

"Fines – which can hit as much as 10 percent of company's global yearly revenue – are paid into the EU budget which pays out farm subsidies and research grants. The European Commission claims antitrust fines ultimately help reduce the financial burden on European taxpayers."

—— Quote from "Record EU Fine for Microsoft." Those fucking Eurosavages need U.S. businesses (and taxpayers) to babysit them at their every need. Murder all Eurosavages! Death to Europe!

(http://news.yahoo.com/s/ap/20080227/ap\_on\_hi\_te/eu\_microsoft)

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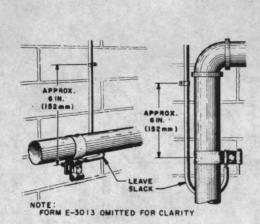


Fig. 64-Typical Installation—L Ground Clamp4

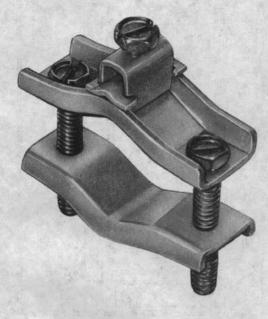


Fig. 65-B Ground Clamp#

7.02 Ground strips are available to provide signal ground terminals (or binding posts) in cable closures, cable terminals, cable terminal sections, or terminal boxes. Where the ground strips are mounted in terminals or on surfaces that are not grounded to a cable sheath or by a separate ground

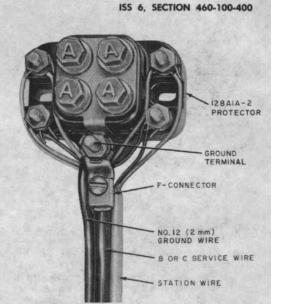


Fig. 66--- Service Wire on Protector

wire, it is necessary to install a No. 12 ground wire from the ground strip to an acceptable ground electrode (Table D).

7.03 The 2A ground strip (Fig. 67) consists of a brass plate with two binding posts. The plate has a "U"-shaped slot for a mounting screw and a depressed tab which prevents the ground strip from turning after it is installed. The 2A ground strip has a capacity of 14 wires. The 2A ground strip installed in a GA-type cable terminal is illustrated in Fig. 68. The 2A ground strip can also be installed on the backboard of a PC6 or PC12 cable closure.

7.04 The 2B ground strip (Fig. 69) consists of an assembly of the 2A ground strip and a mounting bracket (Table G). See Fig. 70 for a typical installation of the 2B ground strip.

7.05 The 4-type ground strips are angular-metal brackets equipped with terminal screws and two binding posts. They are used with 102-type adapters when installed with connecting blocks (Table G). See Fig. 71 and 72 for typical 4-type ground-strip installations.

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Fig. 67-2A Ground Strip

7.06 The 5A ground strip (Fig. 78) consists of a brass plate with two binding posts. It is intended for use in 10- and 16-pair NC, NE, NF, and NH cable terminals. A hole is provided in the plate of the 5A ground strip for mounting it in a cable terminal using the screw which holds the terminal block in the terminal housing (Fig. 74). The 5A ground strip has a capacity of ten wires.

7.07 The 6A ground strip (Fig. 75) consists of a brass plate with two binding posts. It is intended for use in 26-pair NC, NE, NF, and NH cable terminals and is mounted in the same manner as the 5A strip (Fig. 76). The 6A ground strip has a capacity of ten wires.

Note: The NE cable terminals are not provided with grounded housings; therefore, it is necessary to place a bond between the 5A or 6A ground strip and the cable sheath (or to an acceptable ground as outlined in Table D) using a ground wire no smaller than a No. 12 ground wire.

#### 8. COIN STATION GROUND

8.01 The protector ground should be used as first choice for a coin-station ground.

8.02 At unexposed coin stations where there is no protector, any ground that is suitable for a protector ground may be used as a coin ground (Table D).

8.03 Outdoor coin telephones are installed on metal shelves, metal mountings, or in metal booths. If the associated protector ground terminal

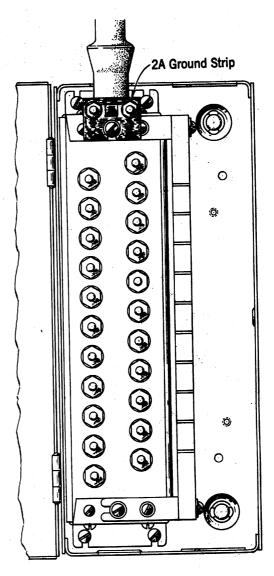


Fig. 68—2A Ground Strip Installed in GA-Type Cable Terminal

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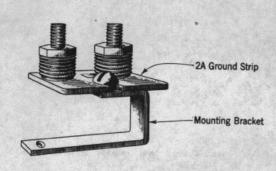
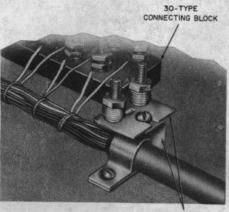


Fig. 69-2B Ground Strip



28 GROUND STRIP

Fig. 70—Typical Installation of 2B Ground Strip

is not already bonded to the shelf, mounting, or booth, this bond must be made using a ground wire no smaller than a No. 12 ground wire.

- 8.04 When a coin telephone is installed outdoors, a ground rod for protector grounding must be installed unless:
  - At least 10 feet of metallic conduit buried in permanently moist soil is connected to the coin shelf, mounting, or booth

OI

(2) The power ground rod of an MGN power system is bonded to the coin shelf, mounting, or booth with a ground wire no smaller than a No. 6 ground wire

or

(3) An acceptable metal water pipe is bonded to the coin shelf, mounting, or booth with a ground wire no smaller than a No. 6 ground wire.



The grounding conductor (third wire of an electrical wiring system) must never be used as the protector ground.

### 9. LOCATING AND INSTALLING GROUND RODS

Danger: Avoid personal injury by protecting eyes and hands when driving ground rods. Wear safety glasses and rubber gloves with leather protectors.

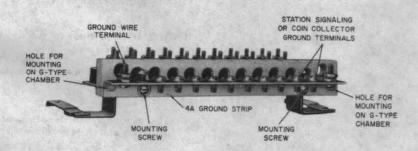


Fig. 71—Typical Installation of 4A Ground Strip

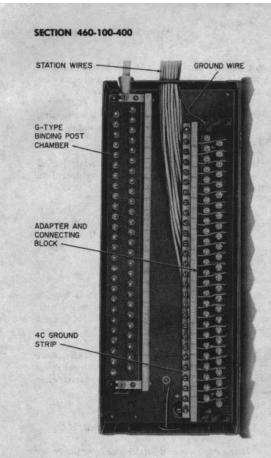


Fig. 72—Typical Installation of 4C Ground Strip

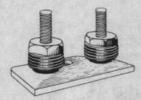


Fig. 73-5A Ground Strip

9.01 Rubber gloves with leather protectors must be worn when driving a ground rod. Avoid bodily contact with the ground rod during this operation. On completion of driving a ground rod,
a voltage tester, eg, 188A test set (Stop Lite) or

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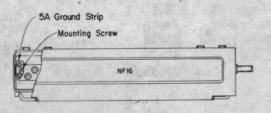


Fig. 74—5A Ground Strip Installed in NF16 Cable Terminal

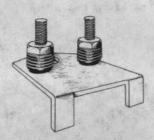


Fig. 75-6A Ground Strip

B-voltage tester, must be used to verify that no voltage condition exists on the ground rod. (Rubber gloves must be worn to test ground when B-voltage tester is used.) If voltage is detected, do not proceed until the supervisor is notified and the condition corrected.

- 9.02 Locate and install ground rods as follows:
  - (a) Where least likely to be damaged or tampered with
  - (b) As near as practical to masonry walls in earth-floor basements
  - (c) Approximately 12 inches from outside walls (Fig. 77)
  - (d) Approximately 2 feet from base of wooden poles or posts where conditions permit
  - (e) At least 6 feet from power or lightning protection ground rods.

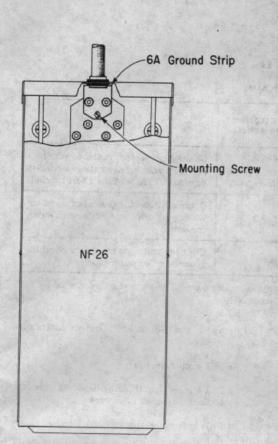


Fig. 76—6A Ground Strip Installed in NF26 Cable Terminal

9.03 Do not unspiral the tail wire attached to the ground rod until just before driving operation is complete. Drive ground rods until the top of the rod is approximately 3 inches below ground level. Increase depth where digging is likely. \*Use the AT-8911 B trenching tool, or other suitable shovel, to excavate ground to obtain the 3-inch depth.

9.04 Avoid making ground wire runs where the wire may be damaged or tampered with. If such locations cannot be avoided, protect the ground wire with station ground wire molding.



Check with property owner or manager regarding the location of ISS 6, SECTION 460-100-400

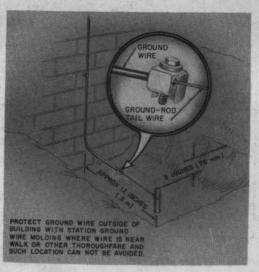


Fig. 77—\$Ground Rod Installed Near Wall\$

any underground electric power cable, water, gas, or fuel tank installations before driving a ground rod.

9.05 Inspect ground rods before and after driving to make certain that tail wires are not broken. If the tail wire is broken, replace ground rod or use a suitable ground clamp of size or type as listed in Table E.

9.06 ◆After the No. 10 or No. 12 station ground wire is installed, it is attached to the ground rod tail wire with a size 6 AT-7796X connector (Fig. 77). Tighten the ground rod tail and ground wire securely in the connector; do not tape this connection. If a 6-gauge ground wire must be terminated on the ground rod, select the proper ground clamp per Table E.◆

9.07 When two or more protectors requiring ground rods are installed at the same location, proceed as follows:

Note: Use the proper size station ground wire as listed in Table B.

(a) If a power ground rod is not available, install a ground rod for each protector. Bond all

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#### ♦ TABLE E4

#### GROUND CLAMPS

GROUND	CLAMP	SEE FIGURE NUMBER	WIRE SIZE	GROUND ELECTRODE (SIZE IN INCHES)	USE
B Station	6-3/4"	58	No. 12	3/8 — 1-3/4	Connect protector ground to water pipe or power service entrance condui
Ground Clamp 1	12-1/2"	_	No. 10	1-7/8 — 3	or mount 72A, 90A, or 114A bracket
L Groun	d Clamp	60	No. 6	1-3	Connect protector ground or bond to water pipe or power service entrance conduit.
B Ground Clamp (See Note)		65	No. 6	1/2 - 1	Connect protector ground or bond to ground rod or water pipe.

Note: Use caution when attaching the B ground clamp to copper pipes. The pipes can be damaged by the wire loop in the clamp if the clamp is tightened excessively.

protectors together. Select wire connectors from Table F. No more than three ground rods need be placed. Space ground rods at least 6 feet apart (Fig. 78).

