NATIONAL COMMUNICATIONS SYSTEM
OFFICE OF THE MANAGER
WASHINGTON, D.C. 20305

ODP #2585/76

IN REPLY REFER TO:

NCS-TS

16 December 1976

MEMORANDUM FOR FIPS POINTS OF CONTACT FOR DATA STANDARDS

SUBJECT: Proposed FIPS PUB, "Telecommunication Circuit File Data
Elements and Codes"

1. Enclosed for your concurrence is the proposed Federal Information
Processing Standard Publication (FIPS PUB) entitled, "Telecommunication
Circuit File Data Elements and Codes." Your concurrence in this stan-
dard would be appreciated by 1 March 1977. In the absence of a
response by the above date, it will be assumed that your agency concurs
in the promulgation of this document.

2. The point of contact for this item is Mr. Dennis Bodson of the
Office of NCS Technology and Standards (NCS-TS). He may be reached
at 692-2124.

MARSHALL L. CAIN
Assistant Manager
NCS Technology and Standards

1 Enclosure
1 Prop FIPS PUB

Next 1 Page(s) In Document Exempt

FIPS PUB

DRAFT FIPS PUB

FOR

TELECOMMUNICATION CIRCUIT FILE

DATA ELEMENTS AND CODES

CATEGORY: SOFTWARE PROGRAM STANDARD

SUBCATEGORY: DATA ELEMENTS AND CODES

Federal Information Processing Standards Publication

TELECOMMUNICATION CIRCUIT FILE DATA ELEMENTS AND CODES

Name of Standard.   Telecommunication Circuit File Data Elements and Codes

Category of Standard.   Software Program Standard, Data Elements and Codes.

Explanation.   This standard specifies the format of a telecommunications circuit file record including the identification and placement of the various fields within the record together with data elements and codes used in the construction of these fields.

Approving Authority. Secretary of Commerce.

Maintenance Agency.   National Communications System, Office of Priority and Data Management (NCS-PD).

Cross Index

    a.   FIPS PUB 5-1, States and Outlying Areas of the United States - June 15, 1970.

    b.   FIPS PUB 10, Countries, Dependencies and Areas of Special Sovereignty

    c.   NCS Circular 55-2 with Appendices dated   , 1976, Subject: NCS Data Base.

    d.   Manual of Regulations and Procedures for Radio Frequency Management, Office of Telecommunications Policy, Executive Office of the President - January 1, 1976

    e.   DCA Circular 310-65-1, "Channel and Circuit Allocations, Defense Communications System Circuit and Trunk File Data Elements and Codes Manual" Supplement 1, dated 3 May 1976 (Conf)

    *f.   DCA Circular 310-130-1, "Submission of Telecommunications Service Request," 22 April 1976.

*Change 1 dated 29 July 1976

Applicability. The standard format, data elements and codes, described herein are prescribed for the interchange of formatted machine sensible coded data between all Federal departments and agencies with respect to telecommunication circuit files.

Waivers. Requests for exceptions, deferments, and revisions of standards will be forwarded to the National Bureau of Standards for consideration and coordination. These requests will provide detailed justification for the exception, deferment, or revision deemed necessary. These should be submitted at least 45 days in advance of any exception or deferral action.

Implementation Schedule. This standard is effective upon publication.

Where to Obtain Copies of the Standard.

    a.   Copies of this publication and referenced FIPS PUBS are for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402. Refer to Federal Information Processing Standard Publication (FIPS PUB) _____ (Price ___ a copy). Microfiche of this publication is available from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22151.

    b.   NCS Circular 55-2 may be obtained from the Office of the Manager, National Communications System, ATTN: NCS-PD, Washington, D.C. 20305.

    c.   Manual of Regulations and Procedures for Radio Frequency Management may be obtained from the Office of Telecommunications Policy, Executive Office of the President, ATTN: Chairman, Interdepartmental Radio Advisory Committee (IRAC), Washington, D.C. 20504. This publication and cross index references may be copied and locally reproduced to meet agency requirements.

    d.   DCA Circulars 310-65-1 and 310-130-1 may be obtained from the Defense Communications Agency, Attn: Code 211, Washington, D.C. 20305.

Special Information. Problems, questions, or changes concerning this standard or its use are welcome, and should be addressed to the maintenance agency.

Specifications. Federal Information Processing Standards Publication _____. (FIPS PUB _____), Telecommunication Circuit File Data Elements and Codes (affixed).

1. General

1.1 Introduction. This standard has been prepared to facilitate the interchange of data between Federal departments and agencies with respect to telecommunication circuit files. There are numerous data bases within the Federal Government containing telecommunication circuit files. The largest such data base is that maintained by the National Communications System. This data base contains information on government-leased and owned circuits for use by the Manager, NCS, in his assigned role as communications resource manager in accordance with Federal Emergency Plan D. Information needs to be exchanged between agencies in support of this requirement. Agencies may also exchange telecommunication circuit file information on a continual basis for other purposes.

1.2 Scope. Section 2 describes the processes followed in preparation of an individual record in the circuit file. Related information is contained in the appropriate appendices.

1.3 Purpose. The purpose of this FIPS PUB is to provide a standard for the format and data elements and their associated codes to be utilized in exchange of telecommunication circuit file information between Federal departments and agencies.

2. Circuit File

2.1 Introduction. A circuit file (CF) describes each circuit therein from user terminal to user terminal. A circuit is comprised of one of more segments. For each circuit there is a minimum of one 80-character record. However, additional 80-character records may be required if it is required to identify intermediate terminals or service points of the same circuit. Each segment is further described by 21 data elements, and these elements are identified and defined in this standard. These fields are described in detail in this publication. Only those data elements which are applicable to the agency's exchanging CF information need to be utilized. The remaining fields, if any, may be left blank. For purposes of illustration an 80 column card format will be utilized to represent the 80-CF. It is the user's prerogative as to whether the circuit file information will be maintained on cards, magnetic tape, or other media.

2.2 Format. The prescribed format for a record contained in the circuit file is shown in Figure 1. There are   fields containing data elements which comprise a CF record. Character positions 18, 20-24, 27-28, 56, and 58-61, are not used at the present time.

2.3 Field. A field identifier (a letter) is used for reference purposes only in Figure 1, and is assigned to each data element. Each data element and its associated codes are separately identified, defined, and listed in this standard.

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CIRCUIT FILE RECORD FORMAT

FIGURE I

A GEOGRAPHIC POINT FROM								B USER/ENR FACILITY From			C State/ Country FM		D State/ Country TO		E GEO AREA FM	TO	UNUSED	F TYPE TRK	UNUSED						G MOD RATE		UNUSED
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28

H GEOGRAPHIC POINT TO								I USER/ENR FACILITY To			J TYPE OPER	K USER CIRCUIT DESIGNATOR ARS	PUR&USE	TOS	CKT.NR.					L SEGMENT NR.	M SVC AVL	N SECURITY EQPT.		O RESTR PRTY	
29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55

UNUSED	P NCS ASTS	UNUSED				Q COMMERCIAL COMMUNICATIONS CIRCUIT IDENTIFIER CMCL.CARRIER		PREFIX		TOS	CIRCUIT NUMBER						SUFFIX		R RTG CFN	S CS	T TIC
56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

*Elements A&H, B&I, and C&D share common codes

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1. Field: A, Character Positions

2. Data Element Name: Full   GEOGRAPHIC LOCATION CONTRACTION FROM

    Abbreviation GELOCO

3. Data Element Definition: This element defines the contraction for geographic location of the terminal at which the circuit segment being described either originates or passes through.

4. Data Element Sources: The method of the development of the items under this data element is the same as utilized by the Inter departmental Radio Advisory Committee (IRAC).

5. Data Element Representation and Codes:

    a. Data Element Representation: Contracted Name
    b. Type of Representation: Alphabetic, numeric, or alphanumeric
    c. Length of Representation: Variable, 1-8 character positions
    d. Left or Right Justification: Left, blanks are inserted in unused positions
    e. Symbols allowed: 26 letters of the alphabet (upper case), numerals 0-9, and blanks

6. Description of Representation:

6.1 This element identifies the contraction for the geographic location of the "FROM" terminal or enroute facility of the segment of the circuit being described. The method of contracting location names in Field A of the CF is the same as utilized by the Interdepartment Radio Advisory Committee in recording the geographic locations of transmitting and receiving stations. A current list of contractions we currently use can be found in the NCS GELOCO listing (cross index reference c).   Contractions, which are not available can be determined in accordance with the rules listed below, which are taken from the Manual of Regulations and Procedures for Radio Frequency Management published by the Office of Telecommunications Policy, Executive Office of the President (cross index reference d).

    This method is based on the following premises:

        a.   That the result will be a standard designation for the purposes of machine processing and need not be instantly recognizable.

        b.   That common designation can be established.

        c.   That rules for contraction apply to all locations regardless of length:

    Rule One. All rules will be followed in strict numerical order.

A 1

Rule Two. An Anglicized version of place names is used when there is a common Anglicized version. Examples:

    WIEN   use   VIENNA
    KÖLM   use   COLOGNE

Rule Three. Accent marks, umlauts, and punctuation marks which are part of a name are not used. Examples:

    DÜSSELDORF   becomes   DUSSELDORF
    CROIX-CHAPEAU   becomes   CROIXCHAPEAU

Rule Four. No spaces are used in two or more word place names when the use of the space would exceed the eight space limit, subject to Rule Five below:

    SAN JUAN   use   SAN JUAN
    LE CHENOY   use   LECHENOY

Rule Five. In place names of two or more words, the following standard abbreviations are to be used when the word is used as a separate word, with another word, or in combination with each other. These abbreviations are always used regardless of the length of an abbreviated name. Use no other abbreviations. Numerals or letters required to complete certain place names, e.g., NAVAL DISTRICT, will follow the abbreviation:

ARMY AREA	ARA	GREAT	GT
BAD	BD	HIGH	HI
BARRACKS	BK	HEIGHTS	HT
CAPE	C	ISLE(S), ILE, ISLAND	I
COAST GUARD	CG	ISLANDS	IS
COAST GUARD DISTRICT	CGD	LAKE(S)	L
COMMON	CMW	MONT MONTE, MOUNT(S)	MT
COUNTY	CO	MOUNTAIN(S)	MTN
CAMP	CP	NEW	N
CREEK	CR	NAVAL DISTRICT	ND
CITY	CY	NORTHEAST (ERN)	NE
DISTRICT	DI	NORTH(ERN)	NO
DIVISION	DV	NORTHWEST(ERN)	NW
EAST(ERN)	E	OCEAN STATION VESSEL	OSV
FORT	FT	PROVING GROUND(S)	PG
GRAND	GR	PARK	PK
POINT	PT	SAINT, SAINTE	ST
RIVER	RV	SOUTHWEST(ERN)	SW
SOUTHEAST(ERN)	SE	UPPER	UP
SOUTH(ERN)	SO	VILLE	VL
SPRING(S)	SPR	WEST(ERN)	W

A2

```
W PK          for  WEST PARK
W CO          for  WEST COUNTY
L LOUISE      for  LAKE LOUISE
BALDYMTN      for  BALDY
MOUNTAIN GR I      for  GRAND ISLAND
FT MEADE      for  FORT MEADE
CPKILMER      for  CAMP KILMER
ARA 6         for  SIXTH ARMY AREA
ND 11         for  11TH NAVAL DISTRICT
OSV J         for  OCEAN STATION VESSEL "J"
```

The following standard abbreviations are exceptions to all abbreviation rules herein. They will be used for the titles indicated:

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AFACADMY      UNITED STATES AIR FORCE ACADEMY
ETR           EASTERN TEST RANGE
NTS           NEVADA TEST SITE
PMR           PACIFIC MISSILE RANGE
WSMR          WHITE SANDS MISSILE RANGE
WTR           WESTERN TEST RANGE
```

These standard abbreviations are always used regardless of word length. Examples:

```
FORT ORD        use  FT ORD
MAISON FORT     use  MAISONFT
SOUTH RUISLIP   use  SORUISLP
HIGH GARRET     use  HIGARRET
```

Rule Six. If rules one through five still result in a word that is too large, eliminate vowels, starting at the right of the place and maintaining "Y" and any initial vowel, whether it is the first letter of the word or the initial letter of a two-place name preceded by a standard abbreviation. Do not eliminate any vowel that is part of a standard abbreviation. Examples:

```
DANNENFELS       becomes   DANNNFLS
SAINT ANDREWS    becomes   STANDRWS
BAD KREUZNACH    becomes   BDKRZYCH
HIGH WYCOMBE     becomes   HIWYCOMB
FYLINGDALES      becomes   FYLNGDLS
```

Rule Seven. If the result is still too large, eliminate one of any double letters, starting at the right, and excepting those caused by any part of a standard abbreviation. Examples:

```
GREAT MASSINGHAM    becomes   GTMSNGHM
```

A3

Rule Eight. If the result is still too large, eliminate letters
as follows, starting from the right, excluding any part of a
standard abbreviation or the initial letter following a standard
abbreviation.

        (1) Eliminate "N" from "NG"
        (2) Eliminate "H" from "TH"
        (3) Eliminate "C" from "CK"
        (4) Eliminate "L" from "LD"
        (5) Eliminate "T" from "ST"
        (6) Eliminate "H" from "CH"

        WASSERTRUDINGEN   becomes   WSRTRDGN

Rule Nine. If the result is still too large, eliminate the letter
"R" from the word, starting from the right and excepting any part
of a standard abbreviation, an initial letter, or the initial
letter of a word following a standard abbreviation. Example:

        SAINT ANDREASBURG   becomes   STANDSBG

Rule Ten. If rules 1 through 9 still result in a name of more than
eight characters, eliminate from the right all characters over
eight, e.g., RTLSNKMT for RATTLESNAKE MOUNTAIN.

1. Field: B   Character Positions 9-11

2. Data Element Name: USER/ENROUTE FACILITY CODE FROM

3. Data Element Definition: This element defines the user or enroute facility at which the circuit segment being described either originates or passes through.

4. Data Element Sources: Codes utilized in this data element were developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Element Representations and Codes:

    a. Data Element Representation: Code
    b. Type of Representation: Alphabetic, numeric, or alphanumeric
    c. Length of Representation: Fixed, three character positions
    d. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9.

6. Description of Representation:

                        This element describes the "FROM" user or enroute facility at which the circuit being described either originates or passes through. Field B will contain the code for the From User or Enroute Facility of the segment of the circuit being described. Field B is associated with Field A of the Circuit File and reflects   the user at the location in Field A for the first circuit segment and the enroute facility code for the location in Field A on all subsequent circuit segments for the same circuit. A list of codes for this field is provided by NCS as indicated in Cross Index, Reference c.

B1

1. Field: C, Character Positions 12-13

2. Data Element Name: <u>STATE OR COUNTRY FROM</u>

3. This element identifies one of the 500 states or countries in which the terminal location of the circuit segment being described originates or passes through.

4. Data Element Sources: FIPS 5-1 States of the United States, FIPS 10 Countries, Dependencies and Areas of Special Sovereignty

5. Data Elements and Codes:

    a. Data Element Representation: Code
    b. Type of Representation: Alphabetic or numeric
    c. Length of Representation: Fixed, 2 character positions
    d. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9.

6. Explanation: This element identifies the state or country in which the "FROM" terminal or enroute location of the circuit segment being described is located. Codes for this field are contained in Cross Index References a, b, and c.

C1

1.   Field: D, Character Positions: 14-15

2.   Data Element Name: <u>STATE OR COUNTRY CODE TO</u>

3.   This element identifies one of the 500 states or countries of the world in which the terminal location of the circuit segment being described terminates or passes through

4.   Data Element Sources: FIPS 5-1 States of the United States, FIPS 10 Countries, Dependencies and Areas of Special Sovereignty

5.   Data Elements and Codes:

   a.   Data Element Representation: Code
   b.   Type of Representation: Alphabetic or Numeric
   c.   Length of Representation: Fixed, 2 character positions
   d.   Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9

6.   Explanation: This element identifies the state or country in which the "TO" terminal or enroute location of the circuit segment being described is located. Codes for this field are contained in Cross Index References a, b, and c.

D1

1.   Field: E, Character Position 16/17

2.   Data Element Name: <u>GEOGRAPHICAL AREA IDENTIFICATION</u>

3.   Data Element Definition: This element identifies the geographical location of the terminal where the circuit segment being described either originates, terminates, or passes through.

4.   Data Element Sources: This data element and codes were developed by the NCS Office of Priority and Data Management (NCS-PD)

5.   Data Elements and Codes:

   a.   Data Element Representation: Code
   b.   Type of Representation: Alphabetic or Numeric
   c.   Length of Representation: Fixed, one character position (for "From" (character Position 16) and for "To" (character position 17))
   d.   Symbols allowed: 26 letters of the alphabet (upper case), and numerals 0-9.

6.   Explanation: This element identifies the geographical area "FROM" and "TO" of the terminal or enroute location of the circuit segment recorded in Fields A and H. The alphabetic code is used if both the "FROM" and "TO" locations are within the CONUS. If either or both the "FROM" and/or "TO" locations are outside the CONUS, the numeric code is used. Those codes listed in part I will be used if both the "FROM" and "TO" locations are within the CONUS. If either or both the "FROM" and/or "TO" locations are outside the CONUS, those codes listed in Part II will be used. Part III is a tabular presentation of area codes representing the United States and other areas of the world which have been identified in Cross Index References a, b, and c.

E1

NAME	GEOGRAPHIC AREA IDENTIFICATION
Northeast U. S.	A
East Central U. S.	B
Southeast U. S.	C
North Central U. S.	D
South Central U. S.	E
Northwest U. S.	F
West Central U. S.	G
Southwest U. S.	H

Note -- The boundary lines between Intra-CONUS Areas G and H in
the State of California shown in Figure 2 follow the northern
country lines of San Luis Obsipo, Kern, and San Bernadino counties.

E2

NAME	GEOGRAPHIC AREA IDENTIFICATION
AMERICAS	1
Northern	2
United Kingdom	3
European	4
Spanish	5
Mid-East	6
Far East	7
Pacific	8
Alaskan	9

Note -- The boundaries of the areas in Part I and II are shown on the maps of the United States and the world, Figures 2 and 3.

E3

NCS INTRA - CONUS AREAS
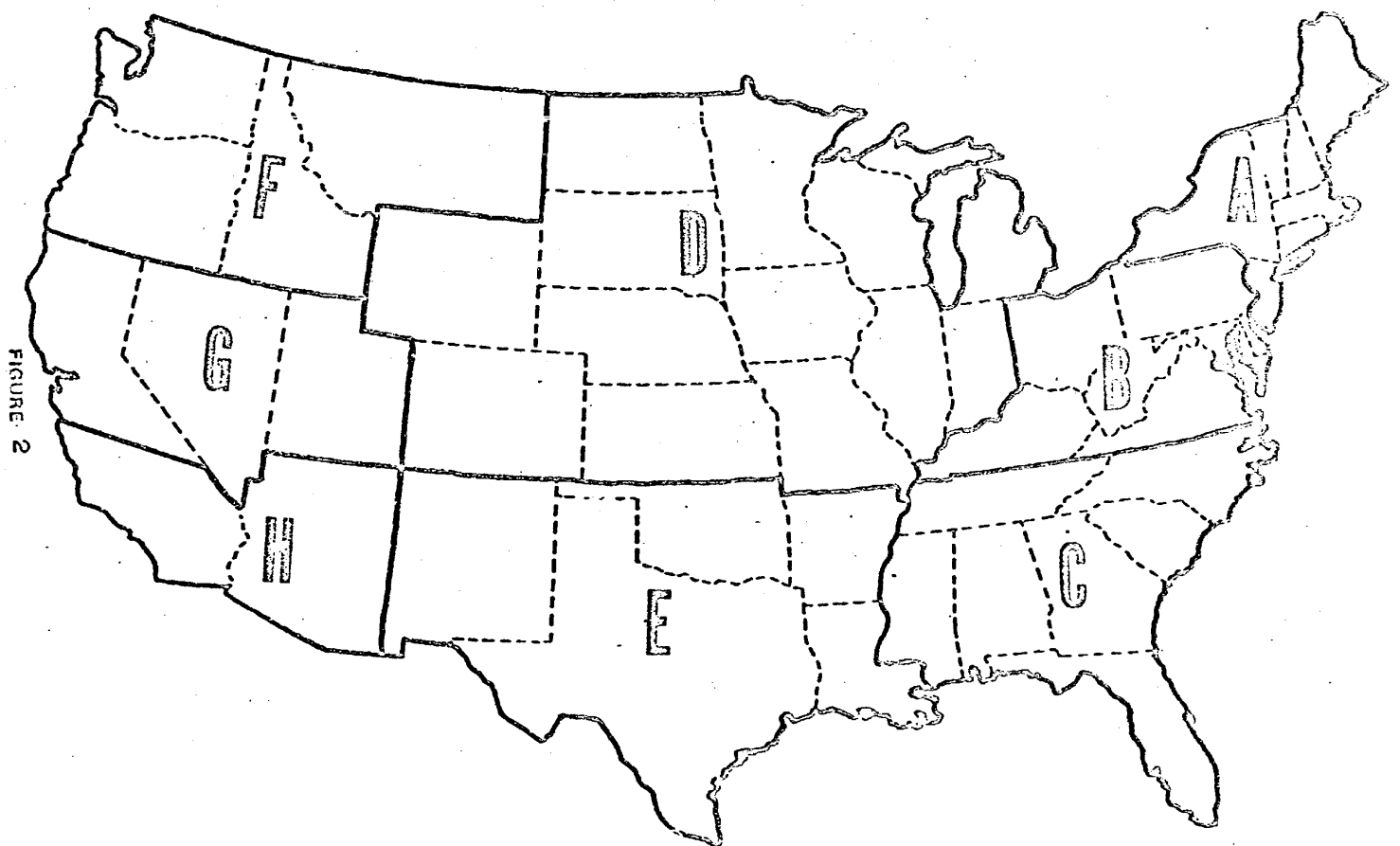
FIGURE 2

NCS GEOGRAPHICAL AREAS

FIGURE 3
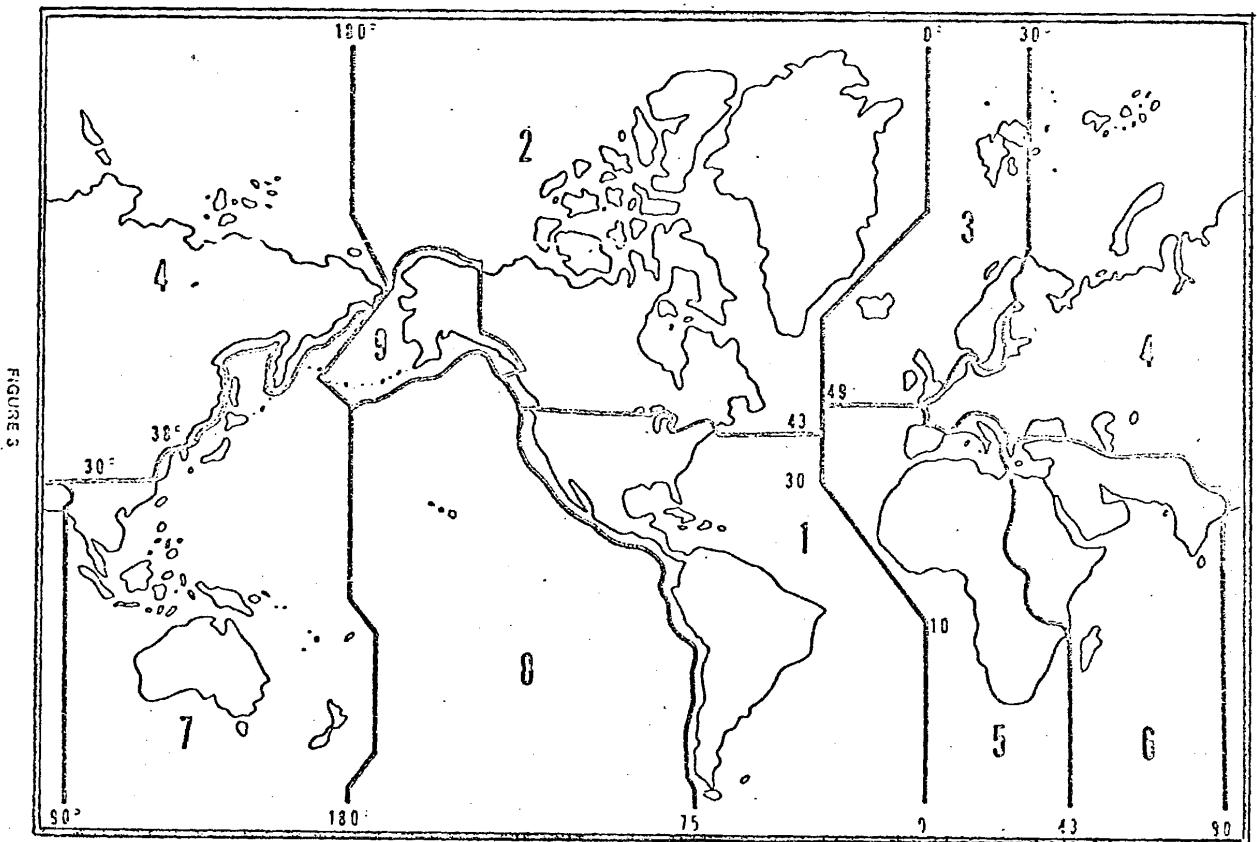
PART III

STATES OF THE UNITED STATES

STATE NAME	AREA	SUB-AREA
ALABAMA	1	C
ALASKA	9	
ARIZONA	1	H
ARKANSAS	1	E
CALIFORNIA	1	G/H
COLORADO	1	D
CONNECTICUT	1	A
DELAWARE	1	B
DISTRICT OF COLUMBIA	1	B
FLORIDA	1	C
GEORGIA	1	C
HAWAII	8	
IDAHO	1	F
ILLINOIS	1	D
INDIANA	1	D
IOWA	1	D
KANSAS	1	D
KENTUCKY	1	B
LOUSIANA	1	E
MAINE	1	A
MARYLAND	1	B
MASSACHUSETTS	1	A
MICHIGAN	1	D
MINNESOTA	1	D
MISSISSIPPI	1	C
MISSOURI	1	D
MONTANA	1	F
NEBRASKA	1	D
NEVADA	1	G
NEW HAMPSHIRE	1	A
NEW JERSEY	1	A
NEW MEXICO	1	E
NEW YORK	1	A
NORTH CAROLINA	1	C
NORTH DAKOTA	1	C
OHIO	1	B
OKLAHOMA	1	E
OREGON	1	F
PENNSYLVANIA	1	B
RHODE ISLAND	1	A
SOUTH CAROLINA	1	C
SOUTH DAKOTA	1	D
TENNESSEE	1	C
TEXAS	1	E
UTAH	1	G
VERMONT	1	A
VIRGINIA	1	B
WASHINGTON	1	F
WEST VIRGINIA	1	B
WISCONSIN	1	D
WYOMING	1	D

E4

COUNTRIES, DEPENDENCIES, AND
AREAS OF SPECIAL SOVEREIGNTY

Name	Area
Afghanistan	6
Albania	5
Algeria	5
American Samoa	8
Andorra	5
Angola	5
Anguilla	1
Antarctica	7
Antigua	1
Argentina	1
Ashmore and Cartier Islands	7
Australia	7
Austria	4
Bahamas	1
Bahrain	6
Bangladesh	7
Barbados	1
Belgium	4
Bermuda	1
Bhutan	6
Bolivia	1
Botswana	5
Bouvet Island	7
Brazil	1
British Honduras	1
British Indian Ocean Territory	6
British Solomon Islands	7
British Virgin Islands	1
Brunei	7
Bulgaria	4
Burma	7
Burundi	6
Cambodia	7
Cameroon	5
Canada	2
Canal Zone	1
Canton and Enderbury Islands	8
Cape Verde	5
Cayman Islands	3
Central African Republic	5
Central and Southern Line Islands	7
Ceylon	7
Chad	5
Chile	1
China, Peoples Republic of	7

E5

Name	Area
China, Republic of	6
Christmas Island	7
Cocos Islands	8
Colombia	1
Comoro Islands	6
Congo (Brazzaville)	5
Congo (Kinshasa)	5
Cook Islands	8
Coral Sea Island Territory	7
Costa Rica	1
Cuba	1
Cyprus	6
Czechoslovakia	4
Dahomey	5
Denmark	4
Dominica	1
Dominican Republic	1
Ecuador	1
El Salvador	1
Equatorial Guinea	5
Ethiopia	6
Faeroe Islands	3
Falkland Islands	1
Fiji	7
Finland	4
France	4
French Guiana	1
French Polynesia	8
French Southern and Antarctic Lands	7
French Territory of Afars and Issas	6
Gabon	5
Gambia	5
Gaza Strip	6
Germany, Federal Republic of	4
Germany, Soviet Zone of	4
Ghana	5
Gibraltar	5
Gilbert and Ellice Islands	7
Greece	6
Greenland	2
Grenada	1
Guadeloupe	1
Guam	7
Guatemala	1
Guinea	5
Guyana	1
Haiti	1
Heard and McDonald Islands	6
Honduras	1
Hong Kong	7

E6

Name	Area
Hungary	4
Iceland	3
India	7
Indonesia	7
Iran	6
Iraq	6
Iraq-Saudi Arabia Neutral Zone	6
Ireland	3
Israel	6
Israel-Jordan Demilitarized Zones	6
Israel-Syria Demilitarized Zones	6
Italy	5
Ivory Coast	5
Jamica	1
Jan Mayen	2
Japan	7
Johnson Atoll	8
Jordan	6
Kenya	6
Korea, North	7
Korea, Republic of	7
Kuwait	6
Kuwait-Saudi Arabia Neutral Zone	6
Laos	7
Lebanon	6
Lesotho	5
Liberia	5
Libya	5
Liechtenstein	4
Luxembourg	4
Macao	7
Madagascar	6
Malawi	6
Malaysia	7
Maldives	6
Mali	5
Malta	5
Martinique	5
Mauritania	5
Mauritius	7
Mexico	1
Midway Islands	8
Monaco	4
Mongolia	4
Montserrat	1
Morocco	5
Mozambique	5
Muscat and Oman	6
Nauru	7

Nepal	6
Netherlands	4
Netherlands Antilles	1
New Caledonia	7
New Hebrides	7
New Zealand	7
Nicaragua	1
Niger	5
Nigeria	5
Niue	7
Norfolk Island	7
Norway	3
Pakistan	7
Panama	1
Papua and New Guinea	7
Paracel Islands	7
Paraguay	1
Peru	1
Philippines	7
Pitcairn Island	8
Poland	4
Portugal	5
Portuguese Guinea	5
Portuguese Timor	6
Puerto Rico	1
Qatar	6
Reunion	6
Romania	4
Rwanda	6
Ryukyu Islands, Southern	7
St. Christopher-Nevis-Anguilla	1
St. Helena	5
St. Lucia	1
St. Pierre and Miquelon	2
St. Vincent	1
San Marino	5
Sao Tome e Principe	5
Saudi Arabia	6
Senegal	5
Seychelles	6
Sierra Leone	5
Sikkim	6
Singapore	7
Somalia	6
South Africa	5
Southern Rhodesia	5
Southern Yemen	6
South-West Africa	5
Soviet Union	4
Spain	5
Spanish Sahara	5
Spanish territories in Northern Morocco	5

E8

Spratly Island	7
Sudan	6
Surinam	1
Svalbard	3
Swan Islands	1
Swaziland	5
Sweden	3
Switzerland	4
Syrai	6
Tanzania	6
Thailand	7
Togo	5
Tokelau Islands	8
Tonga	8
Trinidad and Tobago	1
Trucial States	6
Trust Territory of the Pacific Islands	7
Tunisia	5
Turkey	6
Turks and Caicos Islands	1
Uganda	6
United Arab Republic	6
United Kingdom	3
United States	1
