  Data Field Label           Data Value
1             4057/014 FIRE PLAN ORDERS TYPE    : COMPUTE FIRE PLAN
2             4079/103 FIRE ORDERS INDICATOR    : GENERATE FIRE ORDERS
3             4054/003 FIRE PLAN NAME           : PREP3
4.1           4019/038 H-HOUR DAY               : 6
4.2           0792/443 H-HOUR                   : 5
4.3           0797/442 H-HOUR MINUTE            : 58
7.1           4079/058 COMPUTE ON-CALL TARGETS I: NO STATEMENT
7.2           4079/059 PRELIMINARY TARGET LIST I: NO STATEMENT
7.3           4079/060 CURRENT SITUATION INDICAT: NO STATEMENT

Message:
JVMF      K02.24 IN PROGRESS MISSION NOTIFICATION
Message Case:  1.01 Transmit Mission Notification
Index         DFI/DUI  Data Field Label           Data Value
1             4057/015 MISSION NOTIFICATION TYPE: MISSION NOTIFICATION
2             4003/001 TARGET NUMBER            : AZ1235
3.1           0281/407 TARGET LATITUDE          : 1868314
3.2           0282/407 TARGET LONGITUDE         : -22473383
4.1.2.1       4004/012 FIRE UNIT IDENTIFICATION : 115
4.1.3.1       0281/408 FIRE UNIT LATITUDE       : 200321
4.1.3.2       0282/408 FIRE UNIT LONGITUDE      : -22463432
4.1.4.1.2     4005/001 MUNITIONS TYPE           : HIGH EXPLOSIVE

Message:
JVMF      K02.24 IN PROGRESS MISSION NOTIFICATION
Message Case:  1.02 Transmit Rocket/Missile Fire Unit Air Warning
Index         DFI/DUI  Data Field Label           Data Value
1             4057/015 MISSION NOTIFICATION TYPE: FIRE UNIT AIR WARNING
2             4003/001 TARGET NUMBER            : AB1200
4.1.2.1       4004/012 FIRE UNIT IDENTIFICATION : 115
5.1           4005/007 ROCKET MUNITIONS TYPE    : JEN
5.2.1         0365/416 AIR WARNING AREA CEILING : 1500
5.3.1         0757/420 PERIMETER DISTANCE       : 250
5.4.1         4029/071 NUMBER OF ROCKETS/MISSILE: 2
5.5.1         0281/440 FIRING POINT LATITUDE    : 186854
5.5.2         0282/440 FIRING POINT LONGITUDE   : -21344937
5.7.1.2       0281/442 AIR WARNING AREA LATITUDE: 202004
5.7.1.3       0282/442 AIR WARNING AREA LONGITUD: -22463434
5.8.1.2       4093/017 DISPERSAL PATTERN DESIGNA: DISPERSAL PATTERN A
5.8.1.3          4068/004 DISPERSAL PATTERN EFFECTS: 15

Message:
JVMF      K02.24 IN PROGRESS MISSION NOTIFICATION
Message Case:  1.03 Transmit Target Area Air Warning
Index         DFI/DUI  Data Field Label           Data Value
1             4057/015 MISSION NOTIFICATION TYPE: TARGET AREA WARNING
2             4003/001 TARGET NUMBER            : JJ1235
3.1           0281/407 TARGET LATITUDE          : 185170
3.2           0282/407 TARGET LONGITUDE         : -22463416
4.1.2.1       4004/012 FIRE UNIT IDENTIFICATION : 115
5.1           4005/007 ROCKET MUNITIONS TYPE    : JEN
5.2.1         0365/416 AIR WARNING AREA CEILING : 1500
5.6.1         0281/441 BURST POINT LATITUDE     : 202004
5.6.2         0282/441 BURST POINT LONGITUDE    : -22463434
5.7.1.2       0281/442 AIR WARNING AREA LATITUDE: 207054
5.7.1.3       0282/442 AIR WARNING AREA LONGITUD: -22463440
5.9.1.2       4019/004 EFFECTIVE DAY            : 2
5.9.1.3       0792/404 EFFECTIVE HOUR           : 5
5.9.1.4       0797/403 EFFECTIVE MINUTE         : 55

Message:
JVMF      K02.25 END OF MISSION NOTIFICATION
```

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Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4003/001 TARGET NUMBER            : AD2345
2.2               4004/012 FIRE UNIT IDENTIFICATION : 115
```

Message:
**JVMF K02.27 CLOSE AIR SUPPORT REQUEST**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1.1            4003/002 REQUEST NUMBER           : JJP1225
2              4079/062 IMMEDIATE/PREPLANNED MISS: PREPLANNED
3.1            4129/002 MISSION PRIORITY         : PRIORITY 1
4.1            4129/001 PRIORITY DESIGNATOR      : PRIORITY 1
5.1            4003/001 TARGET NUMBER            : JP2345
6.1            0281/407 TARGET LATITUDE          : 218838
6.2            0282/407 TARGET LONGITUDE         : -22463455
6.3.1          4130/004 TARGET ELEVATION         : 200
7.1.2          4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
7.1.3.1.2      4026/001 TARGET SUBTYPE           : HEAVY MISSILE
9.2.1          4031/001 RADIUS                   : 300
```

Message:
**JVMF K02.28 CLOSE AIR SUPPORT MISSION BATTLE DAMAGE ASSESSM**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
2              4003/003 MISSION NUMBER           : JJP3445
3.2            4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
3.3.1          4026/001 TARGET SUBTYPE           : HEAVY MISSILE
3.4            0281/407 TARGET LATITUDE          : 202174
3.5            0282/407 TARGET LONGITUDE         : -22296121
3.6            4068/001 PERCENT DAMAGED          : 75
3.8            4079/070 SECONDARY EXPLOSIONS     : AFFIRMATIVE
```

Message:
**JVMF K02.32 CLOSE AIR SUPPORT REQUEST ACCEPTANCE**

```
Message Case:  1.02 Accept Immediate CAS Mission Request
Index          DFI/DUI  Data Field Label           Data Value
1.2            4003/003 MISSION NUMBER           : JJP4515
1.7.1.2        4005/005 ORDNANCE TYPE            : MK-84 CONICAL 2000 LB
1.7.1.3        4029/001 QUANTITY OF ORDNANCE     : 20
1.7.3.1.2      4003/002 REQUEST NUMBER           : JJP4515
```

Message:
**JVMF K02.33 CLOSE AIR SUPPORT AIRCREW BRIEFING**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
26             4003/003 MISSION NUMBER           : JJZ1235
```

Message:
**JVMF K02.34 AIRCRAFT ON-STATION**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4003/003 MISSION NUMBER           : JJP2135
2              4132/001 CLOSE AIR SUPPORT AIRCRAF: OTHER CAS AIRCRAFT
3.1            4029/011 NUMBER OF AIRCRAFT       : 3
4              4037/004 STATION TIME             : 20
7.1.2          4005/005 ORDNANCE TYPE            : MK-84 CONICAL 2000 LB
7.1.3          4029/001 QUANTITY OF ORDNANCE     : 12
```

Message:
**JVMF K02.35 AIRCRAFT DEPART INITIAL POINT**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4003/003 MISSION NUMBER           : AZQ1225
2.1            4054/006 ABORT CODE               : AW
```

Message:
**JVMF K02.36 AIRCRAFT MISSION UPDATE**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4003/003 MISSION NUMBER           : AZW1235
2              4003/002 REQUEST NUMBER           : AWD12345
3              4134/001 MISSION CHANGE ORDER     : CONTINUE
4.1            4054/005 CONTACT POINT NAME       : APPLE
```

Message:
**JVMF K02.37 OBSERVER READINESS REPORT**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4004/012 | OBSERVER IDENTIFICATION | : 1111 |
| 2 | 0281/404 | OBSERVER LOCATION LATITUD | : 2046390 |
| 3 | 0282/404 | OBSERVER LOCATION LONGITU | : -18760321 |
| 4.1 | 4130/006 | OBSERVER LOCATION ELEVATI | : 80 |
| 5.1 | 4040/001 | OBSERVER LASER VISIBILITY | : VISIBILITY GREATER THAN 7499 |
| 5.2 | 0365/404 | CLOUD BASE ALTITUDE, FEET | : 400 |
| 5.3.1 | 4133/001 | LASER CORRELATION CODE | : 324 |

Message:
**JVMF K02.38 AIRBORNE FIRE MISSION**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4057/007 | AIRBORNE FIRE MISSION MES | : AIRBORNE FIRE REQUEST |
| 5.1 | 0281/407 | TARGET LATITUDE | : 203687 |
| 5.2 | 0282/407 | TARGET LONGITUDE | : -19107993 |
| 5.3.1 | 4130/004 | TARGET ELEVATION | : 120 |
| 6.1 | 4025/001 | TARGET GENERIC TYPE | : ROCKET/MISSILES |
| 7.1 | 4029/066 | NUMBER OF AIR ATTACK TARG | : 2 |
| 8.1 | 4117/001 | TARGET ACTIVITY | : STATIONARY |

Message:
**JVMF K02.39 FIRE SUPPORT MISSION PLANNING**
Message Case: 1.01 Add Point Graphics Icons

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4058/001 | ACTION DESIGNATOR | : ADD |
| 2 | 4079/006 | PRESENT/PROPOSED LOCATION | : PROPOSED LOCATION |
| 3 | 4065/002 | TACTICAL GRAPHICS | : NO STATEMENT |
| 4 | 0376/401 | IDENTITY, VMF | : FRIEND |
| 8.1.1 | 4054/030 | POINT IDENTIFICATION | : AT01 |
| 8.1.2 | 4011/004 | POINT TYPE | : FIRING POINT |
| 8.2.1.2 | 0281/406 | POINT LOCATION LATITUDE | : 188537 |
| 8.2.1.3 | 0282/406 | POINT LOCATION LONGITUDE | : -19107976 |
| 8.2.1.4.1 | 4130/003 | POINT LOCATION ELEVATION | : 140 |

Message:
JVMF K02.39 FIRE SUPPORT MISSION PLANNING
Message Case: 1.02 Delete Point Graphics Icons

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4058/001 | ACTION DESIGNATOR | : DELETE |
| 2 | 4079/006 | PRESENT/PROPOSED LOCATION | : PROPOSED LOCATION |
| 3 | 4065/002 | TACTICAL GRAPHICS | : NO STATEMENT |
| 4 | 0376/401 | IDENTITY, VMF | : NONE |
| 8.1.1 | 4054/030 | POINT IDENTIFICATION | : QT12 |
| 8.1.2 | 4011/004 | POINT TYPE | : FIRING POINT |

Message:
JVMF K02.39 FIRE SUPPORT MISSION PLANNING
Message Case: 1.03 Add line or Area Graphics

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4058/001 | ACTION DESIGNATOR | : ADD |
| 2 | 4079/006 | PRESENT/PROPOSED LOCATION | : PRESENT LOCATION |
| 3 | 4065/002 | TACTICAL GRAPHICS | : MISSILE FLY THROUGH PATH |
| 4 | 0376/401 | IDENTITY, VMF | : FRIEND |
| 6.1 | 4004/012 | ESTABLISHING UNIT IDENTIF | : 112 |
| 8.2.1.2 | 0281/406 | POINT LOCATION LATITUDE | : 185170 |
| 8.2.1.3 | 0282/406 | POINT LOCATION LONGITUDE | : -33554431 |
| 8.2.1.2 | 0281/406 | POINT LOCATION LATITUDE | : 200321 |
| 8.2.1.3 | 0282/406 | POINT LOCATION LONGITUDE | : -33554431 |
| 8.4.1 | 4054/002 | LINE OR AREA NAME | : MISS1230 |

Message:
JVMF K02.39 FIRE SUPPORT MISSION PLANNING
Message Case: 1.04 Delete Line or Area Graphics

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4058/001 | ACTION DESIGNATOR | : DELETE |
| 2 | 4079/006 | PRESENT/PROPOSED LOCATION | : PRESENT LOCATION |
| 3 | 4065/002 | TACTICAL GRAPHICS | : ASSEMBLY AREA |
| 4 | 0376/401 | IDENTITY, VMF | : NONE |
| 8.4.1 | 4054/002 | LINE OR AREA NAME | : AA1202 |

Message:
**JVMF K02.40 HOWITZER COMMAND**
Message Case: 1.02 Transmit Howitzer Firing Commands

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4057/016 | HOWITZER COMMAND TYPE | : HOWITZER FIRING COMMANDS |
| 2.1 | 4003/001 | TARGET NUMBER | : AS1225 |
| 5.1.2.1 | 4004/012 | HOWITZER IDENTIFICATION | : 180123 |
| 5.1.4.1.2 | 4005/003 | FIRE FOR EFFECT PROJECTIL | : HEA - 105MM, 155MM, 203MM |
| 5.1.4.1.11.1 | 4028/029 | DEFLECTION | : 210 |
| 5.1.4.1.12.1 | 4028/030 | QUADRANT ELEVATION | : 4121 |

Message:
JVMF K02.40 HOWITZER COMMAND
Message Case: 1.03 Howitzer/Observer Dedication

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4057/016 | HOWITZER COMMAND TYPE | : HOWITZER/OBSERVER DEDICATION |
| 4.1.1 | 4004/012 | OBSERVER IDENTIFICATION | : 1111 |
| 7.1 | 4004/012 | FIRE UNIT IDENTIFICATION | : 115 |
| 7.2 | 4067/003 | OBSERVER ACCESS | : ACCESS TO FIRE MISSION FILE |
| 7.3 | 4003/014 | FIRST TARGET NUMBER | : JZ1200 |

Message:
**JVMF K02.41 FIRE UNIT DEPLOYMENT COMMAND**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4079/079 | REPORT INDICATOR | : NO STATEMENT |
| 2 | 4079/038 | DELETE INDICATOR | : NO STATEMENT |
| 3 | 4004/012 | UNIT TO TAKE ACTION IDENT | : 115 |
| 4.1 | 4093/026 | DEPLOYMENT TYPE DESIGNATO | : DEPLOY TO FIRING AREA |
| 6.1.2 | 0281/444 | DEPLOYMENT LOCATION LATIT | : 202023 |
| 6.1.3 | 0282/444 | DEPLOYMENT LOCATION LONGI | : -33554431 |
| 6.1.4.1 | 4130/015 | DEPLOYMENT LOCATION ELEVA | : 120 |
| 9.1 | 4054/031 | DEPLOYMENT AREA NAME | : 2A316 |
| 9.2 | 4004/012 | ORIGINATOR UNIT ID | : 112 |
| 9.6.1 | 4131/002 | FIRE UNIT MISSION | : DIRECT SUPPORT |

Message:
**JVMF K02.42 FIRE PLAN ASSIGNMENT DATA**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4057/017 | FIRE PLAN ASSIGNMENT TYPE | : AMMUNITION AND FIRE UNIT ASS |
| 2 | 4079/060 | CURRENT SITUATION INDICAT | : NO STATEMENT |
| 3 | 4079/081 | NEW FIRE PLAN DEFAULT CRI | : NO STATEMENT |
| 4 | 4079/082 | NEW FIRE PLAN MODIFICATIO | : NO STATEMENT |
| 5 | 4079/083 | PURGE INDICATOR | : NO STATEMENT |
| 8.1 | 4058/018 | FIRE PLAN ASSIGNMENT DESI | : NO STATEMENT |
| 8.3.1 | 0700/401 | WEAPON TYPE | : 155MM |
| 8.4.1 | 4093/014 | MUNITIONS TYPE DESIGNATOR | : HIGH EXPLOSIVE |
| 8.5.1 | 4004/012 | CONTROLLING UNIT IDENTIFI | : 115 |

Message:
**JVMF K02.43 ROCKET/MISSILE MUNITIONS EFFECTS DATA**
Message Case: 1.01 Transmit Munitions Specific Data

