SWITCHING SYSTEMS MANAGEMENT
NO. 4A/4M CROSSBAR SWITCHING SYSTEMS
COMMON CHANNEL INTEROFFICE SIGNALING/SIGNALING OFFICE (CCIS/SO) ASSIGNMENT PRACTICES

CONTENTS PAGE

CONTENTS PAGE

CONTENTS PAGE

FIGURES

CONTENTS PAGE

1. GENERAL

1.01 The machine administrator is responsible for the preparation, assembly, and maintenance of basic office records required for assigning a No. 4 Crossbar Switching System equipped with the electronic translator system (ETS) and the peripheral bus computer (PBC) designated to serve as a common channel interoffice signaling (CCIS) system switching office (SO). Programming the initial office assignments to the ETS office data compiler system (ETS-ODCS) is accomplished by the formatted entry of office data ascending to instructions contained in Translation Guide TG 4A/ETS issued by the Western Electric Company.

1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.

1.03 The title for each figure includes a number(s) in parentheses which identifies the paragraph(s) in which the figure is referenced.

1.04 This section is being issued to contain only the administrative considerations required for the completion of form codes and a brief explanation of the form codes associated with the assigning of the 4A/ETS/PBC CCIS/SO. The machine administrator is referred to the Translation Guide, TG-4A/ETS, for detailed form code instructions.

2. TERMINOLOGY

2.01 This section will describe the PBC as well as the new features or terms associated with a CCIS/SO. (Fig. 1 shall serve as a guide to the new equipment/modifications required for CCIS conversion.)

A. Peripheral Bus Computer (PBC)

2.02 The PBC is a minicomputer manufactured by Digital Equipment Corporation (DEC). It acts as a peripheral processor of the ETS, and will collect all peg count and traffic usage data. It will do reorder analysis, and provide the machine administrator and the network manager with data, in time frames required to properly administer their respective areas of responsibility. The PBC complex for use in a CCIS/SO requires the addition of one DEC cabinet equipped with one RK05 moving head disk with 48K of core memory. PBC then attains a total of 96K of memory. The addition of this DEC cabinet will require a rearrangement of the existing complex and coordination between WECo and the DEC personnel.

B. Insulated Gate Field Effect Transistor (IGFET) Memory

2.03 The IGFET store has been designed as a replacement for the current piggy back twistor (PBT) store currently furnished with the SPC 1A system. IGFET stores will be used for all growth required to implement CCIS. Installed PBT stores will not be replaced. A 6th PBT, if not already installed, will not be added.

2.04 The IGFET Store frame mounts a controller for processor access and up to six memory modules, each containing 32K 40-bit words. The store frames are duplicated for reliability.

2.05 A CCIS/SO requires the addition of two IGFET store frames, each equipped with a minimum of three IGFET modules. This provides 64K 40-bit words (duplicated) to support the basic software package, and data for an indeterminate number of CCIS trunks. Requirements for memory estimation are addressed in Part 5.

C. Distributor and Scanner (DAS)

2.06 The distributor and scanner (DAS) frame is a two bay wide frame containing 2048 scan points, 2048 distribute points and duplicated controller for processor communication via the ETS peripheral unit bus.

2.07 The DAS permits the ETS processor to control the operation of the CCIS trunks and switching system common control circuits, and to receive reports and/or service requests from these units.

2.08 Two DAS frames, fully equipped with scan and distribute circuit packs, are initially required in each office to serve common control circuits and up to approximately 1700 CCIS trunks.

2.09 Each additional 2000 CCIS trunks require another DAS frame. The quantity of trunks served by a DAS is directly reduced by the number of echo suppressor control points and no circuit (NC) lamp points required.

2.10 All DAS frames are fully wired, but circuit packs for scan and/or distribute points need only be furnished in groups of 512 points as required for other than the first two frames. The first two frames are always fully equipped.

D. CCIS Terminal Group Frame

2.11 A 4 bay complex containing signaling links, as well as terminal access circuitry (TAC) for processor communication with each terminal via the ETS peripheral unit bus.

E. CCIS Trunk Frame

2.12 Provides for use of CCIS trunk plug in units, using miniature components mounted on printed circuit boards.

F. Outpulser Link Frame (OLF)

2.13 Each OLF contains three outpulser link circuits (OLC). Each OLC connects a maximum of 120 CCIS trunks to a maximum of 48 outpulsers.

G. Outpulser Link Controller Frame

2.14 The outpulser link controller establishes the connection between the CCIS trunk and outpulser and reports the trunk and outpulser identifies to the ETS processor. The link controller will also connect a continuity check transceiver to the outpulser via DAS distributes from the processor, for incoming CCIS trunks from two wire switching offices.

