

GBPPR 'Zine



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"What is clear to me is that you are perpetuating the corrosive partisan politics that is destroying our country and killing our service members who are at war. For some of you just like some of our politicians, the truth is of little to no value if it does not fit your own preconceived notions, biases, or agendas."

Lt. Gen. Ricardo Sanchez (Ret.), former Commander in Iraq in his October 12, 2007 speech. This was never mentioned in any main stream media news report.

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System Performance – Software Subsystem / #1A ESS

BELL SYSTEM PRACTICES
AT&T Co SPCS

SECTION 231-045-245
Issue 1, June 1977

SYSTEM PERFORMANCE SUBSYSTEM SOFTWARE SUBSYSTEM DESCRIPTION NO. 1 AND NO. 1A ELECTRONIC SWITCHING SYSTEMS

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1. GENERAL

INTRODUCTION

- 1.01 This section describes the functional operation of the system performance subsystem programs in a No. 1 or 1A Electronic Switching System (ESS) Central Office.
- 1.02 When this section is reissued, the reason for reissue will be listed in this paragraph.
- 1.03 Part 7 lists the abbreviations and acronyms used in this section.

PURPOSE OF SYSTEM PERFORMANCE SUBSYSTEM

1.04 The purpose of the system performance subsystem is to provide the maintenance personnel with real-time indicators via the No. 1A System Status Panel (status lamps, light-emitting diode bar graph display, TTY printout) that reflects

the system's performance of various call processing facilities and functions.

SCOPE OF SECTION

- 1.05 The information in this section includes:
 - (a) Brief Description of PIDENTS
 - (b) PIDENT Interface
 - (c) Subsystem Functional Description
 - (d) PIDENT Functional Description

2. BRIEF DESCRIPTION OF PIDENTS

2.01 The System Performance Subsystem is comprised of six PIDENTs grouped into the following functional operations:

- (a) System Status and Activity Display
 - System Performance Indicator (SYPI) Program
- (b) Traffic Control and Service Measurement
 - Dial Tone Speed Test (DTST) Program
 - Line Load Control (LLOD) Program
 - Receiver Attachment Delay Report (RADR) Program
- (c) Service Observing
 - Multiline Service Observing (SOBR) Program
 - Direct Distance Dialing Observing (DDDO) Program

A. System Status and Activity Display

System Performance Indicator (SYPI)

2.02 The SYPI program collects test data, performs statistical tests, updates indicators on the system status panel (Fig. 1), and produces a TTY printout of the related data. The facilities and call processing functions monitored by SYPI include:

- Call Registers
- Hoppers

- Queues
- Service Circuits
- Line and Network
- Data Transfer
- Abrupt Traffic Change
- Originating Calls
- Incoming Calls
- Intraoffice Calls
- Tandem Calls
- Processor Occupancy
- Ineffective Attempts
- DP Dial Tone Speed Test Delays
- TT Dial Tone Speed Test Delays
- MF Receiver Attachment Delay Report Delays
- RP Receiver Attachment Delay Report Delays
- DP Receiver Attachment Delay Report Delays
- Tandem Calls First Failure to Match
- Incoming First Failure to Match
- Incoming Matching Loss
- Outgoing Overflow
- Intraoffice Overflow
- OMR Usage

B. Traffic Control and Service Measurement Programs

Dial Tone Speed Test (DTST)

2.03 The DTST program determines the grade of dial tone service given to originations. The results of the dial tone speed tests are used by the LLOD program as criteria for determining when to deny originating service to some nonessential lines.

Line Load Control (LLOD)

2.04 The LLOD program provides a means of assuring acceptable grades of originating service to lines considered essential in an emergency.

Receiver Attachment Delay Report (RADR)

2.05 The RADR program initiates test calls and determines the delay time taken for connection to a receiver. Test results are used by the network management program and as displayed indicators of system performance.

C. Service Observing Programs

Multiline Service Observing (SOBR)

2.06 The SOBR program administers the connection of the service observing circuit dedicated to a customer's line.

Direct Distance Dialing Observing (DDDO)

2.07 The DDDO program permits an operator to monitor direct distance dialing outgoing calls during the call process. The program controls various signal distributor points to cause the DDDO service circuit to control signals at the observing desks via lamp indicators.

3. SUBSYSTEM INTERFACE

A. System Performance Indicator (SYPI) Program

3.01 The SYPI program interfaces with the following PIDENTs (Fig. 2):

- (a) Executive Control Main Program (ECMP)
- (b) Traffic Counts Program (TCNT)
- (c) Automatic Overload Control Program (AOVD)
- (d) Seize and Release Routines and L-, J-, and T-Bit Administration Program (YAHA)
- (e) Network Failure Maintenance Action Program (NMFL)
- (f) Plant Measurement Program (PPMP)
- (g) Network Failure Maintenance Action Lamp and Key Program (MCTW)

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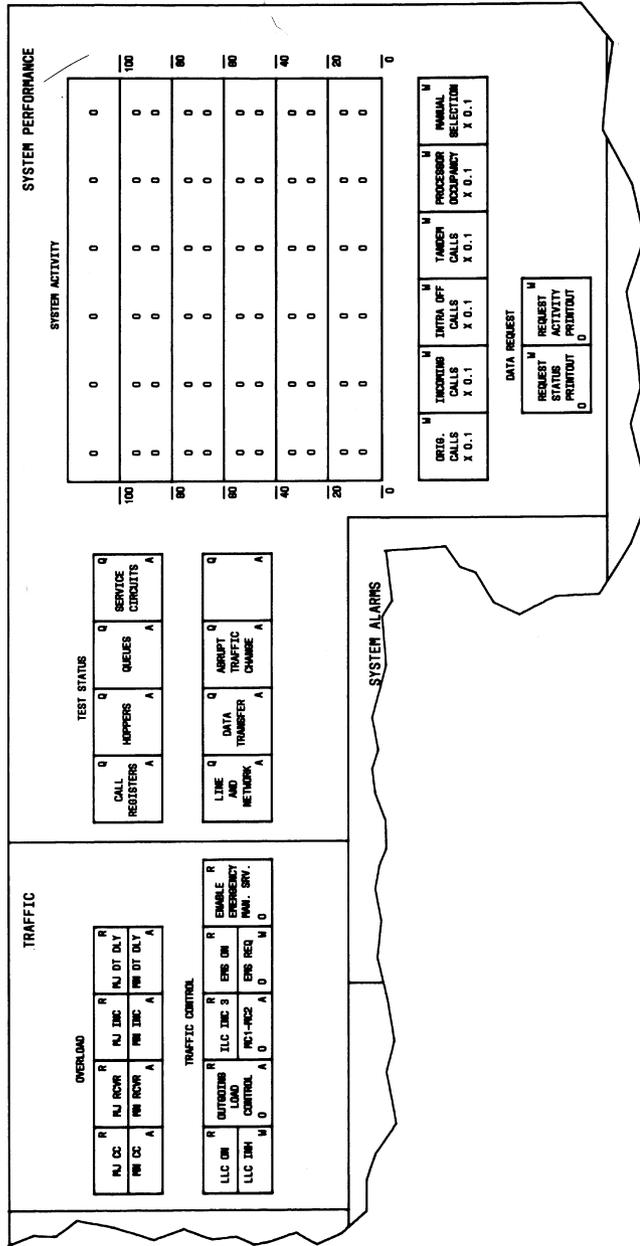


Fig. 1—System Status Panel Traffic and System Performance Indicators

- (h) Memory Integrity and Recovery Program (MIRV)
- (i) Parameter Data Assembler (PDA)
- (j) TTY Input-Output (IOCP)
- (k) Dialing Connection (DNCT)
- (l) Receiver Attachment Delay Report (RADR)

Executive Control Main Program (ECMP)

3.02 The ECMP program interfaces with SYPI by executing an entry every 10 seconds at label SYPI_NTR.

Traffic Counts Program (TCNT)

3.03 The TCNT program accumulates traffic counts and once every hour zeroes the test control memory block SY2HR-FAIL. These counts are used by SYPI in the various statistical tests.

Automatic Overload Control Program (AOVD)

3.04 The AOVD program unloads hoppers and sets an overflow indicator in memory identified as SY2-HOPPERS. SYPI interrogates this indicator once every 10 seconds to determine if any hoppers have overflowed since the last test instant. SYPI processes this information for the HOPPERS status lamp test.

Seize and Release Routines and L-, J-, and T-Bit Administration Program (YAHA)

3.05 The YAHA program maintains peg and overflow counts for the disconnect and by-link dialing senior registers that are utilized by SYPI for the CALL REGISTER status lamp tests. This data is used in calculating the holding time and number of register seizures.

Network Failure Maintenance Action Program (NMFL)

3.06 The NMFL program detects the occurrence of an NN08 switch failure that is used by SYPI for the LINE AND NETWORK status lamp test. Whenever a switch failure is detected, transfer is made to SYPI at SYPISWFL. The SYPI routine periodically performs a test which determines if the detected switch is still on the faulty switch list monitored by NMFL.

Plant Measurement Program (PPMP)

3.07 The PPMP program interfaces with SYPI by maintaining a showering line failure counter PL2SHWL used in LINE AND NETWORK status lamp test calculations.

Network Failure Maintenance Action Lamp and Key Program (MCTW)

3.08 The MCTW program detects the manual operation of the REQUEST STATUS PRINTOUT, REQUEST ACTIVITY PRINTOUT, and MANUAL SELECTION keys. It transfers control to SYPI which, in turn, processes the request and initiates a printout of the data messages.

Memory Integrity and Recovery Program (MIRV)

3.09 The MIRV program zeroes the ENTRY_CNT item of word SY2CNTRS at the end of each phase, so that the SYPI program starts executing its tests in the correct order upon completion of the phase.

Parameter Data Assembler (PDA)

3.10 The PDA maintains the threshold values (engineered number of high day calls per minute) in memory block SY2PK-CLCAP. These values are used by SYPI in computing the ORIG. CALLS, INCOMING CALLS, INTRA OFF CALLS, and TANDEM CALLS bar graphs.

TTY Input-Output (IOCP)

3.11 The IOCP program provides interface media via TTY input and output messages for system initialization, bar graph printout, and a selection of items for display.

3.12 The input message INIT:SYSPRFM is used to initialize the system if shift in data has been detected.

3.13 The TTY output message REPT:SYSPRFM; a b is used for data related to tests on the call registers, service circuits, abrupt traffic changes, hoppers, queues, line and network, and data transfers.

3.14 The TTY output message REPT:SYSPRFM; BARGRPHS is used for retrieving data related to the bar graphs.

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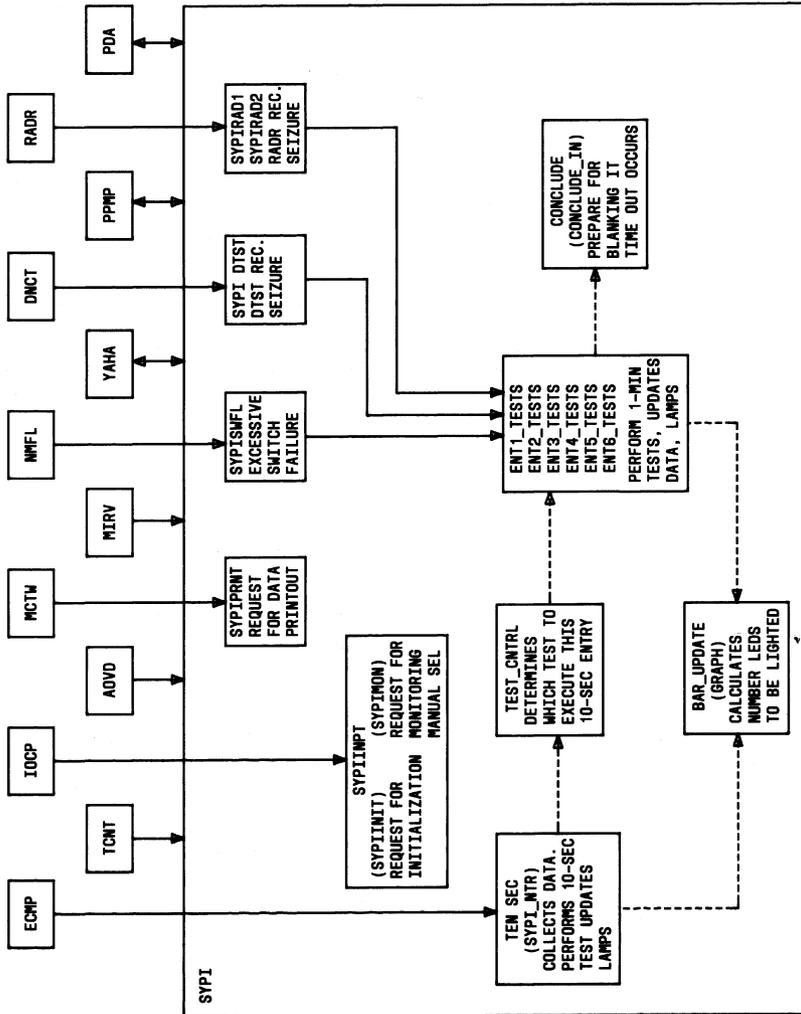


Fig. 2—System Performance Indicator (SYPI) Program Interface

3.15 The TTY input message MON:SYSPRFM;MAN a! is used when selecting an item for display on the MANUAL SELECTION bar graph.

Dialing Connection (DNCT)

3.16 DNCT program interfaces with SYPI if a receiver is to be seized for DTST. Entry is made at SYPIDTST.

Receiver Attachment Delay Report (RADR)

3.17 RADR program gives SYPI an entry at SYPIRAD1 when a trunk MF or DP receiver is seized for RADR. An entry is made at SYPIRAD2 when a trunk RP receiver is seized for RADR.

B. Dial Tone Speed Test (DTST) Program

3.18 Figure 3 shows the interface of DTST and the following PIDENTs:

- (a) Executive Control Main Program (ECMP)
- (b) Dialing Connection Program (DNCT)
- (c) TTY Input-Output Program (IOCP)

3.19 ECMP interfaces with DTST by transferring control every four seconds for initiating the dial tone speed tests.

3.20 DTST interfaces with DNCT by passing control in order to obtain dial tone on the dial tone speed test calls.

3.21 The IOCP program provides interface for controlling the mode of operation and obtaining a printout of related data. Refer to Input/Output Message Manual (IM-6A001/OM-6A001) for use of the following messages.

- DT-ALLOW (Enable DTST)
- DT-INH (Turn-off DTST)
- TOC01 (Traffic and overload status when LLC feature is activated)
- TOC02 (Traffic and overload status when LLC feature is not activated)
- TC-TIME (Turn DTST on and off at specified times).