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4079/086 | DISPERSAL PATTERN INDICAT | : NO STATEMENT |
| 2 | 4005/007 | ROCKET MUNITIONS TYPE | : JEN |
| 3 | 4079/087 | ROCKET MUNITIONS EFFECTS | : ROUND EFFECTS |
| 4.1.1 | 4093/027 | APPROACH ANGLE DESIGNATOR | : NO STATEMENT |
| 4.3.1 | 4068/009 | MUNITIONS RELIABILITY | : 75 |

Message:
JVMF K02.43 ROCKET/MISSILE MUNITIONS EFFECTS DATA
Message Case: 1.02 Transmit Target Data for Munitions Effects Computation

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4079/086 | DISPERSAL PATTERN INDICAT | : NO STATEMENT |
| 2 | 4005/007 | ROCKET MUNITIONS TYPE | : JEE |
| 3 | 4079/087 | ROCKET MUNITIONS EFFECTS | : ROUND EFFECTS |
| 5.1.1 | 4025/001 | TARGET GENERIC TYPE | : ROCKET/MISSILES |
| 5.2.1.2 | 4026/001 | TARGET SUBTYPE | : HEAVY MISSILE |
| 5.2.1.3 | 4193/001 | AREA OF LETHALITY | : 500 |

Message:
JVMF K02.43 ROCKET/MISSILE MUNITIONS EFFECTS DATA
Message Case: 1.03 Transmit Munitions Range Dependent Delivery Data

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|

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1             4079/086 DISPERSAL PATTERN INDICAT: NO STATEMENT
2             4005/007 ROCKET MUNITIONS TYPE    : JED
3             4079/087 ROCKET MUNITIONS EFFECTS : SUBMUNITIONS EFFECTS
6.1.2.1       0757/423 CARRIER MUNITION RANGE   : 600000
6.1.3.1       4039/002 CARRIER RANGE PROBABLE ER: 10
6.1.3.2       4039/003 CARRIER DEFLECTION  PROBA: 5
6.1.3.3       4039/004 SUBMUNITION PRECISION RAN: 5
6.1.3.4       4039/005 SUBMUNITION PRECISION DEF: 2
6.1.4.1       0757/424 K-FACTOR DISTANCE        : 30
6.1.4.2       4068/016 SUBMUNITION RELIABILITY  : 80
6.1.5.2.1     4032/010 SUBMUNITION PATTERN LENGT: 500
6.1.5.2.2        4033/011 SUBMUNITION PATTERN WIDTH: 600

Message:
JVMF      K02.44 TARGET ELEMENT DATA ENTRY
Message Case:  1.01 Add Target Element Data
Index         DFI/DUI  Data Field Label           Data Value
1             4079/038 DELETE INDICATOR         : NO STATEMENT
2             4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
3             4026/001 TARGET SUBTYPE           : HEAVY MISSILE
4.1           4110/004 PRIMARY TARGET SUBTYPE EL: SCUD
4.2       4029/012 NUMBER OF TARGET SUBTYPE : 2

Message:
JVMF      K02.44 TARGET ELEMENT DATA ENTRY
Message Case:  1.02 Delete Target Element Data

Index         DFI/DUI  Data Field Label           Data Value
1             4079/038 DELETE INDICATOR         : DELETE
2             4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
3             4026/001 TARGET SUBTYPE           : MEDIUM MISSILE
4.1           4110/004 PRIMARY TARGET SUBTYPE EL: 220MM MRL BM27 (M1977)
4.3       4029/012 NUMBER OF TARGET SUBTYPE : 6

Message:
JVMF      K02.45 R/M LAUNCHER ORDERS
Message Case:  1.01 Fire Order - Stay in Present Location
Index         DFI/DUI  Data Field Label           Data Value
1             4057/900 LAUNCHER ORDERS TYPE     : FIRE ORDER - STAY IN PRESENT
2.1           4003/001 TARGET NUMBER            : AQ1245
4.1           0281/407 TARGET LATITUDE          : 202023
4.2           0282/407 TARGET LONGITUDE         : -33554431
4.3           4130/004 TARGET ELEVATION         : 120
6.1           4041/001 METHOD OF CONTROL        : AT MY COMMAND
9.1.1         4093/033 LAUNCHER ELEVATION DESIGN: STARTUP OPTION
9.2.1         4085/027 LAUNCHER MESSAGE SEQUENCI: 3
9.3.1         4093/028 ROCKET MISSION TYPE      : PRIORITY FIRE MISSION
9.4.1         4093/029 REPORT STATUS DESIGNATOR : REPORT WHEN READY TO FIRE
9.5.1         4005/007 ROCKET MUNITIONS TYPE    : JEE
9.5.2         4029/014 NUMBER OF ROCKET MUNITION: 4
9.9.3.1       4028/901 MISSILE SHEAF ORIENTATION: 16
9.10.1        4029/085 NUMBER OF AIMPOINTS      : 4
9.10.2.2      4012/002 AIMPOINT EASTING SHIFT   : 200
9.10.2.3      4106/003 AIMPOINT NORTHING SHIFT  : 200
9.10.2.4      4130/016 AIMPOINT LOCATION ELEVATI: 200
9.10.2.5      4029/086 NUMBER OF AIMPOINT MUNITI: 4
9.13.1        4067/004 LAUNCHER COMMAND         : STAY IN PRESENT POSITION

Message:
JVMF      K02.45 R/M LAUNCHER ORDERS
Message Case:  1.02 Fire Order with Firing Point - Stay in Present Location
Index         DFI/DUI  Data Field Label           Data Value
1             4057/900 LAUNCHER ORDERS TYPE     : FIRE ORDER WITH FIRING POINT
2.1           4003/001 TARGET NUMBER            : AR1215
4.1           0281/407 TARGET LATITUDE          : 370678
4.2           0282/407 TARGET LONGITUDE         : -33464390
4.3           4130/004 TARGET ELEVATION         : 130
6.1           4041/001 METHOD OF CONTROL        : AT MY COMMAND
9.1.1         4093/033 LAUNCHER ELEVATION DESIGN: STARTUP OPTION
9.2.1         4085/027 LAUNCHER MESSAGE SEQUENCI: 15
9.3.1         4093/028 ROCKET MISSION TYPE      : PRIORITY FIRE MISSION
9.4.1         4093/029 REPORT STATUS DESIGNATOR : REPORT WHEN ADVANCED READY A
9.5.1         4005/007 ROCKET MUNITIONS TYPE    : JED
9.5.2         4029/014 NUMBER OF ROCKET MUNITION: 4
9.9.2.1       4028/035 ROCKET SHEAF ORIENTATION : 480
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9.10.1        4029/085 NUMBER OF AIMPOINTS      : 2
9.10.2.2      4012/002 AIMPOINT EASTING SHIFT   : 300
9.10.2.3      4106/003 AIMPOINT NORTHING SHIFT  : 300
9.10.2.4      4130/016 AIMPOINT LOCATION ELEVATI: 100
9.10.2.5      4029/086 NUMBER OF AIMPOINT MUNITI: 4
9.12.1.1      4011/003 LOCATION TYPE            : WEAPON AT FIRING POINT
9.12.2.1      4011/001 FIRING POINT IDENTIFIER  : A1
9.12.3.1      0281/440 FIRING POINT LATITUDE    : 353829
9.12.3.2      0282/440 FIRING POINT LONGITUDE   : -32345884
9.12.3.3      4130/013 FIRING POINT ELEVATION   : 100
9.13.1        4067/004 LAUNCHER COMMAND         : STAY IN PRESENT POSITION

Message:
JVMF      K02.45 R/M LAUNCHER ORDERS
Message Case:  1.03 Fire Order with Deployment Location
Index         DFI/DUI  Data Field Label           Data Value
1             4057/900 LAUNCHER ORDERS TYPE     : FIRE ORDER WITH DEPLOYMENT L
2.1           4003/001 TARGET NUMBER            : AX1215
4.1           0281/407 TARGET LATITUDE          : 370678
4.2           0282/407 TARGET LONGITUDE         : -33464390
4.3           4130/004 TARGET ELEVATION         : 100
6.1           4041/001 METHOD OF CONTROL        : AT MY COMMAND
9.1.1         4093/033 LAUNCHER ELEVATION DESIGN: LOW QUADRANT ELEVATION
9.2.1         4085/027 LAUNCHER MESSAGE SEQUENCI: 2
9.3.1         4093/028 ROCKET MISSION TYPE      : PRIORITY FIRE MISSION
9.4.1         4093/029 REPORT STATUS DESIGNATOR : REPORT WHEN ADVANCED READY A
9.5.1         4005/007 ROCKET MUNITIONS TYPE    : JED
9.5.2         4029/014 NUMBER OF ROCKET MUNITION: 2
9.9.2.1       4028/035 ROCKET SHEAF ORIENTATION : 63
9.10.1        4029/085 NUMBER OF AIMPOINTS      : 2
9.10.2.2      4012/002 AIMPOINT EASTING SHIFT   : 200
9.10.2.3      4106/003 AIMPOINT NORTHING SHIFT  : 300
9.10.2.4      4130/016 AIMPOINT LOCATION ELEVATI: 200
9.10.2.5      4029/086 NUMBER OF AIMPOINT MUNITI: 2
9.13.1        4067/004 LAUNCHER COMMAND         : MOVE TO NEXT FIRING POINT
10.1.1        4011/003 LOCATION TYPE            : WEAPON HIDE POINT
10.2.1        4011/005 DEPLOYMENT LOCATION IDENT: A1
10.3.1        0281/444 DEPLOYMENT LOCATION LATIT: 353829
10.3.2        0282/444 DEPLOYMENT LOCATION LONGI: -33464365
10.3.3.1         4130/015 DEPLOYMENT LOCATION ELEVA: 120

Message:
JVMF      K02.45 R/M LAUNCHER ORDERS
Message Case:  1.04 Fire Order with Firing Point and Deployment Location
Index         DFI/DUI  Data Field Label           Data Value
1             4057/900 LAUNCHER ORDERS TYPE     : FIRE ORDER WITH FIRING POINT
2.1           4003/001 TARGET NUMBER            : JJ8114
4.1           0281/407 TARGET LATITUDE          : 556354
4.2           0282/407 TARGET LONGITUDE         : -31043371
4.3           4130/004 TARGET ELEVATION         : 120
6.1           4041/001 METHOD OF CONTROL        : AT MY COMMAND
9.1.1         4093/033 LAUNCHER ELEVATION DESIGN: LOW QUADRANT ELEVATION
9.2.1         4085/027 LAUNCHER MESSAGE SEQUENCI: 3
9.3.1         4093/028 ROCKET MISSION TYPE      : PRIORITY FIRE MISSION
9.4.1         4093/029 REPORT STATUS DESIGNATOR : REPORT WHEN ADVANCED READY A
9.5.1         4005/007 ROCKET MUNITIONS TYPE    : JED
9.5.2         4029/014 NUMBER OF ROCKET MUNITION: 3
9.9.2.1       4028/035 ROCKET SHEAF ORIENTATION : 319
9.10.1        4029/085 NUMBER OF AIMPOINTS      : 2
9.10.2.2      4012/002 AIMPOINT EASTING SHIFT   : 120
9.10.2.3      4106/003 AIMPOINT NORTHING SHIFT  : 200
9.10.2.4      4130/016 AIMPOINT LOCATION ELEVATI: 200
9.10.2.5      4029/086 NUMBER OF AIMPOINT MUNITI: 2
9.12.1.1      4011/003 LOCATION TYPE            : WEAPON AT FIRING POINT
9.12.3.1      0281/440 FIRING POINT LATITUDE    : 1868314
9.12.3.2      0282/440 FIRING POINT LONGITUDE   : -32539712
9.12.3.3      4130/013 FIRING POINT ELEVATION   : 75
9.13.1        4067/004 LAUNCHER COMMAND         : MOVE TO NEXT FIRING POINT
10.1.1        4011/003 LOCATION TYPE            : WEAPON HIDE POINT
10.2.1        4011/005 DEPLOYMENT LOCATION IDENT: A4
10.3.1        0281/444 DEPLOYMENT LOCATION LATIT: 370678
10.3.2        0282/444 DEPLOYMENT LOCATION LONGI: -33464390
10.3.3.1         4130/015 DEPLOYMENT LOCATION ELEVA: 120

Message:
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JVMF      K02.45 R/M LAUNCHER ORDERS
Message Case:  1.05 Movement Command
Index         DFI/DUI  Data Field Label           Data Value
1             4057/900 LAUNCHER ORDERS TYPE     : MOVEMENT COMMAND
10.1.1        4011/003 LOCATION TYPE            : MOVE POINT
10.3.1        0281/444 DEPLOYMENT LOCATION LATIT: 572394
10.3.2        0282/444 DEPLOYMENT LOCATION LONGI: -29158392
10.3.3.1         4130/015 DEPLOYMENT LOCATION ELEVA: 40

Message:
JVMF      K02.46 R/M OPS UPDATE
Message Case:  1.01 Update Rocket/Missile Operational Status
Index         DFI/DUI  Data Field Label           Data Value
1             4057/018 OPERATIONAL STATUS TYPE  : OPERATIONAL STATUS
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3             4004/012 FIRE UNIT IDENTIFICATION : 115
5.5.1         4085/048 NUMBER OF PRIORITY MISSIO: 1
5.6.1         4085/049 NUMBER OF NORMAL MISSIONS: 2
6.1.2         4005/007 ROCKET MUNITIONS TYPE    : JEJ
6.1.3         4029/088 NUMBER OF MUNITIONS 2 MIN: 2
6.1.4         4029/089 NUMBER OF MUNITIONS 5 MIN: 2
6.1.5            4029/090 NUMBER OF MUNITIONS 20 MI: 2

Message:
JVMF      K02.46 R/M OPS UPDATE
Message Case:  1.02 Update Rocket/Missile Munitions/Targets Fired

Index         DFI/DUI  Data Field Label           Data Value
1             4057/018 OPERATIONAL STATUS TYPE  : OPERATIONAL STATUS
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3             4004/012 FIRE UNIT IDENTIFICATION : 115
6.1.2         4005/007 ROCKET MUNITIONS TYPE    : JEE
6.1.3         4029/088 NUMBER OF MUNITIONS 2 MIN: 2
6.1.4         4029/089 NUMBER OF MUNITIONS 5 MIN: 2
6.1.5            4029/090 NUMBER OF MUNITIONS 20 MI: 2

Message:
JVMF      K02.46 R/M OPS UPDATE
Message Case:  1.03 Rocket/Missile Response
Index         DFI/DUI  Data Field Label           Data Value
1             4057/018 OPERATIONAL STATUS TYPE  : ROCKET/MISSILE RESPONSE
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3             4004/012 FIRE UNIT IDENTIFICATION : 115
10.1          4093/036 MLRS REJECTED MESSAGE TYP: MISSION STATUS
10.2       4093/037 MLRS MESSAGE REPLY CODE  : WILL COMPLY

Message:
JVMF      K02.46 R/M OPS UPDATE
Message Case:  1.04 Rocket/Missile Data Base Update
Index         DFI/DUI  Data Field Label           Data Value
1             4057/018 OPERATIONAL STATUS TYPE  : DATA BASE UPDATE
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3             4004/012 FIRE UNIT IDENTIFICATION : 115
8.5.1.2       4011/003 LOCATION TYPE            : WEAPON AT FIRING POINT
8.5.1.3       4079/038 DELETE INDICATOR         : NO STATEMENT
8.5.1.5.1     0281/406 POINT LOCATION LATITUDE  : 185170
8.5.1.5.2     0282/406 POINT LOCATION LONGITUDE : -33554431
8.5.1.5.3.1      4130/003 POINT LOCATION ELEVATION : 120

Message:
JVMF      K02.46 R/M OPS UPDATE
Message Case:  1.05 Rocket/Missile Mission Fired Report
Index         DFI/DUI  Data Field Label           Data Value
1             4057/018 OPERATIONAL STATUS TYPE  : MISSION FIRED
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3             4004/012 FIRE UNIT IDENTIFICATION : 115
8.9.1         4003/015 TARGET NUMBER(S) FIRED   : AT1000
8.9.2         4005/007 ROCKET MUNITIONS TYPE    : JED
8.9.3            4029/014 NUMBER OF ROCKET MUNITION: 12

