JCEOI and LOADSETS

FOR

DUMMIES®

Guides and steps to help produce a JCEOI and LOADSET for the Spectrum Manager

A Reference for the Rest of Us!

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THIS REFERENCE IS BASED ON USING JACS VERSION 1.6. THE MAJORITY OF SELECTIONS/CHOICES AND DATA INPUT IS THE SAME WITH V1.5. SOME MENUS MAY HAVE CHANGED

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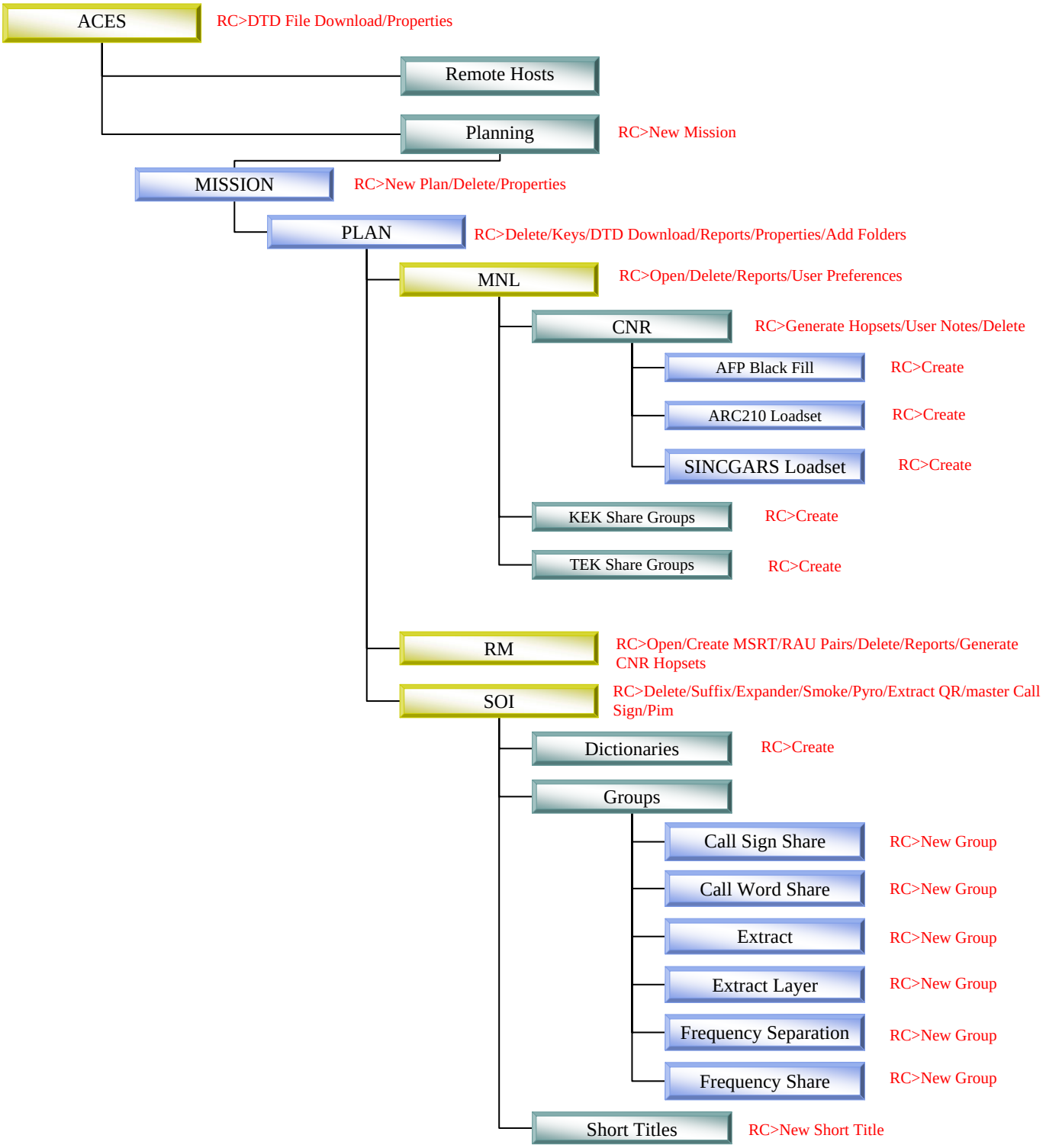
JACS MENU MAP

Red Items are Right Click Options



JACS Setup

- After installing for the first time, ensure that the Unique Unit Identifier (UUI) is filled
  - Create Unique Unit Identifier (*Used to provide unique key tag generation for each ACES Workstation*) This **HAS** to be done in order to generate Key Tags/TSK's etc…
  - **Right Click** on Globe > Properties>
  - This brings up JACS Properties
    - Unique Unit Identifier Tab
      - Enter Alpha Character, 4 Numbers
  - After entering the UUI, enter any user preferences pertaining to:
    - Default Folders Tab (*The Default Folders user preference allows the user to set up the default planning folder(s) that will be created when a new plan is created. The creation of these folders is based on the currently installed modules. Only modules that are installed and have been setup up as a user's default folder in the user's preference will be created.*)
      - For Joint use of JACS, select:
        - Resource Manager
        - Signal Operating Instructions
        - Master Net List
          - Combat Net Radio
      - All other folders are Army Unique Usage unless otherwise noted.
    - KEY Tags (*The key tags user preference allows the user to set up the default key tag information that will be used in key creation and generation.*)
      - ***DTD Download (The DTD Download user preference allows the user to set up the default key tag format, data transfer device type as well as the default DTD download folder that will be used in a DTD download operation.)***

CREATE MISSION/PLAN/MASTER NET LIST

1. Create New Mission/Plan
    a. **Right Click** on PLANNING>New Mission
        i. Enter Mission Name
        ii. Select Classification
        iii. Enter any description
    b. **Right Click** on new MISSION>New Plan
        i. Enter Plan Name
        ii. Select Classification
        iii. Enter the Crypto Effective Date, normally the begin date for the plan
        iv. Enter Duration Date, normally the length of the plan's duration
    c. Add Folders if not set up in the Default Folders Tab of JACS Properties
        i. **Right Click** PLAN>Add Folders
        ii. Seelct folders needed. NOTE: FOR JACS, ONLY NEED:
            1. Resource Manager
            2. Signal Operating Instructions
            3. Master Net List
            4. Combat Net Radio
2. Open Plan, expand folders into view. **Right Click** on MNL>OPEN
3. Create a Master Net List (MNL)
    a. Enter Net Name, or Entity Name i.e. ARFOR, AFFOR etc.
    b. Select Net Type from Drop Down Box
    c. Enter Frequency if fixed, or Frequency band. Can be typed in manually
    d. Add the following data if known, These are common information items that most Spectrum Managers use, but they are not the only ones to use:
        i. XSC **Transmitter State/Country. SFAF Data Item Number 300.**
        ii. XAL **Transmitter Antenna Location. SFAF Data Item Number 301.**
        iii. EMS **Emission Designator. SFAF Data Item Number 114.**
        iv. PWR **Transmitter Power. SFAF Data Item Number 115**
        v. XLL **Transmitter Antenna Coordinates. SFAF Data Item Number 303**
        vi. FREQ Sep
        vii. ORG Code
        viii. Net ID Shows the Net Id. This field is editable and only applies to the CNR planning network
        ix. Chnl Space Shows the Channel Spacing. This field is editable.
        x. Cue Upper Limit Shows the Cue Upper Limit. This field is editable and only applies to the CNR planning network
        xi. C/S
        xii. C/W
        xiii. EP ID
    e. Add any other information you need.
4. Always VALIDATE/SAVE if given the option. If you attempt to select a menu option and it is grayed out, check to see if you have to VALIDATE/SAVE.
5. In JACS v1.6, the user has the option to create a user defined view of the MNL, or select a pre-defined view i.e. ALL/CJTF/JTF, COMSEC, GROUPS etc. To create a user defined view, endure MNL is VALIDATED/SAVED.

a. Go to TOP MENUS
b. Select MNL>User Views
c. Name the new view
d. Select whichever filed you want to include in the view. You can select fields that are the same as common SFAF items.

CREATE RESOURCES

1. After Plan and folders have been expanded, **Right Click** on RM>OPEN
2. **Right Click** on screen and select NEW
3. In the ATTRIBUTES Tab fill in:
    a. Resource Name: Name identifying the Emitters i.e. LMR etc…
    b. Resource Type: Recommendation is to change to SOI. If it is not at SOI then JACS will not marry the resource to the nets during the FREQ Analysis and/or Generation of JCEOI. If the resource is specifically for Hopset/MSRT Pairs, then leave as RAW at this time.
    c. Transmit State/Country Location: Enter the SFAF Item 300/XSC data from the nets in MNL that will be using this resource
    d. Transmit Antenna Location: Enter the SFAF Item301/XAL data from the nets in the MNL that will be using this resource
    e. Station Class: Enter the Station Class of the nets in the MNL that will be using this resource
    f. Transmitter Power: Enter the Transmitter Power of the nets in the MNL that will be using this resource
    g. Emission Designator: Enter the Emission Designator of the nets in the MNL that will be using this resource

    ******NOTE: THE EMISSION DATA ENTERED INTO THE RESOURCE ATTRIBUTES MUST BE VERBATIM AS IT IS IN THE MNL FOR THE NETS USING THIS RESOURCE OR ELSE AN ERROR WILL BE GENERATED DURING JCEOI GENERATION*****
4. In the Frequency List Tab fill in:
    a. Start Freq: M32.00
    b. Stop Freq: M33.50
    c. Increment: K25
    d. Then hit the Add Range button.
5. The Frequency Map shows the layout of all the frequencies and number of frequencies
6. The Statistics Tab gives stats pertaining to the resource just created

CREATE SUFFIX/EXPANDER, SIGN/COUNTERSIGN, SMOKE/PYRO, EXTRACT PACKET QUICK REFERENCE

Suffix/Expander

1. **Right Click** on SOI>Suffix/Expander
2. Use the default Suffix titles in the 1-17 column, or import a predetermined list. In the 18-20 column, enter the suffix for the title i.e.
    a. COMMANDER 06
    b. XO 03
    c. 1SG/CSM 07
3. Select the Expander tab and use the default Expanders in column 1-18 or import a predetermined list. In the 19-20 column, enter the expander for the title i.e.
    a. COPILOT X
    b. FORWARD B
    c. MAIN C
    d. DRIVER W

Sign/Countersign

1. To create a predefined S/CS list, **Right Click** on SOI>Sign/Countersign
2. Select a dictionary to use from the drop down window, if available.
3. If there is no dictionary, type in 20 random words that have no relationship to each other. They can only be between 2-10 characters in length. If you want JACS to randomly pick S/CS, then you must create that dictionary in later steps.