C. Line Load Control (LLOD) Program

3.22 The LLOD program interfaces with the following two PIDENTs (Fig. 4):

- (a) Executive Control Main Program (ECMP)
- (b) TTY Input-Output Program (IOCP)

3.23 ECMP interfaces with LLOD every four seconds to check the mode of operation and status of the DTST tests.

3.24 The IOCP program provides for controlling mode of operation of LLOD via TTY input and output messages. Refer to Input/Output Message Manuals (IM-6A001 OM-6A001) for use of the following messages:

- LLC-ALLOW-ON (Manually enable LLC)
- LLC-ALLOW-AU (Automatically activate LLC)
- LLC-INH (Deactivate LLC)
- LLC-MASK-PRNT (Scan mask printout, LC02, used to determine number of line groups affected)
- TOC01 (Overload data and status reports printed as results of input message LLC-ALLOW+ON if system is OK)
- TOC02 (Traffic and overload data printed as result of input message LLC-ALLOW-AU if system is OK)
- LC01-AGR (Service requested)

D. Receiver Attachment Delay Report (RADR) Program

3.25 RADR interacts with the following PIDENTs (Fig. 5).

- (a) Executive Control Main Program (ECMP)
- (b) Network Management Program (NMGT)
- (c) TTY Input-Output Program (IOCP)

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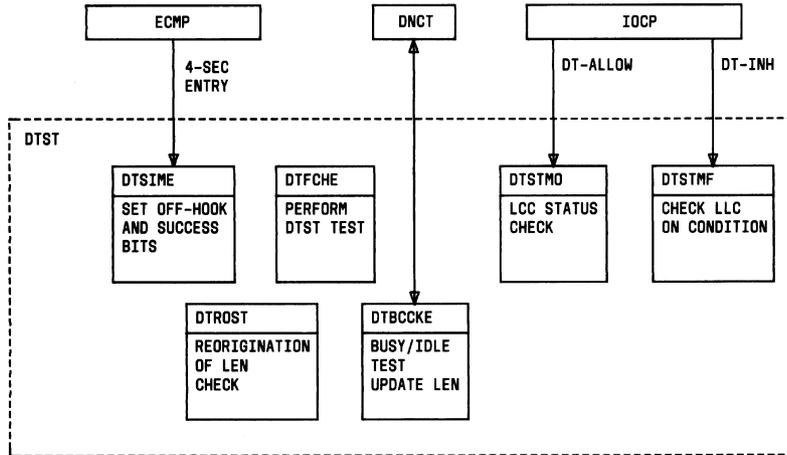


Fig. 3—Dial Tone Speed Test (DTST) Program Interface

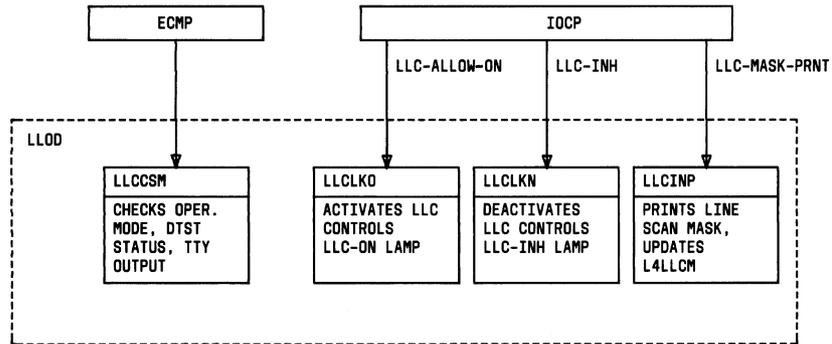


Fig. 4—Line Load Control (LLOD) Program Interface

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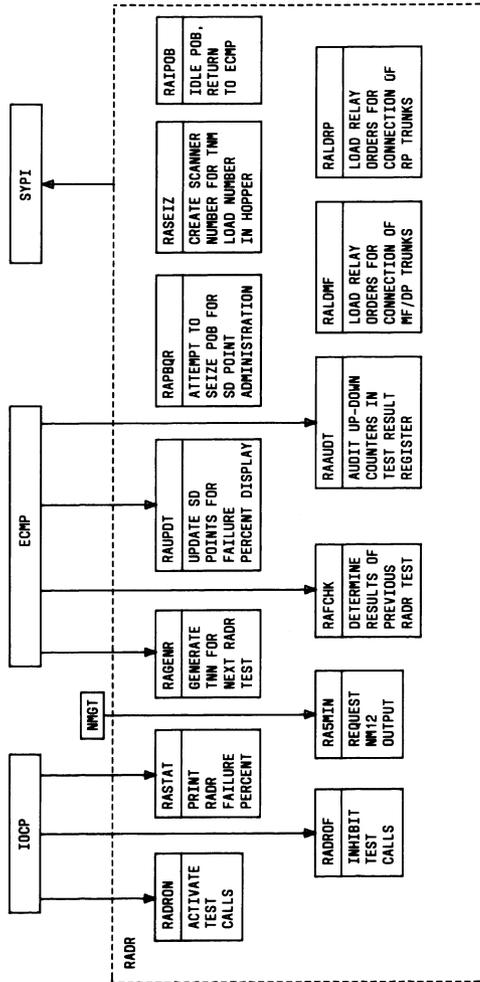


Fig. 5—Receiver Attachment Delay Report (RADR) Program Interface

3.26 The ECMP program schedules and administers the following items for RADR:

- Determines RADR test results every four seconds
- Generates TNN for test every 100 ms
- Simulates TNN seizure every four seconds
- Updates SD points for display every 30 seconds
- Audits up-down counters every hour

3.27 Every five minutes, NMGT interfaces with RADR to process the threshold values used by the RADR test.

3.28 IOCP interfaces to allow for controlling the mode of operation and obtaining status of the RADR feature. Refer to Input/Output Message Manual (IM-6A001 OM-6A001) for use of the following messages:

- RAD-ALLOW (Activate test calls)
- RAD-INH (Inhibit test calls)
- RAD-STATUS (Print RADR failure percent message)

E. Multiline Service Observing (SOBR) Program

3.29 Figure 6 depicts the following PIDENTs that interface with SOBR.

- (a) Dialing Connection (DNCT)
- (b) Scan Point Change Director (CXYH)
- (c) TTY Input-Output Program (IOCP)

3.30 The DNCT program transfers control to SOBR to seize a service observing register for the service observing call.

3.31 The IOCP program provides interface for operation of the SOBR feature. Refer to the input and output manuals for the following messages:

- Recent Change Order (Assigns customer's line for SOBR)

- A3-S001 (Indicates service observing circuit failure)

- SO-RESTORE-a (Indicates service observing circuit release)

F. Direct Distance Dialing Observing (DDDO) Program

3.32 The DDDO program interfaces with the following programs (Fig. 7).

- (a) Executive Control Main Program (ECMP)
- (b) Automatic Message Accounting Data Accumulation Program (AMAC)

3.33 When a seizure signal is sent to the observing desk, ECMP controls a 50-ms scan which detects an answer.

3.34 The DDDO receives control from AMAC to determine if the call is to be service observed.

4. SUBSYSTEM FUNCTIONAL DESCRIPTION

4.01 The system performance subsystem provides the maintenance personnel both manual and automatic means of evaluating the call processing facilities and functions via TTY printouts, test status lamps, and LED bar graph indicators.

4.02 The SYPI program collects data on facilities and processing functions, performs statistical tests, and updates the system performance section of the No. 1A system status panel. The display is intended to indicate early system activity and the presence of abnormalities in the call processing or system software resources to allow corrective measures to be implemented before system deterioration occurs. Call processing facilities monitored and displayed on the system status panel via TEST STATUS lamps are:

- Call Registers
- Hoppers
- Queues
- Service Circuits
- Line and Network
- Data Transfer

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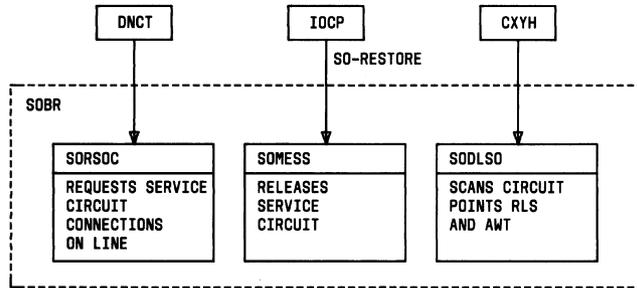


Fig. 6—Multiline Service Observing (SOBR) Program Interface

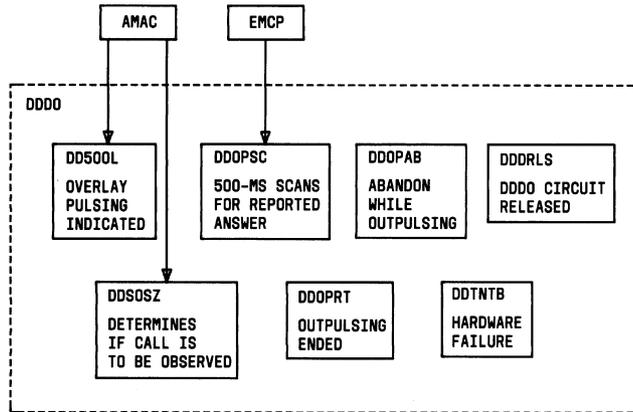


Fig. 7—Direct Distance Dialing Service Observing (DDD) Program Interface

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- Abrupt Traffic Change

System call processing functions displayed by bar graphs are:

- Originating Calls
- Incoming Calls
- Intraoffice Calls
- Tandem Calls
- Processor Occupancy
- Manual Selection—Ineffective Attempts, DP DTST Delays, TT DTST Delays, MF RADR Delays, RP RADR Delays, DP RADR Delays, Tandem Calls First Failure to Match, Incoming First Failure to Match, Incoming Matching Loss, Outgoing Overflow, Intraoffice Overflow, OMR Usage

4.03 Data associated with the TEST STATUS lamps is available to the maintenance personnel via the maintenance TTY. Whenever a printout is requested via the REQUEST STATUS PRINTOUT keys, the associated lamp will light for approximately one second to indicate that the request has been acknowledged.

4.04 Whenever a TEST STATUS lamp is lighted amber for a long period of time, the maintenance personnel may periodically query the system performance program by operating the DATA REQUEST keys. The output data should be examined to ensure that other legitimate problems have also not simultaneously occurred in the system. Each test result in the output message is prefixed by a word indicating the pass or fail status of that test. This enables the maintenance personnel to quickly detect the occurrence of new problems by determining the test which has failed since the previous printout request.

4.05 Data associated with the SYSTEM ACTIVITY bar graphs is obtainable via the TTY by operating the REQUEST ACTIVITY PRINTOUT key. The lamp will light for approximately one second to acknowledge the printout request. The MANUAL SELECTION key must be operated to obtain data displayed by the bar graph furthest to the right. The test for bar graphs is assumed to have failed when the red light emitting diode

(LED) is lighted. A persistently lighted amber TEST STATUS lamp or a persistently red lighted LED at the top of the bar graph generally indicates that either something is wrong or that a permanent shift has occurred in the data. In both cases, the maintenance personnel should analyze printed test results and traffic information when either implementing corrective measures or reinitializing the data.

4.06 The maintenance personnel can also request the reinitialization of any system performance test. If the maintenance personnel feels that a permanent legitimate shift has occurred in the data, then the test can be reinitialized.

4.07 DTST, LLOD, and RADR initiate test calls on which periodic tests are performed to be used in determining system performance. DTST provides a measurement of dial tone service furnished to the customer. RADR administers test calls for measuring the amount of delay incoming calls experience in getting a receiver connection. The LLOD provides means of assuring acceptable grades of originating service to lines considered essential during emergency conditions. If the LLOD has been placed in the automatic operation mode, it is enabled depending upon the results of the dial tone speed tests.

4.08 SOBR and DDDO provide manual means of observing various stages of the call processing function. SOBR allows an operator, located at the centralized service observing desk, to monitor various types of calls. DDDO provides observation of DDD outgoing calls from the centralized office.

5. FUNCTIONAL DESCRIPTION OF PIDENTS

A. System Performance Indicator (SYPI) Program

5.01 SYPI is entered from ECMP at global SYPI_NTR every ten seconds to collect, update data, and perform tests on call functions and facilities. Data, collected at each 10-second entry, is processed for the bar graph PROCESSOR OCCUPANCY, and TEST STATUS lamps for HOPPERS, DATA TRANSFER, SERVICE CIRCUITS, and ABRUPT TRAFFIC CHANGE.

5.02 Program control is passed from program unit TENSEC to subroutine TEST_CNTRL which controls a counter used for determining which activity test routine is to be executed during

the current 10-second entry. The subroutines that perform statistical tests on the facilities are:

- ENT1_TESTS
- ENT2_TESTS
- ENT3_TESTS
- ENT4_TESTS
- ENT5_TESTS
- ENT6_TESTS

5.03 Data, collected on the 10-second entry of each minute (subroutine ENT1_TESTS) is used for tests performed on bar graphs ORIG. CALLS, INCOMING CALLS, INTRA OFF CALLS, and TANDEM CALLS.

5.04 Processing facilities, displayed via TEST STATUS lamps, are processed by subroutines ENT2_TESTS, ENT3_TESTS, ENT4_TESTS, and ENT5_TESTS. The MANUAL SELECTION bar graph is updated and controlled by subroutine ENT6_TESTS.

5.05 Program control is then passed from the above test subroutines to subroutine CONCLUDE_IN which zeroes the level and column bits of the bar graph record so that if time out occurs, the display is blanked. This routine then returns control to ECMP.

5.06 The number of LEDs to be lighted for the bar graph is calculated by subroutine GRAPH. This routine determines the status of the low scale and threshold lamps and updates the associated indicator accordingly. Threshold values, used in the calculations, are obtained from memory block SY2PK-CLCAP.

5.07 When initialization is requested, an entry is made to subroutine SYPIINIT.

5.08 Whenever a request for monitoring the MANUAL SELECTION bar graph data is received, entry is made to subroutine SYPIMON.

SYSTEM ACTIVITY BAR GRAPH UPDATE ROUTINE

5.09 In general, the number of LEDs lighted green indicate the value of the item being

displayed as a percent of the threshold (100 percent) value. If the value of the item falls below 10 percent of the threshold value, the column identification lamp at the bottom of the bar graph is lighted white to indicate a change in scale. The change implies that the percent reading for that bar graph must be multiplied by 0.1 to obtain the true reading. For these low values, each LED represents increments of 1 percent. If, on the other hand, the item being displayed exceeds the threshold value, the LED at the top of the bar graph is lighted red in addition to the ten green lighted LEDs.

5.10 Bar graphs, ORIG. CALLS, INCOMING CALLS, INTRA OFF CALLS, and TANDEM CALLS are updated only once each minute. The PROCESSOR OCCUPANCY bar graph is updated once every 10 seconds.

5.11 The PROCESSOR OCCUPANCY bar graph value is calculated by ECMP once every 10 seconds. This value is the percent of real-time spent by the processor on nonrelinquishable and call processing functions. The bar graph reflects the time spent on accomplishing the basic objective of the system, which is to process calls. SYPI utilizes the integer portion of the ECMP value.

5.12 The MANUAL SELECTION bar graph is normally not lighted. SYPI examines word SY2MNL-REQ to determine if any of the bits are set indicating that an item is to be displayed. If so, a corresponding code is executed causing display of one of the following items.

- Percent of Ineffective Attempts
- Percent DP DTST Delays
- Percent TT DTST Delays
- Percent MF RADR Delays
- Percent RP RADR Delays
- Percent DP RADR Delays
- Percent Tandem Calls First Failure to Match
- Percent Incoming First Failure to Match
- Percent Incoming Matching Loss

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- Percent Outgoing Overflow
- Percent Intraoffice Overflow
- Percent OMR Usage
- Blank bar graph

Ineffective Attempts Test

5.13 The percent of ineffective attempts is defined as the percent of regular and common overflow to the normally processed originating and incoming calls.

DTST Delay Tests

5.14 Bar graph displays of percent of DP DTST delays and TT DTST delays indicate tests that were experiencing delays of more than 3 seconds to obtain dial tone.

RADR Delay Tests

5.15 The percent RADR delays (MF, RP, DP) display the ratio of the number of tests which experienced delays of more than 3 seconds when attempting to obtain a receiver connection to the number of initiated tests.

Matching Loss Tests

5.16 The matching loss failures, displayed by the bar graph, are reflected by the percent tandem calls first failure to match, percent incoming first failure to match, and percent incoming matching loss. The bar graph reflects a percentage value and the ratio of failure calls to total calls.

Overall Tests

5.17 The completion status of intraoffice and outgoing calls, as indicated via bar graph, is based on overflow conditions. Percent outgoing overflow is the ratio of overflow to actual outgoing

calls. Percent intraoffice overflow is the ratio of overflow to actual intraoffice calls.

OMR Test

5.18 The percent output message registers (OMR) is the number of seizures less the number of releases divided by the total OMRs times 100.

TEST STATUS Lamps Update Routine

5.19 The system status panel displays TEST STATUS lamps to provide indications of both normal and abnormal processing conditions for the following facilities:

- Call Registers
- Hoppers
- Queues
- Service Circuits
- Line and Network
- Data Transfer
- Abrupt Traffic Change

Call Registers Test

5.20 Table A lists the call registers monitored by SYPI. The SYPI program applies a statistical test which utilizes the holding time as a parameter. The average holding time is defined as the ratio of the sum of the active elements to the number of seizures. A moving average and a moving variance are computed based on the average holding time. If the sample is very small, no statistical analysis is performed. A safety factor of 4 is normally applied if the sample is sufficiently large. If the value falls beyond the safety value, the test is considered a failure and the lamp is lighted amber. Also, whenever there are requests for the facility but no seizure is made, the lamp will be lighted amber.

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TABLE A

CALL REGISTERS MONITORED BY SYPI	
REGISTER	TTY I/O MESSAGE ABBREVIATION
TTM	TTM
Disconnect	DISC
By-Link Dialing Senior	SXS
AMA (Detailed Billed)	AMADET
AMA (Measured Rate)	AMAMES

Hoppers Test

5.21 Hoppers, monitored by SYPI, are listed in Table B. Whenever a hopper overflows, transfer is made to the automatic overflow program (AOVD), which sets an indicator in the SY2-HOPPERS word as the hopper is unloaded. SYPI interrogates the word once every 10 seconds and determines if the hopper has overflowed since the last check. If so, the TEST STATUS–HOPPERS lamp is lighted amber; otherwise, it is lighted green.