H. Outpulser Link Controller Test Frame (OLCT)

2.15 An ETS processor-controlled test frame which performs scheduled operational tests of the controllers, as well as manually requested tests for trouble clearance.

I. Outpulser

2.16 The outpulser is a modified version of the wire spring multifrequency (MF) sender minus the MF receiver and incoming digit logic. Each outpulser frame holds three outpulsers. An outpulser or sender-outpulser is connected on every incoming CCIS call to complete the following:

(a) Enables the marker to establish the cross office connection.

(b) Provides transceiver access to perform a continuity check of the CCIS trunk transmission facility.

(c) Outpulses the address digits to the next office in the case of conventional outgoing trunk selection.

J. Transceiver and Connector Frame

2.17 Transceivers which are used to make a per call check voice path assurance (VPA) on the trunk transmission facility are furnished in groups of four with a maximum of 10 groups permitted, while transceiver connectors are provided for a maximum of 510 senders, outpulsers, and some trunk test circuits which have outgoing CCIS test capability. The transceiver is conditioned to test both 2W and 4W operation and report the results via DAS distribute points.

K. CCIS Intraoffice Trunk Test Circuit (CIOT)

2.18 This processor controlled test frame performs scheduled operational tests on CCIS trunks, as well as manually requested tests to aid in trouble clearance, circuit order testing, etc.

L. Voice Frequency Link (VFL) Access Unit

2.19 The modem for each signaling terminal is connected to the Voice Frequency Link (VFL) through the VFL access unit. This unit provides test access to both the modem output and the VFL via dedicated jacks, on the test trunk jack (TTJ) bay, accessible from the Integrated Manual Test Frame (IMTF).

3. PRELIMINARY STEPS

3.01 The Western Electric Company Product Engineering Control Center (WECo/PECC) at Columbus, Ohio is responsible for the development of Form Codes and completion instructions for 4A/ETS offices converting to CCIS/SO.

3.02 These basic instructions along with additional material are included as a part of the Translation Guide TG-4A/ETS for use by the Telephone Company and Western Electric in completing the required Form Codes.

3.03 Translation Guide TG 4A/ETS can be ordered from:

Western Electric Co., Inc.
Reproduction Organization
Dept. 4236-2
Building 23-6
Hawthorne Station
Chicago, Illinois 60623

The ordering information is:

New-Standing Order (qty) Document TG 4A ETS Translation Guide No. 4A ETS — Complete (include binders and complete set of index tabs for each document and all subsequent issues.)

3.04 Standing order customers will automatically receive updates and additions to the Translation Guide as they become available. However, before attempting to fill out the forms provided with Translation Guide it is important to verify that you have the latest issue. Forms and/or instructions are frequently updated. When new pages are issued, old pages should be discarded to avoid possible conflicts with the compiler program.

3.05 Division 10 of the Translation Guide contains copies of all forms, printed on a heavier stock. These may be used for local printing of each form, as required.

4. PREPARING STANDARD FORM CODES

A. General

4.01 The input to the ETS office data compiler system (ETS — ODCS) is provided by IBM cards, punched from information specified in the Translation Guide forms prepared by the Telphone Company.

> ***Note:*** The data required in the form codes must be exact and any variations from the standard format or instructions may cause compiler system delays.

4.02 The machine administrator is responsible for the completion of many of the form codes associated with the initial office assignment job. These are listed in the following paragraphs and summarized in Fig. 2. Instructions for completing the forms are contained in Division 3B of Translation Guide, TG-4A/ETS. Most entries are determined by office layout, trunk group size, routing structure, etc. Some entries, however, require administrative decision. The following paragraphs briefly describe each form for which the machine administrator is responsible. Only those entries requiring administrative decision are discussed in detail in this practice.

B. Form Code B01

4.03 The preparation Form Code B01, Incoming Non-CCIS Group Characteristics Record, is the responsibility of the machine administrator. This record describes the incoming trunk group characteristics for all 1-way incoming and 2-way non-CCIS trunk groups. It also describes the individual trunk assignments such as sender link frame (SLF) appearance, circuit number and usage terminal.

4.04 Form Code B01 can accommodate up to 40 trunks of a particular trunk group per page. If additional pages are required for large groups (over 40 trunks) the heading information must remain constant.

4.05 Incoming Taffic Separation (ITSP) assignments on this form code are used to specify one of four classes for Division of Revenue. Each office has to define what each class will represent. This information is also of value to the network manager and the layout of classes should be coordinated with the network manager. However, assignments must be made to meet the requirements for Division of Revenue.

