Chapter 9

Preparation of Applications for Frequency Assignment Action

9.1   DETERMINING WHEN THE SUBMISSION OF AN APPLICATION IS REQUIRED

9.1.1   When the Submission of an Application is Required to Obtain Authority to Use a Frequency

1. Except as provided in Section 9.1.2, the submission of an application is required to obtain authority for a federal radio station to use a frequency within the US&P.

2. For satellite systems employing multiple space stations with the same general characteristics, a separate application shall be submitted for each space station on geostationary satellites; for nongeostationary satellites, one application shall be submitted covering all the space stations in the system.

9.1.2   When the Submission of an Application is Not Required to Obtain Authority to Use a Frequency

1. In accordance with the provisions of Section 7.1, the submission of an application is not required to obtain authority to use a frequency above 3000 GHz.

2. Sections 7.3 through 7.17 authorize the use of certain frequencies under specified conditions. The submission of an application is not required to obtain authority for such use, inasmuch as the authority is granted by the Sections cited; however, an application may be submitted, at the option of the applicant, to provide an entry in the GMF.

3. Mobile stations are authorized as a class of station rather than as individual stations, e.g., 25 mobile stations may be authorized by a single application as opposed to 25 applications. The submission of an application is not required to obtain authority for individual mobile stations to use a frequency in those cases in which the frequency is authorized to the agency for use by mobile stations as a class, provided such stations do not exceed the authority granted.

4. Individual user agencies are not required to submit applications to obtain frequency authority for stations operating in a trunked land-mobile radio system. The agency, or designated lead agency managing the system, will obtain authority for all stations that use the system.

5. Transportable operations may be authorized to defined classes of stations, e.g., fixed (FX), by including on the application the record note S362 (Transportable operations). As in the case cited above for mobile stations, transportable operations are authorized to a class of station rather than to individual stations, e.g., 25 fixed stations may be authorized for transportable operations within a specified geographic area by the submission of a single application as opposed to 25 applications. The submission of an application is not required to obtain authority for individual stations to use a frequency for transportable operations, provided the frequency is authorized to the agency for use by such stations as a class, the assignment includes the Record Note S362, and the stations do not exceed the authority of the frequency assignment.

6. A frequency assignment is not required when operation of a radio frequency device is fully contained within an anechoic chamber or a Faraday cage. This use should not cause harmful interference to authorized assignments.

9.1.3   When the Submission of an Application is Required for the Notification of the Use of a Frequency

1. Section 9.1.1 provides for the use of an application to obtain authority for a federal radio station to use a frequency. An application also is used to notify the bringing into use or the intended bringing into use of a frequency under the terms of existing frequency assignment authority or where no frequency assignment authority is required. The cases involving the submission of an application for the notification of the use of a frequency are as follows:

2. The establishment of a station under the authority of a GROUP frequency assignment (see Section 9.6.5) shall be notified prior to the commencement of operations in the following cases:

   a. When coordination with Canada is required (see Section 3.4).
   b. When coordination in respect of the National Radio Quiet Zone is required (see Section 8.3.9).
   c. When coordination in respect of the Table Mountain Radio Receiving Site is required (see Section 8.3.20).

3. The establishment of a station under the authority of a GROUP FREQUENCY ASSIGNMENT shall be

notified prior to or soon after the commencement of operations in the following cases:

    a. For the use of a frequency in the bands:

30.00-50.00 MHz	148.00-149.90 MHz	162.00-174.00 MHz
138.00-144.00 MHz	150.05-150.80 MHz	406.10-420.00 MHz

except for periods so limited (on the order of six months or less) that notification would be impracticable, as determined by the applicant, e.g., certain tactical or training operations.

    b. For the use of a frequency in the bands:

400.15-406.00 MHz	1660.00-1700.00 MHz

by meteorological aids at other than transient locations or for periods in excess of 15 days.

    c. For the use of any frequency authorized by an assignment bearing Note S322 in the NOTES field, except for periods of use so limited (on the order of six months or less) that notification would be impracticable (see Section 9.6.5).

    4. The establishment of a station under the authority of Section 7.5.2 or Section 7.12, may be notified at the option of the agency concerned when it is determined that notification is practicable and desirable.

    5. Section 8.3.11 provides that federal agencies shall coordinate with the IRAC certain uses of frequencies by their stations located outside the US&P. For those uses requiring coordination, such coordination may be affected, at the option of the agency concerned, by the submission of an application for the notification of the use of the frequency.

9.1.4   Applications Required for Private Contractors

    1. If a private contractor requires the use of radio frequencies under the terms of a Federal Government contract, a determination must be made as to whether the federal agency should apply to the IRAC for the frequency authorization or whether the contractor should apply to the FCC. The determination is based upon whether the radio station "belongs to and is operated by" the federal agency or the contractor. Section 305 of the Communications Act of 1934, as amended, provides in part that "Radio stations belonging to and operated by the United States shall not be subject to the provisions of Sections 301 and 303 of this Act. All such federal stations shall use such frequencies as shall be assigned to each or to each class by the President" (see Section 8.2.17).

    2. When the FCC coordinates with the FAS of the IRAC a proposed radio frequency authorization to be used directly in support of a Federal Government contract (excluding a grant), the contracting federal agency is responsible for:

    a. verifying the validity of the contract, and

    b. certifying that the proposed frequency authorization or its equivalent is necessary for the fulfillment of the contract.

9.2   SPECIAL INSTRUCTIONS CONCERNING CERTAIN APPLICATIONS

9.2.1   Applications Handled by Aeronautical Advisory Group or Military Advisory Group

    Application for the use of frequencies in the following bands shall be in accordance with the provisions of Section 9.14 (all ranges are inclusive):

Aeronautical Advisory Group (AAG)		
190-285 kHz	285-435 kHz*	510-535 kHz*
74.800-75.200 MHz	108.000-121.9375 MHz	123.5875-128.8125 MHz
132.0125-137.000 MHz	328.6-335.4 MHz	978-1020 MHz inclusive
1030 MHz	1031-1087 MHz inclusive	1090 MHz
1104-1146 MHz inclusive	1157-1213 MHz inclusive	5000-5250 MHz
* In these bands only applications for stations in the Aeronautical Radionavigation Service (see Table A, Section 6.1.4) shall be sent to the Chairman of the AAG.		

Military Advisory Group (MAG)	
225.0-328.6 MHz	335.4-399.9 MHz

9.2.2 Applications for Sounder Network Stations or Sounder Prediction Stations

Applications will be in accordance with Section 8.2.21 and include the following in the SUPPLEMENTARY DETAILS (SUP) field:

a. Channeling plan(s) (required for all sounder network stations and, as applicable, for sounder prediction stations) FOR EXAMPLE:

(1) First octave: 2.075 to 3.975 MHz, 20 channels spaced 100 kHz.

(2) Second octave: 4.150 to 7.950 MHz, 20 channels spaced 200 kHz.

(3) Third octave: 8.300 to 15.900 MHz, 20 channels spaced 400 kHz.

(4) Fourth octave: 16.600 to 31.800 MHz, 20 channels spaced 800 kHz.

(5) For those sounders in which the tuning rate is independent of the pulse rate (e.g., Sounder types C2, C3, and C4), wherein the specific frequencies sounded differ from scan to scan, a channeling plan is not a meaningful item. In application for such sounders, so state.

b. Pulse duration(s)

c. Pulse repetition rate(s)

d. Pulses per channel

e. Scan rate(s)

f. Scan interval(s) (time between scans)

g. Antenna type

h. Antenna azimuth (if directional, indicate azimuth of major lobe).

9.2.3 Reserved

9.2.4 Use of Data Plots and Coordination Contour Maps

1. When requesting assignments, it may be necessary to review a data plot and/or coordination contour map prior to receiving authority to operate:

a. in the bands:

1710-1850 MHz	2200-2290 MHz	4400-4990 MHz
7125-7250 MHz	7300-7975 MHz	8025-8500 MHz

for fixed stations involving a communications system which consists of more than two stations that are interconnected (transportable stations and those located outside of the western hemisphere and south of the equator are exempt); or

b. in the band 7900-8400 MHz for transportable earth stations.

2. Before requesting data plots or coordination contour maps, and prior to submitting the frequency assignment proposal to NTIA, the proposing agency shall coordinate with other agencies having existing assignments in the frequency band(s) and geographic area(s) in which the proposed assignment is being requested.

a. If coordination is successful between concerned agencies without the need for data plots or coordination contour maps, the frequency assignment proposal shall include a statement in the FAS field that coordination between concerned agencies determined that data plots and/or coordination contour maps were not required.

b. If any concerned agency desires to review a data plot prior to coordinating on the proposed assignment, the applicant shall submit a copy of the application to the FAS Secretary covered by a memorandum indicating data plots are being requested. The applicant shall include a statement in the FAS field that data plots have been requested.

3. For transportable earth station proposals in the band 7900-8400 MHz, successful coordination may not be accomplished even after data plots have been prepared and reviewed. In these cases, the applicant shall provide coordination contour maps to the FAS Secretary. The proposing agency shall include a statement in the FAS field that coordination contour maps have been provided. The methods described in OTP Report 76-99 "Electromagnetic Compatibility of the Department of Defense Ground Mobile Forces Transportable Earth Terminals with Terrestrial Systems within the 7.2-8.4 GHz Spectrum" shall be used to produce the coordination contour maps.

4. The procedures of Section 9.2.4 paragraphs 1 through 3 shall be used in the processing of applications for NEW actions and for MODIFICATION actions which would increase the probability of harmful interference. In the

latter case, the record replacement procedure shall be used in lieu of submitting an assignment modification action.

5. Data plots and coordination contour maps will be distributed by the FAS Secretary to agencies having a direct interest in the proposal.

9.2.5   Frequency Assignments for Use of Federal Fixed Ultrawideband Systems Not Intended for Operation under Sections 7.8 or 7.9

1. Agencies desiring to deploy fixed UWB systems that do not conform to Sections 7.8 or 7.9 and having received spectrum support in accordance with Chapter 10, Section 10.3.8 shall request a frequency assignment prior to operation. Considering the analyses that resulted in spectrum support, no further analysis regarding protection of federal operations should be required to approve these assignments. The FCC will have the opportunity to review the request with respect to protection of non-federal users. Each successfully coordinated operation will be approved to operate on a non-interference basis. Therefore, if in the future any federal agency or non-federal entity implements or expands an authorized system at distances from the UWB devices that are closer than has been demonstrated to be compatible, the UWB system will have to cease operation unless its compatibility can be reestablished prior to operation of the authorized system. Furthermore, in the future, federal agencies or non-federal users may develop new authorized radiocommunication systems that will have to be evaluated. Calculation of associated distances may indicate that the deployment of these new authorized systems will be at distances from the UWB devices that are closer than has been demonstrated to be compatible. Similar to the previously noted situation, the UWB device will need to cease operations unless its compatibility can be reestablished prior to the operation of the authorized system.

2. In this context, NTIA will consider any such requests received from the FCC through the FAS for non-federal UWB operations that do not conform to the FCC Rules Part 15. In each case, the requested location will be evaluated in terms of its separation distance from federal systems on the List. Operations proposed for locations at closer distances will require further evaluation through measurements or analyses. NTIA will support such non-federal use if it falls outside the distances that NTIA has determined as necessary for compatibility with federal systems on the List. This support will only be given with the understanding that such non federal operations will be required to meet the same non-interference requirement with respect to existing and future authorized operations, including ceasing operations unless, prior to the operation of new federal authorized systems, compatibility has been established at distances closer than has been previously demonstrated to be compatible.

9.3   SUBMISSION OF FAS AGENDA MATERIAL

9.3.1   Frequency Assignment Applications

1. Applications from FAS Member Agencies shall be submitted as indicated below. See also Part 14 for frequency applications which will be considered by the AAG or the MAG. Applications classified CONFIDENTIAL may be transmitted employing Spectrum XXI for Department of Defense users or compact discs for other federal agency users.

a. Electronic Transmission. Applications may be transmitted electronically to NTIA, Spectrum Services Division (SSD) via Spectrum XXI for authorized users or the Data Capture and Forwarding System (DCFS) dcfs.ntia.doc.gov.

b. Magnetic Disc. Under special circumstances and by prior arrangement with the FAS Chairman, agencies may physically deliver a magnetic disc to the NTIA/OSM/SSD at:

> U.S. Department of Commerce
> NTIA/OSM/SSD
> Room 1982, Herbert C. Hoover Building
> 1401 Constitution Avenue, N.W.
> Washington, DC 20230

2. U.S. Government agencies that are not members of the FAS and are not represented on the FAS by an FAS Member Agency are represented by the NTIA/OSM/SSD. Those agencies shall send their frequency assignment requests to:

> U.S. Department of Commerce

NTIA/OSM/SSD
Room 1982, Herbert C. Hoover Bldg.
1401 Constitution Avenue, N.W.
Washington, DC 20230

9.3.2 SECRET Documents, Supplemental Material and Administrative Agenda Items

Documents containing SECRET data, supplemental materials supporting frequency assignment applications (such as charts, maps, etc.), and items for the FAS Administrative Agenda shall be forwarded to the FAS Secretary. Items for the administrative agenda must reach the FAS Secretary no later than the close of business four working days prior to the FAS meeting.

U.S. Department of Commerce
NTIA/OSM/SSD
ATTN: FAS Secretary
Room 1982, Herbert C. Hoover Bldg.
1401 Constitution Avenue, N.W.
Washington, DC 20230

9.4 SECURITY CLASSIFICATION OF APPLICATIONS

1. Classified applications forwarded to NTIA in printed form shall contain all of the security information markings specified for documents in Executive Order 13526, dated December 29, 2009. These markings shall be applied as defined by 32 CFR, Part 2001.
2. Special Instructions for Secret Applications.
   a. On applications which are classified SECRET:
      (1) A statement should be inserted at a convenient place to the effect that reproduction by the FAS Secretary is authorized; however, this statement need not be included if the applicant has previously given the IRAC Executive Secretary written authority to reproduce classified documents. In those cases where the statement is inserted on an application, the statement shall not be included on electronically transmitted applications.
      (2) The information that is classified SECRET shall be provided AFTER all other data are completed. An intervening statement preceding the SECRET data noting that the "THE FOLLOWING DATA, WHEN ASSOCIATED WITH THE FOREGOING DATA MAKES THE ENTIRE APPLICATION SECRET" must be included just prior to identifying the secret data.
      (3) Information inserted in all other areas of the application shall be unclassified or classified CONFIDENTIAL.
   b. As a minimum, for all SECRET applications that are to be considered by the FAS and subsequently recorded in the GMF, the following data items must be included in the CONFIDENTIAL or UNCLASSIFIED portion of the applications:
      (1) Agency Serial Number (entered on the COMMAND ENTRY).
      (2) Type of Action (TYP).
      (3) Security Classification (CLA).
      (4) Frequency (FRQ).
      (5) Missing Data Indicator (MSD).
      (6) Transmitter State/Country (XSC).
   c. In addition to the minimum data fields noted in subparagraph 2b above, the following data items shall also be included in all CONFIDENTIAL portions for all SECRET applications:
      (1) Declassification Date (CDD).
      (2) Original Classification Authority (Circuit Remarks *CLA); or,
      (3) Derivative Classification Authority (Circuit Remarks *CLF).
      (4) Reason for Classification (Circuit Remarks *CLR), if the Circuit Remarks *CLA entry is included.
      (5) Classified Data Fields (Circuit Remarks *CLC or *CLS).
      (6) Unclassified Data Fields (Circuit Remarks *CLU).
      (7) Extended Declassification Date (Circuit Remarks *CDE), if a declassification year and month, or the declassification exemption category 25X1, is not entered in the field CDD.

d. The Missing Data Indicator (MSD) shall contain the letter Z.

e. The information that is classified SECRET shall not be entered on MODIFICATION, RENEWAL, and DELETION actions.

f. SECRET applications will be distributed in accordance with Section 9.3.

g. SECRET data shall not be included on magnetic discs.

9.5 REQUIRED JUSTIFICATION FOR A FREQUENCY ASSIGNMENT

All federal agency frequency assignment requests must contain a justification of need statement and a general explanation of the operation. This statement must be provided by an FAS representative or a federal employee from the headquarters of the requesting agency. (see Section 9.8.2.80.k)

9.6 DESCRIPTION OF TYPES OF FREQUENCY ASSIGNMENTS

9.6.1 Regular Assignment

A REGULAR assignment is a frequency assignment for an unspecified period of time; however, the provisions of Section 8.2.6 apply.

9.6.2 (Reserved)

9.6.3 Temporary Assignment

1. A TEMPORARY assignment is made for a specified period of time not to exceed five years.

a. All assignments with experimental station classes are TEMPORARY assignments.

b. TEMPORARY assignments expire on the date shown in EXD.

c. TEMPORARY assignments may be renewed for additional periods as necessary.

(1) TEMPORARY assignment RENEWAL actions which are to be considered by the FAS shall be submitted at least one month prior to the Expiration Date (EXD) of the assignment.

2. When a TEMPORARY assignment is renewed or converted to a REGULAR assignment, the date of assignment for PRIORITY purposes shall be the original date from which continuous authorization has been in effect.

9.6.4 Trial Assignment

1. A TRIAL assignment is a frequency assignment for the purpose of selecting a suitable SPECIFIC OPERATING FREQUENCY for REGULAR assignment.

a. TRIAL assignments shall be made whenever a trial:

(1) is considered necessary; or

(2) will provide a reasonable basis for judging harmful interference potentialities; or

(3) will resolve objections to a proposed REGULAR or TEMPORARY assignment which are based upon anticipated harmful interference.

b. TRIAL assignment operations MUST cease upon notice from the IRAC that harmful interference is being caused.

c. Objections based on PRIORITY shall not bar TRIAL assignments.

d. TRIAL assignments initially are not to exceed two years; however, a TRIAL assignment may be renewed for additional periods as necessary. The provisions of Section 9.6.3, paragraph 1.c.(1) applies. TRIAL assignments expire on the date shown in EXD.

2. Conversion from a TRIAL to a REGULAR assignment:

a. Before a TRIAL assignment is converted to a REGULAR assignment there shall have been adequate use of the frequency concerned and evidence thereof presented.

b. Additional limitations shall not be applied to an assignment at the conclusion of a trial period unless the trial develops the need for such limitations.

c. When a TRIAL assignment is converted to a REGULAR assignment, the applicable date of assignment for

PRIORITY purposes shall be the original date from which continuous authorization has been in effect.

9.6.5   Group Assignment

1. A GROUP assignment is made only to terrestrial stations and:
    a. provides authority to operate but does not represent continuing operations; or
    b. provides an assignment for planning purposes.
2. GROUP assignments shall not be made to telemetering stations in the band 2200-2290 MHz.
3. GROUP assignments may be authorized as REGULAR, TEMPORARY, or TRIAL assignments.
4. There are two types of GROUP assignments:
    a. The first type is one that PROVIDES AUTHORITY to operate but which does not represent continuing operations. The following applies to such assignments:
        (1) Note S322 shall be entered in the NOTES (NTS) field. (see Annex A for S322 definition).
        (2) The establishment of stations under the authority of these assignments shall be notified prior to or soon after the commencement of operations, except when the period of operation is so limited (on the order of six months or less) that notification would be impracticable (see Section 9.1.3).
    b. The second type of GROUP assignment is one used for PLANNING PURPOSES and represents continuing or definitely anticipated requirements. The following applies to such assignments:
        (1) Note S321 shall be entered in the NOTES (NTS) field. (see Annex A for S321 definition).
        (2) Such assignments shall not exceed three years.
        (3) The technical particulars of these assignments shall describe the intended use of the frequency to the maximum extent practicable at the time of application.
        (4) Operations conducted under the authority of this type of GROUP assignment shall be limited to such uses as site surveys and path testing associated with the intended use. This type of GROUP assignment shall not be considered operational but strictly as a planning assignment set aside to satisfy an identified future requirement. However, all S321 assignments are accorded protection and may be coordinated with Canada at the option of the applicant.

9.7   FREQUENCY APPLICATION

9.7.1   Uses of the Application Format

1. The APPLICATION FORMAT is used for the following frequency assignment actions:
    a. NEW (N)--To apply for a new frequency assignment, the particulars of which, when approved, will be entered in the GMF. See Section 9.8.2, paragraph 40 for special provisions when using a NEW action as a REPLACEMENT for an existing GMF record.
    b. NOTIFICATION (F)--To notify the bringing into use of a frequency by stations under the authority of:
        (1) Section 9.6.5, or
        (2) Section 9.1.3, or
        (3) Section 7.5.2, or
        (4) Section 7.12, or
        (5) Section 8.3.11.
When approved, NOTIFICATION assignment particulars are also entered into the GMF. See Section 9.8.2, paragraph 40, for special provisions when using a NOTIFICATION action as a REPLACEMENT for an existing GMF record.
    c. MODIFICATION (M)--To apply for the addition, substitution, or removal of one or more of the particulars, other than the Classification (CLA), the Frequency (FRQ), the Agency Serial Number (SER), or the Transmitter State/Country (XSC), of an existing frequency assignment. The following provisions apply:
        (1) No more than 60 data fields of an assignment can be modified at one time.
        (2) If more than 60 data fields require modification submit either a NEW or NOTIFICATION action using the record replacement feature described in Section 9.8.2, paragraph 40, or a simultaneous DELETION and NEW or NOTIFICATION action.
    d. RENEWAL (R)--To apply for the extension of the period of a TEMPORARY or TRIAL assignment (see Section 9.6) and to simultaneously update other particulars of the assignment.
    e. DELETION (D)--To apply for the cancellation of a frequency assignment and the removal of all its

particulars from the GMF.

9.7.2 Rules for the Use of the Application Format

1. Requests in the APPLICATION FORMAT may be submitted electronically or on magnetic disc. All individual data which are to be recorded in the GMF are submitted in accordance with the existing rules listed in Chapter 9.

2. Each request submitted in the APPLICATION FORMAT must contain two types of entries:

--COMMAND ENTRY; and
--DATA ENTRIES.

3. The following formatting rules must be adhered to:

a. COMMAND ENTRY. The COMMAND ENTRY must always be the first entry. This entry consists of the application processing COMMAND and the RECORD IDENTIFIER (Agency Serial Number (SER)).

(1) The COMMAND is designated with one of three coded entries:
   (a) $$ADD--for NEW and NOTIFICATION actions; or
   (b) $$CHG--for MODIFICATION, RENEWAL, and DELETION actions.
   (c) $$MOD--for use only with MODIFICATION actions in accordance with paragraph 9 below.

(2) The RECORD IDENTIFIER is ALWAYS the Agency Serial Number (SER) of the frequency assignment record.
   (a) if $$ADD is used, the Agency Serial Number MUST be unique and MUST NOT already be recorded in the GMF.
   (b) if $$CHG or $$MOD is used, the Agency Serial Number MUST be one which is recorded in the GMF.

Example: $$ADD AF 821234

b. DATA ENTRIES. DATA ENTRIES follow the COMMAND ENTRY. Each DATA ENTRY shall address only one data field and specify the:

(1) DATA FIELD MNEMONIC--a three letter code which identifies the data field being addressed. (See the Data Field Title line for each data field listed in Section 9.8.2).

(2) OCCURRENCE NUMBER--a two-digit number denoting which occurrence (first, second, etc.) of the field is being addressed, use a leading zero if necessary.

(3) REQUIRED DATA--submitted in accordance with specific instructions listed in Section 9.8.2.

(4) Generally, only those symbols allowed or specified in Section 9.8.2 shall be used as data. However, specifically, the following symbols shall not be used in any data field:

& -- And	: -- Colon	] -- Right square bracket
[-- Left square bracket	@ -- At	# -- Number or pound
\ -- Reversed virgule	; -- Semicolon	? -- Question
< -- Less than	> --Greater than	% -- Percent
! -- Exclamation	^ -- Insert (caret)	" -- Quotation
' -- Apostrophe	_ -- Underscore	

Example: FRQ01 M123.4
   --the DATA FIELD MNEMONIC is: FRQ
   --the OCCURRENCE NUMBER is: 01
   --the REQUIRED DATA is: M123.4

4. Each application must contain one TYPE OF ACTION (TYP) data entry. The TYPE OF ACTION data entry must consist of one of the following:
   N--for NEW actions
   F--for NOTIFICATION actions

M--for MODIFICATION actions
R--for RENEWAL actions
D--for DELETION actions

5. Each application must also contain a preparation DATE (DAT) entry, which consists of the date in year, month, and day order; use leading zeros for the month and day as necessary.

Example: DAT01 820131

6. The following data fields are multiple occurring; the OCCURRENCE NUMBER must be 01 or greater, but must NOT exceed the maximum allowed for that field.

Table. Occurrence Number			
Codes	**Max. Allowable Occurrences**	**Codes**	**Max. Allowable Occurrences**
STC	20	RAZ	30
EMS	20	RAD	30
PWR	20	RAP	30
NTS	10	ACL	30
RSC	30	REM	30
RAL	30	SRS	09
RRC	30	SEX	09
RLA	30	SUP	15
RLG	30	FAS	05

7. All other data fields are single occurring. Only the number 01 following the mnemonic will be accepted.
8. $$CHG ACTIONS 0
    a. $$CHG is used, along with the TYP data entry to identify a MODIFICATION, RENEWAL or DELETION action.
    b. When submitting a MODIFICATION, RENEWAL or DELETION action, it is extremely important to accurately indicate the proper GMF data field and corresponding occurrence number which the applicant desires to modify. FAILURE TO ACCURATELY INDICATE THE PROPER GMF DATA FIELD AND CORRESPONDING OCCURRENCE NUMBER WILL RESULT IN AN INCORRECT CHANGE.
    c. When submitting a MODIFICATION action, it is possible to add another occurrence of a multiple occurring field to an existing record; in effect, change BLANKS to DATA. The applicant must, however, address the next blank GMF occurrence of the data field(s) to be modified. For example, if a GMF record contains two station classes (STC), emissions (EMS), and power (PWR), and a third occurrence of each is necessary, the applicant submits:

        $$CHG   FAA 723409
        TYP01   M
        DAT01   810901
        EMS03   6KA3E
        STC03   MA
        PWR03   W10

9. $$MOD ACTIONS
    a. Modifications may also be submitted using the COMMAND $$MOD. This optional procedure allows the applicant to submit both NEW and LISTED DATA in the same application, thus providing a means of comparison without having to refer to separate records. This procedure shall be used only with assignment records retrieved from the GMF in the card format, and re-submitted back to the NTIA/SSD via electronic transmission or on magnetic discs or tape
    b. $$MOD actions require:
        (1) Re-submission in Card Format;
        (2) All new data be entered with an EQUAL SIGN (=) between the data field code occurrence number and

the data;

>>(3) The Type of Action must always be entered as TYP01=M; and,
>>(4) The date always be entered as DAT01=nnnnnn (date format is YYMMDD).

Example:

```
$$MOD A 810771
TYP01 M
DAT01 850828
CLA01 U
FRQ01 M168.625
BUR01 F3
STC01 MO
STC01 ML
EMS01 16K00F3E
PWR01 W5
PWR01 W25
NTS01 S362
NTS01 (in this case NEW data is blank -- deleting listed data)
TME01 1
TME01 3
XSC01 NM
XAL01 NEW MEXICO
XRC02 RGNLOFFC
RSC01 NM
RAL02 NEW MEXICO
REM01 *NRM, 00140,REGION 3 AIR OPS
REM01 *NRM, 00300,REGION 3 MOBILE OPS
REM02 *EQS,LMS
REM03 *SYS,NATURAL RESOURCES
SUP01 FOR PROTECTION OF NATIONAL FOREST LANDS
SUP01 WILDFIRE COMMUNICATIONS
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10. Information for AGENCY USE, other than SECRET data, shall be provided after all other data are entered. The intervening statement FOR AGENCY USE must precede the data. The statement "FOR AGENCY USE" and subsequent data SHALL NEVER appear on magnetic disc or electronic submissions.

Example:

```
$$CHG AR 28306
TYP01 M
DAT01 791108
EMS03 6KA3E
RTN01 M
XSC01 VA
XAL01 NORFOLK
```

11. See Section 9.4, paragraph 2.b for rules on submission of SECRET data.
12. The following is a sample application.