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TABLE B

HOPPERS MONITORED BY SYPI

HOPPER	TTY I/O MESSAGE ABBREVIATION
Abandon-Interdigital Time-out	AIT
Centrex Key	CNTXKY
Dial Pulse Outpulsing	DPOP
Hit Scan Result	HITSCN
Line Ferrod Disconnect	LDISC
Miscellaneous Scan (TSJR)	MISSCN
Multifrequency	MF
Release Dial Tone	RLSDT
Revertive Digit Reception	RPR
Revertive Digit Transmission	RPX
Ring Trip	RNGTRP
Step-By-Step Reorder AIT	SXS
TOUCH-TONE®	TT
Trunk Dial Pulse Reception	TRKDPR
Trunk Seizure and Answer	TSA

Queues Test

5.22 The status of queues, as determined by SYPI, is based on the number of POBs encountering queuing versus the total traffic at the instant. The TEST STATUS—QUEUE lamp is lighted amber if the test fails three times consecutively, and lighted green if the test passes three times consecutively. A chance failure or success of the test does not change the color of the lamp. The test is executed once every minute.

Service Circuit Test

5.23 SYPI monitors only the standard service circuits as listed in Table C for determining the status of service circuits. The SYPI program applies the same statistical test as for the call registers (5.20). The TEST STATUS—SERVICE CIRCUIT lamp is lighted amber if the average value falls beyond the given tolerance interval, or if there are requests but no seizures.

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TABLE C
SERVICE CIRCUITS MONITORED BY SYPI

CIRCUIT	TTY I/O MESSAGE ABBREVIATION
Ringing Circuits (Phase 1, 2, 3)	RNG1, RNG2, RNG 3
Audible Circuits (Phase 1, 2, 3)	AUD1, AUD2, AUD3
Interoffice Transmitters Multifrequency Dial Pulse Revertive Panel Call Indicator	MFX DPX RPX PCIX
Interoffice Receivers Multifrequency Dial Pulse Revertive Panel Call Indicator	TRKMFR TRKDPR TRKRPR TRKPCI
Customer Digit Receivers Dial Pulse and TT overflow Dial Pulse TOUCH-TONE	CDPTTR CDPR CTTR
Tandem Tie Lines TT-DP Trunk Receivers TT-DP Customer XMTR-RCVR TT-DP Trunk XMTR-RCVR	TRKTTR TRTLC TRTLT
Coin Circuits Coin Control Circuit Initial Announcement for DT First Overtime Deposit Prompt Announcement	CCCK CSLANN RICODP
Recorded Announcement/Tone Circuits 60-IPM Busy Tone 120-IPM Regular Overflow Tone Vacant Code Announcement Receiver Off-hook Announcement Call Forwarding Denial Announcement Receiver Off-hook Tone Partial Dial-Intercept Call Waiting or Busy Verify Tone	BT OVFLT VACC OFFH CFWDNL ROFFHT PDINCT WAIT

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Line and Network Test

5.24 The lines and networks are checked for excessive failures by SYPI using two independent statistical tests. For the purposes of determining system performance, the classification

of failures (Table D) is based on whether the failure is due probably to a fault in the lines or in the network. The failure counts are maintained in plant measurements program (PPMP) and pegged by the network failure maintenance action program (NMFL).

TABLE D

LINE AND NETWORK FACILITIES MONITORED BY SYPI

FAILURE	CATEGORY	WEIGHTED FACTOR
SUPF — Supervisory Scan	Network	1
FCGF — False Cross and Ground	Network	2
RVFY — Restore and Verify	Network	2
RC — Ringing Current	Line	1
SHWL — Showering Line	Line	1
LLR — Low Line Resistance	Line	1
PX — Power Cross	Line	8

5.25 The check periodically computes the ratio of the weighted sum of the faults constituting the particular failure type to the total traffic per network observed during the interval. If this ratio exceeds a predefined threshold, then the TEST STATUS—LINE AND NETWORK lamp is lighted amber.

5.26 The statistical tests for line and network are done once every minute. Based upon this criteria, the TEST STATUS—LINE AND NETWORK lamp is lighted amber whenever an excessive number of failures in comparison to the traffic occurs in the system. The lamp is lighted green only if the statistical checks are successful for a certain number of consecutive tests and if the test on the NN08 switch passes.

5.27 The occurrence of a NN08 switch failure implies that probably a switch or a trunk connected to a switch is faulty and this faulty element is being repeatedly used. Upon a NN08 switch failure, NMFL transfers to SYPI. SYPI causes the lamp to be lighted amber. The switch number is checked once every 5 minutes against a current list of faulty switch numbers that is

maintained by NMFL. If no match occurs, the lamp is once again lighted green.

Data Transfer Test

5.28 The TEST STATUS—DATA TRANSFER lamp reflects results of the test on the disk and TTY equipment. The tests are executed once every 10 seconds by SYPI.

5.29 Two types of test are applied to the disk facility:

- Functional
- Statistical

5.30 Subroutine FNCTDRWC performs a functional test on the disk operating functions. A failure is recorded if either the disk request failed, or the data was incorrect, or a read/write timeout occurred. Whenever a failure occurs, SYPI requests the disk audit no more than once every 5 minutes.

5.31 The desk statistical checks are processed by subroutine FNCTDSKC. A failure condition

is when there are either excessive invalid requests or too few successes. A queue is full most of the time when there is excessive queuing. Whenever a failure is noted, SYPI requests the disk audit routine (no more than once every 5 minutes).

5.32 The TTY operation is verified by subroutine FNCTTTYC. A statistical test is performed to verify the availability of the output message registers (OMR). A failure is recorded if there is either an excessive number of OMR seizure failures or a lack of idle OMRs. In either case, SYPI requests the appropriate TTY audit (no more than once every 5 minutes).

5.33 The TEST STATUS—DATA TRANSFER lamp is lighted amber if any of the preceding tests fail. The lamp is lighted green only if all tests pass continuously a fixed number of times.

Abrupt Traffic Change Test

5.34 Every 10 seconds SYPI applies a statistical test on certain traffic as listed in Table E. The test is similar to that as applied to call registers and service circuits differing in precision maintained in calculations. If the value falls beyond the given tolerance interval, the TEST STATUS—ABRUPT TRAFFIC CHANGE lamp is lighted amber.

TABLE E

TRAFFIC MONITORED BY SYPI	
TRAFFIC TYPE	TTY I/O MESSAGE ABBREVIATION
Originating	ORIG
Incoming	INC
Intraoffice	IAO
Tandem	TDM

The main differences between this test and that used for call registers and service circuits are:

- Different smoothing constants

- Moving average and moving variance calculations are based on traffic rather than on holding time.
- Lamp not lighted because of no seizures.

B. Dial Tone Speed Test (DTST) Program

5.35 The purpose of the DTST program is to provide measurement of dial tone service. It applies a test to measure the interval of time separating customer goes off-hook and receipt of dial tone. If dial tone is furnished within 3 seconds, a success is recorded. If the 3-second test was a failure and at the end of a 11-second period dial tone has not been furnished, the test is scored as an extended failure.

5.36 DTST consists of six globals:

- DTSIME—Entry point from main program
- DTBCKE—Entry for dial tone busy line check
- DTFCHE—Entry for dial tone failure check
- DTROST—Entry point for checking reorigination of LEN
- DTSTMO—Entry point for TTY input message "DT-ALLOW"
- DTSTMF—Entry point for TTY input message "DT-INH"

5.37 Every 4 seconds, the main program transfers control to DTSIME subroutine. This routine zeroes the success bit and sets the receiver off-hook bit in the DTST register (D4STRO). The SUSC-LI program checks for the receiver off-hook bit, and if found, sets a flag which signifies that this LEN is associated with a DTST. When the dialing connection program processes the line service request hopper, transfer is made to the DTBCKE subroutine if the receive off-hook bit is set.

5.38 The dial tone busy check (DTBCKE) subroutine performs a busy/idle test on the acceptable LEN. If the LEN is idle, the routine determines if LLC is in effect on the line, by interrogating the LLC bit in the DTST register. If LLC is in effect, the LEN is marked to be given DTST, the success bit is set to 1, and control is passed to

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DNCT which attempts to give dial tone to the generated call.

5.39 The dial tone failure check (DTFCHE) subroutine performs checks at the end of 3 seconds and 11 seconds to determine if dial tone has been applied to the line. If the success bit (see 5.37) is a 1 when the 3-second test is made, and if both the LEN was not affected by LLC and dial tone furnished within 3 seconds, the test is recorded as successful.

5.40 The DTROST subroutine checks the line equipment number (LEN) to determine if it is the most recent for the dial tone speed test. If so, a transfer is made to the routine SROH which sets the receiver off-hook bit and causes a reorigination of the DTST.

5.41 When DTST is activated by the TTY input message DT-ALLOW, a transfer is made to DTSTMO which zeroes the DTST inhibit flag in the traffic and overload status A6FLG1 and checks for an LLC on-condition. If LLC is on, the LLC ON lamp is lighted red, a major alarm is sounded, the TTY bell is rung, and a TOC01 output message is printed. If the LLC is off, a TOC02 is printed out on the TTY.

5.42 When DTST is initiated by the TTY input message DT-INH, entry is made at DTSTMF. This routine checks for on-condition of LLC. If the LLC is on, the LLC ON lamp is extinguished, the LCC INH lamp lighted, major alarm sounded, traffic TTY bell rung, and TOC01 message printed. The LLC feature is inhibited, plus printing of dial tone delay information in the traffic output message. But if LLC is off when the inhibit message was entered, a TOC02 message is printed by the IOCP program.

C. Line Load Control (LLOD) Program

5.43 The LLOD program provides a means of assuring acceptable grades of originating service to lines considered essential in an emergency by temporarily denying originating service to nonessential lines. It is applied during system overload conditions, such as real-time, software, and hardware overload.

5.44 The mode of operation of line load control (LLC) may be either automatic, manually activated, or manually deactivated. If the LLC

has been placed in the automatic mode by TTY input message LLC-ALLOW-AU, the program recognizes the request and automatically enables it when three successive extended 11-second DTSTs have failed. When activated, the program calculates the number of line groups to which service will be denied, and as the overload condition subsides, it gradually restores service.

Every 4 seconds, the ECMP enters the LLOD at LLCCSM. It initially determines if a complete line scan has taken place. If not, control is returned to the main program. If line scan has been completed, the program then checks to see if DTST has been inhibited. If so, control is also returned to the main program. Otherwise, if the LLC has been activated by the TTY input message LLC-ALLOW-AU, the program sets the LAU flag bit to 1 and requests printing of a TOC02 output message. Whenever the system recognizes the need for LLC, overloads that cause three successive extended 11-second DTST failures, the LLC "on" flag is set to 1 and appropriate alarms, bells, lamps, and TOC01 output message are generated.

5.45 The LLOD program consists of four subroutines (GLOBALS):

- LLCCSM—Entry point from main program every 4 seconds
- LLCINP—Entry point resulting from TTY input message "LLC-MASK-PRINT"
- LLCLKO—Entry point resulting from TTY input message "LLC-ALLOW"
- LLCLKN—Entry point resulting from TTY input message "LLC-INH."

5.46 The program monitors the 3-second DTST test failure indicator D4STR2 and the percentage of network overload every 4 seconds. Service is denied or restored to nonessential groups depending on the results of these measurements. If there are three successive DTST failures, or if a 3-minute check of the amount of matching loss in the trunk link network (TLN) for incoming calls reveals that more than 10 percent have blocked, the program will remove dial tone service from one-half of the nonessential line current able to receive service. Three more successive DTST failures or another 3-minute period with greater than 10 percent incoming matching loss in the

TLN will result in another 50 percent decrease in the number of nonessential lines being served. All nonessential lines are denied dial tone service after four 50 percent decreases. Whenever LLC is denying service or whenever a 3-second DTST failure occurs, the MN DT DLY lamp lights (amber). When all groups are restored to service, the LLC "on" flag is set back to 0 and the LLC ON lamp is extinguished.

5.47 If LLC has been activated by the input message, LLC-ALLOW-ON entry is at subroutine LLCLKO. The program sets the LAU bit to "0". The LLC ON lamp is lighted (red), a major alarm is sounded, and a TOC01 message is requested. The subsequent program routine is that as discussed in 5.49.

5.48 While LLC is denying service, TC15 TTY output message will be printed each quarter hour.

5.49 If the LLC is deactivated by the TTY input message LLC-INH, entry is made at LLCLKN. The LON and LAU data are zeroed in word A6FLG1 and a TTY TOC02 output message is printed. If the LLC ON lamp was lighted, it will be extinguished and the LLC INH will be lighted (white), and dial pulse counters are incremented. However, if the LEN was affected by LLC and even though the test call was a success, it is treated as a failure. The DTST counter is incremented and control is transferred to the DTBCKE subroutine if the 3-second test was a failure.

5.50 At the 11-second test entry, a check is made of the third most recent LEN to determine if the line was affected by LLC. If so, an extended test failure is scored. Otherwise, the success bit for the 3-second test is checked. If, at the end of 11 seconds, the success bit indicates that dial tone has not been received, the test is scored as an extended test failure. The push-down list is then updated by placing the LEN into the list and removing the LEN just tested.

5.51 On the first transfer to the DTFCHE routine, no LEN is found in the push-down list and the extended 11-second DTST is not enabled. At the 3-second interval determined by the enable bit, a transfer is made to the update subroutine (5.52), which generates the first LEN to-be-tested (LEN) plus the next one that is intended to-be-tested (LENI). A flag is then set which is used to cause

transfer to subroutine DTSIME. The 11-second DTST is completed at the fourth entry to DTFCHE. The main program continues to transfer to DTSIME and DTFCHE subprograms every 4 seconds.

5.52 If the busy/idle test finds the LEN busy, entry is made at BC11 where the LEN is updated with the LENI. The new LEN is first checked rangewise. That is, the LLN of the LEN must be less than or equal to the highest LLN and the LSF must be less than or equal to the highest LSF. The LEN is then checked for translation requirements. The LEN must be an assigned line, which is not a manual, master control, or denied service line. If the LEN is found to be acceptable for DTST, another busy/idle test is performed. However, if the LEN is found to be unacceptable, the routine will make a maximum of 30 update attempts before the test is disabled.

5.53 The LLOD subroutine LLCINP updates the word L4LLCM as system overload varies. This data is used by the supervisory scan program as a scan mask with each bit representing a line group. A printout LC02 of the LLC mask is obtained with the TTY input message LLC-MASK-PRNT.

5.54 The program utilizes the parameter L4ESSL. Each position bit in the word corresponds to the essential lines in office. This 16-bit mask word is updated by LLOD as the traffic overload varies.

5.55 The network overload condition exists if 10 percent or more of incoming calls to an office experiences network blockage on the talking path during the previous 3-minute period. Control overload exists when three consecutive relevant DTST failures are recorded. DTST considered as nonrelevant are the first three following restoration of a group.

D. Receiver Attachment Delay Report (RADR) Program

5.56 The RADR program generates, maintains, and administers incoming test calls designed to measure the amount of delay incoming calls are experiencing in getting a connection to a receiver. Activation and deactivation is via TTY input messages.

5.57 Every 4 seconds, the RADR feature is activated. A test call is generated on a randomly selected incoming trunk. Attempts to

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establish a connection between the incoming test call and a receiver in 3 seconds are termed delays. Outputs of the program include:

- Peg counts of number of tests performed
- Number of failures by receiver type
- Current failure percentages by receiver type on demand or in 5-minute exception output messages
- Current failure percentage readout updated every 30 seconds transmitted for display.

5.58 The RADR program operates in multiple levels and for printout requests on interject. It consists of the following globals:

- RADRON—Activates Test Calls
- RASTAT—Prints RADR failure percentage
- RAFCHK—Determines results of previous RADR test
- RAGENR—Generates a TNN for next RADR test
- RASEIZ—Creates scanner number for TNN and loads number in hopper
- RAAUDT—Audits up-down counters
- RAUPDT—Updates SD points for failure percentage
- RA5MIN—Requests print of NM17 output message
- RALDMF—Loads relay orders for MF/DP trunk connection
- RALDRP—Loads relay orders for RP trunk connection to receiver
- RAPBQR—Attempts to seize POB for SD point administration
- RAIPOB—Idles POB and returns to ECMP
- RADROF—Inhibits test calls

5.59 Entry is made at RADRON in response to a TTY activation request, RAD-ALLOW. This subroutine verifies that parameters are set up properly to allow calls, then tacks either an OK or NG onto the input request. If RADR calls are activated, an OK is tacked onto the input message and a TOC02 output message will be printed. But, if activation is not made, an NG notation is tacked onto the TOC02 message. The subroutine then passes control back to ECMP.

5.60 Any entry is made at RADROF in response to the TTY input message RAD-INH. The purpose of this routine is to configure all call store memory associated with RADR test calls in such a manner to prohibit call processing. The routine:

- Sets an inhibit bit
- Causes a TOC02 output message to be printed immediately and on subsequent quarter hours until reactivated by an automatic or manual request
- Zeroes out registers containing failure percentage up-down counters and results of the previous 50 RADR tests
- Zeroes the CS words that pertain to the current test information.