4.06 Screening class (SCL) mode on this form code is used to allow incoming traffic access to different outgoing trunk groups for the same dialed digits. The network administrator can use screening to restrict unauthorized traffic from a given route. Screening should be done in consultation with the routing supervisor. An example of the use of screening is shown in Division 3 of the Translation Guide.

Caution: Screening should not be used indiscriminately as it does require 16 words of memory for each screening table. The traffic engineer should be advised of office screening requirements so that sufficient store frames (memory space) will be provided.

C. Form Codes 02 Series

4.07 The 02 series of forms listed below are the responsibility of the routing supervisor.

FC 02A — Three Digit Code Grouping Record

FC 02B — Three Digit Screening Code Grouping Record

FC 02C — Six Digit Code Grouping Record

FC 02D — Spare Screening Tables for Either Three or Six Digit Translation

Instructions for completing these forms are contained in the Translation Guide, TG-4A/ETS.

4.08 No attempt should be made to alter, modify or manufacture routing information without the consent of the routing supervisor.

D. Form Code 03 Series

4.09 The 03 series of forms listed below is also the responsibility of the routing supervisor.

FC 03A — INWATS Three Digit Code Grouping Record

FC 03B — INWATS Originating Band Record

FC 03C — INWATS Originating and Through Six Digit Code Grouping Record

FC 03D — INWATS Terminal Screening and Code Grouping Record

These forms cover the routing of Inward WATS calls. The machine administrator should be familiar with the handling of Inward WATS traffic and its unique method of translation. Detailed information is available in the Translation Guide, TG-4A/ETS.

E. Form Code B04

4.10 The preparation of Form Code B04, Outgoing Non-CCIS Trunk Group Characteristics, is the responsibility of the machine administrator. This form code describes the outgoing trunk group characteristics for all 1-way outgoing and 2-way non-CCIS trunk groups. It also describes the trunk block span appearance associated with the group. Each form code describes a maximum of 320 trunks (eight subgroups).

4.11 The machine administrator should consider future growth when completing these forms. Preplanning should include both trunk groups that are expected to exceed their normal configuration and known new groups, expected in the future.

4.12 It is the responsibility of the machine administrator to assign proper class information. This may require consultation with appropriate maintenance center (MTCE) or engineering group as seems appropriate locally.

F. Form Code A05

4.13 The prepration of Form Code A05, CCIS and Non-CCIS Route Pattern Record, is the responsibility of both the machine administrator and the routing supervisor. This form code contains the description of the routing patterns associated with each CCIS and non-CCIS trunk group including announcement trunk group. Each trunk group may have multiple ways of handling calls depending on requirements of:

(a) Traffic Separation

(b) Final Routing Instructions

(c) Alternate Routes

(d) Variable Skip and Code Conversion

4.14 This form also contains outgoing traffic separating classifications. The network manager may make use of the traffic separation data and should be consulted in the layout of the separation pattern. ***However, the network administrator must recognize that the primary consideration in assignment must be to meet the Division of Revenue requirements.***

4.15 Each 4A ETS office has numerous miscellaneous trunk groups required for special testing, announcement groups, etc. Consultations should be made between routing and machine administration so that the proper form codes can be supplied by the routing supervisor.

G. Form Code A06

4.16 The preparation of Form Code A06, Route Multiple Record (Non-CCIS Trunk Groups Only), is the responsibility of the machine administrator in non-CCIS offices. This record is not applicable for CCIS offices. "CCIS trunks cannot be assigned route multiple."

H. Form Code A07

4.17 The preparation of Form Code A07, Announcement Route Record, is the responsibility of the machine administrator. This record shall specify all of the Announcement routes, except final reorder announcement (FRA), available in the office. Each trunk group will be identified by name and route index number.

I. Form Code A08

4.18 The preparation of Form Code A08, Area of Origin Record, is the responsibility of the machine administrator. This record will specify the area code for the home area, and if providing CAMA service, for each area of origin served by the office. In addition, for CAMA traffic an indication shall be made to show permissive 10 digit dialing on an intra-area basis.

J. Form Code A09

4.19 The preparation of Form Code A09, Outgoing Trunk Test Circuit Record, is the responsibility of the machine administrator. This record is used to identify test circuits associated with the switching system.

K. Form Code A10

4.20 The preparation of Form Code A10, Teletypewriter and Data Terminal Record, is the responsibility of the machine administrator. This record is used to assign the required and option teletype and data terminals associated with the switching system.

L. Form Code A11

4.21 The preparation of Form Code A11, Miscellaneous Office Parameters, is the responsibility of the machine administrator. This form is used to describe the variable office parameters. The machine administrator should give special attention to the four table lengths and spare words specified on this form.