Smoke/Pyro

1. To create predefined smoke meanings, **Right Click** on SOI>Smoke/Pyro
2. In the predefined smoke menu, highlight the colored smoke, then highlight the meaning of the smoke. While both smoke and meaning are highlighted, select the "Accept Smoke Pair" button on the bottom. Do this for all the smoke pairs to be defined.
3. To create predefined pyro meanings, **Right Click** on SOI>Smoke/Pyro
4. In the predefined pyro menu, highlight the colored pyro, then highlight the meaning of the pyro. While both pyro and meaning are highlighted, select the "Accept Pyro Pair" button on the bottom. Do this for all the pyro pairs to be defined.

Extract Packet Quick Reference

1. ACES allows you to create the Quick Reference pages to be included in the Extract Packet and Master Call Sign Book. These Quick Reference pages can be included in the Extract Packet and Master Call Sign Book when they are being created. When you are creating the Extract Packet Quick Reference pages, the current working page number will appear in the lower right of the ACES main screen. The page numbers are important because during the SOI packet creation, these page numbers are used to identify the pages required to be included in the packet.
2. To create the extract packet quick reference, **Right Click** >SOI>Extract Packet Quick Reference.
3. In the Packet Quick Reference Edit window, type in the desired information.
4. When you have finished typing, select File>Save from the menu to save all pages. Once the Save option has been selected, the Extract Quick Reference pages will be saved and you can include these pages in the SOI packet during the SOI packet creation.

CREATE DICTIONARIES

1. To create a new dictionary, expand SOI, **Right Click** >Dictionaries>New Dictionary
2. Type in the dictionary name
3. Select the type of dictionary. All dictionaries are created the same way.
4. Either manually type words into the dictionary or import words in from a .TXT file.
5. Dictionaries must meet the following criteria:
    a. 15 Char CW Dictionary 6-15 characters
    b. 5 Char CW Dictionary 2-5 characters
    c. CW User Defined Dictionary 2-15 characters
    d. Color Words Dictionary 2-16 characters
    e. S/CS Dictionary 2-10 characters
6. If importing a text file, you will receive an error if all words do not meet the above criteria plus:
    a. Invalid character on a specific line number
    b. Characters exceed maximum length for the dictionary creating
    c. Characters do not meet the required length for the dictionary creating
7. If a net has a fixed call word in the MNL, the word must be in the dictionary that is selected during the generation process.

CREATING GROUPS

To the various type of groups, expand SOI>Groups and select from the following:

a. Call Sign Share Group
b. Call Word Share Group
c. Extract Group
d. Extract Layer
e. Frequency Separation Group
f. Frequency Share Group

Call Sign Share Group

1. **Right Click** >Call Sign Share>New Group
2. Type in the name of the group

Call Word Share Group

1. **Right Click** >Call Word Share>New Group
2. Type in the name of the group

Extract Group (An Extract Group identifies the nets that will appear on the same extract of an SOI packet)

1. **Right Click** >Extract>New Group
2. On the General tab, enter the name of the group
3. Select Extract Group Tab
    a. Select the format of the group
    b. Select the nets that you want to appear on this extract of an SOI packet by clicking the desired net in the Available Nets box; the selected net's border becomes bolded. Move the mouse cursor until the arrow with a small gray box appears. Once the arrow with a small box appears, hold down the left mouse. While holding down the left mouse, drag the selected net to the desired Net Name cell in the Group Contents box and drop the selected net in the desired Net Name

cell. The selected net appears in the Group Contents box. You can also enter the MNL line number in the desired MNL Line cell and click the mouse cursor into the next row to select the desired net.

Extract Layer
(An Extract Layer identifies the Extract groups that will appear together in an SOI packet. The line represents the line position that the group will appear in the layer.)

1. **Right Click** >Extract Layer>New Layer
2. Enter a unique name for the layer
3. Any unassigned extract groups will appear in the Unassigned Extracts window
4. Select the groups that you want to appear in this layer of an SOI packet by clicking the desired group in the Unassigned Extracts box; the selected group's border becomes bolded. Move the mouse cursor until the arrow with a small gray box appears. Once the arrow with a small box appears, hold down the left mouse. While holding down the left mouse, drag the selected group to the desired Group Name cell in the Layer Contents box and drop the selected group in the desired Layer Name cell. The selected group appears in the Layer Contents box

Frequency Separation Group

1. **Right Click** >Frequency Separation>New Group
2. Enter the name of the group
3. On the Frequencies tab:
    a. In the Minimum Frequency field, enter the minimum frequency separation that is acceptable; the 'What I will accept" frequency
    b. In the Desired Frequency field, enter the frequency separation that is desirable, if possible; the "Wish List" frequency separation

Frequency Share Group

1. **Right Click** >Frequency Share>New Group
2. Enter the name of the new frequency share group

Short Titles

1. **Right Click** >Short Title>New Short Title
2. Enter Short Title name

Generate Editions

1. Expand to the Short Title just created
2. **Right Click** >on the short title>New Edition
3. Enter the following info:
    a. Alpha Character A- ZZ
    b. Classification
    c. Any description
    d. Select create to generate the edition and leave the window open to create more editions. Suggestion is to create 3 editions. A edition for issue and use, B edition on the shelf in case A gets compromised, and C on the back shelf if B goes active.

CREATE FREQUENCY ANALYSIS OF MASTER NET LIST

This operation calculates the number of SOI frequencies, which will be required to meet the current MNL requirements. This operation takes into account the number of frequencies matching the required SOI frequency generation requirements, which are already contained in the MNL.

JACS, as a default only produces a SFAF from the Frequency Analysis with the following items, if they are filled out in the MNL:

1. 005 010
2. 102 110
3. 113 114
4. 115 140
5. 141 144
6. 300 301
7. 502 803
8. 804 910

To add other line items to the SFAF:

1. **Right Click** >MNL>User Preferences
2. Select SFAF Proposal Tab
3. Check the line item numbers that are to be included in the SFAF proposal that JACS will create

To create the Frequency Proposal and SFAF:

1. Open the MNL
2. Select MNL>SOI>Frequency Analysis from the top menu
3. The frequency analysis results will be displayed in a standard view where the SFAF hierarchy (STC, XSC, XAL, EMS, PWR and DOR), Channel Space and Frequency Band will be displayed in a table format. The expanded view will display all of the items in the standard view plus the selected extended SFAF attributes
4. The end result is to have dashes in the Freqs Needed for all the bands listed.
5. If there are frequencies needed, create a SFAF proposal:
    a. Select SFAF>Create Proposal
    b. In the Generate SFAF Proposal window, select the browse button, path to where the file will be saved and name the file
    c. Enter the requestors name
    d. Select Full or Compressed from the format options

STEPS AFTER CREATING JACS SFAF PROPOSAL

1. Import JACS SFAF Proposal into SXXI
2. Nominate and create assignments off of the JACS Proposal
3. Export assignments in single column SFAF format
4. Import these assignments into JACS, into the plan that is being used
5. Import from PLAN>PLAN, or RM>PLAN
6. Go into JACS

REPLICATE SFAF COLUMNS

(This **Replicating the SFAF Columns** operation is used to automatically populate all nets that share the same **Classification**, **XSC**, **XAL**, **STC**, **EMS**, **PWR**, and **DOR** as the selected net with the same SFAF data assigned to the selected net. The Full classification of a net is used in the matching criteria.Any NIU data created from this import will be at the end of the MNL named DEFAULT NET X. There may be more than one entry.

1. Highlight however many of the DEFAULT nets were created
2. Select NET>Replicate SFAF Columns
    a. Choose:
        i. Replicate all columns: Updates matching nets with the exact same data as the master net. This includes clearing cells on matched nets that correspond to a blank master net cell and overwriting filled in data on the matched net with data from the master net.
        ii. Replicate all filled in columns: Will only overwrite data in matched nets cells for cells the master net has data
        iii. Merge-fill in blanks: Will not overwrite any data for the matched net and also fill in data for empty cells corresponding to cells that have data in the master net.
    b. After replication is done, delete all DEFAULT nets
3. Go into RM
    a. Rename any of the new resources that were imported from SXXI
    b. Change those resources from RAW to SOI. If left in RAW, JACS will not use those resources during the generation process

NET IDs/EP IDs

1. Net Ids
    a. Sort MNL by Net Type. SINCGARS nets will be at top
    b. Ensure that all SINCGARS nets have a 3 digit Net ID, a single digit and XX or XXX. Any X in the Net ID column will be randomly generated by JACS.
2. EP Ids
    a. Place a 1 in the EP ID column for all SINCGARS nets that will be using the SAME TSK and HOPSET resource
    b. By using different EP ID’s, multiple TSKs can be used while using the same HOPSET

GENERATE JCEOI

1. After all frequency requirements have been fulfilled, verified by using the frequency analysis, proceed to generate the JCEOI
2. If MNL needs to be validated and/or saved, do so at this time
3. To do a Pre-Gen Analysis, on the MNL, select the nets to be generated by highlighting their entire row
4. At the top menu, select MNL>SOI>Pre-Gen
5. Select whatever components to be run thru the analysis, the select OK
6. Not all warnings/errors will be found during the pre-gen. Warnings can be lived with but all errors must be fixed before generation
7. After pre-gen has been run (optional), to generate, on the MNL, select the nets to be generated by highlighting their entire row
8. Either select the G at the top of the MNL, or at the top menu, select NET>SOI

This section provides you with the information on how to generate an SOI.