Message:
JVMF      K02.46 R/M OPS UPDATE
Message Case:  1.06 Rocket/Missile Target Status
Index         DFI/DUI  Data Field Label           Data Value
1             4057/018 OPERATIONAL STATUS TYPE  : TARGET STATUS
```

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2             4079/038 DELETE INDICATOR         : NO STATEMENT
3             4004/012 FIRE UNIT IDENTIFICATION : 115
11.1          4003/015 TARGET NUMBER(S) FIRED   : AT2135
11.2.1        4005/007 ROCKET MUNITIONS TYPE    : JEN
11.2.2           4029/014 NUMBER OF ROCKET MUNITION: 4

Message:
JVMF      K02.46 R/M OPS UPDATE
Message Case:  1.07 Rocket/Missile Fire Unit Status
Index         DFI/DUI  Data Field Label           Data Value
1             4057/018 OPERATIONAL STATUS TYPE  : FIRE UNIT STATUS
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3             4004/012 FIRE UNIT IDENTIFICATION : 115
8.4.1            0753/404 LAUNCHER OPERATIONAL STAT: STATIC/OPERATIONAL

Message:
JVMF      K02.46 R/M OPS UPDATE
Message Case:  1.08 Rocket/Missile Mission Status
Index         DFI/DUI  Data Field Label           Data Value
1             4057/018 OPERATIONAL STATUS TYPE  : MISSION STATUS
2             4079/038 DELETE INDICATOR         : NO STATEMENT
3             4004/012 FIRE UNIT IDENTIFICATION : 115
8.8.1         4082/010 FIRE MISSION STATUS      : READY TO FIRE
8.8.2.1       4003/001 TARGET NUMBER            : AY6125
8.8.4.1       0797/404 ROCKET IN FLIGHT MINUTES : 6
8.8.4.2       0380/419 ROCKET IN FLIGHT SECONDS : 20
9.1.1         0792/404 EFFECTIVE HOUR           : 5
9.1.2         0797/403 EFFECTIVE MINUTE         : 55
9.1.3         0380/403 EFFECTIVE SECOND         : 20

Message:
JVMF      K02.47 LAUNCHER CONFIGURATION UPDATE
Message Case:  1.01 Transmit Fire Unit Assets for Scheduling
Index         DFI/DUI  Data Field Label           Data Value
1             4004/012 ORIGINATOR IDENTIFICATION: 115
2.1           4079/038 DELETE INDICATOR         : NO STATEMENT
2.2           4029/006 NUMBER OF FIRE UNITS     : 2
3.1.2         4004/012 FIRE UNIT IDENTIFICATION : 115
3.1.3.2       4005/007 ROCKET MUNITIONS TYPE    : JED
3.1.4.2       4110/001 TARGET SUBTYPE ELEMENT   : SCUD

Message:
JVMF      K02.47 LAUNCHER CONFIGURATION UPDATE
Message Case:  1.02 Transmit Fire Mission Scheduling
Index         DFI/DUI  Data Field Label           Data Value
1             4004/012 ORIGINATOR IDENTIFICATION: 1111
3.1.2         4004/012 FIRE UNIT IDENTIFICATION : 115
3.1.3.2       4005/007 ROCKET MUNITIONS TYPE    : JEE
3.1.4.2       4110/001 TARGET SUBTYPE ELEMENT   : T64, T72, T80 TANKS

Message:
JVMF      K02.48 COMMANDER'S FIRE UNIT GUIDANCE
Message Case:  1.01 Transmit Positioning and Rocket/Missile Munitions Mix Guidance
Index         DFI/DUI  Data Field Label           Data Value
1             4057/019 FIRE UNIT GUIDANCE TYPE  : FIRE UNIT POSTURE
2             4058/001 ACTION DESIGNATOR        : ADD
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
6.1           4085/051 POSTURE GUIDANCE NUMBER  : 3
13.1.2        4005/001 MUNITIONS TYPE           : MLRS TERMINAL HOMING MUNITIO
13.1.4.1.1    4029/088 NUMBER OF MUNITIONS 2 MIN: 6
13.1.4.2.1    4029/089 NUMBER OF MUNITIONS 5 MIN: 0
13.1.4.3.1    4029/090 NUMBER OF MUNITIONS 20 MI: 0
13.1.4.4.1       4029/095 NUMBER OF MUNITIONS GREAT: 12

Message:
JVMF      K02.48 COMMANDER'S FIRE UNIT GUIDANCE
Message Case:  1.02 Transmit Positioning and Rocket/Missile Munitions Mix Guidance Delete
Index         DFI/DUI  Data Field Label           Data Value
Index         DFI/DUI  Data Field Label           Data Value
1             4057/019 FIRE UNIT GUIDANCE TYPE  : SCHEDULED ASSETS
2             4058/001 ACTION DESIGNATOR        : DELETE
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
6.1              4085/051 POSTURE GUIDANCE NUMBER  : 5

Message:
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JVMF      K02.48 COMMANDER'S FIRE UNIT GUIDANCE
Message Case:  1.03 Transmit Cannon Ammunition Supply Rate Guidance
Index         DFI/DUI  Data Field Label           Data Value
1             4057/019 FIRE UNIT GUIDANCE TYPE  : AVAILABLE SUPPLY RATE
2             4058/001 ACTION DESIGNATOR        : ADD
3.1           4004/012 FIRE UNIT IDENTIFICATION : 115
7.1           4029/094 CONTROLLED SUPPLY RATE   : 2260

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.01 Transmit Fire Mission Maximum Volleys
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: ROCKET SELECTION CRITERIA
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
6.1           0700/401 WEAPON TYPE              : MULTIPLE LAUNCH ROCKET SYSTE
6.2.1            4029/096 NUMBER OF VOLLEYS, MAXIMU: 3

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.02 Transmit Maximum Rockets
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: ROCKET SHELL CRITERIA
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
14.1.2.1      4005/007 ROCKET MUNITIONS TYPE    : JEN
14.1.3.1         4029/098 NUMBER OF ROCKETS, MAXIMU: 6

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.03 Delete Maximum Volleys
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: ROCKET/MISSILE MODIFICATION
2             4058/001 ACTION DESIGNATOR        : DELETE
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
6.1           0700/401 WEAPON TYPE              : MULTIPLE LAUNCH ROCKET SYSTE
6.2.1            4029/096 NUMBER OF VOLLEYS, MAXIMU: 3

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.04 Delete Maximum Rockets
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: ROCKET/MISSILE MODIFICATION
2             4058/001 ACTION DESIGNATOR        : DELETE
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
14.1.2.1      4005/007 ROCKET MUNITIONS TYPE    : JEN
14.1.3.1         4029/098 NUMBER OF ROCKETS, MAXIMU: 10

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.05 modify Rocket Shell Criteria
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: ROCKET SHELL CRITERIA
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
14.1.2.1      4005/007 ROCKET MUNITIONS TYPE    : JEE
14.1.4.1.1    0757/426 FLOT MINIMUM SAFE DISTANC: 500
14.1.4.4.1.1  4033/009 TARGET WIDTH, MAXIMUM    : 500
14.1.4.4.1.2  4032/008 TARGET LENGTH, MAXIMUM   : 500

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.06 Delete Rocket Shell Modification Criteria
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: ROCKET SHELL CRITERIA
2             4058/001 ACTION DESIGNATOR        : DELETE
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
11.1.2.1      4005/001 MUNITIONS TYPE           : MLRS TERMINAL HOMING MUNITIO
14.1.2.1      4005/007 ROCKET MUNITIONS TYPE    : JED
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14.1.5.1.2.1  4115/002 TERRAIN DESCRIPTION      : SAND

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.07 Modify Rocket Selection Criteria
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: ROCKET SELECTION CRITERIA
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
12.1.2        4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
12.1.3        4026/001 TARGET SUBTYPE           : HEAVY MISSILE
12.1.8.1.1    0700/405 SELECTED WEAPON OF ATTACK: MULTIPLE LAUNCH ROCKET SYSTE
12.1.8.4.2       4005/011 ROCKET MUNITIONS SELECTIO: JEN

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.08 Delete Rocket Selection Modification Criteria
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: FIRE MISSION CRITERIA MODIFI
2             4058/001 ACTION DESIGNATOR        : DELETE
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
12.1.2        4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
12.1.3        4026/001 TARGET SUBTYPE           : HEAVY MISSILE

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.09 Specify Effects Override
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: FIRE UNIT SELECTION CRITERIA
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
12.1.2        4025/001 TARGET GENERIC TYPE      : ROCKET/MISSILES
12.1.3        4026/001 TARGET SUBTYPE           : HEAVY MISSILE
12.1.6.1      4068/003 EFFECTS DESIRED          : 6

Message:
JVMF      K02.49 COMMANDER'S FIRE MISSION GUIDANCE
Message Case:  1.10 Specify Volleys Override
Index         DFI/DUI  Data Field Label           Data Value
1             4057/020 FIRE MISSION GUIDANCE TYP: ATTACK METHOD CRITERIA
2             4058/001 ACTION DESIGNATOR        : ADD
3             4079/083 PURGE INDICATOR          : NO STATEMENT
4             4079/091 IGNORE AMMUNITION INDICAT: NO STATEMENT
12.1.2        4025/001 TARGET GENERIC TYPE      : ARTILLERY
12.1.3        4026/001 TARGET SUBTYPE           : MEDIUM
12.1.7.1         4029/002 NUMBER OF FIRE FOR EFFECT: 3

Message:
JVMF      K02.50 COMMANDER'S TARGET ACQUISITION GUIDANCE
Message Case:  1.01 Establish or Modify Commanders Target Guidance
Index         DFI/DUI  Data Field Label           Data Value
1             4057/021 TARGET ACQUISITION TYPE  : TARGETING CRITERIA
2             4058/001 ACTION DESIGNATOR        : ADD
3             4004/012 DESTINATION UNIT IDENTIFI: 115
4.1           4079/047 TARGET INTELLIGENCE FILE : NO STATEMENT
4.2.2         4054/025 TARGET VALUE AREA NAME   : KILLBOX
4.6.1         4079/049 FIRE REQUEST INDICATOR   : NO STATEMENT
4.6.2         4085/054 TARGET ACQUISITION REQUES: 2
4.6.4.1       4003/001 TARGET NUMBER            : AD2325
4.6.9.1.1.2   0281/406 POINT LOCATION LATITUDE  : 353506
4.6.9.1.1.3   0282/406 POINT LOCATION LONGITUDE : -32530003
4.6.9.3.1     4031/001 RADIUS                   : 5000

Message:
JVMF      K02.50 COMMANDER'S TARGET ACQUISITION GUIDANCE
Message Case:  1.02 Transmit Radar Search Parameters
Index         DFI/DUI  Data Field Label           Data Value
1             4057/021 TARGET ACQUISITION TYPE  : RADAR SEARCH INSTRUCTIONS
2             4058/001 ACTION DESIGNATOR        : ADD
3             4004/012 DESTINATION UNIT IDENTIFI: 115
5.1           4028/042 RADAR SEARCH AZIMUTH     : 0
5.2           4085/056 RADAR SETTING LIMIT, MINI: 2
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5.3           4085/057 RADAR SETTING LIMIT, MAXI: 4
5.4           4028/043 RADAR SECTOR EDGE, LEFT  : -500
5.5           4028/044 RADAR SECTOR EDGE, RIGHT : 600
5.6           0757/429 RADAR RANGE, MINIMUM     : 30
5.7           0757/430 RADAR RANGE, MAXIMUM     : 200
7.1.2         4019/004 EFFECTIVE DAY            : 1
7.1.3         0792/404 EFFECTIVE HOUR           : 5
7.1.4         0797/403 EFFECTIVE MINUTE         : 55

Message:
JVMF      K02.50 COMMANDER'S TARGET ACQUISITION GUIDANCE
Message Case:  1.03 Establish Radar Priority Zone
Index         DFI/DUI  Data Field Label           Data Value
1             4057/021 TARGET ACQUISITION TYPE  : RADAR ZONE INSTRUCTIONS
2             4058/001 ACTION DESIGNATOR        : ADD
3             4004/012 DESTINATION UNIT IDENTIFI: 115
4.1           4079/047 TARGET INTELLIGENCE FILE : NO STATEMENT
4.6.1         4079/049 FIRE REQUEST INDICATOR   : NO STATEMENT

4.6.2         4085/054 TARGET ACQUISITION REQUES: 2
6.1           4085/022 RADAR ZONE NUMBER        : 3
6.2.1         4193/003 RADAR ZONE TYPE          : PRIORITY ARTILLERY TARGET IN
6.3.1.2       0281/448 RADAR ZONE LATITUDE      : 185170
6.3.1.3       0282/448 RADAR ZONE LONGITUDE     : -19107973
6.3.1.2       0281/448 RADAR ZONE LATITUDE      : 191904
6.3.1.3       0282/448 RADAR ZONE LONGITUDE     : -19107980
6.3.1.2       0281/448 RADAR ZONE LATITUDE      : 200338
6.3.1.3       0282/448 RADAR ZONE LONGITUDE     : -19092937

Message:
JVMF      K02.50 COMMANDER'S TARGET ACQUISITION GUIDANCE
Message Case:  1.04 Delete a Radar Zone
Index         DFI/DUI  Data Field Label           Data Value
1             4057/021 TARGET ACQUISITION TYPE  : RADAR ZONE INSTRUCTIONS
2             4058/001 ACTION DESIGNATOR        : DELETE
3             4004/012 DESTINATION UNIT IDENTIFI: 115
6.1           4085/022 RADAR ZONE NUMBER        : 1

Message:
JVMF      K02.51 FIRE SUPPORT REPLY/REMARKS
Message Case:  1.01 Transmit Reply to Received Message
Index         DFI/DUI  Data Field Label           Data Value
1             4057/023 REPLY MESSAGE TYPE       : END OF MISSION
2             4079/079 REPORT INDICATOR         : NO STATEMENT
8.1           4093/036 MLRS REJECTED MESSAGE TYP: NO STATEMENT
8.2           4093/037 MLRS MESSAGE REPLY CODE  : ACKNOWLEDGED
8.3              4082/011 MLRS REJECT MESSAGE CODE : OTHER

Message:
JVMF      K02.51 FIRE SUPPORT REPLY/REMARKS
Message Case:  1.02 Transmit Error Response
Index         DFI/DUI  Data Field Label           Data Value
1             4057/023 REPLY MESSAGE TYPE       : SURVEILLANCE
2             4079/079 REPORT INDICATOR         : NO STATEMENT
8.1           4093/036 MLRS REJECTED MESSAGE TYP: LOCATION/STATUS OR DATA BASE
8.2           4093/037 MLRS MESSAGE REPLY CODE  : WILL COMPLY
8.3           4082/011 MLRS REJECT MESSAGE CODE : ROCKETS ARMED
12.2          4075/001 COMMENTS     : WE HAVE TO GO MANUAL BUT WE

Message:
JVMF      K02.51 FIRE SUPPORT REPLY/REMARKS
Message Case:  1.03 Transmit Time on Target Extension
Index         DFI/DUI  Data Field Label           Data Value
1             4057/023 REPLY MESSAGE TYPE       : NO STATEMENT
2             4079/079 REPORT INDICATOR         : NO STATEMENT
3.1           4058/020 TIME ON TARGET ACTION DES: TIME ON TARGET EXTENSION REQ
4.1           4004/012 OBSERVER IDENTIFICATION  : 1111
7.1           4003/001 TARGET NUMBER            : ZX2135
11.1          4019/002 DAY ON TARGET            : 2
11.2          0792/402 HOUR ON TARGET           : 4
11.3          0797/401 MINUTE ON TARGET         : 0

Message:
JVMF      K02.51 FIRE SUPPORT REPLY/REMARKS
Message Case:  1.04 Transmit Target Signature Data
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| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4057/023 | REPLY MESSAGE TYPE | : TARGET SIGNATURE |
| 2 | 4079/079 | REPORT INDICATOR | : NO STATEMENT |
| 4.1 | 4004/012 | OBSERVER IDENTIFICATION | : 1111 |
| 7.1 | 4003/001 | TARGET NUMBER | : ZW2115 |
| 10.1 | 4029/113 | TARGET SIGNATURE SIZE | : 350 |
| 10.2 | 0792/437 | TIME TO FIRE HOUR | : 6 |
| 10.3 | 0797/436 | TIME TO FIRE MINUTE | : 0 |
| 10.4 | 4005/007 | ROCKET MUNITIONS TYPE | : JEN |
| 10.5.1 | 4004/012 | FIRE UNIT IDENTIFICATION | : 115 |
| 10.6.1 | 4085/038 | PHASE NUMBER | : PHASE 1 |
| 12.2 | 4075/001 | COMMENTS | : THIS IS A HPT |

Message:
**JVMF K02.54 HOWITZER COMMUNICATIONS INITIALIZATION DATA**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4004/012 | HOWITZER IDENTIFICATION | : 180456 |
| 2.2 | 4004/012 | SUBSCRIBER IDENTIFICATION | : 180456 |
| 2.3 | 4079/022 | SUBSCRIBER STATUS INDICAT | : SUBSCRIBER ON |
| 2.5 | 4126/003 | COMMUNICATIONS DEVICE TYP | : AFATDS |
| 2.6 | 4085/003 | SUBSCRIBER RECEIVE SERIAL | : 0 |
| 2.7 | 4085/004 | SUBSCRIBER TRANSMIT SERIA | : 8 |

Message:
**JVMF K03.01 BASIC WEATHER REPORT**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4004/012 | ORIGINATOR ID | : 112 |
| 2.1 | 4099/015 | EFFECTIVE MONTH | : JANUARY |
| 2.2 | 4019/004 | EFFECTIVE DAY | : 10 |
| 2.3 | 0792/404 | EFFECTIVE HOUR | : 8 |
| 2.4 | 0797/403 | EFFECTIVE MINUTE | : 0 |
| 3.1 | 0281/402 | UNIT LATITUDE | : 185170 |
| 3.2 | 0282/402 | UNIT LONGITUDE | : 23394306 |
| 4.1 | 4170/002 | REPORT PERIOD TYPE | : 6 HOUR FORECAST |
| 4.2 | 4099/001 | MONTH | : JANUARY |
| 4.3 | 4019/001 | DAY OF MONTH | : 10 |
| 4.4 | 0792/001 | HOUR | : 8 |
| 4.5 | 0797/004 | MINUTE | : 0 |
| 7.12.1 | 0365/408 | FREEZING ALTITUDE | : 1 |
| 7.13.1 | 4175/008 | ICING TYPE | : CLEAR |
| 7.13.2 | 4175/009 | ICING INTENSITY | : LIGHT |
| 7.14.1 | 4175/003 | PRECIPITATION TYPE | : MEDIUM SNOW |
| 7.14.2 | 4175/007 | PRECIPITATION INTENSITY | : MODERATE |

Message:
**JVMF K03.02 INITIAL AIRBORNE ARTILLERY FIRE CONTROL RADAR** (
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1.2 | 4025/002 | RADAR TARGET TYPE | : WHEELED VEHICLE |
| 1.3 | 4005/008 | AIRBORNE MUNITIONS TYPE | : 5 INCH ROCKET |
| 1.4 | 0281/407 | TARGET LATITUDE | : 185170 |
| 1.5 | 0282/407 | TARGET LONGITUDE | : 1024686 |
| 1.6 | 4019/004 | EFFECTIVE DAY | : 10 |
| 1.7 | 0792/404 | EFFECTIVE HOUR | : 5 |
| 1.8 | 0797/403 | EFFECTIVE MINUTE | : 0 |

Message:
**JVMF K03.03 FORECAST METEOROLOGICAL DATA**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1.1 | 4180/002 | TEMPERATURE GRADIENT | : INVERSE |
| 8.2 | 0365/415 | SURFACE WIND ALTIUDE | : 15 METERS ALTITUDE |
| 8.3 | 0371/412 | SURFACE WIND DIRECTION | : 14 |
| 8.4 | 0367/012 | WIND STRENGTH | : 15 |
| 8.2 | 0365/415 | SURFACE WIND ALTIUDE | : 15 METERS ALTITUDE |
| 8.3 | 0371/412 | SURFACE WIND DIRECTION | : 16 |
| 8.4 | 0367/012 | WIND STRENGTH | : 18 |
| 9.2 | 4021/004 | FORECAST MET ALTITUDE ZON | : ZONE 1 |
| 9.3 | 0367/401 | MET WIND SPEED | : 15 |
| 9.4 | 0371/413 | FORECAST WIND DIRECTION | : 14 |
| 10.1 | 4019/004 | EFFECTIVE DAY | : 7 |
| 10.2 | 0792/404 | EFFECTIVE HOUR | : 8 |

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10.3          0797/403 EFFECTIVE MINUTE         : 0
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Message:
**JVMF K03.04 ASSAULT SUPPORT REQUEST**

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Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1.1           4003/002 REQUEST NUMBER           : ASQ1234
2             4129/002 MISSION PRIORITY         : PRIORITY 1
3             4079/062 IMMEDIATE/PREPLANNED MISS: IMMEDIATE
4             4131/003 ASSAULT SUPPORT MISSION T: INSERTION
5.2           4132/002 ASSAULT SUPPORT AIRCRAFT : AC-130 GUNSHIP
7.1.2         0281/014 LATITUDE, 0.0051 MINUTE  : 11784
7.1.3         0282/014 LONGITUDE, 0.0051 MINUTE : 1462143
7.1.4.1       4130/014 ZONE ELEVATION           : 180
7.1.8.1       4115/002 TERRAIN DESCRIPTION      : SAND
7.1.11        4079/012 ZONE HOT                 : AFFIRMATIVE
7.1.12.1      0372/405 DIRECTION TO THE ENEMY   : SOUTH WEST
7.1.13.1      4172/001 HOSTILE FIRE TYPE RECEIVE: SMALL ARMS
7.1.14.1      4136/001 ZONE SECURITY            : ENEMY IN AREA - USE CAUTION
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Message:
**JVMF K03.05 OBSERVED WEATHER INFORMATION AND EFFECTS**

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Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4176/003 RELATIVE CLOUD COVER AMOU: 5/8 THROUGH 7/8 BROKEN CLOUD
2             0371/414 SURFACE WIND HEADING     : SOUTHEAST
3             4175/002 RELATIVE WIND FORCE      : MODERATE BREEZE
4             4040/002 OBSERVED SURFACE VISIBILI: 2 TO 4 KILOMETERS
5.2           4175/001 WEATHER CONDITIONS       : FREEZING DRIZZLE
6             4156/006 ROAD CONDITION           : ICE PATCHES
7             4115/017 TERRAIN CONDITIONS       : FROZEN GROUND 0 THROUGH 4 CM
8             4177/001 WATER SURFACE CONDITION  : THIN ICE, COMPLETE COVER, IM
9             4023/004 SURFACE AIR TEMPERATURE  : 1
10            4018/005 SURFACE AIR PRESSURE     : 7210
11            0371/415 OBSERVED WIND DIRECTION  : 12
12            0367/410 OBSERVED WIND SPEED      : 5
13            4176/004 RELATIVE OVERCAST AMOUNT : 3/8
14            4176/005 LOWEST CLOUD HEIGHT      : 600 THROUGH 699 METERS
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Message:
**JVMF K03.06 MAYDAY MESSAGE**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4004/012 UNIT DECLARING MAYDAY    : 180213
2             0281/014 LATITUDE, 0.0051 MINUTE  : 23148
3             0282/014 LONGITUDE, 0.0051 MINUTE : 65070
4             4019/046 MAYDAY DAY               : 20
5             0792/454 MAYDAY HOUR              : 13
6             0797/451 MAYDAY MINUTE            : 13
7.1           4029/032 POL QUANTITY             : 5
8.2           4082/022 AIRCRAFT SYSTEM STATUS   : LEFT ENGINE FIRE
9.1.2         4005/008 AIRBORNE MUNITIONS TYPE  : 5 INCH ROCKET
9.1.3         4029/033 QUANTITY OF AMMUNITION   : 15
10.1          1641/001 EMERGENCY TYPE           : NO STATEMENT/OTHER
11.1          1643/001 PERSONNEL INVOLVED       : 6
```