M. Form Codes A12 Through A17

4.22 The preparation of the network management Form Codes A12 through A17, shown below, which are related directly to the network management

functions, is the responsibility of the machine administrator.

FC A12 Preprogrammed Network Control — Cancels

FC A13 Preprogrammed Network Control — Skip

FC A14 Preprogrammed Network Control — Reroute

FC A15 Preprogrammed Network Control — Code Block

FC A16 Preprogrammed Network Control — HTR Codes

FC A17 Regional Centers Manual TORC Reroutes

4.23 These Form Codes will be used to activate preprogrammed network controls within the switching machine.

4.24 Form Codes A12 through A17 relate directly to network management functions and, therefore, the network manager will be the primary source for how these forms will be utilized. The forms are used to activate preplanned network controls within the switching system.

4.25 It is not necessary at time of cutover to request any or all functions of these form codes as they may be entered and activated by recent change procedure at any time. However, it is advisable to request at least one of each function covered by each form so that the network control console can be tested at the time installation.

4.26 Form Codes A12 through A15 utilize 100 key positions on the network management network control console to assign four types of network controls—

(a) Cancel traffic to or from a given point. (A12)

(b) Skip an in-chain route. (A13)

(c) Reroute traffic to an out-of-chain route. (A14)

(d) Code blocking on a 3-, 6-, 7-, or 10-digit basis. (A15)

Since only 20 manual controls can be implemented at one time, judicious use of preplanned controls will increase overall control capability.

4.27 It is recommended that a master sheet be produced locally to list all 100 network management console preprogrammed control positions and their assigned functions to reduce double assignment errors. All controls requested on Form Codes A12, A13, A14, A15 and A16 can be implemented manually on a selected basis. Unless fixed cancels, skips, and/or code blocks are required on a recurring basis it may be desirable not to assign them to preprogram keys. Preprogrammed controls cannot be modified as quickly as manual inputs because they are entered in "protected memory" and can only be altered by a recent change message. For example, if a 100 percent cancel, skip, or code block were requested on Form Codes A12, A13 or A15 respectively, and the control is activated, no variation could be made to this preprogrammed control in the percent, type of traffic affected, or announcement route indicated without submitting a recent change message. However, manual changes on non-preprogrammed controls from the network control console or the NM TTY Channel 2 can be implemented immediately.

Note: All existing preprogrammed controls will be deleted by the compiler during the conversion to CCIS operation.

4.28 To aid the machine administrator and network manager in completing the Form Codes the following brief summary is provided.

(a) FC A12 — Cancel To (CANT), Cancel From (CANF) and Finalize Cancel To (FCANT).

Provides for: Maximum of 128 conventional and 1022 CCIS trunk groups. Percentages of: 25, 50, 75, 87-1/2 or 100% — manually and preprogrammed.

(b) FC A13 — SKIP (SKP)

Provides for: Maximum of 128 conventional and 1022 CCIS trunk groups. Percentages of: 25, 50, 75, 87-1/2 or 100% — manually and preprogrammed.

(c) FC A14 — Reroute (RR) and Immediate Reroute (IRR)

Provides for: Maximum 64 trunk groups. Percentages of: 25, 50, 75, 87-1/2 or 100% — manually and preprogrammed.

(d) FC A15 — Code Block (CB) — Codes — 3D, 6D, 7D, 10D

Provides for: Maximum of 128 codes with hard to reach (HTR) specified in FC A16. Manually and preprogrammed.

4.29 Form Code A16 is used to specify up to one hundred codes in a given domain (Area Code or Non-Area Code) that are classified as "hard to reach" during the implementation of network controls. This feature must be associated with remote DOC, cancel, skip, and code block options as covered under Form Code A12, A13 and A15.

Although the machine administrator is responsible for completing this form, the decision on what codes to classify "hard-to-reach" should be made jointly by the network managers of the local and higher ranking offices.

4.30 Form Code A17 is used for Traffic Overload Remote Control (TORC) in regional center offices. Regional offices have the ability to initiate reroutes of interregional traffic, making use of a third, "via" regional office. Form Code A17 is used to specify the name and route index of the "From" trunk group. The "via" does not need identification on the form.

N. Form Code A18

4.31 The preparation of Form Code A18, FRA/NCA Trunk Block Connector Record, is the responsibility of the machine administrator. This form code generates the data tables used to score trunk block connector registers on marker routed calls to the FRA or NCA trunk groups. All other trunk group assignments are indicated on Form Code B04 and will score trunk block connector (TBC) registers based upon information on that Form Code.