5.61 The RAFCHK is entered every 4 seconds from ECMP to determine test results of the previous test call if one occurred. A check is first made to see if RADR has been inhibited. If so, control is returned to ECMP; otherwise, another check is made to determine if a test was performed during the last 4-second interval. If so, traffic counts associated with the test call are administered. After processing the test results, including the setting of the TOC02 flag if the threshold value was exceeded, control is returned to generate a TNN for the next RADR test.

5.62 Entry is made to RAGENR every 100 ms from ECMP to generate a suitable TNN. If a satisfactory TNN is not found or until the 4-second entry to simulate the seizure occurs, a total of 120 TNNs are considered before a test call is skipped. The routine checks the TNN for the following:

- Within office range

- Assigned
 - 1-way or 2-way
 - Not operator, by-link, or make-busy
 - MF, TDP, or RP impulsing
 - Defined by office parameters
 - Idle when selected
- 5.63** The chosen TNN is converted to a scanner number by RASEIZ and placed in the hopper word for processing by the supervisory scan trunk scanning routine, SUSC-MS. The scanning routine then places the record directly into the trunk seizure and answer hopper as if it had gotten a real report on this trunk. RASEIZ then returns control to ECMP.
- 5.64** If queuing for a POB is required, entry is made from the trunk and service circuit maintenance control (TNKC) program to RAPBQR. The purpose of RAPBQR is to make an attempt to seize a POB for SD point administration. The SDs are administered according to receiver types specified in the office.
- 5.65** When the POB has been activated, either successfully or otherwise, it is made idle by RAIPOB and control is returned to the main program.
- 5.66** When seizure of the POB is seen on the trunk, RALDMF will load the necessary relay orders to do a pseudo connection of an MF or DP trunk to its associated receiver. This loading function is performed by RALDRP if a RP trunk is used. If there is an incoming call that requests usage of the trunk, connection is made to the receiver, thus allowing normal processing of the call rather than forcing the seizure back through the trunk service and answer hopper. If the test was a success (less than 3 seconds since hopper was loaded), the success bit in R3RDTO is set and both receiver and trunk restored.
- 5.67** Every 30 seconds an entry is made to RAUPDT from ECMP to update the SD points on the network management indicator circuit for RADR failure percentage display.

5.68 Hourly, an audit of the up-down failure counters and result registers is performed by RAAUDT. Only those registers of valid receiver types are audited. The purpose of this audit routine guarantees that the up-down counter containing the number of test failures in the last 50 tests are correct.

5.69 Every 5 minutes, entry is made to RA5MIN from the network management program NMGT to determine if any threshold values have been exceeded in the last 5-minute interval. If so, a request is made for printing an NM17 output message. The exception indicators are zeroed and control is returned to the main program.

5.70 At the request of TTY input message RAD-STATUS, an NM17 output message containing the current contents of the up-down counters in the RADR result registers R3RGMF, R3RGDP, and R3RGRP are printed by global RASTAT. If RADR tests are inhibited or if parameters specify no tests can be run, an NG will be tacked onto the input request. If the TTY output hopper is full, an NG will be tacked onto the request. Otherwise, an OK is tacked onto the request and printed with the NM17 message.

E. Multiline Service Observing (SOBR) Program

5.71 The SOBR program provides means by which an operator, at the centralized service observing desk, can monitor various types of calls during the processing procedures. It connects a service observed line to the service observing circuit whenever the observed line originates a call. The SOBR program is activated by a recent change TTY input message that places a service observing indicator in the LEN translation, while at the same time, the service observed line is manually connected with patch cords at the main frame to one of the four available service circuits within the office. The program also releases the line from the circuit at the appropriate signal.

5.72 The SOBR program is entered at SORSOC from the dialing connection program for lines (DNCT). Upon entry, the program checks the register activity bit in a 2-word service observing register (4 per system) associated with the service observed LEN. If the service observing register is busy, call control is returned to DNCT. If not, transfer is made to the scan point change director program which interrogates two scan points, RLS

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and AWT, to determine if the service observing circuit is available. If either the release (RLS) or awaiting call (AWT) scan point is busy, no connection will be made. However, if the RLS scan point is active, the T2 bit will be set to accept so that the CHGD program will recognize and cause an entry at SODLSO which will release the circuit. If both the service observing register and circuit are idle and awaiting a call, the control pulse distributor (SPD) will receive instructions to connect the particular loop to the service observing circuit. Transfer is then made to ECMP at TIMENR which controls a 100-ms time delay before allowing a check of the connection. A successful connection of the circuit causes the AWT scan point to change states. If it has changed states, transfer is made to the main program. If not, transfer is made to IOCP which causes the TTY to print a message indicating that the connection has failed. After printing out the failure message, the program transfers to the release routines.

5.73 The portion of SOBR that causes release of the service observing circuit may be entered at either SOMESS or SODLSO, depending upon the disconnect requirement. If the TTY input message SO-RESTORE-a is typed, the program is entered at SOMESS. A transfer is then made to TYMI which causes an "OK" output message. However, if the supervisory scan of RLS scan point caused the releasing of the circuit, an entry is made at SODLSO. Otherwise, entry is made at DISC which resets all 10 CPD points. Then, after obtaining a 100-ms time delay, a transfer is made to the scan program which determines if the circuit had released. If not, transfer is made to TYMI which causes circuit release failure message to be printed on TTY. Otherwise, control is returned to the main program.

F. Direct Distance Dialing Service (DDDO) Program

5.74 The DDDO program provides observation of DDD outgoing traffic from centralized service observing office. When this type of call enters the system, a seizure signal is sent to the supervisor desk during a request for observance. If the operator accepts a call, a transmission path is established. The called number is outpulsed by an MF transmitter to the observing desk. The program controls the dedicated DDDO observing circuit to send to the operator a signal which indicates various steps in the program of the call by lighting or extinguishing supervisory lamps.

The program recognizes the release of the circuit by the operator and the circuit is restored to the idle state.

5.75 DDDO has seven global entries.

- DDSOOL—Entry point if overlap pulsing (interoffice) was indicated.
- DDSOSZ—Entry point from AMA program after ORDL has determined the line to be observed.
- DDTNTB—Entry point if hardware failure occurs.
- DDDRLS—Entry point when DDDO circuit is released by observer.
- DDOPSC—Entry point from ECMP for 500 ms when a seizure signal is sent.
- DDOPRT—Entry point at end of outpulsing.
- DDOPAB—Entry point if abandon occurs while outpulsing.

5.76 When an outgoing call is determined by the digit analysis program (ORDL) to be interoffice, control is passed to the AMA program. If an AMA register is required and seized, transfer is made at either DDSOOL or DDSOSZ. This subroutine performs a series of tests to determine if the call should be service observed. The major class of the call is checked to see if it is a coin call. Only noncoin calls are accepted for DDD service observing. A check is made to see if the operator's desk is ready to accept the call. If not, control is returned to the client program; otherwise, a seizure signal is sent in an attempt to seize an idle position at the desk. The release (RLS) feared is scanned. The operator is allowed 800 ms, after the seizure signal is sent, to accept the call for observation. If the call is not accepted within this period of time, the call will not be observed.

5.77 At the time the seizure signal is sent to the observing desk, entry is made at DDOPSC. A 500-ms scan program, controlled by ECMP, checks for a reported answer. If received, control is returned to ECMP; otherwise, the dialed digits stored in the originating register are transferred to the DDDO register, and outputted to the desk

by transferring to an entry in the MF digit transmission program.

5.78 Entry is made at DDOPRT after the called number has been outpulsed to the desk and it is determined that the line trunk path is connected. A DDDO register is initialized and transfer is then made to global CIXAM of the CICS program which sends a seizure signal to the desk to extinguish the S lamp at the desk. Transfer is made to CIN11H which then makes an attempt to establish a transmission path via the no-test vertical on the trunk junctor switching frame.

5.79 If because of a busy or blocked condition this path cannot be established, transfer is made to CICS which causes the TRK lamp to flash. If the calling party is connected to a tone trunk, transfer is made to the tone connection program. DDDO upon receiving a tone report makes a request for the DDDO register to become the master at OFBRG. DDDO seizes the POB prior to start of the tone report when this request is honored. The path memory of the line-to-tone trunk connectors is in the path memory annex (PMA) or the DDDO register. This connection will allow the observer at the desk to hear the tone that the calling party hears. If the call does not make connection to the distant office, the forward supervision (FSV) lamp will flash. Control is then passed to ECMP.

5.80 When the called party answers, DDDO subroutine ANSW1 causes a signal to extinguish the FSV lamp indicating the called line is off-hook. If after answer a special service such as add-on or conference is requested, the DDDO program does not establish connection to observe the new connection. A signal is sent to flash the TRK lamp at the desk requesting observer to terminate the observation. If an answer report occurred while the DDDO register is on a queue for a POB, the answer report will enter via the POB queue return slot in the PT table.

5.81 Entry is made at DDDRLS when the RLS key is operated. If the DDDO register is in the outpulsing state, control is given to ECMP. If the tone path is connected, it is released; also released are the DDDO register and circuit. If not, the observing bridge connection is taken down, the DDDO register and circuit is released, and the disconnect is reported. DDDO performs a down-check test on the circuit by scanning the

in-service ferro to see if it returned to the idle state properly.

6. GLOSSARY

Average Holding Time	Number of active elements for a given facility divided by the number of seizures times the number of seconds. The number of seizures is the difference between the number of peg counts and the number of overflows that occurred during the time interval.
Occupancy	Sum of (a) percent of time spent on call processing, and (b) percent of time spent on noncall processing that is not relinquishable to call processing.
Standard Deviation	Square root of the moving variance
Threshold Value	Engineered High Day Calls for a given traffic type in calls per updating interval

7. ABBREVIATIONS AND ACRONYMS

ATP	All Tests Passed
AOVD	Automatic Overload Control Program
DDDO	Direct Distance Dialing Observing Program
DTST	Dial Tone Speed Test Program
ECMP	Executive Control Main Program
ESS	Electronic Switching System
ICOP	TTY Input-Output Program
LLC	Line Load Control
LLOD	Line Load Control Program
MCTW	Lamp and Key Program
MIRV	Memory Integrity and Recovery Program

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NMFL	Network Failure Maintenance Action Program	B. Section 231-045-100 Operational Subsystem
OMR	Output Message Register	C. Section 231-045-105 Call Processing—POTS Subsystem
PDA	Parameter Data Assembler	D. Section 231-045-106 Call Processing—Centrex Subsystem
PPMP	Plant Management Program	E. Section 231-045-135 Charging Subsystem
RADR	Receiver Attachment Delay Report Program	F. Section 231-045-155 Queue and General Purpose Subsystem
SOBR	Multiline Service Observing Program	G. Section 231-045-165 Measurement Subsystem
STF	Some Test Failed	H. Section 231-045-170 Network Management Subsystem
SYPI	System Performance Indicator Program	I. Section 231-045-205 System Verification and Recovery Subsystem
TCNT	Traffic Counts Program	J. Section 231-045-250 MCC Man-Machine Interfacing
YAHA	Seize and Release Routine, L-, J-, and T-Bit Administration Program	K. Section 231-045-265 Teletypewriter Programs Subsystem
		L. Section 231-045-270 Network Fabric Maintenance Subsystem

8. REFERENCES

A. Section 231-045-000 Introduction to No. 1A ESS Software

Nortel DMS-100 Line Module Ring Code Table (LMRNG)

Table Name

Line Module Ring Code Table

Functional Description of Table LMRNG

Table LMRNG specifies the type of ringing assigned to each Line Module (LM) or Remote Line Module (RLM). The following types of ringing are supported:

- Coded ringing based on cyclic variation of 20 Hz.
- Coded ringing based on cyclic variation of 30 Hz.
- Coded special ringing based on cyclic variation of 20 Hz.
- Frequency ringing.
- Superimposed ringing.

The type of ringing for Line Concentrating Modules (LCM), Remote Line Concentrating Modules (RLCM), International Line Concentrating Modules (ILCM), International Remote Line Concentrating Modules (IRLCM), ISDN Line Concentrating Modules (LCMI), and Enhanced Line Concentrating Modules (ELCM) is specified in table LCMINV.

Regular type audible ring is returned to the calling party for all types of ringing. On revertive calls, ring splash is applied to the originating line (with the exception of Coded Ringing Based on Cyclic Variation of 30 Hz and Frequency Selective Ringing).

A Line Module Equipment (LME) frame and a RLM frame have two ringing generators and two LCMs. Under normal operating conditions, one ringing generator serves one LCM. If one of the ringing generators on a frame fails, the remaining ringing generator serves both LCMs on the frame.

The maximum number of lines that can be assigned to a LM bay is 640, or 1,280 for each LME frame. The switching unit can have a mixture of frequency, coded, and superimposed ringing. Only one type of ringing can be assigned for each LME frame (1,280 lines).

Coin Presence Voltage

The standard coin presence test uses a -52 VDC source from the ringing generator applied to the tip side of the coin line. If more than 10 mA of current flows during this voltage application (250 ms), the presence of the initial rate in the coin slot is indicated.

To accommodate local coin overtime, a partial coin presence test using +52 VDC from the ringing generator is used. If more than 10 mA flows, the presence of a coin or coins (any denomination) in the coin slot is indicated.

If the coin presence test voltage (field CNPRESV) in table LMRNG is set to "25V", then -25 VDC is used to test for initial deposit and +25 VDC is used to test for partial coin presence.

On short loops, -52 VDC coin presence can cause activation of the coin return and collect relay due to low internal resistance of the coin return and collect circuit on the coin phone. Coin phones on loops having a loop resistance of less than 200 ohms can experience this. Some examples of coin relay operating currents are shown in the following table:

Examples of Coin Relay Operating Currents

Coin Unit	Operate Current	Non-Operate Current
Western Electric 1C/2C	41 mA	30 mA
Automatic Electric 120B	48 mA	39 mA

Coin dialtone—first phones on short loops must be wired to a LM datafilled in table LMRNG with a –25 VDC coin presence voltage. Coin—first phones do not undergo a coin presence test for the initial rate; but, if local coin overtime is active, a coin presence test is used for the overtime rate and coin—first phones on short loops must be wired to a LM datafilled in table LMRNG with a +25 VDC coin presence voltage.

The coin presence test fails if the coin presence test current is less than 10 mA. Coin phones on long loops from a LM using –25 VDC coin presence can experience failures due to loop resistance. The maximum allowable loop resistance for a coin phone using –25 VDC coin presence tests is 1,200 ohms. If a LM does not have any short-loop coin phones wired to it, the LM must use –52 VDC coin presence.

Coded Ringing Based on Cyclic Variation of 20 Hz

Coded 20 Hz ringing is provided for multiparty lines if the ringers of all parties on the tip side or all parties on the ring side are rung simultaneously. Each of the parties on the tip or ring side has a different ringing code, to differentiate between parties.

Single-party and two-party lines are assigned ringing code "0" in table LENLINES. The ringing cycle is two seconds *on* and four seconds *off*. The six-second ringing cadence for each of the five available ringing codes is shown below in the following table:

Ringling Cadences for Coded 20Hz Ringing

Ringling Code Input for table LENLINES	Ringling Code	On	Off	On	Off	On	Off (seconds)
0	Code 0	2.0	4.0				
1	Code 1	1.5	4.5				
2	Code 2	1.5	0.5	1.5	2.5		
3	Code 3	1.5	0.5	0.5	3.5		
4	Code 4	1.5	0.5	0.5	0.5	0.5	2.5
5	Code 5	1.5	0.5	0.5	0.5	1.0	2.0

The maximum number of lines on a LM bay (640 lines) that can ring simultaneously is 15 for each ringing generator.

Coded Ringing Based on Cyclic Variation of 30 Hz

Coded 30 Hz ringing provides distinctive ringing patterns at 30 Hz to differentiate the type of call, ringing patterns for ring again and call back queueing, ring splash for call forwarding, and emergency service bureau ring back.

Coded 30 Hz ringing does not support two-, four-, eight-, or ten-party lines, or revertive splash ringing. The six-second ringing cadence for coded 30 Hz ringing is identical to the ringing cadence for coded 20 Hz ringing.

Coded Special Ringing Based on Cyclic Variation of 20 Hz

Coded 20 Hz special ringing provides four short (0.5 seconds) bursts for Ring Code 5, as shown below in the following table.

Ring Codes 0 to 4 and their cycles are identical to the ring codes for coded 20 Hz ringing shown in the following table

Ringling Cadence for Coded 20 Hz Special Ring Code 5

Ringling Code	On	Off	On	Off	On	Off	On	Off (seconds)
Code 5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	2.5

Superimposed Ringing

Superimposed ringing is used for semiselective ringing on eight-party lines and fully selective ringing on four-party lines. With superimposed ringing, the 90 VAC, 20 Hz ringing current is biased with 40 or 48 VDC (as specified in field PROMVOLT of table LMRNG) and is dependent on the type of PROM used in the ringing generator.