GENERATION INFORMATION

ACES allows the operator to generate selected components of SOI. Additionally, the operator can generate SOI for a selected group of nets.
Components can be individually selected to be generated including Suffixes/Expanders, Net IDs, Frequencies, Colorwords, Call Words, and Call Signs.
Additionally, the operator can select to generate Smoke, Pyro, Signs/Countersigns, Running Passwords, and PIM Codes using a random assignment performed by the software or using the assignments already created by the operator (predefined). When using random assignments for Signs/Countersigns and Running Passwords, a dictionary must be selected from which the assignments will be generated.
When generating a new SOI edition, only the **Unassigned Fixed** option is selectable.

When performing generation for a previously generated edition, **Replace Existing Generated Data for Selected Nets** and/or **Update Generated Edition** and/or **Unassigned Fixed** options are selectable.

Replace Existing Generated Data for Selected Nets option generates new assignments for the selected nets regardless whether generated data has been previously assigned to the nets. When this option *is not* selected, existing generated assignments *will not* be replaced even for selected nets.

Update Generated Edition option updates the selected SOI edition with the current planned Extract Groups. During the update, Last Letter Uniqueness (LLU) will be validated.

Unassigned Fixed option randomly assigns a fixed frequency and/or fixed call word and/or fixed call sign to the selected nets.

Update ALE Data option updates the data of ALE.

SINCGARS NET UNIQUE FUNCTIONS

After all frequency requirements have been fulfilled certain tasks must be accomplished for SINCGARS nets. These tasks are not needed to generate a JCEOI, but it is easy to do at this time

1. HOPSETs should be created
2. TEK/KEK share groups created
3. EP ID Groups must be created
4. Crypto (TSK, Key Tags) generated
5. LOADSET created

HOPSET

1. Go to MNL>CNR
2. **Right Click** >CNR>Generate Hopset
3. In Resource filed, use drop down menu to select resource to be used from the RM. The resource to be used for Hopset Generation MUS BE IN RAW
4. Select Target Definition from the drop down menu. Frequency Hopping (FH) memory channel. There are six FH memory channels in the RT-1523. Each net definition is capable of storing a limited amount of FH data. Each Target (Net) Definition can hold a maximum of 16 words of memory. The words compose the FH data necessary for the SINCGARS radio to frequency hop. Net definitions contain a limited amount of local lockout capability. During the ACES Generation of Hopsets, you must select the Target (Net) Definitions for the Hopsets. You will have the following options
    a. Net Def: Net Defined1-16 words, resident memory lockout space
    b. Net Def + L7: Net Defined with Lockout 7 - 17-40 words
    c. Net Def + L7 + L8: Net Defined with Lockouts 7 and 8 - 40-64 words
    d. Common: Common lockouts which are common restrictions to all six channels in the radio. These lockouts are referred to as L1 through L6. This option is rarely used because it causes interoperability problems between two radios using different common lockout sets or not using common lockouts..
    e. There are other pros/cons to selecting from these options that the JACS operator must understand
5. Name the Hopset to be generated
6. Select Generate. Number of Frequencies in Hopset using the selected Net Definition will be displayed
7. Select OK. New resource will be in the RM with above name and the type of resource being SINCGARS HOPSET

TEK/KEK Share Groups

1. By creating these share groups, and placing SINCGARS nets into these share groups, the same TEK/KEK key tag will be generated for all these nets rather than different key tags for each SINCGARS net. This allows for the same TEK/KEK to be issued to all the SINCGARS nets
2. Creating TEK and KEK share groups are done the same way
    a. Under MNL>CNR>TEK Share Group, **Right Click** >TEK Share Group>Create
    b. Name the share group
    c. Select CREATE to create the share group and leave the window open or select OK to create the group and close the window
    d. Open the ML and change the view to COMSEC

e. Sort the MNL on Net Type to bring all SINCGARS nets to top
f. In TEK Share Group, select the group using the drop down menu and place the SINCGARS nets into the appropriate groups. Do the same with KEK Share Groups

Crypto/Key Tag Validation and Generation

1. Crypto Generate and validate:
    a. With the MNL sorted on Net Type, highlight all SINCGARS nets.
    b. Select NET>Crypto-Generate. If this option is grayed out, MNL may have to be validated and/or saved
    c. In the Generate field of the Crypto-Generate menu, select EP/Key Assignments and Tags
    d. In the Key field, select the Source and the classification of the tag
    e. In the Time Space, select the Start date and End date
    f. Select Generate and read any prompts
    g. After Successful Generation message is displayed, select CANCEL to close the window.
    h. Using this method, TSKs will be generated.
2. Option 2
    a. To generate EP definitions (EP Share Groups)
        i. Go to MNL>EP Definitions
        ii. At top of EP Share Group Window, select Keys>Create SINCGARS TSK Key
        iii. In Text ID Field, enter name of TSK
        iv. Select Key Classification from drop down menu
        v. Select Cryptoperiod from drop down menu
        vi. Select Key Tag Classification from drop down menu
        vii. Select Effective Date
        viii. On EDITIONS Tab, select Add Edition for however many editions needed to be generated
        ix. Select OK to close menu
    b. Back in EP Share Group Menu:
        i. Select CNR from net type
        ii. Select the HOPSET resource that will be used.
        iii. Select the TSK just created in the Key Field. If the key is not visible, close the EP Share Group menu, then go back into it

LOADSET Creation

1. Path MNL>CNR>SINCGARS Loadset
2. **Right Click** SINCGARS Loadset>Create
3. In SINCGARS Loadset Tab:
    a. Name the Loadset
    b. Enter the Mission Start Date
    c. Select the Short Title
    d. Select the edition
4. Before going to the Channels Tab, open the MNL and sort on Net Type to bring all SINCGARS nets to top

a. Type in the MNL Line number of the Net to be included in the Loadset in line 1-6 of the channels
b. All columns should automatically get filled out
c. Select Create to CREATE one and leave the window open, or select OK to create on and close the window

PLATFORM, EQUIPMENT, DISTRIBUTION Paths Creation for CT3 Download

1. In order for the LOADSET and JCEOI to be loaded into a DTD that is loaded with CT3 software, PLATFORMS, EQUIPMENT and Distribution Paths must be created for all SINGCARS nets.
2. On the MNL, highlight the first SINCGARS net, **Right Click**, and select OPEN.
3. On the PLATFORM Window, **Right Click** in the filed and select NEW.
4. Type in the platform name i.e., NCOIC, OIC 1SG etc, This must be a unique name and cannot be empty.
5. In the DISTRIBUTION PATH field, enter the distribution path. One naming convention can be the Higher Echelon of the net. This naming convention should be simple. See below:

   To avoid confusion it is important to use unique names for *platforms* and equipment, and also to follow some standard naming conventions for distribution paths. SOPs developed by local signal units should take precedence over this *ACES Online Operator's Manual*. Following are some naming convention suggestions.

   Distribution Paths

   The *Distribution Path* or *Path Name* is a text string of alphanumeric characters used in certain ACES screens (e.g, **New GP Platform Properties Window, GP Platform Properties Window**, **CNR Add Platform Window**). This Path Name is the mechanism used to simplify the distribution of sets of data from the ACES Workstation to the *DTD* and then from DTD to DTD. Proper distribution path planning will allow the DTD operator at a higher echelon to quickly select sets of data to transfer to lower echelon DTDs

   Using standard naming conventions for the distribution path will help avoid confusion. One recommended format is:

Unit Designation of Highest Echelon DTD	**+**	**Unit Designation of Next Echelon DTD**	**+**	**Unit Designation of Next Echelon DTD**	**…**	**Unit Designation of Lowest Echelon DTD**

Some example distribution paths might be **1BDE3BNACO1PLT** or **82DIV1BDE**.

6. Click or tab the cursor into the **Platform Role** drop-down box. Select the appropriate platform role by clicking the down arrow and selecting one of the available roles from the drop-down list.

NOTE: Only one **NCS** and **ALT** is allowed per CNR net and there *must be* at least one role selected.

New CNR Platform Properties Property Sheet - Field Descriptions

Platform Name:	The unique name for the functional element to which one or more equipments are assigned. This field is modifiable.
Distribution Path:	A text string which simplifies distribution of groups of data from the ACES Workstation to a DTD, and from DTD to DTD.
Platform Role:	Choose a role from **ALT**, **NCS** or **SUB**. **NOTE:** Only one **ALT** and one **NCS** can exist per CNR network. **NCS** Net Control Station **ALT** Alternate NCS **SUB** Subscriber

7. The next step is to create equipment for a CNR platform**.** Open the desired platform, either by selecting **Platform Open** on the menu bar at the top of the main ACES window or **Right Click** and choosing **Open** from the context menu. Once the **Open** option is selected, the platform is opened and displays the list of equipments if any equipments exist under this CNR platform. Once the desired CNR platform is opened, perform the following steps to create CNR equipment.
8. Either select **Equipment New** on the menu bar at the top of the main ACES window or **Right Click** and choose **New** from the context menu. The **New CNR Equipment Properties** Property Sheet appears with the cursor in the **Name** box.
9. Type in the equipment name.
   NOTE: This equipment name *must be* unique for the entire plan and this box *cannot* be empty.
10. Click or tab the cursor into the **Type** drop-down box. Select the appropriate equipment type by clicking the down arrow and selecting one of the available types from the drop-down list.
    NOTE: The available equipment types are based on the frequency of the net that was selected when the net was added to the MNL.
11. When you have finished entering and selecting information, click the appropriate button to complete the operation.