O. Form Code A19

4.32 The preparation of Form Code A19, CCIS and Non-CCIS Outgoing Trunk Identification Assignments, is the responsibility of the machine administrator. This form code is used by the data compiler program to generate two tables, outgoing trunk group equipped intertoll (OTGEQI) and toll completing (OTGEQT), that enable the PBC to printout in common language and circuit number, those trunks (both CCIS and EM) that are causing stuck senders and sender retrials, (ineffective attempts). A maximum of 12,000 trunk circuit names and numbers can be identified in each table.

P. Form Codes A20, A21, and B21

4.33 The preparation of Form Codes A20, A21, and B21, shown below, is the responsibility of the WECo Engineer.

FC A20-SLF/OLC Controller Group Assignments

FC A21-Controller Group Sender Assignments

FC B21-Controller Group Outpulser Assignments

Q. Form Code A22

4.34 The preparation of Form Code A22, Office Name Record, is the responsibility of the machine administrator. This form code describes the office name by common language location identification (CLLI). It will also be used to indicate if the office is CAMA equipped.

R. Form Code A23

4.35 The preparation of Form Code A23, Trunks Equipped/Working Record, is the responsibility of the machinn administrator. This form code includes both non-CCIS trunks and CCIS trunks and must be completed for each CCIS/SO. This form code is submitted by the machine administrator. All information submitted will be printed in sequence as part of the Machine Load Service Summary (MLSS). Only two PBC calculations are based on this data; marker attempts and ITLF CCS per equivalent 1-way incoming trunk. The number of equivalent 1-way incoming trunks is computed by the PBC from the data in this table.

S. Form Code A24

4.36 The preparation of Form Code A24 (2 pages), Common Control Equipment, is the responsibility of the machine administrator. This form code is

used to describe the quantities and CCS capacities of equipped common control apparatus.

T. Form Code A25

4.37 The preparation of Form Code A25, Sender/Outpulser Group Number/Name Assignment, is the responsibility of the machine administrator. This form code lists all equipped sender or outpulser groups by name and controller group association. The incoming and outgoing groups are listed in the order in which the printout information is desired, leaving lines blank between sender or outpulser types where growth of a particular type is most likely. The quantity of senders, outpulsers and link controllers equipped for traffic and maintenance is solicited as well as the group's engineered capacity. This form code is used in conjunction with WECo cabling assignment charts to associate TDC and TUI input terminals. These associations are made via the WECo-completed form codes A27 and A28.

U. Form Codes A26, A27, A28, A29, A30, A32, A33, A34, A37, A38, A39, A40, and A42

4.38 The preparation of the following form codes is the responsibility of the WECo Engineer:

FC A26-Sender Outpulser Type/Frame — Span Equipped Record

FC A27-Assignments For Traffic Data Converter (TDC)

FC A28-Common Control Usage Assignments

FC A29-Incoming Non-CCIS Trunk Usage Terminal Span/Type Assignment

FC A30-ISRT — Transverter Assignments

FC A32-ISRT — Register Assignments

FC A33-ISRT — ISRT — Sender/Outpulser Assignments

FC A34-ISRT — Transceiver Group Assignments

FC A37-Store Frames Equipped Record

FC A38-DAS Frames

FC A39-Miscellaneous DAS Scan Assignments

FC A40-Link Controller Assignments

FC A42-CCIS TREG/SLF, OLC/DAS/Trunk Associations

4.39 Form Code A26 lists all incoming senders or outpulsers by type and frame span.

4.40 Form Code A27 used to associate TDC input terminals with PBC register numbers. A block of 1024 PBC software registers is reserved for TDC and ETS accumulated peg counts.

4.41 Form Code A28 is used to associate common control scan points to their PBC register number.

4.42 Form Code A29 indicates the incoming trunk type, either CAMA or non-CAMA, per each span of 48 TUI or STUI terminals on terminal strips COA, COB, COC.

4.43 Form Code A30 indicates the assignment of transverter groups A and B to ISRT testing frames.

4.44 Form Code A32 indicates which IRL's are equipped, and which ISRT tests which registers.

4.45 Form Code A33 indicates which senders and outpulsers are equipped and which of two ISRT's they are tested by.

4.46 Form Code A34 lists all ISRT transceiver group assignments.

4.47 Form Code A37 is used to provide the store frame identification characteristics for both piggy back twistor (PBT) and insulated gate field effect transistor (IGFET) stores.

4.48 Form Code A38 lists all DAS frames in the office.

4.49 Form Code A39 is used to gather all the miscellaneous (non-trunk) scan assignments except for senders, outpulsers and non-reporting rows taken from FCs A21, B21 and A38 respectively.