**JVMF K04.01 SPOT/SALUTE REPORT**

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Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4079/020 REPORT TYPE INDICATOR    : SALUTE
2.1           4155/001 EVENT TYPE               : OBSERVATION
3             4004/012 UNIT IDENTIFICATION      : 1111
4.2.1         0376/401 IDENTITY, VMF            : HOSTILE
4.2.2.1       4153/001 SIZE                     : PLATOON
4.2.3.1       4152/006 ACTIVITY                 : OBSERVING
4.2.4         0281/424 ENTITY LATITUDE          : 203687
4.2.5         0282/424 COURSE/SPEED DATA        : -33554431
4.2.6.1       0371/015 COURSE                   : 120
4.2.6.2       0367/403 UNIT SPEED, KPH          : 4
4.2.7.1       4154/001 ENEMY UNIT DESIGNATOR    : INF
4.2.8.1       4019/014 OBSERVATION DAY          : 5
4.2.8.2       0792/419 OBSERVATION HOUR         : 6
4.2.8.3       0797/418 OBSERVATION MINUTE       : 15
4.2.9.1.2     4173/014 SYMBOL DIMENSION         : WARFIGHTING, SPACE
4.2.9.1.3     4173/015 ENTITY TYPE              : SPACE STATION
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4.2.9.1.5.1   4075/014 SYMBOL LABEL             : WARSPACE
4.2.9.1.7     4029/034 QUANTITY OF EQUIPMENT/WEA: 23
4.3.3         4152/002 ACTION TAKEN             : OBSERVING
4.3.11.1.2    4173/014 SYMBOL DIMENSION         : WARFIGHTING, SPACE
4.3.11.1.3    4173/015 ENTITY TYPE              : CREWED SPACE VEHICLE
4.3.11.1.6       4029/035 QUANTITY OF EQUIPMENT/WEA: 21
```

Message:
**JVMF K04.02 LAND ROUTE REPORT**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1.2.2         0281/014 LATITUDE, 0.0051 MINUTE  : 23167
1.2.3         0282/014 LONGITUDE, 0.0051 MINUTE : -2021618
1.4.1         4054/015 ROUTE CODEWORD           : HY66
1.5           4156/003 ROUTE DESCRIPTION        : TRAIL
1.6           4156/002 ROUTE CLASSIFICATION     : MEDIUM TRACKS TWO WAY
1.7           0367/406 MOVEMENT RATE            : SLOW
1.8              4079/021 OPEN/CONCEALED INDICATOR : OPEN
```

Message:
**JVMF K04.03 OBSTACLE REPORT**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1.2           4093/021 OBSTACLE CONTROL DESIGNAT: ENEMY
1.3           4165/001 OBSTACLE TYPE            : OTHER NATURAL OBSTACLE
1.4           4165/003 IMPACT ON MOVEMENT       : BLOCK
1.5.1         4165/002 OBSTACLE STATUS          : EXECUTED
1.9.2         0281/015 LATITUDE, 0.0013 MINUTE  : 92669
1.9.3         0282/015 LONGITUDE, 0.0013 MINUTE : 302131
1.10.1        4152/001 ENEMY ACTIVITY           : FORTIFYING
1.15          4019/014 OBSERVATION DAY          : 9
1.16          0792/419 OBSERVATION HOUR         : 7
1.17          0797/418 OBSERVATION MINUTE       : 0
```

Message:
**JVMF K04.04 AIRBORNE ARTILLERY FIRE CONTROL RADAR (FCR) REP**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4074/001 MISSION SELECTION        : CURRENT MISSION
2             4004/012 SOURCE OF SCAN           : 115
3             4019/033 SCAN DAY                 : 5
4             0792/438 SCAN HOUR                : 5
5             0797/437 SCAN MINUTE              : 15
6             0380/405 SCAN SECOND              : 0
7             0281/434 SCAN LATITUDE            : 370678
8             0282/434 SCAN LONGITUDE           : 1208522
9             0365/407 SCAN ALTITUDE            : 120
11.1.2        4003/001 TARGET NUMBER            : WZ1215
11.1.3        4025/002 RADAR TARGET TYPE        : TRACKED VEHICLE
11.1.4        0757/411 TARGET RANGE OFFSET, NORT: 300
11.1.5        0757/412 TARGET RANGE OFFSET, EAST: 250
11.1.6           0757/413 TARGET RANGE OFFSET, VERT: 50
```

Message:
**JVMF K04.05 ELINT DESCRIPTION MESSAGE**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4004/012 EVENT ENTITY ID REFERENCE: 1111
2             4046/004 ENTITY ID SERIAL NUMBER  : 32
3             4004/012 OWNER ENTITY ID REFERENCE: 115
4             4046/004 ENTITY ID SERIAL NUMBER  : 15
5.1           4004/012 FRIENDLY URN             : 112
7.1           4127/005 NATIONALITY              : UNITED STATES (US)
13.1.2        4003/020 ELINT NOTATION           : 32135
13.1.3        4051/003 NOTATION CONFIDENCE      : 40 TO 49 PERCENT
```

Message:
**JVMF K04.06 ELINT EVALUATION MESSAGE**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4004/012 ORIGINATOR               : 115
2             4004/012 EVENT ENTITY ID REFERENCE: 1111
3             4046/004 ENTITY ID SERIAL NUMBER  : 134
4             4004/012 OWNER ENTITY ID REFERENCE: 112
5             4046/004 ENTITY ID SERIAL NUMBER  : 155
```

```
6             4098/001 YEAR                     : 3
7             4099/001 MONTH                    : MARCH
8             4019/001 DAY OF MONTH             : 21
9             0792/001 HOUR                     : 10
10            0797/004 MINUTE                   : 10
11            1903/412 BASEBAND TYPE            : SIMPLE
13
```

Message:
**JVMF K04.07 ELINT EVENT MESSAGE**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4004/012 EVENT ENTITY ID REFERENCE: 115
2             4046/004 ENTITY ID SERIAL NUMBER  : 34
3.1           4004/012 ENTITY ID REFERENCE NUMBE: 1111
3.2           4046/004 ENTITY ID SERIAL NUMBER  : 45
13.1          4200/001 HOP DWELL                : 412
13.2          4200/002 HOP RATE                 : 200
13.3          1820/403 HOP RATE MULTIPLIER      : 14
13.4          4200/003 HOP SPACING ELEMENT      : 10
13.5          1820/404 HOP SPACING MULTIPLIER   : 5
13.6          4200/004 HOP SPREADER TYPE        : FREQUENCY HOPPER
18            4201/001 JAMMING INDICATOR        : NO JAMMING PRESENT
19            4079/105 EXERCISE PARTICIPANT     : PARTICIPANT
```

Message:
**JVMF K04.08 LASER WARNING**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4194/001 DETECTED LASER TYPE      : BLINDING LASER
2             0281/449 LASED ENTITY LATITUDE    : 370678
3             0282/449 LASED ENTITY LONGITUDE   : 23578143
4.1           0365/033 ALTITUDE, 25 FT          : 55
6.1           0372/412 LASER SOURCE AZIMUTH     : 12
6.2              0372/413 LASER SOURCE VERTICAL ANG: 3
```