United States misc. Caribbean Islands	1
United States misc. Pacific Islands	7
Upper Volta	5
Uruguay	1
Vatican City	5
Venezuela	7
Vietnam, North	7
Vietnam, Republic of	7
Virgin Islands	1
Wake Island	7
Wallis and Futuna	8
West Berlin	4
Western Samoa	8
Yemen, Peoples Democratic Republic of	6
Yugoslavia	5
Zambia	5

1. Field: F, Character Position 19

2. Data Element Name: <u>TYPE OF TRUNK</u>

3. Data Element Definition: This element defines the transmission media used and the function performed on the trunk segment being described.

4. Data Element Sources: This data element and codes were developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Elements and Codes:

    a. Data Element Representation: Code
    b. Type of Representation: Alphabetic or Numeric
    c. Length of Representation: Fixed, 1 character position
    d. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9.

6. Description of Representation: Field F, Character Position 19, will contain the Type of Trunk code which described the transmission media and the function performed on the trunk path being described. A list of codes for this field is shown below:

    A - Single or multichannel HF radio other than single sideband including Continuous Wave (CW) transmission

    B - Sideband (HF) single or multichannel

    C - High-speed time division multiplex system (150 baud and higher channel subdivision)

    D - AUTODIN in - Plant Cable Mode I

    E - AUTODIN in - Plant Cable Mode V

    F - AUTODIN in - Plant Equipment

    G - AUTODIN in - Station Trunk Group

    H - UHF/VHF Line of Sight Radio

    I - Speech Plus System

    J - Low-Speed Time Division Multiplex System (less than 150 baud channel subdivision)

    K - Landline Cable (including open wire)

    L - Landline Cable L

F1

N - Group Frequency Spectrum without Channel Modems

O - Unassigned

P - Landline Cable

Q - Submarine Cable

R - Landline Cable

S - Satellite Relay

T - Forward Propagation Tropospheric Scatter (FPTS)

U - Supergroup Frequency Spectrum without Group or Channel Modems

V - Voice Channel Package (may be preempted for Wideband Service)

W - Frequency Subdivided, Multiple Modem System Digital

X - VFCT System not provided via HF Systems

Y - VFCT provided via HF or combination HF, Wideband

Z - Composite System (nonsimilar media)

1 - Non-DCS Sideband Trunk

2 - Non-DCS UHF/VHF Trunk

3 - Non-DCS Microwave Trunk

4 - Non-DCS Landline Cable Trunk

5 - Non-DCS Tropo Trunk

6 - Non-DCS VFCT Trunk

7 - Non-DCS Submarine Trunk

8 - Non-DCS Satellite Trunk

Note: A Composite System (nonsimilar media) is a mixed system where a combination of microwave, tropo, or landline cable is used to support one trunk. This type system will carry a "Z" type trunk code. The only exceptions are trunks with submarine cable (Q), HF (B), or Satellite (S) transmission media.

1. Field: G, Character Positions 25-26

2. Data Element Name: <u>MODULATION RATE</u>

3. Data Element Definition: This data element defines the speed
   of the service (bauds or bits per second) or the channel capacity
   of the circuit segment being described.

4. Data Element Sources: This data element and codes was developed
   by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Elements and Codes:

   a. Data Element Representation: Code
   b. Type of Representation: Alphabetic
   c. Length of Representation: Fixed, 2 character positions
   d. Symbols allowed: 26 letters of the alphabet (upper case)

6. Description of Representation: Field G, Character Positions 25 and
   26, will contain the Modulation Rate Code which describes the speed
   of service of the circuit being described. If the circuit operates
   at more than one modulation rate alternately, the higher modulation
   rate will be shown in this field.

The following codes are used to indicate the speed of service provided
by the service being described. The modulation rate codes are grouped
into six categories.

    a.   This category of code identifies the baud rate of record
circuits.

AA	Less than 35 baud
AB	37.5 baud
AC	45.5 baud
AD	50.0 baud
AE	56.8 baud
AF	61.12 baud
AG	74.2 baud
AH	75.0 baud
AJ	76.0 baud
AK	110.0 baud
AL	150.0 baud
AM	300.0 baud
AN	600.0 baud
AP	1200.0 baud
AR	2400.0 baud
AS	3600.0 baud
AT	4800.0 baud
AU	42.0 baud
AV	44.5 baud
AW	52.5 baud
AX	55.6 baud
AY	70.0 baud
AZ	1300.0 baud
BA	750.0 baud
BB	9600.0 baud
BC	7200.0 baud
BD	Dual 1200/4800 Baud Autodin Hybrid Service
BE	Dual 2400/4800 Baud Autodin Hybrid Service
BF	82.5 baud
BG	1800.0 baud
BH	3840.0 baud
BJ	72.6 baud
BK	Dual 1200/9600 Baud Autodin Hybrid Service

G2

b. This category of code identifies the number of channels transmitted on a system represented by a pseudo UCD with TL, TP, TQ, TX, TW, or TY purpose and use code.

CA	4 channels	CT	14 channels	
CB	8 channels	CU	20 channels	
CC	12 channels	CV	Speech Plus IV-1TTY	
CD	16 channels	CW	Speech Plus IV-2TTY	
CE	22 channels	CX	Speech Plus IV-3TTY	
CF	28 channels	CY	Speech Plus IV-4TTY	
CG	32 channels	CZ	Speech Plus IV-5TTY	
CH	24 channels	C1	5 channels	
CI	26 channels	C2	7 channels	
CJ	2 channels	C3	13 channels	
CK	1 channel	C4	19 channels	
CL	6 channels	C5	30 channels	
CM	3 channels	C6	21 channels	
CN	15 channels	C7	40 channel teletype	
CO	9 channels			
CP	18 channels			
CQ	17 channels			
CR	10 channels			
CS	11 channels			

c. This category of code identifies high speed digital BPS of circuits.

DA	1200 bps	DS	192000 bps
DB	2000 bps	DT	384000 bps
DC	2400 bps	DU	768000 bps
DD	3600 bps	DW	1536000 bps
DE	4800 bps	FA	20000 bps
DF	7200 bps	FB	50000 bps
DG	9600 bps	FC	100000 bps
DH	250 bps	FD	500000 bps
DI	1000 bps	FE	1000000 bps
DJ	40800 bps	FF	1544000 bps
DK	100 bps	FG	1344000 bps
DL	19200 bps	FH	1800 bps
DM	39500 bps		
DN	48000 bps		
DP	16000 bps		
DQ	56000 bps		
DR	64000 bps		

d. This category of code identifies video and facsimile circuits.

    GA   4.5 mHz TV
    GB   3.0 kHz TV
    GC   48.0 kHz TV
    GD-GL   reserved
    GM .   60   SCAN FAX
    GN   75   SCAN FAX
    GO   100 SCAN FAX
    GP   120 SCAN FAX
    GQ   240 SCAN FAX
    GR   400 SCAN FAX
    GS-GZ   reserved

e. This category of code indentifies voice and program circuits.

    HA   3 kHz Voice (nominal 3kHz)
    HC   6 kHz Program
    HD   10 kHz Program
    HE   15 kHz Program
    HF   5 kHz Program
    HG-HL   reserved

f. . This category of code identifies continuous wave (CW) circuits.

    JA   Manual CW
    JB   Automatic CW
    JC   Tone Telemetry

1. Fiel-RDP83T00573R000600200001-6

2. Data Element Name: Full   GEOGRAPHIC LOCATION CONTRACTION TO

                                        Abbreviation   GELOCO

3. Data Element Definition: This element defines the contraction for the geographic location of the terminal at which the circuit segment being described either terminates or passes through.

4. Data Element Sources: The method of the development of the items under this data element is the same as utilized by the Interdepartmental Radio Advisory Committee (IRAC).

5. Data Element Representation and Codes:

    a.   Data Element Representation: Contracted Name
    b.   Type of Representation: Alphabetic, numeric or alphanumeric
    c.   Length of Representation: Variable, 1-8 character positions
    d.   Left or Right Justification: Left, blanks are inserted in unused positions
    e.   Symbols allowed: 26 letters of the alphabet (upper case) numerals 0-9, and blanks

6. Description of Representation:

6.1 This element identifies the contraction for the geographic location of the "TO" terminal or enroute facility of the segment of the circuit being described. The method of contracting location names in Field H of the CF is the same as utilized by the Interdepartment Radio Advisory Committee in recording the geographic locations of transmitting and receiving stations. A current list of contractions in current use can be found in the NCS GELOCO listing (cross index reference c). Contractions, which are not available, can be determined in accordance with the rules listed below, which are taken from the Manual of Regulations and Procedures for Radio Frequency Management published by the Office of Telecommunications Policy, Executive Office of the President (cross index reference d). See Field A for methodology.

H1

1. Field: I, Character Positions 37-39

2. Data Element Name: <u>USER/ENROUTE FACILITY CODE TO</u>

3. Data Element Definition: This element defines the user or enroute facility at which the circuit segment being described either terminates or passes through.

4. Data Element Sources: Codes utilized in this data element were developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Element Representation and Codes:

    a. Data Element Representation: Code
    b. Type of Representation: Alphabetic, Numeric, or Alphanumeric
    c. Length of Representation: Fixed, three character positions
    d. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9.

6. Description of Representation:

    Data Element Identifier Definition: This element describes the "TO" user or enroute facility at which the circuit being described either terminates or passes through. See Field B for further explanation.

I1

1.

2. Data Element Name: <u>TYPE OF OPERATION</u>

3. Data Element Definition: This element defines the operating capability of the circuit being described.

4. Data Element Sources: This data element and codes were developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Elements and Codes:

   a. Data Element Representation: Code
   b. Type of Representation: Alphabetic
   c. Length of Representation: Fixed, one character position
   d. Symbols allowed: 26 letters of the alphabet (upper case)

6. Explanation: Field J, Record Position 40, will contain the Type of Operation code for the circuit being described. This code entry is the same for all segments of a circuit except multipoint circuits. Field I, for multipoint circuits will reflect the Type of Operation employed on each segment of the circuit as it actually operates. A list of codes for this field is shown below.

   F   Full Duplex

   H   Half Duplex Send and Receive

   M   Multipoint Send and Receive or Conference

   N   Multipoint Receive Only

   R   Half Duplex Receive Only

J1

1. Field K Character Positions 41-48

2. Data Element Name: <u>USER CIRCUIT DESIGNATOR</u>

3. Data Element Definition: This data element consist of a data chain which contains four subelements. These subelements are: (1) Agency requiring the Service; (2) Purpose and/or Use; (3) Type of Service; (4) Circuit Number. These four sub-elements when chained together form the USER Circuit Designator (UCD). A UCD is assigned to each single or multijob segment circuit entered into the NCS CF. Each subelement of the UCD is discussed in the following pages.

4. Data Element Sources: This data element and codes was developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Elements and Codes:

    a. Data Element Representation: Code
    b. Type of Representation: See Subelement Section
    c. Length of Representation: See Subelement Section
    d. Symbols allowed: See Subelement Section

6. Description of Representation: Record positions 41-48 comprise Field K which is described as the User Circuit Designator (UCD). The field is shown in Figure 1, and is comprised of four parts, which are described in the data subelement sections.

K1

1. Field: K, Character Position 41

2. Data Subelement Name: Full AGENCY REQUIRING SERVICE

                              Abbreviation ARS

3. Data Subelement Definition: This subelement identifies the Government
    agency requiring the circuit.

4. Data Element Sources: This subelement and codes was developed by
    the NCS Office of Priority and Data Management (NCS-PD)

5. Data Subelements and Codes:

    a. Data Subelement Representation: Code
    b. Type of Representation: Alphabetic
    c. Length of Representation: Fixed, one record position
    d. Symbols allowed: 26 letters of the alphabet (upper case)

6. Description of Representation: The following codes will be used
    in Field K, character position 41, to identify the agency requiring
    the services.

AGENCY	CODE
Department of State	A
Department of Navy	B
National Command Authority, Command and Control	C
Department of Defense - Defense Communications Agency	D
NCS Minor Operating Agencies, ERDA, USIA, Department of the Interior	F
General Services Administration	G
Diplomatic Telecommunications System	H
Allied Government Circuit Requirements Provided over DCS Facilities	I
Department of Air Force	J
Federal Aviation Administration	L
National Aeronautics and Space Administration	M
DoD Agencies not specifically listed herein	N
Host Country - Any circuit requirement of a country which is host to the United States	O
Other U. S. Departments, Agencies, Commissions or Commercial Companies	P
Commander-In-Chief's (CINC) Command and Control Circuits	R
————————Reserved for SEATO use only————	S
Treaty Organizations; e.g., NATO. SEATO	T
Department of Army	U
Department of Commerce	X

Note -- Codes not assigned for use: E, K, Q, V, W, Y, and Z

K2

1. Field: K, Character Positions 42-43

2. Data Subelement Name: <u>PURPOSE AND/OR USE CODE</u>

3. Data Subelement Definition: This subelement describes the purpose for which the circuit was established or the use which is being made.

4. Data Subelement Sources: This data subelement and codes was developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Subelements and Codes:

    a. Data Subelement Representation: Code
    b. Type of Representation: Alphabetic
    c. Length of Representation: Fixed, 2 character positions
    d. Symbols allowed: 26 letters of the alphabet (upper case)

6. Description of Representation: Character positions 42 and 43 of the UCD contain the two-character code that identifies the "purpose/use" of the service. The following codes are used in this position of the UCD. The first column labeled "agency code" indicates the agency code or codes which may be used with the associated purpose or use code.

Agency Code	Purpose/Use Code	Name
J	A A	Alaskan NORAD Region Network
*	A B	In country common use V/TTY Network
J	A C	Alaskan Air Command and Control
F	A D	Energy Research and Development Administration Radio Network
F	A E	Energy Research and Development Administration Support Circuits
L	A G	Federal Aviation Agency
F	**A H	Energy Research and Development Administration SACNET System
N	**A J	Defense Nuclear Agency
*	***A M	Circuits in Support of Automatic Message Processing System
M	A N	NASA Administrative Circuits
C	***A P	NEACP Voice Network

*When used with purpose and use codes in the first column, indicates various agency codes are used.

**Controlled jointly by Hq DCA, and NCS.

***Hq, DCA controlled networks; as such will be assigned only by Hq, DCA with an associated Hq, DCA Circuit Number

K3

Agency Code	Purpose/Use Code	Name
G	A R	Advanced Records Systems of the Federal Telecommunications System (GSA)
*	A S	Administrative Support-Recruiting
*	A T	Transportation Coordination Network
F	A W	Sea Wave Warning Network
J	B B	AFCS Command Network
B	B D	Fleet Broadcast Access Network
B	B E	Fleet Ballistic Missile Network
J	C A	Air Force Air Defense Command Network
P	C C	PACAF Air Defense Network
U	C D	National Warning System
P	C E	Federal Energy Administration
B	C F	PACFLT Command and Control
P	C G	National Science Foundation
P	C H	HUD Teleprocessing Network
P	C I	Treasury Enforcement Communications System (TFCS)
P	C J	U.S. Department of Agriculture
P	C K	Nuclear Regulatory Commission
*	C L	Control Line
*	C M	Communications Management Office Reporting Network
*	C N	Advanced Research Projects Agency (ARPA) Resource Sharing Computer Network
B	C O	Chief of Naval Operation Flash Network
P	C P	Federal Highway Administration
P	***C Q	Central Intelligence Agency
P	C R	Civil Reserve Air Fleet (CRAF)
P	C S	Civil Service Commission
*	C T	Contingencies
P	C U	U. S. Department of Transportation
P	C V	Selective Service System
F	C W	Department of Commerce
F	C X	National Oceanic and Atmospheric Administration
R	C Y	CINCEUR Command and Control Network

*See Footnote on page K-1
***See Footnote on page K-1

K 4

*	***W C	Worldwide Military Command and Control System
*	***W F	WASHFAX High Speed Digital Facsimile Network
C	***W H	Wheelhouse Network
P	W W	Environmental Protection Agency
B	W X	Navy Weather
B	Y A	Fleet Ship-Shore Access Network
R	Y B	Alaska Command and Control
R	Y C	CINCLANT Command and Control Network
R	Y D	CINCSOUTH Command and Control Network
J	Y E	Space Defense System
J	Y F	DEWLINE/BMEWS Support Network
J	Y I	NORAD/ADC Over the Horizon Network
*	Y K	NORAD/ADC SAGE-BUIC Switched Network
J	Y M	SEA-LAUNCH Ballistic Missile (SLBM) Detection and Warning System
J	Y N	NORAD/ADC Ground Communications Network
J	Y P	NORAD Surveillance and Tactical Network
*	Y Q	NORAD/ADC Point-to-Point
B	Y S	Ocean Systems Network
B	Y Z	Navy Space Surveillance Network
*	Z A	Satellite Control/Reporting Communications
*	Z B	Tactical Command and Control
*	Z D	Search and Rescue
*	Z G	Management/Coordination Network
U	Z H	U. S. Army Air Defense Command Intersite Communications
*	Z K	Ground Forces Air Support Network
*	Z M	Military Air Traffic Control and Flight Facilities Network
*	Z N	Intelligence Collection/Dissemination Network
*	Z P	Canadian Circuits
*	Z Q	Logistics Network
*	Z R	Flight Following/Air OPS Service Network

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    * See Footnote page K-1
*** See Footnote page K-1

K13

*	Z S	Air Traffic Control and Flight Facilities SEASIA Network
J	Z W	BALLISTIC Missile Early Warning System
*	Z X	AUTOVON Subscriber Access Line Equipped for Delivery of Record Traffic through AUTOVON to AUTODIN and vice versa
U	Z Z	Safeguard Management Network

*See footnote page K-1

K14

1. Field: K, Character Position 44

2. Data Subelement Name: <u>TYPE OF SERVICE</u>

3. Data Subelement Definition: This subelement describes the type of service provided by the circuit.

4. Data Element Sources: This data subelement and codes was developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Subelements and Codes:

    a. Data Subelement Representation: Code
    b. Type of Representation: Alphabetic or Numeric
    c. Length of Representation: Fixed, one character position
    d. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9.

6. Description of Representation: The following codes are used in Field K, character position 44, the fourth position of the UCD to identify the Type of Service provided by the service.

Code	Description
A	Teletype service other than DCS switched networks
*B	AUTOVON Access Line (See also "N" below)
C	AUTOVON Interswitch Trunk
D	Data other than DCS switched networks
E	AUTODIN Access Line (See also "L", "Q", and "7" below)
F	AUTODIN Interswitch Trunk
*G	AUTOSEVOCOM Access Line
*H	AUTOSEVOCOM Interswitch Trunk
I	Non-AUTOSEVOCOM Secure Voice Circuit that does not access AUTOVON. (For non-AUTOSEVOCOM Secure Voice Circuits that access AUTOVON, type service Code B will be used.
J	Facsimile other than DCS switched network
K	CW
L	DSSCS AUTODIN Access Line
M	Package System, no channel accounting by DCA
N	AUTOVON Access Line serving an AUTOSEVOCOM subscriber or switch

* Use of Code "N" will identify AUTOSEVOCOM lines accessing an AUTOVON switch; Code "B" will identify all other AUTOVON access lines; codes "G" and "H" will identify AUTOSEVOCOM circuits. Non-AUTOSEVOCOM secure voice lines accessing AUTOVON switches can be identified by the security equipment and/or by the service mode code, if desired.

0	Not assigned
P	Interswitch trunk for switched networks other than AUTOVON, AUTODIN, AND AUTOSEVOCOM
Q	AUTODIN Interchange Circuits, circuits between AUTODIN and other switched networks except AUTOVON
R	Alternate Voice Record other than DCS switched networks
S	Video other than DCS switched networks
T	Telemetry other than DCS switched networks
U	Telephoto other than DCS switched networks
V	Voice other than DCS switched networks
W	DC signaling other than DCS switched networks
X	Package system, channel accounting by DCA
Y	Audio signaling
Z	Tandem Switch Access Line
1	Automatic Message Processing System (AMPS) Access Line
2	AMPS Interswitch Trunks between AMPS Switches
3	FTS Access Line
4	FTS Interswitch Trunk
5	ARS Access Line
6	ARS Interswitch Trunk
7	Indirect AUTODIN Access Line (through an intermediate automatic relay)
8	ARPANET Interswitch Trunk
9	ARPANET Access Line

K16

1.

2. Data Subelement Name: CIRCUIT NUMBER

3. Data Subelement Definition: This data subelement specifies the circuit number of the segment being described.

4. Data Subelement Sources: This data subelement and codes was developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Subelement and Codes:

    a. Data Subelement Representation: Code
    b. Type of Representation: Alphabetic, Numeric or Alphanumeric
    c. Length of Representation: Fixed, 4 character positions
    d. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9.

6. Description of Representation: The following blocks of numbers are used in Field K, character positions 45-48, to reflect specific users or networks as specified. These and other such numbers not specifically assigned below are for use by the Manager, NCS, and DoD (Director, DCA). Block number assignments are inclusive.

NSA	1AAA - 1999
CAO	2000 - 2099
DIA	25AA - 2599
JCS EMATS	2600 - 2699
JCS Teletype	2900 - 2999
JCS Voice	210A - 2199
(JCSAN and	2200 - 2499
National	23AA - 239Z
Elements)	2700 - 2799

Other NCS Operating Agencies are allocated circuit numbers in the following series for assignment to circuits provided from their assets, either leased or owned.

ERDA	5RAA - 5TZZ
	6RAA - 6RZZ
DOS	RAAA - 5AGZ
DTS	5AHA - 5APZ
DOC	5XAA - 5YZZ