Single-party and two-party ring-side lines are assigned "Ringling Code 1-". Two-party, tip-side lines are assigned "Ringling Code 1+". The six-second ringing cadence for each of the four available ringing codes is shown below in the following table:

Ringling Cadences for Superimposed Ringling

Ring Code Input for Table LENLINES	Ringling Code	On	Off	On	Off (seconds)
1	1-	2.0	4.0		
2	1+	2.0	4.0		
3	2-	1.0	0.5	0.5	4.0
4	2+	1.0	0.5	0.5	4.0

The maximum number of lines on a LM bay (640 lines) that can ring simultaneously is 15 for each ringing generator.

Frequency Ringling

Frequency ringing uses a different frequency and a specially tuned ringer for each party.

Four types of frequency ringing are available: decimonic, harmonic, synchronic 16, and synchronic 20. Each LM can be assigned four of the five available frequencies. The four frequencies selected are datafilled in table LMRNG.

The primary frequency for a LM is the frequency in table LMRNG assigned as "frequency A," not necessarily the lowest frequency.

Multiparty lines are assigned as frequencies A, B, C, and D. Single-party lines assigned to Ring Code 0 in table LENLINES receive the primary frequency (frequency A).

The following table shows the five frequencies available for each of the types of frequency ringing, the ringing code used to access each, and the maximum number of lines on a LM bay (640 lines) that can ring simultaneously for each ringing generator.

If the frequency is a partial number (for example, 16.67 Hz), for input purposes the frequency is rounded off to the next highest number. The numbers used as input for these frequencies are enclosed in brackets and are shown after the actual frequency in the following table.

Frequencies Available for Frequency Ringing Types

Ring Code Input for Table LENLINES	----Decimonic----		-----Harmonic-----		---Synchronic-----		
	Frequencies	Lines	Frequencies	Lines	Frequencies (16)	(20)	Lines
0	Primary		Primary		Primary		Primary
1	20	12	16.67 (17)	15	16	20	12
2	30	9	25	11	30	30	9
3	40	6	33.33 (34)	7	42	42	6
4	50	4	50	4	54	54	4
5	60	4	66.67 (67)	3	66	66	3

Each LM can be assigned only four frequencies. If the ringing code of the fifth frequency is specified, the ringing code for the line defaults to the primary frequency.

If the ringing code in table LENLINES is 0 (zero), the station is assigned the primary frequency and a six-second ringing cycle of 1.95 seconds ringing *on* and 4.05 seconds ringing *off*.

If the ringing code in table LENLINES is 1 to 5, the station is assigned the six-second ringing cycles for frequencies A, B, C, and D as shown in the following table:

Ringing Cycles for Frequencies A, B, C, and D

Frequency	Off	On	Off (seconds)
A (primary)	0.60	1.35	4.05
B	1.95	1.35	2.70
C	3.30	1.35	1.35
D	4.65	1.35	1.35

The hardware Product Engineering Codes (PEC) that support the various ringing types are shown below in the following table:

Ringing Generator Interface Types and PECs

Hardware PEC	Ringing Types Supported
2X27AA	Coded 20 Hz and Superimposed
2X27AB	Decimonic and Coded 30 Hz
2X27AC	Harmonic
2X27AD	Synchronic 16
2X27AE	Synchronic 20

Datafill Sequence & Table Size

Table LMINV must be datafilled before table LMRNG. Size is 0 to 512 tuples.

Datafill

The following table describes datafill for table LMRNG:

Table LMRNG Field Descriptions

Field	Subfield	Entry	Explanation and Action
FRAMENO		See Subfields	<i>Frame Number</i> This field consists of subfields SITE and FRAME.
	SITE	Alphanumeric (1 to 4 characters or blank)	<i>Site</i> If office parameter USINGSITE in table OFCOPT and office parameter UNIQUE_BY_SITE_NUMBERING in table OFCENG are both equal to "Y" (yes), and if the line is remote from the host, enter the site name assigned to the remote location. Otherwise, if the line is located at the host, leave the subfield blank and SITE is datafilled by default with HOST. If parameter USINGSITE in table OFCOPT is equal to "Y" and parameter UNIQUE_BY_SITE_NUMBERING in table OFCENG is equal to "N" (no) (numbering is unique by office), the entry in subfield SITE is optional. If SITE is entered, it is checked for a match in one of the tables to which lines are assigned. If SITE is not entered, it is not datafilled by default and is not checked against one of the tables to which lines are assigned. The first character of all entries for this subfield must be alphabetic. If office parameter USINGSITE in table OFCOPT is equal to "N", leave this subfield blank.
	FRAME	0 to 511	<i>Line Module Frame Number</i> Enter the LM or RLM frame number. Frame numbers for NT40 range from 0 to 127. Frame numbers for SuperNode range from 0 to 511.
CNPRESV		52V or 25V	<i>Coin Presence Voltage</i> Enter the voltage to use for coin presence tests.
RNGDATA		See Subfields	<i>Ring Data</i> This field consists of subfield RNGTYPE and refinements FREQUENCIES and PROMVOLT.
	RNGTYPE	C, CSR, C30, F, S, or UNASSIGNED	Ring type Enter one of the following types of ringing to assign to the line module: "C" for coded ringing based on cyclic variation of 20 Hz. "CSR" for coded 20 Hz special ringing. "C30" for coded ringing based on cyclic variation of 30 Hz. "F" for frequency ringing and datafill refinement FREQUENCIES

"S" for superimposed ringing and datafill refinement PROMVOLT

"UNASSIGNED" if changing the ring type of a tuple.

Note: Values C5A, C5B, C3C, or C3D can appear in the range of entries for field RNGTYPE; these are not valid entries for table LMRNG and are rejected if entered.

FREQUENCIES	See Subfields	<i>Frequencies</i> If the entry in subfield RNGTYPE is "F", datafill this refinement. This refinement consists of subfields A, B, C, and D.
A	16, 17, 20, 25, 30, 34, 40, 42, 50, 54, 60, 66, 67, or blank	<i>Frequency A</i> Enter the frequency assigned as frequency A (primary frequency).
B	16, 17, 20, 25, 30, 34, 40, 42, 50, 54, 60, 66, 67, or blank	<i>Frequency B</i> Enter the frequency assigned as frequency B.
C	16, 17, 20, 25, 30, 34, 40, 42, 50, 54, 60, 66, 67, or blank	<i>Frequency C</i> Enter the frequency assigned as frequency C.
D	16, 17, 20, 25, 30, 34, 40, 42, 50, 54, 60, 66, 67, or blank	<i>Frequency D</i> Enter the frequency assigned as frequency D.
PROMVOLT	40V or 48V	<i>PROM Offset Voltage</i> If the entry in subfield RNGTYPE is "S", datafill this refinement. Enter the PROM offset voltage required for the PROM in the ringing generator.

EXPRETRP	Y or N	<i>Extend Pretrip</i> If DMS-1 links are present in the LM, enter "Y" (yes) to extend the ringing pretrip to 200 ms. Otherwise, enter "N" (no).
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-End-

Datafill Example

Sample datafill for table LMRNG appears in the following example:

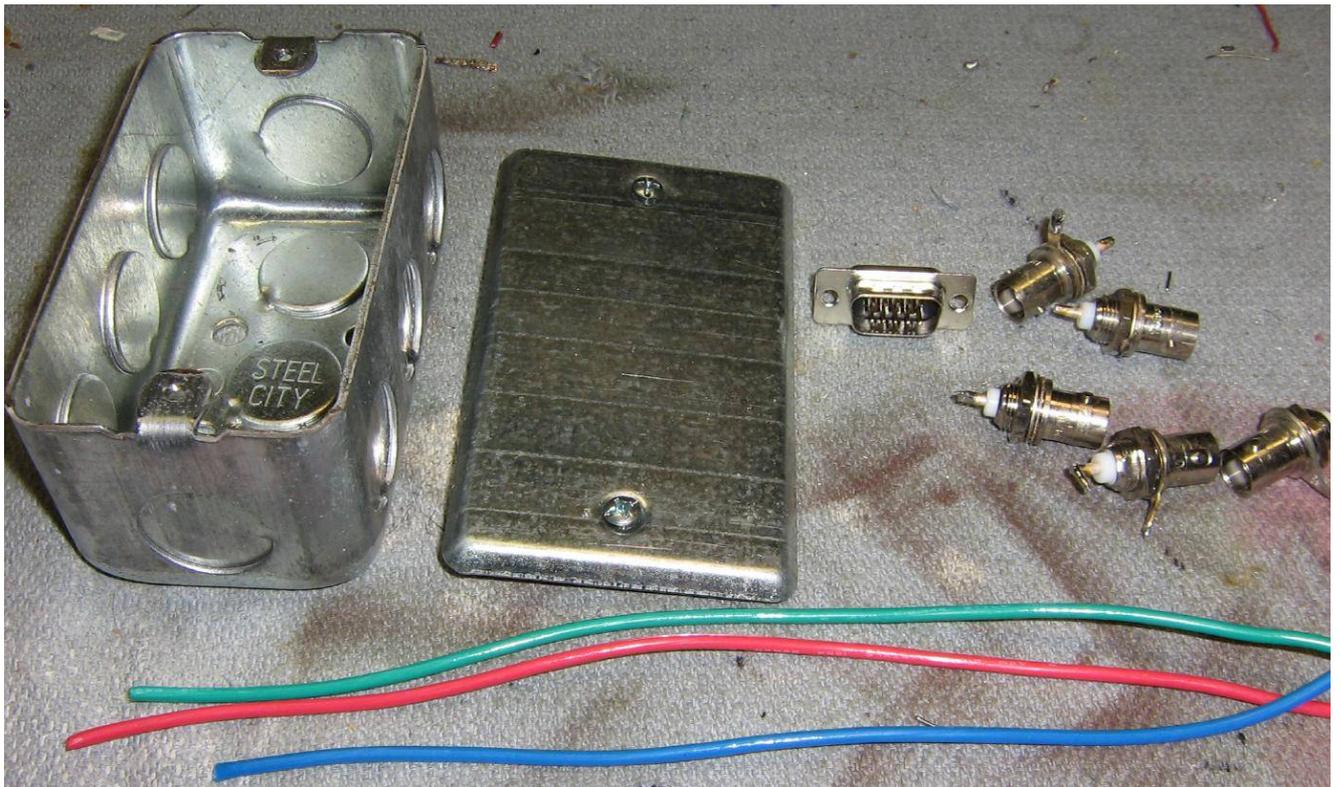
FRAMENO	CNPRESV	RNGDATA	EXPRETRP
HOST 0	52V	C	N

VGA Video Breakout Boxes

Overview

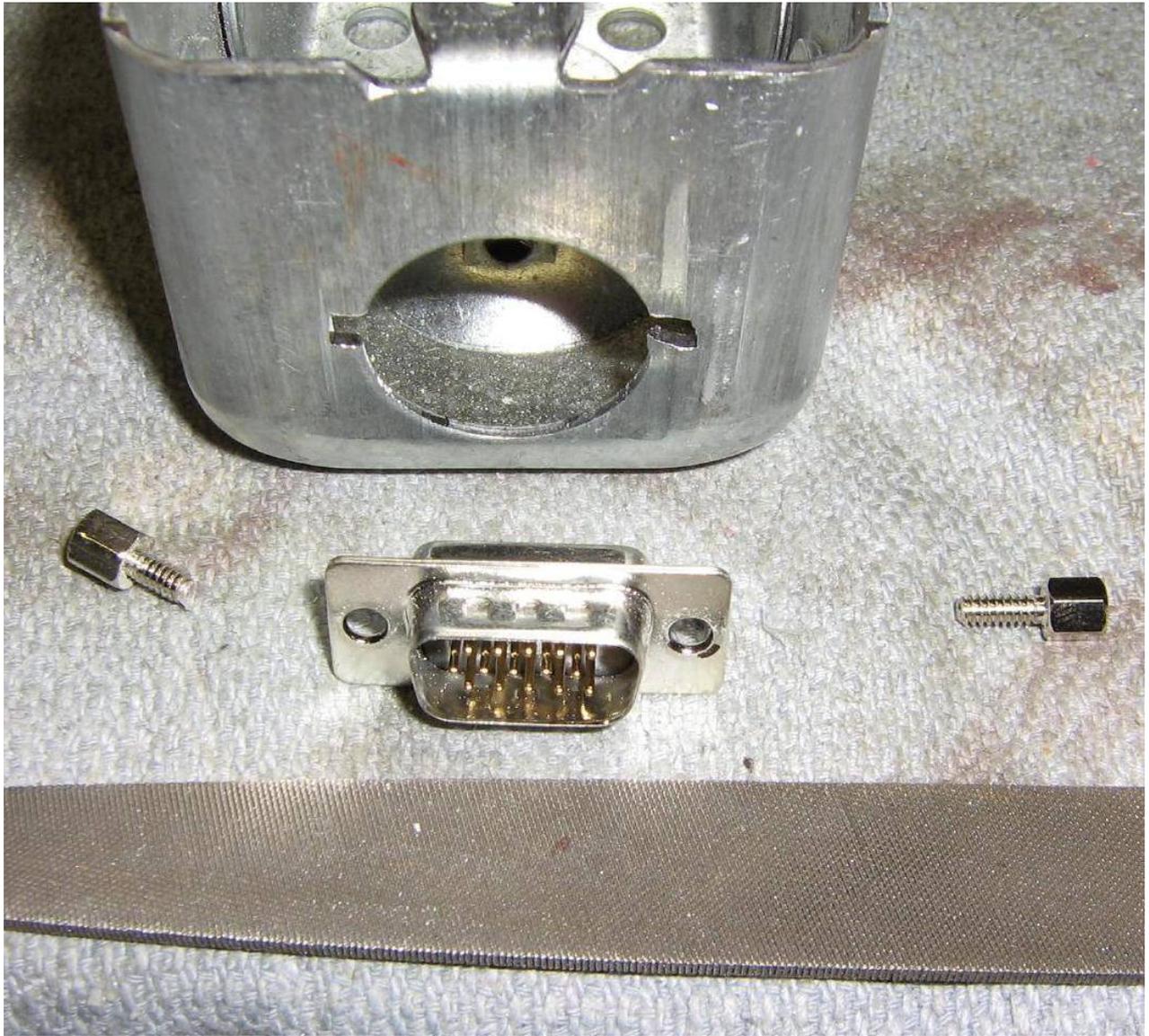
Video breakout boxes are handy little tools for experiments involving VGA video signals. These breakout boxes will come in handy if you are ever experimenting with "van Eck Phreaking." This is the infamous, and often misunderstood, method where you try to recreate a computer monitor's display by intercepting the RF "noise" the monitor or the video cable and card are radiating. To help recreate these images, you'll need to use a VGA video breakout box which will allow you to insert your own horizontal and vertical video synchronization signals, along with your newly recovered video input signal.

Construction Notes & Pictures

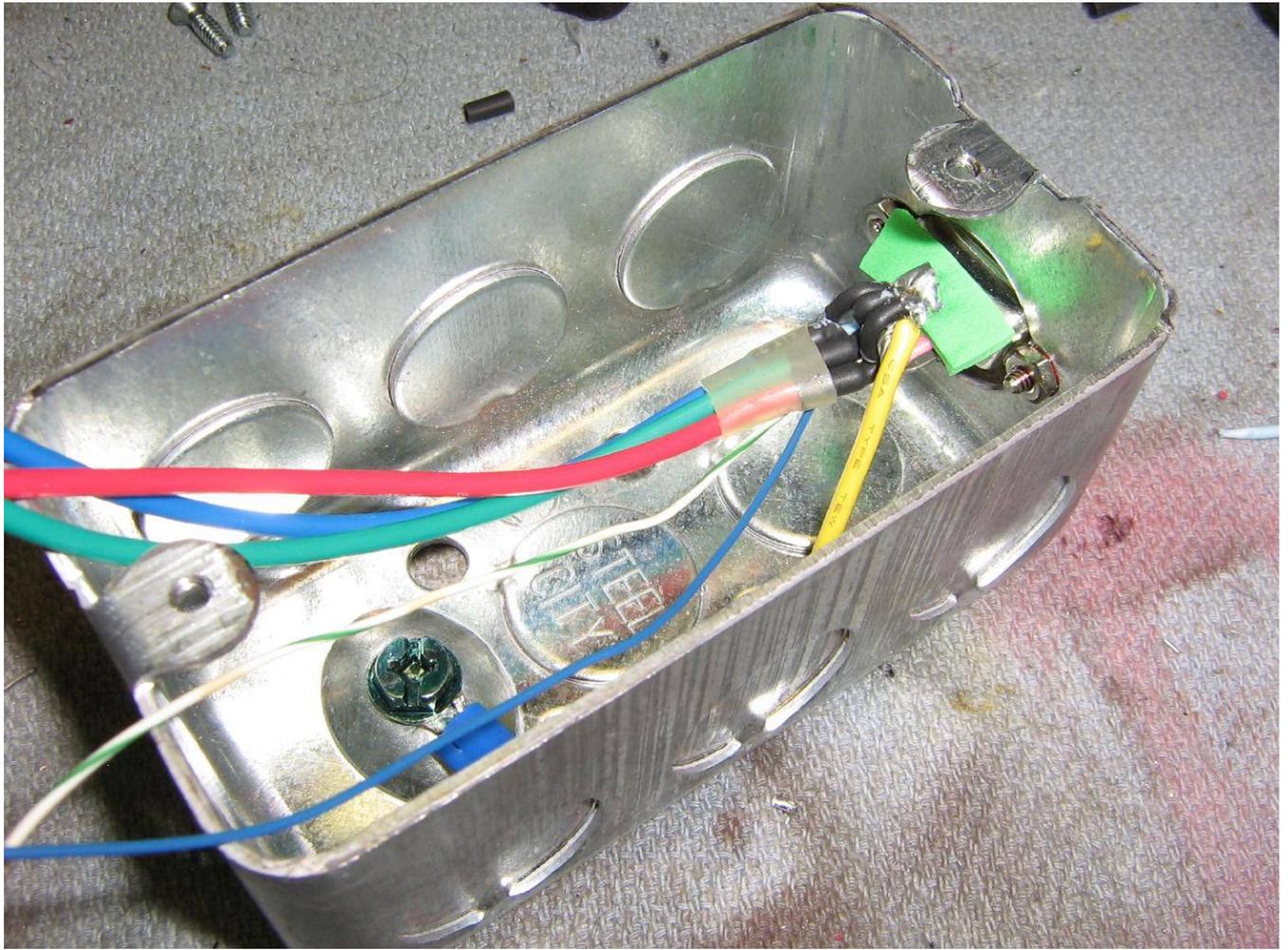


Parts overview. You'll need a metal outlet box and matching metal cover plate, some DB-15 connectors (both male and female versions), and a bunch of BNC connectors. Purists should use 75 ohm BNC connectors, but the regular 50 ohm version will work fine. You'll also want some 3/8-inch solder lugs for the BNC connectors.

