

DEFINITION OF TERM

CONTENTS

- |                             |                         |
|-----------------------------|-------------------------|
| 1. SCOPE OF SECTION         | 3. CABLE AND FORM TERMS |
| 2. EQUIPMENT LOCATION TERMS | 4. COMMON WIRING TERMS  |

1. SCOPE OF SECTION

1.1 This Section defines the various terms generally used to designate equipment locations, cables, forms and common wiring.

2. EQUIPMENT LOCATION TERMS

Front: When used to designate the location of components or framework parts, "Front" is generally that side from which the equipment is operated or the side on which the major maintenance operations are performed.

A. On switchboards, desks, power bays, and panels, "Front" is the side from which the equipment is operated.

B. On relay racks, traffic and message register racks, and dial frames, "Front" is the side on which the apparatus is mounted.

C. With the use of duct-type frames (as used for toll transmission equipment) three different line-up arrangements are possible as follows:

1. Single-sided arrangement, in which case "Front" is the side requiring the greater activity or maintenance. In general, "Front" is the wiring side. Exceptions to the general rule are such equipment as VF channel patch bays, K carrier sealed test terminal bays, K and L carrier HF patch and program patch bays, and television bays. In such exceptions, "Front" is the operating side but the wiring is on the rear.

2. Back-to-back arrangement, in which case two single-sided bays are located with the apparatus side butted each to the other. Here the wiring side of each bay is called "Front".

3. Double-sided arrangement, in which case the equipment panels are mounted on both sides of the bay, with the components exposed and with the panel wiring between the bay uprights. Here both sides of the bay are called "Front".

Left: When used to designate equipment for switchboards, desks, frames, or racks, it shall be interpreted as being taken when facing the front of such switchboards, desks, frames, or racks.

Rear: (See Front.) When used to designate the location of components or framework parts, "Rear" is opposite that side of the frame which has been established as the "Front".

A. On switchboards, desks, power bays, and panels, "Rear" is the side farthest away from the operator.

B. On relay racks, traffic and message register racks, and dial frames, "Rear" is the wiring side of the frame.

Right: When used to designate equipment for switchboards, desks, frames, or racks, it shall be interpreted as being taken when facing the front of such switchboards, desks, frames or racks.

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### 3. CABLE AND FORM TERMS

**Arm:** A branch or leg of the main section of a cable form.

**Banjo Strapping:** Bare tinned wire which is run directly from terminal to terminal usually on crossbar switches.

**Butt:** The point at which the sheath or covering of a cable terminates.

**Butt Leg:** The leg nearest the butt or main body of a cable form having two or more legs or branches.

**Cable Form:** A formation of wires not encased in a jacket.

The wires are held in formation either by sewing with twine, nylon cable ties, (sewed form) or by means of fanning rings, fanning strips, or other wire retaining devices (loose wire form). Cable forms are of two types, those made of bulk wire and those made from the unjacketted ends of switchboard cables.

**Coaxial Office Cable:** An insulated conductor enclosed in a single or double covering of braided wire shielding and an outer insulation (jacket) that covers the shield.

**Double Stripper:** That portion of a cable between two given points from which the outer covering is stripped or removed. The length of the double stripper is the distance between the stripper butts.

**F Stitch:** A supplementary stitch on a local cable form for separating wires of the same color which are to be connected to different terminals of the same component.

**Fanned Form:** An arrangement where the wires are brought directly from the butt of the cable, or from the point where the wires leave a sewed or loose wire form through a fanning strip or other fanning device, to the terminals of components without being otherwise secured.

**Interbay Cable:** A cable which has its ends terminated in separate bays.

**Interbay Cables:** A cable which has both ends terminated in the same bay.

**Leg:** (See Arm.)

**Local Cable:** A cable composed wholly or in part of bulk wire held in cable formation by sewing with twine or nylon cable ties.

**Loose Wire Form:** Wiring held in cable formation by fanning rings, other wire retaining devices, or ties.

**Sewed Form:** A formation of cable wires, bulk wires, or both bulk wires and cable wires compactly sewed in such a manner that the wires are brought out approximately opposite their associated terminals at the components.

**Single Stripper:** That portion of the end of a cable from which the outer covering is stripped or removed. The length of the single stripper is the distance between the butt and the end of the stripper before the conductors are unwound.

**Slanting Form:** The arm of a switchboard short multiple cable form where the edge of the cable form nearest the components to which the wires are soldered is slanting and not parallel to the rows of terminals on the components.

**Splice Stripper:** (See Double Stripper.)

**Straight Form:** The arm of a switchboard short multiple cable form where the edge of the form nearest the components to which the wires are connected is straight and parallel to the rows of terminals on the components.

**Straight Straps:** Straps run straight across terminals which are to be connected together.

**Slanting Skinners:** Skinners which are of unequal length, and where the edge of the form nearest the apparatus to which the wires are connected is slanting and not parallel to the row of terminals on the apparatus.

**Stripper:** That portion of a cable from which the outer covering is stripped or removed.

**Stripping:** The operation of removing the outer covering or sheath of a cable together with the inner wrapping (when provided), thus exposing the wires.