- (b) If a power ground rod is available, one telephone ground rod is sufficient. Bond all protectors together and bond telephone ground rod to power ground rod (Fig. 48).
- 9.08 Multiple station protectors, such as the 116-or 117-type, should not be connected to a single telephone ground rod unless the rod is bonded to the power system ground rod. If a power system ground rod is not available, a multiple station protector may be connected to an array of three telephone ground rods, spaced at least 6 feet apart, and bonded together with No. 6 ground wire (Fig. 78).
- 9.09 Always bond ground rods using No. 6 ground

### 10. INSTALLING SNEAK CURRENT FUSES

- 10.01 Sneak current fuses are required to provide additional protection for:
  - No. 1 and No. 2 ESS Centrex data link cabinet trunks

- No. 1 and No. 2 ESS Centrex attendant trunks
- PBX trunk circuits
- PBX ♦(other than DIMENSION)♦ off-premise
   ♦stations exposed to power♦
- PBX battery or ringing feed circuits
- Certain special circuits or leased lines.

10.02 Sneak current is foreign current, caused by a "cross" with or induction from power conductors. The sneak current is too low to burn open fusible links of wire or cable and of insufficient voltage to arc over protector blocks or protector units.

10.03 Sneak current protection is provided by the use of heat coils or 60A and 60D fuses in a variety of mountings.

10.04 The 60A and 60D fuses (Fig. 79) are rated 0.350 ampere and differ only in arrangement for mounting. The 60A fuse has a spade terminal and is used with the 94A protector mounting (Fig. 80). The 60D fuse is mounted in a 14A fuse holder (Fig. 81) or 1094A protector (Fig. 82), for 191A1-20 protector (Fig. 83).

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#### PTABLE F4

### WIRE CONNECTORS

CONNECTOR	FIGURE NUMBER	CONDUCTOR SIZE	USE	
E Connector Size 1	52	No. 12 through 4	Connect or bond ground wire to bare power ground wire.	
E Connector Size 2		No. 12 through 1/0 and 8 through 4 armored ground wire	Connect or bond ground wire to armored power ground wire.	
At 7796X Size 6 Size 4 Size 2	53	No. 12 through 6 No. 8 through 4 No. 6 through 2	(a) Ground station ground wire to ground rod tail wire.      (b) Ground shield of cable or buried service wire at terminals or cable closures.	
Blackburn PAC3	54	No. 6 through 8 copper		
FARGO GA610C	55	to No. 2 through 4 aluminum	Connect No. 6 ground wire to aluminum power ground wire for bonding.	
F Connector	25 _	No. 6	(a) Connect service wire shield to protector ground terminal.	
			(b) Connect No. 6 ground wire to ground bracket of cable closure housing.	

### \$14A FUSE HOLDER

10.05 A typical installation of the 14A fuse holder and 60D fuse is shown in Fig. 84. The fuse holder fits on the binding post (under the bottom nut) of a protector, protector terminal, or connecting block. One end of the 60D fuse attaches to the fuse holder and the station wire is connected to the other end. This places the fuse in series with the line. As only one station wire can be attached to a fuse, a connecting block arrangement is required to terminate additional station wires.

10.06 Where 134A1A protectors and 66- or 68-type connecting blocks are employed, it is not possible to mount the 14A fuse holder. Therefore, when sneak current fuses are required, one of the following alternatives must be used:

(1) Install an additional connecting block, such as a 57A2-10 or 57A2-16 connecting block,

in order to mount the 14A fuse holder as shown in Fig. 85.

- (2) Use the 1094A protector, one for each pair of wires
- (3) Use the 191A1-20 protector for up to 20 exposed pairs. ●

### \$1094A PROTECTOR

10.07 The 1094A protector consists of a metal base with two No. 94A protector mountings and two 60D fuses (Fig. 82). When installed outdoors, the 1094A protector is mounted in a 93C • (MD) protector mounting.

### \$191A1-20 PROTECTOR

10.08 The 191A1-20 protector (Fig. 83) is a combination protector and terminating field intended for use with 66-type quick-connect hardware.

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### PTABLE GO

#### GROUND STRIPS

TYPE	BINDING POSTS	TERMINALS	WIRE CAPACITY (QUANTITY)	USED WITH	FIGURE
2A	2	<u></u> -/-	14	GA-type cable terminal, PC6 or PC12 cable closure	67
2B	2	-	14	30- and 31-type connecting blocks	69
4A	2	11	11	102B adapters when installed with connecting blocks	71
4B	2	16	16	102C adapters when installed with connecting blocks	10 -21
4C	2	26	26	102D adapters when installed with connecting blocks	72
5A	2	- 1	10	10- and 16-pair NC, NE, NF, and NH cable terminals	73
6A	2	(8) <del>-</del> (1)	10	26-pair NC, NE, NF, and NH cable terminals	75

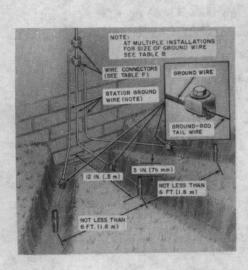


Fig. 78-Three Ground Rods

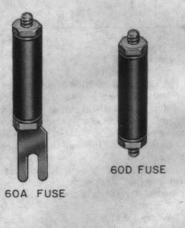
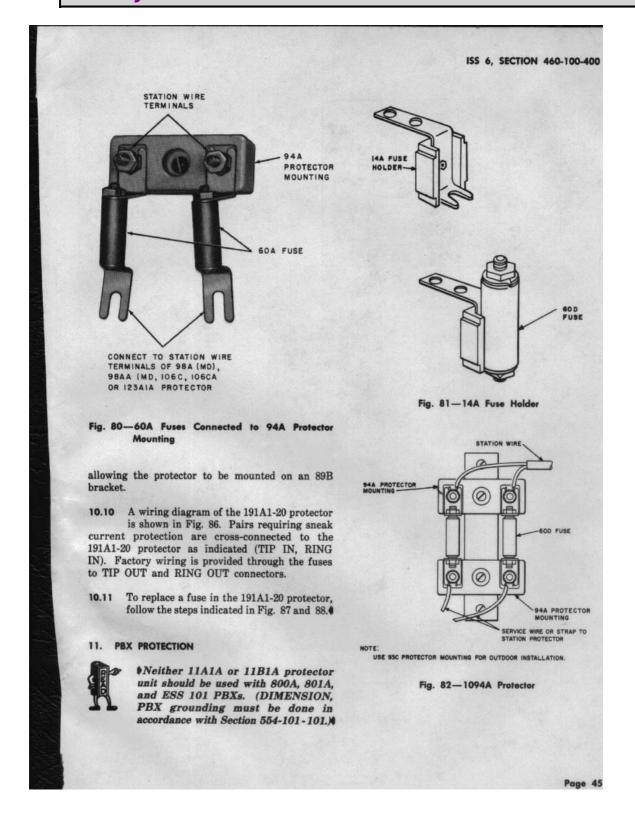
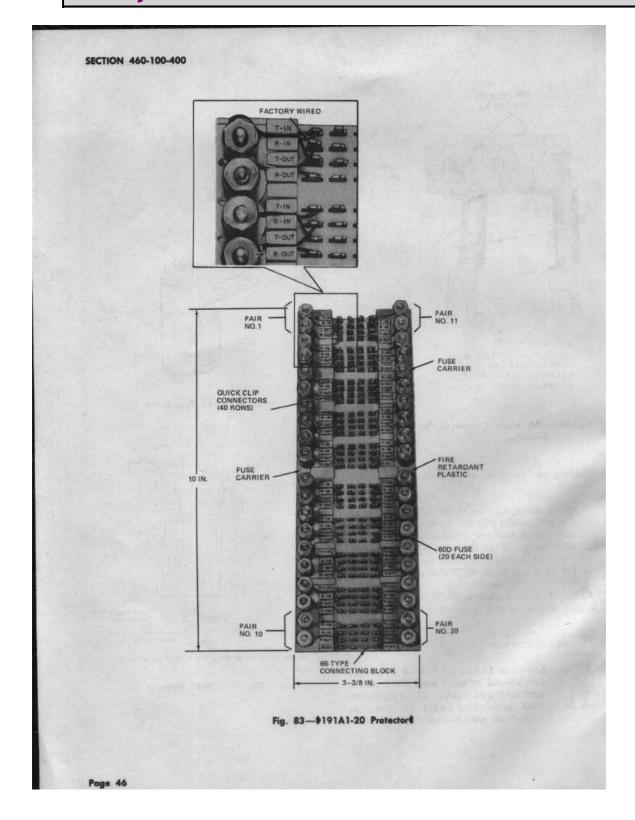


Fig. 79—60A and 60D Fuses

It is factory wired and equipped with forty 60D fuses which will provide sneak current protection for 20 exposed pairs.

10.09 The base of the 191A1-20 protector is identical to the 66-type connecting block





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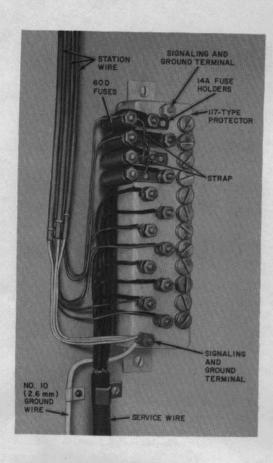


Fig. 84—Method of Installing 60D Fuses and 14A
Fuse Holder on 117-Type Protector (Battery
Feed Circuit Illustrated)

11.01 In addition to the preceding requirements covering bonding, grounding, and sneak current protection, the following protective measures must be applied at PBX locations.

be bonded to an acceptable ground electrode (Table D). Building entrance cables terminating in 1A4A terminal blocks, NH-type cable terminals, or 134A1A protectors, can be grounded by connecting the ground clamp or ground lug of the terminal block, terminal, or protector, to an acceptable grounding electrode with a No. 6 ground wire. This ground wire must be installed. The sheath

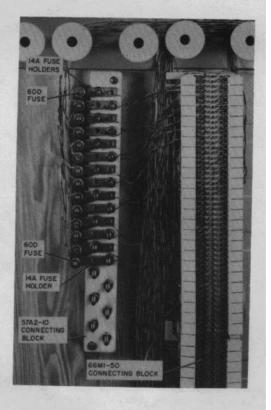


Fig. 85—Sneak Current Fuse Arrangement for 66M1-50 Connecting Block

of a building entrance cable is **not** a grounding electrode.

- 11.03 The PBX signaling ground must be connected to the protector ground.
- 11.04 Sneak current fuses must be provided as specified in paragraph 10.01, or heat coils must be used.
- 11.05 Exposed off-premises extensions must be provided with protectors at the station end as well as at the PBX end. If exposed to power, sneak current protection is also required.
- 11.06 An older type PBX may have battery and ringing voltages supplied from the central

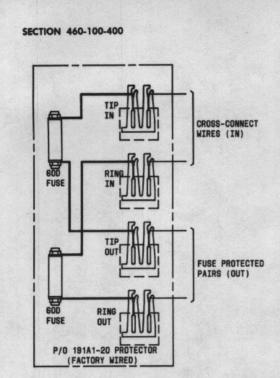


Fig. 86-\$191A1-20 Protector-Wiring Diagrams

office. Also, some newer type PBXs may have battery and ringing voltages supplied from the central office for reserve power in the event of a commercial power failure. When two or more cable pairs are used in multiple to supply battery and these pairs are extended by two or more drop wires, fused-type protectors are required. When the battery supply is extended by a single drop wire, bused protectors are not required. Ringing feeder circuits are fused with 60E fuses.

11.07 The 1094A protector, which may be used where station protectors are not required, used with 134A1A-type protectors or for ringing feeder circuits is shown in Fig. 82.

11.08 Two battery feeder pairs terminated at a 117-type protector equipped with 14A fuse holder and 60D fuses are illustrated in Fig. 84. The pairs are strapped on the PBX side of the fuses.