```
$$ADD NTIA991234
TYP01 N
DAT01 850701
FRQ01M123.4
CLA01 U
```

NET01 AT013
ICI01 C
RTN01 R
BUR01 1A2A
EXD01 891215
STC01 FX
EMS01 16KF3E
PWR01 K1
STC02 FL
EMS02 16KF3E
PWR02 W100
NTS01 S361
NTS02 S362
XSC01 MD
XAL01 GLEN BURNIE
XLA01 392530N
XLG01 0764501W
XAP01 H
XAZ01 045
XCL01 AA 123
XAD01 03GDIPOLE   00050H0100T
TME01 1
RSC01 PA
RAL01 PHILADELPHIA
RRC01 DIV AX
RLA01 400201N
RLG01 0751502W
ACL01 WBW 22
RAP01 H
RAZ01 225
RAD01 10GHORN
RSC02 DE
RAL02 WILMINGTON AIRPORT
RLA02 395010N
RLG02 0753515W
ACL02 OLD341
RAP02 V
RAZ02 ND
RAD02 03GDIPOLE
REM01 *RAD,0050R
REM02 *NRM,00102,NET
SUP01 THIS IS A SAMPLE

9.8   PREPARATION OF A NEW OR NOTIFICATION ACTION

9.8.1   Introduction

Before submitting a NEW or NOTIFICATION action, read Section 9.7. The following index of data field codes, which are described in detail in Section 9.8.2, is provided for easy reference.

Table: Index of Field Codes					
Codes	Section 9.8.2 Paragraph No.	Codes	Section 9.8.2 Paragraph No.	Codes	Section 9.8.2 Paragraph No.
ACL	37	*CLR	39aa	*SBW	39t
BIN	11	*CDE	39bb	*SGN	39t

BUR	13	*CLC	39cc	*SYS	39u
CDD	7	*CLS	39cc	*TRN	39ee
CLA	6	*CLU	39dd	*USA	39w
DAT	3	*DOC	39g	RLA	33
EMS	16	*EBW	39t	RLG	34
EXD	14	*EGN	39t	RRC	32
FAS	79	*EQR	39o	RSC	30
FOI	41	*EQS	39o	RTN	4
FRQ	8	*EQT	39o	SER	1
ICI	10	*ESB	39e	SEX	40c
LSR	5	*ESR	39e	SPD	20
MSD	12	*EST	39e	SRS	40b
NET	9	*FRB	39b	STC	15
NTS	18	*FBE	39c	SUP	80
PWR	17	*FLN	39x	TME	19
RAD	38	*JNT	39i	TYP	2
RAL	31	*LSB	39e	XAD	29
RAP	35	*LSR	39e	XAL	22
RAZ	36	*LST	39e	XAP	26
REM	39	*MEX	39v	XAZ	27
*AGN	39j	*NRM	39m	XCL	28
*ARB	39f	*NTS	39k	XLA	24
*ARR	39f	*ORB	39q	XLG	25
*ART	39f	*PRD	39ff	XRC	23
*CAN	39l	*PRR	39n	XSC	21
*CLA	39y	*RAD	39d		
*CLF	39z	*RPT	39h		

9.8.2 Application Data Requirements

1. SER--Applicant Serial Number (10 Characters-1 Occurrence)

a. This field is for the applicant's Serial Number (SER) of the application. This serial number becomes the unique identifier for the application on the FAS agenda and for the assignment record, when approved, in the GMF. Once an application is on the FAS agenda, serial numbers MAY NOT be altered. The Serial Number must ALWAYS be entered on the COMMAND ENTRY which is ALWAYS $$ADD for a NEW or NOTIFICATION action, $$CHG for a MODIFICATION, RENEWAL, or DELETION action, or $$MOD for MODIFICATION action. Each application shall bear a unique 10 character Agency Serial Number composed of:

(1) The applicant's name abbreviation in characters 1-4; the abbreviation shall be the same as shown in Annex G, Section G.1. If the applicant's name abbreviation is less than 4 characters, leave characters 2-4 blank, as applicable.

(2) The last two digits of the current calendar year in characters five and six, and

(3) A four-digit number to indicate for that year and agency the numerical sequence of the proposed assignment action in characters 7-10.

b. Each year agencies must start a new cycle of Serial Numbers for new assignments. Agencies may start using the new year serial numbers on December 1 and must stop using the past years' serial numbers no later than January 31 (example: December 1, 2008 the Army could use AR 090001 and Army records with AR 08XXXX must be processed by NTIA onto an agenda by January 31, 2009). New assignments received by NTIA after January 31 with the previous year's serial numbers will be rejected.

c. On a joint application for a NEW action, insert the Serial Number for the agency that prepares the application. (Do not submit a joint application for a NOTIFICATION, MODIFICATION, RENEWAL or DELETION action.)

Example: AR 090001

2. TYP--Type of Action (1 Character--1 Occurrence)
Enter either the letter:

N--for a NEW action; or
F--for a NOTIFICATION action.

3. DAT--Date (6 Characters--1 Occurrence)

a. Enter the date in year, month, and day order on which the application is prepared by the applicant.
b. Use numeric characters only.
c. Leave no blanks.

Example: DAT01 811225

4. RTN--Routine (1 Character--1 Occurrence)

a. This field is used to indicate that the frequency application is to appear in the routine portion of the FAS agenda. Leave this field blank if the application is to appear in the regular portion of the FAS agenda. Only one of the letters A, or M or R may be entered in the RTN field.

b. Enter the letter:
(1) A--if the assignment request is for consideration by the AAG (see Section 9.14.1), or
(2) M--if the assignment request is for consideration by the MAG (see Section 9.14.2) or,
(3) R--if the assignment request is not to be considered by the AAG or MAG and:
(a) the application is a notification of a telecommunication laser; or
(b) the assignment will be used during distress, safety and calling on frequency 156.8 MHz; or
(c) the assignment is being made pursuant to Section 7.12; or
(d) Note L192, L197, or L199 applies; or
(e) the assignment is made pursuant to Section 8.3.24; or
(f) the assignment will be for speed meter use on frequency 10525 MHz or 24150 MHz; or
(g) there will be no increase in the probability of harmful interference.

c. If the ROUTINE field is left blank or contains a character other than A, M or R, the application will appear in the regular portion of the agenda unless one of the following criteria is met:
(1) if the assignment request is to be considered by the AAG or MAG, the letter A or M, as applicable, will be automatically entered in the ROUTINE field; or
(2) if the assignment request:
(a) is for 156.8 MHz; or
(b) includes one or more of the following Notes (NTS):

L192	S160
L197	S279
L199	S348

or,
(c) is for speed meter use on frequency 10525 MHz or 24150 MHz; or,
(d) is for the frequency band 401.7-402.1 MHz and includes the following Note (NTS): S594 the letter R will be automatically entered in the ROUTINE field.

5. LSR--List Serial Number (10 Characters--1 Occurrence)

a. This field is to be used only on NOTIFICATION actions when an agency notifies the bringing into use of a frequency by a particular station or stations under the authority of an authorized GROUP assignment.

b. Insert the Serial Number of the GROUP assignment as it is shown in the GMF. Do not close up blank spaces which appear in characters 2-4 of the recorded GMF Agency Serial Number.

6. CLA--Classification (1 Character--1 Occurrence)

a. This field is for the security classification of the assignment as determined in accordance with Executive Order 13526.

b. Insert only one of the following codes in this field. ASSIGNMENTS ARE NEVER CLASSIFIED HIGHER THAN SECRET.

(1) U--Unclassified   (2) C--Confidential (3) S—Secret

    c.   Modification of the S--SECRET or C--CONFIDENTIAL classification (CLA) data field to U--UNCLASSIFIED is NOT authorized, EXCEPT by submission of a serial replace proposal.

7. CDD -- Declassification Date (6 Characters - 1 Occurrence)

    a. Complete this field for every application on which the CLA data field contains the letter C.

    b. Enter the letters DE in the first two characters.

    c. Beginning in character three,

    (1) Enter the year and month of the declassification date, in year and month (YYMM) order (The assignment will be automatically declassified on the last day of that month.). (If the declassification date has been extended beyond 10 years from the initial classification date, an entry is also required in the Circuit Remarks field *CLF); or,

    (2) Enter the letter X, immediately followed by from one to three numbers, in numerical sequence, that correspond to the applicable exemption categories listed in Executive Order 13526; or,

    (3) Enter 25X, immediately followed by a number that corresponds to the applicable exemption category listed in E.O. 13526. for those assignments that are exempt from the 25 year automatic declassification rule for permanently valuable information. (For all assignments not in the declassification exemption category 25X1, the date for declassification shall be included in the Circuit Remarks field *CDE.); or,

    (4) Enter OADR for those assignments that are classified derivatively based on source documents for which the declassification instructions are marked "Originating Agency's Determination Required," or its acronym "OADR". An entry of OADR in this data field requires an entry in the Circuit Remarks field *CLF.

    (5) Enter DEVENT for those assignments that will be declassified after the occurrence of an event as specified in Executive Order 13526. An entry of DEVENT in this data field requires an entry in the Circuit Remarks field *DIC.

    Examples:

    CDD01 DE0603
    CDD01 DEX358
    CDD01 DE25X1
    CDD01 DEOADR
    CDD01 DEVENT

8. FRQ--Frequency (13 Characters--1 Occurrence)

    Enter either a SPECIFIC OPERATING FREQUENCY (see paragraph 8.b.) or the lower limit of a FREQUENCY BAND ASSIGNMENT (see paragraph 8.c.) in accordance with the following instructions:

    a. Composing the FRQ Entry

    (1) In the first character enter one of the following codes to designate the category in which the frequency is being expressed:

    K--for kiloHertz
    M--for MegaHertz
    G--for GigaHertz
    T--for TeraHertz

Note: For frequencies expressed in kiloHertz, the applicant may optionally enter the letter K in character 1 or immediately begin entering the frequency in character 1 (see examples).

    (2) Express the frequency in:
        kiloHertz (kHz) thru 29999.999999 kHz,
        MegaHertz (MHz) from 30 MHz thru 99999.999999 MHz,
        GigaHertz (GHz) from 100 GHz thru 2999.999999 GHz, and
        TeraHertz (THz) at 3 THz and above.
    (3) Use a decimal point only if there is a significant (nonzero) digit to the right of the decimal.
    (4) If a decimal point is used, enter no more than six significant digits to the right of the decimal.

b. Requesting SPECIFIC OPERATING FREQUENCIES

(1) A "SPECIFIC OPERATING FREQUENCY" (also referred to as "assigned frequency" or "authorized frequency") identifies the center of that portion of the frequency spectrum occupied by the emitted signal. The lower and upper limits of the ASSIGNED FREQUENCY BAND, see Section 6.1.1, Paragraph 44, are determined by:

(a) Subtracting from the SPECIFIC OPERATING FREQUENCY one-half the necessary bandwidth shown in the Emission field plus the absolute value of the frequency tolerance as derived from Chapter 5; and

(b) Adding to the SPECIFIC OPERATING FREQUENCY one-half the necessary bandwidth plus the absolute value of the frequency tolerance as derived from Chapter 5.

The result of this calculation determines the amount of spectrum which may be occupied by a SPECIFIC OPERATING FREQUENCY.

(2) A SPECIFIC OPERATING FREQUENCY shall always be entered in the FRQ field unless the transmitting station employs one of the techniques described in paragraph 8.c. below.

Examples:

14495.5--for 14495.5 kHz, or
K14495.5--for 14495.5 kHz
M165.0125--for 165.0125 MHz
G138.25--for 138.25 GHz

c. Requesting FREQUENCY BAND ASSIGNMENTS.

(1) Certain operations may necessitate the assignment of a range of frequencies in lieu of a specific operating frequency; this range is known as a "FREQUENCY BAND ASSIGNMENT." FREQUENCY BAND ASSIGNMENTS permit the transmitting station to operate on any specific frequency so located within the range that the necessary bandwidth plus twice the tolerance does not extend beyond the lower and upper limits shown in the Circuit Remarks *FRB field. See paragraph 8.b.(1) (a) and (b), for the method used to calculate the amount of spectrum which may be occupied by any specific emitted signal within the range of frequencies authorized by a FREQUENCY BAND ASSIGNMENT.

(2) Except as indicated in paragraph 8.c. (3), a FREQUENCY BAND ASSIGNMENT shall only be requested when one or more specific frequency assignments will not satisfy the requirement.

(3) FREQUENCY BAND ASSIGNMENTS are normally authorized only for the following:
(a) Transmitters which automatically sweep through all frequencies in a band.
(b) Radiosonde transmitters operating in either of the bands:

400.15-406.00 MHz   1670.00-1700.00 MHz

(c) Frequency agile radar beacons (racon) operating in either of the bands:

2900-3100 MHz   9300-9500 MHz

(d) Transmitters which use automatic frequency selection based upon changing propagation conditions along the transmission path.
(e) Transmitters which automatically pause at 15 or more specific operating frequencies within a band.
(f) Operations which require the use of 15 or more specific operating frequencies within a band for research, development, test and/or evaluation purposes.
(g) Operations which involve a multitude of mobile radiolocation or radionavigation transmitters. Whenever possible, at the option of the applicant, operational frequencies may be recorded in the CIRCUIT REMARKS *AGN sub-field.
(h) Tactical and/or Training assignments above 30 MHz which 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).

(4) Requests for FREQUENCY BAND ASSIGNMENTS which do not meet the above criteria will be considered by the FAS on a case-by-case basis.

(5) Using the procedures in paragraph 8a, insert the frequency which identifies the lower limit of the

FREQUENCY BAND ASSIGNMENTS.
        (6) All applications for FREQUENCY BAND ASSIGNMENTS must include:
            (a) A dash in the Frequency Band Indicator (BIN) field, and
            (b) An entry in the Circuit Remarks *FRB field.
    d. Special Coordination Requirements.
        (1) If the frequency requires coordination under the provisions of the Sections (as applicable) in Section 8.3 or Section 9.14, the applicant shall, insofar as practicable, complete such coordination prior to submitting the application to the FAS.

9. NET--Net Control (5 Characters--1 Occurrence)
    a. At the option of the applicant, this field may be used to identify within the applying agency:
        (1) A specific user; or
        (2) A command; or
        (3) An activity; or
        (4) A unit; or
        (5) A project; etc.
    b. The data may be alpha, numeric or alphanumeric.

10. ICI--International Coordination Identifier (1 Character--1 Occurrence)
    a. When Canadian coordination is required by the IRAC in accordance with Section 3.4, enter the letter C in this field. The letter C should be entered on the application by the submitting agency; however, it will be entered by the Canadian Coordination computer program if this field is left blank and the application meets the criteria of Section 3.4.
    b. When Canadian coordination is not required by the IRAC but the submitting agency determines it to be beneficial to coordinate with Canada, the submitting agency must enter the letter C in this field in order to initiate coordination action.
    c. If the submitting agency desires Mexican coordination, enter the letter M in this field.
    d. If both Canadian and Mexican coordination are desired, enter the letter B in this field.
    e. When Canadian coordination is not required by Section 3.4 and neither Canadian nor Mexican coordination are desired, leave this field blank.

    Example: ICI01 C

    f. The ICI field is also used to identify the U.S. Federal Government coordination channels for those Canadian assignments along the U.S./Canada border that have been included in the GMF for electromagnetic compatibility analysis purposes:
            D = through NTIA with FAS member agencies
            F = through the FAA
            J = through the DOD's Joint Chiefs of Staff (JCS)
            U = no indication of coordination
    g. When Canadian coordination is required by the FCC for the 932.5 - 935.0 or 941.5 - 944.0 MHz bands in accordance with Section 3.4, enter the letter A in this field. The letter A should be entered on the application by the submitting agency; however it will be entered by the Canadian Coordination computer program if this field is left blank and the application meets the criteria of Section 3.4.

11. BIN--Frequency Band Indicator (1 Character--1 Occurrence)
    a. Whenever a frequency band assignment is requested (see Section 9.8.2, paragraph 8.c.) enter a dash (-) in this field.
    b. If a specific operating frequency is requested, leave this field blank.

    Example: BIN01 --

12. MSD--Missing Data Indicator (1 Character-1 Occurrence)
    a. Enter the letter Z for all applications which would be classified SECRET if all required data were provided.

b. If the letter Z does not apply, leave this field blank.

Example: MSD01 Z

13. BUR--Bureau (4 Characters--1 Occurrence)
 a. At the option of the applicant, this field may be used to identify an organizational subunit of the applying agency.
 b. If used, this field must contain an abbreviation from Annex G, Section G.1.

14. EXD--Expiration Date (6 Characters--1 Occurrence)
 a. This field is for the year, month and day on which a TEMPORARY or TRIAL assignment is to expire (see Section 9.6)
 b. To compose the EXD entry:
  (1) Insert in the first two characters the last two digits of the year; and
  (2) Insert in characters three and four a two-digit number (01 through 12) for the month.
  (3) Insert in characters five and six a two-digit number (01 to 31) corresponding to the day of the month the application is to expire.
 c. For TEMPORARY assignments the date shall not exceed five years.
 d. For TRIAL assignments, the date shall not exceed two years.
 e. For GROUP assignments used for planning purposes (NTS S321), the date shall not exceed three years.
 f. Leave blank for a REGULAR assignment.

Example: EXD01 890615

15. STC--Station Class (6 Characters--20 Occurrences)
 a. This field is for the Station Class symbol(s) as shown in Sections 6.1.2 (alphabetical by classes) and 6.1.3 (alphabetical by symbols). Enter only one such symbol per entry.
 b. Each entry in the STATION CLASS field must also contain a corresponding entry in the POWER field and the EMISSION field.
 c. The suffix "R" shall be added to the class of station (STC) symbol only if the station is also a repeater station in a corresponding frequency assignment and its use is reflected in the paired frequency (PRD) field.

29.89-50.00 MHz	148.00-149.90 MHz	162.00-174.00 MHz
138.00-144.00 MHz	150.05-150.80 MHz	380.00-399.90 MHz
		406.10-420.00 MHz

For this purpose a repeater consists of a radio transmitter, a radio receiver and coupling between the two so as to retransmit unchanged in intelligence the received signal.
 d. The station class symbol FL shall be used only when all three land stations, land, maritime and aeronautical mobile, will be in use at some time (i.e., FL to be used only when all three classes, FB, FC, and FA will be used).
 e. The station class symbol MO shall be used when all three mobile stations, land, maritime and aeronautical mobile will be in use at some time (i.e., MO to be used only when all three classes, ML, MS, and MA, will be used).
 f. Each entry of the station class symbols: AM, AMA, MA, MAD, MAP, MO, MOE, MOEA, MOU operating in all frequency bands except those listed in paragraph g. below must also contain corresponding Circuit Remarks (REM) information on the maximum aircraft altitude (*NTS,M014, 0030, see Section 9.8.2.39k) and commensurate authorized area of operation (*RAD).
 g. Each entry of the station class symbol FA, FAC, FAB, FLU, MA, MAD, MAP, MO, MOE, MOEA, MOEB, MOU operating in the 118-136.475 MHz, 225-328.6 MHz, 335.4-399.9 MHz bands, Ground Based Transceiver Service (GBTS) using 978 MHz and 1090 MHz must also contain the corresponding Circuit Remarks (REM) Agency Data (*AGN) information concerning the minimum altitude (FLL), maximum altitude (FLT) and Tailored Service Volume (TSV) as applicable to the assignment. (See Section 9.8.2.39 j)

16. EMS--Emission Designator (14 Characters--20 Occurrences)
The EMISSION DESIGNATOR consists of the necessary bandwidth and emission classification symbols.

a. The amount of radio spectrum which may be occupied by an authorized frequency assignment does not extend beyond:

(1) The ASSIGNED FREQUENCY BAND (see Section 6.1.1) which is determined by:

(a) Subtracting from the specific operating frequency 1/2 the necessary bandwidth plus the absolute value of the frequency tolerance as derived from Chapter 5; and,

(b) Adding to the specific operating frequency 1/2 the necessary bandwidth plus the absolute value of the frequency tolerance as derived from Chapter 5; or

(2) The lower and upper limits shown in the Circuit Remarks *FRB field for FREQUENCY BAND ASSIGNMENTS.

b. The authorized use is determined by the designated:

(1) Type of modulation;

(2) Nature of the signal(s) modulating the main carrier; and

(3) Type of information to be transmitted.

c. An EMISSION DESIGNATOR must be entered for each type of transmission. For example, a 6KA3E EMISSION DESIGNATOR does not include authority for any other type of transmission such as CW or tone modulated telegraphy.

d. The EMISSION DESIGNATOR consists of the following:

(1) Necessary bandwidth.

(a) See Annex J for methods used to calculate necessary bandwidths.

(b) Doppler Shift shall not be included in the frequency tolerance or necessary bandwidth; however, at the option of the applicant, Doppler Shift may be shown as an extra item of information in the SUPPLEMENTARY DETAILS field.

(2) Emission classification symbols:

(a) First symbol--Indicates the type of modulation of the main carrier.

(b) Second symbol--Indicates the nature of signal(s) modulating the main carrier.

(c) Third symbol--Indicates the type of information to be transmitted.

(d) Fourth symbol--Indicates the details of the signal (Optional--recommend when applicable).

(e) Fifth symbol--Indicates the nature of multiplexing (Optional--recommend when applicable).

e. The EMISSION DESIGNATOR shall be entered according to the following rules:

(1) Necessary Bandwidth. To express the necessary bandwidth portion of the EMISSION DESIGNATOR, enter a maximum of five numerals and one letter. The letter occupies the position of the decimal point and represents the unit of bandwidth as follows:

H for Hertz
K for kiloHertz
M for MegaHertz
G for GigaHertz

Fractional bandwidths may be expressed to a maximum of two decimal places following the letter. The first character of the necessary bandwidth shall always be greater than zero unless the necessary bandwidth is less than 1 Hertz in which case the first character shall be the letter H. Express the necessary bandwidths according to the following:

(a) Necessary bandwidths between .01 and 999.99 Hz shall be expressed in Hertz using the letter H in lieu of the decimal; (e.g., 15H is 15Hz of bandwidth; 15H01 is 15.01 Hz of bandwidth).

(b) Necessary bandwidths between 1.00 and 999.99 kHz shall be expressed in kiloHertz using the letter K in lieu of the decimal; (e.g., 2K is 2 kHz of bandwidth; 2K85 is 2.85 kHz of bandwidth).

(c) Necessary bandwidths between 1.00 and 999.99 MHz shall be expressed in MegaHertz using the letter M in lieu of the decimal; (e.g., 6M is 6 MHz of bandwidth; 6M25 is 6.25 MHz of bandwidth).

(d) Necessary bandwidths between 1.00 and 999.99 GHz shall be expressed in GigaHertz using the letter G in lieu of the decimal; (e.g., 10G is 10 GHz of bandwidth; 10G05 is 10.05 GHz of bandwidth).

(2) Emission Classification Symbols. Enter the basic emission designator of three symbols, and if desired, two optional additional symbols, as derived from the following:

(a) First symbol--designates the type of modulation of the main carrier:

UNMODULATED	
Symbol	**Type of Emission**
N	Emission of an unmodulated carrier.

AMPLITUDE-MODULATED

Emission in which the main carrier is amplitude-modulated (including cases where sub-carriers are angle-modulated):

A	Double-sideband
B	Independent sidebands
C	Vestigial sideband
H	Single-sideband, full carrier
J	Single-sideband, suppressed carrier
R	Single-sideband, reduced or variable level carrier

ANGLE-MODULATED

Emission in which the main carrier is angle-modulated:

Symbol	**Type of Emission**
F	Frequency modulation
G	Phase modulation

AMPLITURE-MODULATED AND ANGLE-MODULATED

Symbol	**Type of Emission**
D	Emission in which the main carrier is amplitude-modulated and angle-modulated either simultaneously or in a pre-established sequence.

PULSE

Emission of pulses:
(Emissions, where the main carrier is directly modulated by a signal which has been coded into quantized form (e.g., pulse code modulation), shall be designated as either an emission in which the main carrier is amplitude-modulated, or an emission in which the main carrier is angle-modulated).

Symbol	**Type of Emission**
P	Sequence of unmodulated pulses.

A sequence of pulses:

Symbol	**Type of Emission**
K	Modulated in amplitude
L	Modulated in width
M	Modulated in position
Q[1]	Carrier is angle-modulated during the period of the pulse
V	A combination of the foregoing or produced by other means

---

[1] Angle modulation includes either frequency or phase modulation.

COMBINATION	
Symbol	**Type of Emission**
W	Cases not covered above, in which an emission consists of the main carrier modulated, either simultaneously or in a combination of two or more of the following modes: amplitude, angle, pulse.
X^2	Cases not otherwise covered.

(b) Second symbol--designates the nature of signal(s) modulating the main carrier:

Symbol	**Type of Emission**
0	No modulating signal.
1	A single channel containing quantized or digital signals without the use of a modulating subcarrier. (This excludes time-division multiplex.) [3]
2	A single channel containing a quantized or a digital signal with the use of modulating subcarrier.[3]
3	A single channel containing an analogue signal.[3]
7	Two or more channels containing quantized or digital signals.[3]
8	Two or more channels containing analogue signals.[3]
9	A composite system with one or more channels containing quantized or digital signals, together with one or more channels containing analogue signals.
X^2	Cases not otherwise covered.

(c) Third symbol--designates the type of information to be transmitted (In this context the word "information" does not include information of a constant, unvarying nature such as provided by standard frequency emissions, continuous wave and pulse radars, etc.)

Symbol	**Type of Emission**
N	No information transmitted.
A	Telegraphy--for aural reception.
B	Telegraphy--for automatic reception.
C	Facsimile.
D	Data transmission, telemetry, telecommand; (the symbol D indicates that data, telemetry, or telecommand information is being transmitted individually or, that any combination of the three are being transmitted simultaneously. If any combination is being transmitted simultaneously, one of the multichannel symbols, 7, 8, or 9, must be used for the second symbol.)
E	Telephony (including sound broadcasting).
F	Television (video).
W	Combination of the above. (Use only for multi-channel systems having the capability of transmitting all information simultaneously).
X^2	Cases not otherwise covered.

(d) Fourth symbol--designates the details of signal(s):

---

[2] The Supplementary Details (SUP) will provide a full explanation for the selection of the letter X unless the application is for a non-directional beacon in the bands 190-435 and 510-535 kHz.

[3] In this context, the word "Channel(s)" refers to the radio frequency (RF) channel.

Symbol	Type of Emission
A	Two-condition code with elements of differing numbers and/or durations.
B	Two-condition code with elements of the same number and duration without error-correction.
C	Two-condition code with elements of the same number and duration with error-correction.
D	Four-condition code in which each condition represents a signal element (of one or more bits).
E	Multi-condition code in which each condition represents a signal element (of one or more bits).
F	Multi-condition code in which each condition or combination of conditions represents a character.
G	Sound of broadcasting quality (monophonic).
H	Sound of broadcasting quality (stereophonic or quadraphonic).
J	Sound of commercial quality (excluding categories defined for symbols K and L below).
K	Sound of commercial quality with the use of frequency inversion or band-splitting.
L	Sound of commercial quality with separate frequency-modulated signals to control the level of demodulated signal.
M	Monochrome.
N	Color.
W	Combination of the above.
X^2	Cases not otherwise covered.

(e) Fifth symbol--designates the nature of multiplexing:

Symbol	Type of Emission
N	None.
C	Code-division multiplex (This includes bandwidth expansion techniques.)
F	Frequency-division multiplex.
T	Time-division multiplex.
W	Combination of frequency-division multiplex and time-division multiplex.
X^2	Other types of multiplexing.

Examples:

Symbol	Type of Emission
N0N	Continuous wave.
1K24F1B	1.24 kHz necessary bandwidth for frequency modulated single channel telegraphy.
16KF3EJN	16 kHz necessary bandwidth for commercial telephony.

f. Each entry in the EMISSION (EMS) field must also contain a corresponding entry in the POWER (PWR) and STATION CLASS (STC) fields.

17. PWR--Power (12 Characters--20 Occurrences)

a. This field is for the transmitter output power NORMALLY supplied to the antenna transmission line and is entered according to the emission designator as follows:

(1) Carrier power (pZ) for A3E sound broadcasting in the Broadcasting Service.
(2) Mean power (pY) for other amplitude modulated emissions using an unkeyed full carrier, and for all frequency modulated emissions.
(3) Peak envelope power (pX) for all emission designators other than those referred to in (1) and (2) above, including C3F television (video only).

b. For different emission designators, the relationships between peak envelope, mean, and carrier power, under the conditions of normal operation and of no modulation, are contained in Recommendation ITU-R SM.326-6

(1994).

    c. The power shall be entered as follows:

        (1) In character one enter the unit of power as:

          W-- for Watt

          K -- for Kilowatt

          M -- for Megawatt

          G -- for Gigawatt

            (a) Enter W and show power in watts when less than 1 kilowatt.

            (b) Enter K and show power in kilowatts for 1 to 999.99999 kilowatts, inclusive.

            (c) Enter M and show power in Megawatts for 1 to 999.99999 Megawatts, inclusive.

            (d) Enter G and show power in Gigawatts when 1 Gigawatt and above.

        (2) Insert a decimal point only if there is a significant nonzero value to the right of the decimal.

        (3) The power may be entered to a maximum of five characters to the right of the decimal.

Examples: W.5 for 1/2 watt

                 K2.5 for 2 1/2 kilowatts

    d. Each entry in the POWER (PWR) field must also contain a corresponding entry in the EMISSION (EMS) and STATION CLASS (STC) fields.

18. NTS--Record Notes (4 Characters--10 Occurrences)

    a. The RECORD NOTES apply to the entire frequency assignment; therefore, a specific RECORD NOTE shall be entered only once in this field. Agencies may enter RECORD NOTES as applicable during the preparation of applications, or RECORD NOTES may be added at the FAS meeting.

    b. Enter, as applicable, the appropriate RECORD NOTE(S) from the lists shown in Annex A.

    c. The types of RECORD NOTES which may be entered are:

        (1) COORDINATION (C_____)--Indicates specific coordination requirements.

        (2) EMISSION (E_____)--Indicates emission limitations.

        (3) LIMITATION (L_____)--Indicates operational limitations.

        (4) PRIORITY (P_____)--Indicates assignment precedence in relation to other assignments.

        (5) SPECIAL (S_____)--Indicates special conditions and/or amplifying data.

    d. All assignment requests meeting one or more of the following criteria must indicate the applicable NOTE(S):

        (1) For a station in the domestic FIXED service (see Section 8.2.11), enter, as appropriate:

C078	L012	S012	S148	S206
S208	S358	S359	S360	

        (2) Enter the applicable NOTE(S) from the S500-S899 series if the assignment is for:

          (a) A station in a Space radiocommunication service; or

          (b) An experimental station to be operated in the manner of a station in a Space radiocommunication service; or

          (c) An experimental station to be used for the static test (prelaunch ground-to-ground checkout) of communication equipment to be used in a Space radiocommunication service; or

          (d) A station to be used to support a Space mission.

        (3) Enter S321 or S322 for an assignment being made that is subject to the provisions of Section 9.6.5.

        (4) Enter S348 if an assignment is for communications with Non-Federal Citizens Band (CB) stations and is made pursuant to Section 8.3.24.

    e. For NOTIFICATION actions:

        (1) Enter S160 or S165 if the assignment is being made under the authority of Section 7.12 or Section 7.5.2.

(2) Enter S141 if the assignment is to a transmitting station located outside the US&P.

(3) Enter the NOTES which were applied to the GROUP assignment (see Section 9.6.5); except that NOTES S149, S321, and S322 shall never be entered on the NOTIFICATION action. If the GROUP assignment bears either S170 or S171, these NOTES may be inserted or omitted at the option of the applicant.

f. Enter the NOTE S366 on applications for an area assignment whose parameters indicate that operations are outside the Canadian Zone but are suspect of Canadian Coordination or when:

(1) The parameters provided on the application meet the requirements for Canadian coordination as specified in Section 3.4; and

(2) The Transmitter Antenna Location (XAL) field contains an area that is within or partially within the U.S./Canadian Coordination Zone (see Section 3.4); and

(3) The Transmitter Antenna Latitude and Longitude (XLA and XLG) fields are blank on the application; but

(4) Operations will be south of the U.S./Canada Coordination Zone; or

(5) For frequencies below 1000 MHz the power used while in the Zone will not exceed 5 watts.

19. TME--Time (4 Characters--1 Occurrence)

a. This field is for the period of time during which it is intended that the frequency will be either guarded (monitored) or used for transmission. The period indicated is not a limitation or restriction, but rather the normal period of time during which the frequency is required to satisfy the operational requirement described in supplementary details.

b. This field applies to assignments in all bands except for assignments containing either of the Notes S141, S321, S322 or S323. Prior to January 5, 2015, TME will be reviewed, added, or modified for assignments contained in the five quantitative assessment frequency bands: 1300-1390 MHz, 1675-1695 MHz, 2700-2900 MHz, 2900-3100 MHz, and 3100-3550 MHz. All other frequency assignments will be reviewed, added, or modified during their appropriate 5 year review.

c. The period of time shall be indicated by use of one of the numbers 1 through 4, entered in the first character of the TIME (TME) field as follows, enter the number:

1--For constant or nearly (50-100% use); or
2--For regular or frequent (10-50% use); or
