

5ESS® SWITCHING EQUIPMENT
 OPERATING SUPPORT SYSTEMS
 INTERFACE CIRCUIT

CHANGES

D. Description of Changes

D.1 Added "(MFR DISC)" under the 48FR1 Data Unit. Added a new block diagram showing the 839C Dial Backup Unit, the 103A and/or the 104A connector block, the NCA-3444-16 cable (Furnished with 839C), the D4BU cable (1 Required, 2 places), and the 812A Bulk Cable. Added "For applications using the 48FR1 Data Unit." Added "For applications using the 839C Dial Backup Unit."

D.2 Added to note 337:

| <u>DATA SET</u> | <u>APPLICATION(S)</u> | <u>OPTIONS</u> |
|-----------------|-----------------------|-------------------|
| 839C | SCANS, AMARC (DBU) | ON, OFF, OFF, OFF |
| 839C | AMATPS, MLT2, RCV | ON, ON, OFF, OFF |

D.3 Added to note 341:

| | | | | |
|-----------------------|------|-------|---|------|
| 839B USER'S MANUAL | 839C | ALONE | 8 | .068 |
|-----------------------|------|-------|---|------|

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CIRCUIT DESCRIPTION

CD-5D071-01
ISSUE 1
APPENDIX 7B
DWG ISSUE 8B
DIST CODE BT13

5ESS® SWITCHING EQUIPMENT
OPERATING SUPPORT SYSTEMS
INTERFACE CIRCUIT

CHANGES

D. Description of Changes

- D.1 Replace the "444 Acoustic, Triple Interface" line printer and the "444 Acoustic, Triple Interface, Top Paper Exit" line printer for ROP, OPR, and Traffic Printer applications with the "Model 577" printer on a line out basis.
- D.2 Change the word "Teletype" to "AT&T."
- D.3 Change cable numbers and update notes 313 and 341 to show proper descriptions and cabling information.
- D.4 Update cable information to show correct cables.

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CIRCUIT DESCRIPTION

CD-5D071-01
ISSUE 1
APPENDIX 6M
DWG ISSUE 7M
DIST CODE BT13

5ESS® SWITCHING EQUIPMENT
OPERATING SUPPORT SYSTEMS INTERFACE
CIRCUIT

CHANGES

D. Description of Changes

- D.1 Change option on Data Set 48FR1, Application(s) AMATPS, MLT2, from D,N,A to E,N,A.
- D.2 On the Sheet Index page, add "thru 6" after AS 11 STLWS 1, and on sheet B12, change "STLWS 0" to "STLWS 1 THRU 6" under AS11.
- D.3 On the Sheet Index page and within the documentation, delete AS12 through AS16.
- D.4 On sheet B12, change "(SEE NOTE 305)" to "(SEE NOTE 304)".

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SESS® SWITCHING EQUIPMENT
OPERATING SUPPORT SYSTEMS INTERFACE
CIRCUIT

CHANGES

D. Description of Changes

- D.1 Replace the 5310 printer with the 572 printer on a line out basis for RCV/L application.
- D.2 Replace the 5310 printer with the 572 printer on a line out basis for STLWS application.
- D.3 Replace the 5310 printer with the "444 Acoustic, Triple Interface" line printer or the "444 Acoustic, Triple Interface, Top Paper Exit" line printer on a line out basis. Both printers require the "98 Character ASCII Band Up/Low" in order to print both upper and lower case characters.
- D.4 Replace the KS23554L 1 Colorscan 2 terminal with the KS23554L5 Colorscan 2 terminal for domestic applications. Replace the KS23554L 1 Colorscan 2 terminal with the KS23554L6 Colorscan 2 terminal for international applications.
- D.5 Replace the existing cable information for the 5310 and 5320 printers with the new cable information required for the 572 printer and the 444 line printer. Line out old cable information.
- D.6 Replace the 5320 printer with the 615MT Terminal (which is made up of the 53D410YAA Display e/w the 56K420ADD Keyboard, the 55C715ACAA Controller, and the TP460552 [4425] Emulator) for Belt Line applications. The 572 printer is also being added as an attachable option to the 615MT terminal in order to provide paper print outs of the information being provided to the 615MT Terminal.
- D.7 Add the 77A Data Mounting and the 7500A-L2 Data Service Unit to the Operating Support Systems Interface drawing.

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DWG ISSUE 6B
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- D.8 Add the WP-91652 L20 DC to AC Inverter to the OSS Drawing in order to provide protected AC power for the 7500A Data Service Unit.
- D.9 Reference the WP-91652 L20 DC to AC Inverter for other OSS applications in which protected AC power is required.

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DWG ISSUE 5M
DIST CODE BT13

5ESS® SWITCHING EQUIPMENT
OPERATING SUPPORT SYSTEMS INTERFACE
CIRCUIT

CHANGES

D. Description of Changes

- D.1 Replace the KS-22921L3 color terminal with the KS23554L1 color terminal on a line out basis.
- D.2 Replace the 5425 and 4425 video terminals with 615MT on a line out basis.