```
FAA               5BLA - 5QZZ
                  6BAA - 6PZZ
                  (See Note Below)

GSA               IAAA - IZZZ
                  JMAA - JZZZ
                  OAAA - OZZZ

Mgr, NCS          JAAA - JLZZ
                  HAAA - HZZZ
                  5UZZ - 5WZZ
                  5ZAA - 5ZZZ
                  6AAA - 6AZ9
                  6SAA - 6ZZZ

NASA              5AQA - 5BKZ
                  6QAA - 6QZZ
```

Note: FAA Region Assignments:

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Alaska          5BLA - 5CMZ
Central         5CNA - 5EDZ
Eastern         5EEA - 5HBZ
Great Lakes     5HCA - 5MTZ
New England     5MUA - 5OKZ
Northwestern    5OLA - 5QBZ
Rocky Mountain  6BAA - 6DTZ
Southern        6DUA - 6JDZ
Southwestern    6JEA - 6NFZ
Western         6NGA - 6PZZ
```

K18

1. Fixed, Character:

2. Data Element Name: <u>SEGMENT NUMBER</u>

3. Data Element Definition: This data element defines the drop or segment number of the circuit being described.

4. Data Element Sources: None

5. Data Elements and Codes:

   a. Data Element Representation: Cardinal Number
   b. Type of Representation: Numeric
   c. Length of Representation: Fixed, 2 character positions
   d. Left or Right Justification: Left, a zero is inserted in character position 49 for segment numbers less than 10, i.e., segment number 01.
   e. Symbols allowed: Numerals 0-9.

6. Description of Representation:

   Character positions 49-50 identifies the drop or segment of service being described if the service is a multiple drop service. Otherwise, in the case of "Point-to-Point" services, it is always 01.
   If the service is a multiple drop service then the segments are numbered consecutively from User terminal to User terminal, and where appropriate, in each direction of the service.

L1

Agency Code	Purpose/Use Code	Name
D	D A	Defense Communications Agency Coordination Circuits
J	D B	THIRD AF Operational Network
D	D C	AUTODIN Coordination Circuits
D	D D	DCA Operations Control Complex Network
J	D E	17th AF Operational Network
B	D F	Navy Direction Finding Network
N	****D I	Defense Intelligence Agency Communications
C	***D J	National Military Command and Control Voice Network
C	***D M	Emergency Message Automatic Transmission System (JCS)
N	****D N	Critical Intelligence Communications
N	D P	NSA Operational Support
J	D Q	USAFE Air Weapons Control Network (412L)
H	**D S	DIPLOMATIC Telecommunications System
C	***D T	Pentagon Minuteman Network
J	D W	USAFE Hq Command and Control Network
J	E A	Air Force Security Service
*	E B	Emergency Broadcast System
X	E C	NESS Satellite Engineering
X	E D	NESS Coordination
X	E E	NESS Data Collection System
X	E F	NESS WEFAX (APT/HRPT)
X	E G	NESS Pictorial Data
X	E H	NESS Satellite Data
X	E I	NESS Signaling Control
X	E J	NESS Grid Transfer
X	E K	NESS Vertical Sounding
X	E L	NESS International Meterology

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* See Footnote on page K-1
** See Footnote on page K-1
*** See Footnote on page K-1
**** UCD's for circuits with these purpose/use codes will be assigned by DIA or NSA.

Agency Code	Purpose/Use Code	Name
D		
D	D A	Defense Communications Agency Coordination Circuits
J	D B	THIRD AF Operational Network
D	D C	AUTODIN Coordination Circuits
D	D D	DCA Operations Control Complex Network
J	D E	17th AF Operational Network
B	D F	Navy Direction Finding Network
N	****D I	Defense Intelligence Agency Communications
C	***D J	National Military Command and Control Voice Network
C	***D M	Emergency Message Automatic Transmission System (JCS)
N	****D N	Critical Intelligence Communications
N	D P	NSA Operational Support
J	D Q	USAFE Air Weapons Control Network (412L)
H	**D S	DIPLOMATIC Telecommunications System
C	***D T	Pentagon Minuteman Network
J	D W	USAFE Hq Command and Control Network
J	E A	Air Force Security Service
*	E B	Emergency Broadcast System
X	E C	NESS Satellite Engineering
X	E D	NESS Coordination
X	E E	NESS Data Collection System
X	E F	NESS WEFAX (APT/HRPT)
X	E G	NESS Pictorial Data
X	E H	NESS Satellite Data
X	E I	NESS Signaling Control
X	E J	NESS Grid Transfer
X	E K	NESS Vertical Sounding
X	E L	NESS International Meterology

** See Footnote on page K-1
*** See Footnote on page K-1
**** UCD's for circuits with these purpose/use codes will be assigned by DIA or NSA.

K6

R	E U	EUCOM Contingency Circuits
J	F A	AFLC Voice Tie Line Network
H	**F B	Foreign Broadcast Information Service
P	F C	Federal Bureau of Investigation
J	F E	AFLC Air Logistics Network
P	F I	Department of Justice, Administrative Circuits
P	F J	Department of Justice Telecommunications System (JUST)
P	F K	Department of Justice, Drug Enforcement Administration.
B	F O	Fleet Operations Control Network
G	F P	FTS Circuits of the GSA
P	F R	Federal Reserve System
P	F Y	Federal Communications Commission
C	G A	Coordination for Atomic Operations Network
L	G C	FAA Service A
L	G D	FAA Service B
L	G E	FAA Service C
L	G G	FAA Service O
L	G J	FAA Remote Controlled Air Ground
L	G K	FAA Service F Interphone
L	G L	FAA Command and Control
L	G M	FAA Other Networks
*	G P	General Finance Accounting
O	G S	Turkish National Circuits
BORP	G U	U. S. Coast Guard
J	H A	AFSC Voice Tie Line Network
J	H B	AFSC Project Support Network
J	H C	16 AF Operational Circuits
J	H D	Tactical Air Control System (407L)
J	H U	AFSC PRESTO Network
J	H V	AFSC Multiple Satellite Tracking Network
P	H W	Department of Health, Education and Welfare Administrative Circuits

* See Footnote on page K-1
** See Footnote on page K-1

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F	I A	United States Information Agency
D	I C	AUTOVON Access Line Use to Connect AUTOVON and AUTODIN Switches for Interchange of Traffic Between Subscribers of these two Networks
X	I D	NOS Management Information System
X	I E	NOS Marine Radio
X	I F	NOS Tide Gage Data
X	I G	NOS Geodetic Data
X	I H	NOS Data Buoy Information
J	J A	SAC Primary Alert System
J	J B	SAC Remote UHF Network
J	J C	SAC Short Order Network
J	J D	SAC Command and Control Network (465L)
J	J E	SAC Teletypewriter Network
J	J G	SAC Telephone Network
J	J J	SAC Voice Orderwire
J	J L	SAC Post Attack Command and Control System (Ground Environment)
*	J P	Pacific Command Joint Network
*	J T	Joint Overseas Telephone System
*	K A	Intelligence
U	K K	Army Command and Control Network
*	K L	Keying Lines
C	***K N	NEACP Teletypewriter Network
C	***K R	ANMCC Network
J	K S	Relocation COPAN
J	K T	Relocation Air Force Command Network
J	K U	USAF Relocation Voice Network
C	***K W	NCA/JCS Minimum Essential Emergency Communications Network
C	***K X	NMCC Teletypewriter Network
C	***K Z	NMCS Data Transmission

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*See Footnote on page K-1
***See Footnote on page K-1

P	L C	Public Offering Telephone/Telegraph Network
U	L H	USATACCOM U.S. Army Alaska Tactical Command
T	L N	Live Oak Circuits Between U.S. Components
T	L O	Live Oak Circuits Between Non-U.S. Components
D	L P	AUTOVON Loop-Around Trunks
T	L R	Live Oak Circuits Between Non-U.S. and a U.S. Component
J	M A	Eastern Missile Range Missile/Space Support Network
B	M C	U. S. Marine Corps
*	M G	Dedicated Critical AUTODIN Subscriber Restoral Circuit Between AUTODIN and AUTOVON Switches
*	M R	Western Missile Range Missile Space Support Network
N	***M S	Manned Space Flight Network
*	M V	U. S. Military Assistance Network
R	N A	USREDCOM Command and Control Circuits
P	N C	National Crime Information Center
*	N G	National Guard - Training
*	N K	Information Dissemination
U	N N	Civil Defense Voice/Teletype System
U	N O	National Alert Communications II
U	N P	Defense Civil Preparedness Agency Support Circuits (DCPA)
B	N S	Navy Security Administration
P	O A	Social Security Administration
B	O C	Naval Comm Master Control Station Command/ Coordination
M	O D	Operational Tracking & Data Acquisition, Deep Space Net
M	O J	NASCOM Operational; DSN
M	O P	NASCOM Operational; Program