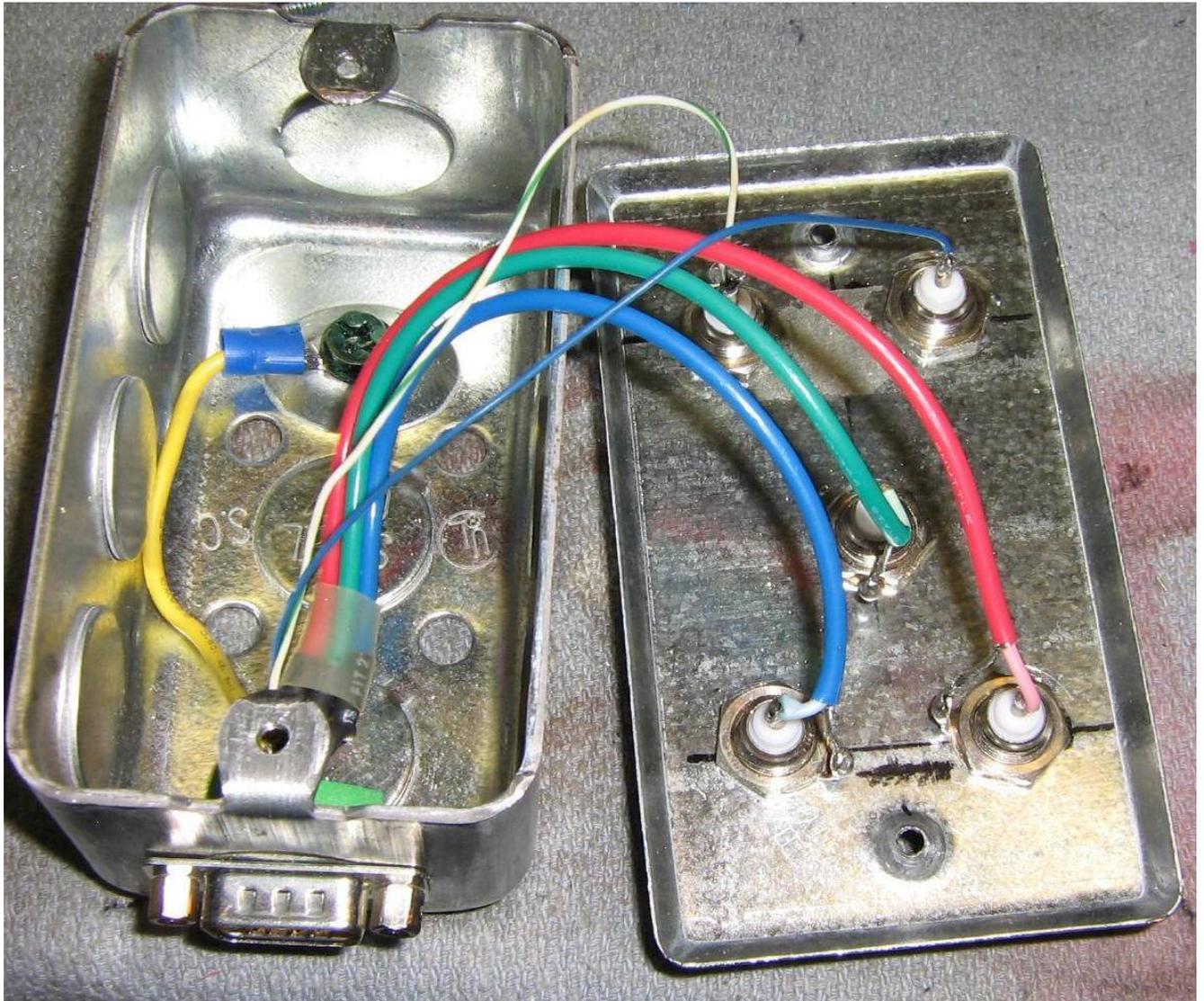
Salvage an old VGA video monitor for a source of small-diameter 75 ohm coaxial cable, as shown in the picture.



To mount the DB-15 connectors to the outlet box, you'll need to file little notches on the side of the knock-out plug hole. The notches will allow the connector's mounting hardware to secure the connector. You may need to place washers on the hardware if the notch is too big. Also be sure the notches are deep enough so the mounting hardware isn't fixed at an angle, which can block the insertion of the video cable. Use a little Loctite on the nuts to prevent loosening the DB-15 when you disconnect the video cable.

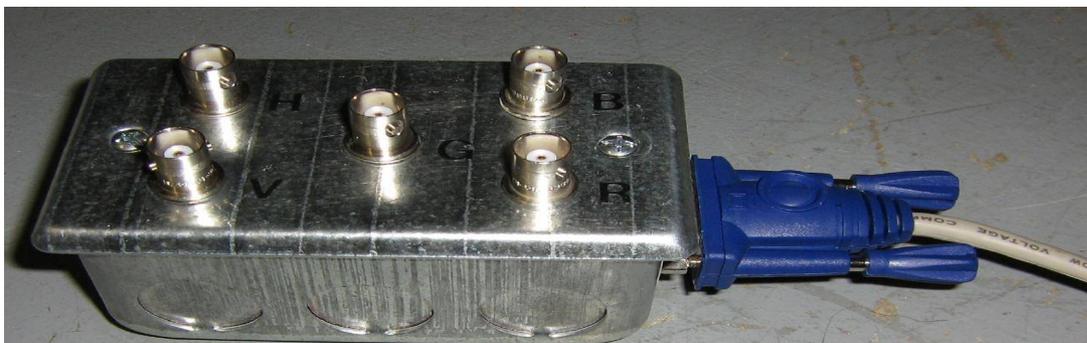


Wire up the first breakout box as shown in the schematic. Yes, it will be a pain. Remember to tie all the ground leads together, including a ground wire to the metal case. Note the green ground screw which has a wire going to the DB-15's common ground.

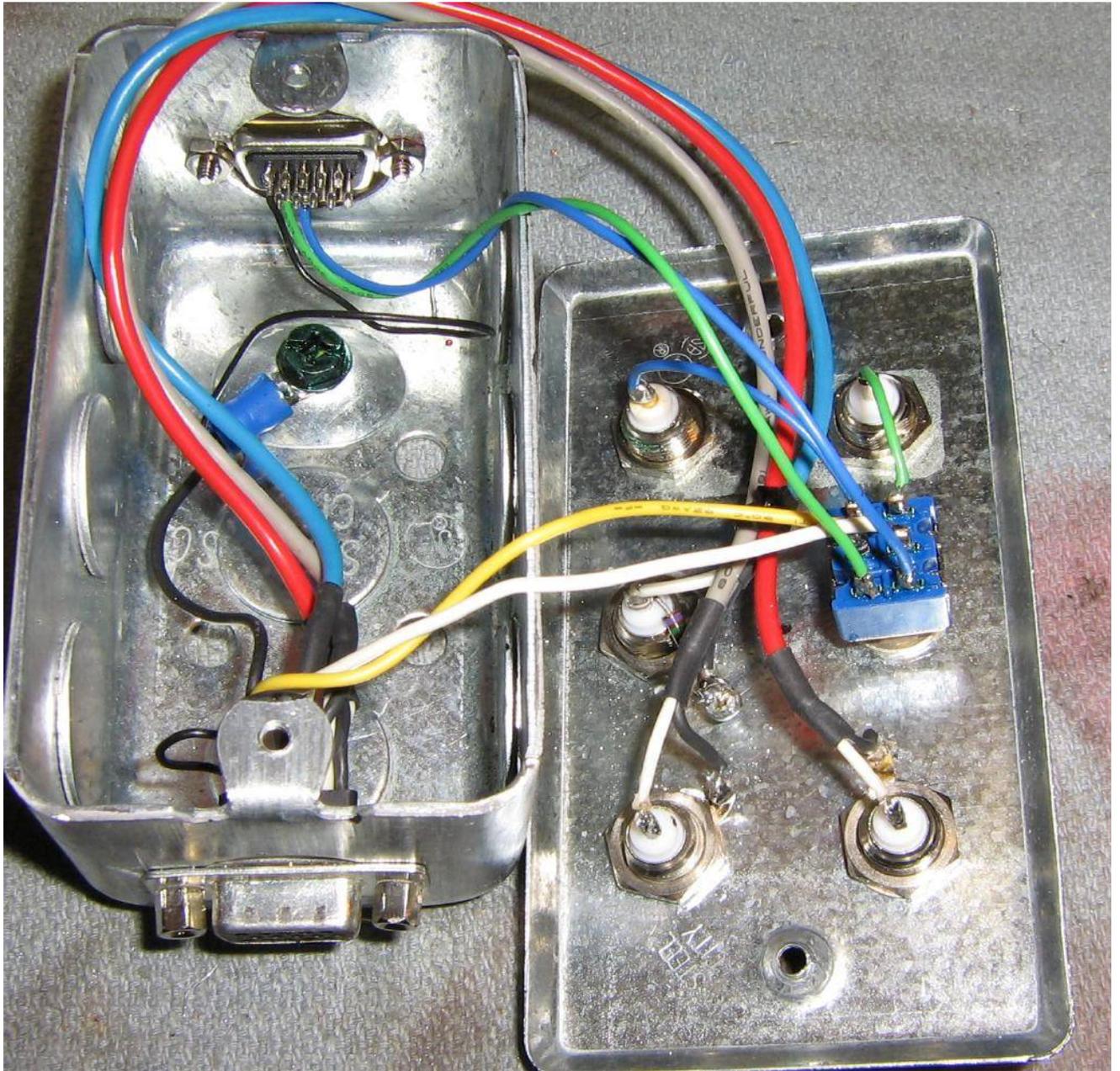


Drill five 3/8-inch diameter holes in the metal cover plate in a pattern you wish.

Connect the video and synchronization lines as shown. The video signals will need their integrity maintained by using coaxial cable and a good ground connection to the BNC connector. The horizontal and vertical synchronization lines can just be single wires.



Completed case overview. Use an extension video cable to connect the breakout box to the video card.



For the second breakout box, we'll do things a little differently. This version will allow you to insert your own video and synchronization signals. The toggle switch selects between using an external video card to generate the horizontal and vertical synchronization signals or injecting your own. Be sure both DB-15 connectors share a common ground.

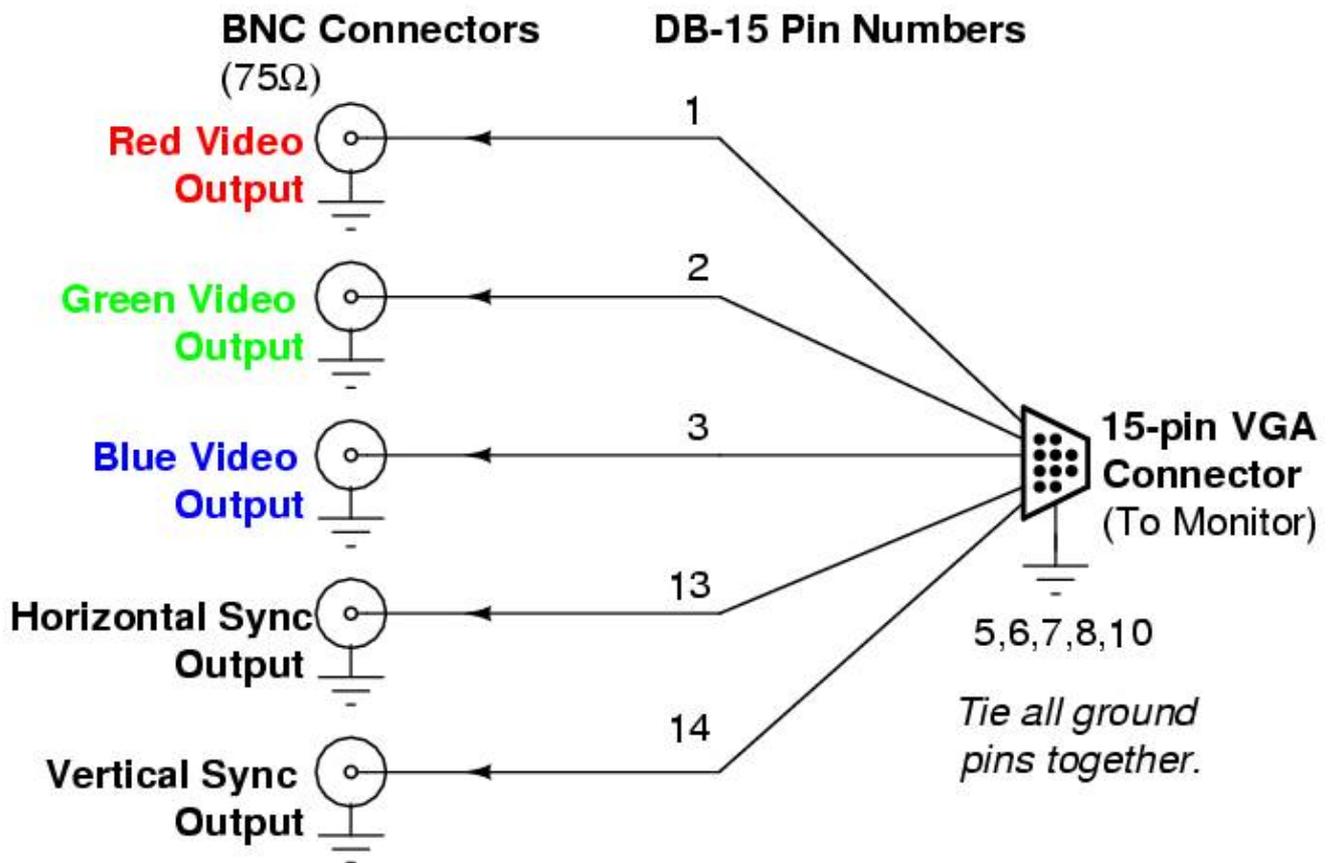
The **BLUE** video input line is terminated with a 75 ohm resistor. The other video inputs are left unterminated.



Completed case overview of the second version.