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CIRCUIT DESCRIPTION

CD-5D071-01
ISSUE 1
APPENDIX 3B
DWG ISSUE 4B
DIST CODE BT13

5ESS® SWITCHING EQUIPMENT
OPERATING SUPPORT SYSTEMS INTERFACE
CIRCUIT

CHANGES

D. Description of Changes

- D.1 Add a T-Switch to the MCC links for dual interfacing with the 3B20D Processor.

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CIRCUIT DESCRIPTION

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ISSUE 1
APPENDIX 2A
DWG ISSUE 3A
DIST CODE BT13

5ESS® SWITCHING EQUIPMENT
OPERATING SUPPORT SYSTEMS INTERFACE
CIRCUIT

CHANGES

D. Description of Changes

D.1 Replace the 64A2 Data Mounting with the 64A3 Data Mounting on a line out basis. The 64A3 Data Mounting also required a new mounting bracket in order to allow it to mount in a 5ESS Switching cabinet properly.

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5ESS™ SWITCHING EQUIPMENT
OPERATING SUPPORT SYSTEMS INTERFACE
CIRCUIT

CHANGES

D. Description of Changes

- D.1 Remove references to 3B IOP peripheral control slot assignments because they are controlled by SD-5D014-02.
- D.2 Replace STLWS VT100 terminal with a Teletype 5425 and update the printer codes.
- D.3 Add 56K baud dedicated line and 9600 baud dial-up capabilities to the AMATPS feature.
- D.4 Add recent change and verify capabilities (RCV) to host offices.
- D.5 Create a 250 foot cable used to connect a TN74B to a 212 data set in the host offices for the STLWS feature.
- D.6 Add typical data set arrangements for interfacing to the 3B20D-2 processor for the MLTZ dial backup feature.
- D.7 Correct documentation figures showing arrangements for remote maintenance and remote STLWS features.
- D.8 Clarify documentation and make the drawing more generic.

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5ESS* SWITCHING EQUIPMENT
 OPERATING SUPPORT SYSTEMS INTERFACE
 CIRCUIT

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switch. They are accessed individually via synchronous data links.

2.02 Each link consists of a Peripheral Controller (PC) circuit pack in the 3B IOP that is connected to the terminal or OSS by various data sets, data auxiliary sets, and related hardware.

2.03 Power strips are provided in each data set cabinet. An entire cabinet is designated either essential or protected. Two types of AC power may not be mixed in any one cabinet.

2.04 See SD-5D014-02 for all 3B IOP peripheral control slot assignments.

SECTION I - GENERAL DESCRIPTION

1. PURPOSE OF CIRCUIT

1.01 Documents various links in a 5ESS office among the 3B™ IOP (Input/Output Processor), 5ESS operational support systems (OSS), and various terminals.

2. GENERAL DESCRIPTION OF OPERATION

2.01 The operational support systems are systems removed or operating in a remote environment from the 5ESS. They are designed to assist the operating telephone companies (OTC) in the administration and operation of the

SECTION II - DETAILED DESCRIPTION

1. OPERATIONAL SUPPORT SYSTEMS

1.01 Automatic message accounting teleprocessing (AMATPS) (AS1, AS4)
POWER REQUIREMENTS - PROTECTED AC

AMA provides the means by which revenue information on charged calls is transferred from the 5ESS Switching System to a revenue accounting office (RAO).

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1.02 CENTRALIZED TRUNK TEST UNIT
(CTTU) (AS2)
POWER REQUIREMENTS - ESSENTIAL AC

CTTU is used to remotely test trunks and lines at a 5ESS Switching Office from a maintenance center.

1.03 SWITCHING CONTROL CENTER SYSTEM
(NO. 2 SCCS)(AS 4)
POWER REQUIREMENTS - PROTECTED AC

SCCS is a duplex remotely located monitor and control system that provides administrative, operational, and maintenance functions for various types of stored program controlled systems.

1.04 AUTOMATIC MESSAGE ACCOUNTING
RECORDING CENTER (AMARC)
(AS3,AS4) POWER REQUIREMENTS -
PROTECTED AC

AMARC is a centralized minicomputer system that records billing data on customer-dialed calls.

1.05 ENGINEERING AND ADMINISTRATIVE
DATA ACQUISITION SYSTEM (EADAS)
(AS 5) POWER REQUIREMENTS - ESSENTIAL
AC

EADAS provides an electronic, software controlled means of collecting traffic data. (part of the total network data system (TND).)

1.06 RECENT CHANGE MEMORY
ADMINISTRATION SYSTEM (RMAS)
(AS 5) POWER REQUIREMENTS - ESSENTIAL
AC

RMAS interfaces with the 5ESS data base manager (DBM) To perform recent change/verify and office record activities.