Message:
**JVMF K04.09 BRIDGE REPORT**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1.2           4139/001 BRIDGE TYPE              : MULTILEVEL
1.3.2         0281/015 LATITUDE, 0.0013 MINUTE  : 139089
1.3.3         0282/015 LONGITUDE, 0.0013 MINUTE : 5940549
1.4           4093/003 CONTROLLING FORCE        : FRIENDLY FORCES
1.6.1         4141/001 VEHICLE TYPE             : HEAVY TRACKED
1.7.1         4079/013 TRAFFIC FLOW INDICATOR   : TWO-WAY
1.8.1         4123/006 HORIZONTAL CLEARANCE     : 12
1.9.1         4123/007 UNDERBRIDGE CLEARANCE    : 20
1.10.1        4019/014 OBSERVATION DAY          : 2
1.10.2        0792/419 OBSERVATION HOUR         : 9
1.10.3        0797/418 OBSERVATION MINUTE       : 0
1.12.1.3.1    4139/003 SPAN MATERIAL            : WOOD
1.12.1.4.1    4139/002 SPAN TYPE                : FLOATING
1.12.1.5.1    4032/002 SPAN LENGTH              : 400
1.12.1.6.1    4139/004 SPAN CONDITION           : DAMAGED
```

Message:
**JVMF K04.10 INITIAL MEACONING, INTRUSION, JAMMING AND INTER**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4004/012 IDENTITY OF UNIT RENDERIN: 112
2             4191/001 MIJI TYPE                : JAMMING
3             0281/402 UNIT LATITUDE            : 556354
4             0282/402 UNIT LONGITUDE           : 23762199
5             0372/411 MIJI BEARING             : 16
8.2           4191/003 EQUIPMENT AFFECTED       : RADAR
8.3.1         4191/002 MIJI EFFECT              : WHITE NOISE
9.2           1819/001 FREQUENCY/FREQUENCY RANGE: FREQUENCY RANGE
9.3           1820/003 FREQUENCY MULTIPLIER, 1 (: 2
9.4           0417/006 FREQUENCY, 1 (FRQ1)      : 456
9.5.1         1820/004 FREQUENCY MULTIPLIER, 2 (: 3
9.5.2         0417/007 FREQUENCY, 2 (FRQ2)      : 560
```

Message:
**JVMF K04.11 ROTHR TASK REQUEST**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4004/012 ORIGINATOR               : 115
2              4085/064 TASK NUMBER              : 10
3.2.1          4058/023 COVERAGE/SURVEILLANCE DES: POINT
3.4            4212/001 SURVEILLANCE TYPE        : BOTH
3.6.1.2        4099/001 MONTH                    : JANUARY
3.6.1.3        4019/001 DAY OF MONTH             : 5
3.6.1.4        0792/001 HOUR                     : 5
3.6.1.5        0797/004 MINUTE                   : 55
6.1.2          0281/443 LATITUDE, 0.03 FEET      : 23723363
6.1.3          0282/443 LONGITUDE, 0.03 FEET     : 1509001184
6.1.4          4184/001 PRECISION, POSITION      : 10 METER
```

Message:
**JVMF K04.12 ROTHR STATUS REPORT**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4004/012 ORIGINATOR               : 115
2.2            4099/001 MONTH                    : JANUARY
2.3            4019/001 DAY OF MONTH             : 5
2.4            0792/001 HOUR                     : 9
2.5            0797/004 MINUTE                   : 55
3.2            4212/002 SURVEILLANCE COVERAGE STA: EFFECTIVE SURVEILLANCE AREA
3.3.1.2        4212/001 SURVEILLANCE TYPE        : BOTH
3.3.1.3.1.2    4085/066 PCA/ESA SECTOR NUMBER    : 15
3.3.1.3.1.3    4085/067 PCA/ESA CELL NUMBER      : 2
3.3.1.3.1.5.1  4212/005 ESA CODE                 : EFFECTIVE SURVEILLANCE
3.3.1.3.1.2    4085/066 PCA/ESA SECTOR NUMBER    : 18
3.3.1.3.1.3    4085/067 PCA/ESA CELL NUMBER      : 3
3.3.1.3.1.5.1  4212/005 ESA CODE                 : MARGINAL SURVEILLANCE
4.2            4213/005 PERCENT USED             : 12
```

Message:
**JVMF K05.01 POSITION REPORT**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1.2            4004/012 URN                      : 115
1.3            0281/402 UNIT LATITUDE            : 556354
1.4            0282/402 UNIT LONGITUDE           : 23762199
1.5            4119/002 LOCATION DERIVATION      : INERTIAL NAVIGATION AUGMENTE
1.6.1          4119/005 LOCATION QUALITY         : 10 < QUALITY <= 25 METERS
1.7            0385/003 EXERCISE INDICATOR       : EXERCISE TRACK OR UNIT
1.13              0275/001 ORIGINATOR ENVIRONMENT/ C: SUBSURFACE
```

Message:
**JVMF K05.02 NUCLEAR, BIOLOGICAL, CHEMICAL REPORT ONE (NBC 1**

```
Message Case:  1.03 Transmit Geographic Location of a Nuclear Attack
Index          DFI/DUI  Data Field Label           Data Value
1              4155/002 NBC EVENT TYPE           : NUCLEAR
2              1768/001 TYPE OF BURST            : SPACE
3.2            4019/019 ATTACK DAY               : 4
3.3            0792/424 ATTACK HOUR              : 12
3.4            0797/422 ATTACK MINUTE            : 0
6.1            4079/018 LOCATION QUALIFIER       : ACTUAL
6.2.2          0281/415 ATTACK LOCATION LATITUDE : 556354
6.2.2             0282/415 ATTACK LOCATION LONGITUDE: 23762199
```

Message:
**JVMF K05.03 NUCLEAR, BIOLOGICAL, CHEMICAL REPORT TWO (NBC** 2

```
Message Case:  1.01 Transmit Nuclear Evaluation Data
Index          DFI/DUI  Data Field Label           Data Value
1              4155/002 NBC EVENT TYPE           : NUCLEAR
2              4003/006 STRIKE SERIAL NUMBER     : 15
3.1.2          4019/019 ATTACK DAY               : 2
3.1.3          0792/424 ATTACK HOUR              : 9
3.1.4          0797/422 ATTACK MINUTE            : 0
4.1            1768/001 TYPE OF BURST            : AIR
4.2            4079/018 LOCATION QUALIFIER       : ACTUAL
4.3.2          0281/415 ATTACK LOCATION LATITUDE : 387553
4.3.3          0282/415 ATTACK LOCATION LONGITUDE: 23594864
6.1            4093/004 CRATER PRESENT INDICATOR : CRATER PRESENT
6.2            4145/002 ESTIMATED NUCLEAR YIELD  : 300
6.3.1          4033/004 CRATER WIDTH             : 1000
7.1            4079/019 SUSPECTED/OBSERVED INDICA: OBSERVED EVENT
```

```
7.2.2         0700/404 DELIVERY MEANS           : TORPEDO (TOR)
8.1.1         0372/402 LEFT RADIAL LINE DIRECTIO: 12
8.1.2         0372/403 RIGHT RADIAL LINE DIRECTI: 10
9.1           4180/001 AIR STABILITY            : NEUTRAL
9.2           4023/002 AIR TEMPERATURE          : 15
9.3           4142/001 RELATIVE HUMIDITY        : 45
9.4           4175/006 WEATHER PHENOMENA        : BLOWING SNOW, SANDSTORM, DUS
9.5           4176/001 GENERIC CLOUD COVERAGE   : BROKEN CLOUDS

Message:
JVMF      K05.04 NUCLEAR, BIOLOGICAL, CHEMICAL REPORT THREE (NBC
Message Case:  1.01 Transmit Nuclear Downwind Zone Data
Index         DFI/DUI  Data Field Label           Data Value
1             4155/002 NBC EVENT TYPE           : NUCLEAR
2             4003/006 STRIKE SERIAL NUMBER     : 11
3.1.2         4019/019 ATTACK DAY               : 4
3.1.3         0792/424 ATTACK HOUR              : 14
3.1.4         0797/422 ATTACK MINUTE            : 0
4.1           4079/018 LOCATION QUALIFIER       : ACTUAL
4.2           1768/001 TYPE OF BURST            : UNDERWATER
4.3.1         4145/002 ESTIMATED NUCLEAR YIELD  : 100
4.4.2         0281/415 ATTACK LOCATION LATITUDE : 370678
4.4.3         0282/415 ATTACK LOCATION LONGITUDE: -18924136
8.1           0372/402 LEFT RADIAL LINE DIRECTIO: 130
8.2           0372/403 RIGHT RADIAL LINE DIRECTI: 160
10.1          0757/406 ZONE 1 DOWNWIND DISTANCE : 4000
10.2          0367/405 EFFECTIVE WIND SPEED     : 20
10.3          4031/007 NBC CLOUD RADIUS         : 2000

Message:
JVMF      K05.05 NUCLEAR, BIOLOGICAL, CHEMICAL REPORT FOUR (NBC
Message Case:  1.01 Transmit Nuclear Monitoring Results
Index         DFI/DUI  Data Field Label           Data Value
1             4155/002 NBC EVENT TYPE           : NUCLEAR
2.1           4003/006 STRIKE SERIAL NUMBER     : 205
3.2           0281/418 READING LOCATION LATITUDE: 353829
3.3           0282/418 READING LOCATION LONGITUD: 23578168
3.5.1         1768/001 TYPE OF BURST            : UNKNOWN
3.5.2         4143/001 RADIATION LEVEL          : 10
3.5.3.1       4144/002 DOSE RATE TREND          : INCREASING
3.5.4.1       4144/003 RELATIVE RADIATION DECAY : NORMAL
3.6.1         4019/021 READING/SAMPLE DAY       : 5
3.6.2         0792/427 READING/SAMPLE HOUR      : 17
3.6.3         0797/424 READING/SAMPLE MINUTE    : 0

Message:
JVMF      K05.06 NUCLEAR, BIOLOGICAL OR CHEMICAL REPORT FIVE (NB
Message Case:  1.02 Transmit Biological/Chemical Contamination Area
Index         DFI/DUI  Data Field Label           Data Value
1             4155/002 NBC EVENT TYPE           : BIOLOGICAL
2.1           4003/006 STRIKE SERIAL NUMBER     : 4
3.1.2         4138/002 AGENT TYPE               : BIOLOGICAL AGENT
3.1.3         4138/003 AGENT PERSISTENCY TYPE   : UNKNOWN
8.1           4098/004 LATEST SURVEY YEAR       : 3
8.2           4099/004 LATEST SURVEY MONTH      : JANUARY
8.3           4019/016 LATEST SURVEY DAY        : 2
8.4           0792/423 LATEST SURVEY HOUR       : 17
8.5           0797/420 LATEST SURVEY MINUTE     : 0
10.1.2        0281/422 BLACK/YELLOW CONTOUR LATI: 742033
10.1.3           0282/422 BLACK/YELLOW CONTOUR LONG: 23946587

Message:
JVMF      K05.07 BIOLOGICAL, CHEMICAL REPORT SIX (NBC 6)
Message Case:  1.02 Transmit Chemical Data Information
Index         DFI/DUI  Data Field Label           Data Value
1             4155/002 NBC EVENT TYPE           : CHEMICAL
2             4003/006 STRIKE SERIAL NUMBER     : 3
3.1           0281/418 READING LOCATION LATITUDE: 556354
3.2           0282/418 READING LOCATION LONGITUD: 23762199
3.3.1         4146/001 SAMPLE TYPE              : LIQUID
3.4.1.2       4138/002 AGENT TYPE               : BLISTER AGENT
3.4.1.3       4138/003 AGENT PERSISTENCY TYPE   : NON-PERSISTENT
6.2           4075/001 COMMENTS                 : this is a chem attack