New CNR Equipment Properties Property Sheet- Field Descriptions

Name:	The unique name for the functional position associated with an assemblage of equipments (not the person filling that position). The name must be unique to the platform and to the plan. This field is modifiable.
Type:	Type of equipment used to secure the net. The available types are based on the frequency band of the net

MASTER NET LIST FIELD DESCRIPTIONS

AGN	C/S	C/W	C/S Share	C/W Share	Chnl Spc
Clr/Num	Clr/W	COMSEC Class	Coord	CRKT	Cue Upper Limit
EMS	EP ID	FRQ	FRQ BAND	FRQ Sep	FRQ Share
Guard	Group	ICOM Hopset	JRFL	KEK	KEK Share
Keymat	Line	NATO Pool	Net ID	Net Name	Net Status
Net Type	NonICOM Hopset	Notes	Org Code	Platform KEK	Proj Name
PUSH	PWR	Rad Tun	RAL	Restore	RENT
Reuse Cls	Reuse Pri	Reuse Zn	RLL	RORB	RORBAP
RORBIN	RORBNR	RORBPE	Rrad	RRNT	RSC
RSNT	Sec Class	Spc Inst	Status Date	STC	TAD
TEK	TEK Share	Text	Usage	User	User Code
XAL	Xeqp	XLL	XORB	XORBAP	XORBIN
XORBNR	XORBPE	Xrad	XSC	XSPD	24HR

Sec Class	**Security Classification. SFAF Data Item Number 005.** Data Item 005 has two parts. Part one contains a 2-letter designator representing the security classification of the record and, if applicable, special handling instructions. The second part of the item contains a 10-character field containing the record declassification instructions. The record declassification instructions *must always be entered* if the first character of the security classification is a **C**, **S**, or **T**. **Classification Codes - First Character** **U** - UNCLASSIFIED **C** - CONFIDENTIAL **S** - SECRET **T** - TOP SECRET **Special Handling Codes - Second Character** Special Handling Codes may be required in TOP SECRET, SECRET, or CONFIDENTIAL records to reflect the fact that if the classified data were removed from the record, the remaining UNCLASSIFIED data must still be protected in accordance with the applicable special handling code. Remember, this could apply in instances where SECRET or CONFIDENTIAL records are sent to NTIA as UNCLASSIFIED records for inclusion in the GMF automated database. **A** Approved for public release; distribution is unlimited (DoD Directive

5230.24).

B Releasable to soil country and the North Atlantic Treaty Organization (NATO); otherwise, not releasable outside the US Government in accordance with (IAW) Section 552(b)(1) of Title 5 of the US Code.

E Not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

F Not releasable to foreign nationals and not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

H Releasable to soil country only; otherwise, not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

J Contingency Assignment - The record contains unified commander comments only; not releasable to foreign nationals unless formally coordinated; otherwise, not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

K Permanent assignment. Available for contingency use within the theater after coordination with and approval of the cognizant unified commander - releasable to soil nation; otherwise, not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

N Releasable to NATO; otherwise, not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

P Proprietary; otherwise, not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

The following special handling codes are used within TOP SECRET stand-alone databases and are not to be used within the FRRS worldwide SIPRNET database system:

L Sensitive Compartmented Information (SCI); otherwise, not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

Q Special Category (SPECAT); otherwise, not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

R Special Access Required (SAR); otherwise, not releasable outside the US Government IAW Section 552(b)(1) of Title 5 of the US Code.

Declassification Instructions

For TOP SECRET, SECRET, CONFIDENTIAL records, provide the appropriate

declassification instruction using one of the following formats:

DEYYYYMMDD Declassify on: Enter **DE** followed by the year **(YYYY)**, the month **(MM)** and the day of the month **(DD)**. If the declassification date set at the time of the original classification action is to be extended beyond 10 years, a data entry is required in Data Item 014.

DEOADR Declassify on: Originating Agency Determination Required. If DEOADR is used in a record, an entry is required in Data Item 014.

Examples:
UE
CB, DE20051130
SE, DEOADR

DEXnnnnnnn Declassify on: Exempt from automatic declassification. The letters **nnnnnnn** indicate one or more reasons (see list below) why TOP SECRET, SECRET, CONFIDENTIAL records cannot be automatically declassified. Enter **DEX** followed by one to seven numbers, in numerical order, applicable to the appropriate reason(s) listed below.

1 Reveal an intelligence source, method, or activity, or a cryptologic system or activity.

2 Reveal information that would assist in the development or use of weapons of mass destruction.

3 Reveal information that would impair the development or use of technology within a US weapons system.

4 Reveal US military plans or national security emergency preparedness plans.

5 Reveal foreign government information.

6 Damage relations between the US and a foreign government, reveal a CONFIDENTIAL source, or seriously undermine diplomatic activities that are reasonably expected to be ongoing for a period greater than ten years.

7 Impair the ability of responsible US government officials to protect the president, the vice president, and other individuals for whom protection services, in the interest of national security, are authorized.

8 Violate a statute, treaty or international agreement.

Examples:
SH, DEX1 (one reason for exemption from automatic declassification)
CJ, DEX134 (three

		reasons for exemption from automatic declassification)
	DE25Xn	Declassify on: Permanently valuable information (as defined by the national archivist) is exempt from automatic declassification 25 years beyond the original classification date. (The letter **n** indicates why a TOP SECRET, SECRET, or CONFIDENTIAL record cannot be automatically declassified 25 years after the original classification date.) Enter **DE25X** followed by a number **n** from the applicable paragraph below. Note: When the value of **n** is greater than **1**, an entry is required in Data Item 016. **1** Reveal the identity of CONFIDENTIAL human source, or reveal information about the application of an intelligence source or method, or reveal the identity of a human intelligence source when the unauthorized disclosure of that source would clearly and demonstrably damage the national security interests of the US. **2** Reveal information that would assist in the development or use of weapons of mass destruction.

	3 Reveal information that would impair US cryptologic systems or activities. **4** Reveal information that would impair the application of state-of-the-art technology within a US weapon system. **5** Reveal actual US military war plans that remain in effect. **6** Reveal information that would seriously and demonstrably impair relations between the US and a foreign government, or seriously and demonstrably undermine ongoing diplomatic activities of the US. **7** Reveal information that would clearly and demonstrably impair the current ability of US Government officials to protect the president, vice president, and other officials for whom protection services, in the interest of national security, are authorized. **8** Reveal information that would seriously and demonstrably impair current national security emergency preparedness plans.

		9 Reveal information that would violate a statute, treaty, or international agreement. **Example:** SH, DE25X5	
	Maximum Input Length:	2,10 characters.	
		Input Requirement:	Data Item 005 is *always required*. Enter the overall security classification of the frequency proposal or assignment and the appropriate special handling code if required. (OUS&P requests must have a special handling code included in the security classification. When applicable, each UNCLASSIFIED frequency assignment must have a special handling code so it can be identified as a record that has been separated from a CONFIDENTIAL group defined in the *DOD Frequency Assignment Security Classification Guide*.) As a security precaution, this data item cannot be deleted from a record and can only be changed by use of Data Item 006.
Net Name	**JCEOI Master Net List Name. SFAF Data Item Number 983.** Data Item 983 is the name entered in the JCEOI Master Net List in JACS. This is a required item for the JCEOI.		

	Maximum Input Length: 16 characters. **Input Requirement:** Enter the name of the net the assigned frequency will support. Revised Battlefield Electronics CEOI System/Revised DTD (Data Transmission Device) Software (RBECS/RDS) will only support 16 characters. Common Tier Three (CT3) will only support 15 characters and will truncate the last character. **Examples:** CINC1 JTF17 3BDE CMD
Net Type	Describes the net's equipment type. **MNL GENERAL** has no associated equipment within ACES and is used to include the net in SOI. As components are installed beneath MNL, net types become available for selection by the operator that are related to the newly installed component. **MNL GENERAL** - This net type is used for nets that may require SOI assignments but will not be Crypto Generated to produce COMSEC key tag assignments. Therefore, platforms and equipments cannot be added to MNL GENERAL nets. For SOI frequency assignments, MNL GENERAL nets will receive only one frequency assignment. **CNR SINCGARS** - This net type is used for planning SINCGARS nets. When planning SINCGARS nets, the operator has the option to add or not add platforms and equipment. If downloading loadsets via distribution path, platforms and equipment are required. If manually creating loadsets, platforms and equipment are **NOT** required to Crypto Generate the net's COMSEC key tag assignment. **CNR RATT** - Radio Teletype net type used for planning division level HF Nets. **CNR NRI** - Net Radio Interface net type used for planning CNR to Mobile Subscriber Equipment (MSE) radio interface nets. **CNR Common Use** - Net type used to plan nets that have equipment participating in multiple frequency bands. **CNR Non Secure** - Net type used for planning non-secured networks. These net types cannot be crypto validated and generated.
FRQ	**Frequency. SFAF Data Item Number 110.** Data Item 110 is the frequency band or discrete frequency assigned to the unit and/or required for the equipment described in the assignment. A reference frequency, if included, is the assignment of a suppressed or reduced carrier sideband. **Maximum Input Length:** 11 or 11-11 or 11(11) characters. **Input Requirement:** This data item is *always required*. Enter the discrete frequency or frequency band assigned to the unit and/or required for the equipment described in the assignment. A reference frequency, if included in parenthesis, is the assignment of a suppressed or reduced carrier sideband. For a frequency band

assignment, enter the lower frequency and the upper frequency (separated by a dash) with the frequency unit indicator preceding the lower frequency. An upper frequency range unit indicator is required if the units of the upper frequency range is different from the units of the lower frequency range, e.g. 110. K2000-M35. For certain operations, the assignment of a range of frequencies (frequency band) may be required in lieu of a specific operating frequency. These types of assignments shall only be requested when specific frequencies will not satisfy the requirements. Frequency band assignments are normally authorized for the following:

a. Transmitters which automatically sweep through all frequencies in a band.

b. Radiosonde transmitters operating in either of the bands: M400.15 - 406.0 or M1670 - 1700.

c. Frequency-agile radar beacons (racon) operating in either of the bands: M2900 - 3100 or M9300 - 9500.

d. Transmitters that use automatic frequency selection based on changing propagation conditions along the transmission path.

e. Transmitters that automatically pause at 15 or more specific operating frequencies within a band.

f. Operations that require the use of 15 or more specific operating frequencies within a band for Research, Development, Test and Evaluation (RDTE) purposes.

g. Operations that involve a multitude of mobile radiolocation or radionavigation transmitters. Whenever possible, at the option of the applicant, operational frequencies may be recorded in Data Item 503.

h. Tactical and/or training assignments (above 30 Megahertz (MHz)) that require the use of 15 or more specific operating frequencies within a band.

i. Operations devoted exclusively to Electronic Warfare (EW), Electronic Countermeasures (ECM), and/or Electronic Counter-Countermeasures (ECCM). For sideband operations, enter the reference frequency in parentheses after the assigned frequency.