11.09 A fuseless protector equipped with 60A fuses for outdoor installations is shown in Fig. 89

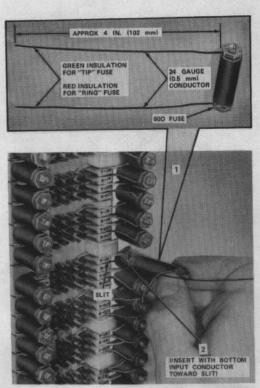


Fig. 87-PReplacing Fuse#

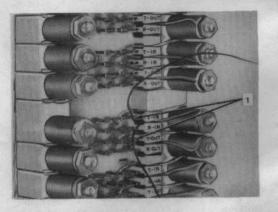


Fig. 88-PFuse Replaced®

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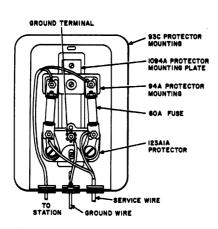


Fig. 89—Fuseless Protector Equipped With Sneak Current Fuses, Outdoor Installation

11.10 A fused protector equipped with 60A fuses is shown in Fig. 90. A converted protector equipped with 60A fuses is shown in Fig. 91.

11.11 Two battery feeder pairs terminated on fuseless station protectors equipped with 60A fuses and bridged to one station wire are shown in Fig. 92.

11.12 A maximum of three service wires furnishing battery for a system may be terminated on one fused protector and must be bridged on the line side of the protector (Fig. 93). In the event more than three service wires are required to extend a battery feed circuit, additional protectors must be installed (Fig. 94). Use two 11C fuses, one for the tip conductors and one for the ring conductors. If it is necessary to strap the conductors at the binding posts, remove the 2A1A protector units and substitute 2A1D (dummy) protector units where fuses have been removed as shown in Fig. 94. On disconnects, replace the 2A1D protector units with 2A1A protector units and replace fuses.

### 12. EXPOSED DROP WIRES CONNECTED TO UNEXPOSED CABLE

12.01 Drop wires, connected to an unexposed cable terminal and extending into an exposed area, expose both the subscriber station and the distribution cable. To avoid changing the status

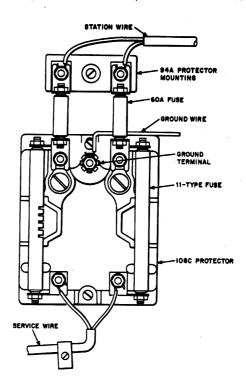


Fig. 90—60A Fuses Used With 94A Protector Mounting and 106C Protector

of the unexposed cable, protectors are required at the junction of the drop wire and the cable.



It is extremely important that telephone craft personnel be informed of locations as described in paragraph 12.01. If service orders do not specify protection required or the cable terminals are not specifically identified, local instructions must provide this information. Where there is any doubt on the part of the telephone craft force, maximum protection should be provided, treating telephone stations as exposed stations.

12.02 Where an exposed drop wire is to be connected to an unexposed pair of 19-gauge

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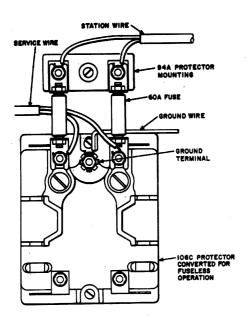


Fig. 91—₱60A Fuses Used With 94A Protector Mounting and Converted 106C Protector

■ Converted 106C Protector

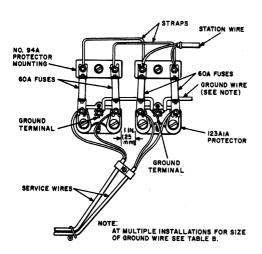


Fig. 92—\$Fuseless Protectors Used for Bridging Service
Wires on Battery Feed Circuits

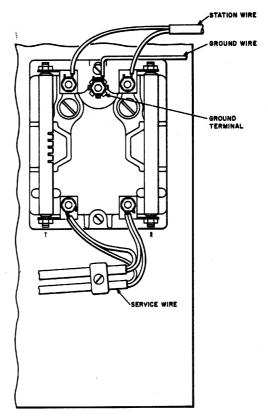


Fig. 93—Two Service Wires Bridged at Fused Pretectors

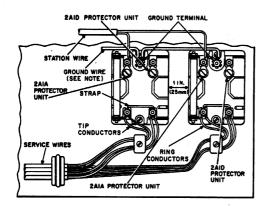
or 22-gauge cable, a fusible link of bridle wire is required between the cable pair and the drop wire, in addition to the protector. In addition, a fusible link is required between the exposed section and a fuseless station protector. Otherwise, a fused protector must be used.

12.03 Protectors must be installed at station locations as well as at terminal locations when exposed drop wires are connected to unexposed cables.

12.04 Where exposed drop or block wires are to be connected to unexposed cables terminated in 49-type terminals, install 3A3-3 protected terminal blocks in place of the unprotected blocks.

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NOTE:
AT MULTIPLE INSTALLATIONS FOR SIZE OF GROUND WIRES SEE TABLE B.

Fig. 94—Bridging Four Pairs at Fused Protectors\$

12.05 Typical wall and pole installations, using protectors for cable protection, are shown in Fig. 95 through 98.

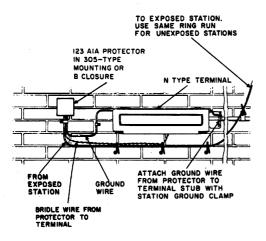


Fig. 95-N-Type Terminal, Wall Installation

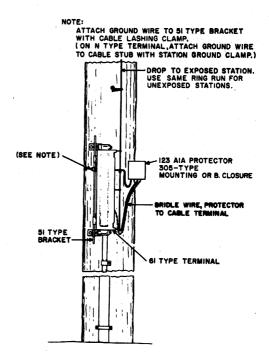


Fig. 96—N- or 61-Type Terminal, Pole Installation

#### 13. 118B PROTECTOR

13.01 The 118B protector (Fig. 99), which supersedes the 99C protector, is designed to protect telephone circuits in the event of an accidental contact between power wires (of the MGN-type and carrying over 2000 volts) and telephone wires. The 118B protector consists of three carbon electrodes, having 0.020-inch gaps, mounted on a porcelain base and enclosed in a rubber case (Fig. 100). Three No. 14 gauge insulated wire leads extend from the bottom of the protector. One lead, 72-inches long, is connected to ground (of the MGN power) and two leads, 36-inches long, are connected to the telephone line wires.

13.02 The 118B protectors are connected to drop wires (Fig. 101) or rural wires (Fig. 102) as specified by detailed plans, telephone company engineering or supervisory instructions. The 118B

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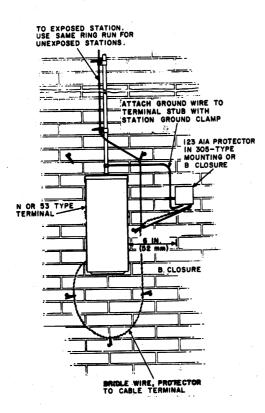


Fig. 97—PN- or 53-Type Terminal, Wall Installation

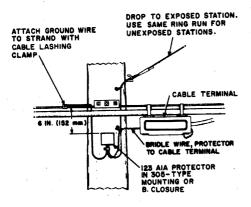


Fig. 98—PN-Type Terminal, Strand Mounted

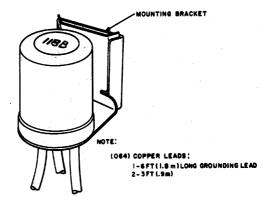


Fig. 99-\$118B Protector\$

protector provides protection for a single drop wire or rural wire; however, the length of a drop wire or rural wire run may dictate the installation of additional protectors on the same drop wire or rural wire.

13.03 Drop wires and rural wires, run on higher voltage joint use poles, do not require a 118B protector:

- Where wire runs (including branch runs) are 1000 feet or less in length
- Where wire runs are attached directly below aerial cables supported by effectively grounded strands.

13.04 Refer to Section 624-730-200 for additional information and illustrations for installing the 118B protector on rural wire.

13.05 Do not remove 118B protectors from dead circuits on joint use poles.

of the 118B protector to a power vertical grounding conductor that is connected to both the power system multigrounded neutral wire and to a ground electrode. Grounding conductors on transformer poles which meet this requirement are satisfactory. Grounding conductors from power lightning arresters shall not be used unless they are connected to the power neutral wire. Where local instructions

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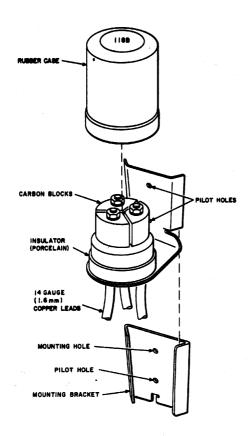


Fig. 100-\$118B Protector, Disassembled

and the power company permit, the connection between the ground lead of the 118B protector and the vertical grounding conductor may be made by telephone company personnel.

Danger: The power vertical grounding conductor shall be tested with a \$188A test set (Stop Lite) or a B-voltage tester as described in Section 081-705-102 or 081-705-101, respectively. \$\\$\$ before making this connection.

13.07 Where the power company has installed an aluminum vertical grounding conductor, do not use an AT-7796X connector due to the likelihood

of corrosive chemical reaction between copper and aluminum. Make the grounding connection to an aluminum vertical grounding conductor with a Blackburn PAC3 or Fargo GA6100 connector.

at locations where there are no power system vertical grounding conductors, install a ground rod at the base of the pole and run No. 6 ground wire from the ground rod to the top of the telephone space and leave coiled at that point an additional length (usually about 6 feet) sufficient to reach the power neutral wire. Power company personnel shall make the connection to the power neutral wire. Report all such installations to the supervisor immediately so arrangements may be made to have the grounding conductor connected to the power neutral as soon as practical.

Danger: Avoid personal injury by protecting eyes and hands when driving ground rods. Wear safety glasses and rubber gloves with leather protectors

Danger: Do not perform any work in the power company space on the pole.

- 13.09 To install a ground rod and vertical grounding conductor:
  - (a) Drive a ground rod about 2 feet from the base of the pole with the top of the rod at least 3 inches below ground level. The ground rod should be located so the grounding conductor may be run on the side of the pole reserved for power company attachments.
  - (b) Connect the vertical grounding conductor (No. 6 ground wire) directly to the ground rod with a B ground clamp.
  - (c) Fasten the grounding conductor to the pole at 18-inch intervals with 1-1/4 inch B staples.
- (d) Where ground wire molding is used, fasten it to the pole with cable straps and strap nails at 4-foot intervals.
- 13.10 The 118B protector is self-cleaning and generally should require no maintenance. It is possible, however, that an operation will

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#### SECTION 460-100-400

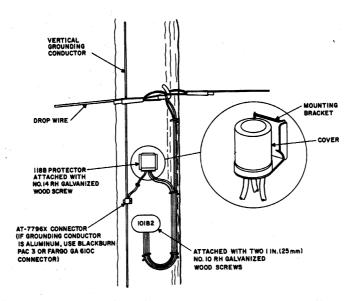


Fig. 101-\$118B Protector Connected to Drop Wire\$

cause the cover to be blown off or to rupture. When working on drop wires or rural wires connected to such a damaged protector, notify the supervisor or proceed according to local instructions.