Message:
```

**JVMF K05.08 BASIC WIND REPORT**

Message Case: 1.02 Transmit Basic Wind Report

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4079/015 | FORECAST/REPORT INDICATOR: | REPORT |
| 3.1 | 0281/438 | MET STATION LATITUDE : | 185170 |
| 3.2 | 0282/438 | MET STATION LONGITUDE : | 23394306 |
| 3.3 | 4130/002 | MET STATION ELEVATION : | 80 |
| 4.1 | 4019/014 | OBSERVATION DAY : | 9 |
| 4.2 | 0792/419 | OBSERVATION HOUR : | 14 |
| 4.3 | 0797/418 | OBSERVATION MINUTE : | 0 |
| 5.1.2 | 4019/017 | VALIDITY DAY : | 9 |
| 5.1.3 | 0792/422 | VALIDITY HOUR : | 18 |
| 5.1.4 | 0797/421 | VALIDITY MINUTE : | 59 |
| 6.2 | 4021/002 | BWR MET ALTITUDE ZONE : | ZONE 1 |
| 6.3 | 0371/408 | BWR MET WIND DIRECTION : | 12 |
| 6.4 | 0367/401 | MET WIND SPEED : | 10 |
| 6.2 | 4021/002 | BWR MET ALTITUDE ZONE : | ZONE 2 |
| 6.3 | 0371/408 | BWR MET WIND DIRECTION : | 13 |
| 6.4 | 0367/401 | MET WIND SPEED : | 12 |

Message:

**JVMF K05.09 CHEMICAL DOWNWIND REPORT**

Message Case: 1.02 Transmit Chemical Downwind Report

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4079/015 | FORECAST/REPORT INDICATOR: | REPORT |
| 2 | 4054/014 | VALIDITY AREA : | 1ID |
| 3 | 4019/014 | OBSERVATION DAY : | 5 |
| 4 | 0792/419 | OBSERVATION HOUR : | 8 |
| 5 | 0797/418 | OBSERVATION MINUTE : | 0 |
| 7.2 | 0371/409 | DOWNWIND DIRECTION : | 130 |
| 7.3 | 0367/404 | DOWNWIND SPEED : | 12 |
| 7.4 | 4180/001 | AIR STABILITY : | NEUTRAL |
| 7.5 | 4023/002 | AIR TEMPERATURE : | 14 |
| 7.6 | 4142/001 | RELATIVE HUMIDITY : | 70 |
| 7.7 | 4175/006 | WEATHER PHENOMENA : | ELEVATED INVERSION LAYER |
| 7.8 | 4176/001 | GENERIC CLOUD COVERAGE : | BROKEN CLOUDS |

Message:

**JVMF K05.10 EFFECTIVE DOWNWIND REPORT**

Message Case: 1.02 Transmit Effective Downwind Report

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4079/015 | FORECAST/REPORT INDICATOR: | REPORT |
| 2 | 4054/014 | VALIDITY AREA : | 1AD |
| 3 | 4019/014 | OBSERVATION DAY : | 10 |
| 4 | 0792/419 | OBSERVATION HOUR : | 8 |
| 5 | 0797/418 | OBSERVATION MINUTE : | 0 |
| 7.1.2 | 4145/001 | NUCLEAR YIELD GROUP : | ALPHA |
| 7.1.4.1 | 0371/409 | DOWNWIND DIRECTION : | 13 |
| 7.1.4.2 | 0367/404 | DOWNWIND SPEED : | 8 |
| 7.1.4.3 | 4135/001 | EXPANSION ANGLE : | 90 DEGREES |

Message:

**JVMF K05.11 STRIKE WARNING**

Message Case: 1.02 Transmit Single Air Burst Nuclear Strike Warning

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4079/016 | CONVENTIONAL/NUCLEAR WARN: | NUCLEAR |
| 2.2 | 4019/015 | STRIKE DAY : | 5 |
| 2.3 | 0792/420 | STRIKE HOUR : | 9 |
| 2.4 | 0797/419 | STRIKE MINUTE : | 15 |
| 2.2 | 4019/015 | STRIKE DAY : | 5 |
| 2.3 | 0792/420 | STRIKE HOUR : | 19 |
| 2.4 | 0797/419 | STRIKE MINUTE : | 45 |
| 3.1 | 4054/013 | WARNING CODEWORD : | BIGBOOM |
| 6.1.1 | 4031/002 | MINIMUM SAFE DISTANCE (MS: | 200 |
| 6.2.1.2 | 0281/414 | GROUND ZERO LOCATION LATI: | 370375 |
| 6.2.1.3 | 0282/414 | GROUND ZERO LOCATION, LON: | 23410745 |
| 7.1.1 | 4031/003 | MINIMUM SAFE DISTANCE (MS: | 200 |
| 8.1.1 | 4031/004 | MINIMUM SAFE DISTANCE (MS: | 200 |

Message:

**JVMF K05.12 REDCON**

Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4082/005 | READINESS CONDITION LEVEL: | LEVEL 2 |

Message:
**JVMF K05.13 THREAT WARNING MESSAGE**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1.1 | 4004/012 | URN | : 115 |
| 2 | 1762/002 | THREAT TYPE | : SURFACE-TO-SURFACE MISSILE |
| 3 | 0401/001 | THREAT POSTURE | : UNKNOWN |
| 4.1 | 0792/001 | HOUR | : 12 |
| 4.2 | 0797/004 | MINUTE | : 1 |
| 4.3.1 | 0380/001 | SECOND | : 0 |
| 6.1 | 0281/017 | LATITUDE, 0.0103 MINUTE | : 11847 |
| 6.2 | 0282/013 | LONGITUDE, 0.0103 MINUTE | : 11751 |
| 6.3.1 | 0351/009 | SQUARE/CIRCLE SWITCH (S/C | : CIRCULAR/ELLIPTICAL |
| 6.3.2 | 1806/001 | AXIS ORIENTATION (AXS ORI | : 120 |
| 6.3.3 | 0419/001 | AREA MAJOR AXIS, 4 | : 0.03936 DATA MILES |
| 6.3.4 | 0419/002 | AREA MINOR AXIS, 4 | : 0.43393 DATA MILES |
| 6.4.1 | 0792/001 | HOUR | : 12 |
| 6.4.2 | 0797/004 | MINUTE | : 10 |
| 6.4.3.1 | 0380/001 | SECOND | : 0 |

Message:
**JVMF K05.14 SITUATION REPORT**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1.1 | 4152/001 | ENEMY ACTIVITY | : ASSEMBLING |
| 2.2.1 | 4004/012 | UNIT IDENTIFICATION | : 1111 |
| 2.3.1 | 4082/005 | READINESS CONDITION LEVEL | : LEVEL 2 |
| 2.4.1 | 0281/402 | UNIT LATITUDE | : 353804 |
| 2.4.2 | 0282/402 | UNIT LONGITUDE | : 23561423 |
| 2.5.1 | 4082/007 | UNIT STATUS CODE | : AMBER |
| 2.6.1 | 4164/001 | COMMANDER ASSESSMENT | : ACCOMPLISH FOLLOW-ON MISSION |
| 2.7.1 | 4162/001 | NATURE OF OPERATION | : ATTACK |
| 2.9.1.2.1 | 0804/001 | AIR SPECIFIC TYPE | : F-111 (GENERAL DYNAMICS) |
| 2.9.1.3.1 | 0808/001 | SURFACE (MARITIME) SPECIF | : DIXIE |
| 2.9.1.4.1 | 0809/001 | SUBSURFACE (MARITIME) SPE | : TANG SS |
| 2.9.1.5.1 | 0810/001 | LAND (GROUND) SPECIFIC TY | : SA-X-17 |
| 2.10.1 | 4029/031 | AVAILABLE NUMBER OF PERSO | : 50 |
| 2.11.1 | 4082/007 | UNIT STATUS CODE | : AMBER |
| 2.12.1.2 | 4163/001 | POL TYPE | : AIRCRAFT FUEL JP8 |
| 2.12.1.3.1 | 4029/032 | POL QUANTITY | : 100 |
| 2.12.1.4.1 | 4082/007 | UNIT STATUS CODE | : AMBER |
| 2.13.1.2 | 4005/001 | MUNITIONS TYPE | : 2.75 ROCKETS |
| 2.13.1.3.1 | 4029/033 | QUANTITY OF AMMUNITION | : 5000 |
| 2.13.1.4.1 | 4082/007 | UNIT STATUS CODE | : GREEN |

Message:
**JVMF K05.15 FIELD ORDERS**
Message Case: 1.01 Operations Plan or Operations Order

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4093/007 | PLAN/ORDER TYPE | : OPERATIONS ORDER |
| 2.1 | 4003/007 | OPERATION IDENTIFICATION | : 0121 |
| 3.1 | 4054/016 | OPLAN/OPORD NAME | : BIG ATTACK |
| 5.1.1 | 4004/012 | ORDER ORIGINATOR | : 112 |
| 5.2 | 4098/001 | YEAR | : 3 |
| 5.3 | 4099/001 | MONTH | : JANUARY |
| 5.4 | 4019/001 | DAY OF MONTH | : 3 |
| 5.5 | 0792/001 | HOUR | : 5 |
| 5.6 | 0797/004 | MINUTE | : 0 |
| 6.1.2.1 | 4004/012 | OVERLAY ORIGINATOR | : 112 |
| 6.1.3 | 4098/001 | YEAR | : 3 |
| 6.1.4 | 4099/001 | MONTH | : JANUARY |
| 6.1.5 | 4019/001 | DAY OF MONTH | : 2 |
| 6.1.6 | 0792/001 | HOUR | : 19 |
| 6.1.7 | 0797/004 | MINUTE | : 0 |
| 6.1.8 | 4170/001 | REPORT/MESSAGE/OVERLAY TY | : OPORD |
| 7.1 | 4079/008 | REORGANIZATION INDICATOR | : NO REORGANIZATION |
| 7.2.1 | 4082/002 | UTR EXECUTION STATUS REQU | : NOTIFICATION NOT REQUIRED |
| 7.3.1 | 4082/003 | UTR EXECUTION STATUS | : EXECUTED |
| 7.4 | 4098/001 | YEAR | : 3 |
| 7.5 | 4099/001 | MONTH | : JANUARY |
| 7.6 | 4019/001 | DAY OF MONTH | : 3 |
| 7.7 | 0792/001 | HOUR | : 5 |
| 7.8 | 0797/004 | MINUTE | : 0 |
| 7.9.1 | 4098/001 | YEAR | : 3 |
| 7.9.2 | 4099/001 | MONTH | : JANUARY |

```
7.9.3         4019/001 DAY OF MONTH             : 3
7.9.4         0792/001 HOUR                     : 5
7.9.5         0797/004 MINUTE                   : 0
8.1.2.1       4004/012 UNIT TO TAKE ACTION      : 115
8.1.7.1.2.1   4162/001 NATURE OF OPERATION      : ATTACK
8.1.7.1.2.2   0281/429 OPERATION LATITUDE       : 572394
8.1.7.1.2.3   0282/429 OPERATION LONGITUDE      : -29158392
8.1.7.1.2.4   4098/007 OPERATION YEAR           : 3
8.1.7.1.2.5   4099/008 OPERATION MONTH          : JANUARY
8.1.7.1.2.6   4019/025 OPERATION DAY            : 3
8.1.7.1.2.7   0792/430 OPERATION HOUR           : 5
8.1.7.1.2.8   0797/429 OPERATION MINUTE         : 0
```

Message:
**JVMF K05.16 LAND MINEFIELD LAYING REPORT**

```
Message Case:  1.02 Land Minefield Laying Report
Index         DFI/DUI  Data Field Label           Data Value
1.2           4004/012 MINEFIELD LAYING UNIT    : 112
1.3           4166/001 MINEFIELD TYPE           : HASTY PROTECTIVE
1.4           4166/005 GENERAL TYPE MINES       : MIXED
1.5           4166/002 DELIVERY METHOD          : ARTILLERY DELIVERY
1.6           4166/004 MINE PLACEMENT           : LAND SURFACE
1.7           4166/006 MINEFIELD REFERENCE DESIG: FM3
1.8.2         0281/428 MINEFIELD LATITUDE       : 12389585
1.8.3         0282/428 MINEFIELD LONGITUDE      : 1497235079
1.9.2         4166/003 MINEFIELD ACTION INDICATO: MINEFIELD CANCEL LAYING
1.9.3         4099/001 MONTH                    : JANUARY
1.9.4         4019/001 DAY OF MONTH             : 3
1.9.5         0792/001 HOUR                     : 14
1.9.6         0797/004 MINUTE                   : 0
1.10.1.2      0281/426 SAFE LANE LATITUDE       : 12497321
1.10.1.3      0282/426 SAFE LANE LONGITUDE      : 1497234960
```

Message:
**JVMF K05.17 OVERLAY MESSAGE**

```
Message Case:  1.03 New Overlay
Index         DFI/DUI  Data Field Label           Data Value
1             4170/003 OVERLAY TYPE             : FIRE PLAN OVERLAY
2             4004/012 OVERLAY ORIGINATOR'S UNIT: 112
7             4047/003 NEW/UPDATE/REPLACE OVERLA: OVERLAY NEW
10.4          4173/014 SYMBOL DIMENSION         : TACTICAL GRAPHICS, FIRE SUPP
10.5          0376/401 IDENTITY, VMF            : HOSTILE
10.6          4173/003 ICON STATUS              : P - PRESENT POSITION
10.7.2        4047/002 ADD/DELETE/UPDATE SYMBOL : ADD SYMBOL
10.7.4.1      4173/015 ENTITY TYPE              : SPACE STATION
10.7.4.2      4173/016 ENTITY SUBTYPE           : ILLEGAL - 7
10.7.4.10.3.2 0281/437 SYMBOL LATITUDE          : 185172
10.7.4.10.3.3 0282/437 SYMBOL LONGITUDE         : 23395979
10.7.4.11.14. 0700/401 WEAPON TYPE              : ARTILLERY
```

Message:
**JVMF K05.18 MOPP**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4082/006 NBC POSTURE/STATUS       : NBC GARMENT WORN
```

Message:
**JVMF K05.19 ENTITY DATA MESSAGE**

```
Message Case:  1.01 Graphical Reference Entity Type is Fire Mission
Index         DFI/DUI  Data Field Label           Data Value
1.2           4004/012 ORIGINATOR               : 1111
1.3           4019/001 DAY OF MONTH             : 4
1.4           0792/001 HOUR                     : 5
1.5           0797/004 MINUTE                   : 58
1.6           0380/001 SECOND                   : 0
1.7           4205/001 GRAPHICAL REFERENCE ENTIT: FIRE MISSION
1.8           4046/004 ENTITY ID SERIAL NUMBER  : 213
1.9           4058/001 ACTION DESIGNATOR        : ADD
1.10.1.1      4057/002 FIRE MISSION TYPE        : GEOGRAPHIC LOCATION
1.10.2.1      4003/001 TARGET NUMBER            : JH6125
1.10.3.4.1    0281/407 TARGET LATITUDE          : 185170
1.10.3.4.2    0282/407 TARGET LONGITUDE         : 23394306
```

Message:
**JVMF K05.20 EXECUTION MATRIX**

Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1.1.1 | 4003/007 | OPERATION IDENTIFICATION | 0203 |
| 1.2.1 | 4054/016 | OPLAN/OPORD NAME | ATTACKOFTOMATO |
| 2.1.3 | 4170/001 | REPORT/MESSAGE/OVERLAY TY | OPORD |
| 2.1.4.1.1 | 4046/002 | MAJOR REVISION SERIAL NUM | 2 |
| 2.1.4.2.1 | 4046/003 | MINOR REVISION SERIAL NUM | 1 |
| 3.1 | 4099/020 | H-HOUR MONTH | JANUARY |
| 3.2 | 4019/038 | H-HOUR DAY | 5 |
| 3.3 | 0792/443 | H-HOUR | 14 |
| 3.4 | 0797/442 | H-HOUR MINUTE | 0 |
| 4.1.2 | 4004/012 | UNIT IDENTIFICATION | 115 |
| 4.1.3.2 | 4085/009 | EXECUTION PHASE NUMBER | 2 |
| 4.1.3.3 | 4029/013 | H+N HOURS | 4 |
| 4.1.3.4.2 | 4173/014 | SYMBOL DIMENSION | WARFIGHTING, SPACE |
| 4.1.3.4.3 | 4173/015 | ENTITY TYPE | CREWED SPACE VEHICLE |
| 4.1.3.4.4 | 4152/006 | ACTIVITY | ATTACKING |

Message:
**JVMF K05.91 GRAPHICAL COMMANDER'S INTENT**

Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4054/016 | OPLAN/OPORD NAME | BIGATTACKCOMMINMG |
| 2.1 | 4004/012 | URN | 115 |
| 4.2 | 4004/012 | URN | 112 |

Message:
**JVMF K07.01 MEDICAL EVACUATION REQUEST**

Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4100/007 | REQUESTOR CALL SIGN | BULLDOG7 |
| 2 | 4004/012 | REQUESTING UNIT IDENTIFIC | 115 |
| 3 | 4098/001 | YEAR | 3 |
| 4 | 4099/001 | MONTH | JANUARY |
| 5 | 4019/001 | DAY OF MONTH | 12 |
| 6 | 0792/001 | HOUR | 14 |
| 7 | 0797/004 | MINUTE | 15 |
| 9 | 4131/001 | MEDEVAC MISSION TYPE | AIR |
| 12.2 | 4129/003 | MEDEVAC MISSION PRIORITY | PRIORITY |
| 12.3 | 4029/021 | NUMBER LITTER PATIENTS | 6 |
| 12.4 | 4029/022 | NUMBER AMBULATORY PATIENT | 10 |
| 12.5.1 | 4124/001 | CASUALTY TYPE | WOUNDED IN ACTION |
| 12.7 | 4079/011 | MEDIC REQUIRED INDICATOR | AFFIRMATIVE |
| 15.1 | 0281/014 | LATITUDE, 0.0051 MINUTE | 43426 |
| 15.2 | 0282/014 | LONGITUDE, 0.0051 MINUTE | 1496663 |
| 16.1 | 4130/001 | ELEVATION, FEET | 120 |
| 20 | 4079/012 | ZONE HOT | AFFIRMATIVE |
| 21.1.2 | 0372/405 | DIRECTION TO THE ENEMY | SOUTH WEST |
| 21.1.3.1 | 4172/001 | HOSTILE FIRE TYPE RECEIVE | SMALL ARMS |

Message:
**JVMF K07.02 CASUALTY REPORT**

Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4029/026 | NUMBER OF CASUALTIES, 1 | 2 |
| 2.1.2.1 | 4147/001 | PAY GRADE | O-4 |
| 2.1.3.1 | 4148/001 | OCCUPATIONAL SPECIALTY | 11 |
| 2.1.4 | 4124/001 | CASUALTY TYPE | AMPUTATION |
| 2.1.5.1 | 4125/001 | BODY PART AFFECTED | HEAD |
| 2.1.6.1.1 | 4150/001 | LAST NAME | JONES |
| 2.1.6.2.1 | 4150/002 | INITIALS | JJ |
| 2.1.6.3.1 | 4085/001 | SOCIAL SECURITY NUMBER | 111111111 |
| 2.1.6.4.1 | 4151/001 | ARMED SERVICE DESIGNATOR | ARMY |
| 2.1.6.5.1 | 4149/001 | ACTUAL OR EXPECTED DISPOS | EVACUATE(D) DECEASED |
| 2.1.7.1 | 0281/423 | BURIAL SITE LATITUDE | 589710 |
| 2.1.7.2 | 0282/423 | BURIAL SITE LONGITUDE | -18924567 |
| 2.1.2.1 | 4147/001 | PAY GRADE | O-6 |
| 2.1.3.1 | 4148/001 | OCCUPATIONAL SPECIALTY | 19 |
| 2.1.4 | 4124/001 | CASUALTY TYPE | PERFORATION |
| 2.1.5.1 | 4125/001 | BODY PART AFFECTED | UPPER EXTREMITIES |
| 2.1.6.1.1 | 4150/001 | LAST NAME | SMITH |
| 2.1.6.2.1 | 4150/002 | INITIALS | BS |
| 2.1.6.3.1 | 4085/001 | SOCIAL SECURITY NUMBER | 222112222 |
| 2.1.6.4.1 | 4151/001 | ARMED SERVICE DESIGNATOR | ARMY |
| 2.1.6.5.1 | 4149/001 | ACTUAL OR EXPECTED DISPOS | EVACUATE(D) DECEASED |

```
2.1.7.1       0281/423 BURIAL SITE LATITUDE     : 357198
2.1.7.2       0282/423 BURIAL SITE LONGITUDE    : 23578163
```