4.50 Form Code A40 lists all equipped link controllers.

4.51 Form Code A42 indicates the fixed and direct relationship between a CCIS trunk, a sender link frame or outpulser link circuit (SLF/OLC) appearance for 2-way and 1-way incoming trunks, a software trunk register (TREG) and a distributor and scanner circuit (DAS) point. 1-way outgoing trunks require only the TREG-DAS-trunk association as they do not have OLC/SLF appearances.

> ***Note:*** Since TELCO completion of FC A43 and B43 are dependent upon assignments made on this FC it is important that this information be provided to them early in the office data process.

V. Form Code A43

4.52 The preparation of Form Code A43, CCIS Trunk Group Characteristics, is the responsibility of the machine administrator. This form code must be completed for every incoming, outgoing or 2-way CCIS trunk group.

4.53 Completion of the FC A43 and B43 are dependent on office data provided by the WECo engineer on FC A42. This information should be received early enough to permit the converting office time to meet their decompile-recompile schedule.

(a) CCIS cannot be assigned route multiples, therefore, there will not be an associated FC A06.

(b) FC B43 is used in association with FC A43 to provide the band and trunk related data.

W. Form Code B43

4.54 The preparation of Form Code B43, CCIS Trunk Group Band Characteristics, is the responsibility of the machine administrator.

4.55 Completion of this form code is dependent upon office data provided by the WECo regional engineer on FC A42 which associates trunk register (TREG) to either OLC or SLF appearances and with DAS appearances.

X. Form Code A45

4.56 The preparation of Form Code A45, Integrated Manual Test Frame (IMTF) Assignments For Frames with CCIS Test Capability, is the responsibility of the machine administrator. This form is used to assign IMTFS having CCIS testing capability.

Y. Form Code A46

4.57 The preparation of Form Code A46, CCIS Intraoffice Trunk Test Circuit (CIOT) Assignment Record, is the responsibility of the machine administrator. This form is used to assign one of four CIOT access circuits or one of four CIOT retest circuits.

Z. Form Code A48

4.58 The preparation of Form Code A48, Decoder Marker Test (DMT) Return Test Line Record, is the responsibility of the machine administrator. This form is used to assign outgoing link frame appearances for DMT CCIS return test lines.

AA. Form Code A50

4.59 The preparation of Form Code A50, Signaling Link Assignment Record, is the responsibility of the machine administrator. This form associates the signaling link to the common language location identifier (CLLI). This information is available from the Long Lines CCIS Network Assignment Center (CNAC) Cincinnati, Ohio.

AB. Form Codes A55 Through A58

4.60 Form Codes A55 through A58 which address automated sender testing assignments are not available as of this issue. These form codes, which are the responsibility of both the machine administrator and maintenance center personnel, shall be addressed in the subsequent issue of this DFMP.

5. MISCELLANEOUS FORM CODES

A. General

5.01 The 000 series forms (Pseudo Form Codes), used to solicit input information about the office, are the responsibility of the machine administrator. These forms do not create entries in office data tables but are used in the following applications:

(a) Generation of printouts

(b) Determining type of office

(c) Determining type of processing run.

B. Pseudo Form Code 001

5.02 Pseudo Form Code 001, Issue Data, lists the latest issue of TG 4A/ETS forms, integrated data management system (IDMS) office data system issue, office base number and control group number.

C. Pseudo Form Code 006 Through 008

5.03 Pseudo Form Code 006 through 008, Identification Data, lists basic telephone company identification data.

D. CCIS/SO Memory Estimate Form ME-1

5.04 Responsibility for CCIS/SO Memory Estimation Form, ME-1, input is shared between the equipment and routing engineers and should be completed as early in the conversion process as possible.

5.05 This form is used to estimate memory requirements of the approximately 250 types of SPC resident data tables, there are approximately 90 that are classified as relocatable. The amount of data required for these 90 tables in different offices accounts for the difference in memory required by these offices.

6. ASSEMBLY OF COMPLETED FORMS

6.01 It is the responsibility of the machine administrator to assemble the completed form codes from both routing and machine administration and then forward the complete package to the equipment engineer.

6.02 The equipment engineer will complete Form 2730, Telephone Equipment Order, and submit the entire package to the regional Western Electric engineer for data center processing.