Precede the frequency value with unit indicators as follows:

K if frequency is less than 30 MHz

M if frequency is at least 30 MHz, but less than 100GHz

G if frequency is at least 100 GHz, but less than 3THz

T if frequency is 3 THz or greater

	Insert a decimal point only if there is a significant digit to the right of the decimal point. **Examples:** K17034 K6737.5(6736) K2000-M30 For frequency band(s) that are to be excluded from a given frequency band, enter the excluded bands in Data Item 111. **Examples:** M13250-15700 M14770-14930 **Special Consideration for Processing Frequency Entries** Frequency(ies), frequency bands, or reference frequencies listed in FRRS records cannot be changed. Frequency data is required (as part of a computer triple check of frequency (Data Item 110), record security classification (Data Item 005), and record serial number (Data Item 102)) to ensure that the correct record is being modified. Failure to enter the complete frequency, upper frequency limit, or reference frequency (Data Item 110) when using a Modification action is a frequent mistake that is overlooked during computer processing; **however, mistakes made in entering the security classification of Data Item 110 are not overlooked during computer processing.** The security classification of Data Item 110 is processed the same way as a data item being modified using a Modification action. For example, a modification input of **110. M9345** would change a record containing **110. (C)M9345-9465** to read **110. M9345-9465**. In this example, the frequency data (M9345-9465) remained unchanged, but the classification of the frequency data was **declassified from (C) to (U)**.
FRQ BAND	**Frequency Band**. See **FRQ** for information.
XSC	**Transmitter State/Country. SFAF Data Item Number 300.** Data Item 300 is an authorized abbreviation for the state, country, or geographical area in which the transmitting station is located. This data item cannot be changed in an FRRS record containing 144. Y. **Maximum Input Length:** 4 characters. **Input Requirement:** This data item is required. Enter the name or standardized abbreviation of the state, country, or area in which the transmitting antenna is located. **Examples:** IN

	LANT SPCE
XAL	**Transmitter Antenna Location. SFAF Data Item Number 301.** Data Item 301 is the name of the city, base, or geographical area of operation within which the transmitting antenna is actually located. **Maximum Input Length:** 24 characters. **Input Requirement:** This data item is required. Enter the name of the city, base, or geographical area where the transmitter antenna is located. Abbreviate the data entry if necessary; however, if an abbreviation is not required, the entry should be spelled the same as that in the US postal zip code directory or applicable gazetteer. After being entered the first time, all future entries for that same location should be spelled the same. If the transmitter antenna location is the same as the entry in Data Item 300, the antenna location should be abbreviated using the same abbreviation as that entered in Data Item 300. In addition to the above, the following will apply: a. The following standard abbreviations will be used even if the entry is less than 24 characters: **Abbreviation** — **Location Word** **ARPT** — Airport **ARA** — Army Area **CP** — Camp **CY** — City **CGD** — Coast Guard District **CO** — County **DI** — District **DIV** — Division **FT** — Fort **IAP** — International Airport **IS** — Island(s) **LNB** — Large Navigational Buoy **MT** — Mont, Monte, Mount(s)

MTN	Mountain(s)
MAP	Municipal Airport
PG	Proving Ground(s)
PT	Point
ST	Saint

b. If the location name exceeds 24 characters after applying the standard abbreviation(s) and the entry has not been previously used, then shorten the entry to 24 characters and enter the full text in Data Item 801 for review by the assignment authority.

If an area of operation is selected, it may be described as a radius, in kilometers, extending from a given location. For example, if an assignment is for transmission anywhere within a 50-kilometer radius of Dallas, then insert DALLAS in this data item and the radius in Data Item 306 (Authorized Radius). An area of operation may also be described by geographical coordinates. For example, if an assignment is for one or more land mobile stations operating south of 33 degrees north in the state of Arizona, then insert AZ in this data item and the coordinate data in Data Item 530 (Authorized Areas).

An area of operation within several states may also be described in this data item as US or USA, with the included or excluded state being shown in Data Item 531 (Authorized States). Similarly, US&P may be used if the area includes a possession. For locations described as an area of operation, note that operations might not occur in every square mile of the area selected and the area described might overlap into states not shown in Data Item 300 (State/Country).

Although the data inserted shall normally be geographical names or descriptions, exceptions may be made for experimental operations, mobile operations where the state/country and antenna location data items are identical (such as 300. PAC, 301. PAC, etc.), and/or space operations. For an assignment to an experimental station, other than one in space, or to a mobile station having identical state/country and antenna location names, words such as AIRCRAFT, BALLOONS, or SHIPS may be used, as appropriate. For an assignment to a station aboard a geostationary satellite, insert GEOSTATIONARY. For an assignment to a station aboard a nongeostationary satellite, insert NONGEOSTATIONARY. For an assignment to a station located on a natural object in space, insert the name of the object, e.g., MOON.

Examples:
FT BRAGG
NASHVILLE

	NONGEOSTATIONARY
STC	**Station Class. SFAF Data Item Number 113.** Data Item 113 identifies the functional use of the assigned frequency at a particular transmitting station. See the *Frequency Resource Record System (FRRS) Standard Frequency Action Format (SFAF), MCEB PUB 7*, Annex A to Appendix A for a list of acceptable station class symbols and their definitions. The suffix *R* is included if a station is used primarily as a repeater and operates in the bands 29.89-50 (exclusive Government use), 138-144, 148-148.9, 150.05-150.8, 162-174, and 406.1-420 MHz. **Maximum Input Length:** 4 characters. **Input Requirements:** Enter one or more standard station class symbol(s). (Data items 113, 114, 115 and (116 for Europe only) are interrelated, and an entry in any of the three data items must be accompanied by a corresponding entry in the other data items.) **Example:** FX
EMS	**Emission Designator. SFAF Data Item Number 114.** Data Item 114 identifies the necessary bandwidth and emission classification symbols. The bandwidth can be determined by using formulas shown in the *ITU Radio Regulation, CCIR Recommendations*, or the *NTIA Manual*. Emission classification symbols consist of the three required symbols and the two optional symbols shown in Table A-B-1 and A-B-2 in Annex B to Appendix A of the *Frequency Resource Record System (FRRS) Standard Frequency Action Format (SFAF), MCEB PUB 7*. **Maximum Input Length:** 11 characters. **Input Requirement:** Enter one or more emission designator(s) containing the necessary bandwidth and the emission classification symbols. Enter the necessary bandwidth using the first four characters (three digits and a unit designator letter are required), with the unit designator in the position the decimal would normally occupy. Use: **H** If the value is less than 1000 Hz **K** 1 KHz to values less than 1000 KHz **M** 1 MHz to values less than 1000 MHz **G** 1 GHz or greater. A doppler shift shall not be included in the frequency tolerance or bandwidth of emission; however, when a doppler shift is significant, it should be reported in Data Item 520.

	Example: 3K00J3E See Appendix A to the *Frequency Resource Record System (FRRS) Standard Frequency Action Format (SFAF), MCEB PUB 7* for more examples.
PWR	**Transmitter Power. SFAF Data Item Number 115.** Data Item 115 identifies the maximum transmitter power output authorized to be used. **Maximum Input Length:** 9 characters. **Input Requirement:** Enter one or more power data entries. Enter (1) carrier power (pZ) for A3E sound broadcasting in the broadcasting service, (2) mean power (pY) for other amplitude modulated emissions using unkeyed full carrier, and for all frequency modulated emissions, and (3) peak envelope power (pX) for all emission designators other than those referred to in (1) and (2) above, including C3F television (video only). Express the power to a maximum of five decimal places and precede the entry with the unit designator as follows: **W** If power is less than 1000 watts **K** If power is at least 1 KW but less than 1000 KW **M** If power is at least 1 MW but less than 1000 MW **G** If power is 1 GW or greater. **Examples:** W0.5 K1.5
User	**Operating Unit. SFAF Data Item Number 207.** Data Item 207 indicates the name or designation of the organization using the frequency assignment. **Maximum Input Length:** 18 characters. **Input Requirement:** This data item is required. Enter the short name or designation of the organization using the frequency assignment. For CINCPACFLT: Enter ACFT and/or SHIPS when Data Item 300 equals PAC, LANT, INDO, etc. **Examples:** 602TCW SUBRON18 517ARTY
XLL	**Transmitter Antenna Coordinates. SFAF Data Item Number 303.** Data Item 303 is the World Geodetic System 1984 (WGS 84) datum latitude and longitude

	(expressed in degrees, minutes, and seconds) of the transmitter antenna location entered in Data Item 301. **Maximum Input Length:** 15 characters. **Input Requirement:** This data item is required except when the site named in Data Item 301 is an area of operation for which coordinates cannot be applied or for nongeostationary satellites. Enter geographical coordinates (degrees, minutes, and seconds) for the antenna location. If the seconds are not known, insert 00 for the seconds, except in the case of navigation aid system (NAVAIDS), geostationary satellites, and microwave facilities where seconds are required. Use leading zeros as appropriate for degrees, minutes, or seconds. Degrees latitude require two digits; degrees longitude require three digits. Enter N or S for latitude and E or W for longitude. If GEOSTATIONARY has been entered in Data Item 301, enter the latitude as 000000N and the longitudinal position of the satellite (in degrees, minutes, and seconds east or west). Note, when older maps are used, the coordinates may vary as much as 300-400 meters from locations determined by using DOD standard WGS 84 datum maps or Global Positioning System (GPS) equipment. Organizations are encouraged to obtain GPS equipment to determine the position of fixed antennas. **Examples:** 214216N1171039W (Coordinates for a fixed location) 000000N1750000E (Coordinates for a geostationary satellite)
Xrad	**Transmitter Authorized Radius. SFAF Data Item Number 306.** Data Item 306 defines the area of operation for a portable, mobile, or transportable transmitter station. This area is expressed as a radius in kilometers extending from the geographical coordinates listed in Data Item 303. **Maximum Input Length:** 5 characters. **Input Requirement:** If the station is portable, mobile, and/or transportable, and a circular area is used to describe the area of operation, enter a radius (in kilometers) from the coordinates listed in Data Item 303 to describe the area in which the transmitter station will operate. And the suffix T to the entry if the radius applies only to the transmitter station, or B if the radius applies to both the transmitter and receiver stations (Note: When both fixed and mobile stations are to transmit on the same frequency, leave this data item blank and enter the radius of the mobile station id Data Item 406). **Examples:** 150B (Indicates a 150-kilometer radius of operation for both transmitter and receiver stations)