#### 14. CONVERTING PROTECTORS

Caution: When converting station protectors on SSM (Special Safeguarding Measures) and/or SSP (Special Service Protection) lines, arrangements must be made to have the special lines taken out of service before doing any work on the protector, since this work could readily cause service interruptions.

14.01 Fused protectors at stations not subject to conditions as outlined in paragraph 3.01, should be converted to fuseless operation or replaced by the 123- or 128-type protectors. Do not convert fused protectors to fuseless operation where the station is served by open, rural, or urban wire. If fuseless protection is required, a 123- or 128-type protector must be installed as a replacement.

14.02 The 98A (MD) protector (Fig. 44) can be converted to fuseless operation by adding two 121A adapters and two 213A connectors (Fig. 103) as follows:

- (1) Disconnect line wires.
- (2) Remove cap and protector blocks.
- (3) Insert the 121A adapters all the way into the protector well with the flat side against the ground electrode.
- (4) Check for ground at all protector terminals.

  With the protector blocks removed, the adapter should provide solid ground to the terminals.

Note: A check for ground may be made using the 1013A hand test set. With the TALK/MON switch of the test set in the TALK position, connect one cord clip to the ring side of the (working) line wire and, with the other cord clip, tap each line terminal of the protector. A pronounced click will be

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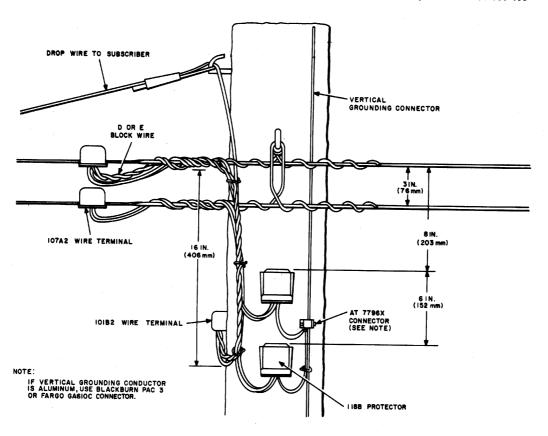


Fig. 102—\$118B Protectors Connected to Rural Wires

heard in the test set receiver when protector terminals are grounded.

- (5) Remove adapters from protector well and assemble each adapter with a No. 26 and a No. 27 protector block.
- (6) Install assemblies in protector well. Check for grounds; line terminals should not be grounded.
- (7) Where requirements of (4) and (6) are not met, discard adapters and replace with other adapters. If requirements cannot be met on the second attempt, do not try to convert the protector; install a 123- or 128-type protector

instead. Do not attempt to bend or adjust the adapter tabs or protector block springs.

- (8) Reinstall cap.
- (9) Connect line wires using care not to reverse tip and ring.

**Note:** The line wire may be moved to the station side of the protector if it is of sufficient length. If not, proceed to next step.

- (10) Loosen nuts on 11C fuses.
- (11) Insert 213A connectors over each fuse with end inside fuse clips. In cases where fuses

#### SECTION 460-100-400

have shrunk slightly, one or both connector ends may be placed outside of fuse clips. Some bowing of the connectors is not considered objectionable.

(12) Tighten nuts on fuses (Fig. 104).

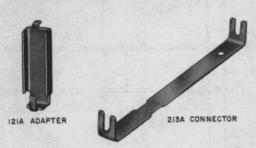


Fig. 103-121A Adapter and 213A Connector

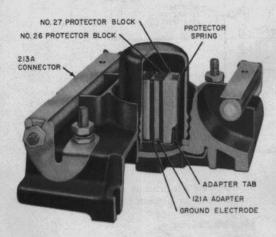


Fig. 104—Converted 98A (MD) Protector

14.03 The 106C and the 1293C (MD) protectors may be converted to fuseless operation by connecting the aerial or buried drop input line wires directly to the station side of the protector, provided the line wires are of sufficient length. The fuses may then be removed (Fig. 105). Where the input line wires are too short to reach the station side of the protector, install two 213A

connectors as described in paragraph 14.02(11). The 106C protector is equipped with 2A1A protector units; therefore, adapters are not required (Fig. 106).

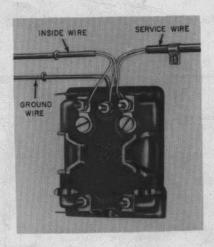


Fig. 105—Alternate Method of Converting 106C
Protector

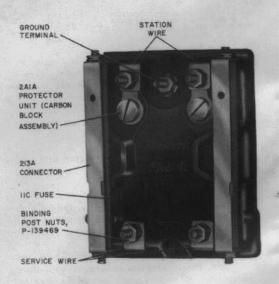


Fig. 106-Converted 106C Protector

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14.04 The 106A (MD) protector cannot be converted to fuseless operation because of insufficient current-carrying capacity.

#### 15. MAINTENANCE

- 15.01 When making station visits, inspect the telephone grounding system. If the protector ground is not connected to the best available ground electrode in accordance with Table D, change the ground conductor. Make sure the protector ground, power service ground, and interior metallic water pipe are bonded together. If the protector and power are grounded to separate ground rods, make sure the ground rods are bonded together.
- 15.02 Inspect the ground wire, ground clamps and connectors for broken or disconnected wires or loose connections. Replace hardware if defective, damaged, or badly corroded. Make sure the ground wire tag (Form E-3013B) is in place.

Note: •It is not necessary to replace No. 14 (MD) ground wire in existing installations unless it is defective or used to ground more than one circuit.

15.03 Replace grounded protector units, operated protector blocks, open fuses, and defective or badly corroded protectors. Replace protector units or protector blocks with proper types. Do not use yellow or blue protector blocks.

Danger: If for any reason, it is suspected that the protector is energized, DO NOT attempt to remove protector blocks. Verify presence or absence of voltage with a voltage tester. if energized, notify supervisor and proceed no further.

- 15.04 The 2B1A and 2B2A protector units are equivalent and either may be used in a 123A1A or 128A1A-2 protector. The 2B1A has a slotted screw-type cap while the 2B2A has a 3/8-inch hexagonal cap which requires the 216B tool for removal.
- 15.05 The 123B1A protector uses two 6B1A (gas tube) protector units in parallel with two 2B2A (carbon) protector units. When replacing protector units in the 123B1A protector, be sure to install the 2B2A protector units in the wells marked "CARBON ONLY" (Fig. 3).
- 15.06 The 111A (MD) protector uses 2A1A protector units instead of the 2B1A or 2B2A protector units.

15.07 When visiting PBX or KTS locations, make sure the proper size ground wire connects the protector ground terminal to the best available grounding electrode (Tables B and D). A cable shield or sheath is not an acceptable grounding electrode.

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# Nortel DMS-100 TOPS Audio Table (TOPAUDIO)

### **Table Name**

**TOPS Audio** 

### **Functional Description of Table TOPAUDIO**

TOPAUDIO defines audio programs for playing to a caller while waiting for an operator. A program consists of a combination of ringing, music, announcements, and/or silence.

### **Datafill Sequence & Table Size**

Tables CLLI (Common Language Location Identifier), ANNS (Announcement), and ANNMEMS (Announcement Members) must be datafilled before table TOPAUDIO.

Table CT4QNAMS (Call Type for Queuing by Names) must be datafilled after table TOPAUDIO. Therefore, an associated tuple must be deleted from table CT4QNAMS before deleting from table TOPAUDIO.

Size is 0 to 128 tuples.

### **Datafill**

The following table describes datafill for table TOPAUDIO:

### Table TOPAUDIO Field Descriptions

		-	Explanation and Action
AUDIOKEY		Alphanumeric (1 to 16 characters)	Audio Key This field is the key to the table and defines a name for this program. This name is used in table CT4QNAMS.
ROUTES		See Subfield	
	AUDIOSEL	,	Audio Selection This field defines the components of the program. The values are defined as follows:
			* ANN (Announcement) - Enter datafill in fields ANNCLLI and AUDRING.
			* MUSIC - Enter datafill in refinements MUSICLLI and TIME.
			* SILENCE - Enter datafill in refinement TIME.
			* RINGING - Enter datafill in refinement TIME.
			* REPEAT - Enter datafill in refinement ROUTE.

This value continuously replays the sequence of entries in AUDIOSEL, starting with the entry number in ROUTE and going to the last entry before REPEAT. When REPEAT is used, it must be the last entry. Also, REPEAT cannot be the only entry.

Each value, except REPEAT, can be used more than once.

		than once.
ANNCLLI	Name from table ANNMEMS	Announcement CLLI Enter data in this field if field AUDIOSEL=ANN. This field defines the announcement CLLI and it must be entered in tables CLLI, ANNS, and ANNMEMS.
AUDRING	Y or N	Audible Ringing Enter data in this field if field AUDIOSEL=ANN. This field indicates if audible ringing is provided (Y) or not (N) to the caller after the announcement is connected and before the beginning of a cycle.
MUSICLLI	Name from table ANNMEMS	Music CLLI Enter data in this field if field AUDIOSEL=MUSIC. This field defines the music CLLI and it must be entered in tables CLLI, ANNS, and ANNMEMS.
TIME	0 to 1,800	Time Enter data in this field if field AUDIOSEL=MUSIC, RINGING, or SILENCE. Field TIME defines how many seconds the music, ringing or silence are played. If MUSIC, RINGING, or SILENCE is the last entry in field AUDIOSEL, TIME must be set to 0. Value "0" provides continuous playing of the MUSIC, RINGING, or SILENCE.
 ROUTE	1 to 5	Route Enter data in this field if field AUDIOSEL=REPEAT. This field indicates the starting entry number in field AUDIOSEL of the sequence of AUDIOSEL entries that are to be continuously replayed. When value REPEAT is used in field AUDIOSEL, REPEAT must be the last entry.

-End-

### **Datafill Example**

The following example MAP display shows sample datafill for table TOPAUDIO:

AUDIOKEY	ROUTES
POP_MUSIC_ONLY SILENCE_ONLY BUSOFC_AFTER_HRS STD_WAIT_TRMT	(MUSIC POP_MUSIC_CLLI 0) (SILENCE 0) (ANN BUS_HRS_ANN_CLLI Y) (MUSIC ROCK_MUSIC_CLLI 0) (RINGING 4) (ANN HOLD_4_OPR_CLLI Y) (MUSIC ROCK_MUSIC_CLLI 30) (ANN DONT_HANGUP_CLLI N) (REPEAT 3) \$

The following are comments on the above tuples.

The first example tuple shows a one–element audio route list that could be used to replace ringing with music for queued calls. After the music selector, the route specifies the music CLLI and the duration of the music in seconds. A non–zero duration would be used if the music were to be followed by an announcement after some number of seconds. But in this example, music is the last element of the route list, so the duration datafill is zero indicating infinite duration. (For music in queue, infinite duration means to continue the treatment until the operator becomes available or the caller goes on hook).

The second example tuple shows a one–element audio route list that could be used to simply replace ringing with silence. No CLLI is entered in datafill when the silence selector is used. However, a duration is entered and interpreted the same way as a music duration. (A route with the ringing selector has a similar field for the duration.)

The third example shows an audio route that might be used for after hours calls to the business office, if these calls are routed to an operator. The audio route begins with an announcement, which might say the business office is closed, but an operator will be connected if the caller stays on the line. After the announcement, music is played until an operator becomes available.

The "Y" entry in this announcement route is for the audible ringing subfield. A "Y" value indicates that audible ringing should be applied between the time the announcement is connected and the beginning of a cycle.