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* See Footnote on page K-1
*** See Footnote on page K-1

M	O S	NASCOM Operational; STDN
M	O T	NASCOM Operationa; Network Trunk
*	O O	Orderwire
J	P A	AF Command Post Voice Network
J	P B	AF Alternate Command Network
J	P C	AF Command Network
J	P E	AF Emergency Message Automatic Transmission Network
J	P G	AF Project Management Network
*	P H	Army, Air Force, Navy Network
*	P M	Passenger Traffic Management System
P	P O	U. S. Postal Service Data System
U	P P	Army Continuity of Operations Network
*	P S	Commercial Press Services
*	P T	Petroleum and Distribution Command Network
J	Q A	MAC Command Control Record Communications System
*	Q E	Weather Teletypewriter (Civil, FAA A, C,O)
*	Q G	Weather Teletypewriter
*	Q I	Weather FAX (Civil, U.S. Weather Bureau)
*	Q J	Weather (DCA/USAF) (GWC)
J	Q M	MAC Command Control Voice Circuits
T	Q N	NATO Circuits between U. S. Components
T	Q O	NATO Circuits between Non-U.S. Components
T	Q R	NATO Circuits between Non-U. S. and a U. S. Component
J	Q S	MAC Operational Support Circuits
*	R C	Command and Control of Reserve Forces Within Reserve Command Organization
J	R F	PACAF Command and Control Network
*	R P	Random Access Personnel Information Data System
*	R S	AFRTS/Stars and Stripes

* See Footnote on page K-1

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*	S A	Serious Incident Reporting
*	***S B	Special Communications Support to Sudi Arabia
*	S G	Safeguard Inter-Site Communications
P	S L	St. Lawrence Seaway
D	S O	Spare Channel
D	S P	Spare Patch/Interconnect
*	S S	Special Security Office Network
N	S U	Defense Supply Agency Leased Communications Services
J	T A	TAC Operations Support TTY Network
J	T B	TAC Command and Control Voice Alerting System
J	T C	TAC Operations Support Voice System Network
J	T D	TAC Remote Computer Circuits
*	T E	Army, AF, Navy Temp (This code should be used only for temporary service for which there is no other suitable purpose and use code assigned).
A	**T F	Department of State
J	T G	TAC Tactical Air Control System in-Garrison Training Network
P	T H	Department of Treasury
P	T I	Department of Treasury, Secret Service Automatic Message Systems (SAMS)
D	T L	Low Speed TDM System (Below 150 baud)
D	T P	Speech Plus System
D	T Q	Frequency Subdivided Multiple Modem System Digital
B	T R	Navy Tracking Network
F	T S	USBR ADP Telecommunications Network
F	T T	Government of Trust Territory of Pac Is (Department of Interior)
F	T U	U. S. Department of the Interior
P	T V	Tennessee Valley Authority
D	T W	Voice Channel Package (may be preempted for Wideband Service)

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*   See Footnote on page K-1
** See Footnote on page K-1
*** See Footnote on page K-1

D	T X	VFCT System
D	T Y	High Speed TDM System (150 baud and higher)
J	T Z	AFTAC Data Network
*	U A	Common User Teletypewriter Service
*	U B	Common User Voice Service
*	U D	DCS Automatic Secure Voice Communications Network Circuits
*	U E	Common User Digital Data (excluding teletype)
*	U F	Common User FAX (other than weather)
*	U G	Special Data Quality Circuit (between switched) (for use in Southeast Asia only)
*	U H	Special Data Quality Access Circuit (for use in Southeast Asia only)
D	U L	DCS Automatic Record Communications Network Circuits (circuit requirements validated by Hq, DCA AUTODIN Manager)
*	U M	Special Purpose Network (This code should be used only in infrequent cases when there is no suitable purpose/use code assigned. A new code should be requested in cases where additional circuit requirements for a given purpose can be anticipated.)
J	U O	AF Air Operations Network
D and O	U U	DCS Automatic Voice Network Circuits (circuit requirements validated by Hq, DCA AUTOVON Manager)
*	U W	Interdepartmental Dial Telephone Network
*	U Z	Southeast Asia Tandem Switch Intersite Trunk Circuits
P	V A	Veterans Administration
C	***V P	Special Support Network (DCA use only)
C	***V Q	DCS Secure Teletype/Voice Communications (Hq, DCA use only)
B	W A	Antisubmarine Warfare Network
B	W B	Antisubmarine Warfare Environmental Prediction System

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*   See Footnote page K-1
***See Footnote page K-1

1. Field: M, Character Position 51

2. Data Element Name: Full <u>CIRCUIT SERVICE AVAILABILITY</u>

    Abbreviation ___ S/A _____

3. Data Element Definition: This element defines the circumstances
    or conditions under which service is available to the user of
    the circuit.

4. Data Element Sources: This data element and codes was developed
    by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Elements and Codes:

    a. Data Element Representation: Code
    b. Type of Representation: Alphabetic
    c. Length of Representation: Fixed, 1 character position
    d. Symbols allowed: 26 letters of the alphabet (upper case).

6. Description of Representation: Field M, Character Position 51,
    will contain the Service Availability code which defines the
    period of time or when the circuit being described is available
    for use. A circuit may have more than one type of service availability.
    For each type of Service Availability there must be continuity between
    circuit segment terminals from the first through the last segment
    except when the circuit has "oncall" segments. The following codes
    are used to indicate when or how a service is made available for the
    designated user.

    A   Full period (pertains to time available).

    B   Time Shared (may be used alternately by all terminals, or on a
         time shared basis).

    C   Six hours or less.

    D   Military Satellite-available as scheduled by the Hq, DCA
         Satellite Communications Control Facility.

    E.   Between 6 and 12 hours.

    F.   Between 12 and 18 hours (more than 18 hours will be reported
         as full period)

    G.   On-call (activated on request of user). These are circuit
         or segments of circuits which are called up through the
         Government tech control or activated directly by the user
         through a control lead.

H   Programmed Reroute - Routing allocated to an existing
circuit via different transmission paths on at least
one segment of the routing, but connecting the same
terminal points. This route is available full time to
the user but is used only when activated.

J   Second allocated path - A second allocated path is used
to provide simultaneous service for the corresponding
full period path. This is a separate distinct complete
path between serving Tech Controls/Users, carrying the
same traffic as the "A" route but with no common segments
between serving Tech Controls.

K   Frequency shared (may be either full or part time).

M   Engineered Military Circuit - A commercially leased
circuit which is engineered to provide Government com-
munications but is used commercially until such time as
the Government calls the circuit up. The reaction time
for callup will exceed that of on-call circuitry because
the commercial control must be notified and they in turn
bring down the commercial traffic and revert the circuit
to Government use.

P   Programmed Preempt (1st priority level) (carries preemption
equipment online to automatically preempt the associated
circuit).

R   Reserved Commercial Facility (not available until CSA issued)

S   Programmed preempt (2nd priority level) (automatically preempts).

T   Programmed preempt (3rd priority level) (automatically preempts).

1. Field: N, Character Positions 52-53

2. Data Element Name: SECURITY EQUIPMENT

3. Data Element Definition: This element identifies whether the
    circuit segment being described is secure or non-secured.

4. Data Element Sources: DCA Circular 310-65-1, supplement 1, (Cross
    Index Reference e)

5. Data Elements and Codes:

    a. Data Element Representation: Code
    b. Type of Representation: Numeric
    c. Length of Representation: Fixed, 2 character positions
    d. Symbols Allowed: Numerals 0-9

6. Description of Representation: ØØ in record positions 52-53 indicate
    the circuit being described is not secured. If the circuit is
    secure, the codes identified in cross index reference e will be
    utilized.

N1

1. Field: Old Character Positions 54-55

2. Data Element Name: Full <u>RESTORATION PRIORITY</u>

   Abbreviation ___RP___

3. Data Element Definition: This element identifies the codes signifying the sequence of recommencement of communications service by patching, rerouting or substitution of component parts

4. Data Element Sources: This data element and codes was developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Elements and Codes:

   a. Data Element Representation: Code
   b. Type of Representation: Alphanumeric
   c. Length of Representation: Fixed, 2 character positions
   d. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9.

6. Description of Representation: Character positions 54-55 are used to denote restoration priority. The codes to be used in these positions are contained in cross index reference f. If the circuit has no assigned restoration priority, code ØØ will be entered in this field.

01

1.   Field: Q, Character Position 57

2.   Data Element Name: <u>NCS ASSETS</u>

3.   Data Element Definition: This element identifies the circuit segment being described as to whether it is or is not an NCS asset

4.   Data Element Sources: This data element and codes was developed by the NCS Office of Priority and Data Management (NCS-PD)

5.   Data Elements and Codes:

   a.   Data Element Representation: Code
   b.   Type of Representation: Numeric
   c.   Length of Representation: Fixed, one character position
   d.   Symbols allowed: Numerals 0-9.

6.   Description of Representation: The following codes are used in Field Q, character position 57, to indicate whether or not the service being described is an NCS asset (assets of the NCS Operating Agencies which are NCS assets are shown in paragraph 6.1 below):

   1   NCS Asset
   2   Non-NCS Asset (See note below)
   3   Unknown

NOTE: Services of non-NCS Operating Agencies will be coded "2" in this field.

6.1 The networks or communications capabilities listed below, which are assets of the NCS Operating Agencies, have been declared NCS assets and as such when reported under the provisions of this circular will be coded 1 in record position 57 of the NCS services/segment record format:

NCS Assets

DoD

   Defense Communications System (DCS)
   Interagency Communications System (ICS)
   Washington Area Secure High-Speed Facsimile System (WASHFAX)
   Saipan-Guam (DoD - DOI) Interconnect
   National Warning System (NAWAS)

State

   Diplomatic Telecommunications Service (DTS)

NASA

   NASA Communications Network (NASCOM)

Q1

GSA

Federal Telecommunications System (FTS)

Advanced Record System (ARS)
Intercity Voice Network

FAA

Meteorological Data Systems (Services A, C, & O)
Aeronautical Message Circuits (Service B)
Weather Message Switching Center (WMSC)
Air Traffic Control Interphone (Service F)
Remote Center Air Ground Circuits
International Flight Services, Aeronautical Fixed
    Telecommunications Network (AFTN)
FAA Alaskan Region Teletypewriter Systems (Services
    A, B, C, and O HF Radio Backup)

ERDA

Secure Automatic Communications Network (SACNET)
Emergency Radio System (ERS)

USIA

International Broadcast Service

Commerce

National Facsimile Network (NAFAX)
National and Aviation Meterological Facsimile System
    (NAMFAX)
RAREP and Warning Coordination System (RAWARC)

Interior

Trust Territory of the Pacific Inlands (TTPI) Government
    Communications Network

1.   Field: Q, Character Positions 62-77

2.   Data Element Name: Full <u>COMMERCIAL COMMUNICATIONS CIRCUIT</u>
                          <u>IDENTIFIER</u>

                          Abbreviation <u>CCCI_____</u>

3.   Data Element Definition: The commercial communications circuit
     identifier is a unique identifier assigned to leased services by the
     communication common carriers from which the service is leased
     and identifies the circuit segment being described. This element
     is comprised of five subelements.

4.   Data Element Sources: Commercial carriers

5.   Data Elements and Codes:

     a.   Data Element Representation: Code
     b.   Type of Representation: Alphanumeric
     c.   Length of Representation: 16 character positions
     d.   Symbols allowed: 26 letters of the alphabet (upper case) and
          numerals 0-9.

6.   Description of Representation: To aid in the identification of
     circuits which utilize leased facilities, CF segment records describing
     the facility or terminal will contain the commercial circuit identifier
     or designation of these facilities. Inasmuch as a standard format
     for the commercial circuit identifier does not exist within the
     communication industry, procedures outlined in this appendix will
     be utilized when entering this information in the CF.

     This field is subdivided into five parts as follows: Commercial
     Carrier Identification (character positions 62-65), Commercial
     Number Prefix (character positions 66-67), Type of Service
     (character positions 68-69), Commercial Circuit Number (character
     positions 70-74) and Suffix Number (character positions 75-77).
     Each subelement is described in detail in the following pages.

     Note: In the event the circuit segment is provided from Government-
     owned assets, enter the character "Z" in each of the four
     character positions alloted for the Commercial Carrier Identification,
     i.e., card columns 62-65, leaving card columns 66-77 blank.