1.07 SERVICE EVALUATION SYSTEM (SES-2)
(AS 5)
POWER REQUIREMENTS - ESSENTIAL AC

SES is a feature used to determine the quality of network service as viewed from the customer's perspective and to direct quality control activities.

1.08 MECHANIZED LOOP TEST SYSTEM
(MLT-2) (AS 5)
POWER REQUIREMENTS - ESSENTIAL AC

MLT-2, designed to replace the Local Test Desk. (LTD), is also used as a back up for MLT-1. MLT-2 provides a rapid and convenient method for automatically testing a subscriber's telephone line.

1.09 SOFTWARE CHANGE ADMINISTRATION
AND NOTIFICATION SYSTEM (SCANS)
(AS 6) POWER REQUIREMENTS - ESSENTIAL
AC

SCANS provides a remote means of applying orderly changes to the 5ESS System software in the form of broadcast warning messages (BWM's).

1.10 AUTOMATIC LINE INSULATION
TESTING - REPAIR SERVICE BUREAU
(ALIT-RSB) (AS 7) POWER REQUIREMENTS -
ESSENTIAL AC

Used to put high voltage on telephone lines and to test for shorts and insulation brake down.

1.11 VERIFY REMOTE SERVICE BUREAU
LOCAL TEST DESK (Vfy RSB LTD) (AS
7) POWER REQUIREMENTS - ESSENTIAL AC

Used only to verify, recent change and verify to look at all lines, trunks and circuit packs in the system. Cannot make changes to system.

1.12 RECENT CHANGE AND VERIFY - SWITCHING CONTROL CENTER (RCV SCC) NETWORK ADMINISTRATION CENTER (RCV NAC) CALL TRANSFER ATTENDANT ??? (RCV CTA) (AS 7)

Used to look at and change the ECD, lines, and trunks. Can put a circuit into or remove it from service.

1.13 CENTRALIZED AUTOMATIC REPORTING ON TRUNKS (CAROT)(AS 7)
POWER REQUIREMENTS - None (DATA SET NOT REQUIRED)

CAROT is used to provide automatic routine testing and to do demand testing on trunks

1.14 MECHANIZED LOOP TEST SYSTEM (MLT 1) (AS 8)
POWER REQUIREMENTS - NONE (Data Set Not Required)

MLT-1 provides a rapid and convenient method for automatically testing a subscriber's telephone line. MLT-1 does not have the interactive testing capabilities that a local test desk (LTD) has.

1.15 MASTER CONTROL CONSOLE (MCC) (AS 9, AS 10)
POWER REQUIREMENTS - PROTECTED AC

Used for maintenance of the 5ESS. Also provides the emergency action interface (EAI) and displays hardware status.

1.16 SUPPLEMENTARY TRUNK LINE WORK STATION (STLWS) (AS 7, AS 11-1)
POWER REQUIREMENTS - ESSENTIAL AC

STLWS provides a craft interface for trunk and line testing. Tests are requested via menu commands and TTY input messages. Also works like the MCC, but does not have EAI.

1.17 MOBILE CART (AS 17)
POWER REQUIREMENTS - ESSENTIAL AC

DC Jack used for trunk and line testing. CRT or Pinter are on a cart.

1.18 RECENT CHANGE AND VERIFY - LOCAL (RCV-L) (AS 18)
POWER REQUIREMENTS - ESSENTIAL AC

Used to make changes to the Equipment Configuration Data (ECD).

1.19 OFFICE RECORD PRINTER (ORP) (AS 7 AS 24)
POWER REQUIREMENTS - ESSENTIAL AC

ORP is used to obtain a hard copy of any file from the 5ESS Switching System.

1.20 TRANSMISSION MAINTENANCE TERMINAL (TMT) (AS 7)
POWER REQUIREMENTS - ESSENTIAL AC

Used to test TIs for SLC 96 lines.

1.21 REMOTE SWITCHING MODULE INTERFACE (RSM) (AS 25)
POWER REQUIREMENTS - ESSENTIAL AC

A maintenance terminal used to maintain an RSM

1.22 DEDICATED REMOTE STLWS (AS 26)
POWER REQUIREMENTS - ESSENTIAL AC

Same as 1.16, except with the use of a data set it can be remoted off to a different location. Provides a personnel interface for trunk and line testing.

SECTION III - REFERENCE DATA

1. WORKING LIMITS

1.01 See BSP 590-010-201, Section 6, for thermal considerations.

2. CONNECTING CIRCUITS

- (a) 5ESS Applications Schematic - SD-5D014-02
- (b) Interframe communications circuit SD-5D009-01
- (c) 3B Peripheral Control Frame SD-4C106-01
- (d) 5ESS AC Power Distribution Circuit SD-5D004-01
- (e) Miscellaneous Cabinet SD-5D130-01
- (f) MCC/TLWS/STLWS SD-5D114-01
- (g) 5ESS DC Power Distribution Circuit SD-5D005-01

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