The last example specifies four seconds of ringing, followed by an announcement (which might ask the caller to hold for an operator), followed by 30 seconds of music and then a different announcement (which might ask the caller to stay on the line). The "(REPEAT 3)" after the last announcement specifies that the last announcement should be followed by element 3 of the route list, which is music. So the pattern of 30 seconds of music followed by the "don't hang up" announcement continues until the operator becomes available or the caller goes on–hook.

In the last example, note that the actual duration of ringing before the first announcement could be anywhere from four seconds to nearly the number of seconds the announcement takes. This longer ringing time would occur if the caller were connected to the announcement just after a cycle had begun, and had to wait almost an entire cycle's length before beginning to hear the announcement.

Also in the last example, notice that the Audible Ringing subfield is "Y" for the first announcement but "N" for the second one. When an announcement follows ringing, a "Y" selector is recommended because it causes the ringing to simply continue until the beginning of the announcement cycle comes around. But when an announcement follows music, it may be better to provide silence, rather than a short burst of ringing, until the beginning of a cycle. This is especially true if the announcement is short.

It is recommended that the last route in each audio route list specify either repetition or an interval (music, ringing, or silence) of infinite duration. Otherwise, the route list does not specify what happens if the end of the list is reached before the operator becomes available. When this happens, ringing is applied until the operator becomes available.

### **Error Messages for Table TOPAUDIO**

The following error messages apply to table TOPAUDIO.

\_\_\_\_\_

Error Messages for Table TOPAUDIO	
Error Message	Explanation and Action
TUPLE ALREADY EXISTS	The field AUDIOKEY name must be unique. If an attempt is made to add a second tuple with the same name this error message is displayed.
INVALID ANNOUNCEMENT/MUSIC CLLI. CHECK TABLE ANNS.	When field AUDIOSEL=MUSIC, then MUSICLLI refinement specifying music CLLI must be already in tables CLLI, ANNS and ANNMEMS tables. Otherwise this error message is displayed.
MUSIC AS THE LAST CHOICE MUST HAVE ZERO TIME.	If MUSIC is the last selection in field AUDIOSEL, then the associated TIME must be 0 (zero). Otherwise this error message is displayed
RINGING AS THE LAST CHOICE MUST HAVE ZERO TIME.	If RINGING is the last selection in field AUDIOSEL, then the associated TIME must be 0 (zero). Otherwise this error message is displayed
SILENCE AS THE LAST CHOICE MUST HAVE ZERO TIME.	If the SILENCE is the last selection in field AUDIOSEL, then the associated TIME must be 0 (zero). Otherwise this error message is displayed.
REPEAT ROUTE MUST NOT BE GREATER THAN <n></n>	When field AUDIOSEL=REPEAT then ROUTE refinement specifies the route number (1 to 5) where the repeat sequence begins. If the specified target route does not exist or the route is illegal (for example, the last selection is route #5 and entered as "REPEAT 5") then this error message is displayed
AUDIOKEY MUST BE DELETED FROM CT4QNAMS FIRST.	If an attempt is made to delete a tuple whose AUDIOKEY is still entered in table CT4QNAMS, then this error message is displayed.
NO AUDIO SELECTION WAS DATAFILLED.	At least one audio selection must be entered in field AUDIOSEL. Otherwise, this error message is displayed.
TABLE LIMIT HAS BEEN REACHED.	If the limit of tuples in table TOPAUDIO is reached, this error message is displayed.
	If table TOPAUDIO is not able to allocate more data store, this error message is displayed.
REPEAT MUST BE THE LAST CHOICE	If the REPEAT choice in field AUDIOSEL is not the last one, this error message is displayed.
SINGLE REPEAT CHOICE IS NOT ALLOWED.	If REPEAT is only choice in field AUDIOSEL, this error message is displayed.

\_\_\_\_\_\_

-End-

# 2.4 GHz Spectrum Analyzer Adapter

### Overview

This is a updated and slightly more robust version of a 2.4 GHz downconverter which we first talked about in Issue #6. This particular downcoverter will be designed mostly for extending the range of a spectrum analyzer or a frequency counter. The high dynamic range will also allow this converter to be useful in certain electronic warfare applications.

The RF input will be able to handle slightly more input power, up to 100 mW (+20 dBm), and will not be bandpass filtered. An optional external bandpass filter can be used to narrow the frequency range of the mixer. The 2.278 GHz local oscillator will be supplied from a stock California Amplifier MMDS downconverter circuit board. The downconverter's die–cast aluminum case and the antenna input N connector will also be used.

The theory of operation is simple. Direct RF energy in the range of 2.4 GHz to 2.5 GHz is applied to the RF port on a Mini–Circuits MBA–25MH mixer. The California Amplifier's 2.278 GHz local oscillator signal, slightly underpowered at +5 dBm, will then be applied to the mixer's LO port. The mixer's IF output will be in the VHF frequency range, at around 172 MHz for a 2.45 GHz input. The IF signal will then be low–pass filtered and sent to a Motorola MWA120 wideband amplifier. The MWA120 was chosen for its natural tendency to roll off frequencies above 400 MHz, and also for its fairly low–noise and high third–order intercept capabilites. Standard Mini–Circuits MAR–x series MMICs can be used for post–mixer IF amplification, or even no IF amplification can be used, if so desired.

Proper RF and microwave construction techniques will be required to keep the circuit from oscillating or generating a large amount of output spurious signals. Proper 50 ohm termination on all the mixer's ports will also be required for maximum performance.

-----

#### Frequency Conversions

RF Input (MHz)	IF Output (MHz)	Notes
2300	22	13 cm Ham Band
2325	47	
2350	72	
2375	97	
2400	122	Part 15 / Ham Band
2425	147	Part 15 / Ham Band
2450	172	Part 15 / Ham Band / Microwave Ovens
2475	197	Part 15 / Ham Band
2500	222	MMDS
2525	247	MMDS
2550	272	MMDS
2575	297	MMDS
2600	322	Pedophiles / MMDS
2650	372	MMDS
2700	422	MMDS

Local Oscillator: 2.278 GHz

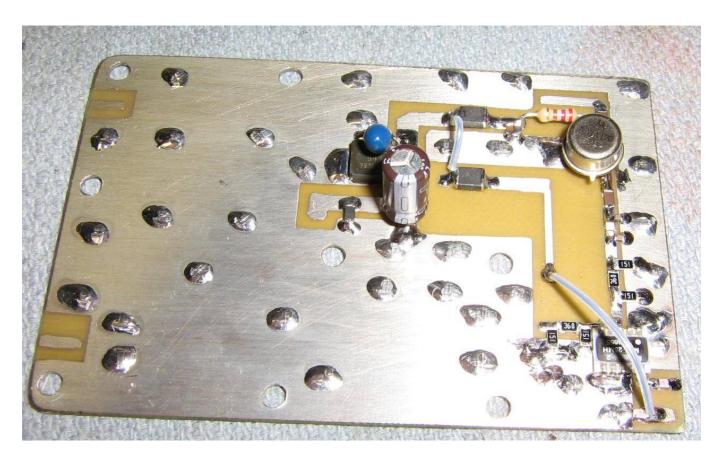
The optional IF low-pass filter rolls off gain above 250 MHz.

### **Construction Notes & Pictures**



Parts overview for the ammo box we'll mount the converter in.

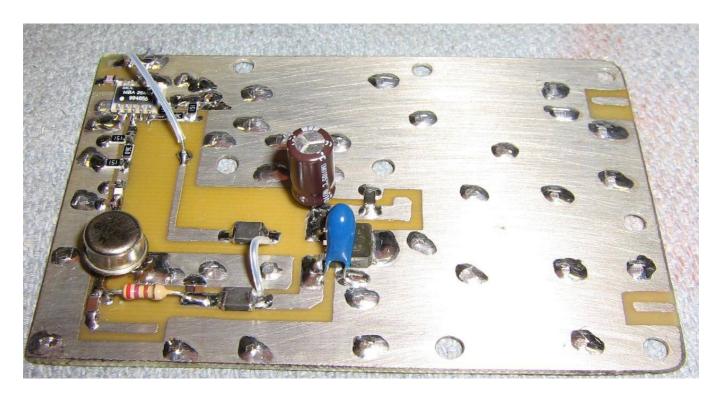
To the left is a filtered IEC AC line socket, a panel—mount fuse holder, a SPDT switch with a rubber boot cover, and a green neon power indicator lamp. In the middle are the panel—mount BNC and N RF connectors which will be used to connect up to the converter. On the right is a surplus +15 VDC "wall wart" power supply secured to a small piece of right—angle aluminum. Solder the 120 VAC input to the wall wart directly to the prongs and cover them with heatshrink tubing.



Assemble the converter PC board as shown above.

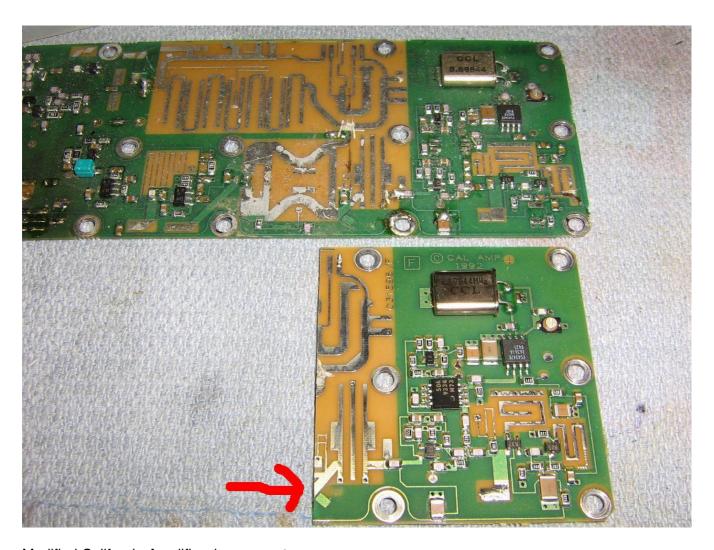
The mixer's local oscillator input is on the lower-right. The RF input is via the attenuator pad going off to the left. The IF output goes up into the MWA120 amplifier. A 78M12 regulates the incoming wall wart voltage.

The jumper wire is the +12 VDC line for the stock local oscillator section in the California Amplifier downconveter.



### Alternate view.

The large black things in series with the voltage lines are surface–mount ferrite beads. The input filter capacitor to the 78M12 is 47  $\mu$ F and the output capacitor is a 10  $\mu$ F tantalum.



Modified California Amplifier downconveter.

The red arrow points to the downconveter's local oscillator output, after a stripline bandpass filter. The 2.278 GHz signal is at around +5 dBm (3.1 mW). This is a little low and conversion loss will suffer. The mixer is designed to see at least +10 dBm (or even +7 dBm) on its LO port.