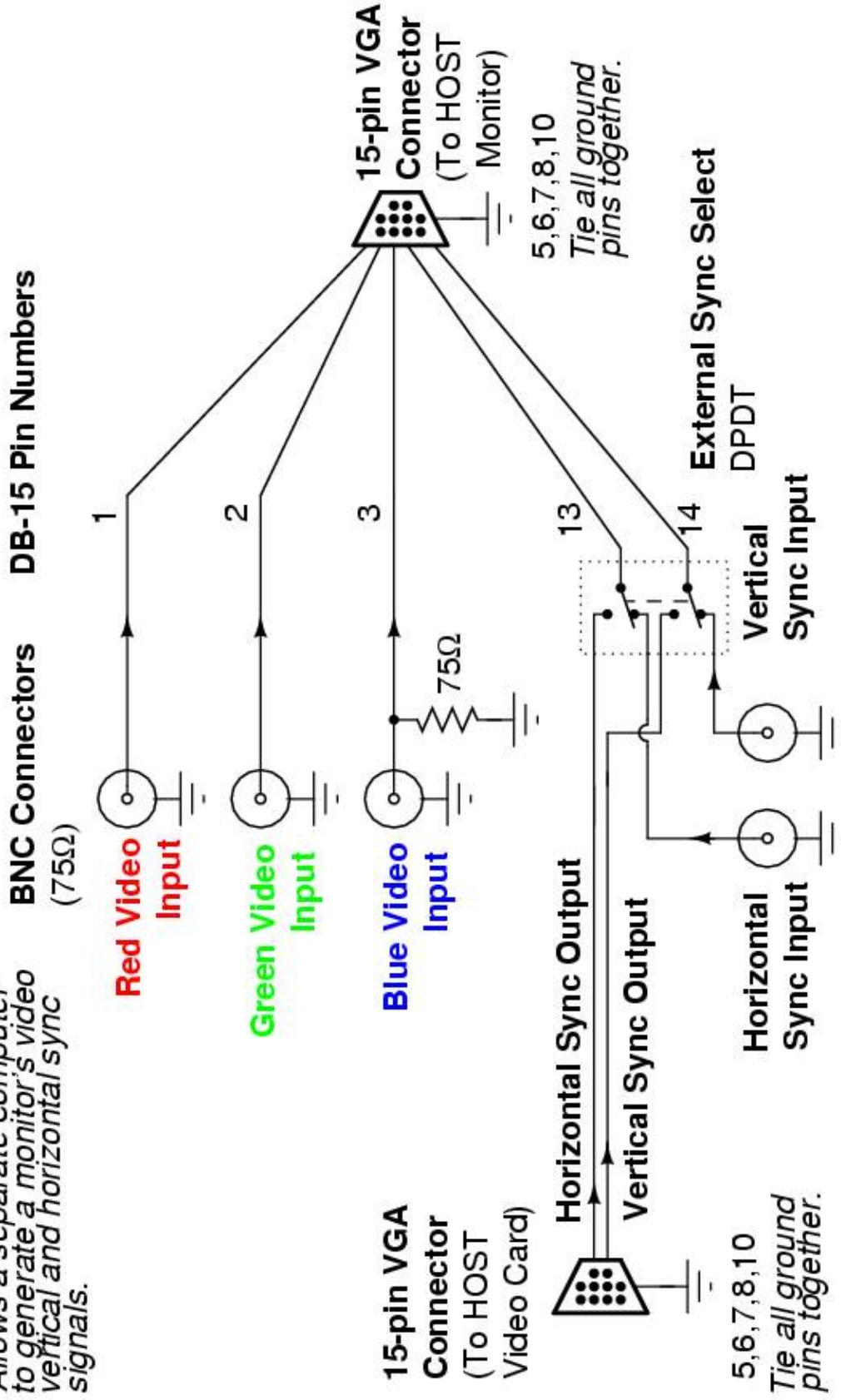
Schematics

VGA Video Breakout Box #1



VGA Video Breakout Box #2

Allows a separate computer to generate a monitor's video vertical and horizontal sync signals.



Fake Rock Hiding Space

Overview

There is always a need for a small, secure outdoor hiding space for your intelligence gathering follies. You too can be just like a professional agency, and hide your secret device directly in plain site. Fake tree stumps, rocks, squirrel nests, and logs all have been used by intelligence agencies at some point in time to hide their data collecting devices or to act as a drop site for contacting agents in the field.

For this project, we'll show you how to convert one of those stupid thrift store "plastic rock pictures" into an excellent outdoor hiding space for various objects.



This was a fake rock in Russia which was implanted with electronic communications equipment so MI6 officers could contact and exchange information with their Russian assets. Oh, if the communications link breaks – don't kick the rock.

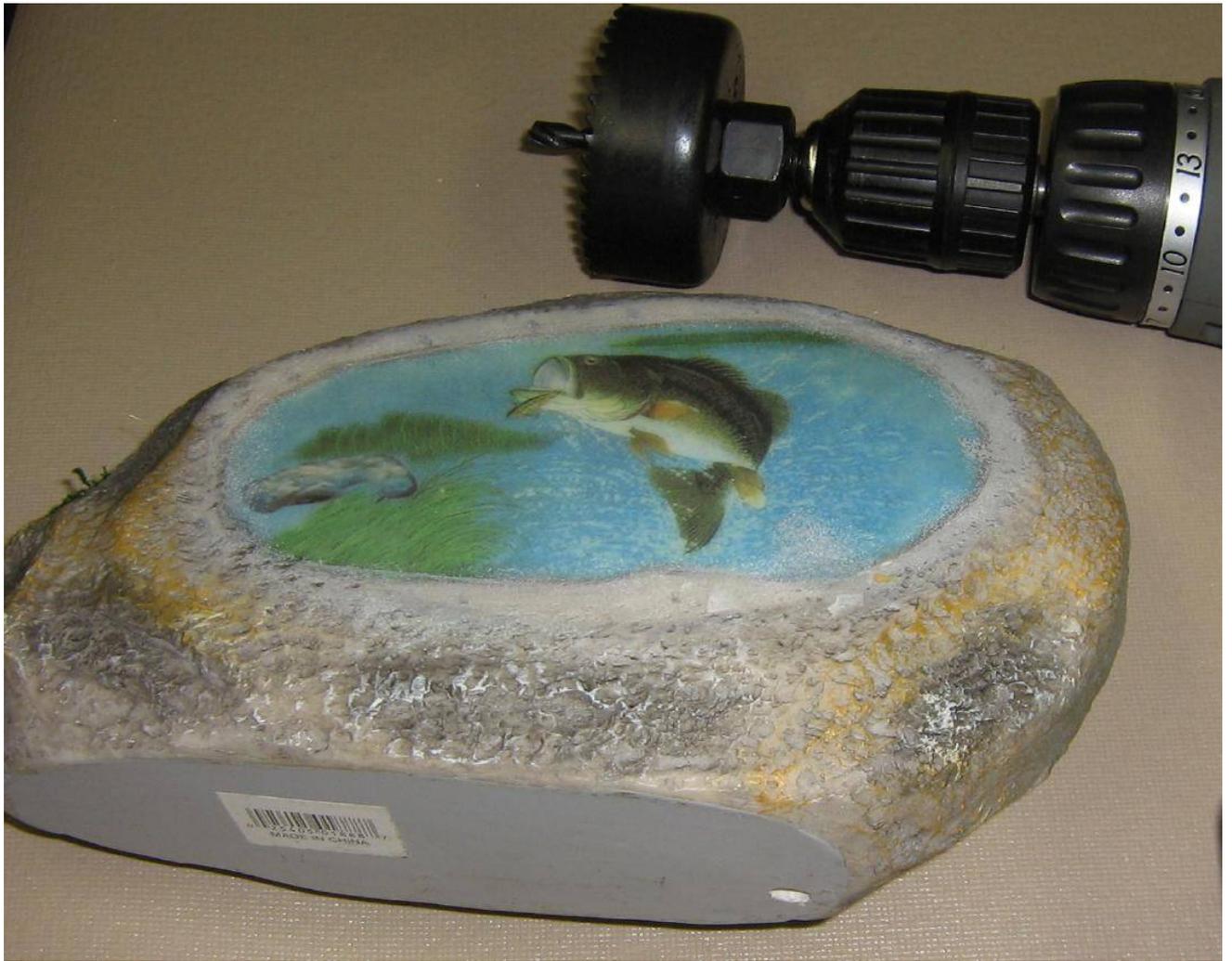
Construction Notes & Pictures



Look! A rock!



No, it's just a stupid plastic fish picture.



Lets drill the bastard!

Use a 2.5 inch diameter (or larger) hole saw to drill into the plastic rock.



Use a file to clean up the edges of the new hole.



You'll need to paint over the picture on the rock and also touch up the support base with different shades of camouflage spray paint. A little bit of gray, brown, and green where used here. You'll also need to fill the injection hole with some silicone sealant. You may want to try the hobby store for more realistic-looking paint or other artificial touch-ups to add to the rock.



Completed paint overview.



Now, onto sealing that big hole. A good method is to use a piece of sheet gasket rubber from the hardware store. The gasket rubber shown here was from a "Make Your Own Gasket" plumbing kit. Use a compass to draw a circle a little larger than the hole you drilled into the rock. Then cut out the rubber patch using a pair of tin snips.

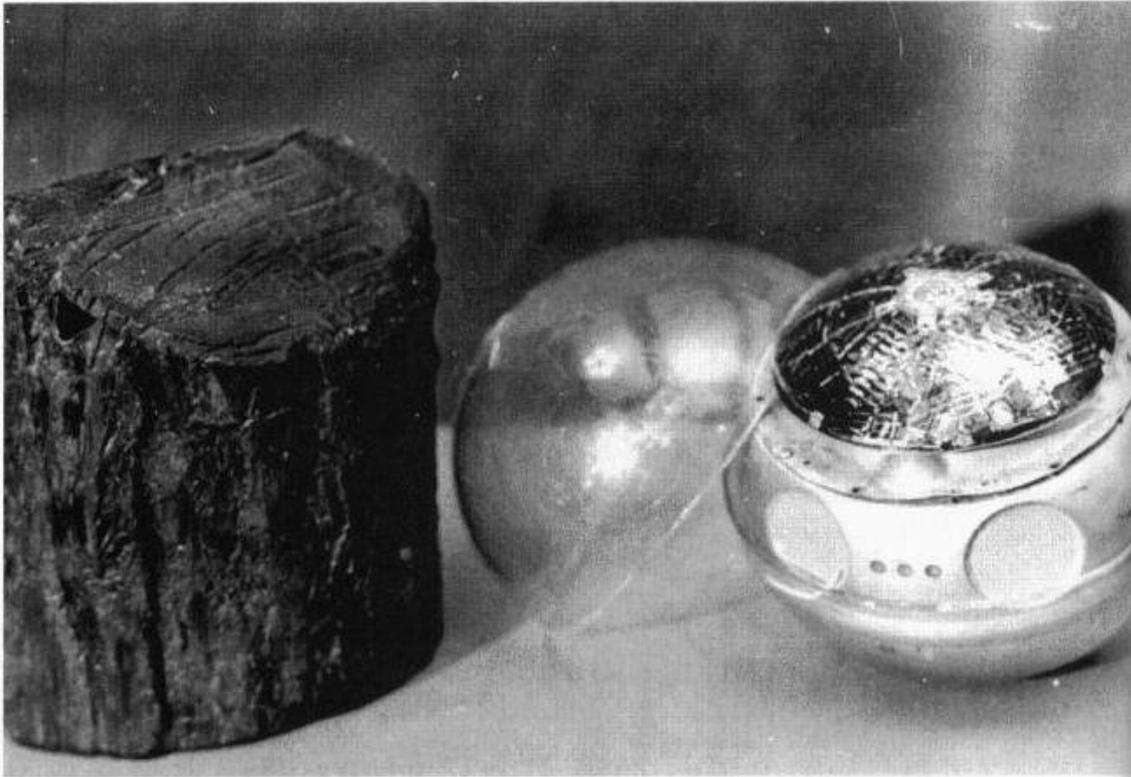
Next, you'll want to load your device into the rock. If the ultimate weatherproofing is required, fill the entire rock with silicone sealant. Be sure to leave room to get at any batteries.

Finally, to attach the rubber patch over the hole, squirt some removable weatherstripping sealant along the outside edge and place the rubber gasket over it. Remove any sealant overspill and press down on the patch until the sealant dries. Since the weatherstripping is removable, you can easily remove the patch and get access to the inside of the rock. Be sure to also paint the rubber patch.

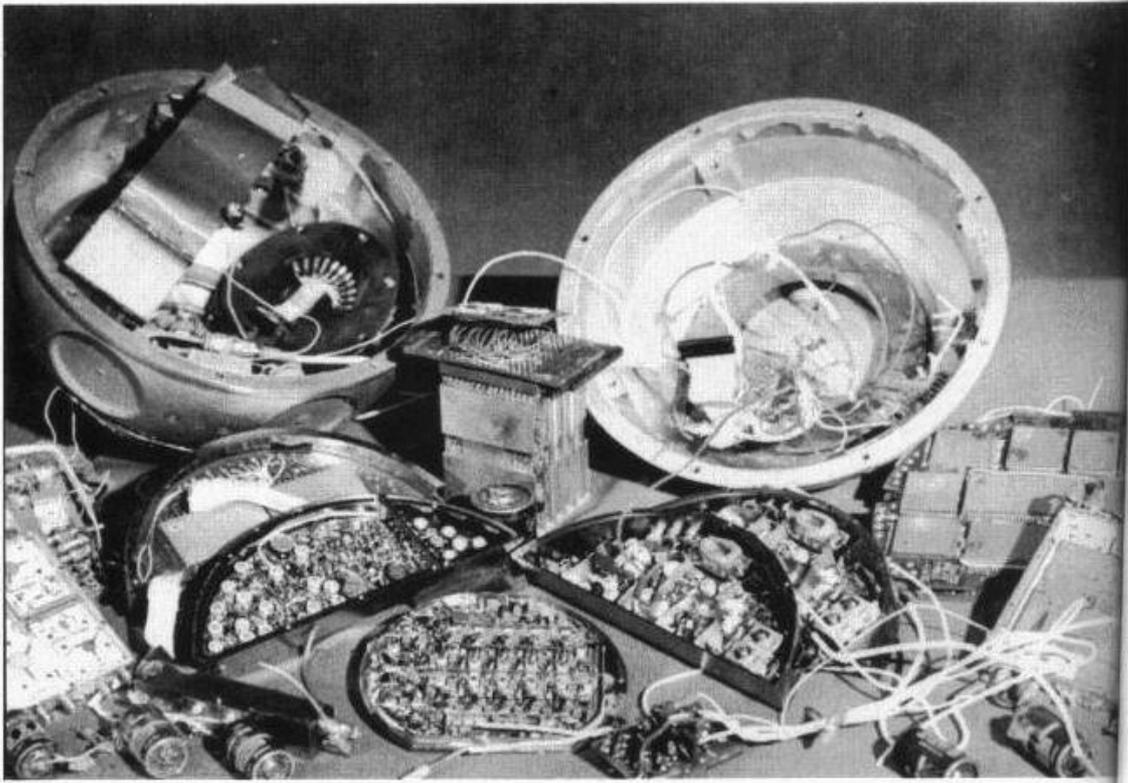


Another possibility for sealing the hole is to use some threaded PVC adapters. You'll have to make a little divot for the rock to sit in, but this could be really handy for any seismic sensors which may need to be placed in contact with the ground.

It could also be handy for adding a "ground" heatsink to avoid having your fake rock detected by a professional counterintelligence agency using thermal imaging equipment.



8 and 9. Two views of a tree-stump concealment with a high-tech sensor inside. This is an alleged CIA KAPELLE-type sensor deployed in the Soviet Union and subsequently discovered by the KGB Second Chief Directorate.



Bonus



Planting a "victory garden" in Portland, Oregon (1943).

Could you imagine all the screaming and crying if people had to do this today?

End of Issue #43



Any Questions?

Editorial and Rants

Let me guess... You didn't hear about this one?

Teen Charged In Deadly Attack On Clairton Woman

October 17, 2007 – From: www.kdka.com

By KDKA News

CLAIRTON – Investigators have arrested and charged a teenager in connection to the brutal stabbing death of an elderly woman in Clairton.

Florence Ranta, 82, was beaten, stabbed and robbed at her Third Street home on October 6. Neighbors found her covered in blood on her dining room floor.

She died four days later at Mercy Hospital.

Police have charged 15-year-old Johnie Washington III with criminal homicide, burglary, robbery and theft in Rantas death. He's expected to be arraigned at Pittsburgh Municipal Court. Allegheny County Police and Clairton Police handled the investigation.



Johnie Washington, 15, has been charged in the death of an elderly Clairton woman.
KDKA



Florence Ranta
KDKA

*This is a **very** good read.*

Propaganda Redux

August 7, 2007 – From: www.opinionjournal.com

By Ion Mihai Pacepa

Take it from this old KGB hand: The left is abetting America's enemies with its intemperate attacks on President Bush.

During last week's two-day summit, British Prime Minister Gordon Brown thanked President Bush for leading the global war on terror. Mr. Brown acknowledged "the debt the world owes to the U.S. for its leadership in this fight against international terrorism" and vowed to follow Winston Churchill's lead and make Britain's ties with America even stronger.

Mr. Brown's statements elicited anger from many of Mr. Bush's domestic detractors, who claim the president concocted the war on terror for personal gain. But as someone who escaped from communist Romania—with two death sentences on his head—in order to become a citizen of this great country, I have a hard time understanding why some of our top political leaders can dare in a time of war to call our commander in chief a "liar," a "deceiver" and a "fraud."