3--For intermittent (1-10% use); or
4--For sporadic/occasional (less than 1% use).

d. In all bands below 29.89 MHz, this field may also be used to indicate the period of the day that a circuit is in operation. Enter one of the following, as applicable:

H24--For 24-hour operation,
HJ--For day operation,
HN--For night operation,
HT--For transition period operation,
HX--For intermittent operation throughout the 24-hour day or no specific working hours.

Note that this entry applies to the period of operation of the circuit, not the period of operation of an individual frequency. If one of these symbols is entered in this field with one of the figures 1 through 4, the applicable figure is entered first.

20. SPD--Power Density (4 Characters--1 Occurrence)

a. On applications for assignments to earth or space stations, or to terrestrial stations (including experimental stations) employing earth or space station techniques, insert the maximum power density (in dB(W/Hz)) supplied to the antenna. For frequencies below 15 GHz, the power shall be averaged over the worst 4 kHz band; for frequencies at 15 GHz and above, the power shall be averaged over the worst 1 MHz band. The worst 4 kHz or 1 MHz band are defined as that 4 kHz or 1 MHz that has the highest power density within the assigned necessary bandwidth.

b. For negative values insert a dash in character one.
c. For positive values insert a zero in character one.
d. For values less than 10, insert a zero in characters two and three.
e. For values 10 to 99 inclusive, insert a zero in character two.

Examples: SPD01 –008 (The maximum power density per Hertz is –8 dBW/Hz.)
SPD01 0001 (The maximum power density per Hertz is 1 dBW/Hz.)

21. XSC--Transmitter State/Country (4 Characters--1 Occurrence)
a. Using one of the geographical abbreviations (State, Country, or Area) as shown in Annex G, Section G.2, insert the abbreviation of the State, Country, or Area in which the site of the transmitting station is located.
b. If the State, Country, or Area in which the site of the transmitting station is located is classified SECRET, insert XXXX in this field.
c. For a station on board a satellite in space, insert SPCE.
d. For emanations from a natural or cosmic origin intended for reception by space-based Passive Sensor or Radio Astronomy stations, insert RCVR.

Example: XSC01 CO for Colorado

22. XAL--Transmitter Antenna Location (24 Characters--1 Occurrence)
a. This field is for the name of the city or other geographical subdivision in which the site of the transmitting antenna is physically located. A major installation, such as Dallas-Fort Worth International Airport or Andrews AFB, is considered to be a city or other geographical subdivision. In certain cases non-geographical data are used.
b. In certain cases it may be necessary to describe an area of operation for which no specific name can be applied. For locations described as an area of operation, it shall be recognized that transmissions might not occur in every square kilometer of the area indicated, and the area described might overlap into states that are not shown in the transmitter STATE/ COUNTRY field.
c. Such areas may be described:
(1) as a radius in kilometers extending from a given location;

Example:

In the case of transmissions by one or more mobile stations located at any point within 80 kilometers of Dallas, insert DALLAS in this field and a radius in the CIRCUIT REMARKS *RAD field; or

(2) by the use of geographical coordinates in Circuit Remarks.

Example:

In the case of transmissions by one or more mobile stations in the area south of 33 degrees N in the State of Arizona, insert Arizona in this field and the data pertaining to the coordinates in the CIRCUIT REMARKS field. An area of operation within several states also may be described in this field as US or USA with the included or excluded states being shown in the CIRCUIT REMARKS field. Similarly, USP may be used if the area includes a possession.
d. While the data inserted normally shall be geographical names or descriptions, exceptions may be made for experimental operations, mobile operations where the XSC and XAL fields are identical, or for space operations. The following rules apply:
(1) For transmission by an experimental station, other than one in space, or to a mobile station having identical XSC and XAL fields, words such as AIRCRAFT, BALLOONS, or SHIPS may be used as appropriate.
(2) For transmission by a station aboard a geostationary satellite, insert GEOSTATIONARY.
(3) For transmission by a station aboard a nongeostationary satellite, insert NONGEOSTATIONARY.
(4) For transmission by a station located on a natural object in space, insert the name of the object, e.g., MOON.
(5) For transmission by a station aboard a space vehicle designed for operation in deep space (beyond the moon) where Earth orbital data are irrelevant, insert DEEP SPACE followed by planet (s) name, or PROBE, for those vehicles that do not orbit other planetary objects.
(6) For emanations from a natural or cosmic origin intended for reception by a space-based Passive Sensor (station class E2 or E4 and note S385) or Radio Astronomy stations (station class RA and note S385), insert RCVR.
(7) For transmission by a station aboard a vehicle whose purpose is to carry a payload into orbit, transmissions could occur from launch through placing the payload into orbit, the term LAUNCH VEHICLE may

be used.

      e. Entries in this field are limited to ALPHA and NUMERIC characters.

23. XRC--Transmitter Control (8 Characters--1 Occurrence)

This field is optional and is primarily for the name of the facility that controls, either electrically or administratively, the transmitting station; however, other similar data may be inserted. If the name exceeds eight characters, abbreviate.

24. XLA--Transmitter Antenna Latitude (7 Characters 1 Occurrence)

      a. Insert two characters each for the degrees, minutes, and seconds of the latitude of the site named in the TRANSMITTER ANTENNA LOCATION (XAL) field. Insert leading zeros for degrees, minutes, and seconds as required. Seconds shall be provided whenever possible; however, if it is impracticable to obtain the exact seconds, insert the closest seconds available. Coordinates will be referenced to the World Geodetic System Code 84/North American Datum 83. If another system code is used the type and reason will be entered in the supplementary remarks section.

      b. Leave this field blank if:

      (1) The site named in the TRANSMITTER ANTENNA LOCATION (XAL) field is an area, see Section 9.8.2, paragraph 22.c.(2) for which coordinates cannot be applied, e.g., Chicago District; or,

      (2) If non geographical data are used, e.g., AIRCRAFT.

      c. For a station aboard a Geostationary satellite, insert 000000N.

      d. For a station aboard a Non-geostationary satellite or a Deep Space vehicle, leave this field blank.

      e. Insert N for North or S for South latitude in the last space as applicable.

Example: XLA01 385351N

25. XLG--Transmitter Antenna Longitude (8 Characters--1 Occurrence)

      a. Insert in degrees (three characters), minutes (two characters) and seconds (two characters), the longitude of the site named in the TRANSMITTER ANTENNA LOCATION (XAL) field. Insert leading zeros for degrees, minutes, and seconds as required. Seconds shall be provided whenever possible; however, if it is impracticable to obtain the exact seconds, insert the closest seconds available. Coordinates will be referenced to the World Geodetic System Code 84/North American Datum 83. If another system code is used the type and reason will be entered in the supplementary remarks section.

      b. Leave this field blank if:

      (1) The site named in the TRANSMITTER ANTENNA LOCATION (XAL) field is an area for which coordinates cannot be applied, e.g., Chicago District; or,

      (2) If non-geographical data are used, e.g., AIRCRAFT.

      c. For a station aboard a Geostationary satellite, insert the longitudinal position of the satellite in degrees (three characters) and minutes (two characters) East or West longitude. In this case always enter 00 in the seconds portion of this field. Use leading zeros as required.

      d. For a station aboard a Non-geostationary satellite, or a Deep Space vehicle, leave this field blank.

      e. Insert E for East or W for West longitude in the last space as applicable.

Example: XLG01 0770133W

26. XAP--Transmitter Antenna Polarization (3 Characters--1 Occurrence)

      a. Transmitter antenna polarization is required on applications:

      (1) For assignments above 1000 MHz that must be coordinated by the IRAC with the Canadian Department of Communications pursuant to Section 3.4.6, Appendices 3 and 4 of Arrangement D; or

      (2) For transmitting Earth or Terrestrial stations (including experimental stations) employing Earth station techniques; or

      (3) For transmitting Space or Terrestrial stations (including experimental stations) using Space station techniques;

      (4) For assignments to TERRESTRIAL STATIONS at 420 MHz and above.

      b. Transmitter Antenna Polarization is not required on applications for:

(1) Experimental stations except as indicated in 26.a.(2) and (3);
(2) Mobile stations;
(3) Portable stations;
(4) Radiolocation mobile stations;
(5) Radionavigation mobile stations;
(6) Transportable stations;
(7) Group assignments;
(8) A period of six months or less;
(9) Meteorological Aids in the 1660-1700 MHz band;
(10) TACAN/DME stations in the 960-1215 MHz band;
(11) Aeronautical Telemetering stations in the 1435-1535, 2200-2290 and 2310-2395 MHz bands.

c. This field may be completed on other applications at the option of the applicant.

d. If more than one antenna is to be used, insert the polarization of the antenna to be used most frequently; however, for a space station, antenna polarization may be listed for up to three antennas, provided they are entered in the same sequence as the antenna data entered in the TRANSMITTER ANTENNA DIMENSIONS (XAD) field.

e. Insert one of the following letters or combination of letters to indicate the antenna(s) polarization:

A--Elliptic, Left
B–Elliptic, Right
D--Rotating
E--Elliptical
F--45 degrees
H--Horizontal
J--Linear
L--Left Hand Circular
M–Oblique Angled, Left
N–Oblique Angled, Right
O–Oblique Angled, Crossed
R--Right Hand Circular
S--Horizontal and Vertical
T--Right and Left Hand Circular
V--Vertical
X--Other

Examples: XAP01 V (Vertically polarized transmissions)

XAP01 FJL (45 degrees, Linear, and Left Hand Circular polarized transmissions for three space station antennas)

27. XAZ--Transmitter Antenna Orientation (3 Characters--1 Occurrence)

a. TERRESTRIAL STATIONS: On applications for assignments to Terrestrial stations complete this field in accordance with the procedures given below for the applicable frequency range. Enter one of the following as applicable:

(1) For directive antennas oriented in a fixed direction, enter a three-digit number indicating the azimuth of the main antenna lobe in degrees east of True North, using leading zeros as necessary and 360 for True North.

(2) For stations using on-site passive reflectors, displaced vertically from the primary antenna or installed on the same antenna farm as the primary antenna (normally within 150 meters of the transmitter), enter the horizontal azimuth of the on-site passive reflector.

(3) S--For directive antennas that operate in fixed mode (direction) but are steerable in the horizontal plane, e.g., steerable log periodic.

(4) ND--For Non-directive antennas.

(5) R--For antennas rotating through a full 360 degree azimuth while in operation.

(6) SSH--For antennas scanning horizontally through a limited sector.

(7) SSV--For vertically scanning (nodding) antennas.

(8) T--For tracking antennas capable of continuous reorientation for the purpose of maintaining optimum observance of a moving station or object.

b. TERRESTRIAL STATIONS BELOW 29890 kHz

(1) On applications for assignments to fixed (FX) stations in the band 3000 to 29890 kHz, enter the appropriate code in accordance with paragraph 27a.(1)-(8). This field may be left blank if the ANTENNA LOCATION is an area representing multiple transmitting stations, e.g., Chicago District, or if the application bears either the Note S362 or S189.

(2) On applications for assignments below 29890 kHz, other than those for fixed (FX) stations in the band 3000 to 29890 kHz, this field may be completed at the option of the applicant in accordance with paragraph 27a.(1)-(8).

c. TERRESTRIAL STATIONS AT 29890 kHz AND ABOVE

(1) On applications for assignments to stations at 29890 kHz and above, enter the appropriate code in accordance with 27a.(1)-(8).

(2) This field may be left blank on applications for:
    (a) Experimental stations;
    (b) Mobile stations;
    (c) Portable stations;
    (d) Radiolocation mobile stations;
    (e) Radionavigation mobile stations;
    (f) Transportable stations;
    (g) Group assignments;
    (h) A period of six months or less;
    (i) Marker beacons in the 74.8-75.2 MHz band;
    (j) VOR/ILS in the 108-117.975 MHz band;
    (k) Stations in the aeronautical mobile service in the 117.975-136 MHz band;
    (l) Stations in the aeronautical and maritime mobile services in the 138-144, 148-150.8, 157.0375-157.1875, 225-328.6, 335.4-399.9 MHz bands, or on the frequencies 156.6, 156.7, 161.6 MHz;
    (m) Glideslopes in the 328.6-335.4 MHz band;
    (n) Meteorological Aids in the 400.05-406, and 1660-1700 MHz bands;
    (o) TACAN/DME in the 960-1215 MHz band; and
    (p) Aeronautical telemetering stations in the 1435-1535, 2200-2290 and 2310-2395 MHz bands; and
    (q) Stations using radar.

(3) On applications for assignments that are listed above as exceptions, this field may be completed at the option of the applicant.

d. EARTH STATIONS: For Earth and Terrestrial stations (including experimental stations) employing Earth station techniques, insert the letter V followed by a two-digit number expressing the minimum operating angle of elevation of the antenna, in degrees, from the horizontal for geostationary satellites and the minimum operating angle of elevation of the antenna, in degrees, from the horizontal for non-geostationary satellites and multiple receiving geostationary satellites.

e. SPACE STATIONS: For Space and Terrestrial stations (including experimental stations) employing space station techniques, enter one of the following, whichever is applicable.
    (1) NB--for narrow beam antennas, i.e., substantially less than earth coverage; or
    (2) EC--for earth coverage antennas; or
    (3) Leave the field blank in the case of space-to-space operations.

28. XCL--Transmitter Call Sign (8 Characters-1 Occurrence)

This field is for the call sign or identifier assigned to the station in accordance with Section 6.5.

a. Insert the full call sign starting in the first position left-justified; however, those that do not require eight spaces and that are formed by letters followed by numbers, insert the letters with left-justified and the numbers with right-justified.

b. For navigation aids this field is for the identifier instead of a call sign.

Example: XCL01 WUH 55

29. XAD--Transmitter Antenna Dimensions (24 Characters--1 Occurrence)

This field shall be completed in accordance with the following procedures. Each Entry is dependent upon

frequency range and type of station, i.e., TERRESTRIAL, EARTH or SPACE. Antenna gain must be entered in decibels with reference to an isotropic (dBi) source. Where gain is derived from a source in reference to a dipole (dBd), the dBi gain can be determined by adding 2.15 to the dBd gain (dBd + 2.15 = dBi) (ref: ITT Reference Data for Radio Engineers). Enter data according to the following:

    a. TERRESTRIAL Stations BELOW 29890 kHz:

      (1) This field may be left blank if the ANTENNA LOCATION (XAL) is an area representing multiple transmitting stations, e.g., Chicago District, or if the application bears either of the Notes S362 or S189.

      (2) Gain is required on applications for assignments to fixed (FX) stations in the band 3000 to 29890 kHz. Only the gain shall be entered in characters 1-3 of this field. Characters 4-24 shall be blank. The following formatting instructions apply: Insert in characters one and two, an appropriate two digit number which represents the gain; use a leading zero if the gain is less than ten. Insert the letter G in the third character (e.g., 04G, 20G). If the gain is zero it shall be entered as 00G.

      (3) On all other applications for assignments below 29890 kHz, this field may be completed at the option of the applicant. However, if completed it must be in accordance with (2) above.

    b. TERRESTRIAL Stations at 29890 kHz and ABOVE:

      (1) This field may be left blank on applications for:

        (a) Experimental stations;

        (b) Mobile stations;

        (c) Portable stations;

        (d) Radiolocation mobile stations;

        (e) Radionavigation mobile stations;

        (f) Transportable stations;

        (g) Group assignments;

        (h) A period of six months or less;

        (i) Marker beacons in the 74.8-75.2 MHz band;

        (j) VOR/ILS in the 108-117.975 MHz band;

        (k) Stations in the aeronautical mobile service in the 117.975-136 MHz band;

        (l) Stations in the aeronautical and maritime mobile service in the 138-144, 148-150.8, 157.0375-157.1875, 225-328.6, 335.4-399.9 MHz bands, or on the frequencies 156.6, 156.7, 161.6 MHz;

        (m) Glideslopes in the 328.6-335.4 MHz band;

        (n) Meteorological aids in the 400.05-406, and 1660-1700 MHz bands;

        (o) TACAN/DME in the 960-1215 MHz band;

        (p) Aeronautical telemetering stations in the 1435-1535, 2200-2290, and 2310-2395 MHz bands.

    (2) On all applications for assignments above 29890 kHz that are listed in 29b.(1)(a)-(p) as exceptions, this field may be completed at the option of the applicant.

    (3) If more than one antenna is to be used, insert the data for the antenna to be used most frequently.

    (4) The following formatting instructions apply:

      (a) GAIN--Insert in the first two characters a two-digit number representing the nominal gain of the antenna in decibels. Insert a zero in the first space if the gain is less than ten. Enter the letter G in the third space. If the gain is zero, enter 00G.

      (b) NAME--Starting with the fourth character, insert an abbreviation from the list of approved antenna names and the associated authorized abbreviations listed in Annex G, G.6. If the antenna is not listed, forward the new antenna name, abbreviation, and manufacturer specification sheet to the FAS for inclusion into Annex G, G.6 prior to submitting proposals.

      (c) ELEVATION--Starting with the 14th character, enter a five-digit number representing the site (terrain) elevation in meters above mean sea level (MSL). Use all five spaces, inserting leading zeros as applicable. For a site below MSL, enter a dash in the 14th space and a four digit number. Insert the letter H in the 19th space. Leave blank for assignments to transportable transmitter stations (S362).

      (d) HEIGHT--Starting with the 20th character, insert a four-digit number representing the antenna height in meters above terrain. Use all four spaces, inserting leading zeros as applicable. Insert the letter T in the 24th space.

    Example: XAD01 10GCORNREFLTR06550H0175T

    c. EARTH Stations: The following formatting instructions apply to both Earth and Terrestrial stations (including experimental stations) employing Earth station techniques.

(1) Use the entire 24 characters to record the following particulars:

(a) GAIN--Insert in the first two characters a two-digit number representing the gain of the antenna in the direction of maximum radiation. Insert a zero in the first character if the gain is less than ten. Enter the letter G in character three. For a negative gain, insert XXG and give the value in the CIRCUIT REMARKS *EGN field.

(b) BEAMWIDTH--Beginning with character four, insert a three-digit number representing the antenna beamwidth (degrees) at the half power points. Use all three spaces, inserting leading zeros as applicable. Enter the letter B in character seven. For a beamwidth requiring more than three spaces, insert XXXB and give the value in the CIRCUIT REMARKS *EBW field.

(c) AZIMUTH--In characters eight through fourteen, insert the azimuth angles (in degrees clockwise from True North) of the main beam. If the Earth station is to communicate with a single Geostationary satellite, insert the azimuth angle to the satellite in spaces eight through ten (use leading zeros), a slant bar in space eleven, and XXX in spaces twelve through fourteen. If it is to communicate with two geostationary satellites, insert the azimuth angle to the first in spaces eight through ten, a slant bar in space eleven, and the azimuth angle to the second satellite in spaces twelve through fourteen. If the Earth station is mobile or transportable, or is to communicate with nongeostationary satellites or with more than two geostationary satellites, indicate the range of azimuth angles over which the Earth station antenna will point by inserting in spaces eight through ten a three-digit number for one extreme azimuth, a hyphen in space eleven, and a three-digit number in spaces twelve through fourteen for the other extreme azimuth. Use leading zeros as necessary and 360 for True North. In character fifteen insert the letter A.

(d) ELEVATION--Starting with character sixteen, insert a five-digit number representing the site (terrain) elevation in meters above mean sea level (MSL). Use all five spaces, inserting leading zeros as necessary. In character twenty-one insert the letter H.

For mobile or transportable stations, leave blank.

(e) HEIGHT--Starting with character twenty-two, insert a three-digit number representing the antenna height in meters above terrain. Use all three spaces, inserting leading zeros as applicable. For an Earth station aboard an aircraft, insert a two-digit number followed by the letter K to denote the maximum operational altitude of the aircraft in thousands of feet above mean sea level.

For altitudes under 10,000 feet insert a leading zero.

Example: XAD01 35G106B010/130A05200H025

d. SPACE Stations: The following formatting instructions apply to both Space and Terrestrial stations (including experimental stations) using Space station techniques:

(1) This field provides room for the details of up to three antennas per Space station. If the station uses more than three antennas for the requested frequency, provide data for the three most frequently used antennas.

(2) Use characters one through seven for the details of the first antenna. Enter:

(a) GAIN–Insert in the first two characters a two-digit number representing the gain of the antenna in the direction of maximum radiation. Insert a zero in the first character if the gain is less than ten. Enter the letter G in character 3. For a negative gain, insert XXG and give the value in the CIRCUIT REMARKS *SGN field.

(b) BEAMWIDTH--Beginning with character four, insert a three-digit number representing the antenna beamwidth (degrees) at the half power points. Use all three spaces, inserting leading zeros as necessary. Insert the letter B in space seven. For a beamwidth requiring more than three spaces, insert XXXB and give the value in the CIRCUIT REMARKS *SBW field.

Examples:

XAD01 08G150B
XAD01 36G2.1B
XAD01 XXG125B
XAD01 20GXXXB

(3) If the assignment involves the use of a second antenna:

(a) Insert a slant bar in character eight; and,

(b) Use characters nine through fifteen for the details as specified in paragraph 29.d.(2)(a) and (b).

Example: XAD01 30G016B/30G0.1B

    (4) If the assignment involves the use of a third antenna:
       (a) Insert a slant bar in character sixteen; and,
       (b) Use characters seventeen through twenty-three for the details of the third antenna as specified in paragraph 29.d.(2) (a) and (b).

Example: XAD01 30G016B/30G0.1B/20G.25B

    (5) Leave character twenty-four blank.

30. RSC--Receiver State/Country (4 Characters--30 Occurrences)
    a. Using one of the geographical abbreviations (state, country, or area) as shown in Annex G, Section G.2, insert the abbreviation of the State, Country, or Area in which the site of the receiving station is located.
    b. For a station on board a satellite in space, insert SPCE.

Example: RSC01 CO for Colorado.

31. RAL--Receiver Antenna Location (24 Characters--30 Occurrences)
    a. This field is for the name of the city or other geographical subdivision in which the site of the receiving antenna is physically located. A major installation, such as Fort Monmouth or Andrews AFB, is considered to be a city or other geographical subdivision. In certain cases non-geographical data are used.
    b. In certain cases it may be necessary to describe an area of operation for which no specific name can be applied. For locations described as an area of operation, it shall be recognized that reception might not occur in every square kilometer of the area indicated, and the area described might overlap into States that are not shown in the RECEIVER STATE/COUNTRY (RSC) field.
    c. Such areas may be described:
       (1) As a radius in kilometers extending from a given location:

Example:

    In the case of reception by one or more mobile stations located at any point within 80 kilometers of Dallas, insert DALLAS in this field and a radius in the CIRCUIT REMARKS *RAD field; or
       (2) By the use of geographical coordinates in Circuit Remarks.

Example:

    In the case of reception by one or more mobile stations in the area south of 33 degrees N in the State of Arizona, insert Arizona in this field and the data pertaining to the coordinates in the CIRCUIT REMARKS field. An area of operation within several States also may be described in this field as US or USA with the included or excluded States being shown in the CIRCUIT REMARKS field. Similarly, USP may be used if the area includes a Possession.
    d. While the data inserted normally shall be geographical names or descriptions, exceptions may be made for experimental operations, mobile operations where the RSC and RAL fields are identical, or for space operations. The following rules apply:
       (1) For reception by an experimental station, other than one in space, or to a mobile station having identical RSC and RAL fields, words such as AIRCRAFT, BALLOONS, or SHIPS may be used as appropriate.
       (2) For reception by a station aboard a geostationary satellite, insert GEOSTATIONARY.
       (3) For reception by a station aboard a non-geostationary satellite, insert NONGEOSTATIONARY.
       (4) For reception by a station located on a natural object in space, insert the name of the object, e.g., MOON.
       (5) For reception by a station aboard a space vehicle designed for operation in deep space (beyond the moon) where earth orbital data are irrelevant, insert DEEP SPACE followed by planet(s) name, or PROBE, for those vehicles that do not orbit other planetary objects.
    e. Entries in this field are limited to ALPHA and NUMERIC characters.

32. RRC--Receiver Control (8 Characters-30 Occurrences)

This field will only be used by the computer program Federal Spectrum Management System (FSMS)/Spectrum XXI online to indicate that the GMF record has been processed through the new system. Agencies cannot enter data into this field.

33. RLA--Receiver Antenna Latitude (7 Characters--30 Occurrences)

a. Insert two characters each for the degrees, minutes, and seconds of the latitude of the site named in the RECEIVER ANTENNA LOCATION (RAL) field. Insert leading zeros for degrees, minutes, and seconds as required. Seconds shall be provided whenever possible; however, if it is impracticable to obtain the exact seconds, insert the closest seconds available. Coordinates will be referenced to the World Geodetic System Code 84/North American Datum 83. If another system code is used the type and reason will be entered in the supplementary remarks section.

b. Leave this field blank if:

(1) The site named in the RECEIVER ANTENNA LOCATION (RAL) field is an area, see Section 9.8.2, paragraph 31.c.(2) for which coordinates cannot be applied, e.g., Chicago District; or,

(2) If non-geographical data are used, e.g., AIRCRAFT.

c. For a station aboard a Geostationary satellite, insert 000000N.

d. For a station aboard a Non-geostationary satellite or a Deep Space vehicle, leave this field blank.

e. Insert N for North or S for South latitude in the last space as applicable.

f. For assignments where the transmitter and receiver equipment is not collocated then enter the RLA of the receiving antenna; otherwise, enter the same coordinates contained in XLA.

34. RLG--Receiver Antenna Longitude (8 Characters--30 Occurrences)

a. Insert in degrees (3 characters), minutes (2 characters) and seconds (2 characters), the longitude of the site named in the RECEIVER ANTENNA LOCATION (RAL) field. Insert leading zeros for degrees, minutes, and seconds as required. Seconds shall be provided whenever possible; however, if it is impracticable to obtain the exact seconds, insert the closest seconds available. Coordinates will be referenced to the World Geodetic System Code 84/North American Datum 83. If another system code is used the type and reason will be entered in the supplementary remarks section.

b. Leave this field blank if:

(1) the site named in the RECEIVER ANTENNA LOCATION (RAL) field is an area for which coordinates cannot be applied, e.g., Chicago District; or,

(2) if non geographical data are used, e.g., AIRCRAFT.

c. For a station aboard a Geostationary satellite, insert the longitudinal position of the satellite in degrees (3 characters) and minutes (2 characters) East or West longitude. In this case always enter 00 in the seconds portion of this field. Use leading zeros as required.

d. For a station aboard a Non-geostationary satellite, or a Deep Space vehicle, leave this field blank.

e. Insert E for East or W for West longitude in the last space as applicable.

f. For assignments where the transmitter and receiver equipment is not collocated then enter the RLG of the receiving antenna; otherwise, enter the same coordinates contained in XLG.

35. RAP--Receiver Antenna Polarization (3 Characters--30 Occurrences)

a. Receiver antenna polarization is required on applications:

(1) For receiving Earth or Terrestrial stations (including experimental stations) employing Earth station techniques; or

(2) For receiving Space or Terrestrial stations (including experimental stations) using Space station techniques; or

(3) For receiving Terrestrial stations at 420 MHz and above.

b. Receiver Antenna Polarization is not required on applications for:

(1) Experimental stations except as indicated in 26.a.(2) and (3);

(2) Mobile stations;

(3) Portable stations;

(4) Radiolocation mobile stations;

(5) Radionavigation mobile stations;

(6) Transportable stations;

(7) Group assignments;

(8) A period of six months or less;

(9) Meteorological Aids in the 1660-1700 MHz band;

(10) TACAN/DME stations in the 960-1215 MHz band;

(11) Aeronautical Telemetering stations in the1435-1535, 2200-2290, and 2310-2395 MHz bands;

(12) Stations using radar;

(13) Passive reflectors.

c. This field may be completed on other applications at the option of the applicant.

d. If more than one antenna is to be used, insert the polarization of the antenna to be used most frequently; however, for a space station, antenna polarization may be listed for up to three antennas, provided they are entered in the same sequence as the antenna data entered in the RECEIVER ANTENNA DIMENSIONS (RAD) field.

e. Insert one of the following letters or combination of letters to indicate the antenna(s) polarization:

A--Elliptic, Left

B--Elliptic, Right

D--Rotating

E--Elliptical

F--45 Degrees

H--Horizontal

J--Linear

L--Left Hand Circular

M--Oblique Angled, Left

N--Oblique Angled, Right

O--Oblique Angled, Crossed

R--Right Hand Circular

S--Horizontal and Vertical

T--Right and Left hand Circular

V--Vertical

X--Other

36. RAZ--Receiver Antenna Orientation (3 Characters--30 Occurrences)

a. TERRESTRIAL STATIONS: On applications for assignments to Terrestrial stations complete this field in accordance with the procedures given below for the applicable frequency range. Enter one of the following as applicable:

(1) For directive antennas oriented in a fixed direction, including off-site passive reflectors listed in the RECEIVER ANTENNA LOCATION (RAL) field, enter a three-digit number indicating the azimuth of the main antenna lobe in degrees east of True North, using leading zeros as necessary and 360 for True North.

(2) For stations using on-site passive reflectors, displaced vertically from the primary antenna or installed on the same antenna farm as the primary antenna (normally within 150 meters of the receiver), enter the horizontal azimuth of the on-site passive reflector.

(3) S--For directive antennas that operate in fixed mode (direction) but are steerable in the horizontal plane, e.g., steerable log periodic.

(4) ND--For non directive antennas.

(5) R--For antennas rotating through a full 360 degree azimuth while in operation.

(6) SSH--For antennas scanning horizontally through a limited sector.

(7) SSV--For vertically scanning (nodding) antennas.

(8) T--For tracking antennas capable of continuous reorientation for the purpose of maintaining optimum observance of a moving station or object.

b. TERRESTRIAL STATIONS BELOW 29890 kHz

(1) On applications for assignments to fixed (FX) stations in the band 3000 to 29890 kHz, enter the appropriate code in accordance with paragraph 36a.(1) (8). This field may be left blank if the ANTENNA LOCATION is an area representing multiple receiving stations, (e.g., Chicago District, or if the application bears either the Note S362 or S189).

(2) On applications for assignments below 29890 kHz, other than those for fixed (FX) stations in the band 3000 to 29890 kHz, this field may be completed at the option of the applicant in accordance with paragraph 36a.(1)-

(8).

      c. TERRESTRIAL STATIONS AT 29890 kHz AND ABOVE

        (1) On applications for assignments to stations at 29890 kHz and above enter the appropriate code in accordance with 36a.(1)-(8).

        (2) This field may be left blank on applications for:

          a) Experimental stations;

          b) Mobile stations;

          c) Portable stations;

          d) Radiolocation mobile stations;

          e) Radionavigation mobile stations;

          f) Transportable stations;

          g) Group assignments;

          h) A period of six months or less;

          i) Marker Beacons in the 74.8-75.2 MHz band;

          j) VOR/ILS in the 108-117.975 MHz band;