1. Field: Q, Character Positions 62-65

2. Data Subelement Name: Full <u>COMMERCIAL CARRIER</u>

   Abbreviation <u>CMCL CARRIER</u>

3. Data Subelement Definition: This subelement identifies the name of the commercial carrier (domestic, international or foreign) providing the circuit segment being described.

4. Data Element Sources: Defense Commercial Communications Office (DECCO), Scott Air Force Base, Illinois. Request for additional codes or change to existing codes should be submitted to the Manager, NCS, Office of Priority and Data Management (NCS-PD)

5. Data Elements and Codes:

   a.   Data Subelement Representation: Code
   b.   Type of Representation: Alphabetic
   c.   Length of Representation: Fixed, 4 character positions
   d.   Left or Right Justification; Left - when the assigned code is less than four characters long, it will be entered starting in character position 62 leaving unused positions to the right blank.
   e.   Symbols allowed: 26 letters of the alphabet (upper case)

6. Description of Representation: The following codes are used in Field Q, character positions 62-65, to identify the commercial carrier from which the service is leased.

<u>CODE</u>	<u>CARRIER</u>
ALAL	General Telephone of Alaska
ALDA	Alabama Telephone Company, Inc.
ALDN	Alden Electronics & Impulse Recording Equipment Co. Inc.
ALEX	Alexandria Telephone Company
ALGA	Allied Telephone Company
ALHA	Alma Telephone Company, Incorporated
ALKZ	General Telephone Company of Alaska
ALLA	Alla (Allied Long Line Agencies)
AMSC	American Satellite Corporation
APO	Australian Post Office
ARC	Aeronautical Radio, Inc.
ARR	The Alaska Railroad
AT	American Telephone and Telegraph Company
ATA	City of Anchorage Telephone Utility
ATSI	Advanced Technical Services, Incorporated
BAAZ	Bald Knob Telephone Company
BCHA	Boone County Telephone Company
BCT	British Columbia Telephone Company
BEHZ	Beaver State Telephone Company
BEJZ	Bek Telephone Mutual Aid Corporation
BEOA	Bell Telephone Company of Canada

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BERM	Bermuda Telephone Company, Ltd
BEUA	Benton Ridge Telephone Company
BN	Bell Telephone Company of Nevada
BP	Bell Telephone Company of Pennsylvania
BRIZ	Brimley Telephone Company
BRPA	Brookville Telephone Company
BRTT	Regie Telephone and Telegraph, Belgium
BUSH	Bush-Tell, Incorporated
BBTC	Bristol Bay Telephone Communications Co-op
BETL	Bettles Light and Power Company
CAVA	Cascade Telephone Company
CAWS	Cable and Wireless Ltd., London, England
CCC	Canadian Commercial Corporation
CDC	Control Data Corporation
CEEZ	Central Telephone Company of Minnesota
CEHB	Commonwealth Telephone Company of Virginia
CENN	Central Telephone Company, Hickory, N.C.
CEOB	Central Telephone Company, Ft Dodge, Iowa
CETL	Central Telephone Company of Illinois
CFCS	Canadian Forces Communications Service
CFNE	Churchill County Telephone and Telegraph System
CHKV	Chugwater Telephone Company
CHSV	Chickasaw Telephone Company
CIT	Continental Telephone Company of California
CITA	Cypress Telecommunications Authority
CLAR	Clear Lake Independent Telephone Company
CMEG	Communications Engineering, Incorporated
CMLS	CML Satellite Corporation
CMSA	Communications Satellite Corporation
CNAL	Canadian National Telephone of Alaska
CNT	Canadian National Telecommunications
CODX	CODEX Corporation
COGE	Commonwealth Telephone Company of Pennsylvania
COJV	Costal Utilities, Incorporated
COMZ	Comanche County Telephone Co-op Association, Inc.
COPA	Cordova Public Utilities
COPV	Cooper Valley Telephone Co-op
CP	Chesapeake and Potomac Telephone Company of the District of Columbia
CPB	Chesapeake and Potomac Telephone Company of Maryland
CPU	California-Pacific Utilities Company
CPV	Cheasapeake and Potomac Telephone Co. of Virginia
CPW	Cheasapeake and Potomac Telephone Co. of W. Virginia
CRNR	Cornhusker State Telephone Company
CS	Cincinnati Bell Incorporated
CTCM	Continental Telephone Company of Michigan
CTNC	Carolina Telephone and Telegraph Company
CTNE	CTNE, Spain
CU	Citizens Utilities Company of California
CWL	Cable and Wireless, Ltd (West Indies)
CZTC	Cozad Telephone Company

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DATA
DB          Oberpostkasse, Germany
DELA        De Kalb-Ogle Telephone Company
DGNT        The Great Northern Telephone Co. Copenhagen, Denmark
DIPT        Danish-Icelandic Phone Service
DND         Department of National Defense of Canada TELCO
DOT         Department of Transport of Canada
DPTT        Posts Telephone and Telegraph, Denmark
DS          Diamon State Telephone Company
DTN         Post Office London, South Central Tel Area, London, England
DTWV        West Virginia Telephone Company

EAEA        Eastern Illinois Telegraph Company
ERST        Eastern Slope Rural Telephone Association
ETE         Ellensburg Telephone Company
EVEC        Eagle Valley Telephone Company

FAMU        City of Fairbanks Municipal Utilities System
FARS        Farmers Independent Telephone Company
FFA         Fernmelderechnungsstelle, Frankford, Germany
FFPT        Posts Telephone and Telegraph, Finland
FKF         Das Fernmeldeamts, Kaiserslautern, Germany
FMTL        Continental Telephone Company of the Northwest, Inc.
FPTT        Postal Telephone and Telegraph, France

GATM        General Telephone Company of Ohio
GBTC        Golden Belt Telephone Association, Inc.
GECO        General Electric Company
GECZ        General Telephone Company of Florida
GEEZ        Gem State Utilities Corporation
GEFA        General Electric Company
GEMA        General Telephone Company of the Midwest
GETA        General Telephone Company of Upstate New York
GLST        Glacier State Telephone Company
GPO         Government Post Office
GPTT        OTE The Hellenic Telecommunications Organization
GRAB        Greater Anchorage Borough Telecommunications Co., Inc.
GRMT        Grand River Mutual Telephone Corporation
GRSC        Graphic Sciences, Inc.
GSDT        General Telephone Company of the Southwest
GTCL        General Telephone Company of Kentucky
GTLI        General Telephone Company of Indiana, Inc.
GTMM        General Telephone Company of Michigan
GTMW        General Telephone Company of Wisconsin
GTPE        General Telephone Company of Pennsylvania
GTS         General Telephone Company of California
GTSE        General Telephone Company of the Southeast
GTSI        General Telephone Company of Illinois
GTT         General Telephone Company of the Northwest, Inc.
GUJZ        Gurley Telephone Company
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GWTC	Golden West Telephone Co-op, Inc.
HADZ	Hawaiian Telephone Company
HARA	Haviland Telephone Company, Inc.
HCSI	Harris Communications System, Inc.
HUTC	Humphreys County Telephone Compnay
HW	Honeywell Corporation
IACL	International Aeraldio (Caribbean) Ltd.
IB	Indiana Bell Telephone Company
IBMC	International Business Machines Corporation
ICCO	International Communication Corporation
ICFM	United Telephone Company of Florida
ICS	Intercomsa, S. A.
IIIP	Posts Telephone and Telegraph, Iceland
IINL	Iowa Telephone Company
IIPT	Posts Telephone and Telegraph, Iran
IL	Illinois Bell Telephone Company
ILCA	Illinois Consolidated Telephone Company
ILLI	Illinois State Telephone Company
IMGH	Island Empire Telephone Company
IMTC	Inter-Mountain Telephone Company
INDT	Industry Telephone Company
INMA	Inter-Community Telephone Company
INPA	Intra-State Telephone Company
IPTT	Postal Telephone and Telegraph, Italy
ITAL	Societa Italcable
ITBT	Interbel Telephone Co-op Inc.
ITCI	Interior Telephone Company, Inc.
ITSI	Indiana Telephone Corporation
ITTC	ITT Central American Cables and Radio, Inc.
ITTW	ITT World Communications, Inc.
JAAA	Jamestown Telephone Corporation
JBAZ	Independent Communications, Inc.
JBN	J. B. N. Telephone Company, Inc.
JUFZ	Juneau and Douglas Telephone Company
KACZ	KanOkla Telephone Association, Inc.
KAFZ	Karnack Telephone Company
KDD	Korusai Deshin Denwa
KEDZ	Ketchikan Public Utilities
KENZ	Kentucky Telephone Company
LAFR	LaFourche Telephone Company
LAKE	Lakedale Telephone Company
LCW	La Crosse Telephone Corporation
LITT	Data Log Division
LOAZ	Lodgepole Indian Exchange
LOST	Lone Star STate Telephone Company
LPTT	Posts Telephone and Telegraph, Luxembourg
LTEL	Lufkin Telephone Exchange
LTLN	Lincoln Telephone and Telegraph Company

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MAJA	Malheour Home Telephone Company
MAQZ	Matanuska Telephone Association, Inc.
MB	Michigan Bell Telephone Company
MCIT	MCI Telecommunications Corporation
MCLU	Utah Telephone Company
MCM	Mankato Citizens Telephone Company
MCTC	Missouri Central Telephone Company
MDSC	Mohawk Data Sciences Inc.
MGNA	Magnavox System, Inc.
MICW	Microwave Communications, Inc.
MINF	Minford Telephone Company
MITR	Mitron Systems Corporation
MKT	Mid-Texas Telephone Company
MMOU	Midland Telephone Company
MMTC	Mogollon Mountain Telephone Company
MODZ	Mona Short Line Telephone Company; Sundance, Wyoming
MORZ	Monroe County Telephone Company; Sparta, Wisconsis
MOTO	Motrola Inc, Communications Division
MPTT	Ministry of Postal Telephone and Telegraph, Morocco
MRCM	Mid-Rivers Telephone Co-op
MS	Mountain States Telephone and Telegraph Company
MSDI	Marya Data Service
MUIR	Muirhead Incorporated
MURD	Murdocksville Independent Telephone Company
NARK	Northern Arkansas Telephone Company
NASM	Northern Telephone Co-op, Incorporated
NAVA	Navasota Telephone Company
NCCC	N-Tripple-C
NCTT	Norfolk and Carolina Telephone and Telegraph Co.
NDTA	North Dakota Telephone Company
NE	New England Telephone and Telegraph Company
NEPA	New Jersey Telephone Company
NEVA	Newark Telephone Company
NEWM	Newmont Telephone Co-op, Incorporated
NISI	Northwest Iowa Telephone Company
NJ	New Jersey Bell Telephone Company
NKTC	Kansas Telephone Company
NNPT	Posts Telephone and Telegraph, Norway
NODZ	North Florida Telephone Company
NOJC	Northwest Telephone Company
NORC	North State Telephone Company, Incorporated
NPTC	North Pittsburg Telephone Company
NPTT	Ministry of Defense, Rijkschatkist, Netherlands
NSPC	Northern States Power Company
NST	North State Telephone Company
NTON	Nevada Telephone and Telegraph Company
NTT	NTTPC, Japan
NU	Alaskan Power and Telephone Company
NW	Northwestern Bell Telephone Company
NY	New York Telephone Company
NUSH	NUSHAGAK Telephone Co-op, Incorporated

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OB   The Ohio Bell Telephone Company
OFMO   Osceola Telephone Company
OTKW   Olympic Telephone Company
OTZT   OTZ TELCO, Anchorage Alaska

PAOZ   Panhandle Telephone Company
PARA   Parma Telephone Company
PARN   Pacific and Arctic Railway and Navigation Company
PEPZ   Peetz Co-op Telephone Company
PIDC   First Colony Telephone Company
PIQZ   Pioneer Telephone Association, Incorporated
PK   Peking Telephone Company of the Peoples Republic of China
PLDT   Philippines Long Distance Telephone Company
PNTP   West Texas Communications Corporation
POEB   Polar Rural Telephone Mutual Air Corporation
POJZ   Puerto Rico Telephone Company
PPLC   Northwestern Telephone Systems, Inc.
PPTT   Pakistan, Telephone and Telegraph
PT   Pacific Telephone and Telegraph Company
PTCF   Peninsula Telephone and Telegraph Company
PTNW   Pacific Northwest Bell Telephone and Telegraph Company
PTTP   Posts Telephone and Telegraph, Portugal
PVTC   Penasco Valley Telephone Co-op, Inc.
PRCA   Puerto Rico Communications Authority

RCA   RCA Global Communications, Incorporated
RCAA   RCA Alaska Communications, Inc.
RCOT   Redwood County Telephone Company
RIVV   Riviera Telephone Company, Inc.
RCAC   RCA American Communications
RMPD   Reservation Telephone Co-op
ROFB   Rosebille Telephone Company
ROXA   Rochester Telephone Company, Inc., Rochester, Indiana
RPTT   Russian Telephone Co., Moscow, Russia
RTR   Rochester Telephone Corporation, Rochester, N.Y.