### Close up view.

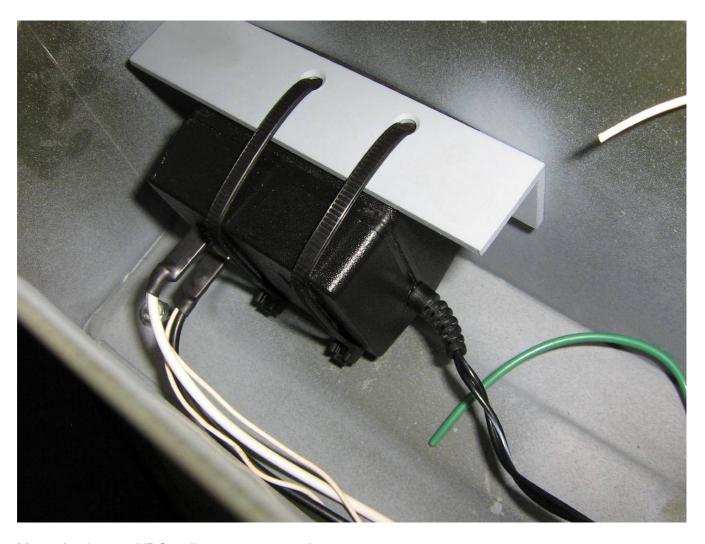
You'll have to scrape a little bit of solder mask off the output stripline from the bandpass filter, as shown on the lower–right. Also note the thin stripline trace off to the far–right of the PC board. This is the +12 VDC line for powering the 2.278 GHz oscillator circuit.



Install the new PC board, being sure it is both mechanically and electrical stable.

You can also install the RF connectors at this point and small pieces of coax to connect up to the connectors. For this particular project, a N connector will be used on the RF input and a BNC connector on the IF output.

Small zero-ohm jumpers connect the downconveter's local oscillator output to the new PC board. The two zero-ohm jumpers to the left of the MWA120 in the above photo are for mechanical stablity.



Mount for the +15 VDC wall wart power supply.

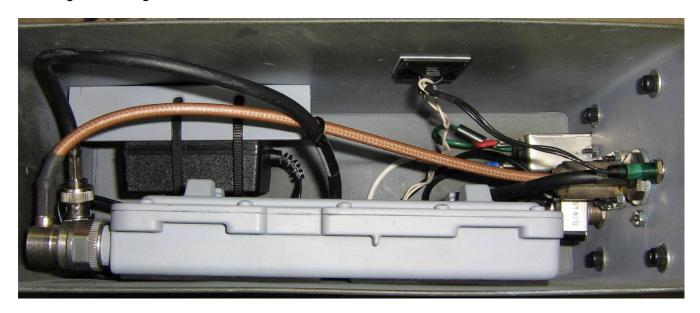
Secure the power supply itself with small pieces of art foam and zip ties.

The incoming AC power lines are soldered directly to the wall wart's prongs, with the extra set of wires to power a neon power indicator lamp.



Rear view of the front panel AC power input connections.

A small ferrite bead is slipped over the green ground wire on the lower–left. The ammo box should have a good Earth ground.



Installation of the MMDS downconverter case holding the new converter circuit board.

The MMDS downconverter case is secured to the side of the ammo box using a small 1/4"-20 inch bolt and some art foam.

Note the RF cable connections to the front panel.



Alternate internal overview.



Completed front panel overview.

There are dust caps installed on the input N connector and the output BNC connector.

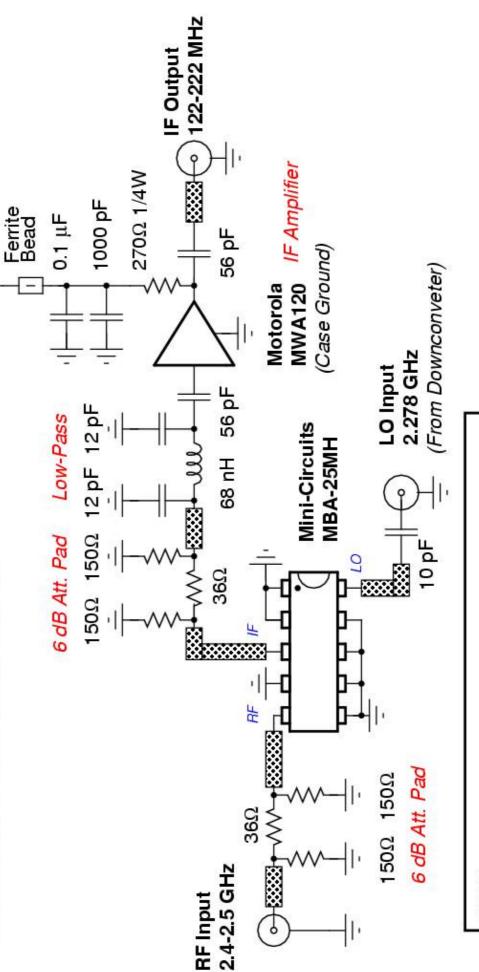
Brass drawer handles protect the front panel and the RF connectors from any abuse.

The green neon lamp in the upper-center is a 120 VAC power indicator.

# 2.4 GHz Spectrum Analzyer Adapter

+12 VDC

Downconveter to receive the 2.4 GHz band.



50Ω microstrip line

Ferrite bead is from an old SVGA video card.

Add bandpass filter on the input to decrease bandwidth.

The IF amplifier is optional.

# Ameritech Mechanized Accounts Payable System Logon Information

# **AMAPS Logon – Illinois Locations**

#### 3270 Terminal Emulation

Proceed to section 3270 Terminal Emulation.

#### **AOS Network via Direct Connection**

If the terminal has access to the ABLE Service "Network Access Control - 2:2 (116) USERS Service: prompt:

Type EXPRES and press Enter.

*Note:* Users dialing into the AOS Network *cannot* access EXPRES at the above "Service:" prompt. Please refer to the *ISDN/Modem Dial–In Terminal* instructions section.

#### **VT or VT-Emulated Terminal**

If the terminal has access to a "Local>" prompt, type C COECIS and press Enter.

#### **LAN Terminal or PC**

To access AMAPS from a terminal/PC connected to a Local Area Network (LAN), contact your LAN administrator to receive setup instructions for your specific work location.

#### **OpenNet Workstation**

If the workstation is configured on OpenNet with Domain Name Service (DNS), type telnet COECIS and press Enter.

#### ISDN/Modem Dial-In Terminal

To access AMAPS from ISDN or a terminal/PC with a modem or other dial-in capabilities, set up your communications software (Crosstalk, Procomm, etc.) as follows:

- 9600 baud or lower
- 8 bits
- No parity
- 1 stop bit
- ISDN users dial: 708-248-xxxx

#### **NCC Access**

Dial 708–248–xxxx. Ameritech Center modem pool users must have a NCC logon ID with COECIS access priviledges.

At the "Destination:" prompt, type COECIS and press Enter.

At the "NCC Login:" prompt, type your NCC logon ID and press Enter.

At the "NCC Password:" prompt, type your NCC logon password and press Enter.

At the "Username>" prompt, type your NCC logon ID and press Enter.

At the "Local>" prompt, type C COECIS and press Enter.

#### SecurID Access

Dial one of the corporate network modem pools for your area. To obtain a list of available numbers, contact your SecurID administrator or the Client Help Center.

Follow the instructions for logging onto the Network Access Server on your SecurID instructions. If EXPRES/COECIS is not on your SecurID menu, refer to the section *SecurID Instructions*.

#### **Other Users**

If you do not have access to a workstation within your work group or one that is available at your work location that either has OpenNet access or dial–in capabilities, contact the Client Help Center for assistance in accessing AMAPS.

## AMAPS Logon – Illinois Ameritech Center

#### 3270 Terminal Emulation

Proceed to section 3270 Terminal Emulation.

#### VT or VT-Emulated Terminal

If the terminal has access to a "Local>" prompt, type C COECIS and press Enter.

#### **Macintosh Workstation**

To access AMAPS from a Machintosh computer, modify your Phone Book to establish AMAPS as a menu item as follows:

- Double-click on Mac 240 Phone Book.
- Click and hold on DIAL, drag to EDIT NUMBERS.
- · Click on NEW.
- Click on TELNET DRIVER, click on OK.

In the TCP ADDRESS area, type **coecis** and click on OK.

In the MENU NAME area, type **AMAPS** and click on OK and then click FINISHED. Once AMAPS is established as a menu item, to log on from your Macintosh, click and hold on DIAL and drag it down to AMAPS.

#### **PC Workstation**

All other PC users should call 708–248–xxxx to receive setup instructions for a PC logon batch file.

#### ISDN/Modem Dial-In Terminal

To access AMAPS from ISDN or a terminal/PC with a modem or other dial-in capabilities, set up your communications software (Crosstalk, Procomm, etc.) as follows:

- 9600 baud or lower
- 8 bits
- No parity
- 1 stop bit
- ISDN users dial: 708-248-xxxx

#### **NCC Access**

Dial 708–248–xxxx. Ameritech Center modem pool users must have a NCC logon ID with COECIS access priviledges.

At the "Destination:" prompt, type COECIS and press Enter.

At the "NCC Login:" prompt, type your NCC logon ID and press Enter.

At the "NCC Password:" prompt, type your NCC logon password and ress Enter.

At the "Username>" prompt, type your NCC logon ID and press Enter.

At the "Local>" prompt, type C COECIS and press Enter.

#### **SecurID Access**

Dial one of the corporate network modem pools for your area. To obtain a list of available numbers, contact your SecurID administrator or the Client Help Center.

Follow the instructions for logging onto the Network Access Server on your SecurID instructions. If EXPRES/COECIS is not on your SecurID menu, refer to the section *SecurID Instructions*.

# **Other Users**

If you do not have access to a workstation within your work group or one that is available at your work location that either has OpenNet access or dial–in capabilities, contact the Client Help Center for assistance in accessing AMAPS.

# **AMAPS Logon – Indiana Locations**

#### 3270 Terminal Emulation

Proceed to section 3270 Terminal Emulation.

#### **LAN Terminal/PC**

Under Communications, select the EXPRES/COECIS option. TCP/IP software is required, if it is not present, select the following options in sequence: Network Software, Software Setup, and TCP/IP on PC. Then follow the prompts to install the software on your PC.

#### **LAN via Windows**

Click on the EXPRES icon under "Windows: LAN Communications Group."

#### All-In-One

To access AMAPS from the Indiana All-In-One system:

Log on to All-In-One using your All-In-One username and password.

Type COM (Communications Menu) and press Enter.

Type MF (Main Frame Menu) and press Enter.

Type 5 (EXPRES/COECIS) and press Enter.

#### **VT or VT-Emulated Terminal**

If the terminal has access to a "Local>" prompt, type C COECIS and press Enter.

-- OR --

Type C INVMS at the "Local>" prompt and press Enter. Type SNA at the "Username:" prompt and press Enter. Type NETWORK at the "Password:" prompt and press Enter. Type 97 and press Enter.

-- OR --

Type C INVMS at the "Local>" prompt and press Enter. Type REGIONAL at the "Username:" prompt and press Enter. Type REGIONAL at the "Password:" prompt and press Enter. Type 8 and press Enter.

#### Modem/Dial-In Terminal

AMAPS must be accessed via SecurID when using modem/dial-in capabilities. If you do not have a SecurID card or EXPRES/COECIS is not on your SecurID menu, see *SecurID Instructions* on how to obtain a SecurID.

#### **Other Users**

If you do not have access to a workstation within your work group or one that is available at your work location that either has OpenNet access or dial–in capabilities, contact the Client Assistance Service Center at 317–265–xxxx for assistance in accessing AMAPS.

# **AMAPS Logon – Michigan Locations**

# 3270 Terminal Emulation

Proceed to section 3270 Terminal Emulation.

#### Modem/Dial-In Terminal

AMAPS must be accessed via SecurID when using modem/dial-in capabilities. If you do not have a SecurID card or EXPRES/COECIS is not on your SecurID menu, see *SecurID Instructions* on how to obtain a SecurID.