          k) Stations in the Aeronautical Mobile service in the 117.975-136 MHz band;

          l) Stations in the aeronautical and maritime mobile services in the 138-144, 148-150.8, 157.0375-157.1875, 225-328.6, 335.4-399.9 MHz bands, or on the frequencies 156.6, 156.7, 161.6 MHz;

          (m) Glideslopes in the 328.6-335.4 MHz band;

          (n) Meteorological aids in the 400.05-406, and 1660-1700 MHz bands;

          (o) TACAN/DME in the 960-1215 MHz band;

          (p) Aeronautical Telemetering stations in the 1435-1535, 2200-2290, and 2310-2395 MHz bands; and

          (q) Stations using radar.

        (3) On applications for assignments that are listed above as exceptions, this field may be completed at the option of the applicant.

      d. EARTH STATIONS: For Earth and terrestrial stations (including experimental stations) employing Earth station techniques, insert the letter V followed by a two-digit number expressing the minimum operating angle of elevation of the antenna, in degrees, from the horizontal for geostationary satellites and the minimum operating angle of elevation of the antenna, in degrees, from the horizontal for non-geostationary satellites.

      e. SPACE STATIONS: For Space and terrestrial stations (including experimental stations) employing space station techniques, enter one of the following, whichever is applicable.

        (1) NB--for narrow beam antennas, (i.e., substantially less than earth coverage); or

        (2) EC--for earth coverage antennas; or

        (3) Leave the field blank in the case of space-to-space operations.

37. ACL--Receiving Station Call Sign (8 Characters--30 Occurrences)

      a. This field is optional and is for the call sign assigned to the station which will receive transmissions from the station listed in the Transmitter Antenna Location (XAL) field.

      b. Insert the full call sign starting in the first position sign left-justified; however, those that do not require eight spaces and that are formed by letters followed by numbers, insert the letters with left-justified and the numbers with right-justified.

38. RAD--Receiver Antenna Dimensions (24 Characters--30 Occurrences)

This field shall be completed in accordance with the following procedures. Each entry is dependent upon frequency range and type of station, (i.e., TERRESTRIAL, EARTH or SPACE). Antenna gain must be entered in decibels with reference to an isotropic (dBi) source. Where gain is derived from a source in reference to a dipole (dBd), the dBi gain can be determined by adding 2.15 to the dBd gain (dBd + 2.15 = dBi) (ref: ITT Reference Data for Radio Engineers). Enter data according to the following:

      a. TERRESTRIAL STATIONS BELOW 29890 kHz:

        (1) This field may be left blank if the ANTENNA LOCATION (RAL) is an area representing multiple receiving stations, e.g., Chicago District, or if the application bears either of the Notes S362 or S189.

        (2) Gain is required on applications for assignments to fixed (FX) stations in the band 3000 to 29890 kHz. Only the gain shall be entered in characters 1-3 of this field. Characters 4-24 shall be blank. The following formatting instructions apply: Insert in characters one and two, an appropriate two digit number which represents the gain; use a leading zero if the gain is less than ten. Insert the letter G in the third character (e.g., 04G, 20G). If the gain is zero

it shall be entered as 00G.

     (3) On all other applications for assignments below 29890 kHz, this field may be completed at the option of the applicant. However, if completed it must be in accordance with (2) above.

    b. TERRESTRIAL STATIONS at 29890 kHz and ABOVE:

      (1) This field may be left blank on applications for:

        (a) Experimental stations;

        (b) Mobile stations;

        (c) Portable stations;

        (d) Radiolocation mobile stations;

        (e) Radionavigation mobile stations;

        (f) Transportable stations;

        (g) Group assignments;

        (h) A period of six months or less;

        (i) Marker Beacons in the 74.8-75.2 MHz band;

        (j) VOR/ILS in the 108-117.975 MHz band;

        (k) Stations in the aeronautical mobile service in the 117.975-136 MHz band;

        (l) Stations in the aeronautical and maritime mobile services in the 138-144, 148-150.8, 157.0375-157.1875, 225-328.6, 335.4-399.9 MHz bands, or on the frequencies 156.6, 156.7, 161.6 MHz;

        (m) Glideslopes in the 328.6-335.4 MHz band;

        (n) Meteorological aids in the 400.05-406, and 1660-1700 MHz bands;

        (o) TACAN/DME in the 960-1215 MHz band;

        (p) Aeronautical telemetering stations in the 1435-1535, 2200-2290, and 2310-2395 MHz bands;

        (q) Stations using radar.

    (2) On all applications for assignments above 29890 kHz that are listed in 38.b.(1)(a)-(q) as exceptions, this field may be completed at the option of the applicant.

      (3) If more than one antenna is to be used, insert the data for the antenna to be used most frequently.

      (4) The following formatting instructions apply:

        (a) GAIN--Insert in the first two characters a two-digit number representing the nominal gain of the antenna in decibels. Insert a zero in the first space if the gain is less than ten. Enter the letter G in the third space. If the gain is zero, or antenna is a passive reflector, enter 00G.

        (b) NAME--Starting with the fourth character, insert an abbreviation from the list of approved antenna names and the associated authorized abbreviations listed in Annex G, G.6. If the antenna is not listed, forward the new antenna name, abbreviation, and manufacturer specification sheet to the FAS for inclusion into Annex G, G.6 prior to sumitting proposals.

        (c) ELEVATION--Starting with the 14th character, enter a five-digit number representing the site (terrain) elevation in meters above mean sea level (MSL). Use all five spaces, inserting leading zeros as applicable. For a site below MSL, enter a dash in the 14th space and a four digit number. Insert the letter H in the 19th space. Leave blank for assignments to transportable receiving stations (S362).

        (d) HEIGHT--Starting with the 20th character insert a four-digit number representing the antenna height in meters above terrain. Use all four spaces, inserting leading zeros as applicable. Insert the letter T in the 24th space.

    Example: RAD01 10GCORNREFLTR06550H0175T

    c. EARTH STATIONS: The following formatting instructions apply to both Earth and Terrestrial stations (including experimental stations) employing Earth station techniques.

      (1) Use the entire 24 characters to record the following particulars:

        (a) GAIN–Insert in the first two characters a two-digit number representing the gain of the antenna in the direction of maximum radiation. Insert a zero in the first character if the gain is less than ten. Enter the letter G in character three. For a negative gain, insert XXG and give the value in the CIRCUIT REMARKS *EGN field.

        (b) BEAMWIDTH--Beginning with character four, insert a three-digit number representing the antenna beamwidth (degrees) at the half power points. Use all three spaces, inserting leading zeros as applicable. Enter the letter B in character seven. For a beamwidth requiring more than three spaces, insert XXXB and give the value in the CIRCUIT REMARKS *EBW field.

        (c) AZIMUTH--In characters eight through fourteen, insert the azimuth angles (in degrees clockwise from True North) of the main beam. If the Earth station is to communicate with a single Geostationary satellite,

insert the azimuth angle to the satellite in spaces eight through ten (use leading zeros), a slant bar in space eleven, and XXX in spaces twelve through fourteen. If it is to communicate with two or more geostationary satellites, separate applications are required for each Earth station azimuth. If the Earth station is to communicate with non-geostationary satellites or is mobile or transportable, and is to communicate with a geostationary satellite, indicate the range of azimuth angles over which the Earth station antenna will point by inserting in spaces eight through ten a three-digit number representing one of the extreme azimuth angles, a hyphen in space eleven, and a three-digit number in spaces twelve through fourteen representing the other extreme angle. Use leading zeros as necessary and 360 for True North. In character fifteen insert the letter A.

(d) ELEVATION--Starting with character sixteen, insert a five-digit number representing the site (terrain) elevation in meters above mean sea level (MSL). Use all five spaces, inserting leading zeros as necessary. In character twenty-one insert the letter H.

For mobile or transportable stations, leave blank.

(e) HEIGHT--Starting with character twenty-two, insert a three-digit number representing the antenna height in meters above terrain. Use all three spaces, inserting leading zeros as applicable. For an Earth station aboard an aircraft, insert a two-digit number followed by the letter K to denote the maximum operational altitude of the aircraft in thousands of feet above mean sea level.

For altitudes under 10,000 feet insert a leading zero.

Example: RAD01 35G106B010/XXXA05200H025

d. SPACE Stations: The following formatting instructions apply to both Space and Terrestrial stations (including experimental stations) using space station techniques:

(1) This field provides room for the details of up to three antennas per Space station. If the station uses more than three antennas for the requested frequency, provide data for the three most frequently used antennas.

(2) Use characters one through seven for the details of the first antenna. Enter:

(a) GAIN–Insert in the first two characters a two-digit number representing the gain of the antenna in the direction of maximum radiation. Insert a zero in the first character if the gain is less than ten. Enter the letter G in character 3. For a negative gain, insert XXG and give the value in the CIRCUIT REMARKS *SGN field.

Examples: RAD01 20G015B
RAD01 08G.25B
RAD01 XXG105B
RAD01 20GXXXB

(b) BEAMWIDTH--Beginning with character four, insert a three-digit number representing the antenna beamwidth (degrees) at the half power points. Use all three spaces, inserting leading zeros as necessary. Insert the letter B in space seven. For a beamwidth requiring more than three spaces, insert XXXB and give the value in the CIRCUIT REMARKS *SBW field.

(3) If the assignment involves the use of a second antenna:
(a) Insert a slant bar in character eight; and
(b) Use characters nine through fifteen for the details as specified in paragraph 38.d.(2)(a) and (b).

Examples: RAD01 20G016B/10G.30B

(4) If the assignment involves the use of a third antenna:
(a) Insert a slant bar in character sixteen; and
(b) Use characters seventeen through twenty three for the details of the third antenna as specified in paragraph 38.d(2) (a) and (b).

Example: RAD01 10G025B/20G.30B/30G1.9B

(5) Leave character twenty-four blank.

39. Circuit Remarks (REM) (40 Characters-30 Occurrences)

The CIRCUIT REMARKS field is used primarily to record frequency assignment characteristics that have no

specific fields provided for them on the application, particularly amplifying data concerning the frequency, antenna location, and equipment characteristics. General rules for the formation of entries are given below followed by specific rules for each type of entry. The use of this field is limited to the following types of entries for which specific rules are given:

*AGN	*CLS	*EST	*NRM
*ARB	*CLU	*FBE	*NTS
*ARR	*DFI	*FLN	*ORB
*ART	*DOC	*FRB	*PRD
*CAN	*EBW	*IFI	*PRR
*CDD	*EGN	*JNT	*RAD
*CDE	*EQR	*LSB	*RPT
*CLA	*EQS	*LSR	*SBW
*CLC	*EQT	*LST	*SGN
*CLF	*ESB	*MEX	*TRN
*CLR	*ESR	*MFI	*USA

a. General Rules

(1) Entries are always preceded by the mnemonic REM, the occurrence number, an asterisk, and a three letter identifying code followed by a comma, e.g., REM01 *FRB,. In this field, an asterisk is used only for this purpose. Entries concerning frequency bands precede other entries. Enter these data immediately after the comma at the end of the identifying code. The data may be any combination of words and elements. An element is a code or a numeric value. If the data consist entirely of elements, the number of spaces for each element is specified, and the position of each element with respect to the identifying code is specified. If an element is numeric, fill all spaces using leading zeros as necessary. If an element is a code, left-justified in its allocated space, and, if it requires fewer spaces than are allocated, leave the spaces on the right side blank. To increase readability, a word may be used as a code.

(2) Where necessary, specific rules require an entry be completed within a single 40-character line. This is to prevent the division or breaking of an element between two lines. If the use of more than one entry is permitted and is necessary, the identifying code for that entry is entered again at the beginning of each line which is used. Such entries should not have a hyphenated word at the end of a line.

*b. Frequency Band Data (*FRB)*

On an application for a band of frequencies, e.g., 1200 MHz to 1300 MHz enter the lower limit of the band in the FREQUENCY field and both the lower and upper limits in the CIRCUIT REMARKS field.

(1) Insert the identifying code REM01 *FRB always as the first entry in the CIRCUIT REMARKS field.

(2) Insert a comma in the 5th space.

(3) Insert the lower limit of the frequency band in the 13 spaces immediately following the comma. Express the frequency in KiloHertz (kHz) below 30000 kHz; in MegaHertz (MHz) from 30 MHz to (but not including) 100,000 MHz; in GigaHertz (GHz) from 100 GHz to (but not including) 3000 GHz; and in TeraHertz (THz) at 3 THz and above. Insert in the first space after the comma the letter M if the frequency is expressed in MegaHertz, the letter G if the frequency is expressed in GigaHertz, and the letter T if the frequency is expressed in TeraHertz. Always insert a decimal point in the 7th space from the comma. The numeric value of the frequency must completely fill the 13 allotted spaces, leading zeros to the left of the decimal and ending zeros to the right of the decimal being used as necessary.

(4) Insert a comma in the 19th space immediately after the lower limit of the frequency band.

(5) Starting with the 20th space, insert the upper limit of the frequency band as explained in (3) above.

Examples:

    REM01 *FRB,015010.000000,015100.000000
    REM01 *FRB,010000.000000,M00050.000000
    REM01 *FRB,M00162.012500,M00162.587500
    REM01 *FRB,M90000.000000,G00110.000000

*c. Excluded Frequency Band Data (*FBE)*

In the case of an application for a band of frequencies where a portion of the band is to be excluded, the lower and upper limits of the band are inserted as the first entry as stated under Frequency Band Data above. The portion to be excluded is then inserted as the second entry in the CIRCUIT REMARKS field.

(1) Insert the identifying code *FBE always as the second entry.

(2) Insert a comma in the 5th space.

(3) Insert the lower limit of the excluded portion in the 13 spaces immediately following the comma. Express the frequency in kiloHertz (kHz) below 30000 kHz; in MegaHertz (MHz) from 30 MHz to (but not including) 100,000 MHz; in GigaHertz (GHz) from 100 GHz to (but not including) 3000 GHz; and in TeraHertz (THz) at 3 THz and above. Insert in the first space after the comma the letter M if the frequency is expressed in MegaHertz, the letter G if the frequency is expressed in GigaHertz, and the letter T if the frequency is expressed in TeraHertz. Always insert a decimal point in the 7th space from the comma. The numeric value of the frequency must completely fill the 13 allotted spaces, leading zeros to the left of the decimal and ending zeros to the right of the decimal being used as necessary.

(4) Insert a comma in the 19th space immediately after the lower limit of the excluded portion.

(5) Starting with the 20th space, insert the upper limit of the excluded portion as explained in 3 above.

(6) If additional portions of the frequency band are to be excluded, insert each portion on a succeeding entry in ascending order as explained in (1) through (5) above.

Examples:

    REM01*FRB,M00960.000000,M01700.000000
    REM02*FBE,M01400.000000,M01427.000000
    REM03*FBE,M01660.000000,M01670.000000

Under this example the following bands would be authorized:

     960-1400 MHz
    1427-1660 MHz
    1670-1700 MHz

*d. Authorized Area of Operation (*RAD)*

Enter a radius of operation from a given geographical location for mobile stations, transportable stations, and multiple transmitting and/or receiving stations (NOTE S361). Normally this geographical location is that of a fixed station; if no fixed station is involved, select a center point within the operating cell. A radius is required for:

--Multiple transmitting and/or receiving FIXED stations (NOTE S361) if coordinates are entered in the XLA/XLG and RLA/RLG fields.

--Mobile and transportable stations if coordinates are entered in the XLA/XLG and RLA/RLG fields.

--Multiple transmitting FIXED stations (NOTE S361) if coordinates are entered in the XLA/XLG fields.

--Mobile and transportable transmitter stations if coordinates are entered in the XLA/XLG fields.

--Multiple receiving FIXED stations (NOTE S361) if coordinates are entered in the RLA/RLG fields.

--Mobile and transportable receiver stations if coordinates are entered in the RLA/RLG fields.

(1) Complete the total entry within a single 40-space CIRCUIT REMARKS field, i.e., on one entry.

(2) Insert the identifying code REMnn *RAD.

(3) Insert a comma after the identifying code.

(4) After the comma insert in the next four spaces the radius in kilometers, using leading zeros as necessary.

(5) For assignments in the AAG frequency bands (see 9.2.1 to identify AAG bands), the radius shall be followed by a comma and its equivalent nautical mile value including the letters NM. If the applicant does not submit the nautical mile equivalent, it will be generated by NTIA.

(6) At the option of the applicant, amplifying data describing the area of operation may be included on the *RAD entry. Insert a comma after the radius followed by the amplifying data. THE ENTIRE RADIUS ENTRY INCLUDING ALL THE AMPLIFYING DATA SHALL BE CONTAINED WITHIN A SINGLE 40-SPACE CIRCUIT REMARKS LINE.

(7) Should the assignment contain the amplifying data B, R, or T in *RAD, these indicate:

B - Transmission authorized and reception protected within the radius drawn around the XLA/XLG and RLA/RLG coordinates,

R - Reception protected within the radius drawn around the RLA/RLG coordinates,

T - Transmission authorized within the radius drawn around the XLA/XLG coordinates after the last abbreviation.

Should the assignment contain multiple receiver locations and the area of operation shown applies to some but not all receiver locations, the receiver occurrence number may be shown in the optional data portion of *RAD. Likewise, if different values for an area of operation pertain to the transmitter and receiver locations, these values are followed by an R or T as indicated above.

*e. Authorized States (*ESB, *ESR, *EST, *LSB, *LSR, *LST)*

The transmitter and receiver ANTENNA LOCATION fields provide an area of operation within four or more states may be described in those fields as US or USA, with the included (*LSB,*LSR,*LST) States being shown in the CIRCUIT REMARKS field. The excluded states field codes (*ESB,*ESR,*EST) can be used on any US, USA or USP assignment and may exclude one or more states as long as four or more states remain. Similarly, USP may be used if the area includes a possession.

(1) Insert one of the following identifying codes after REMnn:

*LST for transmitting in the states listed.

*LSR for receiving in all states listed.

*LSB for transmitting and receiving in the states listed.

*EST for transmitting in all states except those listed.

*ESR for receiving in all states except those listed.

*ESB for transmitting and receiving in all states except those listed.

(2) Insert a comma after the identifying code.

(3) After the comma insert the State or Possession abbreviation as shown in Annex G, Section G.2, followed by another comma.

(4) After the comma insert the abbreviations for the additional states or possessions, separating the abbreviations by commas. Do not insert a comma after the last abbreviation.

(5) If more than one entry is required, repeat the identifying code at the beginning of each entry.

(6) If the fact that operation in any one or more, but not all, of the areas listed under this data entry is classified, separate CIRCUIT REMARKS entries must be made for the classified data and unclassified data in order to comply with the requirements of subparagraphs cc (Classified Data Fields (*CLD)) and dd (Classified Data Fields (*CLC or *CLS)) and dd (Unclassified Data Fields (*CLU)) of paragraph 39 of this section.

Examples:

REM01 *LST,CA,OR,WA,NV (transmitting in 4 States)
REM03 *LSR,AL,GA,MS,FL,LA,GA (receiving in 6 States)
REM04 *LSB,IL,IN,OH,PA (transmitting and receiving in 4 States)
REM02 *EST,AZ,NM,TX (transmitting in all states except those listed)

*f. Authorized Areas (*ARB, *ARR, *ART)*

The CIRCUIT REMARKS field also may be used to describe areas which cannot be described under Authorized Area of Operation or Authorized States, (e.g. a part of a State or parts of several contiguous states). In such cases the transmitter and/or receiver ANTENNA LOCATION fields would show the name of the state or USA.

(1) Complete the total entry for the Authorized Area within a single 40-space CIRCUIT REMARKS entry, unless the provisions of subparagraph (6) below apply.

(2) Insert one of the following identifying codes after REMnn:

*ART for transmitting in the area shown.

*ARR for receiving in the area shown.

*ARB for transmitting and receiving in the area shown.

(3) Insert a comma after the identifying code.

(4) After the comma insert the data concerning the area. It is preferable to always identify this area as either a square or rectangle, using the four points of the compass in degree and minutes. When this is not possible, use the

abbreviations in Annex G, Section G.2, to identify a state or possession. Use E for east(ern), N for north(ern), S for south(ern) and W for west(ern).

(5) Separate elements by commas.

(6) If the fact that operation in any one or more, but not all, of the areas listed under this data entry is classified, separate CIRCUIT REMARKS entries must be made for the classified data and unclassified data in order to comply with the requirements of subparagraphs cc (Classified Data Fields (*CLC or *CLS)) and dd (Unclassified Data Fields (*CLU)) of paragraph 39 of this section.

Examples:

REM01 *ARB,39N43N098W099W (use leading zero for longitude less than 100 degrees)
REM02 *ART,3915N4320N10016W10102W
REM03 *ARR,S OF 33N
REM01 *ART,S OF 40N,E OF 095W
REM03 *ART,SW WY,NE UT, NW CO

g. Docket Numbers of Older Authorizations (*DOC)

When renewing or modifying an assignment (see Section 9.9), the docket number applicable to the older authorization is automatically retained in the assignment record. When deleting an assignment and, simultaneously, submitting a NEW or NOTIFICATION action to replace it (see Section 9.7), the docket number applicable to the older authorization is not retained in the assignment records. The absence of the older docket number makes difficult any review of the history of a given authorization. In the latter case, the older docket number may be included in the CIRCUIT REMARKS field of the application immediately following the identifying code *DOC. In addition, the date of authorization of the older docket and/or the applicable agency serial number may be included, in that order, on the same entry immediately following the docket number.

(1) Complete the total entry within a single 40-space CIRCUIT REMARKS entry.

(2) Insert the identifying code REMnn *DOC.

(3) Insert a comma after the identifying code.

(4) After the comma insert the docket number(s)of the older authorization(s). Separate multiple docket numbers by commas.

(5) If a date and/or serial number is to be inserted, insert a comma followed by the pertinent data, separating by a comma the date and the agency serial number. Dates must have six digits indicating year, month, and day.

Examples:

REM02 *DOC,84729 (docket only)
REM11 *DOC,73621,570415 (docket and date)
REM08 *DOC,67543,551025,N 550142 (docket, date, and serial)
REM03 *DOC,I8143591,AF 810230 (docket and serial)
REM07 *DOC,89432,I6723419 (two dockets)

h. Receiving Repeater (*RPT)

This field is used only to identify a receiver location which is used as a repeater in the bands listed in Section 6.1.3, paragraph 2. If the station named in the receiver ANTENNA LOCATION field is used primarily as a repeater, it may be so identified in the CIRCUIT REMARKS field.

(1) Insert the identifying code REMnn *RPT.

(2) Insert a comma after the identifying code.

(3) After the comma insert the letter R. If there is more than one location entered in the receiver ANTENNA LOCATION field, and if each location is used primarily as a repeater, insert the letter R: however, if some but not all of the locations are used primarily as a repeater, insert the letter R followed by the appropriate receiver.

Examples:

REM01 *RPT,R (Each location entered in the receiver ANTENNA LOCATION field is used primarily as a

repeater.)

REM02, *RPT,R02 (The location entered as the second receiver ANTENNA LOCATION field is used primarily as a repeater.)

i. Joint Applications (*JNT)

An application that is submitted jointly by two or more agencies is prepared by the agency identified in the AGENCY SERIAL NUMBER field, and all agencies involved are identified in the CIRCUIT REMARKS field, using the agency abbreviation as shown in Annex G, Section G.1.

(1) Insert the identifying code REMnn *JNT.

(2) Insert a comma after the identifying code.

(3) After the comma insert in the next four spaces the abbreviation of the first agency. Left-justified the abbreviation, leaving blank the spaces to the right if the abbreviation has fewer than 4 characters.

(4) For the remaining agencies insert the appropriate abbreviations separated by commas.

(5) If more than one entry is required, repeat the identifying code at the beginning of each entry.

(6) If the fact that operation in any one or more, but not all, of the areas listed under this data entry is classified, separate CIRCUIT REMARKS entries must be made for the classified data and unclassified data in order to comply with the requirements of subparagraphs cc (Classified Data Fields (*CLC or *CLS)) and dd (Unclassified Data Fields (*CLU)) of paragraph 39 of this section.

Example:

REM08 *JNT,DOE ,AR   ,NASA (for this example DOE's serial number would appear in the AGENCY SERIAL NUMBER field).

j. Agency Data (*AGN)

(1) This CIRCUIT REMARKS field may be used to record agency data that are pertinent to the proposed assignment but not intended to be a part of the authority requested. The data shall not include decodes of the particulars of the proposed assignment.

(a) Insert the identifying code REMnn AGN.

(b) Insert a comma after the identifying code.

(c) After the comma insert the agency data.

(d) If more than one entry is required, repeat the identifying code at the beginning of each entry.

Examples:

REM02*AGN,VIA PASSIVE SATELLITE
REM03 *AGN,DELETE IN APRIL 1971
REM04 *AGN,WIRELESS MICROPHONE
REM05 *AGN,SHARED INTERBUREAU
REM06 *AGN,NARROWBAND IN FISCAL 1969

(2) This CIRCUIT REMARKS field will contain the mnemonics FLL, FLT and TSV as applicable to designate operational parameters of station class FA, FAC, FAB, FLU, MA, MAD, MAP, MO, MOE, MOEA, MOEB, and MOU operating in the 118-136.475 MHz and 225-328.6 MHz, 335.4-399.9 MHz bands, Ground Based Transceiver Service (GBTS) using 978 MHz and 1090 MHz would be in the following format:

*AGN,FLL=XXX,,FLT=XXX,TSV=XXXXX. [REMARKS]
*AGN,FLL=050,FLT=230
*AGN,FLL=200,FLT=360,TSV=ZDC50

(a) FLL,FLT entries are documented in hundreds of feet.
    1. 1000 feet   010
    2. 2000 feet   020

3. 10.000 feet   100
4. 35 000 feet   350

(3) When an assignment contains the note S945 the agency must enter the name of the Cubesat or smaller satellite in the Circuit Remarks Field.

k. Notes (*NTS)

The CIRCUIT REMARKS *NTS field is used to complete the conditional comments of the MINUTE (M--) NOTE agreed to by the FAS. Insert the identifying code REMnn *NTS, a comma, the MINUTE NOTE, a comma, and the data to complete the MINUTE NOTE.

(1) *Examples*:

Note	Entries
M002	REM02 *NTS,M002,7640924,FCC TO NTIA
	REM11 *NTS,M002,IRAC, 13381
	REM07 *NTS,M002,FAS, 1700927B
M003	REM01 *NTS,M003,WRC/TV, WASHINGTON
	REM08 *NTS,M003,JOHN SMITH, 415/841/5121
	REM03 *NTS,M003,ONR,MINNEAPOLIS
M004	Same as M003
M006	REM02*NTS,M006,ROCKVILLE, MD
M007	REM08 *NTS,M007,NAVY
	REM09 *NTS,M007,FCC,EIC,NY
M008	REM01 *NTS,M008,FAA,5965kHz, HONO/TOKYO
M009	REM01 *NTS,M009,AF
M010	Same as M009
M011	REM08 *NTS,M011,WABC,NY
	REM10 *NTS,M011,KHVO/TV, COWLICK,TX
M013	REM11 *NTS,M013,CG SUBJECT TO PRIOR COORD
M014	REM14 *NTS,M014,0010,AGL
M015	REM17 *NTS,M015,IRAC 33221/4,SPS 13928/4
M017	REM09 *NTS,M017,CO,AK
M018	REM07 *NTS,M018,FCC ,070326,JKAM,060717-03

(2) Applies to all frequency bands except 118-136.475 MHz, 225-328.6 MHz, 335.4-399.9 MHz, Ground Based Transceiver Service (GBTS) using 978 MHz and 1090 MHz (See Section 9.2.8.39 j above). Each entry of the station class symbols: AM, AMA, MA, MO, MOE, MOEA, MOEB, or MOU must also contain corresponding information on the maximum aircraft altitude (*NTS,M014,).

(a) In characters 1 through 4 of the Circuit Remarks Field insert the identifying code *NTS.

(b) Insert a comma in the 5th space.

(c) Insert the M note M014 in spaces 6 thru 9.

(d) Insert a comma in space 10.

(e) Insert the aircraft altitude in 100s of feet in spaces 11 through 14.

   1. 1000 feet   0010
   2. 2000 feet   0020
   3. 10,000 feet   0100
   4. 35,000 feet   0350

(f) Insert a comma in the 15th space.

(g) Insert AGL if operations are Above Ground Level or MSL if operations are reference Mean Sea Level in spaces 16 through 18.

REMXX *NTS,M014,0010,AGL

(3) M018 Each entry of Pre-coordination Data:
This field is optional and may be used when a frequency application has been pre-coordinated between two agencies prior to the application being submitted to the Frequency Assignment Subcommittee. This field will indicate the agency, date, names and any restrictions/agreements made by the two agencies.

    (a) Insert the identifying code REMnn, a space, then *NTS,M018 followed by a comma.
    (b) After the comma, insert the agency abbreviation as specified in Annex G, Section G.1 followed by blank spaces as necessary to complete the four character field with which the applicant agency pre-coordinated.
    (c) Insert a comma after the agency's abbreviation.
    (d) After the comma, insert the date of the coordination in YYMMDD format.
    (e) Insert a comma followed by free text format but should include items such as: the name or initials of the coordinator from the commenting agency, pre-coordination reference, restrictions or agreement text if required.
    (f) If additional lines of text are needed, the additional lines shall start with items 1-3 above and contain the continuation of free text.

Example: REM02 *NTS,M018,FCC ,070326,J Kam,060717-03

In the above example, the record was pre-coordinated with the FCC, Mr. Jeff Kam, on March 26, 2007, and the pre-coordination reference is 060717-03.

*l. Canadian Coordination Data (*CAN)*
    (1) An entry is required for all applications which have been coordinated with Canada (see Section 3.4).
    (2) After NEW assignments have been coordinated with Canada, the Canadian comments will automatically be entered by NTIA's processing programs in the appropriate REMnn entry as *CAN, the U.S. coordination serial number, and, either:

    (a) NHIA--No Harmful Interference Anticipated; or,
    (b) The actual comment received from Canada

Examples:

    REM08 *CAN,780029,NHIA
    REM02 *CAN,750361,NO MOBILE USE WITHIN 64 KILOMETERS
    REM03 *CAN,RAD OF BURNABY BC

    (3) For updating GMF records, including the use of the record replacement action, the following procedure applies:
    (a) If the updated assignment will not increase the probability of harmful interference, agencies are required to retain the existing *CAN entry, including CAN ORIG; these assignments will not be re-coordinated with Canada.
    (b) If the probability of harmful interference is increased, the assignment will be re-coordinated with Canada and the agency should not retain *CAN data.
    (4) If the frequency assignment is to be used in the Canadian coordination border zone defined in Arrangement D, Section 3.4.6, and,
    (a) the frequency is 408.400 MHz the Canadian coordination program will automatically enter:

    *CAN,CAN LTR 17 JAN 79. NO OBJ NIB.
    *CAN,CANADA USE EXCL FOR RADIO ASTRONOMY

    (b) the frequency is either 418.050, 418.075, or, 418.575 MHz the Canadian coordination program will automatically enter:

    *CAN,CAN LTR 17 JAN 79, AGREE COMM CAN
    *CAN,U.S. USE ON A SHARED NON PRI BASIS

*m. Number of Stations and System Name/Identifier (*NRM)*

　　　(1) The Circuit Remarks (*NRM) field is used to indicate the number of stations and system name/identifier with which the assignment may be identified.

　　　(2) A station is one or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radiocommunication service. A system is two or more stations that have a common property, usually geographic, administrative, functional, or operational in nature.

　　　(3) System names/identifiers shall be determined by the applicant and may be alphabetic, numeric, or alphanumeric. Each shall be unique within an agency but may be used by more than one agency. Systems names/identifiers shall not contain more than 29 characters including spaces. If abbreviations are used, the system names/identifier shall be abbreviated the same way each time it is used within a given agency.

　　　(4) The word NET may be used as the system name for each assignment that represents an entire system, e.g., a single base station and a number of mobile stations that communicate on a single frequency.

　　　(5) If the identity of a system is applied to a particular frequency assignment, it is the responsibility of the applicant agency to ensure that the same name/identifier is recorded in the particulars of all assignments associated with that same system.

　　　(6) The entry (*NRM), including the number of stations and system name/identifier is required if:

　　　　(a) the assignment is within one or more of the following frequency ranges:

```
30.0-50.0 MHz *
138.0-144.0 MHz
148.0-149.9 MHz
150.05-150.8 MHz
162.0-174.0 MHz
406.1-420 MHz
```

　　　　* Limited to bands allocated exclusively to the Federal Government.

　　　　and

　　　　(b) the frequency assignment has one or more of the following station class symbols:

FB	FL	FLEC	MLP	MOEB	MS
FBD	FLD	FLH	MO	MOEC	MSD
FC	FLE	FLU	MOD	MOH	MSP
FCB	FLEA	ML	MOE	MOP	
FCD	FLEB	MLD	MOEA	MOU	

　　　　or

　　　　(c) the assignment is within one or more of the frequency ranges listed in (6)(a) and the letter "R" is appended to any of the station classes listed in (6)(b); or

　　　　(d) the assignment is within one or more of the frequency ranges in (6)(a) and the NOTES (NTS) field contains either S361 or S362. or,

　　　　(e) the assignment is for a frequency above 29890 kHz and the transmitter STATE/COUNTRY (XSC) field contains US, USA, or USP; except, where the NOTES (NTS) field contains S322.

　　　(7) Except as provided in (6) above, the entry may be used to record only the system name/identifier of the system with which the assignment is associated (see (10)(e) below).

　　　(8) At the option of the applicant *NRM data may be recorded for all other assignments or,

　　　(9) The figure recorded for the number of stations shall represent either the exact number or a range of numbers determined as follows:

Within the range	Record the number
1-10	10
11-30	30
31-100	100
101-300	300
Above 300	Nearest 100

The number recorded shall be the same on each application for an assignment associated with the particular system. If the figure changes, all associated assignments shall be amended.

(10) The following detailed instructions shall be used to record *NRM data:

(a) Complete the total entry within a single line.

(b) Insert the identifying code REMnn *NRM.

(c) Insert a comma in column 5.

(d) Beginning in column 6 insert a five digit number to indicate the number of stations. Use leading zeroes as necessary; or

(e) Beginning in column 6 insert in the next five spaces the letters XXXXX if data are being provided in accordance with (7) above.

(f) Insert a comma in column 11.

(g) Insert the system name/identifier beginning in column 12 (a maximum of 29 columns are available for this data).

Examples:

REM03 *NRM,00100,MIAMI (31 to 100 stations for the MIAMI system)
REM05 *NRM,00045,REGION2 (45 stations for the REGION 2 system)
REM01 *NRM,00010,HHS1 NET (1 to 10 stations for a single assignment that represents an entire system)
REM04 *NRM,XXXXX,BD046
REM02 *NRM,XXXXX,ELLSWRTHD SATAF
REM01 *NRM,XXXXX,NOPRAIRI 2
REM09 *NRM,XXXXX,SOUTH JACKSONVILLE

(11) Agencies desiring to distinguish between the number of mobiles and portables in use for their assignments may do so in the following manner:

REM02 *NRM,00100,M,REGION3
REM03 *NRM,00275,P,REGION3

Indicating separate numbers for mobiles and portables is optional. If only one number is shown that number indicates the sum of both mobiles, portables and stations. The option exists even when an agency desires to indicate a portable station class in STC. Similarly, if an agency DID NOT desire to use a portable station class in STC that agency could indicate an *NRM line for the mobile stations and a separate *NRM line for the portable stations.

*n. Pulse Repetition Rate (*PRR)*

(1) On an application for assignment to a station using a secondary radar on the frequency 1030 MHz or for pulsed radars operating in the bands 1215-1390, 2700-2900, and 9000-9200 MHz, enter the pulse repetition rate in *PRR.

(2) Insert the field code REMnn followed by one space, the code *PRR, then a comma. After the comma insert the numeric value, preferably a measured value, for the specific pulse repetition rate to be used. PRR will be indicated in pulses per second up to and including 999 PPS and in thousands at 1000 PPS and above, adding the letter K at the end of the numeric value for the latter. For equipment having a capability for more than one specific PRR, insert the appropriate numerical values separated by a slant bar. For equipment having a capability for continuously variable PRRs over a wide range, insert upper and lower numerical values separated by a dash. At the option of the applicant, *PRR may be included on applications for pulsed equipment operating in any band.

o. Equipment Characteristics (*EQR, *EQS, *EQT)

(1) All applications for new stations above 29.89 MHz, except as indicated in paragraphs (2) and (3) below, shall contain the indicated data on equipment nomenclature and, where applicable, the data shall be entered as specified in paragraph (4) below. At the option of the applicant, data on nomenclature may be included on applications below 29.89 MHz.

(2) Equipment nomenclature is not required, neither EQT/EQR nor EQS, in the following cases, but may be included at the option of the applicant:

(a) On application with S321 or S322 in the Notes field.

(b) For XR class of station used for terrestrial radiocommunication. XR class of station used for space radiocommunication requires EQT and EQR.

(c) For MO, ML, MA, or MS classes of station, including whenever suffixed by one or two letters, e.g., MOE, MOEA.

(d) For Doppler radars (speed meters or speed guns) on frequencies 10525 MHz, 24150 MHz, or 35.5 GHz, which are FCC type accepted.

(3) Receiver nomenclature (EQR) is not required for:

(a) BC, BCI, BT, EE, or SS classes of station;

(b) ECM or ECCM operations;

(c) TACAN/DME;

(d) Markers in the band 74.8-75.2 MHz; or signal generators; however, transmitter nomenclature (EQT) is required;

(e) 1030 MHz.

(4) The following special provisions apply in the case of certain types of applications:

(a) The nomenclature data entered on applications for group assignments (see Section 9.6.5) may be representative of the equipment concerned.

(b) For pulsed radars in the bands 1215-1390, 2700-2900, and 9000-9200 MHz, the tune-ability and pulse duration capability of the transmitter shall be entered on the EQT line after the transmitter nomenclature, except when the provisions of subparagraph (5) below apply. The pulse repetition rate shall be entered in *PRR.

(c) In the case of certain applications in the bands 29.89-50.00, 108.000-117.975, 150.8-174.0, 328.6-335.4, 406.1-420.0 and 450-512 MHz, a code may be entered instead of nomenclature to indicate the technical characteristics of typical equipment.

(5) If any of the data, but not all, to be entered in an equipment characteristics data field entry are classified, separate CIRCUIT REMARKS entries must be made for the classified data and unclassified data in order to comply with the requirements of subparagraphs cc (Classified Data Fields (*CLC or *CLS)) and dd (Unclassified Data Fields (*CLU)) of paragraph 39 of this section. (An example of such mixed data that would require separate entries is when the equipment nomenclature of a radar system is unclassified, yet the pulse duration or tunability is classified.)

Example:

```
REM04 *EQT,G,//AN/RADAR-12$AT-1221
REM05 *EQT,G,TC,PD2M/6M
REM08 *CLC,REM05,ETC,ETC,ETC
REM09 *CLU,ALL DATA NOT LISTED IN *CLC OR *CLS
```

General

1. The nomenclature for the transmitters and receivers associated with the assignment shall be indicated. If the nomenclature includes prefixes or suffixes such as MOD or MOD and a numeral, include these symbols. If the nomenclature includes the word "MARK", use the abbreviation MK. In lieu of transmitter or receiver nomenclature, the system nomenclature may be indicated. (System nomenclature is defined, for purposes of this section, as that nomenclature assigned to a combination of equipment, e.g., AN/GRC-27 consisting of a T217 transmitter, an R278 receiver, and an AT197 antenna.)

2. Antenna nomenclature may be provided at the option of the applicant.

3. If both a federal nomenclature and a commercial model number are associated with the same equipment, the

federal nomenclature is preferred.

4. If only a commercial model number is available, also indicate the manufacturer of the equipment. A list of manufacturer names and associated codes is printed in Section G.5. If the manufacturer's name is not listed, email the FAS Secretary with the new manufacturer's name and a suggested code. The FAS Secretary will reply to your request with the approved three letter manufacturer code that will be entered in Section G.5.

5. If neither a federal nomenclature nor a commercial model number has been assigned, the manufacturer's code and a short descriptive name of the equipment shall be entered in the CIRCUIT REMARKS field.

6. For commercial radars the Manufacturer Code is required to be entered for the first occurrence of *EQT and *EQR only.

7. Entries may be continued on additional Circuit Remarks lines, if necessary.

Transmitters

For transmitters insert the following:

Identifying Code
Insert the Identifying Code REMnn *EQT.

Commercial/Federal Government Equipment Code
Insert a comma after the Identifying Code followed by G for a Federal Government nomenclature, C for a commercial model number, or U if neither has been assigned.

Nomenclature (Transmitters)
Insert a comma after the Commercial/Federal Government Equipment Code followed by the nomenclature of the transmitter. If a commercial model number is used, enter the manufacturer's code before the model number. If more than one type of transmitter is used, separate the nomenclature/model numbers by commas. In lieu of the transmitter nomenclature, the system nomenclature may be provided by inserting two slant bars (//) followed by the system nomenclature. If neither a Federal Government nomenclature nor a commercial model number has been assigned enter *EQT,U, the abbreviation of the manufacturer's code, a short descriptive name of the transmitter, and disregard the instructions for antenna nomenclature in the following paragraph.

Nomenclature (Antenna)
If the transmitter is associated with a specific antenna nomenclature, it may be included, at the option of the applicant, by inserting the symbol $ followed by the antenna nomenclature.

Examples: (Transmitters)

REM02 *EQT,G,T128MOD2

A Federal Government nomenclature transmitter whose nomenclature is T128MOD2; this is a modification of the original T128 transmitter.

REM04 *EQT,C,MOTB93MPB

A commercial transmitter manufactured by Motorola, with model number B93MPB.

REM04 *EQT,G,//AN/ARC322$AS102

A Federal Government nomenclatured system AN/ARC322 which utilizes an AS102 antenna.

Pulsed Radars in the Bands 1215-1390, 2700-2900, and 9000-9200 MHz
Immediately after the transmitter nomenclature, insert the tunability and pulse duration capability of the radar transmitter, as described below. Enter the pulse repetition rate capability in *PRR. At the option of the applicant, these data may be included on applications for pulsed radars in other bands.
Tunability

After the transmitter nomenclature, insert a comma and one of the tunability codes FA, FX, FV, TC, or TS, according to the following:

FA For frequency agility radars which operate on various frequencies within a band, either in a specified or random mode.

FX For radars capable of operating only on a single discrete frequency.

FV For radars that operate on a discrete frequency determined by the characteristics of a fixed magnetron or similar radio frequency generating device.

TC For radars capable of being tuned to any frequency within the authorized band.

TS For radars capable of being tuned across the authorized band in discrete steps or increments.

Pulse Duration

After the tunability code, insert a comma and the letters PD followed by a numeric value indicating the characteristic pulse duration(s) of the equipment (at the half-power points). PD will be indicated in microseconds up to and including 999 microseconds and in milliseconds at one millisecond and above, adding the letter M at the end of the numeric value for the latter. Fractions may be shown to the nearest tenth by using a decimal. For equipment having a capability for more than one specific PD, insert the appropriate numerical values separated by a slant bar. For equipment having a capability for continuously variable PD's over a wide-range, insert upper and lower numerical values separated by a dash.

Examples:

PD1/3/5.6
PD2M/6M
PD1-25

Example: REM04 *EQT,G,//ASR-4,TC,PD0.833

Receivers

For receivers insert the following:

Identifying Code

Insert the Identifying Code *EQR.

Commercial/Federal Government Equipment Code

Insert a comma after the Identifying Code followed by G for a Federal Government nomenclature, C for a commercial model number, or U if neither has been assigned.

Nomenclature (Receivers)

Insert a comma after the Commercial/Federal Government Equipment Code followed by the nomenclature of the receiver. If a commercial model number is used, enter the manufacturer's code before the model number. If more than one type of receiver is used, separate the nomenclature/model numbers by commas. In lieu of the receiver nomenclature, the system nomenclature may be provided by inserting two slant bars (//) followed by the system nomenclature. If neither a Federal Government nomenclature nor a commercial model number has been assigned, enter *EQR,U the abbreviation of the manufacturer's code, a short descriptive name of the receiver, and disregard the instructions for antenna nomenclature in the following paragraph.

Nomenclature (Antenna)

If the receiver is associated with a specific antenna nomenclature, it may be included, at the option of the applicant, by inserting the symbol $ followed by the antenna nomenclature.

Occurrence Label Indicator

If the indicated receiver is used at all receiving locations on the application, no occurrence label needs to be indicated. If the receiver nomenclature is associated with only some of the receiver locations, insert after the nomenclature a plus sign (+) followed by the associated receiver location. Separate the entries for other receiver locations by commas and begin each with the equipment code (G, C, or U).

Examples: (Receivers)

REM03 *EQR,G,RR201

A Federal Government nomenclatured receiver whose nomenclature is RR201 associated with all receiver locations on the application.

REM04 *EQR,C,RCACR 1004

RCA receiver model CR 1004 associated with all receiver locations on the application.

REM06 *EQR,G,//AN/GRC20$AS202

A Federal Government nomenclature system—the AN/GRC20 system, using an AS202 antenna associated with all receiver locations on the application.

Transceivers

If a transceiver is used, and the transmitter and receiver do not have separate nomenclatures, the transceiver nomenclature shall be indicated under both *EQT and *EQR Identifying Codes.

Examples: (Transceivers)

REM04 *EQT,G,SCR1055

Transmitter entry for Federal Government nomenclature transceiver SCR1055.

REM05 *EQR,G,SCR1055

Receiver entry for Federal Government nomenclatured transceiver SCR1055.

If a transceiver and its antenna are included as part of the transceiver nomenclature, so indicate by entering the transceiver nomenclature followed by the symbol $ and the transceiver nomenclature.

Examples: (Transceivers/Antennas)

REM02 *EQT,G,SCR1055$SCR1055

Transmitter entry for Federal Government nomenclatured transceiver SCR1055 which includes an antenna within the nomenclature.

REM04 *EQR,G,SCR1055$SCR1055

Receiver entry for Federal Government nomenclatured transceiver SCR1055 which includes an antenna within the nomenclature.

Transmitter Antenna and Receiver Antenna

In certain instances a single nomenclature/model number has been assigned to combinations consisting of a transmitter and its associated antenna or a receiver and its associated antenna, (i.e., the antenna does not have a nomenclature, but is considered to be part of the transmitter or receiver). In such cases, enter the nomenclature as a transmitter or receiver nomenclature followed by the symbol $ and the transmitter or receiver nomenclature.

Examples:

REM04 *EQT,G,AN/PRC201$AN/PRC201

A Federal Government nomenclatured transmitter AN/PRC201 which includes an antenna within the nomenclature.

REM02 *EQR,G,AN/PRR302$AN/PRR302

A Federal Government nomenclatured receiver AN/PRR302 which includes an antenna within the nomenclature.

Option for Indicating Certain Equipment in the Bands 29.89-50, 150.8-174, 406.1-420, and 450-512 MHz

If the equipment to be used in these bands has the characteristics of typical single channel, fixed and land mobile, FM equipment with bandwidths not exceeding 16 kHz as outlined in Section 5.3.5, the code LMS may be used instead of equipment nomenclature. When this optional procedure is used, insert the Identifying Code REMnn *EQS followed by a comma and the code LMS.

Example: REM02 *EQS,LMS

Transmitters and receivers associated with this assignment have characteristics as specified in Section 5.3.5.

Although the equipment characteristics are not outlined in Section 5.3.5, *EQS,LMS may be used in the 450-512 MHz band.

Option for Indicating Certain Equipment in the Bands 108-117.975, and 328.6-335.4 MHz

If the equipment to be used in these bands has the characteristics and is for the purpose specified in 2 below, the codes indicated in 1 below may be used instead of equipment nomenclature. When this optional procedure is used, insert the Identifying Code *EQS followed by a comma and the appropriate code from paragraph 1 below.

1. Typical VOR and ILS Equipment Codes

VOR1A	Standard VHF Omni-Range (100kHz channeling)
VOR1B	Doppler VHF Omni-Range (100kHz channeling)
VOR2A	Standard VHF Omni-Range (50kHz channeling)
VOR2B	Doppler VHF Omni-Range (50kHz channeling)
ILSLOC	ILS Localizer (50kHz channeling)
ILSGS	ILS Glide Slope (150kHz channeling)

Examples: (Typical VOR and ILS Equipment)

*EQS,VOR1A

Standard VOR with 100 kHz channelization having characteristics specified in 2 below.

*EQS,VOR1B

Doppler VOR with 100 kHz channelization having characteristics specified in 2 below.

*EQS,VOR2A

Standard VOR with 50 kHz channelization having characteristics specified in 2 below.

*EQS,VOR2B

Doppler VOR with 50 kHz channelization having characteristics specified in 2 below.

*EQS,ILSLOC

ILS Localizer having characteristics specified in 2 below.

*EQS,ILSGS

ILS Glide Slope having characteristics specified in 2 below.

2. Typical Equipment Characteristics

VHF OMNI-RANGE--100 kHz Channel (Standard--VOR1A, Doppler--VOR1B)

1. Lower Frequency: 108.0 MHz; Upper Frequency: 117.95 MHz
2. Frequency Tolerance: .002%
3. Emission: 21KA9W (with voice) 21KA2A (without voice)
4. Power: 13 to 200 watts
5. Modulator Bandwidth: 10 kHz
6. Modulator Data: 30 Hz - 30%; 9960 Hz -30%; 1020 Hz - 8%; Voice - 28%
7. Emission Falloff:

ΔF kHz	20	60
Level (dB)	-20	-60

8. Spurious Attenuation: -80 dB
9. Antenna Type: Alford Loop Array (Standard VOR) 50 element antenna array (Doppler VOR).
10. Horizontal Beamwidth: 360°
11. Vertical Beamwidth: 85°
12. Polarization: Horizontal
13. Orientation: Non-directive

VHF OMNI-RANGE (50 kHz Channel) (Standard--VOR2A, Doppler VOR2B)

1. Lower Frequency: 108.0 MHz; Upper Frequency: 117.95 MHz.
2. Frequency: Tolerance: 002%
3. Emission: 21KA9W (with voice)
                           21KA2A (without voice)
4. Power: 13 to 200 watts
5. Modulator Bandwidth: 10kHz.
6. Modulator Data: 30 Hz - 30%; 9960 Hz - 30%; 1020 Hz - 8%; Voice - 28%
7. Emission Falloff:

ΔF kHz	20	30	40
Level (dB)	-30	-50	-60

8. Spurious Attenuation: -80dB
9. Antenna Type: Alford Loop Array (Standard VOR); 50 element antenna array (Doppler VOR).
10. Horizontal Beamwidth: 360°
11. Vertical Beamwidth: 80°
12. Polarization: Horizontal

ILS LOCALIZER (ILSLOC)

1. Lower Frequency: 108.1 MHz; Upper Frequency: 111.95 MHz
2. Frequency Tolerance: 0.002%
3. Emission: 2K04A1A to 15KA9W
4. Power: 5 to 200 watts.
5. Modulator Bandwidth: 3 kHz.
6. Modulator Data: 90 Hz - 20%; 150 Hz - 20%; Voice - 50%; 1020 Hz - 5%.
7. Spurious Attenuation: -75dB
8. Antenna Types: Standard 8-Loop (Alford); V-Ring, Waveguide; Traveling Wave (Alford); Dipole Array (MRN-7); SDF (Simplified Directional Facility).
9. Horizontal Beamwidth: 10° to 360°
10. Vertical Beamwidth: 40°
11. Polarization: Horizontal
12. Orientation: Fixed
13. Channelization: 50 kHz

ILS GLIDE SLOPE (ILSGS)

1. Lower Frequency: 329 MHz; Upper Frequency: 335 MHz
2. Frequency Tolerance: 0.002%
3. Emission: 300HA1N to 3K3A1N.
4. Power: 1 to 25 watts
5. Modulation Bandwidth: 150 Hz.
6. Modulation Data: 90 Hz - 50%; 150 Hz - 40%
7. Spurious Attenuation: -68dB
8. Antenna Types: Dipoles; Box Antenna; Wave Guide; Cavity
9. Horizontal Beamwidth: 24° to 72°
10. Vertical Beamwidth: 128°
11. Polarization: Horizontal
12. Orientation: Fixed
13. Channelization: 150 kHz

p. Point of Contact (*POC)

This field is required on all federal radio spectrum applications for use in US&P. This entry identifies the person and associated contact information that validated the assignment data is correct. The field is completed by entering the following data:

a. Enter the field code REMnn followed by a space. Following the space enter the code *POC followed by a comma.

b. Immediately after the comma, enter the name of the individual (not to exceed 17 characters) at the lowest level as designated by the agency followed by a comma.

c. Immediately after the comma, enter the phone number of the person above using 10 characters followed by a comma.

d. Immediately after the comma, enter the date when the data on the assignment was validated in six characters in the year, month, and day, and format.

Example: REM05 *POC,JOHN SMITH,7037801234,110627

Space Radiocommunication Assignments

If the application is for an assignment to earth or space stations or to terrestrial stations (including experimental stations) employing earth or space station techniques, insert the following data in the format indicated:

q. Orbital Information on Non-Geostationary Satellites (Transmitting and Receiving) (*ORB)

For applications involving a single non-geostationary satellite or multiple non-geostationary satellites having similar orbital characteristics:

    a. Enter the identifying Code REMnn *ORB followed by a comma.

    b. In the next four spaces, enter the equatorial inclination angle in degrees, using leading zeros as necessary and a decimal with fractional degrees. In the next two spaces, enter the letters IN.

    c. In the next five spaces, enter the apogee in kilometers, using leading zeros as necessary. In the next two spaces, enter the letters AP.

    d. In the next five spaces, enter the perigee in kilometers, using leading zeros as necessary. In the next two spaces, enter the letters PE.

    e. In the next six spaces enter the period, using leading zeros as necessary and a decimal for a fractional unit. If the period is less than 24 hours, enter the period in hours followed, in the next space, by the letter H. If the period is 24 hours or more, enter the period in days followed in the next space, by the letter D.

    f. In the next two spaces, enter the number of satellites in the system, using a leading zero as necessary. In the next two spaces, enter the letters NR.

    g. In the next three spaces, enter T01 for a non-geostationary transmitting satellite and R01, R02, etc. for each non-geostationary receiving satellite if the orbital information is for space-to-space transmissions. Entry is optional for other than space-to-space transmissions.

    Example: *ORB,68.8IN40765AP00465PE12.283H01NR

One satellite in the system having orbital characteristics as follows: 68.8 inclination, 40,765 kilometer apogee, 465 kilometer perigee, 12.283-hour period.

For applications with multiple receiving space stations, indicate the orbital information for the satellite of each receiving space station in the Circuit Remarks, followed by the receiver involved (R01, R02, etc.).

    Examples:

    REM01 *ORB,68.2IN06900AP00239PE022.05H02NRR01
    REM02 *ORB,72.9IN03209AP00655PE013.46H01NRR02

The orbital characteristics of the two satellites having similar characteristics specified in RAL field R01 are as follows: 68.2 inclination, 6,900 kilometer apogee, 239 kilometer perigee, 22.05-hour period. The orbital characteristics of the one satellite specified in the RAL field R02 are as follows: 72.9 inclination, 3,209 kilometer apogee, 655 kilometer perigee, 13.46-hour period.

    h. If any, but not all, of the orbital data are classified, separate CIRCUIT REMARKS entries must be made for the classified and unclassified data in order to comply with the requirements of subparagraphs cc (Classified Data Fields (*CLC or *CLS)) and dd (Unclassified Data Fields (*CLU)) of paragraph 39 of this section. If the data for a non-geostationary transmitting satellite are included in separate entries because of classification, enter T01 in the last three characters of each entry. If the data for non-geostationary receiving satellites are included in separate entries because of classification, enter the appropriate receiving satellite designator R01, R02, etc., in the last three characters of each entry.

r. Reserved

s. Reserved

*t. Antenna Gain and Beamwidth Requiring Additional Spaces (Earth and Space Stations) (*EGN, *SGN, *EBW, *SBW)*

    (1) The antenna gain for transmitting and receiving earth and space stations is entered in the transmitter and receiver ANTENNA DIMENSIONS fields. Two spaces are available for the value and one space for the letter G. If more than two spaces are required for value, XXG is entered in the ANTENNA DIMENSIONS field and the value is entered in the CIRCUIT REMARKS field following *EGN (for earth stations) or *SGN (for space stations). Enter

"T" after the gain to identify the transmitter, or "R" to identify the receiver; for example, *EGN,1.5T or *SGN,-05R. For applications with multiple receiving stations with different gain values, the entry in the CIRCUIT REMARKS field is followed by R01, R02, etc., to identify the receiving station involved.

(2) Similarly, the antenna beamwidth for transmitting and receiving earth and space stations is entered in the transmitter and receiver ANTENNA DIMENSIONS fields. Three spaces are available for the value and one space for the letter B. If more than three spaces are required for the value, XXXB is entered in the ANTENNA DIMENSIONS field and the value is entered in the CIRCUIT REMARKS field following *EBW (earth) or *SBW (space). Enter "T" after the beamwidth to identify the transmitter, or "R" to identify the receiver; for example, *EBW, 1.25T or *SBW, 1.45R. For applications with multiple receiving stations with different beamwidths, the entry in the CIRCUIT REMARKS field is followed by R01, R02, etc. to identify the receiving station involved.

*u. Frequency Authorization Function (*MFI, *IFI, *DFI)*

(1) The Frequency Authorization Function entry indicates the functional use or purpose of a frequency authorization. This entry shall not restrict the applicant from using the frequency for other purposes as circumstances warrant, nor shall the applicant be required to obtain FAS approval before changing the functional use of an assignment. However, the user shall be expected to correct the functional use entry, if appropriate, whenever the assignment is modified or updated.

(2) A Frequency Authorization Function entry is required if:

(a) The frequency assignment falls within one of the following bands:

29.89 - 50.00 MHz*
162.0125 - 174.0 MHz
406.1 - 420.0 MHz
935.0 - 940.0 MHz*
* Limited to bands allocated exclusively to the Federal Government.

and,

(b) The assignment does not bear Record Notes S141 nor S322.

(3) The entry of a Frequency Authorization Function is optional for all other assignments.

(4) The Frequency Authorization Function entry is defined in three fields:

(a) Major Function Identifier (*MFI) - describes the primary/major function or purpose for which the frequency authorization will be used.

(b) Intermediate Function Identifier (*IFI) - describes the most significant sub-function or purpose for which the frequency authorization will be used.

(c) Detailed Function Identifier (*DFI) - describes in greater detail the function(s) or purpose for which the frequency authorization will be used.

(5) All assignments having a Frequency Authorization Function entry shall have an entry for a Major Function Identifier (*MFI). Entries for Intermediate Function Identifier (*IFI) and Detailed Function Identifier (*DFI) are optional. The Function Identifiers with Description lists in Parts 1 and 2, below, contain general and agency specific standard entries for use in any of the three fields.

(6) The Frequency Authorization Function entry is comprised of:

(a) The identifying code *MFI followed by a comma,

(b) A function identifier selected from the lists in Parts 1 and 2, below,

(c) And, if needed, the identifying code *IFI followed by a comma and the function identifier selected from the lists in Parts 1 and 2, below,

(d) And, if needed, the identifying code *DFI followed by a comma and the function identifier selected from the lists in Parts 1 and 2, below, or a description as noted in subparagraph (8)(h), below.

(7) The entries should be entered in the following order if more than one identifier is used: *MFI; *IFI; *DFI. See subparagraphs (8)(h), (i) and (j), below, for other specific instructions.

(8) General rules:

(a) Only one occurrence of *MFI and *IFI is allowed. Multiple occurrences of *DFI are allowed.

(b) Only standard functional identifiers (the name or abbreviation shown in bold in Parts 1 and 2, below) will be used in Frequency Authorization Function entries, except for entries in *DFI as noted in subparagraph (8)(i) and (j), below. The descriptions included inside the parenthesis in the lists in Parts 1 and 2, below, are shown only for information purposes to assist spectrum managers in selecting the correct data entry.

(c) A specific functional identifier may be entered only once in an application.

(d) Any of the General Function Identifiers listed in Part 1, below, may be used in any of the three function

identifier fields, and there are no association restrictions.

(e) If the frequency authorization will be used for more than one function/purpose, select the functional identifier for the most important function/purpose for entry in the Major Function Identifier (*MFI). Select the second most important functional identifier for entry in the Intermediate Function Identifier (*IFI). Enter any additional functional identifier in the Detailed Function Identifier (*DFI).

(f) If two or more functions are equally important, choose the functional identifier for the function which will make most use of the assigned frequency for entry in the Major Function Identifier (*MFI). The second functional identifier may be entered in the Intermediate Function Identifier (*IFI). Additional amplifying information may then be entered in the Detailed Function Identifier (*DFI) to show other function(s) supported by the assignment.

Examples:

REM03 *MFI,FIRE (A single general function identifier entry)
REM11 *MFI,CONSTRUCTION   (Two general function identifiers)
REM12 *IFI,MAINTENANCE
REM05 *MFI,GROUND OPERATIONS   (An example with a new DFI)
REM06 *IFI,TRAINING
REM07 *DFI,NTC EVALUATION EXERCISES
REM03 *MFI,SUSTAINING BASE OPERATIONS (An example with multiple DFI's (with agency specific and general identifiers)
REM04 *IFI,MAINTENANCE
REM05 *DFI,EQUIPMENT CHECKS
REM06 *DFI,TEST AND CALIBRATION

(g) General and agency specific functional identifiers may be used in the same application.

(h) If none of the function names in the lists in Part 1 or Part 2, below, accurately reflect the function/purpose of a specific frequency application, enter MISC (Miscellaneous) as the Major Function Identifier (*MFI), then enter an amplifying description of the function of the assignment in the Detailed Function Identifier (*DFI). (See subparagraph (9), below.)

Example:

REM08 *MFI,MISC
REM09 *DFI,BALLOON RECOVERY OPERATIONS
REM10 *DFI,COMMAND AND CONTROL

(i) If SPECIAL PROJECTS is used in *MFI or *IFI, *DFI must contain an amplifying description of the project.

(j) If OTHER OPERATIONS is used, it must be entered in *MFI and amplifying description of the operation   must be entered in the *IFI or *DFI.

(9) If MISC is used in *MFI, and *DFI contains an amplifying description, or if a new standard Major, Intermediate or Detailed Functional Identifier is proposed, the FAS Representative should submit to the FAS Secretary a request to add a new function name to either of the lists in Part 1 or Part 2, below. The request should contain the proposed function name and a brief description of the function.

Part 1 - General Function Identifiers with Description

The following list contains general function identifiers that have been approved for use by any agency in Major Function Identifier (*MFI), Intermediate Function Identifier (*IFI), and Detailed Function Identifier (*DFI).

ADMINISTRATIVE--Used for administrative management of personnel and/or material.
AIR TRAFFIC CONTROL--Used for ground-air and air-ground voice communications dedicated to controlling the movement of aircraft.
BACKBONE--Used for multiple-function point-to-point communications where landline systems are not available.

COMMANDER--Used by commanders at other than top executive echelons to directly command and control operations.

CONSTRUCTION--Used to support construction activities (e.g. road building, erection of power lines, construction of dams or bridges, etc.).

CONTINGENCY--Used only during unusual situations (e.g. civil disturbances, communications outages, natural disasters, etc.), and kept in service only for the duration of the situation.

COG/COOP--Used in support of Continuity of Government/Continuity of Operations during emergency situations and COG/COOP training and exercises.

EARTHQUAKE MONITORING--Used for monitoring and collection of information regarding movement of the Earth due to the rupture of geologic faults.

EXECUTIVE--Used by the top echelon leadership of a government agency (e.g. normally used at department level and above where strategic policy is formulated).

FIRE--Used to notify the presence of a fire, or to direct, control, or coordinate the operations of fire response vehicles, equipment, and personnel during fire suppression or fire prevention activities.

HYDROLOGIC--Used for collection of information regarding the waters of the Earth and its atmosphere, or for the control and management of these waters.

INSPECTION--Used during brief and infrequent visits to field sites and installations by inspection teams (e.g. operational readiness inspections, facility evaluations, Inspector General visits, etc.).

LAW ENFORCEMENT--Used to direct, control, or coordinate the activities of personnel engaged in law enforcement duties (e.g. building and installation security, criminal investigations, police activities, intelligence and counter-intelligence operations, intruder detection, etc.).

MAINTENANCE--Used to support maintenance activities (e.g. resurfacing of roads, maintenance of power lines, repair of dams or bridges, etc.).

MEDICAL--Used to direct, control, or coordinate the activities of medical personnel and emergency response vehicles.

MISC (Miscellaneous)--Used to support a function not shown elsewhere on this list. (Note: See subparagraph (9) above for additional instructions.)

MOBILE TELEPHONE--Used to provide an interconnection between vehicular radios and landline systems.

NATURAL RESOURCES--Used for the management, protection, and conservation of natural resources (e.g. national forests, public lands, wildlife, etc.).

NAVAIDS--Land stations used to furnish navigational assistance to aircraft and/or ships (e.g. instrument landing systems (ILS), non-directional beacons (NDB), long-range navigation (LORAN), racons, etc.).

NAVAIDS CONTROLS--Used to activate and deactivate visual or electronic navigational aids (e.g. runway lights, radio beacons, unmanned lighthouses, etc.).

PAGING--A one-way communications system used for selective calling of personnel. (Note: Although paging systems may be used in direct support of functions shown on this list, such as EXECUTIVE or MEDICAL, all paging assignments shall show PAGING as the function name.)

POSTAL OPERATIONS--Used to support the collection, processing and delivery of the U.S. Mail.

RDTE SUPPORT--Used for communications support of research, development, test, and evaluation (RDT&E) programs and projects. (These frequency assignments do not have an experimental station class.)

SEISMIC--Used to transmit measurements of stress, strain, or movements of the Earth's crust.

SHORT TERM INCIDENT RESPONSE--Used to respond to short term emergency situations contained within a localized coordination area (e.g. hostage negotiation, bomb threats, locally contained disasters, etc.), and kept in service only for the duration of the incident.

SPECIAL COURIER--Used by personnel engaged in transporting valuable, sensitive, hazardous, or classified material.

SPECIAL PROJECTS--Used in support of communications electronics systems that are generally one-of-a-kind systems (e.g., Special Forces, intelligence, RF propagation systems, ground and avionics communications-electronics weapons systems, etc.). (Note: See subparagraph (8)(i) above for additional instructions.)

SURVEY--Used on an intermittent basis by field survey teams involved in measurement activities (e.g. geodetic surveys, radiation hazard monitoring, pre-construction site surveys, etc.).

TELECOMMAND--Used to remotely control the operations of an unmanned vehicle (land, sea, air, or space), or to activate and deactivate instruments or devices carried by the vehicle (e.g. missile destruct, guidance of remotely piloted vehicles (RPVs), control of overhead cranes, etc.).

TEST RANGE--Used in support of operations that are unique to a government test range (e.g. range control, range

safety, range timing, etc.).

TRAINING--Used to train personnel in the accomplishment of a specific task or set of tasks.

TRANSPORTATION--Used to coordinate the routine movement of material and/or personnel from one point to another (e.g. messenger service, supply expeditor, taxi dispatch, etc.).

TRUNKING--Radiotelephony using standard land mobile trunking principles.

UTILITIES--Used for the management, control, and/or distribution of utilities (e.g. electric power, water, telephone service, oil and gas, etc.).

WEATHER--Used for the transmission of meteorological information (e.g. wind speed, temperature, barometric pressure, forecasts, etc.).

VOLCANO MONITORING--Used for monitoring and collection of information regarding a rupture in the crust of the Earth that allows lava, ash or gases to escape from magma chambers below the surface.

WIRELESS MIKE--A transmitting device used to provide the audio input to a speaker system. (Note: Although wireless mikes may be used in direct support of functions shown elsewhere on this list, such as RDTE SUPPORT or TRAINING, all assignments for these devices shall show WIRELESS MIKE as the function name.)

Part 2 - Agency Specific Function Identifiers with Description

The following list contains standard agency specific function identifiers that have been approved by one or more agencies for use in Major Function Identifier (*MFI), Intermediate Function Identifier (*IFI), and Detailed Function Identifier (*DFI).

A-EPLRS--Used in support of the Airborne Enhanced Position Location Reporting System (A-EPLARS), a secure, electronic warfare (EW)-resistant tactical transmission system supporting the Army Tactical Command and Control System (ATCCS) and the Army Battle Command System.

A2C2S (Army Airborne Command & Control System)--Used in support of Army Airborne Command & Control System.

ACS (Aerial Common Sensor)--Used in support of Intelligence and Electronic Warfare operations.

AEGIS--Used in support of AEGIS cruisers and destroyer weapon system operations.

AERO CLUB--Used in support of flight training and recreational flying clubs.

AFATDS--Used in support of Advanced Field Artillery Tactical Data System.

AFAUX/CAP (Air Force Auxiliary/Civil Air Patrol)--Provides Search & Rescue, Disaster Relief, Airborne Reconnaissance, Counter-drug Operations, Contingency Communications Support, and other National Security/Emergency Preparedness (NS/EP) functions.

AFSATCOM--Used for voice and/or data transmissions over the AFSATCOM system.

AHFEWS (Army HF EW System)--Used in support of Intelligence and Electronic Warfare operations.

AIR DEFENSE--Used in supporting those defensive measures designed to destroy attacking enemy aircraft or missiles in the Earth's envelope of atmosphere, or to nullify or reduce the effectiveness of such attack.

AIR DEFENSE/INTERCEPT--Used in support of fire finding exercises and operations.

AIR DEFENSE WARNING--Used to identify the presence of hostile aircraft and or missiles.

AIR FORCE ONE--Used in support of presidential aircraft operations.

AIR FORCE SPECIAL OPERATIONS--Used to support AFSOF units (special operations wings and groups, special tactics groups, and special operations weather teams) which provide aircraft and other support for a variety of SOF missions.

AIR OPERATIONS--Used in supporting those functions which typically originate from the air and/or directly support the launching of, actual conduct of, and returning of airborne forces carrying out air operations whether over land or sea.

AIR ROUTE SURVEILLANCE RADAR--Used for radar's that monitor aircraft routes.

AIR/GROUND/AIR COMMUNICATIONS--Used supporting voice and/or data transmissions between airborne and ground-based platforms.

AIR/AIR COMMUNICATIONS--Used in supporting voice and/or data transmissions between two airborne platforms.

AIRBORNE COMMAND CENTER--Used by airborne command post aircraft in support of the national authority or Combatant Commands.

AIRCRAFT--Used in supporting air operation under the jurisdiction of the Department of the Army.

AIRPORT SURVEILLANCE RADAR--Used for general coverage radars that are located at airdromes.

ALARM SYSTEMS--Used for physical security (e.g., Sensors, Motion Detectors, Intrusion & Duress Alarms, Etc.).

AMPS (Air Movement Planning System)--Used in support of Air movement operations.

AMSS (Automatic Meteorological Sensor System)--Used in support of Intelligence and Electronic Warfare operations.

ANTI-TERRORISM--Used in direct support of anti-terrorism.

APPROACH CONTROL--Used to provide a pilot conducting flight in accordance with instrument flight rules to commence an approach to an airport.

APRS Weather Station—Automatic Position Reporting System (APRS) weather station provides highly accurate and timely measurements of wind speed and direction, barometric pressure, humidity, temperature, and rainfall.

AQF (Advanced Quick Fix)--Used in direct support of command and control, fire control nets, also used for ground surveillance, counter/mortar, and counter/battery operations.

ARL (Aerial Reconnaissance-Low)--Used in support of Intelligence and Electronic Warfare operations.

ARMY AVIATION--Used in supporting the operation of fixed and rotary-winged aircraft maintained by the Army; includes but is not limited to attack helicopters, scout helicopters, and utility aircraft.

ARMY SPECIAL OPERATIONS--Used to support Army SOF units (civil affairs, psychological warfare, and ranger/special forces) which are assigned a variety of SOF missions.

ARTILLERY--Used to provide internal command, control, and communications to division and below for fire support.

ARTS (Automated Remote Tracking System) (Telemetry)--Used in conjunction with the Space Ground Link Subsystem (SGLS).

ASAS (All Source Analysis System)--Used in support of Intelligence and Electronic Warfare operations.

ASOS (Automated Surface Observation System)--Used for the collection of weather information used by civil and military aircraft.

ASW (Anti-Submarine Warfare)--Used in support of anti-submarine warfare operations.

ATFP--Communications used in supporting fleet Anti-Terrorism Force Protection.

ATIS (Auto Terminal Information Service)--Used for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

AVENGER-STC--Used in support of Short Range Air Search Radar (Stringer) operations.

AWACS--Used in supporting special DoD airborne early warning aircraft that are equipped with search and height-finding radar and communications equipment for controlling weapon systems and performs the air surveillance and control mission.

AWOS (Automatic Weather Observing System)--Observes weather conditions at specific locations and transmits continuously to aircraft in the area.

BASE OPERATIONS--Used in supporting the operations of an Air Terminal; a facility on an airfield that functions as an air transportation hub and accommodates the loading and unloading of airlift aircraft and the in-transit processing of traffic.

BATTLE COMMAND--Used in support of command, control, and communications, tactical Internet, and Warfighter Information Network/Satellite networks.

BEACON--Used in supporting Marker Beacons, Aeronautical Radio Beacons, and Radar Beacons for radio navigation land stations.

BLUE ANGELS--Used in support of the Navy Blue Angels demonstration team.

BMDS (Ballistic Missile Defense System)--Joint integrated and multilayered system defending the U.S. deployed forces and allies against ballistic missiles by engaging them in boost, mid-course and terminal phases of flight.

BMEWS (Ballistic Missile Early Warning System)--Used in DoD's electronic system for providing detection and early warning of attack by enemy inter-continental ballistic missiles.

BROADCAST--Used to support broadcasting signal via Television and/or Radio service.

C3 (Command, Control, & Communications)--Used in supporting those strategic, inter-/intra-theater, or inter-/intra service C3 functions NOT already covered under another category.

CARS (Contingency Airborne Reconnaissance System)--Used in support of Airborne Reconnaissance operations.

CAVALRY--Used in supporting those ground elements whose missions are reconnaissance, security, and economy of force; to find the enemy, to develop the situation and to provide the commander with reaction time and security.

CBR (Chemical, Biological, Radiological)--Chemical, biological and radiological teams that respond to terrorist incidents in order to assist local, state, or federal agencies in the conduct of post-incident mitigation actions.

CID--Used in support of U.S. Army (Criminal Investigation Command) CID operations.

CCMD/GENERAL/FLAG OFFICER SPT--Used in support of command and control and supporting Combatant Commands/General and Flag Officers.

CIVIL AFFAIRS--Used for command activities centered on relationship between military forces and civil authorities and citizens in a friendly or occupied country or area. Command performance of certain functions or exercise of certain authority normally the responsibility of the local government.