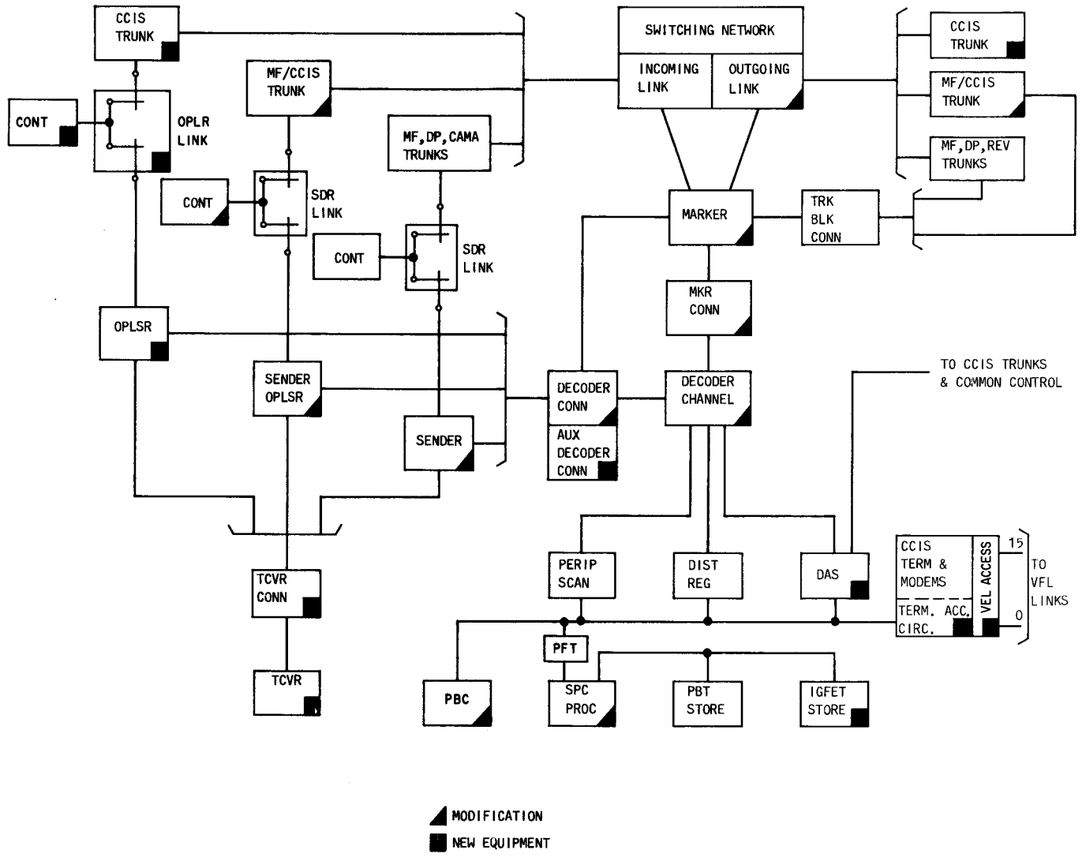

Fig. 1—4A Toll Crossbar CCIS Application Schematic

FORM CODE NUMBER	FORM CODE NAME	RESPONSIBILITY
B01	INCOMING NON-CCIS TRUNK GROUP CHARACTERISTICS	MACHINE ADMINISTRATOR
02A	THREE DIGIT CODE GROUPING RECORD	ROUTING ENGINEER
02B	THREE DIGIT SCREENING CODE GROUPING RECORD	ROUTING ENGINEER
02C	SIX DIGIT CODE GROUPING RECORD	ROUTING ENGINEER
02D	SPARE SCREENING TABLES — 3 AND 6 DIGIT TRANSLATION	ROUTING ENGINEER
03A	INWATS — THREE DIGIT CODE GROUPING RECORD	ROUTING ENGINEER
03B	INWATS — ORIGINATING BAND RECORD	ROUTING ENGINEER
03C	INWATS — ORIGINATING AND THROUGH SIX DIGIT CODE GROUPING RECORD	ROUTING ENGINEER
03D	INWATS — TERMINAL SCREENING AND CODE GROUPING RECORD	ROUTING ENGINEER
B04	OUTGOING NON-CCIS TRUNK GROUP CHARACTERISTICS	MACHINE ADMINISTRATOR
A05	ROUTE PATTERN RECORD (CCIS AND NON-CCIS)	ROUTING ENGINEER & MACHINE ADMINISTRATOR
A06	ROUTE MULTIPLE RECORD — NON-CCIS TRUNKS ONLY	MACHINE ADMINISTRATOR
A07	ANNOUNCEMENT ROUTE RECORD	MACHINE ADMINISTRATOR
A08	AREA OF ORIGIN RECORD	MACHINE ADMINISTRATOR
A09	OUTGOING TRUNK TEST CIRCUIT RECORD	MACHINE ADMINISTRATOR
A10	TELETYPEWRITER/DATA TERMINAL RECORD	MACHINE ADMINISTRATOR
A11	MISCELLANEOUS OFFICE PARAMETERS	MACHINE ADMINISTRATOR
A12	NETWORK CONTROL — CANCELS (PREPROGRAMMED)	MACHINE ADMINISTRATOR
A13	NETWORK CONTROL — SKIP (PREPROGRAMMED)	MACHINE ADMINISTRATOR
A14	NETWORK CONTROL — REROUTES (PREPROGRAMMED)	MACHINE ADMINISTRATOR
A15	NETWORK CONTROL — CODE BLOCKS (PREPROGRAMMED)	MACHINE ADMINISTRATOR
A16	NETWORK CONTROL — HARD TO REACH (HTR) (PREPROGRAMMED)	MACHINE ADMINISTRATOR
A17	REGIONAL CENTER MANUAL TORC ROUTES	MACHINE ADMINISTRATOR
A18	FRA/NCA TRUNK BLOCK CONNECTOR RECORD	MACHINE ADMINISTRATOR
A19	OUTGOING TRUNK IDENTIFICATION ASSIGNMENTS (CCIS & NON-CCIS)	MACHINE ADMINISTRATOR
A20	SLF/OLC CONTROLLER GROUP ASSIGNMENTS	WECo
A21	CONTROLLER GROUP SENDER ASSIGNMENTS	WECo