	30T (Indicates a 30-kilometer radius of operation for the transmitter)
Xeqp	**Transmitter Equipment Nomenclature. SFAF Data Item Number 340.** Data Item 340 has two parts. The first part identifies the type of equipment (government, commercial, or unassigned) and the second part identifies either the standard military nomenclature or the commercial make and model number of the equipment at each specific transmitter station location. If both a military nomenclature and a commercial model number are assigned to the same equipment, the military nomenclature will be used. **Maximum Input Length:** 1,18 characters. **Input Requirement:** This data item is required. Enter the equipment type code followed by the equipment system or component nomenclature for the transmitter location. (If available, the system nomenclature is preferred rather than the component nomenclature; however, either is acceptable. Data items 340 and 343 are interrelated, and an entry in Data Item 340 should be accompanied by a corresponding entry in Data Item 343, if known.) Enter one of the following equipment type codes: **G** Government nomenclature **C** Commercial model number **U** Unassigned nomenclature After the equipment type code, enter a comma and then the nomenclature subject to the following: a. For a government equipment nomenclature, enter the standard military nomenclature. **Examples:** G,AN/GRC-103 (A system nomenclature) G,T128 (A transmitter component nomenclature) b. If only a commercial model number is available, indicate the manufacturer of the equipment, using the manufacturer's code listed in Annex D to Appendix A of the *Frequency Resource Record System (FRRS) Standard Frequency Action Format (SFAF), MCEB PUB 7*, followed by the model number. If no manufacturer code exists or is unknown, enter the full name of the manufacturer in Data Item 801. **Example:**

	C,MOTH23FFN1130E (A commercial handie-talkie manufactured by Motorola, model number H23FFN1130E. A partial nomenclature such as MOTH23 is incomplete since it applies to several different models of Motorola handie-talkie. The manufacturer's name and the complete model number should be obtained from data plates on equipment whenever possible) c. If the nomenclature includes a modification, insert MOD and a number, if applicable, immediately following the nomenclature. For the word MARK, insert MK immediate following the nomenclature. **Example:** G,T238MK1 d. If the transmitter does not have an assigned government nomenclature or commercial model number, enter the manufacture's name and a brief description of the equipment listed in Data Item 801. **Examples:** COLLINS RADIO EXPERIMENTAL RADAR
RSC	**Receiver State/Country. SFAF Data Item Number 400.** Data Item 400 is an authorized abbreviation for the state, country, or geographical area in which the receiving station is located. The approved list of abbreviations are listed in Annex C to Appendix A of the *Frequency Resource Record System (FRRS) Standard Frequency Action Format (SFAF), MCEB PUB 7*. **Maximum Input Length:** 4 characters. **Input Requirement:** This data item is required. Enter the name or abbreviation of the state, country, or area in which the receiving antenna is located. **Example A:** NC (a single or first occurrence for a receiver) **Example B:** TN,R01 (an example of two receivers) SPCE,R02

RAL

Receiver Antenna Location. SFAF Data Item Number 401. Data Item 401 is the name of the city, base, or geographical area of operation within which the receiving antenna is actually located.

Maximum Input Length: 24 characters.

Input Requirement: This data item is required. Enter the name of the city, base, or geographical area where the receiver antenna is located. Abbreviate the date entry if necessary; however, if an abbreviation is required, the entry should be spelled the same as that in the US Postal Zip Code Directory or applicable gazetteer. After a name has been entered the first time, all future entries for that same location should use the same spelling. If the receiver antenna location is the same as the entry in Data Item 400, the antenna location will be abbreviated using the same abbreviation entered in Data Item 400.

a. In addition to the above, the following standard abbreviations will be used even if the entry is less than 24 characters.

Abbreviation	Location Word
ARPT	Airport
ARA	Army Area
CP	Camp
CY	City
CGD	Coast Guard District
CO	County
DI	District
DIV	Division
FT	Fort
IAP	International Airport
IS	Island(s)
LNB	Large Navigational Buoy
MT	Mont, Monte, Mount(s)
MTN	Mountain(s)

	MAP Municipal Airport **PG** Proving Ground(s) **PT** Point **ST** Saint b. If the location name exceeds 24 characters after applying the standard abbreviation(s) and the entry has not been previously used, then shorten the entry to 24 characters and enter the full text in Data Item 801 for review by the assignment authority. If an area of operation is involved, it may be described as a radius, in kilometers, extending from a given location. For example, if an assignment is for transmission anywhere within a 50-kilometer radius of Dallas, then insert DALLAS in this data item and the radius in Data Item 306 (Authorized Radius). An area of operation may also be described by geographical coordinates. For example, if an assignment is for one or more land mobile stations operating south of 33 degrees north in the state of Arizona, then insert AZ in this data item and the coordinate data in Data Item 530 (Authorized Areas). An area of operation within several states may also be described in this data item as US or USA, with the included or excluded state being shown in Data Item 531 (Authorized States). Similarly, US&P may be used if the area includes a possession. For locations described as an area of operation, note that operations might not occur in every square mile of the area selected and the area described might overlap into states not shown in Data Item 300 (State/Country). While the data inserted shall normally be geographical names or descriptions, exceptions may be made for experimental operations, mobile operations where the state/country and antenna location data items are identical (such as PAC PAC, etc.), and/or space operations. For an assignment to an experimental station, other than one in space, or to a mobile station having identical state/country and antenna location names, words such as AIRCRAFT, BALLOONS, or SHIPS may be used, as appropriate. For an assignment to a station aboard a geostationary satellite, insert GEOSTATIONARY. For an assignment to a station aboard a nongeostationary satellite, insert NONGEOSTATIONARY. For an assignment to a station located on a natural object in space, insert the name of the object, e.g., MOON. **Examples:** FT BRAGG NASHVILLE,R05 NONGEOSTATIONARY
RLL	**Receiver Antenna Coordinates. SFAF Data Item Number 403.** Data Item 403 is

	the WGS 84 datum latitude and longitude (expressed in degrees, minutes, and seconds) of the receiver antenna location(s) entered in Data Item 401. **Maximum Input Length:** 15 characters. **Input Requirement:** This data item is required except when the site named in Data Item 401 is an area of operation for which coordinates cannot be applied or for nongeostationary satellites. Enter geographical coordinates (degrees, minutes, and seconds) for the antenna location. If the seconds are not known, insert 00 for the seconds, except in the case of NAVAIDS, geostationary satellites, and microwave facilities where seconds are required. Use leading zeros as appropriate for degrees, minutes, or seconds. Degrees latitude require two digits; degrees longitude require three digits. Enter N or S for latitude and E or W for longitude. If GEOSTATIONARY has been entered in Data Item 401, enter the latitude as 000000N and the longitudinal position of the satellite (in degrees, minutes, and seconds east or west). Note, when older maps are used, the coordinates may vary as much as 300-400 meters from locations determined by using DOD standard WGS 84 datum maps or Global Positioning System (GPS) equipment. Organizations are encouraged to obtain GPS equipment to determine the position of fixed antennas. **Examples:** 422615N1263228W 000000N0925300W
Rrad	**Receiver Authorized Radius. SFAF Data Item Number 406.** Data Item 406 defines the area of operation for a portable, mobile, or transportable receiver station. This area is expressed as a radius in kilometers extending from the geographical coordinates listed in Data Item 403. **Maximum Input Length:** 4 characters. **Input Requirement:** If Data Item 306 is blank and the receiving station is portable, mobile, or transportable and a circular area is used to describe the area of operation, enter the radius (in kilometers from the coordinates entered in Data Item 403) to describe the area in which the receiving station will operate. (Note: When both fixed and mobile stations transmit on the same frequency, an entry in Data Item 406 indicates that the mobile station will be operating within the area described). **Example:** 250
Text	**Agency Free-Text Comments. SFAF Data Item Number 503.** Data Item 503 is used to record agency remarks in the applications processed through the IRAC. These remarks will, therefore, be included in the GMF. **Maximum Input Length:** 35 characters.

	Example: USAF AND USN SPONSORED. Flight levels are required by FAA coordination of frequency assignments within the US&P. Flight level data will be entered in hundreds (100s) of feet. The data entry will be formatted as: FL (followed by three digits). Leading zeros are required. **Examples:** FL160 (This means 16,000 feet.) FL035 (This means 3,500 feet.)
Proj Name	**Exercise Project. SFAF Data Item Number 910.** Data Item 910 provides the Project or Exercise name associated with a temporary assignment or proposal. **Maximum Input Length:** 20 characters. **Input Requirement:** This data item is optional. **Example:** GUARDRAIL
JRFL	**Joint Restricted Frequency List (JRFL) Protection Code. SFAF Data Item Number 985.** Data Item 985 may have two elements. The first element contains the JRFL protection code that is applicable to the frequency assigned to this net. The first data element is followed by a slash and a locally assigned priority code. (Note when this data item is blank the frequency assigned to this net will not be included in the JRFL. **Maximum Input Length:** 1 or 1/2 (1 slash 2) characters. **Input Requirement:** If the frequency assigned to this net is to be included in the JRFL, enter the protection code from the list below that was requested for the corresponding master net list entry. If required, then enter a slash followed by the assigned priority code. **T** Taboo. Safety of life, stop buzzer, etc. If priorities are used, Taboo should always be A1. **G** Guarded. Frequencies with interest to the Intelligence sections. **P** Protected. Frequencies that have importance to the operation, but may be jammed because of geographic or time separation. The locally assigned priority code consists of a letter followed by a number in the range A1 through Z9, with A1 being the highest.