#### **SecurID Access**

Dial one of the corporate network modem pools for your area. To obtain a list of available numbers, contact your SecurID administrator or the Client Help Center.

Follow the instructions for logging onto the Network Access Server on your SecurID instructions. If EXPRES/COECIS is not on your SecurID menu, refer to the section *SecurID Instructions*.

#### **LAN Terminal/PC**

To access AMAPS from a terminal/PC connected to a LAN, contact your LAN administrator to receive setup instructions for your specific work location.

#### **Other Users**

If you do not have OpenNet, MBT Modem Pool, or LAN access, you may access AMAPS from terminals at the following locations:

- Northwestern Hwy., Office Center, "A" Building, Room 121
- Northwestern Hwy., Office Center, "B" Building, Room 300
- Northwestern Hwy., Office Center, "E" Building, Room 158
- Northwestern Hwy., Office Center, "W" Building, Room 252
- 10625 Northland Dr., SANDY Building, Room 200

Or contact the Client Help Center for assistance.

# **AMAPS Logon - Ohio Locations**

#### 3270 Terminal Emulation

Proceed to section 3270 Terminal Emulation.

# **OpenNet Workstation**

If your workstation (PC, Macintosh, or a terminal that can emulate a VT-220 or higher) has access to the "Xyplex>" prompt, type C COECIS and press Enter.

## ISDN/Modem Dial-In Terminal

To access AMAPS from a terminal/PC with modem/dial-in capabilities, set up your communications software (Crosstalk Mark IV, Crosstalk for Windows, or SmartComm II) as follows:

- 9600 baud or lower
- 8 bits
- No parity
- 1 stop bit

# **SecurID Access**

Dial one of the corporate network modem pools for your area. To obtain a list of available numbers, contact your SecurID administrator or the Client Help Center.

Follow the instructions for logging onto the Network Access Server on your SecurID instructions. If EXPRES/COECIS is not on your SecurID menu, refer to the section *SecurID Instructions*.

#### **Other Users**

If you do not have access to a workstation within your work group or one that is available at your work location that either has OpenNet access or dial–in capabilities, contact the Ohio Desktop Computing Group for assistance at 216–822–xxxx.

# **AMAPS Logon – Wisconsin Locations**

#### 3270 Terminal Emulation

Proceed to section 3270 Terminal Emulation.

## **OpenNet Workstation**

Access AOS/EAS/OpenNet following your normal routines. Type C COECIS at the "Local>" prompt and press Enter.

-- OR --

Type C INVMS at the "Local>" prompt and press Enter. Type REGIONAL at the "Username:" prompt and press Enter. Type REGIONAL at the "Password:" prompt and press Enter. Type 8 and press Enter.

#### Modem/Dial-In Terminal

AMAPS must be accessed via SecurID when using modem/dial-in capabilities. If you do not have a SecurID card or EXPRES/COECIS is not on your SecurID menu, see *SecurID Instructions* on how to obtain a SecurID.

#### **Other Users**

If you do not have OpenNet or AOS/EAS access, contact the Data Provisioning Helpline at 1–800–924–xxxx for information on obtaining access. If access cannot be immediately established at your work station it is recommended that you:

- Use a terminal in your work group which has access.
- Use one of the shared terminals which will be available at various locations.

#### 3270 Terminal Emulation

The AMAPS 3270 terminal emulation software, A–Net, is accessed through a Virtual Telecommunications Access Method (VTAM) screen. Your screen should look like this:

AMERITECH INTEGRATED CORPORATE NETWORK
SNA ID: XXXXXXXX

WARNING: FOR AUTHORIZED BUSINESS USE ONLY. SUBJECT TO MONITORING.

Type **LOG LACOECIS** or **LOG WACOECIS**. If you use a supersession (i.e., LASUP03 or Panoramic), add LACOECIS or WACOECIS to your application list.

# **Keyboard Mapping**

The keys shown below are those necessary to use the A–Net terminal emulation on your 3270–type terminal device to access AMAPS. If you have additional software to emulate a 3270–type device, use the key from your software package to emulate the appropriate Program Function (PF) key.

# **EXPRES and Deputization Keyboard Mapping**

- (P)F1 = Tab
- (P)F2 = Up Arrow
- (P)F3 = Exit/Cancel
- (P)F4 = Exit/Cancel
- (P)F5 = Control Use with E (Escape), L (Online Help), H (Backtab)
- (P)F6 = Refresh Screen
- (P)F7 = Up Arrow
- (P)F8 = Down Arrow
- (P)F12 = EXPRES Field Help
- Enter = Return

# **Routing and Approval Keyboard Mapping**

- (P)F1 = Tab
- (P)F2 = Up Arrow
- (P)F3 = Not Used
- (P)F4 = Not Used
- (P)F5 = Not Used
- (P)F6 = Refresh Screen
- (P)F7 = Up Arrow
- (P)F8 = Down Arrow
- (P)F9 = GOLD Menu
- (P)F12 = Not Used
- Enter = Return
- PA1 = GOLD Help
- PA2 = Exit

# **EXPRES, VVOPS, and Deputization Cursor Movement**

The Tab (PF1) key moves your cursor from field—to—field, the Enter key completes the screen. The Up Arrow (PF7) scrolls the data up through the scrolling region, the Down Arrow (PF8) scrolls the data down through the scrolling region. Type Control (PF5) plus H to move the cursor back through the fields on your screen. Action commands instruct you to use the letter within the parentheses to perform your desired action. The Exit/Cancel keys or Control (PF5) plus E allow you to escape from a screen. Online help is available for each field by pressing the PF12 key or Control (PF5) plus L.

# **Routing and Approval Cursor Movement**

The Tab (PF1) key moves your cursor from field—to—field, the Enter key completes the screen. The Up Arrow (PF7) scrolls the data up through the scrolling region, the Down Arrow (PF8) scrolls the data down through the scrolling region. Action commands instruct you to type the letter(s) to perform your desired action. The Exit/Cancel keys allow you to exit from a screen. Online help is available by pressing PA1 or H. Menu options are available by pressing PF9 (GOLD Menu).

# **SecurID Instructions**

AMAPS must be accessed via SecurID when using modem/dial-up terminals. SecurID access is managed by Network Distributed Security.

If you do not have a SecurID card, complete a SecurID card request form (AM860). Destination request information should reflect EXPRES/COECIS. Mail or fax the form to the appropriate SecurID administration group.

If you have a SecurID card, contact the appropriate SecurID administration group via e-mail or complete form AM860 to update the destination/network information. Any questions regarding SecurID access can be directed to the appropriate SecurID administration hotline.

# Logging on to AMAPS

Log onto AMAPS using your AMAPS username and password.

For first time users, the password provided to you in your Job Aid is only valid for your first session of AMAPS. Follow the system prompts to establish your new password. Remember this new password and your AMAPS username for your next logon. If you need your password reset, contact the Client Help Center.

Once logged onto the system, the "Information Services / COECIS Main Menu" will be displayed. From this menu, select the primary menu for your application:

DB	-	Ameritech Database Menu
UP	-	User Setup Menu
VTX	-	Enter Videotext
XP	-	Employee Expense Reimbursement System (EXPRES)
vv	_	Vendor Voucher Payment System (VVOPS)
RA	-	Electronic Routing and Approval Services
RF	_	Refresh Screen
LO	-	Logoff System

**Note:** The options you can access off this and subsequent menus will be determined by a system security function.

To update your user profile, type UP and press Enter.

To request employee reimbursement, type **XP** and press Enter.

To request vendor payment, type vv and press Enter.

To use the routing and approval capabilities of the system, type RA and press Enter.



This is an excerpt from the book *The Sword and the Shield – The Mitrokhin Archive and the Secret History of the KGB* by Christopher Andrew and Vasil Mitrokhin.

It discusses the widely believed, but false, story that the CIA created AIDS to kill off all the niggers in third-world countries. Wait, that sounds like a good idea actually...

# From Page 244:

security of the Guinean Republic. 132

The fabrication of compromising US documents and imaginary CIA plots of tinued into the Gorbachev era. In addition to the "silent forgeries" shown privately Sekou Touré and other gullible political leaders around the world, forgeries were us to promote media campaigns: among them, in 1987, a forged letter from the D William Casey, on plans to overthrow the Indian prime minister, Rajiv Gandhi 1988, bogus instructions from Reagan to destabilize Panama; and in 1989, a factorized letter from the South African foreign minister, "Pik" Botha, referring to a sister but non-existent secret agreement with the United States. 113

Probably the most successful anti-American active measure of the Gorbachev promoted by a mixture of overt propaganda and covert action by Service A, was story that the AIDS virus had been "manufactured" by American biological ward specialists at Fort Detrick in Maryland. An East German, Russian-born physic Professor Jacob Segal, claimed on the basis of "circumstantial evidence" (later who

#### From Page 245:

discredited) that AIDS had been artificially synthesized at Fort Detrick from two natural viruses, VISNA and HTLV-1. Thus fortified by spurious scientific jargon, the AIDS fabrication not merely swept through the Third World, but took in some of the Western media as well. In October 1986 the conservative British Sunday Express made it its main front-page story. During the first six months of 1987 alone, the story received major news coverage in over forty Third World countries.

At the very height of its success, however, the AIDS fabrication was compromised by a combination of Western protests and "new thinking" in Soviet foreign policy. "We tell the truth and nothing but the truth," Gorbachev proudly proclaimed at a Moscow press conference in July 1987. Faced with official American protests and the repudiation of the AIDS story by the international scientific community, the Kremlin for the first time showed signs of embarrassment at a successful active measures campaign. In August 1987 US officials in Moscow were informed that the story was officially disowned and Soviet media coverage of it came to an abrupt halt.

The AIDS fabrication, however, was swiftly followed by other, equally scurrilous anti-American active measures in the Third World, some of which also seduced sections of the Western media. Among the most successful was the "haby parts" story, alleging that rich Americans were butchering Third World children in order to use their bodies for organ transplants in the United States. In September 1988 a motion in the European Parliament condemning the alleged trafficking in "haby parts," proposed by a French Communist MEP, passed on a show of hands in a poorly attended session. 124

From the end of the Cald Was did that . . . . . . . . . . .

# End of Issue #48



**Any Questions?** 

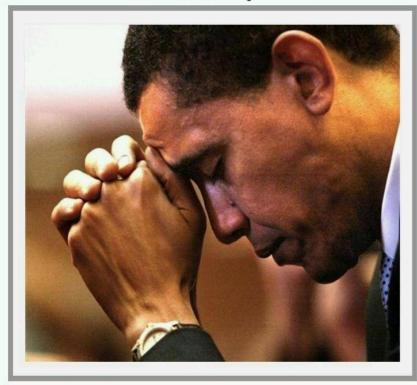
# **Editorial and Rants**

So Barack Hussein Obama now says he had <u>no idea</u> what was happening at his nigger power "church." Hmmm...

From: http://www.daylife.com/photo/0c29cez0gz3TF

Organizing the world's news. Search millions of articles, images, people SEARCH T

# Photo from AP Photo by NAM Y HUH



41 months ago: Barack Obama, then Democratic senatorial candidate, prays during a services at Trinity United Church of Christ in Chicago in this Oct. 31, 2004 file photo. Obama's made religion a signature part of his campaign through his own public appearances in places where Democrats rarely venture, and a faith-based voter mobilization, topped by forums in Iowa, New Hampshire and South Carolina that could prove key to organizing.