CIVIL DISTURBANCES--Used to support civil disturbance operations.

CIVIL ENGINEERING--Used to support civil engineering activities.

CIVIL SUPPORT TEAM--Mobile support teams deploying to support national emergencies and natural disasters.

CIVIL WORKS--Used to support civil works activities.

CIWS (Close-In Weapons System)--Used in support of weapon system.

CLEARANCE DELIVERY--Used by air traffic control tower staff to communicate departure instructions to air crews while the aircraft are still on the ground.

CLOSE AIR SUPPORT (CAS)--Used in supporting air action by fixed and rotary-wing aircraft against hostile targets which are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces.

COLOR/HONOR GUARD--Used to support military color guard/honor activities.

COMBAT CONTROL TEAM--Used in support of Intelligence, Maneuver, Fire Support, Air Defense, Mobility and Survivability, Logistics and Battle Command.

COMMAND AND CONTROL--Used for command and control of military operations.

COMMAND DESTRUCT/TERMINATION--Used by range safety officers to destroy errant missiles or UAVs.

COMMAND NET--Used for command and control of the Commanders Net.

COMMAND POST--Used in supporting Command, Control, and Communications at the Command Post (CP).

COMMAND POST/CENTER--Used in supporting Command, Control, and Communications at the Command Post (CP).

COMMUNICATIONS--Used in supporting the collection by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy or supporting the passing of data concerning the communications characteristics of a particular area.

COMMUNITY ASSISTANCE--Used to support non-specific community assistance activities.

CONSEQUENCE MANAGEMENT--Used to support U.S. government interagency assistance to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the results of a terrorist incident involving weapons of mass destruction.

CONSERVATION--Used to support resources conservation activities.

COUNTER DRUG--Used in direct support of counter drug operations.

CSSCS (Combat Service Support Control System)--Used by computer software system designed to assist commanders in the planning of logistics operations.

CTT (Commander's Tactical Terminal)--Used to support Command Post operations.

DATA COLLECTION PLATFORM--Used to monitor the environment through the transmission of observations from surface-based platforms to NOAA satellites.

DATA LINK--Used in support of the operation of a data link.

DBRITE (Digital Bright Radar Indicator Tower Equipment)--Used for DBRITE operations.

DEPARTURE CONTROL--Used in controlling aircraft departing from airdromes until they are turned over to air route controllers or go on visual flight rules.

DIS (Defense Investigative Service)--Used by DIS organizations.

DISASTER PLANNING--Used in direct support of disaster operations.

DMSP (Defense Meteorological Satellite Program)--Used in direct support of the Defense Meteorological Satellite Program.

DOMESTIC SUPPORT OPERATIONS--Used for various types of military support provided to federal, state, and local agencies in the areas of disaster assistance, environmental assistance, law enforcement, and community assistance.

DRONE CONTROL--Used in direct support of drone control operations.

DSCS (Defense Satellite Communication System)--Used for voice and/or data transmissions over the Defense Satellite Communication System.

DTSS (Digital Topographic Support System)--Used in direct support of DTSS operations.

EDUCATION--Used for military education activities.

ELECTRONIC WARFARE--Used in supporting the collection by visual observation or other detection methods,

information about the activities and resources of an enemy or potential enemy or supporting the passing of data concerning the electronic characteristics of a particular area.

EMERGENCY COMMUNICATION--Used in the support of aviation for distress or emergency conditions.

EMERGENCY SERVICES--Used in support of non-specific emergency services.

EMWIN--Emergency Managers Weather Information Network, used to provide a near-real-time round-the-clock digital data feed which is disseminated by radio, satellite and Internet broadcasts, and is intended for emergency managers and public safety officials who need timely weather information to make critical decisions.

ENGINEERS--Used in supporting Engineers that perform construction, demolition, surveying, road and bridge building.

ENVIRONMENTAL--Used to support environmental controls, surveys, and research operations.

ENVIRONMENTAL CLEANUP--Used to support environmental cleanup operations.

EOD (Explosive Ordinance Disposal)--Used in supporting EOD during destruction or demolition operations. This includes EOD robotic devices.

EPLRS (Enhanced Position Location Reporting System)--Used in support of EPLRS system.

EQUIPMENT CHECKS--Used to support equipment checks made prior to commencing normal operations.

ERCS (Emergency Rocket Communications Systems)--Used to support the Emergency Rocket Communication System or ECM Resistant Communications System.

ETCAS (Enhanced Traffic Collision Avoidance System)--Used by aircraft equipped with the ETCAS equipment.

ETRAC (Enhanced Tactical Radar Correlator)--Used to support tactical Radar operations.

EXERCISE--Used in supporting a military maneuver or simulated wartime operation involving planning, preparation, and execution.

EXPERIMENTAL--Used in supporting activities that require an experimental station class.

FAADC2 (Forward Area Air Defense, Command and Control)--Used for forward air defense operations.

FEEDER CONTROL--Feeder control transitions aircraft from the en route structure to the initial approach fix for landing.

FEMA (Federal Emergency Management Agency)--Used to support FEMA (Federal Emergency Mgt Agency) operations.

FIRE ALARM--Used in support of emergency fire-alarm systems.

FIRE SUPPORT--Used to support artillery in support of infantry, armored, airborne, and airborne mobile operations.

FLEET SUPPORT--Used to support fleet units/shore facilities.

FLIGHT FOLLOWING--Issues information and advisories to arriving, departing, and en route aircraft and monitors the flight progress of aircraft. Additionally, flight following posts and relays flight progress reports and posts information to flight data strips, boards, charts and maps.

FLIGHT INFORMATION--Used for providing aviation weather, advisory service, and other operational data to aircraft.

FLIGHT INSPECTION--Normally accomplished FAA flight check aircraft to determine if specific navigation aids (NAVAIDS) such as NDB, VOR, and TACAN are functioning properly.

FLIGHT TEST--Used to support flight test operations.

FLOOD WARNING SYSTEM--Provides flood warning information in the event of rain and or river/stream/creek overflow.

FLTSATCOM (Fleet Satellite Communications)--Used for voice and/or data transmissions over the FLTSATCOM system.

FORACS (Fleet Operational Readiness Accuracy Check Site)--Used to support Fleet Operational Readiness Sites.

FORWARD AIR CONTROL POST--Used in supporting a highly mobile USAF tactical air control system radar facility subordinate to the control and reporting center and or control post used to extend radar coverage and control in the forward combat area.

GBAS (Ground Based Augmentation System)--Provides terminal area precision approach and positioning services that augments the Global Positioning System (GPS) signal.

GBCS-L (Ground Based Common Sensor-Light)--Used to support the ground based sensor system.

GBS (Global Broadcast System)--Used for voice and/or data transmissions over the Satellite system.

GCA (Ground Control Approach)--A radar approach system for aircraft arriving at an airfield.

GCCS (Global Command and Control System-Army)--Used to support GCCS operations.

GLOBAL--HF frequencies assigned to DOD global communications network.

GLOBAL ALE (Automatic Link Establishment)--Used in supporting ALE operations within the DOD global communications network.
GLOBAL BLACK--Used in support of the USAF Global HF Network for a non-secure email net.
GLOBAL DISCRETE--Unpublished (non-FLIP) HF frequencies assigned to DOD global communications network.
GLOBAL RED--Used in support of the USAF Global HF Network secure email net.
Ground Missile Defense (GMD)--Communications used in supporting Anti-Terrorism Force Protection.
GOES (Geostationary Operational Environmental Satellites)--GOES is a series of meteorological geostationary orbiting satellites that provide weather prediction data for the Western Hemisphere and particularly for the U.S.
GOLDEN KNIGHTS--Used by the Army's Golden Knights demonstration team.
GPS (Global Positioning System)--Used for precise positioning/navigation information.
GRCS (Guardrail Common Sensor)--Used in support collection and location system.
GRIZZLY (M1 Bleacher MineSweeper)--Used to support mine sweeping operations using CNR.
GROUND CONTROL--Used in supporting those functions which controls originate from the ground and directly support ground-based operations.
GROUND INTERDICTION--Used to support ground operations, convoy, scouting, surveillance etc.
GROUND OPERATIONS--Used in supporting those functions which originate from the ground and directly support ground-based operations.
GSR (Ground Surveillance Radar)--Used to support ground surveillance radar operations.
H-ENROUTE (High Enroute Communications)--Used for air traffic control operations between departure and destination terminal areas in the high altitude stratum.
HAARP (High Frequency Active Auroral Research Program)--A scientific endeavor to study the properties and behavior of the ionosphere to understand its use to enhance communications and surveillance systems for both civilian and military purposes.
HARBOR-PORT OPERATIONS--Used for controlling movements of ships in harbors and ports.
HAVE QUICK--Used in supporting DOD's Jam-resistant UHF Communications Radio.
HAZARDOUS MATERIAL RELEASE--Used to support hazardous material release.
HAZMAT (Hazardous Materials)--Used to support operations dealing with hazardous materials.
HELO CONTROL--Used to control and coordinate helicopter transit between ships.
HICOM (High Command)--Used to support CINC HF high command net.
HYDRA (Hierarchical Yet Dynamically Reprogrammable Architecture)--Used in support of various shipboard voice communications requirements.
IEWCS (Intelligence Electronic Warfare Common Sensor)--Used in support of Intelligence and Electronic Warfare operations.
IFF/SIF--Used to support Identification Friend or Foe/Selective Identification Features activities.
ILS (Instrument Landing System)--Used to support localizer and glideslope aircraft Instrument Landing Systems.
IMETS (Integrated Meteorological System)--Used to support the collection of weather reports.
INDUSTRIAL CONTROLS--Used to support industrial controls.
INFANTRY--Used in supporting those ground-based elements designed to close with and destroy the enemy and which serve as a key element of combat power in close combat.
INSTALLATION PA SYSTEM (Giant Voice)--Used by installation public address systems.
INSTRUCTOR/STUDENT TRAINING--Used in supporting those activities during training which originate from the class room instructions. Mainly used for training purposes.
INTELLIGENCE--Used in support of the gathering of intelligence information.
INTERPLANE--Used between aircraft in flight.
INVENTORY/INVENTORY CONTROLS (e.g.**,** Optical Scanners)--Used in support of gathering inventory data at exchange, supply, and other logistical type facilities.
IONOSPHERIC SOUNDER--Used in support of ionospheric sounder operations.
I-REMBASS (Improved-Remotely Monitored Battlefield Sensor System)--Used to support ground surveillance operations.
ISYSCON (Integrated System Control)--Used to manage multiple tactical communications systems.
JSS (Joint Surveillance System)--Used in supporting the Joint Surveillance System Radars.
JTIDS/MIDS (Joint Tactical Information Distribution System)--Used in support of the operation of JTIDS. Used in support of the operation of Link 16 Command and Control Tactical Data Systems. Also known as TADIL-B.
L-ENROUTE (Low Enroute Communications)--Used for air traffic control operations between departure and

destination terminal areas in the low altitude stratum.

LAND WARRIOR--Used to support combat net radio operations for Corps and below.

LEASAT (Leased Satellite)--Used for voice and/or data transmissions over the LEASAT system.

LINEBACKER--Used to operate in forward combat areas, the Linebacker is capable of shooting down rotary and fixed-wing aircraft, as well as cruise missiles.

LLDR (Lightweight Laser Designator Rangefinder)--Used in support of range finding operations.

LMRDFS (Light Man-portable Radio Direction Finding System)--Used to support direction finding system.

LOCAL CONTROL--Used by air traffic controllers in the vicinity of an airdrome.

LOCKS AND DAMS--Used in direct support of the operation of locks and dams.

LONGBOW (Apache Helicopter)--Used by the weapons radar on Apache helicopters.

LOOTING PREVENTION--Used in direct support of looting prevention.

M93A1 FOX--Used to support Bridge operations.

MARS (Military Affiliated Radio System)--Used for voice and/or data transmissions over the Military Affiliated Radio System.

METEOROLOGICAL--Used in supporting the collection by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy or supporting the passing of data concerning the meteorological characteristics of a particular area.

MFCS (Mortar Fire control System)--Used to support command and control of Mortar Fire Control operations.

MICROWAVE--Used to support Microwave data links.

MICROWAVE DATA LINK--Used in supporting the microwave data links.

MILITARY POLICE--Used to support security operations, military laws, orders and regulations, traffic control, crime prevention, investigations, logistics, coordination, and planning of police functions.

MILSTAR (Military Strategic and Tactical Relay System)--Used for voice and/or data transmissions over the MILSTAR system.

MISSILE--Used in supporting electronic fire distribution system designed for CONUS use in coordinating all elements of air defense from target detection to target destruction.

MITT/DTES (Mobile Integrated Tactical Terminal/Distributed Common Ground System Test and Evaluation Strategy)--Used to support mobile tactical terminal.

MLRS (Multiple Launch Rocket System)--Used to support the flight parameters of its main carrying missiles and submissiles.

MLS (Microwave Landing System)--Used to support Microwave Landing Systems.

MOMS (Man on the Move System)--Used in support of Man on the Move System operations.

MOTOR POOL--Used to support the motor pool.

MSE (Mobile Subscriber Equipment)--Used to provide secure, automatic digitized voice, data, and facsimile communications to the users, whether static or mobile operations.

MTS (Movement Tracking System)--Used to support the movement of personnel and equipment.

MUNITIONS--Used in support of the storage or movement of munitions.

MUTUAL AID--Used for fire, medical, police, and other emergency services between federal, state and local agencies.

MYSTIC STAR--Used to support the President of the U.S. and senior federal executives.

NAOC (National Airborne Operations Center)--Used in direct support of NAOC operations.

NASA--Used in support of NASA operations.

NAVAL GUNFIRE SUPPORT--Used in direct support of Naval Gunfire Support Operations.

NAVIGATION RADAR--Used for radar navigation in reduced visibility to assist the operator in determining the range and bearing to obstructions (e.g., other craft or buoys), avoiding obstacles, avoiding collisions, accessing the bank of a river or shore, and as an aid to maintain a vessel in a channel to avoid running aground.

NAVY SPECIAL OPERATIONS--Used for special, focused warfare operations conducted by Navy Sea, Air, Land (SEAL) teams, SEAL Delivery Vehicle Teams, and Special Boat Units (SBU) under the cognizance of the Naval Special Warfare Command.

NCIS (Naval Criminal Investigative Service)--Used by Naval Criminal Investigative Service organizations.

NDB--A signal (beacon) transmitting on a select frequency which is used by aircraft to determine their location in relation to the beacon signal. May serve as a guide to an airfield or location.

NERON (NOAA Environmental Real-Time Observation Network)--RF links are used to establish two-way (simplex) communications to poll data collection platforms (DCP) for MESONET data via base stations and repeater stations as applicable. The DCPS reply by transmitting the hydrometric data.

NEXRAD--Used in support of the Next Generation Weather Radar (NEXRAD).

NOAA WEATHER RADIO--Used for the dissemination of National Oceanic and Atmospheric Administration weather forecasts, weather warnings, and other critical information to the public.

NOAA WEATHER RADIO LINK--A simplex UHF radio link carrying the NWR broadcast from the Weather Forecast/Satellite Office (WFO/WSO) to the VHF transmitter. This radio link is used when a telephone line is unavailable.

NORAD (North American Air defense Command)--Used by the North American Air defense Command.

NTDR (Near Term Digital Radio)--Used to support the Army's data communication backbone for platoon to brigade.

OCCS SUPPORT--Used for communications support of Observer Controller Communication System (OCCS) programs and projects.

OSI (Office of Special Investigation)--Used by Office of Special Investigation organizations.

OTHER OPERATIONS--Used in supporting those functions not covered in one of the categories listed herein. (Note: See subparagraph (8) (j) above for additional instructions.)

OTHR/ROTHR (Over-the-Horizon Radars)--Used in supporting the OTHR. Some systems are relocatable.

PAR (Precision Approach Radar)--Used for Precision Approach Radar operations.

PATRIOT-- An air defense missile system.

PAVE PAWS (Precision Acquisition Vehicle Entry Phased Array Warning System)--Used in supporting the Precision Acquisition Vehicle Entry Phased Array Warning System.

PILOT-TO-DISPATCHER--Used between the base operations dispatcher and air crews.

PILOT-TO-METRO--Used between the base weather facility and air crews.

PILOT-TO-PILOT--Communication between air crews in flight.

POL (Petroleum, Oil, and Lubricants)--Used to support POL activities during exercises and operations.

PRIME BEEF--Used in support of the Prime Beef construction team.

PRISON BUS--Used for immediate communications support to prison and/or local police units during the transport of federal prisoners between federal correction facilities, other transportation media, medical facilities, and/or U.S. Courts.

PROJECT COTHEN--Federal Anti-Drug Operations.

PSYCHOLOGICAL OPERATIONS--Used for planned psychological activities in peace and war directed to enemy, friendly and neutral audiences to influence attitudes and behavior affecting achievement of political and military objectives.

PUBLIC WORKS--Used to support public works.

RADAR (Radio Detection and Ranging)--Used to support the various types of radar functions.

RADIO RELAY--Used in supporting signal communication system using very high frequencies and line of sight radio transmitters and receivers in lieu of trunk wire circuits. This system, when used in conjunction with carrier equipment, will provide channels for both voice and Teletype operations.

RADIOLOCATION--Used in supporting the determination of relative direction, position, or motion of an object, or its detection, by means of the constant velocity of rectilinear propagation characteristics of radio waves.

RADIOSONDE--Airborne instrumentation platform for collection/transmission of atmospheric temperature, pressure, relative humidity, and wind speed and direction data. Data is used to provide a three-dimensional picture of atmospheric conditions, which is essential for weather forecasting and meteorological research.

RAMP CONTROL--Used to control the movement of aircraft and vehicle traffic on the flight line.

RANGE CONTROL--Used in supporting the Range Control functions on a DOD Range (e.g., Range scheduling).

RANGE OPERATIONS--Used in supporting general operations on a DOD Test Range or Military Training.

RANGER UNITS--Used in supporting those units that plan and conduct special military operations and have the ability to support conventional military operations.

REMOTE MAINTENANCE MONITORING--Used for the remote collection of radio system status and operational data for remote review and analysis.

RDMS (Range Data Management Subsystem)--Used to support the RDMS currently being used at the National Training Center (NTC).

RED HORSE--Used in support of Air Force tactical construction operations.

REFUELING--Used in supporting voice communications in support of air-air refueling operations.

REMOTE BARRIER CONTROL SYSTEMS--Used to control aircraft barrier systems.

REMOTE CONTROL CRANE--Used to control remotely controlled cranes such as in a shipyard, harbor or other major industrial facilities.

RESOURCES CONSERVATION--Used to support resource conservation research operations.

RESUPPLY--Used in support of re-supply operations.

RF TAGS--(Radio Frequency Tags and Interrogators)--Logistics and shipping container tracking and management devices.

RUNWAY ICE DETECTION SYSTEMS--Used to monitor runway ice detection systems.

RUNWAY LIGHTING CONTROL--Used to control remotely controlled runway lighting.

RVR (Runway Visual Range)--Used for the measurement of atmospheric transmissivity along airport runways.

SAFETY--Used in support of public works safety net.

SATELLITE COMMUNICATIONS--Used for voice and/or data transmissions over a non-specific satellite system.

SAWDS (Satellite Automated WX Dist Sys)--Network to disseminate weather information to DOD facilities.

SCAMP (Single Channel Anti-Jam Manportable Terminal)--Used to support voice and data links for battle command and control communications.

SCOPE SHIELD--Tactical handheld radios.

SEA OPERATIONS--Used in supporting those functions which originate from on board ship and/or directly support the launching of, actual conduct of, and returning of forces carrying out sea-based operations; operations in a maritime and littoral environment which contribute to gaining and maintaining freedom of action.

SEABEES--Used in support of SEABEES construction activities.

SEARCH AND RESCUE--Used in supporting Search and Rescue (SAR) operational use of aircraft, surface craft, submarines, specialized rescue teams and equipment to search for and rescue personnel in distress on land or at sea.

SECURITY FORCE--Used in providing installation physical security operations.

SENTINEL (AN/MPQ-64 Surveillance Radar)--Used for air surveillance and target acquisition/tracking sensor for Short Range Air Defense (SHORAD) weapons systems.

SGLS (Space Ground Link Subsystem) (Telemetry)--Used in conjunction with the Automated Remote Tracking System (ARTS).

SH-ENROUTE (Super High Enroute Communication)--Used for air traffic control operations between departure and destination terminal areas in the super-high altitude stratum.

SHIP/AIR OPERATIONS--Used in supporting airborne units assigned to US Naval ships.

SHIP/SHIP--Used in supporting ship-to-ship communications.

SHIP/SHORE OPERATIONS--Used in supporting ship-to-shore and shore-to-ship communications.

SHIPYARD--Used in supporting shipyard operations, except remote controlled cranes.

SHORE PATROL--Used by shore patrol activities.

SHUTTLE--Used in direct support of Space Shuttle operations.

SIMULATOR--Used to support simulator activities.

SINCGARS (Single Channel Ground and Airborne Radio System)--Used to support combat arms command and control operations.

SINCGARS-ASIP (Single Channel Ground and Airborne Radio System-Advanced System Improvement Plan)--Used to support combat arms command and control operations.

SNOW REMOVAL--Used to support snow removal activities.

SOF (Supervisor of Flying)--Used by the SOF to assist pilots.

SONOBUOY--Used for floating electronic sensors designed to provide various data for Navy antisubmarine warfare (ASW).

SORT (Special Operations Response Team)--Used by federal officers specially trained in controlling disturbances within U.S. Penitentiaries or other federal correctional facilities.

SPACE OPERATIONS--Used in supporting those functions that directly support operational space missions including satellite control and shuttle missions.

SPECIAL FORCES--Used for specially trained, equipped and organized force against strategic or tactical targets in pursuit of national military, political, economic, or psychological objectives. These operations may be conducted during peace or hostilities. They may support conventional operations, or be prosecuted independently when use of conventional forces is inappropriate or infeasible.

SPECIAL OPERATIONS--Used in directly supporting Special Operations; those operations conducted by specially trained, equipped, and organized DOD forces (e.g., SOF) against strategic or tactical targets during peacetime or during hostilities.

SPECIAL SECURITY OPERATIONS--Used in direct support of special security operations.

SPEED MEASUREMENT SYSTEMS--Used by law enforcement activities to measure the speed of vehicles.

SPITFIRE (SPITFIRE Manpack UHF SATCOM DAMA Terminal)--Used to support digital voice communications.

SQUADRON/WING COMMON--A common frequency used for communication within a squadron or wing; (AF) a unit composed normally of one primary mission group and the necessary supporting organizations; (Navy) the basic organizational and administrative unit for naval, land, and tender-based aviation; (Marines) a balanced task organization of aircraft groups/squadrons together with appropriate command, air control, administrative, service, and maintenance units.

STRIKER II (Advanced Fire Support/Scout/Surveillance System)--Used to support long-range, reconnaissance, surveillance and fire support systems.

SUPPLY AND LOGISTICS--Used to support general supply and logistics operations.

SURFACE NAVAIDS--Ship stations used to furnish navigational assistance to aircraft and/or ships.

SURVEILLANCE/ RECONNAISSANCE--Used in supporting those strategic and tactical sensors and systems which provide warning of air breathing, ballistic missile, space-based, or tactical ground-based attack or to relay voice and/or data on the activities and resources of a potential or real enemy or the characteristics of a particular area obtained through visual observations or other detection methods.

SURVEILLANCE SYSTEMS--Used to support base security surveillance operations.

SUSTAINING OPERATIONS--Used in supporting those functions normally performed in conjunction with the continued operation of an Army Post, a Navy/Marine Corps Base, or an Air Force Base.

TACAN (Tactical Air Navigation)--Used by TACAN systems.

TACCS (Tactical Army Combat Service Support Computer System)--Used in support of the TACCS.

TACJAM (Tactical Communications Jamming System)--Used to support jamming operations.

TACTS (Tactical Trunk Signaling)--Used to support trunking systems.

TADIL-A--Used in support of the operation of Link 11 Naval Tactical Data System (ship to ship and ship to air) operations. Also used by the USAF for air to ground operations.

TADIL-C--High Frequencies (HF) used in support of the operation of Link 11 Naval Tactical Data Systems (ship to ship and ship to air) operations.

TARGET--Used to support target scoring and precision tracking radar etc.

TARGET ACQUISITION--Used within a system that identifies valid targets.

TARGET SCORING--Used to support target scoring of laser equipment.

TAXI--Used by base/installation taxi systems.

TCAS (Traffic Collision Avoidance System)--Used by aircraft equipped with the TCAS equipment.

TCRS (Target Control System)--Used to support target control functions and exercises at NTC.

TEAMMATE--Used to support collection and direction finding systems.

TECHNICAL ESCORT UNIT--Used to support a technical escort unit which is a deployable explosive and chemical/biological response team that identifies, escorts, decontaminates, disposes and mitigates explosive chemical and biological devices.

TELEMETRY--Used in supporting the transmission of telemetry data on a DOD range.

TEST AND MEASUREMENT--Used in supporting the test and measurement functions on a DoD Range.

TEST RANGE TIMING--Used in supporting the transmission of timing signals on a DOD Range.

TETHERED AEREOSTAT RADAR--Used in supporting the Tethered Aerostat Radars and interface system.

THUNDERBIRDS--Used by the USAF Thunderbirds demonstration team.

TIS or TRAVELERS INFORMATION SYSTEM--Used to provide travelers advisories.

TMGS (Transportable mobile ground subsystems)--Used in support of telecommand operations.

TOSS (TV Ordnance Scoring System)--Used in support of telecommand operations in scoring target accuracy on military ranges.

TOWER--Controls aircraft within assigned airspace and aircraft/vehicles on ground at airfields.

TRACKWOLF--Used to support ground based HF skywave communications intercept and direction finding systems.

TRAILBLAZER (Ground Based Communications Intelligence System)--Used by the Army to gather Intelligence.

TROJAN SPIRIT--Used to support the Transportable Trojan Spirit II satellite communications terminal.

TSU--Technical escort unit is a deployable explosive and chemical/biological response team that identifies, escorts, decontaminates, disposes and mitigates explosive chemical and biological devices.

UAV (Unmanned Aerial Vehicle)--Used in supporting the testing and/or operations of pilotless aircraft.

UNLICENSED DEVICE--Used by the government for use by low power devices normally operated without a license under the provisions of Part 15 of the FCC Regulations.

VOICE LINK--Used in the support of a voice radio link.

VORTAC (VHF Omni-range TACAN)--Used for VORTAC operations.

VOR (Very High Frequency Omnidirectional Range)--Used for Very High Frequency (VHF) Omnidirectional Range (VOR) operations.

WARNING SYSTEM--A signal or siren that warns of imminent danger (e.g., bomb alert, chemical, tornadoes, etc.).

WEAPON SYSTEMS--Used by major weapon systems.

WEAPONS STORAGE PROTECTION--Used to support weapons storage facilities.

WEATHER RADAR--Radar frequencies used by aircraft or ground based sites for weather purposes.

WHCA (White House Communications Agency)--Used in supporting WHCA operations.

WIDEBAND GLOBAL SATCOM--Used for voice, data and/or video transmissions in support of U.S. military operations using the Wideband Global Satcom (WGS) system.

WILDLIFE PRESERVATION--Used for game wardens, endangered species/wildlife preservation and tracking the movements of wild animals.

WIND MEASUREMENT--Used in the support of wind measurement equipment (direction, speed and/or shear)

WIND PROFILER--Used for sensing wind shear in the vicinity of airports.

WIN-T (Warfighter Information Network-Tactical)--Used to support the Army's Tactical Intranet consisting of switching/routing/transport that provides voice, data and video services.

WIRELESS LOCAL AREA NETWORK--Used to support local area network frequency bands.

WOLVERINE (Assault Bridge)--Used to support command and control of bridge operations.

*v. Mexican Coordination Data (*MEX)*

(1) The information in this field is normally those comments that were added based on FAS ADM 800118, dated June 16, 1980. These comments are:

*MEX,21311, IRAC, MAR 1980, MAY 1980 GMF

(2) As these comments indicate that this record was provided to Mexico for coordination in the original list, do not delete this entry when updating the assignment. If a record replacement action is used, and the frequency and/or location does not change, the docket numbers of the older authorization should be retained in the circuit remarks (see subparagraph 39g, *DOC).

(3) Agencies may also use this field to enter coordination comments based upon actual coordination with Mexico.

(4) Use this field by inserting the identifying code REMnn followed by a space, then *MEX followed by a comma, then the data.

*w. U.S. Coordination Comments on Canadian and Mexican Proposals (*USA)*

(1) Proposals for frequency coordination from Canada (and at some future date from Mexico) are processed through the automated FAS agenda system. When coordination is completed, the records are added to the GMF with the U.S. coordination comments indicated on the record by the code *USA followed by NHIA or NHIC.

(a) NHIA means no harmful interference is anticipated either to or from the proposals.

(b) NHIC means no harmful interference is anticipated, but additional information or a noting comment pertinent to the coordination is include.

(2) See Section 9.16.3 for instructions on formatting and voting *USA comments.

*x. FCC File Number (*FLN)*

This entry is used to identify an FCC File Number of an application received or license issued to a non-federal entity allowed to use either an NTIA-authorized frequency or a U.S. federal radio station on a frequency licensed by the FCC.

(1) Insert REMnn followed by a space and the identifying code *FLN followed by a comma.

(2) Immediately following the comma insert the FCC file number.

*y. Name, or Personal Identifier and Position, of Original Classification Authority (*CLA).*

(1) This field is used to identify, by name, or by personal identifier and position, the original classification authority for classified data. This entry shall be included for all classified applications for which the classification

was originally applied by the applicant and was not determined from derivative methods. This entry shall include all data in a single occurrence.

(2) Enter the field code REMnn followed by a space. Following the space, enter the code *CLA followed by a comma. Immediately after the comma, enter the name, or personal identifier and position, of the original classification authority, or the statement EXCLUDED,1.6.B, if entry of this information falls under the exclusion provision of Executive Order 13526.

Example:

        REM04 *CLA,ASD,CCCI,DOD
        REM02 *CLA,COMDR,12AF,USAF"
        REM05 *CLA,JOHN MCCLELLAN,AA,NTIA,DOC
        REM03 *CLA,EXCLUDED,1.6.B

*z. Derivative Classification Authority (*CLF).*

(1) This field is used to identify the source document, or classification guide, used as the basis for derivatively classifying data in a frequency assignment. This entry shall be included in all applications that are derivatively classified or contain a declassification instruction of OADR in the data field CDD, and shall be composed such that the source document or classification guide can be readily identified. Use more than one entry if necessary.

(2) Enter the field code REMnn followed by a space. Following the space, enter the code *CLF followed by a comma. Immediately after the comma, enter the identity of the source document or classification guide. Include the title, date and agency or organization that published the source document.

(3) In those instances where the original classification authority extends a declassification date in the field CDD beyond the initial 10-year period, this field is used to identify the date the declassification was extended, the individual that approved the extension, and that individual's agency or organization. However, entry of this information is not necessary when the classification is derived from another source and the source is listed in accordance with subparagraph (2) above.

Examples:

        REM06 *CLF,ASD,C3I,MEMO,SUBJ WINDOW
        REM07 *CLF,3JULY95
        ****
        REM04 *CLF,B-1B SCG,930815, OC-ALC/LAB
        ****
        REM10 *CLF,NTIA SCG FOR FREQ ASSIGNMENT
        REM11 *CLF,RECORDS,821108, ASCI (NTIA),DOC

*aa. Reason for Classification (*CLR).*

(1) This field is used to cite the category, or categories, of Executive Order 13526, that the original classification authority determined to be the reason(s) frequency assignment data in the assignment must be classified. This entry shall be included in all classified applications, except those classified derivatively, for which entry is optional. If this entry is used, all data shall be entered in a single occurrence.

(2) Enter the field code REMnn followed by a space. Following the space, enter the code *CLR followed by a comma. Immediately after the comma, enter the code 1.4, followed immediately by one, some, or all of the letters a, b, c, d, e, f or g, or h, which represents the classification categories listed in Executive Order 13526. For multiple category entries, enter the letters in alphabetical order.

  Example: REM05 *CLR,1.4ABCD"

*bb. Extended Declassification Date (*CDE).*

(1) This field is used to enter the declassification date for "permanently valuable" information when the field CDD contains an entry in the range DE25X2 - DE25X9. This entry shall include all data in a single occurrence.

(2) Enter the field code REMnn followed by a space. Following the space, enter the code *CDE followed by

a comma. Immediately after the comma, enter the declassification date in year, month and day (YYMMDD) order.

*cc. Classified Data Fields (*CLC or *CLS).*
      (1) These fields are used to identify those data fields in an assignment that are classified confidentical or secret. One or both of these entries must be included on all classified applications to indicate the classified information.
      (2) Enter the field code REMnn followed by a space. Following the space, enter the code *CLC to indicate those data fields that are classified Confidential or *CLS to indicate those data fields that are classified Secret followed by a comma. Immediately after the comma, enter the mnemonic(s) (and occurrence number of multiple occurring fields) of the classified data field(s). If more than one mnemonic is entered, separate each with a comma. You must enter all classified data fields that are confidential in *CLC and all classified data fields that are Secret in *CLS.
      (3) Use as many entries of *CLC or *CLS REM lines as necessary to list all classified data fields.
      (4) The entry for Supplementary Details will always be SUP (See paragraph 80, subparagraph j, of this section.).

      Example: REM09 *CLC,EMS01,PWR01,EMS02,PWR02,SUP
                      REM10 *CLS,XAD01, RAD03, REM11

*dd. Unclassified Data Fields (*CLU).*
      (1) This field is used to identify those unclassified frequency assignment data fields in a classified assignment. This entry shall be included in all classified applications. This entry shall include all data in a single occurrence.
      (2) Enter the field code REMnn followed by a space. Following the space, enter the code *CLU followed by a comma. Immediately after the comma, enter the statement ALL DATA FIELDS NOT LISTED IN *CLC or *CLS if there are unclassified data fields, or the statement NO UNCLASSIFIED DATA FIELDS if there are no unclassified data fields.

*ee. Transition and Planning Data (*TRN)*
    This optional data field may be used to provide the planned date it is anticipated an assignment will be transitioned and to provide the new frequency planned for the operation.
      a. Insert the identifying code REMnn *TRN;
      b. Following the identifying code, insert a comma;
      c. After the comma, insert in the next six characters the dated, in year, month, day (yymmdd) order, planned for the transition or narrowing to occur.
      d. If the frequency to be transitioned to is known, insert a comma after the date, followed by the new frequency. Enter this data the same way frequency is entered into the data field FRQ.

      Examples:

      REM06 *TRN, 050630, M416.225
      REM05 *TRN, 030331

*ff. Paired Frequency (*PRD)*