Message:
**JVMF K07.03 LOGISTICS REPORT**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1.2.1         4004/012 UNIT IDENTIFICATION      : 115
1.3           4019/004 EFFECTIVE DAY            : 5
1.4           0792/404 EFFECTIVE HOUR           : 5
1.5           0797/403 EFFECTIVE MINUTE         : 0
1.6.2         4160/001 CLASS OF SUPPLY          : V
1.6.4.4       4029/048 QUANTITY ON-HAND         : 15
1.6.4.5       4029/044 QUANTITY MULTIPLIER      : QUANTITY X 10
```

Message:
**JVMF K07.04 PERSONNEL STATUS**

```
Message Case:  1.01 Transmitting Personnel Status Report
Index         DFI/DUI  Data Field Label           Data Value
1.2           4004/012 UNIT IDENTIFICATION      : 112
1.3           4019/004 EFFECTIVE DAY            : 1
1.4           0792/404 EFFECTIVE HOUR           : 6
1.5           0797/403 EFFECTIVE MINUTE         : 0
1.6.1.2       4122/002 PERSONNEL CLASSIFICATION : ENLISTED
1.6.1.3       4029/061 ASSIGNED NUMBER OF PERSON: 10
1.6.1.4.2     4079/032 GENDER INDICATOR         : MALE
1.6.1.4.3     4029/062 ON-HAND NUMBER OF PERSONN: 8
1.8              4079/108 CREW REGISTRATION INDICAT: NEGATIVE
```

Message:
**JVMF K07.05 EPW/DETAINEE EVACUATION REQUEST/RESPONSE**

```
Message Case:  1.01 EPW/Detainee Evacuation Report
Index         DFI/DUI  Data Field Label           Data Value
1             4079/033 REQUEST/RESPONSE INDICATO: REQUEST
5             4029/064 NUMBER OF PERSONNEL      : 25
6.1.2         4029/064 NUMBER OF PERSONNEL      : 25
6.1.3.1       4079/032 GENDER INDICATOR         : MALE
6.1.4.1       4122/002 PERSONNEL CLASSIFICATION : ENLISTED
6.1.6.1       4127/005 NATIONALITY              : IRAQ (IZ)
6.1.7.1          4169/001 GENERAL PHYSICAL CONDITIO: NON-AMBULATORY STARVED POOR
```

Message:
**JVMF K07.06 CTIL/BRIL ACTION MESSAGE**

```
Message Case:  1.01 Modifying Personnel on the Commander's Tracked Item List (CTIL)
Index         DFI/DUI  Data Field Label           Data Value
1.2           4079/034 CTIL/BRIL INDICATOR      : CTIL
1.3           4058/008 CTIL/BRIL ACTION DESIGNAT: ADD
1.5.1         4148/001 OCCUPATIONAL SPECIALTY   : 19D
1.5.2.1          4148/002 SPECIAL SKILLS IDENTIFIER: H
```

Message:
**JVMF K07.07 MEDICAL UNIT SITUATION REPORT**

```
Message Case:  Not Applicable
Index         DFI/DUI  Data Field Label           Data Value
1             4004/012 ORIGINATOR IDENTIFICATION: 115
2             0281/402 UNIT LATITUDE            : 2397347
3             0282/402 UNIT LONGITUDE           : 23583595
4.2           4004/012 ORIGINATOR OR SUBORDINATE: 116
4.3.2         0281/402 UNIT LATITUDE            : 2397347
4.3.3         0282/402 UNIT LONGITUDE           : 23583595
4.3.4         4079/006 PRESENT/PROPOSED LOCATION: PRESENT LOCATION
4.4.1.2       4124/001 CASUALTY TYPE            : WOUNDED IN ACTION
4.4.1.3       4029/048 QUANTITY ON-HAND         : 3
4.5.1.2       4129/003 MEDEVAC MISSION PRIORITY : PRIORITY
4.5.1.3       4029/048 QUANTITY ON-HAND         : 1
4.10.1.2      4141/003 AMBULANCE TYPE           : TRACKED
4.10.1.3.1    4029/050 QUANTITY AUTHORIZED      : 1
4.10.1.4.1    4029/048 QUANTITY ON-HAND         : 1
4.10.1.5.1    4029/030 NUMBER OF OPERATIONAL VEH: 1
4.13.1.2      4148/003 CRITICAL MOS SHORTAGE    : 11B
4.13.1.3      4029/137 SHORTAGE QUANTITY        : 3
```

Message:
**JVMF K07.08 MORTUARY AFFAIRS SITUATION REPORT**

```
Message Case:  Not Applicable
```

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4099/015 | EFFECTIVE MONTH | : JANUARY |
| 2 | 4019/004 | EFFECTIVE DAY | : 2 |
| 3 | 0792/404 | EFFECTIVE HOUR | : 10 |
| 4 | 0797/403 | EFFECTIVE MINUTE | : 15 |
| 5 | 4004/012 | REPORTING UNIT | : 112 |
| 6 | 4047/004 | REPORT UPDATE INDICATOR | : NEW REPORT |
| 7.1.2 | 4148/003 | CRITICAL MOS SHORTAGE | : 19D |
| 7.1.3 | 4029/137 | SHORTAGE QUANTITY | : 15 |
| 9.1 | 0281/452 | MORTUARY AFFAIRS COLLECTI | : 2385000 |
| 9.2 | 0282/452 | MORTUARY AFFAIRS COLLECTI | : 23724474 |
| 9.3.1 | 4054/039 | MORTUARY AFFAIRS COLLECTI | : 15 |

Message:
**JVMF K07.09 SUPPLY POINT STATUS REPORT**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4170/005 | SUPPLY POINT REPORT TYPE | : DIGITAL FUEL STATUS REPORT |
| 2.2 | 4004/012 | SUPPLY POINT IDENTIFICATI | : 115 |
| 2.3 | 4098/001 | YEAR | : 3 |
| 2.4 | 4099/001 | MONTH | : JANUARY |
| 2.5 | 4019/001 | DAY OF MONTH | : 2 |
| 2.6 | 0792/001 | HOUR | : 16 |
| 2.7 | 0797/004 | MINUTE | : 15 |
| 2.8 | 4102/016 | SUPPLY POINT TYPE | : GROUND VEHICLE REFUEL POINT |
| 2.9 | 0281/453 | SUPPLY POINT LATITUDE | : 556354 |
| 2.10 | 0282/453 | SUPPLY POINT LONGITUDE | : 23762199 |

Message:
**JVMF K07.10 EMERGENCY RESUPPLY REQUEST**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4004/012 | UNIT REQUESTING RESUPPLY | : 115 |
| 2 | 0281/402 | UNIT LATITUDE | : 370678 |
| 3 | 0282/402 | UNIT LONGITUDE | : 23578143 |
| 4.2 | 4160/001 | CLASS OF SUPPLY | : VI |
| 4.3 | 4102/011 | SUPPLY IDENTIFICATION TYP | : DODAC |
| 4.4 | 4102/012 | SUPPLY ITEM IDENTIFICATIO | : 013-2345-34567 |
| 4.5 | 4102/010 | UNIT OF ISSUE | : GROSS (GR) |
| 4.6 | 4029/028 | NUMBER OF SUPPLY ITEMS | : 2 |
| 4.7 | 4029/044 | QUANTITY MULTIPLIER | : QUANTITY X 1 |

Message:
**JVMF K07.11 EMERGENCY RESUPPLY REQUEST RESPONSE**
Message Case: Not Applicable

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4004/012 | UNIT REQUESTING RESUPPLY | : 115 |
| 2 | 4079/112 | APPROVED/DENIED INDICATOR | : REQUEST APPROVED |
| 4.1.2 | 4160/001 | CLASS OF SUPPLY | : VI |
| 4.1.3 | 4102/011 | SUPPLY IDENTIFICATION TYP | : NSN |
| 4.1.4 | 4102/012 | SUPPLY ITEM IDENTIFICATIO | : 013-34567-456732 |
| 4.1.5 | 4102/010 | UNIT OF ISSUE | : CAN (CN) |
| 4.1.6 | 4029/028 | NUMBER OF SUPPLY ITEMS | : 2 |
| 4.1.7 | 4029/044 | QUANTITY MULTIPLIER | : QUANTITY X 10 |
| 5.1 | 4211/001 | RESUPPLY DELIVERY MEANS | : LAND VEHICLE |
| 5.2 | 0281/455 | DELIVERY LATITUDE | : 370678 |
| 5.3 | 0282/455 | DELIVERY LONGITUDE | : 23578143 |
| 6.1 | 4019/001 | DAY OF MONTH | : 2 |
| 6.2 | 0792/001 | HOUR | : 9 |
| 6.3 | 0797/004 | MINUTE | : 45 |

Message:
**JVMF K07.12 TASK MANAGEMENT**
Message Case: 1.01 Call for Support

| Index | DFI/DUI | Data Field Label | Data Value |
|---|---|---|---|
| 1 | 4093/047 | TASK MESSAGE TYPE | : CALL FOR SUPPORT |
| 2.2 | 4152/004 | TASK TYPE | : TRANSPORTATION |
| 2.3.1 | 4152/005 | TASK SUBTYPE | : CLASS VI SUPPLY |
| 2.4 | 4098/001 | YEAR | : 3 |
| 2.5 | 4099/001 | MONTH | : JANUARY |
| 2.6 | 4019/001 | DAY OF MONTH | : 2 |
| 2.7 | 0792/001 | HOUR | : 9 |
| 2.8 | 0797/004 | MINUTE | : 15 |
| 2.9.1 | 4098/001 | YEAR | : 3 |
| 2.9.2 | 4099/001 | MONTH | : JANUARY |

```
2.9.3          4019/001 DAY OF MONTH             : 4
2.9.4          0792/001 HOUR                     : 11
2.9.5          0797/004 MINUTE                   : 15
2.10.1         4098/001 YEAR                     : 3
2.10.2         4099/001 MONTH                    : FEBRUARY
2.10.3         4019/001 DAY OF MONTH             : 3
2.10.4         0792/001 HOUR                     : 9
2.10.5         0797/004 MINUTE                   : 0
2.11.1         0281/014 LATITUDE, 0.0051 MINUTE  : 22114
2.11.2         0282/014 LONGITUDE, 0.0051 MINUTE : 1473635
2.12           4004/012 REQUESTING UNIT          : 115
2.13.1            4004/012 SUPPORTED UNIT POINT OF C: 112
```

Message:
**JVMF K07.12 TASK MANAGEMENT**

```
Message Case:  1.02 Task Order
Index          DFI/DUI  Data Field Label           Data Value
1              4093/047 TASK MESSAGE TYPE        : TASK ORDER
2.2            4152/004 TASK TYPE                : MILITARY POLICE
2.3.1          4152/005 TASK SUBTYPE             : AREA SECURITY
2.4            4098/001 YEAR                     : 3
2.5            4099/001 MONTH                    : JANUARY
2.6            4019/001 DAY OF MONTH             : 8
2.7            0792/001 HOUR                     : 8
2.8            0797/004 MINUTE                   : 15
2.9.1          4098/001 YEAR                     : 3
2.9.2          4099/001 MONTH                    : JANUARY
2.9.3          4019/001 DAY OF MONTH             : 9
2.9.4          0792/001 HOUR                     : 10
2.9.5          0797/004 MINUTE                   : 0
2.10.1         4098/001 YEAR                     : 3
2.10.2         4099/001 MONTH                    : JANUARY
2.10.3         4019/001 DAY OF MONTH             : 15
2.10.4         0792/001 HOUR                     : 17
2.10.5         0797/004 MINUTE                   : 0
2.11.1         0281/014 LATITUDE, 0.0051 MINUTE  : 22325
2.11.2         0282/014 LONGITUDE, 0.0051 MINUTE : 1473635
2.12           4004/012 REQUESTING UNIT          : 115
2.14.1         4004/012 TASKED UNIT              : 116
```

Message:
**JVMF K08.01 PREPOSITIONED SUPPLY REPORT**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4159/001 TYPE OF PREPOSITIONED SUP: CONCEALED
2.2            0281/425 PREPOSITIONED SUPPLY LATI: 372362
2.3            0282/425 PREPOSITIONED SUPPLY LONG: 23578140
2.6.2          4160/001 CLASS OF SUPPLY          : VI
2.6.4          4029/028 NUMBER OF SUPPLY ITEMS   : 3
2.6.5          4029/029 NUMBER OF CONTAINERS     : 6
```

Message:
**JVMF K10.01 HOSTILE AIRCRAFT SIGHTING REPORT**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4004/012 URN                      : 112
2              0281/014 LATITUDE, 0.0051 MINUTE  : 33698
3              0282/014 LONGITUDE, 0.0051 MINUTE : 1473614
4              4019/014 OBSERVATION DAY          : 4
5              0792/419 OBSERVATION HOUR         : 10
6              0797/418 OBSERVATION MINUTE       : 15
7              0372/406 DIRECTION TO AIRCRAFT    : NORTH EAST
9              4079/071 LOW/HIGH ALTITUDE INDICAT: BELOW OR EQUAL TO 1000 FEET
10             0371/401 TARGET HEADING           : SOUTHEAST
11             4079/072 MOVEMENT INDICATOR       : MOVING
12.2           1797/001 AIR PLATFORM (AIR PLT)   : RECONNAISSANCE
12.3           0386/013 STRENGTH                 : 2 UNITS
```

Message:
**JVMF K10.02 LOW-ALTITUDE AIR DEFENSE (LAAD) DAMAGE ASSESSME**

```
Message Case:  Not Applicable
Index          DFI/DUI  Data Field Label           Data Value
1              4004/012 URN                      : 115
2              0281/014 LATITUDE, 0.0051 MINUTE  : 32665
3              0282/014 LONGITUDE, 0.0051 MINUTE : 1485140
```