SB   Southern Bell Telephone and Telegraph Company
SCB   South Central Bell Telephone Company
SETT   Southeastern Telephone Company
SHTC   Iroquois Telephone Corporation
SIP   SOCIETA Italiana Telefonico
SISZ   Sitka Telephone Company
SJF   St. Joseph Telephone and Telegraph Company
SMJB   Smithville Telephone Company, Inc.
SNE   The Southern New England Telephone Company
SNTB   Central Telephone Company
SOCC   United Telephone Company of Indiana, Inc.
SOIZ   Southern Kansas Telephone Company
SOTA   Southeastern Telephone Company
SPCC   Southern Pacific Communications Company
SPTT   Posts Telephone and Telegraph, Sweden
SRMC   Souris River Telephone Mutual Air Corporation
STZM   Surburban Telephone Company
SVRT   Salinas Valley Radio Telephone Company
SW   Southwestern Bell Telephone Company

Q9

TACZ	Taylor Telephone Co-op, Incorporated
TEGA	Texas Telephone and Telegraph Company
TENN	Tennessee Telephone Company
TESC	Tele-Signal Corporation
THBZ	Three Rivers Telephone Co-op, Incorporated
TIMA	Tidewater Telephone Company
TOPA	Toledo Telephone Company
TPTT	Posts Telephone and Telegraph, Turkey
TRTT	TRT Telecommunications Corporation
TTC	Telephone-Technical Corporation
TTHM	Triangle Telephone Co-op Association, Inc.

UKCM	United Telephone Company of Missouri
UNDZ	Union Telephone Company
UNJZ	United Telephone Mutual Air Co-op
UNLA	United Telephone Association, Inc.
UNMA	United Telephone Company of the Carolinas, Inc.
UNQA	United Telephone Company of Kansas, Inc.
UNRA	United Telephone Company of New Jersey
UNTO	United Telephone Company of Ohio
USC	Ultronic System Corporation
UTH	United Telephone Company of Pennsylvania
UTON	United Telephone Company of the Northwest
UTW	United Telephone Company of the West

VAAA	Valley Rural Telephone Co-op Association
VAEA	Vashon Telephone Company
VICT	Victor Systems, Inc.
VIHA	Virginia Telephone and Telegraph Company

WCTC	West Coast Telephone Company of California
WEDZ	Continental Telephone Company of Missouri
WEIB	Western Arkansas Telephone Company
WEJB	Western California Telephone Company
WESM	Western Microwave Company
WEST	Wes-Tex Telephone Co-op, Inc.
WGRW	Western Wahkiakum County Telephone Company
WHAW	Western Union of Hawaii, Inc.
WHFZ	Wheat State Telephone Company, Inc.
WHGB	Whittier Telephone Company
WICC	Wiggins Telephone Association
WLTK	Wilter, Incorporation
WRMA	West River Mutual Aid Telephone Corporation
WT	Wisconsin Telephone Company
WTCI	Western Telecommunications, Inc.
WTCM	Western Telephone Company
WTOC	Western States Telephone Company, Inc.
WU	The Western Union Telegraph Company
WUDS	Western Union Data Service Company, Inc.
WUII	Western Union International, Inc.
WYDZ	Wyoming Telephone Company, Incorporated

| YUKN | Yokon Telephone Company |

Q10

1. Field: Q, Character Positions 66-67

2. Data Subelement Name: PREFIX

3. Data Subelement Definition: This subelement is a literal prefix as assigned to the circuit by the commercial carrier involved with the circuit segment being described.

4. Data Element Sources: Commercial Carriers

5. Data Subelements and Codes:

   a. Data Subelement Representation: Literal as assigned by the carrier.
   b. Type of Representation: Alphabetic or Numeric
   c. Length of Representation: Fixed, 2 record positions
   d. Left or Right Justification: See Item 6.
   e. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9 and blanks.

6. Description of Representation: Character positions 66 and 67 contain the prefix assigned to the commercial identifier. The prefix may be alphabet or numeric. Alpha characters are to be entered left to right, with a blank on the right if applicable. Numeric characters are to be entered right-justified with leading zeros. Right most prefix characters in excess of two will be dropped. If no prefix is used, these columns will be left blank.

Q11

1. Field: Q; Character Positions 68-69

2. Data Subelement Name: TYPE OF SERVICE

3. Data Subelement Definition: This subelement defines the type of service provided by the circuit as identified by the commercial carrier.

4. Data Subelement Sources: Commercial Carriers

5. Data Subelements and Codes:

   a.   Data Subelement Representation: Code
   b.   Type of Representation: Alphabetic
   c.   Length of Representation: Fixed, 2 character positions
   d.   Symbols allowed: 26 letters of the alphabet (upper case)

6. Description of Representation: Columns 68 and 69 contain the type service code assigned to the commercial identifier.   Column 68 must contain a code for all commercial identifiers and column 69 is used only when a second digit is required to identify the type of service.   A list of codes for this field is shown in this sections.   NOTE: Often a carrier's quote of service will contain the letter "G" preceding the Type of Service letters, e.g., GDP. Inasmuch as the letter "G" means Government, it will not be included as a part of the Type of Service.

   Commercial Identifier Type Service Codes.   The following codes are used in Field Q, character positions 68-69, to identify the Type of Service provided by the commercial lease being described:

TYPE SERVICE	DESCRIPTION
B	Data-Teletype
BT	Alt Data-Teletype
C	Control Channel or Remote Metering-Teletype
D	Data-(Sch 4 and 5)
DP	Alt Data (Sch 4)
E	Foreign Exchange-Teletype
F	Telephoto
FP	Alt Telephoto
H	Tie Line Service
L	Local Private Line Telephone
M	Control Channel or Remote Metering-Telephone
P	Telephone
PB	Alt Telephone
PC	Alt Telephone

Q12

TYPE SERVICE	DESCRIPTION
PD	Data Phone (Full Period)
PT	Alt Telephone
PZ	Telephone (MSC)
PX	Alt Foreign Exchange
Q	Equipment Only (AUTOVON)
R	Mobile Radio
S	Single Channel
T	Teletype
U	Program Transmission Channel
W	Broad band
X	Foreign Exchange
XD	Foreign Exchange (Data Phone)
Y	Equipment Only (Other)

Q13

1. Field: Q, Character Positions 70-74

2. Data Subelement Name: CIRCUIT NUMBER

3. Data Subelement Definition: This subelement identifies the literal commercial circuit number as assigned by the commercial carrier to the circuit segment being described.

4. Data Subelement Sources: Commercial Carriers

5. Data Subelements and Codes:

    a. Data Subelement Representation: Literal as assigned by the carrier.
    b. Type of Representation: Alphanumeric
    c. Length of Representation: Fixed, 5 character positions
    d. Left or Right Justification: See item 6
    e. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9.

6. Description of Representation: Character positions 70 through 74 contain the commercial number assigned to the circuit segment. No blanks are permitted in these columns. Numbers with less 5 characters will be entered right-justified with leading zeros. Numbers in excess of five may continue into columns 75-77 as necessary, in lieu of suffix numbers.

1.   Field: Q, Character Positions 75-77

2.   Data Subelement Name: SUFFIX

3.   Data Subelement Definition: This subelement is a literal suffix assigned by the commercial carrier and represents a subdivision of the circuit number.

4.   Data Subelement Sources: Commercial Carriers

5.   Data Subelements and Codes:

   a.   Data Subelement Representation: Literal as assigned by commercial carrier
   b.   Type of Representation: Alpha or Numeric
   c.   Length of Representation: Fixed, 3 character positions
   d.   Left or Right Justification: See item 6
   e.   Symbols allowed: 26 letters of the alphabet (upper case), numerals 0-9 and blanks.

6.   Description of Representation: Character positions 75 through 77 contain the suffix number of the commercial number when assigned. Alpha characters will be entered left to right with blanks to the right as required. Numeric characters are to be entered right-justified with leading zeros. If no suffix is assigned, these columns will be left blank.

Q15

1. Field: R, Character Position 78

2. Data Element Name: ROUTING CONFIGURATION

3. Data Element Definition. This element defines the send and/or receive side routing configuration of the circuit segment being described.

4. Data Element Sources: This data element and codes was developed by the NCS Office of Priority and Data Management (NCS-PD)

5. Data Elements and Codes:

   a. Data Element Representation: Code
   b. Type of Representation: Numeric
   c. Length of Representation: Fixed, 1 character position
   d. Symbols allowed: Numeral 0-9

6. Description of Representation: The following codes will be used in Field R, Character position 78, to describe the Routing Configuration of the service being described.

CODE	DESCRIPTION
1	The configuration of the send side (as defined by the convention in paragraph 5q, Section 2, Chapter 1, Part 2 of Cross Index Reference c) of full duplex, half duplex send and receive, or multipoint send and receive, or conference services whose return path is dissimilarly routed.
2	The configuration of the receive side (as defined by the convention in paragraph 5q, Section 2, Chapter 1, Part 2 of Cross Index Reference c) of full duplex, half duplex send and receive, and multipoint send and receive, or conference services whose send path is coded 1. For NCS Circuit File purposes, half duplex receive only and multipoint receive only services are also coded 2 in order to emphasize the receive side aspect.
3	The configuration of the send side of a full duplex, half duplex send and receive, and multipoint send and receive, or conference services is identical (reciprocally) to the receive side (return path) of these services.

R1

1.   Field: S, Character Position 79

2.   Data Element Name: Full RESTORATION PRIORITY CERTIFICATION STATUS

                              Abbreviation ____CS_____

3.   Data Element Definition: This data element defines the status of
     certification of restoration priority given to a circuit for restoral
     basis in accordance with National Communications System Memorandum
     (NCSM) 1-68, 18 July 1968

4.   Data Element Sources: NCS Office of Priority and Data Management
     (NCS-PD)

5.   Data Elements and Codes:

     a.   Data Element Representation: Code
     b.   Type of Representation: Alphabetic
     c.   Length of Representation: Fixed, 1 character position
     d.   Symbols allowed: 26 letters of the alphabet (upper case).

6.   Description of Representation: The following codes will be used
     in Field S, RP Certification Status, Character position 79, to
     indicate the status of the review and certification by the Manager,
     NCS, of the Restoration Priority (RP) Assignment of the service
     being described:

CODE	DESCRIPTION
B	A new circuit start and the Manager, NCS, disagrees with user on the RP assignment.
C	Certification (agreement) by the Manager, NCS, of the RP assignment.
N	A new circuit start (prior to RP review or certification action).

S1

1. Field: T, Character Position 80

2. Data Element Name: Full <u>TRANSACTION IDENTIFICATION CODE</u>

   Abbreviation <u>TIC</u>

3. Data Element Definition: This data element identifies the type of, and originator of the transaction (i.e., addition, deletion or change) being made on the circuit file.

4. Data Element Sources: NCS Office of Priority and Data Management (NCS-PD)

5. Data Elements and Codes:

   a. Data Element Representation: Code
   b. Type of Representation: Alpha or Numeric
   c. Length of Representation: Fixed, 1 character position
   d. Symbols allowed: 26 letters of the alphabet (upper case) and numerals 0-9

6. Description of Representation: Each change to the NCS Circuit File, whether it be an addition, deletion, or a change, must be identified as to the type change and as to the originator of the change. The following Transaction Identification Codes (TIC) are assigned for use in this field. See also Paragraph 3, Section 1, Chapter 1, Part 2, cross index reference c.

ORIGINATING AGENCY	ADD	DELETE
Department of Defense		
Hq DCA	A	J
Unassigned	B	K
DCAOC AED Scott AFB	C	L
DCA-Europe	D	M
DCA-Pacific	E	N
Hq, DCA (Computer Generated)	G	X
Manager, NCS	1	Y
Department of State	2	S
Diplomatic Telecommunications Service	3	T
General Services Administration	4	U
Federal Aviation Administration	5	V
National Aeronautics and Space Administration	6	W

T2

ORIGINATING AGENCY	ADD	DELETE
Energy Research and Development Administration	7	R
Federal Communications Commission	8	Q
U. S. Department of Commerce	9	Z