I spent decades scrutinizing the U.S. from Europe, and I learned that international respect for America is directly proportional to America's own respect for its president.

My father spent most of his life working for General Motors in Romania and had a picture of President Truman in our house in Bucharest. While "America" was a vague place somewhere thousands of miles away, he was her tangible symbol. For us, it was *he* who had helped save civilization from the Nazi barbarians, and it was he who helped restore our freedom after the war—if only for a brief while. We learned that America loved Truman, and we loved America. It was as simple as that.

Later, when I headed Romania's intelligence station in West Germany, everyone there admired America too. People would often tell me that the "Amis" meant the difference between night and day in their lives. By "night" they meant East Germany, where their former compatriots were scraping along under economic privation and Stasi brutality. That was then.

But in September 2002, a German cabinet minister, Herta Dauebler-Gmelin, had the nerve to compare Mr. Bush to Hitler. In one post-Iraq-war poll 40% of Canada's teenagers called the U.S. "evil," and even before the fall of Saddam 57% of Greeks answered "neither" when asked which country was more democratic, the U.S. or Iraq.

Sowing the seeds of anti-Americanism by discrediting the American president was one of the main tasks of the Soviet-bloc intelligence community during the years I worked at its top levels. This same strategy is at work today, but it is regarded as bad manners to point out the Soviet parallels. For communists, only the leader counted, no matter the country, friend or foe. At home, they deified their own ruler—as to a certain extent still holds true in Russia. Abroad, they asserted that a fish starts smelling from the head, and they did everything in their power to make the head of the Free World stink.

The communist effort to generate hatred for the American president began soon after President Truman set up NATO and propelled the three Western occupation forces to unite their zones to form a new West German nation. We were tasked to take advantage of the reawakened patriotic feelings stirring in the European countries that had been subjugated by the Nazis, in order to shift their hatred for Hitler over into hatred for Truman—the leader of the new "occupation power." Western Europe was still grateful to the U.S. for having restored its freedom, but it had strong leftist movements that we secretly financed. They were like putty in our hands.

The European leftists, like any totalitarians, needed a tangible enemy, and we gave them one. In no time they began beating their drums decrying President Truman as the "butcher of Hiroshima." We went on to spend many years and many billions of dollars disparaging subsequent presidents: Eisenhower as a war-mongering "shark" run by the military-industrial complex, Johnson as a mafia boss who had bumped off his predecessor, Nixon as a petty tyrant, Ford as a dimwitted football player and Jimmy Carter as a bumbling peanut farmer. In 1978, when I left Romania for good, the bloc intelligence community had already collected 700 million signatures on a "Yankees-Go-Home" petition, at the same time launching the slogan "Europe for the Europeans."

During the Vietnam War we spread vitriolic stories around the world, pretending that America's presidents sent Genghis Khan-style barbarian soldiers to Vietnam who raped at random, taped electrical wires to human genitals, cut off limbs, blew up bodies and razed entire villages. Those weren't facts. They were our tales, but some seven million Americans ended up being convinced their own president, not communism, was the enemy. As Yuri Andropov, who conceived this *dezinformatsiya* war against the U.S., used to tell me, people are more willing to believe smut than holiness.

The final goal of our anti-American offensive was to discourage the U.S. from protecting the world against communist terrorism and expansion. Sadly, we succeeded. After U.S. forces precipitously pulled out of Vietnam, the victorious communists massacred some two million people in Vietnam, Laos and Cambodia. Another million tried to escape, but many died in the attempt. This tragedy also created a credibility gap between America and the rest of the world, damaged the cohesion of American foreign policy, and poisoned domestic debate in the U.S.

Unfortunately, partisans today have taken a page from the old Soviet playbook. At the 2004 Democratic National Convention, for example, Bush critics continued our mud-slinging at America's commander in chief. One speaker, Martin O'Malley, now governor of Maryland, had earlier in the summer stated he was more worried about the actions of the Bush administration than about al Qaeda. On another occasion, retired four-star general Wesley Clark gave Michael Moore a platform to denounce the American commander in chief as a "deserter." And visitors to the national chairman of the Democratic Party had to step across a doormat depicting the American president surrounded by the words, "Give Bush the Boot."

Competition is indeed the engine that has driven the American dream forward, but unity in time of war has made America the leader of the world. During World War II, 405,399 Americans died to defeat Nazism, but their country of immigrants remained sturdily united. The U.S. held national elections during the war, but those running for office entertained no thought of damaging America's international prestige in their quest for personal victory. Republican challenger Thomas Dewey declined to criticize President Roosevelt's war policy. At the end of that war, a united America rebuilt its vanquished enemies. It took seven years to turn Nazi Germany and imperial Japan into democracies, but that effort generated an unprecedented technological explosion and 50 years of unmatched prosperity for us all.

Now we are again at war. It is not the president's war. It is America's war, authorized by 296 House members and 76 senators. I do not intend to join the armchair experts on the Iraq war. I do not know how we should handle this war, and they don't know either. But I do know that if America's political leaders, Democrat and Republican, join together as they did during World War II, America will win. Otherwise, terrorism will win. Abu Musab al-Zarqawi predicted just before being killed: "We fight today in Iraq, tomorrow in the land of the Holy Places, and after there in the West."

On July 28, I celebrated 29 years since President Carter signed off on my request for political asylum, and I am still tremendously proud that the leader of the Free World granted me my freedom. During these years I have lived here under five presidents—some better than others—but I have always felt that I was living in paradise. My American citizenship has given me a feeling of pride, hope and security that is surpassed only by the joy of simply being alive. There are millions of other immigrants who are equally proud that they restarted their lives from scratch in order to be in this magnanimous country. I appeal to them to help keep our beloved America united and honorable. We may not be able to change the habits of our current political representatives, but we may be able to introduce healthy new blood into the U.S. Congress.

For once, the communists got it right. It is America's leader that counts. Let's return to the traditions of presidents who accepted nothing short of unconditional surrender from our deadly enemies. Let's vote next year for people who believe in America's future, not for the ones who live in the Cold War past.

Lt. Gen. Pacepa is the highest-ranking intelligence official ever to have defected from the Soviet bloc. His new book, "*Programmed to Kill: Lee Harvey Oswald, the Soviet KGB, and the Kennedy Assassination*" (Ivan R. Dee) will be published in November.

CNN Memo: Use Fires to Push "Planet in Peril" Series

From October 18, 2007

Monday Meeting Notes

-**Jon Klein:** Great job on the 8 o'clock special on Friday; great job on the fire coverage. We shouldn't irresponsibly link this to Global Warming, but it is a nature story, so we should be able to use it to push to the Planet in Peril special tomorrow night.

TOP STORIES

-Wild Fires out West

According to notes from CNN's Monday news meeting network president Jon Klein tells employees to use the California fire tragedy to "push" their "*Planet in Peril*" special, but warns reporters not to "irresponsibly link" the fires to global warming. Several of the fires were arson.

Let me guess... You didn't hear about this one?

Man Convicted of Raping, Murdering 14-Year-Old Girl

November 1, 2007 – From: www.wishtv.com

By WISH News

COLUMBUS, Ind. – Jurors have convicted a Columbus man of raping and stabbing to death a 14-year-old girl.

Twenty-year-old Demetrick Shepherd could face life in prison without the possibility of parole. Bartholomew County jurors are scheduled to begin considering what penalty to recommend to the judge.

Jurors deliberated for about four hours before finding Shepherd guilty of rape and murder Wednesday.

Chelsea Porter, who attended Central Middle School, was found dead June 29 in an apartment of a family friend on the east side of the city about 40 miles south of Indianapolis. Authorities say Shepherd entered the apartment where she was sleeping to steal some car keys when she awoke and he attacked her, stabbing her 11 times with a butcher knife.



Let me guess... You didn't hear about this one?

Also note how they say "teens," when actually four of them are adults.

Five Teens Indicted in Murder

October 16, 2007 – From: www.thepilot.com

By John Chappell

The Moore County Grand Jury on Monday indicted five teens in the shooting death of a 12-year-old Mount Pleasant girl last month.

Sherrod Nicholas Harrison, 19, Michael Graham Currie, 18, Van Roger Smith Jr., 16, and Perry Ross Schiro, 19, all of Cameron, and Ryan Jermar White, 18, of Sanford, were indicted on charges of murder, assault with a deadly weapon with intent to kill inflicting serious injury, and breaking and entering.

All have court–assigned defense attorneys. Two of them, Harrison and Currie, now have two attorneys each as required by law in potential capital cases.

Emily Elizabeth Haddock was at home sick Sept. 21 when someone broke into her home on Marks Road near Vass and shot her several times with a .22–caliber handgun. Sheriff's deputies said they believe the intruders intended to burglarize the house but were surprised to find the girl at home.

Deputies had gone to 6988 Marks Road in Cameron responding to a reported breaking and entering and a death, according to a sworn statement later filed by Deputy Bradley Whitaker.

"Emily Elizabeth Haddock (age 12) was found dead from two gunshot wounds to the head," Whitaker said in the affidavit. "A burgundy van was seen in the area that day acting in a suspicious manner. Also, during the investigation, Michael Graham Currie, Van Roger Smith, Jr., and Sherrod Harrison were identified as suspects."

Detective Sgt. Jeff Medlin located a 1994 burgundy van at the home of Currie's mother, Jenessa Clark. She consented to a search of the van, according to court documents. She gave Medlin the key.

Three days later, deputies arrested Smith and charged him with killing Haddock.

"He gave a written statement of his actions and stated he was in the burgundy van (that day) with Sherrod Harrison and Michael Graham Currie," Whitaker said. "They drove the van to the residence (and) pulled into the driveway."

Smith took detectives to the scene of the murder and showed them where they had parked the van. Whitaker said he thought the tires from that van could be matched to plaster casts of tire tracks made by deputies investigating the murder.

"I feel that it is probable that the tire tracks located in the driveway were left by the burgundy Dodge van," Whitaker said in his affidavit. "The tires on the burgundy Dodge van need to be seized so they can be sent to (the SBI crime lab) to be compared to the tire tracks collected by the Moore County Sheriff's Office on Sept. 21, 2007."

On Oct. 11, Senior Resident Superior Court Judge James M. Webb granted the order, and the tires were removed and sent to Raleigh for comparison.

The five suspects remain in the Moore County jail without bond.



A Yahoo! search for "emily elizabeth haddock msnbc" brings up these two MSNBC webpages:

The screenshot shows a search interface with a navigation bar containing links for Web, Images, Video, Local, Shopping, and more. The search input field contains the text "emily elizabeth haddock msnbc" and a yellow "Search" button is visible. To the right of the search bar is an "Options" dropdown menu. Below the search bar, two search results are listed:

1. [5th suspect arrested in Moore County girl's death - News - MSNBC.com](#)
<P><!-- --><p>Associated Press - October 4, 2007 6:45 PM ET ... breaking and entering related to the Sept. 21 death of **Emily Elizabeth Haddock**. ...
www.msnbc.msn.com/id/21139795 - 38k - [Cached](#)
2. [3 teens arrested in shooting death of 12-year-old North Carolina girl ...](#)
MSNBC. 3 teens arrested in shooting death of 12-year-old North Carolina girl ... the shooting death of **Emily Elizabeth Haddock**, the Moore County Sheriff's Office ...
www.msnbc.msn.com/id/21051157 - 37k - [Cached](#)

But they are both no longer there.

File Edit View Go Bookmarks Tools Help

Back Forward Reload Stop Home <http://www.msnbc.msn.com/id/21139795/>

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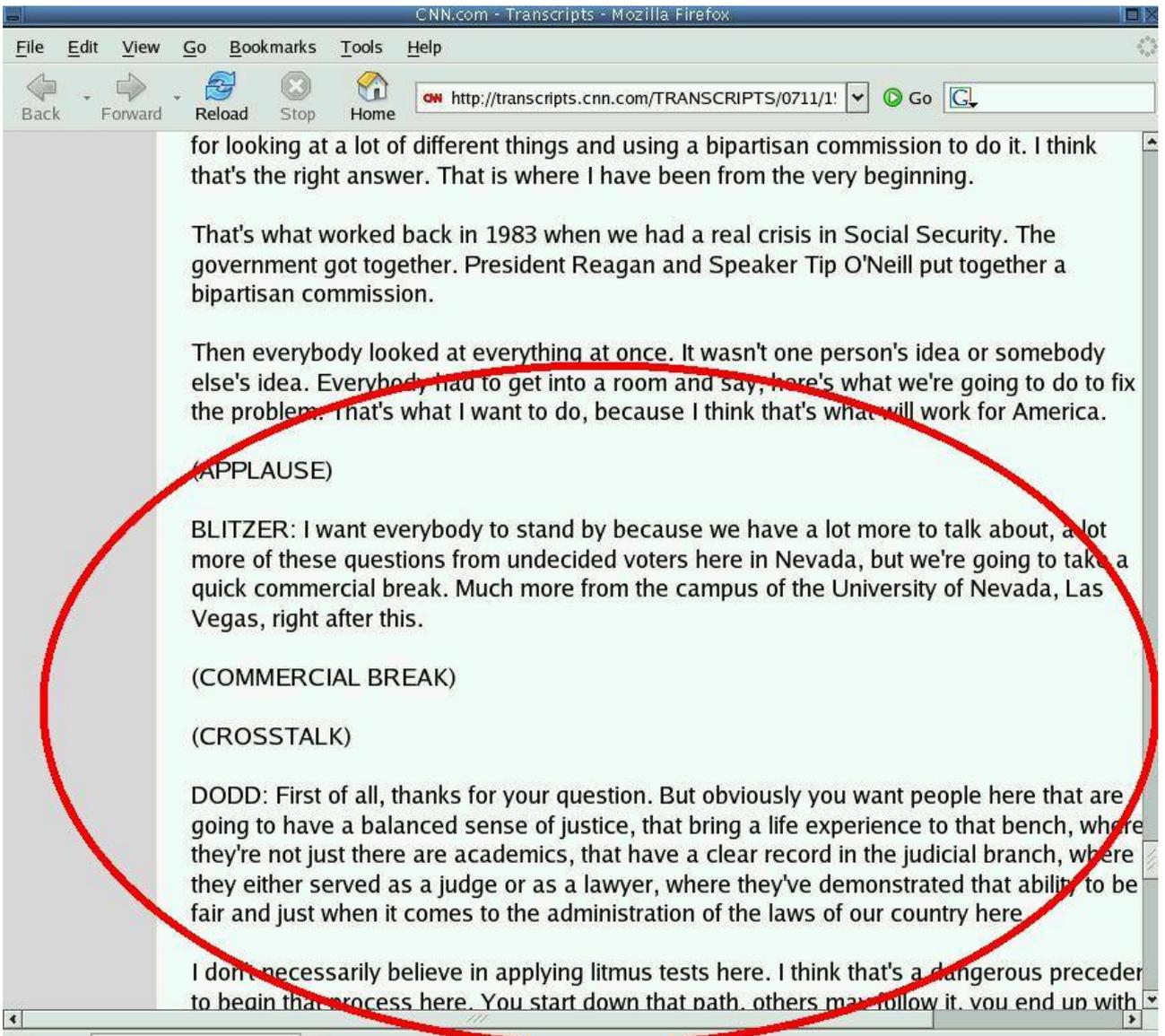
At least there is no bias in the media.

CNN Plants Debate Questioners



Plant #1: LaShannon Spencer, whom Blitzer introduced as an "undecided voter", was tagged by Dan Riehl: in truth, she served as the political director of the Democratic Party of Arkansas.

From: <http://directorblue.blogspot.com/2007/11/cnn-plants-questions-to-protect-hillary.html>



From: <http://transcripts.cnn.com/TRANSCRIPTS/0711/15/se.02.html>

CNN then later edits the transcripts to remove LaShannon Spencer's question.

(Page 25 of 29)

(Announcements.)

BLITZER: Welcome back to the campus of the University of Nevada, Las Vegas. We're at the Democratic presidential debate. Suzanne Malveaux's got another undecided voter with a question.

MALVEAUX: LaShannon Spencer, please stand up for a moment. What is your question?

LASHANNON SPENCER: We constantly hear health care questions and questions pertaining to the war. But we don't hear questions pertaining to the Supreme Court justice or education. (Applause.)

My question is, if you are elected president, what qualities must the appointee possess?

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MALVEAUX: I'd like to get to Senator Dodd, if you would. And in answering that question, also tell us whether or not you would require your nominees to support abortion rights.

(Laughter, cross talk.)

SEN. DODD: Well, first of all, you want -- first of all, thanks for your question.

Well, obviously you want people here that are going to have a balanced sense of justice, to

-  E-Mail Article
-  Listen to Article
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From <http://www.iht.com/articles/2007/11/16/america/15debatetranscript.php?page=25>

This is an excerpt from the transcript at the *International Herald Tribune* website.

At least there is no bias in the media.