Just like Stalin.

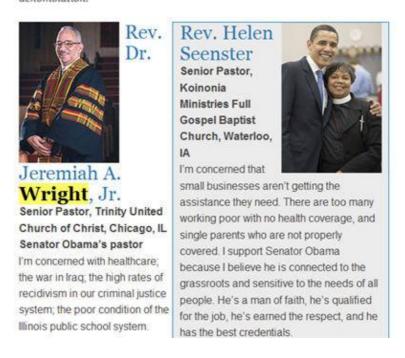
From: http://sweetness-light.com/archive/pastor-wright-erased-from-obamas-website

#### Before:



#### Testimonials

Endorsements from religious leaders are extended in their personal capacity, and not on behalf of any house of worship, organization or denomination.



#### After:



#### Testimonials

Endorsements from religious leaders are extended in their personal capacity, and not on behalf of any house of worship, organization or denomination.

# Danielle S. Orthodox Judaism,

College Park, MD
I am a PhD student in
educational policy and
married with a 4 year old
son. I was raised Catholic
but converted to Judaism at
17. My faith requires me to
be a good neighbor and
this translates into my
politics. I believe Senator
Obama recognizes this
principle. At the end of the

day, many people of faith

want the same thing; we just

# Rev. Helen Seenster Senior Pastor, Koinonia Ministries Full

Koinonia Ministries Full Gospel Baptist Church, Waterloo, IA

I'm concerned that

small businesses aren't getting the assistance they need. There are too many working poor with no health coverage, and single parents who are not properly covered. I support Senator Obama because I believe he is connected to the



I found this poking around Archive.org looking for suppressed news stories.

# Oil Fields' Free Refill

April 16, 2002 - From: www.newsday.com

By Robert Cooke

DEEP UNDERWATER, and deeper underground, scientists see surprising hints that gas and oil deposits can be replenished, filling up again, sometimes rapidly.

Although it sounds too good to be true, increasing evidence from the Gulf of Mexico suggests that some old oil fields are being refilled by petroleum surging up from deep below, scientists report. That may mean that current estimates of oil and gas abundance are far too low.

Recent measurements in a major oil field show "that the fluids were changing over time; that very light oil and gas were being injected from below, even as the producing [oil pumping] was going on, said chemical oceanographer Mahlon "Chuck Kennicutt. "They are refilling as we speak. But whether this is a worldwide phenomenon, we don't know. Also not known, Kennicutt said, is whether the injection of new oil from deeper strata is of any economic significance, whether there will be enough to be exploitable. The discovery was unexpected, and it is still "somewhat controversial within the oil industry.

Kennicutt, a faculty member at Texas A&M University, said it is now clear that gas and oil are coming into the known reservoirs very rapidly in terms of geologic time. The inflow of new gas, and some oil, has been detectable in as little as three to 10 years. In the past, it was not suspected that oil fields can refill because it was assumed the oil formed in place, or nearby, rather than far below. According to marine geologist Harry Roberts, at Louisiana State University, "petroleum geologists don't accept it as a general phenomenon because it doesn't happen in most reservoirs. But in this case, it does seem to be happening. You have a very leaky fault system that does allow it to migrate in. It's directly connected to an oil and gas generating system at great depth.

What the scientists suspect is that very old petroleum — formed tens of millions of years ago — has continued migrating up into reservoirs that oil companies have been exploiting for years. But no one had expected that depleted oil fields might refill themselves.

Now, if it is found that gas and oil are coming up in significant amounts, and if the same is occurring in oil fields around the globe, then a lot more fuel than anyone expected could become available eventually. It hints that the world may not, in fact, be running out of petroleum.

"No one has been more astonished by the potential implications of our work than myself, said analytic chemist Jean Whelan, at the Woods Hole Oceanographic Institution, in Massachusetts. "There already appears to be a large body of evidence consistent with ... oil and gas generation and migration on very short time scales in many areas globally, she wrote in the journal Sea Technology.

"Almost equally surprising, she added, is that "there seem to be no compelling arguments refuting the existence of these rapid, dynamic migration processes.

The first sketchy evidence of this emerged in 1984, when Kennicutt and colleagues from Texas A&M University were in the Gulf of Mexico trying to understand a phenomenon called "seeps, areas on the seafloor where sometimes large amounts of oil and gas escape through natural fissures.

"Our first discovery was with trawls. We knew it was an area of massive seepage, and we expected that the oil seeps would poison everything around the site. But they found just the opposite.

"On the first trawl, we brought up over two tons of stuff. We had a tough time getting the nets back on board because they were so full of very odd–looking sea floor creatures, Kennicutt said. "They were long strawlike things that turned out to be tube worms.

"The clams were the first thing I noticed, he added. "They were pretty big, like the size of your hand, and it was obvious they had red blood inside, which is unusual. And these long tubes -- 3, 4 and 5 feet long -- we didn't know what they were, but they started bleeding red fluid, too. We didn't know what to make of it.

The biologists they consulted did know what to make of it. "The experts immediately recognized them as chemo-synthetic communities, creatures that get their energy from hydrocarbons — oil and gas — rather than from ordinary foods. So these animals are very much like, but still different from, recently discovered creatures living near very hot seafloor vent sites in the Pacific, Atlantic and other oceans.

The difference, Kennicutt said, is that the animals living around cold seeps live on methane and oil, while the creatures growing near hot water vents exploit sulfur compounds in the hot water.

The discovery of abundant life where scientists expected a deserted seafloor also suggested that the seeps are a long-duration phenomenon. Indeed, the clams are thought to be about 100 years old, and the tube worms may live as long as 600 years, or more, Kennicutt said. The surprises kept pouring in as the researchers explored further and in more detail using research submarines. In some areas, the methane–metabolizing organisms even build up structures that resemble coral reefs.

It has long been known by geologists and oil industry workers that seeps exist. In Southern California, for example, there are seeps near Santa Barbara, at a geologic feature called Coal Oil Point. And, Roberts said, it's clear that "the Gulf of Mexico leaks like a sieve. You can't take a submarine dive without running into an oil or gas seep. And on a calm day, you can't take a boat ride without seeing gigantic oil slicks on the sea surface.

Roberts added that natural seepage in places like the Gulf of Mexico "far exceeds anything that gets spilled by oil tankers and other sources.

"The results of this have been a big surprise for me, said Whelan. "I never would have expected that the gas is moving up so quickly and what a huge effect it has on the whole system.

Although the oil industry hasn't shown great enthusiasm for the idea — arguing that the upward migration is too slow and too uncommon to do much good — the search for new oil and gas supplies already has been affected, Whelan and Kennicutt said. Now, companies scan the sea surface for signs of oil slicks that might point to new deposits.

"People are using airplane surveys for the slicks and are doing water column fluorescence measurements looking for the oil, Whelan said. "They're looking for the sources of the seeps and trying to hook that into the seismic evidence normally used in searching for buried oil. Similar

research on known oil basins in the North Sea is also under way, and "that oil is very interesting. There are absolutely marvelous pictures of coral reefs which formed from seepage [of gas] from North Sea reservoirs, Whelan said.

Analysis of the ancient oil that seems to be coming up from deep below in the Gulf of Mexico suggests that the flow of new oil "is coming from deeper, hotter formations and is not simply a lateral inflow from the old deposits that surround existing oil fields, she said. The chemical composition of the migrating oil also indicates it is being driven upward and is being altered by highly pressurized gases squeezing up from below.

This upwelling phenomenon, Whelan noted, fits into a classic analysis of the world's oil and gas done years ago by geochemist–geologist John Hunt. He suggested that less than 1 percent of the oil that is generated at depth ever makes it into exploitable reservoirs. About 40 percent of the oil and gas remains hidden, spread out in the tiny pores and fissures of deep sedimentary rock formations.

And "the remaining 60 percent, Whelan said, "leaks upward and out of the sediment via the numerous seeps that occur globally.

Also, the idea that dynamic migration of oil and gas is occurring implies that new supplies "are not only charging some reservoirs at the present time, but that a huge fraction of total oil and gas must be episodically or continuously bypassing reservoirs completely and seeping from surface sediments on a relatively large scale, Whelan explained.

So far, measurements involving biological and geological analysis, plus satellite images, "show widespread and pervasive leakage over the entire northern slope of the Gulf of Mexico, she added.

"For example, Ian MacDonald at Texas A&M has published some remarkable satellite photographs of oil slicks which go for miles in the Gulf of Mexico in areas where no oil production is occurring. Before this research in oil basins began, she added, "changes in reservoired oils were not suspected, so no reliable data exists on how widespread the phenomenon might be in the Gulf Coast or elsewhere.

The researchers, especially the Texas team, have been working on this subject for almost 15 years in collaboration with oil industry experts and various university scientists. Their first focus was on the zone called South Eugene Island block 330, which is 150 miles south of New Orleans. It is known as one of the most productive oil and gas fields in the world. The block lies in water more than 300 feet deep.

As a test, the researchers attempted to drill down into a known fault zone that was thought to be a natural conduit for new petroleum. The drilling was paid for by the U.S. Department of Energy.

Whelan recalled that as the drill dug deeper and deeper, the project seemed to be succeeding, but then it abruptly ended in failure. "We were able to produce only a small amount of oil before the fault closed, like a giant straw, probably because reducing the pressure there allowed the fissure to collapse.

In addition to the drilling effort and the inspection of seeps, Whelan and her colleagues reported that three–dimensional seismic profiles of the underground reservoirs commonly show giant gas plumes coming from depth and disrupting sediments all the way to the surface.

This also shows that in an area west of the South Eugene Island area, a giant gas plume originates from beneath salt about 15,000 feet down and then disrupts the sediment layers all the way to the surface. The surface expression of this plume is very large — about 1,500 feet in diameter. One surprise, Whelan said, was that the gas plume seems to exist outside of faults, the ground fractures, which at present are the main targets of oil exploration.

It is suspected that the process of upward migration of petroleum is driven by natural gas that is being continually produced both by deeply buried bacteria and from oil being broken down in the deeper, hotter layers of sediment. The pressures and heat at great depth are thought to be increasing because the ground is sinking — subsiding — as a result of new sediments piling up on top. The site is part of the huge delta formed over thousands of years by the southward flow of the massive Mississippi River. Like other major deltas, the Mississippi's outflow structure is continually being built from sands, muds and silts washed off the continent.

Analysis of the oil being driven into the reservoirs suggests they were created during the so-called Jurassic and Early Cretaceous periods (100 million to 150 million years ago), even before the existing basin itself was formed. This means the source rock is buried and remains invisible to seismic imaging beneath layers of salt.

In studying so-called biomarkers in the oil, Whelan said, it was concluded that the oil is closely related to other very old oils, implying that it "was probably generated very early and then remained trapped at depth until recently. And, she added, other analyses "show that this oil must have remained trapped at depths and temperatures much greater than those of the present-day producing reservoirs.

At great depth, where the heat and pressure are high enough, she explained, methane is produced by oil being "cracked, and production of gas "is able to cause sufficient pressure to periodically open the fracture system and allow upward fluid flow of methane, with entrapment of oil in its path.

Help prevent Global Warming®. Err... I meant Climate Change™.

Don't park your car, with that heat-radiating engine, next to the fucking weather station!

From: http://wattsupwiththat.wordpress.com/2008/03/link-to-weather-station-photos/