B21	CONTROLLER GROUP OUTPULSER ASSIGNMENT	WECo
A22	OFFICE NAME RECORD	MACHINE ADMINISTRATOR
A23	TRUNKS EQUIPPED AND WORKING RECORD	MACHINE ADMINISTRATOR
A24 (A&B)	COMMON CONTROL EQUIPPED RECORD	MACHINE ADMINISTRATOR
A25	SENDER/OUTPULSER GROUP NUMBER/NAME ASSIGNMENT	MACHINE ADMINISTRATOR
A26	SENDER/OUTPULSER TYPE/FRAME — SPAN EQUIPPED RECORD	WECo
A27	ASSIGNMENTS FOR TRAFFIC DATA CONVERTOR (TDC)	WECo
A28	COMMON CONTROL USAGE ASSIGNMENTS (TUI)	WECo
A29	INCOMING NON-CCIS TRUNK USAGE TERMINAL SPAN/TYPE ASSIGNMENT	WECo

Fig. 2—No. 4A ETS CCIS/SO Form Codes Summary and Responsibilities (Page 1 of 2)

FORM CODE NUMBER	FORM CODE NAME	RESPONSIBILITY
A30	ISRT/TRANSVERTER ASSIGNMENTS	WECo
A32	INSRT — REGISTER ASSIGNMENTS	WECo
A33	INSRT/SENDER, OUTPULSER ASSIGNMENTS	WECo
A34	ISRT/TRANSCEIVER GROUP ASSIGNMENTS	WECo
A37	STORE FRAMES EQUIPPED RECORD	WECo
A38	DAS FRAMES	WECo
A39	MISCELLANEOUS DAS SCAN ASSIGNMENTS	WECo
A40	LINK CONTROLLER ASSIGNMENTS	WECo
A42	CCIS TREG/SLF, OLC/DAS/TRUNK ASSOCIATIONS	WECo
A43	CCIS TRUNK GROUP CHARACTERISTICS	MACHINE ADMINISTRATOR
B43	CCIS TRUNK GROUP BAND CHARACTERISTICS	MACHINE ADMINISTRATOR
A45	IMTF ASSIGNMENTS (FOR FRAMES WITH OUTGOING CCIS TEST CAPABILITY)	MACHINE ADMINISTRATOR
A46	CIOT ASSIGNMENT RECORD	MACHINE ADMINISTRATOR
A48	DECODER MARKER TEST LINE RECORD	MACHINE ADMINISTRATOR
A50	SIGNALING LINK ASSIGNMENT RECORD	MACHINE ADMINISTRATOR
A55	AUTOMATED SENDER TESTING ASSIGNMENTS	MACHINE ADMINISTRATOR & 4A MTCE
A56	AUTOMATED SENDER TESTING ASSIGNMENTS	MACHINE ADMINISTRATOR & 4A MTCE
A57	AUTOMATED SENDER TESTING ASSIGNMENTS	MACHINE ADMINISTRATOR & 4A MTCE
A58	AUTOMATED SENDER TESTING ASSIGNMENTS	MACHINE ADMINISTRATOR & 4A MTCE
001-008	PSEUDO FORMS	MACHINE ADMINISTRATOR
ME-1	CCIS/SO MEMORY ESTIMATE	EQUIPMENT & ROUTING ENGINEER

Fig. 2—No. 4A ETS CCIS/SO Form Codes Summary and Responsibilities (Page 2 of 2)