    This field identifies a repeater station or point-to-point operations using paired transmit or receive frequency, the associated agency serial number and any other information (e.g., repeater input, repeater output) associated with that frequency's assignment. This entry is required for all applications having a station class with the suffix "R" added, meaning the station is to be used primarily as a repeater, and the frequency being applied for is within one of the ranges listed in Section 6.1.2, paragraph 2 or Section 6.1.3, paragraph 2. This entry is also required for any application containing the Circuit Remarks entry "*RPT" (see paragraph 39h, above). For point to point operations this field applies to all frequency bands above 29890 kHz.
      (1) Insert the identifying code REMnn, a space, then *PRD followed by a comma.
      (2) After the comma, insert the repeater station transmit or receive frequency, followed by a comma. The frequency shall be entered with four digits beyond the decimal point (e.g. M39.0125; M166.0000), and shall be preceded by the letter designating the frequency band (e.g. M for mega-hertz)(see Chapter 6, Section 6.2)
      (3) After the comma, insert the 10-digit serial number associated with the repeater station receive or transmit

frequency assignment. However, if this field is used and multiple assignments for the repeater station frequency, include only one of those serial numbers as a representative of the group.

(4) (Optional) After a comma, insert associated information (e.g., repeater input, repeater output etc.).

Note: The only characters allowed in this portion of the associated information field are alphabetical, blanks and commas.

Example:

REM01 *PRD,M166.0125,VA 000622,RPT OUT
REM02 *PRD,M39.0250,NASA010101,RPT IN
REM03 *PRD,M166.0000,NASA060001

*gg. Declassification Instructions Comment (*DIC)*

(1) This field is used to describe the event, when after its occurrence, the data field (CLA) Classification would be changed to U-Unclassified, data field (CDD) Declassification Date would be removed from the record, and any data item classified (C) or (S) would be reclassified to (U). (Note: The responsible agency is required to submit a modification transaction to declassify the assignment once the event described in this data field occurs.)

(2) Enter the field code REMnn followed by a space. Following the space enter the code *DIC followed by a comma. Immediately after the comma describe the event that is the basis for declassifying the assignment record.

Example: REM08 *DIC, DECLASSIFY AFTER MISSILE LAUNCH

40. Serial Replaced (SRS) and Serial Replaced Expiration Date (SEX)

a. General Rules

(1) These two fields may be used to delete from the GMF one or more (maximum of nine) existing assignments simultaneously with a NEW or NOTIFICATION Action. If a New or NOTIFICATION Action is intended as a replacement for existing assignments, an entry for each replaced assignment is made in the SERIAL REPLACED (SRS) field and the SERIAL REPLACED EXPIRATION DATE (SEX) field.

(2) The assignment record to be deleted will be automatically converted to a temporary assignment with an expiration date corresponding to the date entered in the SEX field. It will be printed on the FAS agenda immediately following the new or notified record to which it refers. The new or notified action and the assignment to be deleted will appear in the GMF until the date entered in the SEX field has passed, at which time the latter will be deleted.

(3) Each entry in the SERIAL REPLACED (SRS) field must have a corresponding entry in the SERIAL REPLACED EXPIRATION DATE (SEX) field.

(4) If no assignment record is to be deleted, these fields shall be left blank.

b. Serial Replaced (SRS) (10 Characters--9 Occurrences)

Enter the identifying code SRSnn followed by the Serial Number of the assignment being replaced as it is shown in the GMF.

Examples: SRS01 AF 761234
                SRS09 NASA783456

c. Serial Replaced Expiration Date (SEX) (6 Characters--9 Occurrences)

Enter the identifying code SEXnn followed by the desired date of deletion in year-month-day order. The date shall not exceed one year from the date of the application.

Examples: SEX01 880615
                SEX09 880915

41. FOI-Exempt from FOIA (1 Character-1 Occurrence)

This field is used for identifying those assignments determined by the submitting agency's Freedom of Information Act (FOIA) Officer to be exempt from release in accordance with the provisions of the FOIA, 5.U.S.C. 552, as amended. By entering X in this field, the agency representative attest the record meets one or more of the criteria

outlined in the provisions of the Freedom of Information Act, 5 U.S.C. 552 as amended. Agency representatives will provide NTIA with justification upon request. Agency representatives will timely update information in this field as changed. The federal agency requesting the frequency assignment should work with its FOIA officials to determine whether the frequency assignment may be withheld under any of the available FOIA exemptions for unclassified records at the time that it requests the assignment.

42-78. Reserved

79. Frequency Assignment Subcommittee (FAS) (72 Characters--5 Occurrences)

The FAS field shall be used to provide information that will not be recorded in the GMF. This field is used for information of value only to FAS Representatives and relevant only while the frequency assignment action remains on the FAS agenda. This data will not be recorded in the GMF.

Examples:

FAS01 THIS IS A RENEWAL OF AN EXISTING AUTHORIZATION.
FAS03 ROUTINE UPDATE. 5-YEAR REVIEW.
FAS01 TELEPHONE ACTION RE-QUESTED.
FAS05 AGA COORD WITH SMITH/NTIA, 8/1/85.

80. Supplementary Details (SUP) (72 Characters-15 Occurrences)
The SUPPLEMENTARY DETAILS (SUP) data field may contain an explanation of the proposed operation and supplemental data as required below.
a. *Experimental Station Classes*: If the application is for an assignment to an experimental station, insert information to further describe the intent or nature of the experimental operation (see Section 6.4).
b. *Canadian Coordination*:
(1) If Canadian coordination is required or desired, any amplifying data to be forwarded to Canada shall be entered in the SUPPLEMENTARY DETAILS in the following format:

(CANCOR . . . .);

Examples:

(CANCOR USE ALONG BORDER IS OCCASIONAL)   (CANCOR REF U.S. SERIAL I8190001)
(CANCOR NOTE 172.9 MHZ, U.S. SERIAL 760001)

The abbreviation CANCOR must immediately follow the initial parenthetic character. Only the data following "CANCOR" and preceding the closing parentheses sign will be forwarded to Canada.
(2) In addition to any other amplifying data, the following information is to be furnished Canada using the procedure in 80.b.(1) above:
(a) If abbreviations have been used in the transmitter and/or receiver Antenna Location fields, and complete spelling is not readily apparent, enter the complete spelling.
(b) If the frequency has been coordinated previously with Canada for use in the same geographic area, insert the U.S. Serial Number of the previous coordination as it appears on the *CAN line in the Circuit Remarks of the GMF assignment being cited.
(c) If an expeditious reply from Canada is necessary, insert EXPEDITIOUS REPLY REQUESTED.
d) If the application is for operations in two or more states along the border and S322 has not been inserted in the NOTES field, insert additional data to inform Canada of the extent to which the frequency will be used.
(e) While an application is Tabled on the FAS agenda during the Canadian coordination process, an agency may use the SUPPLEMENTARY DETAILS (SUP) field to request reconsideration of an adverse comment made

by Canada. On the next available SUP line using the format (CANCOR), an agency shall request reconsideration of the Canadian comment and provide rationale for the request. Agencies may not request reconsideration with a frequency change. To change frequency a new application must be submitted.

Examples:

(CANCOR Rqst reconsideration based on 120 kilometer separation)
(CANCOR Rqst reconsideration with antenna changed to 7dB yagi and noting adjacent channel offset of 12.5 kHz)

See Section 9.16 for submitting FAS agenda corrections and changes.

c. Fixed Station and Transportable Transmitting Earth Station Coordination:
(1) If the application is for an assignment to a transportable Earth station in the band 7900-8400 MHz or to a fixed (FX) station in the bands 1710-1850, 2200-2290, 4400-4990, 7125-7250, 7300-7975, or 8025-8400 MHz whereby the requirement involves a communications system consisting of more than two stations that are interconnected (excluding stations to be used for transportable operation--Note S362), and a data plot or coordination contour map was circulated, enter the notation "data plot circulated" or "contour map circulated," as applicable in the FAS field (see Section 9.2.4 for details).
(2) If a data plot or coordination contour map was not circulated and successful coordination was effected with all agencies concerned, insert a statement to indicate that this coordination determined data plots and/or coordination contour maps were not required.

d. Transportable Receiving Earth Station: If the application is for transportable Earth stations in the band 7250-7750 MHz, insert a statement indicating that power flux density (PFD) at Earth surface will not exceed the limits listed in Section 8.2.36.

e. Frequency Diversity: Applications for frequencies to be used in the frequency diversity mode of operation shall contain a statement of justification consistent with the provisions of Section 8.2.25. Frequency diversity applications for each individual radio path shall be cross-referenced by frequency, and the statement of justification shall be included in the SUPPLEMENTARY DETAILS field of each application.

f. Sounder Stations: If the application is for a sounder network or a sounder prediction station, insert a statement indicating that it has been determined no existing authorized ionospheric sounder transmitter is capable of meeting the requirement (see Section 8.2.21).

g. Notification Actions:
(1) For notification under the authority of Section 7.12, insert information to identify the coordination correspondence with the FCC regarding the proposed operation.
(2) If the application is a notification of a telecommunications laser, describe the function and purpose of the operation.

h. Emission Symbol Explanation: If the letter X is used in either of the first, second, or third emission designator symbol(s) (see Section 9.8.2, paragraph 16e(2)(a), (b), and (c)) an explanation of emission characteristics must appear in the Supplementary Details.

i. Separate System Justification: For assignments for land mobile systems that are within 30 km of an existing or planned trunked land mobile system authorized by NTIA, provide the information required under subparagraph 8.2.48a.

j. Classification of Supplementary Details: NTIA compresses this data field in order to preserve total assignment record size, and the information is treated as a single paragraph. Individual marking of separate line occurrences for the purposes of complying with paragraph 39, subparagraphs cc and dd, is not possible. Therefore, if any of the information entered in Supplementary Details is classified, the entire Supplementary Details entry becomes classified.

k. All applications: If the application is for an assignment for a federal agency then it shall contain:
(1) Justification of need (see Section 8.2.4);
(2) A statement by the FAS representative/alternate or headquarters federal employee that the assignment is needed; and
(3) A general explanation of the operation (see Section 9.5).

Example:

SUP01 This base station and mobiles are required for building evacuation and COOP activities which the FAS representative has verified are needed by the agency.
SUP01 This fixed point to point operation is required for transferring data and video which the FAS alternate has verified as needed.

9.9   USE OF THE CARD FORMAT FOR MODIFICATION, RENEWAL, AND DELETION ACTION

1. The card format with the COMMAND CARD "$$MOD" is used only with MODIFICATIONS (see Section 9.7.2, paragraph 12, and below).
2. The card format with the COMMAND CARD "$$CHG" is used for the following purposes:
a. MODIFICATION (M)--To apply for the addition, substitution, or removal of one or more of the particulars, other than the frequency, the agency serial number, or the transmitter state/country, of an existing frequency assignment which is in the GMF. No more than 60 data fields of a particular assignment can be modified at one time (see Section 9.7.1, (subparagraph C).
b. RENEWAL (R)--To apply for the extension of the period of a temporary or trial assignment which is in the GMF (see Section 9.6) and to simultaneously update other particulars of the assignment.
c. DELETION (D)--To apply for the cancellation of a frequency assignment and the removal of all its particulars from the GMF.
3. The COMMAND CARD $$CHG may not be used to take action on the AGENCY SERIAL NUMBER, the transmitter STATE /COUNTRY, or the FREQUENCY fields.

9.10   USE OF FIELD CODES

Only the following field codes may be used for actions containing a $$CHG or $$MOD COMMAND CARD. The field code and occurrence number is used to identify the data field(s) which the applicant desires to address (see Section 9.7.1).

<table>
<tr><td colspan="4" align="center">**Table: Field Codes**</td></tr>
</table>

Field Title	Field Code	Field Title	Field Code
Action Number	ACN	Receiver Antenna Location	RAL
Receiving Station Call Sign	ACL	Receiver Antenna Longitude	RLG
Bureau	BUR	Receiver Antenna Polarization	RAP
Circuit Remarks	REM	Receiver Antenna Orientation	RAZ
Classification	CLA	Receiver Control	RRC
Date	DAT	Receiver State/Country	RSC
Declassification Date	CDD	* Review Year	RYR
Emission	EMS	Routine	RTN
Expiration Date	EXD	Supplementary Details	SUP
FOIA	FOI	Station Class	STC
Frequency Assignment Subcommittee	FAS	Time	TME
International Coordination Indicator	ICI	Transmitter Antenna Orientation	XAZ
Missing Data Indicator	MSD	Transmitter Antenna Dimensions	XAD
Net Control	NET	Transmitter Antenna Latitude	XLA
Notes	NTS	Transmitter Antenna Location	XAL
Power	PWR	Transmitter Antenna Longitude	XLG
Power Density	SPD	Transmitter Antenna Polarization	XAP
Receiver Antenna Dimensions	RAD	Transmitter Call Sign	XCL
Receiver Antenna Latitude	RLA	Transmitter Control	XRC
		Type of Action	TYP

*See Annex F and Section 9.15.

Example:

        $$CHG I 791882
        TYP01 M
        DAT01 791105
        EMS03 20KF2B

indicates that the applicant desires to change the third emission in the GMF record I 791882 to 20KF2B.

9.11   PREPARATION OF THE CARD FORMAT FOR A MODIFICATION ACTION

1. Before submitting a Modification action, read Sections 9.7 and 9.9.

2. Assignments which have been previously coordinated with the Canadian Department of Communications pursuant to Section 3.4 may be modified without being recoordinated with Canada provided the modification will not increase the probability of harmful interference. If the Modification will increase the probability of harmful interference, the assignment must be re-coordinated with Canada.

3. The deletion of an entry in the EMISSION field, in the POWER field, or in the STATION CLASS field, requires that a corresponding deletion be made in the other two fields.

4. Prepare the application for the routine portion of the FAS agenda, according to the instructions below, when the modification:

        -- Does not increase the probability of harmful interference, and
        -- Does not extend or delete the expiration date.

Enter RTN01 followed by one of the letters A, M, or R:

        -- Enter A if the assignment is in the AAG band (see Section 9.14.1).

-- Enter M if the assignment is in the MAG band (see Section 9.14.2).

-- Enter R if the assignment is neither in the AAG nor MAG bands. The letter R will be automatically entered by the computer in the ROUTINE field if the following conditions are met:

a. The frequency assignment being modified is not within the AAG or MAG bands (see 9.14.1 and 9.14.2); and

b. The following fields are modified, added or deleted either alone or in conjunction only with each other:

*AGN	*EQS	*POC	TME
ACL	*EQT	*PRD	XAL
ACN	*FLN	*PRR	XAP[4]
FOI	ICI	RAL	XCL
BUR	*IFI	RAP[4]	XLA[5]
*CAN	*JNT	RLA[5]	XLG[5]
CLA	*MFI	RLG[5]	XRC
DAT	*MEX	RRC	
*DFI	NET	RYR	
*DOC	NTS	SPD	
*EQR	*NTS[6]	SUP[7]	

5. The following card formatting rules apply:

a. Each MODIFICATION requires:

(1) The COMMAND CARD:

$$CHG or $$MOD (Enter the serial number of the assignment being modified as it is recorded in the GMF)

(2) The TYPE OF ACTION (TYP) Card: TYP01

(3) The DATE (DAT) Card:

DAT01 (Enter the date (year/month/day) on which the application is prepared. Use numeric characters only; leave no blanks.)

(4) The data field and data being modified.

(a) Insert the code for the field being modified in the first three spaces. The codes are listed in Section 9.10. Insert the occurrence number for that portion of the field being modified in the last two spaces, as entered in the GMF. For example, insert EMS02 for the emission shown in the list on the second line of the EMISSION FIELD.

(b) Insert the new data that are to appear in the GMF as replacements for those entered under LISTED DATA. Enter the data in the same manner as prescribed in Section 9.8.

(c) If the data are to be deleted from the field being modified, enter the field code and leave the data field blank.

b. All other data fields listed in Section 9.10 may be used at the option of the applicant.

(1) Agency Action Number (ACN) (10 Characters--1 Occurrence) The format of the entry shall consist of alpha and or numeric characters and represent agencies internal tracking information for agenda records. The field will be blank if not used by the agency for internal tracking.

(2) Supplementary Details (SUP) (72 Characters--15 Occurrences)

Agencies will review the SUPPLEMENTARY DETAILS for each assignment being modified to ensure that the data are correct and current. Comments relating to routine modifications (change of bureau, Net, equipment, etc.) are not required and must be removed from the record. Agencies shall not reiterate the modification action in SUP.

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[4] A change to XAP or RAP in the bands 7125-8500 and 14500/15350 MHz for fixed systems would not apply to this non-interference change.

[5] If movement is less than 8 kilometers.

[6] A change to *NTS would not apply to M002, M008, or M009 since these give protection to existing agencies and removal could cause serious interference issues.

[7] A change to SUP in the AAG bands and 162/174 MHz would not apply to this non-interference change.

However, enter comments if the modification is to an assignment that must be RE-COORDINATED with Canada. Insert (CANCOR REFERENCE US SERIAL XXXXX followed by information to rationalize the re-coordination).

   Example: SUP01 (CANCOR REFERENCE US SERIAL I8031849. INCREASE POWER.)

9.12   PREPARATION OF THE CARD FORMAT FOR A RENEWAL ACTION

   1. Before submitting a RENEWAL action, read Section 9.7.1 and Section 9.9.
   2. The following card formatting rules apply:
      a. Each RENEWAL action requires:
         (1) The COMMAND CARD:
            $$CHG (Enter the serial number of the assignment being renewed as it is recorded in the GMF)
         (2) The TYPE OF ACTION (TYP) Card: TYP01 R
         (3) The DATE (DAT) Card:

            DAT01 (Enter the date (year/month/day) on which the application is prepared. Use numeric characters only; leave no blanks.)

            (4) the DATA CARD EXD: EXD01 880615
   For the renewal of temporary assignments, the new date is not to exceed five years hence.
            (5) Updates to other particulars of the assignment, (e.g., REM06 *SYS, SURVEY)
      b. The ROUTINE (RTN) data field may not be used for renewal applications unless the assignment contains at least one of the following Notes: L192, L197, L199, S035, S160, S279, or S348.

9.13   PREPARATION OF THE CARD FORMAT FOR A DELETION ACTION

   1. Before submitting a DELETION action, read Section 9.7.1 and Section 9.9.
   2. The following card formatting rules apply:
      a. Each DELETION action requires:
         (1) The COMMAND CARD:
            $$CHG (Enter the serial number of the assignment being deleted as it is recorded in the GMF)
         (2) The TYPE OF ACTION (TYP) Card: TYP01 D
         (3) The DATE (DAT) Card:

            DAT01 (Enter the date (year/month/ day) on which the application is prepared. Use numeric characters only; leave no blanks)
      b. Agency Action Number (ACN) may be submitted on a DELETION action.

9.14   APPLICATIONS CONSIDERED BY THE AERONAUTICAL ADVISORY GROUP (AAG) AND THE MILITARY ADVISORY GROUP (MAG)

9.14.1 Applications Considered by AAG

   1. The AAG is responsible for engineering AAG frequency assignments and determining whether or not applications for frequency assignment action in the following bands should be submitted to NTIA for approval.
         190-285 kHz
         285-435 kHz*
         510-535 kHz*
         74.800-75.200 MHz
         108.000-121.9375 MHz
         123.5875-128.8125 MHz
         132.0125-136.000 MHz
         328.600-335.400 MHz
         978-1020 MHz inclusive
         1030 MHz

1031-1087 MHz inclusive
1090 MHz
1104-1146 MHz inclusive
1157-1213 MHz inclusive
5000-5250 MHz

* In these bands only applications for stations in the Aeronautical Radionavigation Service (see Table A, Section 6.1.4) shall be sent to the Chairman of the AAG.

2. For frequency assignment proposals in the above bands, agencies shall transmit UNCLASSIFIED applications to NTIA viaprocesses indentified in Section 9.3.1. Send non-federal applications directly to the Chairman, AAG, or directly to NTIA at the option of the FCC FAS Representative; additionally, the requestor's point of contact must be included on the application.

3. Exceptionally, the following types of applications for assignment in the above bands shall be prepared and processed in accordance with the provisions of Sections 9.3 through 9.13.

     a. Those which are classified,
     b. Those which must be referred to the IRAC (see Section 10.9),
     c. Those for space radiocommunication, and
     d. Those known to be controversial.

4. Submit unclassified frequency assignment proposals in the bands above for engineering analysis and review by FAA via WebFCR. Add Coordination Note C089 to the Notes Field (NTS) on each non-FAA proposal. (See Annex A and Annex D). Additionally, the applicant may indicate the date of coordination and the FAA point of contact, and correspondence identification, if applicable, in the FAS data field.

5. After technical evaluation, coordination, and other appropriate action, the Chairman of the AAG as well as other AAG members shall vote their decision via the Automated Voting Procedures, Section 9.16.2.

    5. After technical evaluation, coordination, and other appropriate action, the Chairman of the AAG as well as other AAG members shall vote their decision via the Automated Voting Procedures, Section 9.16.2.

9.14.2 Applications Considered by MAG

    1. The MAG is responsible for determining whether or not applications for frequency assignment action in the bands 225.0-328.6 and 335.4-399.9 MHz should be submitted to NTIA for approval.

    2. For assignment actions involving these bands, agencies will transmit UNCLASSIFIED applications to NTIA viaprocesses identified in Section 9.3.1.

    3. Exceptionally, the following types of applications shall be prepared and processed in accordance with the provisions of Sections 9.3 through 9.13:

     a. Those which are classified SECRET,
     b. Those which must be referred to the IRAC,
     c. Those involving transmissions to or from space, and
     d. Those known to be controversial.

    4. After technical evaluation, coordination (if necessary), and other appropriate action, the Chairman of the MAG as well as other MAG members shall vote their decision via the Automated Voting Procedures, Section 9.16.2.

9.15   OTHER GMF FIELD CODES

    The following field codes are presented for information. Only the field code RYR is addressable in a frequency assignment action (see Sections 9.10 and 9.11 and Annex F.)

    a. *AUD--AUTHORIZATION DATE (6 Characters-1 Occurrence)*
    The date on which the assignment was originally authorized. The format used in YYMMDD.

    b. *AUS--AUTHORIZATION NUMBER (8 Characters)--10 Occurrences)*
    (1) This unique number is generated internally by the agenda preparation programs each time an action on a frequency assignment appears on the FAS agenda. This is the FAS docket

(DKT) number of the action on the FAS agenda.

      (2) Up to ten entries (occurrences) are retained in the assignment record in the GMF. The first entry will always be the most current authorization number. If there is more than one entry, the *ORIGINAL* authorization number will always be retained as the second entry. When the AUS fieldbecomes full (10 occurrences), more room is created by dropping the older, *NON-ORIGINAL*, entries and moving all others down.

     c. *MBR--AGENCY MEMBERSHIP (1 Character--1 Occurrence)*

    This field designates agency membership in the Frequency Assignment Subcommittee (FAS) community.

      M   Voting Member of the FAS

      N   Non-Voting/Non-Member of the FAS. NTIA represents these agencies in the FAS.

      O   Non-Voting/Non-Member of the FAS. Other FAS Member agencies represent these agencies in the FAS.

      X   Non-Voting/Non-Member of the FAS. Canadian and Mexican records in the GMF are currently identified by the letter X.

     d. *RVD--REVISION DATE (6 Characters-1 Occurrence)*

    The date on which the frequency assignment was most recently revised. The format used is YYMMDD.

     e. *RYR--REVIEW YEAR (2 Characters--1 Occurrence)*

    This field is used ONLY when no other changes are required (all parameters as listed are up-to-date) and it is necessary to indicate a review of an assignment has been completed (see Annex F). (If any change is being submitted to any character of any data field, the RYR need not be submitted.) The RYR field is not retained in the assignment record-it resets the date in the RVD field, which is retained in the GMF.

9.16   FAS AGENDA ACTIONS

9.16.1 FAS Votes and Agenda Corrections Directives

    1. Directives are changes to a field(s) of a frequency application proposal on the FAS agenda. Directives shall be transmitted to the NTIA/SSD Automated Data Capture System via the telephone dial-up electronic data transfer method.

    2. FAS agenda DIRECTIVES shall be prepared in card format, and the following rules apply:

     a. A $$DIR COMMAND CARD and an AGC01 card are both required for each DIRECTIVE package.

      (1) If the DIRECTIVE(s) applies to a single application, or to multiple applications NOT in numerical sequence by Docket Number (DKT), the Command Entry must be on the first line. Enter $$DIR, a space, then the docket number (DKT) of the application being addressed.

      (2) If an identical DIRECTIVE(s) applies to a series of applications in numerical sequence by docket number, on the first line enter ENDREQ RANGE, a space, the FIRST docket number of the sequence, a slant bar, then the LAST docket number of the sequence. On the second line enter $$DIR, a space, then the FIRST docket number of the sequence.

      (3) Enter the AGC01 card into the DIRECTIVE package at any place following the $$DIR card. Enter AGC01, a space, then the agency abbreviation of the agency submitting the DIRECTIVE package (see Annex G, Section G.1).

     b. DATA ENTRIES will follow the procedures specified in Section 9.7.2, paragraph 3b and as outlined in paragraphs 3 and 4 below.

     c. Comments concerning an FAS agenda docket which the applicant or the NTIA/SSD wishes to make a part of the FAS agenda record, but not a part of the GMF record, may be entered using the field mnemonic FAS (see Section 9.8.2, paragraph 79).

    3. Changes to applications on the FAS agenda may be made by submission of DIRECTIVES. However, no more than 99 data fields may be changed and the following rules apply:

     a. Serial Numbers (SER) may never be changed.

     b. The FREQUENCY (FRQ) field may not be changed on applications undergoing Canadian coordination. To change FRQ a new application must be submitted. (A new agency serial number is required unless the original application is withdrawn first.)

     c. If the application is a MODIFICATION or RENEWAL no change may be made to the FREQUENCY (FRQ) and TRANSMITTER STATE/COUNTRY (XSC) fields.

     d. If the application is a DELETION, no changes are allowed.

     e. Changes to any field not listed in 3f, below, will result in the application being redistributed to the FAS

representatives for additional review. All agencies, except the host, must vote on the redistributed application. A redistributed application previously TABLED by an agency other than the host will REMAIN TABLED until the tabling agency votes to accept (see paragraph 4, below).

    f. The following fields may be changed without causing redistribution or rejection:

    (1) ACL, ACN, BUR, *DFI, ICI, *IFI, *MFI, *PRD, NET, RAL, RAP, RAZ, RRC, RYR, SPD, SUP, XCL, XRC, VOT, *AGN, *CAN, *DOC, *EQT, *EQR, *EQS, *EBW, *SBW, *EGN, *SGN, *ENT, *RNT, *SNT, *JNT, *MEX, *ORB, *RPT, *USA.

    (2) *ESB, *ESR, *EST--ONLY if added as a new occurrence.

    (3) EXD--ONLY if changed from blank to numeric, or if the change decreases numeric value in the application.

    (4) NTS--ONLY if added as a new occurrence and does not include a new entry of S148, S164, S288 or S322.

    (5) XAL--However, if the FAS agenda item is a MODIFICATION action and the XAL was changed on initial submission, it may NOT be changed back to the ORIGINAL XAL via a directive. (If the agency desires to do this, the MODIFICATION or RENEWAL action must be withdrawn from the agenda and resubmitted at a later date with the correct XAL.)

    (6) FAS--However, if changes are necessary, resubmit the entire FAS field with the changes incorporated.

    4. VOTE DIRECTIVES shall be submitted using the mnemonic VOT with any two digit occurrence number, however 00 (zero zero) is recommended. A VOTE is a four part field - THE FIRST THREE MUST ALWAYS BE COMPLETED.

    a. The first part consists of a single letter followed by a comma. Use:

    (1) the letter A to accept the application;

    (2) the letter T to table the application;

    (3) the letter R to withdraw the application (only the submitting (host) agency or NTIA may vote R);

    b. The second part consists of the abbreviation (see Annex G) of the FAS member agency submitting the VOTE DIRECTIVE followed by a comma.

    c. The third part shall always be the five (5) digit number found in RVS for the application being voted upon. To ensure that votes are applied to the most current version of an application, votes that do not match the number found in RVS by NTIA's automated program will not be processed and registered.

    d. IF PART FOUR IS USED, a COMMA must be included immediately AFTER THE SECTION NUMBER in part three. The fourth part is a 59 character field for agencies to use for comments concerning the application. As a minimum, agencies tabling an application shall include comments with reason for tabling, or provide a name and telephone number for further contact.

    Examples:

    $$DIR I8900006
    AGC01 NTIA
    VOT00 T,NTIA,00025,CONTACT JOHN SMITH,PH 202-202-2020

    ENDREQ RANGE I8900290/I8900310
    $$DIR I8900290
    AGC01 USGM
    VOT00 A, USGM,00315
    $$DIR I8900330
    AGC01 USGM
    VOT00 R, USGM,00315,TO RESUBMIT

    $$DIR I8900331
    AGC01 USGM
    REM02 *AGN,NEW INFO
    REM03 *EQS,LMS

9.16.2   Agency Comments and Voting Procedures

1. CONDITIONAL comments, called Minute Notes, may be recorded on frequency assignment actions (see Section 9.8.2, Paragraph 39). These comments will not duplicate conditions specified in a Record Note (see Annex A) or a Footnote to the Table of Frequency Allocations (see Section 4.1), and will be submitted in card format as a DIRECTIVE in accordance with Section 9.16.1 and below.

a. Directives adding Minute Notes to an assignment action must be submitted only by the host agency. An agency wishing to record Minute Notes on another agency's application must submit a VOTE DIRECTIVE to table the application, and include comments as to the reason for the tabling action. Agencies may only vote to table another agency's application if harmful interference is anticipated, there are technical errors in the application that affect the electromagnetic environment or the request violates NTIA radio spectrum policy. If an agency tables an application due to a violation of NTIA radio spectrum policy, the tabling agency must cite the specific policy violated (not to include Chapters 6 or 9). The Frequency Assignment Branch (FAB) shall review the policy issue and report its decision to the FAS. Agencies are encouraged to communicate their concerns and attempt resolution prior to tabling an application, particularly where similar tabling actions may apply to many applications. Furthermore, agencies are encouraged to remove their tabling action promptly once the application has been corrected or the issue resolved.

b. Minute Notes that will exceed eight lines of the CIRCUIT REMARKS field must be submitted by letter to the Secretary, FAS. The FAS Secretary will assign an FAS Administrative (ADM) Docket number to the comments. The FAS ADM Docket number will then be recorded in the Circuit Remarks field of the affected application by the NTIA/SSD.

2. Frequency assignment actions on the FAS agenda will not normally be approved by NTIA until all voting is unanimous, or 9 workdays after the Initial Processing Date (IPD) for NEW proposals and MODIFICATIONS, 5 workdays after the IPD for routine MODIFICATIONS, and 1 workday after the IPD for DELETES. The exceptions for AAG, and Canada, are listed in 2c below. All voting shall be in accordance with the following: a.   FAS member agencies MAY vote either to accept (A) or table (T) another agency's applications, and MAY vote to withdraw (R) their own applications. However, an agency MAY NOT vote to withdraw (R) another agency's applications.

b. FAS members that represent other agencies are considered the host and need not vote on the applications they submit on behalf of the represented agency, except to vote a withdrawal (R).

c. Applications, except those within the AAG area of responsibility or those from Canada and Mexico, will be automatically approved by NTIA 9 workdays after the IPD for NEW proposals and MODIFICATIONS, 5 workdays after the IPD for routine MODIFICATIONS, 1 workday after the IPD for DELETES, and 5 working days after the IPD for agency NGR (for the bands 71-76 and 81-86 GHz) if NTIA votes accept, unless a vote to TABLE has been recorded.

(1) Applications within the AAG area of responsibility, which have not been voted to ACCEPT by the Chairman of the AAG within 9 workdays of the IPD will be automatically TABLED to the AAG Chairman.

(2) Applications from Canada and Mexico will be automatically approved by NTIA after 30 calendar days of the IPD unless a vote to TABLE has been recorded.

9.16.3   Agency Votes and Directives on Canadian and Mexican Frequency Assignment Proposals

1. Agency votes and directives on Canadian and Mexican frequency assignment proposals on the FAS agenda will be prepared in accordance with 9.16.1. NTIA's vote represents a vote on behalf of the non-member agencies.

2. Agencies may only vote A to ACCEPT, or T to TABLE. Agencies may not make directive changes to Canadian or Mexican proposals except to add a *USA entry to the Circuit Remarks (REM) field or revise their own *USA comment.

3. Only Canada or Mexico may vote R to REJECT/WITHDRAW their own proposals. NTIA may vote to REJECT a Canadian or Mexican proposal which is TABLED with an HIA comment, but only after some mutually agreed upon period of time with no resolution of the problem indicated by the HIA comment.

4. Vote A if the proposal is No Harmful Interference Anticipated - NHIA

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$$DIR I9102222
AGC01 NASA
VOT00 A,NASA,00690,NHIA
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5. If the proposal is NHIA but adding some additional information or make a noting comment, vote A and use the acronym NHIC in the comment (VCM) portion of the vote card. Follow the vote card with an entry for the Circuit Remarks field (REM) using the identifier *USA for the comment. If the vote is NHIC and there is no *USA entry for Circuit Remarks, the reply will go to Canada or Mexico as NHIA. An agency card is mandatory in order to connect the appropriate agency with the associated remarks.

        $$DIR I9102223
        AGC01 J
        VOT00 A,J ,00690,NHIC
        REM05 *USA,NHIC, Noting use of M163.4375,U.S.
        REM06 *USA,NHIC,serial I8701234, Detroit, MI.

    6. Vote T for Harmful Interference Anticipated -HIA. Use HIA in the VCM portion of the vote card. Follow the vote card with an entry for REM using the identifier *USA for the comment. An agency card is mandatory.

        $$DIR I9102224
        AGC01 AR
        VOT00 T,AR ,00690,HIA
        REM03 *USA,HIA,U.S. serial I8302345, M169.25,
        REM04 *USA,HIA,Detroit, MI.

9.16.4   Coordination and Referral of Applications for Frequency Assignment Action

    1. In accordance with the agreement shown in Section 3.4, the NTIA's Spectrum Services Division (SSD) coordinates certain applications for frequency assignment action with the Canadian Department of Industry (Industry Canada). When it is determined that an application must be coordinated with Canada, the NTIA/SSD will table the application pending comments from Canada concerning the coordination.
    2. By applying for a frequency assignment an agency coordinates with other agencies which might be affected by the applicant's use of the frequency through the FAS agenda process. In the event that unfavorable coordination comments are received either before or subsequent to submission of an application for the FAS agenda, applicants may request the application be referred to a meeting of the FAS for deliberation.
        a. To request referral, the host shall include a request for referral using the VOTE directive; the host shall vote to table and shall use only the words REFER TO FAS in the comments portion of the Vote directive (see 9.16.1 above).
        b. If referral is requested, the host should also submit a letter to the FAS Secretary with a copy of all unfavorable comments attached, explaining in detail why the application should be favorably considered. The FAS will deliberate the applications and recommend a course of action.
    3. An item on the FAS agenda shall be referred to the IRAC for consideration:
        a. Upon the specific request of any FAS member agency or the FAS Chairman;
        b. If it cannot be resolved solely on the basis of technical considerations;
        c. If it is a matter for which policy has not heretofore been established;
        d. At the specific request of the IRAC; or,
        e. If specifically directed by other sections of this Manual.
    4. The FAS shall take no action on an item referred to the IRAC until advice has been received from the IRAC. When referring items to the IRAC, the FAS should provide all pertinent information, including:
        a. A statement of the problem;
        b. Facts bearing on the problem, including the background;
        c. A list of agencies that favored approval and those that favored disapproval; and,
        d. A brief statement of the basis given by those agencies that objected to approval of the item.

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