	Examples: T G/F2 P/A4
AGN	**Agency. SFAF Data Item Number 200.** Data Item 200 identifies the agency responsible for managing the frequency assignment. Within the DOD this is normally USA, USN, USAF, or NSA. If an assignment is in joint use by two or more agencies, then both Data Items 147 and 200 must be completed. The responsible DOD agency will be entered as the first data entry in Data Item 147 followed by the other joint agencies. For example, an assignment between USAF and NASA would be entered as **147. USAF, 147/2. NASA** and **200. JNTSVC.** **Maximum Input Length:** 6 characters. **Input Requirement:** Enter one of the following service or agency abbreviations as appropriate: USA, USN, USAF, NSA, or JNTSVC. If JNTSVC is entered, Data Item 147 must be completed. **Example:** USA
FRQ Sep	**Frequency Separation Criteria. SFAF Data Item Number 112.** Data Item 112 identifies the required frequency separation between the different radio sets operated at one transmitter or receiver location. **Maximum Input Length:** 35 characters. **Input Requirement:** Data Item 112 is required for USCINCEUR assignments. It is optional for all others. Enter the required frequency separation ()F), in MHz, between the different radio sets operated at one location. **0.5 MHZ** For a transmitter power below 24.8 dBW (300 watts), enter 0.5 MHz **2 MHZ** For a transmitter power above 24.8 dBW (300 watts), enter 2 MHz **2.0 - 9.9 MHZ** For an exceptionally high transmitter powers, enter values between 2.0 MHz and 9.9 MHz. If radio sets have two or more power stages, enter the dBW value and)F for each power stage. Note: This data is required in order to avoid desensitizing the receivers if two or more UHF radio sets are operated at one location simultaneously, e.g., at a tower. This data also is required to establish the prerequisites for an interference-free radio communication.

	If, in radio relay frequency requests, a minimum frequency separation between a number of transmitters or between a transmitter and a receiver must be observed, these separation frequencies are to be entered. Enter the value in MHz. Use the following abbreviations and separate them with slashes: **TX** - Transmitter **RX** - Receiver **Examples:** 0.5 MHZ 2.0 MHZ TX/TX40MHZ/TX/RX100MHZ
Coord	**Coordination Indicator. SFAF Data Item Number 151.** Data Item 151 indicates whether the IRAC is to coordinate the application with the Canadian Government, the Mexican Government, or both. It is also used for EUCOM assignments coordinated with NATO or host nations, or both. **Maximum Input Length:** 1 character. **Input Requirement:** For assignments near US borders, enter one of the following codes: **C** Coordinated with Canada **M** Coordinated with Mexico **B** Coordinated with both Canada and Mexico For EUCOM and Atlantic Command (LANTCOM) assignments, enter one of the following codes: **M** Coordinated with NATO for inclusion in the Master Radio Frequency List (MRFL) **H** Coordinated with Host Nation **B** Coordinated with both NATO and Host Nation **Example:** C The coordination indicator is also used to identify the US Government coordination channels for those Canadian assignments along the US/Canada border that have been included in the GMF for EMC analysis purposes:

	D Coordinated through NTIA with FAS member agencies **F** Coordinated through FAA **J** Coordinated through the DOD's Joint Chiefs of Staff (JCS) **U** No indication of coordination.
NATO Pool	**NATO Pooled Frequency Code Number. SFAF Data Item Number 505.** Data Item 505 provides data on communications associated with ground transmitters/receivers as well as aircraft operating in the 225-400 MHz frequency band. **Maximum Input Length:** 5 characters. **Input Requirement:** Data Item 505 is required for CINCEUR and USACOM assignments. For air/ground/air and air to air requirements in the 225-400 MHz band, enter a Type Special Assignment code. Use of this data item is optional for all other bands. **Code** — **Type Special Assignment** **B** — air/ground/air requirements **A** — air to air requirements **P** — air/ground/air pool requirement Upon approval of USCINCEUR assignments only, the Frequency Management Subcommittee (FMSC) will assign, from the groupings below, a code number identifying the type and nationality of a frequency pool: 0001-0199 — United States 0700-0999 — Special Operations Pools 2000-2299 — Command and Miscellaneous Pools **Example data input:** P **Example of data returned from FMSC:** P0803
Guard	**Guard Requirement. SFAF Data Item Number 999.** Data Item 999 is a listing of organizations required to guard (monitor) the net.

	Maximum Input Length: 20 characters. **Input Requirement:** Enter organizations required to guard this net, if any. **Examples:** JTF CMD CTR MARFOR CMD CTR AFFOR CMD CTR G-NMZ,TR,CV8
Rad Tun	**Transmitter Radar Tunability. SFAF Data Item Number 345.** Data Item 345 is a coded entry describing the tuning capabilities of both pulsed and nonpulsed radars. **Maximum Input Length:** 2 characters. **Input Requirement:** For all radars, enter one of the following symbols: **FA** Frequency-agile radars that operate on various frequencies within a band, either specified or random mode **FV** Radars that operate on a discrete frequency determined by the characteristics of a fixed magnetron or similar radio frequency generating device **FX** Radars capable of operating on a single discrete frequency **TC** Radars capable of being tuned to any frequency within the requested band **TS** Radars capable of being tuned across the authorized or requested band in discrete steps or increments. This includes crystal control. **Example:** TC
Org Code	**Organization Code.** A number from 1 to 99 that separates the nets into organizations as determined by the operator. For SINCGARS nets, no more than 1000 nets and no more than 100 nets with the same hundreds grouping may be in the same Organization Code.
Net ID	**Net ID.** This Net ID is used when the Net Type is SINCGARS. To fix a SINCGARS Net ID, type the 3-digit Net ID into the MNL. To ensure a Net ID is assigned to a net for a specific hundreds grouping during the SOI generation, enter the number followed by 'XX' (i.e., '3XX'). To assign a random SINCGARS Net ID during the SOI generation, enter 'XXX'.
Chnl Spc	**Channel Spacing.** Channel Spacing is used to determine the raster increments of an SOI frequency that can be assigned to the net. The Channel Spacing is in the SFAF Frequency format.
Cue Upper	**Cue Upper Limit.** Cue Upper Limit is used to limit the Cue frequency assignment

Limit	for a SINCGARS net. During the SOI frequency assignment, the SINCGARS net will not receive a Cue assignment greater than the one specified in the field. The Manual frequency assignment is limited by the FRQ BAND attribute for the net. The Cue Upper Limit is in the SFAF Frequency format.
Reuse Cls	**Reuse Class.** Reuse Class specifies all Reuse Zones with the Reuse Class will use the same set of frequencies during the SOI frequency assignment. Reuse Class is described by a number from 1 to 99.
Resue Zn	**Reuse Zone.** Each net within a Reuse Zone may not be allocated the same frequency as any other net with the same Class and Zone for any one time period. The format of a Reuse Zone is described by a number from 1 to 99.
C/S	**Net Tactical Call Sign. SFAF Data Item Number 987.** Data Item 987 is the tactical Call Sign assigned to the net. A Call Sign is defined as any combination of alphanumeric characters or phonetically pronounceable characters (trigraph), which identifies a communications facility, a command, an authority, an activity or unit; used primarily for establishing and maintaining communications. Call Sign is used by the SOI generation function to determine Call Sign requirement for the net. Enter 'Y' for a randomly assigned Call Sign. Enter 'N' for no Call Sign assignment. Enter 'Letter-Number-Letter' for a fixed Call Sign (i.e., 'N3Y'). **Maximum Input Length:** 3 characters. **Input Requirement:** Enter 'Y' if requesting a tactical Call Sign. The Call Sign will be assigned by JACS, if requested. **Example:** Y
C/W	**Net Tactical Call Word. SFAF Data Item Number 986.** Data Item 986 is the tactical Call Word assigned to the net. A tactical Call Word is defined as a pronounceable word that identifies a communications facility, a command, an authority, an activity, or a unit. Call Word is used by the SOI generation function to determine call word requirement for the net. **Maximum Input Length:** 15 characters. **Input Requirement:** Enter the Call Word directly into the MNL to fix the Call Word for the net or select the dictionary from which the SOI call word assignment function will assign a Call Word. Dictionaries are identified on the MNL by being placed between "[]".
24HR	**24 Hours Call Word Protection.** If selected, the Call Word assigned to the net **will not** be assigned to any other net *in adjacent time periods* of the SOI edition.
EP ID	**Electronic Protection Identifier.** All nets within an EPID share the same Hopset

	resource and TSK. Valid ranges for an EPID are 1 to 99.
Restore	**Net Restoral Priority. SFAF Data Item Number 991.** Data Item 991 is the restoral priority assigned to the net. The first character identifies the type of network, and the second and third numbers prioritize the net within that type of network (as defined in APP-4). This priority will be established by the JTF commander. **Maximum Input Length:** 3 characters. **Input Requirement:** Enter the restoral priority of the net, if any. **Examples:** H15 A01
Keymat	**COMSEC Keymat. SFAF Data Item Number 995.** Data Item 995 contains the short title of the communications security (COMSEC) keying material (Keymat) that is used for the net. **Maximum Input Length:** 15 characters. **Input Requirement:** Enter the COMSEC Keymat for the net, if required. **Examples:** USKAT 619 USKAT 3120
User Code	**User Net/Code. SFAF Data Item Number 208.** Data Item 208 is a unique code that identifies the specific user of the frequency, i.e., the command, activity, unit, project, etc. **Maximum Input Length:** 6 characters. **Input Requirement:** Enter codes as directed by the responsible agency, as follows: **Army** Enter one Net Control Code. **Navy** Enter the one Unit Identification Code (UIC) of either the operating unit identified in Data Item 207 or in Data Item 302. **Air Force** Enter a standard use code as directed by Air Force Frequency Management Agency. **Examples:** N53618 ACEUS
CRKT	**Circuit Type, Line Item, Group Category. SFAF Data Item Number 996.** Data

	Item 996 contains the Circuit Type (first two alpha characters), Line Item (next three digits), and Group Category (last three alpha numeric positions). **Maximum Input Length:** 8 characters. **Input Requirement:** Enter the Circuit Type, Line Item, and Group Category for the net, if required. **Examples:** AO4ZA1 ED1253HO3
Line	**Line Item. SFAF Data Item Number 996.** See CRKT.
Group	**Group Category. SFAF Data Item Number 996.** See CRKT.
Usage	**Band Usage. SFAF Data Item Number 993.** Data Item 993 is the Band Usage of the net, if required. This character defines the frequency band label the net uses. **Maximum Input Length:** 1 character. **Input Requirement:** Enter the corresponding Band Usage of the net, if required. **H** - Hertz **K** - KiloHertz **M** - MegaHertz **Examples:** K M
Notes	**Net Notes. SFAF Data Item Number 998.** Data Item 998 contains the Net Notes associated with any Special Instructions (SPECINST). **Maximum Input Length:** 3 characters. **Input Requirement:** Enter the corresponding abbreviation for the SPECINST, if required. If this data item is to be used, Data Item 997 must contain SPECINST. **Examples:** Y11 AA1
Spc Inst	**JCEOI Special Net Instructions. SFAF Data Item Number 997.** Data Item 997 contains any special instructions applicable to the net. **Maximum Input Length:** 63 characters. **Input Requirement:** Enter any applicable special instructions pertaining to the net listed in data item 983, JCEOI Master Net List Name.