```
4             4099/015 EFFECTIVE MONTH          : JANUARY
5             4019/004 EFFECTIVE DAY            : 7
6             0792/404 EFFECTIVE HOUR           : 8
7             0797/403 EFFECTIVE MINUTE         : 15
8.2           0804/001 AIR SPECIFIC TYPE        : B-1 (ROCKWELL)
8.3           1898/001 NUMBER OF AIRCRAFT       : 2
8.4           4029/075 NUMBER OF AIRCRAFT DESTRO: 1
8.5           4029/076 NUMBER OF AIRCRAFT DAMAGE: 1
9             4029/008 NUMBER OF WEAPONS        : 2
```

## 15-3. USMTF Messages

This window shows the USMTF Available Message List window and displays the message template. These windows work the same as the Package 11 windows.

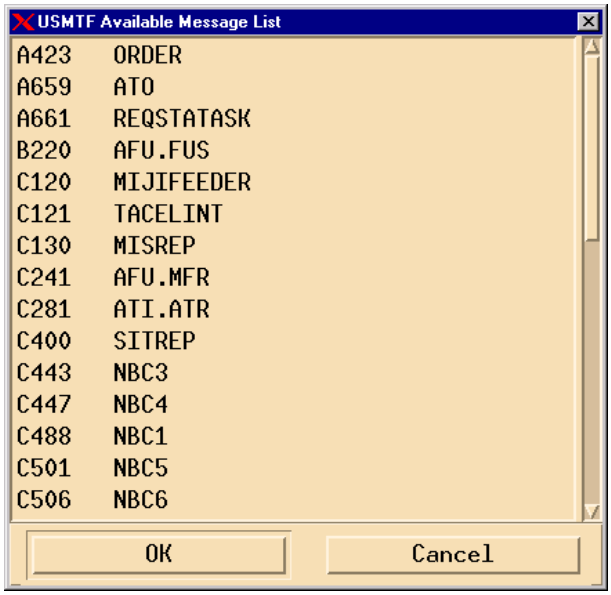


**Figure 15-6 USMTF Available Message**

| Msg Number | USMTF Message Name |
|---|---|
| | |
| A423 | ORDER |
| A659 | ATO |
| A661 | REQSTATASK |
| B220 | AFU.FUS |
| C120 | MIJIFEEDER |
| C121 | TACELINT |
| C130 | MISREP |
| C241 | AFU MFR |
| C281 | ATI ATR |
| C400 | SITREP |
| C443 | NBC3 |
| C447 | NBC4 |
| C488 | NBC1 |
| C501 | NBC5 |
| C506 | NBC6 |
| C507 | NBC CDR |

| | |
|---|---|
| D210 | FM CFF |
| D281 | ATI.TCRIT |
| D670 | AIRSUPREQ |
| E400 | PLANORDCHG |
| E500 | AIREWARN |
| F002 | GENADMIN |
| F014 | RI |
| F015 | RRI |
| F541 | AKNLDG |
| F756 | ACO |
| G131 | INTSUM |
| G489 | NBC2 |
| S201 | SPRT.GEOM |
| S202 | FP ATL |
| S305 | TIDAT |
| S308 | ATI IEWTC |
| S309 | ENSIT |
| S507 | RESOURCES |
| S508 | SUPCONSTRAINT |
| S509 | CTIL |

## 15-4. GDU/MCA Messages

This window shows a list of the GDU/MCA types of messages available for the operator to enter into the Event List and displays the message template associated with the message type highlighted. The double click action defaults to this edit operation.

**NOTE**

Those messages that Bold are denoted with "VIEW ONLY" can only be viewed and will not be able to be saved and transmitted, but the fields available in the message can be examined

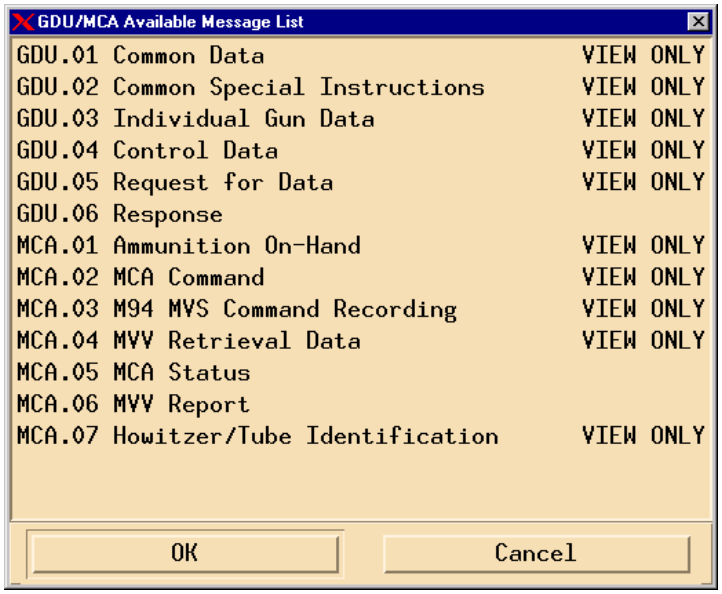


**Figure 15-7 GDU/MCA Messages**

This section is designed to give an example of how to setup a GDU/MCA message. Further information on valid data can be obtained by activating the help feature inside of each field. The GDU/MCA interface will display an error message if the operator attempts to activate the "OK" button with an invalid message.

| Msg Number | Message Name |
|---|---|
| | |
| GDU.01 | Common Data |
| GDU.02 | Common Special Instructions |
| GDU.03 | Individual Gun Data |
| GDU.04 | Control Data |
| GDU.05 | Request for Data |
| GDU.06 | Response |
| MCA.01 | Ammunition On-Hand |
| MCA.02 | MCA Command |
| MCA.03 | M94 MVS Command Recording |
| MCA.04 | MVV Retrieval Data |
| MCA.05 | MCA Status |
| MCA.06 | MCA Report |
| MCA.07 | Howitzer/Tube Identification |

### 15-4-1. GDU/MCA GDU.04 Control Data

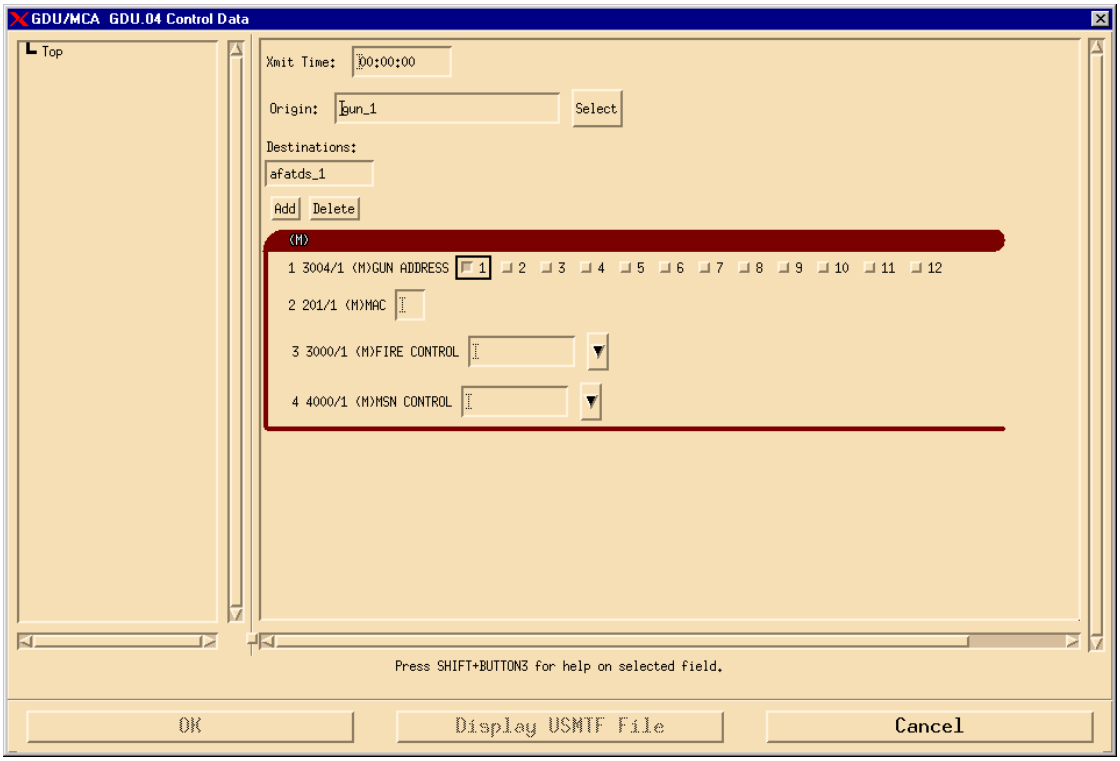


**Figure 15-8 GDU Control Data**

# SECTION 2
# GENERIC MESSAGES

## 15-5. GENERIC Messages

The Generic Message was designed with ease of use in mind. Several of the most common PK11 and JVMF messages were chosen and combined into the Generic Message type. The interface is less complicated than the traditional PK11 and JVMF message formats. The operator need only enter a few basic fields and when chosen for transmission a valid message will be generated and sent. The interface does not allow for every single type of any specific message to be created, nor is it intended to test specific field requirements of AFATDS. It has been designed to allow an operator to easily simulate the most basic capabilities of SISTIM messages.

Generic Messages can also be copied to the Originating Units message specification using a very simple interface. From the Event List the operator should choose copy.

The operator can then choose whether to copy to another Generic Message or to PK11 or JVMF depending on what the Originating Unit of that message is. After selecting the message type and selecting “OK” a new message will be placed on the TOEL.

### 15-5-1. Generic Fire Request

The Generic Fire Request is made up of the PK11 K02.04 Call for Fire and the JVMF K02.04 Call for Fire. This message has been designed to allow the operator to send a simple Call for Fire message to AFATDS with some of the most common fields. The sections for Target Type and Shell/Fuze Data have been made simpler by using the common AFATDS types. Also the message has been broken up into logical sections to hopefully alleviate any confusion on what data is required in order to have the information necessary to transmit a valid message.

### 15-5-2. Generic ATI or Artillery Target Intelligence

The Generic ATI or Artillery Target Intelligence is made up of the PK11 K02.09 Target Data and the JVMF K02.09 Target Data. This message was designed to allow simple creation and transmission of targets. Similar to the generic Fire Request the ATI uses AFATDS Target Types.

### 15-5-3. Generic EOM

The Generic EOM is made up of the PK11 K02.16 End of Mission and the JVMF K02.16 End of Mission. This message is intended to simplify the sending of a “End Mission” case of the End of Mission message. In most cases if the operator enters the target number of the mission he wishes to end this is enough information. The other fields have been included to allow for a little more flexibility but are not required.

### 15-5-4. Generic Geometry

The Generic Geometry is made up of the PK11 K02.15 Coordination Measures and the JVMF K02.15 Fire Support Coordination Measures. This message was designed to allow the operator to easily enter and transmit some of the most common Fire Support Geometries used by AFATDS. Not all of the PK11 and JVMF geometry types can be transmitted via this message. By selecting the Outgoing / New / Generic / Geometry message creates geometries. On the Generic Geometry message insure that the “add to map toggle” is checked to have the geometry displayed on the map.

### 15-5-5. Generic FO Command

The Generic FO Command is made up of the PK11 K02.01 Check Fire, the PK11 K02.06 Observer Notify, the PK11 K02.12 On-Call Fire Request, the JVMF K02.01 Check Fire, the JVMF K02.06 Observer Mission Update and the JVMF K02.12 On-Call Fire Command. This message was designed to easily transmit some of the most common Forward Observer commands without having to search for the specific message, which contains that type of command. The Observer Commands that the message allows are SHOT, SPLASH, ROUNDS COMPLETE, READY, CHECK FIRE, CHECK FIRE ALL, CANCEL CHECK FIRE, CANCEL CHECK FIRE ALL, and FIRE

### 15-5-6. Generic Unit Status

The Generic Unit Status is made up of the PK11 K02.51 Unit Situation Report, the PK11 K02.18 Fire Unit Capabilities, the JVMF K02.18 Fire Unit Status, and the K02.37 Observer Readiness Report. This message is intended in most cases to allow the operator to move a unit on the map via the Unit Status messages. There are other fields that allow for weapon range manipulation, but these should be used for Fire Units only.

### 15-5-7. Generic MET Template

The Generic MET is made up of the PK11 K02.03 Met Data, JVMF K02.03 Fire Support Meterological Data, JVMF K03.03 Forecast Meterological Data, JVMF K05.08 Basic Wind Report, and the JVMF K03.05 Observed Weather Information and Effects messages. This message is intended to allow the operator to send meteorological data.

# CHAPTER 16.
# ACRONYMS

**- A -**

| | |
|---|---|
| ACO | Airspace Control Order |
| AFATDS | Advanced Field Artillery Tactical Data System |
| AFCS | Automatic Fire Control System |
| AFU FUS | Ammunition Fire Unit-Fire Unit Status |
| AFU MFR | Ammunition Fire Unit-Mission Fired Report |
| AIRSUP REQ | Air Support Request |
| ASAS | All Source Analysis System |
| ATHS | Airborne Target Hand-off System |
| ATI ATR | Artillery Target Intelligence-Artillery target Report |
| ATI IEWTC | Artillery Target Intelligence-Intelligence and Electronic Warfare Target Coordination Message |
| ATO | Air Tasking Order |

**- B -**

| | |
|---|---|
| BCS | Battery Computer System |
| BDE | Brigade |
| BN | Battalion |
| BOM | Bit Oriented Message format |

**- C -**

| | |
|---|---|
| CBRR | Counter Battery Radar Q-37 |
| CCU | Compact Computer Unit |
| CFF | Call For Fire |
| CFL | Coordinated Fire Line |
| CHA | Chemical Hazard Area |
| Cn Btry | Cannon Battery |
| CNO | Can Not Observe |
| COLT | Combat Observation/Lasing Teams |
| COM | Character Oriented Message format |
| COMINT | Communications Intelligence |
| CP/FDC | Command Post/Fire Direction Center |
| CPH | Copperhead |
| CRI | Coordinated Illumination |
| CROS | Crossover Geometry |

**- D -**

| | |
|---|---|
| DAA | Damage Avoidance Area |
| DC | Danger Close |
| DCT | Digital Communication Terminal |
| DMD | Digital Message Device |
| DNL | Do Not Load |
| DNO | Did Not Observe |
| DSA | Dead Space Area |

**- E -**

| | |
|---|---|
| ELINT | Electronic Intelligence |
| EOM | End of Mission |
| EPLRS | Enhanced Position Location and Reporting System |

**- F -**

| | |
|---|---|
| FASCAM | Family of Scatterable Mines |
| FBCB2 | Future XXI Battle Command Brigade and Below |
| FCS | Fire Control System |
| FDDM | Fire Direction Data Manager |
| FDS | Fire Direction System |
| FED | Forward Entry Device |
| FF | FireFinder |
| FFE | Fire For Effect |
| FIST | Fire Support Team |
| FL | Flash Ranging |
| FL | Front Line |
| FLOT | Front Line of Troops |
| FM | Fire Mission |
| FO | Forward Observer |
| FOCMD | Forward Observe Command |
| FOS | Forward Observer Station |
| FOWOL | Forward Observer Without Laser |
| FSCL | Fire Support Coordination Line |
| FSCM | Fire Support Coordination Measure |
| FSE | Fire Support Element |
| FSO | Fire Support Officer |

**- G -**

| | |
|---|---|
| GDU | Gun Display Unit |
| GSM | Ground Station Module |
| GSRA | Ground Surveillance Radar |
| GT | Gun Target |
| G/VLLD | Ground/Vehicular Laser Locator Designator |

**- H -**

| | |
|---|---|
| HE | High Explosive |

**- I -**

| | |
|---|---|
| ICM | Improved Conventional Munitions |
| IFCS | Improved Fire Control System |
| IR | Airborne Infrared |

**- J -**

| | |
|---|---|
| JSTARS | Joint Surveillance Target Attack Radar System |
| JVMF | Joint Variable Message Format |

**- L -**

| | |
|---|---|
| LRRP | Long Range Reconnaissance Patrol |
| LSFZ | Laid FASCAM Safety Zone |

**- M -**

| | |
|---|---|
| MBC | Mortar Ballistic Computer |
| MLRS | Multiple Launch Rocket System |
| MMS | Mass Mounted Sight |
| MTO | Message To Observer |

**- O -**

| | |
|---|---|
| OBCO | Observer Location |
| OBSR | Observer Not Artillery |
| OPFAC | Operational Facilities |
| OPS | Operations |

**- P -**

| | |
|---|---|
| PI | Photo Interpretation |
| Plt FDC | Platoon Fire Direction Center |
| POW | Prisoner of War |
| PRAND | Prone and Standing troops in target area |
| PROVER | Prone with overhead Cover troops in target area |
| PRUG | Prone and Dug-in |
| PSFZ | Planned FASCAM Safety Zone |

**- Q -**

| | |
|---|---|
| Q36 | Counter Mortar Radar Model Number |
| Q37 | Counter Battery Radar Model Number |

**- R -**

| | |
|---|---|
| RAAMS | Remote Anti Armor Mine System |
| RFA | Restrictive Fire Area |
| RFFE | Repeat Fire For Effect |
| RFL | Restrictive Fire Line |
| RKTMSL | Rocket Missile |
| RPV | Remotely Piloted Vehicle |

**- S -**

| | |
|---|---|
| SISTIM | Simulator/Stimulator |
| SORING | Sound Ranging |

| | |
|---|---|
| SLAR | Side Looking Airborne Radar |
| SPLL | Self-Propelled Launcher Loader |

**- T -**

| | |
|---|---|
| TA | Target Acquisition |
| TACAIR | Tactical Air |
| TACFIRE | Tactical Fire Direction System |
| TBMCS | Theater Battle Management Core System |
| TCIM | Tactical Communication Interface Module |
| TGTB | Target Base |
| TOEL | Time Ordered Events List |
| TOF | Time of Flight |
| TOT | Time On Target |
| TTF | Time to Fire |

**- U -**

| | |
|---|---|
| UCU | Ultra Computer Unit |
| USMTF | US Message Text Format |
| UDP | User Datagram Protocol |

**- V -**

| | |
|---|---|
| VA | Vertical Angle |
| VI | Vertical Interval |
| VT | Variable Time Fuse |

**- W -**

| | |
|---|---|
| WP | White Phosphorus |