	Examples: AOR WIDE SAR EXERCISE OPERATIONS SPECINST
TAD	**Net Tactical Air Designator. SFAF Data Item Number 988.** Data Item 988 is the TAD assigned to the net. A tactical air designator is a series of alphanumeric characters that can be used to identify frequencies and nets. These designators are usually listed in the Air Tasking Order (ATO) to prevent inadvertent disclosure of classified information. **Maximum Input Length:** 5 characters. **Input Requirement:** Enter the TAD, if known. **Examples:** 3 115
Clr/W	**Net Color Word. SFAF Data Item Number 989.** Data Item 989 is the Color Word assigned to the net. A tactical color word is a series of alpha characters that can be used to identify frequencies and nets. These words are usually listed in the Air Tasking Order (ATO) to prevent inadvertent disclosure of classified information. **Maximum Input Length:** 16 characters. **Input Requirement:** Enter the Color Word, if known. This item must contain information if data is entered in Data Item 990 Color Number. **Examples:** BLUE ORANGE
Clr/Num	**Net Color Number. SFAF Data Item Number 990.** Data Item 990 contains a two digit Color Number assigned to the net. These numbers are usually listed in the Air Tasking Order (ATO) to prevent inadvertent disclosure of classified information. **Maximum Input Length:** 2 characters. **Input Requirement:** Enter the Color Number, if known. A leading zero is required for numbers less than ten. This data item must contain information if data is entered in data item 989 Color Word. **Examples:** 22 03
Push	**Net Push Number. SFAF Data Item Number 992.** Data Item 992 is the Push

	Number assigned to the net. A push number is a series of alpha characters assigned to a frequency to assist the aircrew in moving to an alternate frequency. **Maximum Input Length:** 3 characters. **Input Requirement:** Enter the Push Number of the net, if any. **Examples:** 15 123
Reuse Pri	**Reuse Priority.** Reuse Priority is used by the operator to specify the ability level of a net to be used in a Frequency Reuse Group. Valid range is from 1 to 5 (1 indicates a net that can most be used in a Reuse Group and 5 is the least able to be used in a Reuse Group).
XORBIN	**Transmitter Equatorial Inclination Angle. SFAF Data Item Number 315.** Data Item 315 indicates the angle at which the transmitting NONGEOSTATIONARY satellite's orbit crosses the equator. A nongeostationary satellite is defined as one whose circular orbit does not lie in the plane of the earth's equator and has a specific equatorial inclination, apogee, and perigee. **Maximum Input Length:** 4 characters. **Input Requirement:** Enter an equatorial inclination angle (in degrees), using a decimal point for fractional degrees for nongeostationary space transmitter stations. **Example:** 34.7
XORBAP	**Transmitter Apogee. SFAF Data Item Number 316.** Data Item 316 indicates the point in the orbit of a NONGEOSTATIONARY satellite at which it is farthest from the earth. **Maximum Input Length:** 5 characters. **Input Requirement:** Enter apogee (in kilometers) for nongeostationary space transmitter stations. **Example:** 23500
XORBPE	**Transmitter Perigee. SFAF Data Item Number 317.** Data Item 317 indicates the point in the orbit of a NONGEOSTATIONARY satellite at which it is nearest to earth. **Maximum Input Length:** 5 characters. **Input Requirement:** Enter perigee (in kilometers) for nongeostationary space

	transmitter stations. **Example:** 200
XORB	**Transmitter Period of Orbit. SFAF Data Item Number 318.** Data Item 318 indicates the time it takes for a NONGEOSTATIONARY transmitter satellite to make one complete orbit. **Maximum Input Length:** 7 characters. **Input Requirement:** Enter the period of orbit for nongeostationary space transmitter stations. If the period of orbit is less than 24 hours, enter the time in hours followed by the letter H. If it is 24 hours or more, enter the number of days, followed by the letter D. Enter the data, using a decimal point for a fractional unit. **Example:** 19.6H
XORBNR	**Transmitter Number of Satellites. SFAF Data Item Number 319.** Data Item Number 319 indicates the number of NONGEOSTATIONARY satellite transmitters in a system having similar orbital characteristics. **Maximum Input Length:** 2 characters. **Input Requirement:** Enter the number of nongeostationary satellites in the system. **Example:** 1
XSPD	**Transmitter Power Density. SFAF Data Item Number 321.** Data Item 321 indicates the maximum power density, per hertz (in dBW), supplied to an earth or space station's antenna or to those of terrestrial stations (including experimental) employing earth or space station techniques. For frequencies below 15GHz, the power shall be averaged over the worst 4 KHz band; for frequencies 15 GHz and above, the power shall be averaged over the worst 1 MHz band. The worst 4 KHz and 1MHz bands are defined as those having the highest power density within the assigned emission bandwidth. **Maximum Input Length:** 4 characters. **Input Requirement:** For earth, space, or terrestrial stations (including experimental stations) employing earth or space station techniques, insert the maximum power density per Hz (in dBW) supplied to the antenna. For negative values, insert a minus sign (-) before the value. **Example:** 8

RORBIN	**Receiver Equatorial Inclination Angle. SFAF Data Item Number 415.** Data Item 415 indicates the angle at which the nongeostationary receiving satellite's orbit crosses the equator. A nongeostationary satellite is defined as one whose circular orbit does not lie in the plane of the earth's equator and that has a specific equatorial inclination, apogee, and perigee. **Maximum Input Length:** 4 characters. **Input Requirement:** Enter an equatorial inclination angle (in degrees) for nongeostationary space receiver stations. **Example:** 34.7
RORBAP	**Receiver Apogee. SFAF Data Item Number 416.** Data Item 416 indicates the point in the orbit of a nongeostationary receiver satellite at which it is farthest from the earth. **Maximum Input Length:** 5 characters. **Input Requirement:** Enter apogee (in kilometers) for nongeostationary space receiver stations. **Example:** 23100
RORBPE	**Receiver Perigee. SFAF Data Item Number 417.** Data Item 417 indicates the point in the orbit of a nongeostationary receiver satellite at which it is nearest to earth. **Maximum Input Length:** 5 characters. **Input Requirement:** Enter perigee (in kilometers) for nongeostationary space receiver stations. **Example:** 200
RORB	**Receiver Period of Orbit. SFAF Data Item Number 418.** Data Item 418 indicates the time it takes for a nongeostationary receiver satellite to make one complete orbit. **Maximum Input Length:** 7 characters. **Input Requirement:** Enter the period of orbit for nongeostationary space receiver stations. If the period of orbit is less than 24 hours, enter the time in hours followed by the letter H. If it is 24 hours or more, enter the number of days, followed by the letter D. Enter the data, using a decimal point for a fractional unit.

	Example: 19.6H
RORBNR	**Receiver Number of Satellites. SFAF Data Item Number 419.** Data Item Number 419 indicates the number of nongeostationary receiving satellite in a system having similar orbital characteristics. **Maximum Input Length:** 2 characters. **Input Requirement:** Enter the number of nongeostationary satellites in the system. **Example:** 24
RSNT	**Space Station Noise Temperature. SFAF Data Item Number 470.** Data Item 470 denotes the noise temperature of the receiving space stations. **Maximum Input Length:** 4 characters. **Input Requirement:** Data Item 470 is required only for a space station(s). Enter the space station noise temperature in degrees Kelvin. **Example:** 200,R02
RRNT	**Earth Station System Noise Temperature. SFAF Data Item Number 471.** Data Item 471 denotes the noise temperature of the receiving earth station(s). **Maximum Input Length:** 4 characters. **Input Requirement:** Data Item 471 is required only for a receiving earth station(s). Enter the earth-station system noise temperature in degrees Kelvin. **Example:** 60,R02
RENT	**Equivalent Satellite Link Noise Temperature. SFAF Data Item Number 472.** Data Item 472 denotes the nose temperature at the input of the earth-stations receiver corresponding to the radio-frequency noise power that produces the total observed noise at the output of the satellite link. This excludes noise due to interference coming from satellite links using other satellites and from terrestrial systems. **Maximum Input Length:** 4 characters. **Input Requirement:** This entry is required for each earth station that receives signals from a geostationary space station using a simple frequency changing transponder. Enter noise temperature in degrees Kelvin, taking into consideration all satellite links received by the earth station on the frequency indicated.

	Example: 96,R03
FRQ Share	**Frequency Share Group.** All nets within a frequency share group will be assigned the same frequency during the SOI frequency generation process.
C/W Share	**Call Word Share Group.** All nets within a call word share group will be assigned the same frequency during the SOI frequency generation process.
C/S Share	**Call Sign Share Group.** All nets within a call sign share group will be assigned the same frequency during the SOI frequency generation process.
COMSEC Class	**COMSEC Classification.** COMSEC Classification is used by the operator to specify the classification of data that is to be transmitted across the net. When COMSEC key tags are generated for the net, the same classification specified here will be assigned to the key tag.
Platform KEK	**Platform KEK.** If COMMON KEK is selected, the platforms and equipment assigned to that net will receive the net's KEK designator. If UNIQUE KEK is selected, then each platform and equipment assigned to that net will receive its own unique KEK designator.
Net Status	**Net Status.** Displays the net's COMSEC key tag generation status.
TEK Share	**TEK Share Group.** All nets within a TEK share group will be assigned the same TEK designator.
KEK Share	**KEK Share Group.** All nets within a KEK share group will be assigned the same KEK designator.
TEK	**TEK Designator.** The TEK Designator that is assigned to the net by the ACES COMSEC key tag generation function.
KEK	**KEK Designator.** The KEK Designator that is assigned to the net by the ACES COMSEC key tag generation function.
ICOM Hopset	**ICOM Hopset Designator.** ICOM Hopset Designator used by this net for Hopset fill. Assigned by ACES.
NonICOM Hopset	**Non ICOM Hopset Designator.** Non ICOM Hopset Designator used by this net for Hopset fill. Assigned by ACES.
Status Date	**Net Status Date.** The date which the current net status was generated.