**Sub Arm:** A branch of an arm (an arm which breaks out of another arm).

**Switchboard Cable:** Any cable with plastic (or fabric) sheath or covering.

**Tip End:** The end of the cable arm farthest from the butt or main body of the cable. On a cable which has no butt, the end of the cable with the smallest diameter.

**Tip Leg:** The leg farthest from the butt or main body of a cable form having two or more legs or branches.

#### 4. COMMON WIRING TERMS

**Bare Strap:** (See Strap) a strap made of bare wire.

**C Wiring:** Those switchboard or local cable wires which are required to be segregated for electrical reasons, such as wiring carrying tones. (Designated "C", "C2", "C4", and "C5" on the circuit schematics, depending upon the extent to which the segregation is required.) For further description see Section 201 of this Handbook.

**Common Wire:** Any wire supplying battery, ground, ringing, tone, etc, to more than one component. The connections between the several components are made by means of common straps or loop wires.

**Common Strap:** (See Strap.) A continuous piece of wire which connects one or more terminals within an individually numbered circuit to terminals on succeeding or preceding numbered circuits for the purpose of supplying battery, ground, or other common potential to the components or to serve as a common wire for testing, listening, ringing, etc.

**Connecting:** The operation of securing or fastening wires to terminals such as by soldering, solderless wrapping, quick-connecting, fastening with screws or clamps, or by any other approved method.

**D Wiring:** Wiring not sewed into cable forms. This includes "D, D1, D2, D3, D4 and D5" wiring. For specific definition of each "D" wiring symbol, refer to Section 201 of this Handbook.

**Dressing:** The process of arranging wires and skinners with respect to terminals.

**Extended Skinner Connection:** A connection between adjacent terminals which is established by extending the bare end of a wire terminating on one of the terminals to the adjacent terminal or to the next terminal in line in order to avoid the use of a separate strap or loop.

**F Stitch Wire:** A wire or lead placed under an "F" Stitch on a cable form (for further information, see Section 221 of this handbook).

**Individual Strap:** (See Strap.) Straps that connect two or more terminals in the same individually numbered circuit for the purpose of supplying battery, ground, or other common potential to components or to serve as a common wire for testing, listening, ringing, etc.

**Loop Lead or Wire:** Insulated common wire run from terminal to terminal of same or adjacent components and sewed in the cable form instead of being run directly from terminal to terminal.

**Multiple Twin (Quad):** Two pairs twisted together.

**Pair:** Two wires run together, usually twisted.

**Pair, Tight Twisted:** Paired wires twisted either manually or by machine to a specific frequency of twist tighter than the frequency of twist normally furnished by the wire manufacturer. For example, paired wires initially manufactured with a twist length of 1.50 inches which have been additionally twisted to a length of 1.25 inches or less per completed twist.

**Quad:** (See Multiple Twin.)

**Quick-Connect Connection:** An unsoldered connection made by inserting an insulated wire between the two contact surfaces of a slotted-beam type terminal with an approved tool. (For further information refer to Section 340 of this Handbook).

**Shiner:** The end of the wire or Skinner from which the insulation has been stripped to provide for connection to the terminal. (Also, sometimes used as the exposed portion of the conductor between the insulation and soldered or solderless wrapped connection.)

**Skinner:** In sewed forms, that portion of a wire which extends from the sewed portion of the form to the end of the wire. In fanned forms, either that portion of the wire which extends from the butt of the cable when fanned directly from the butt, or that portion which extends from a sewed or loose wire cable form located between the cable butt and the end of the wire.

**Skinner Length:** In the sewed form, the wire length from the sewed portion to the point of connection to the component, as measured from the edge of the cable nearest to the component. In the fanned form, it is the wire length from the cable butt, or cable form break-out to the point of connection to the component.

**Skinning:** The operation of removing the insulation from skimmers or conductors.

**Sleeved strap:** (See Strap.) A strap made of sleeved wire.

**Soldering:** The operation of fusing wire and terminal (or other metal parts) together by use of a suitable alloy of low melting point.

**Solderless Wrap (SW) Connection:**  
A connection made by wrapping a specific number of turns of a wire around a terminal with an approved wrapping tool. (Refer to Section 310 of this handbook for requirements.)

**Spare Wires:** Extra wires placed in switchboard cable for use in cases where, through breakage or through other unusual cases, some of the regular wires in the cable are not available for use.

**Note:** Most Central Office switchboard cables have had the spare wires removed.

**Straight Skimmers:** Skimmers which are of equal length and where the edge of the form nearest the apparatus to which the wires connect, is straight and parallel to the apparatus terminals.

**Strap:** (See Common Strap and Individual Strap.) Straps may be of bare or insulated wire, run from terminal to terminal of the same or adjacent components and not included in a sewed form.

**Strapping:** The process of connecting two or more terminals on the same or adjacent piece of apparatus by means of a bare or sleeved wire, or loop leads, for the purpose of supplying battery or ground to apparatus, or to serve as a common lead.

**Surface Strapping:** Strapping located near the end rather than at the base of the terminal to facilitate frequent changing or removal by the maintenance force.

**Surface Wiring:** Wiring which is run loose and dressed near or against the mounting plate or panel, such as "SW1" and "D3" wiring.

**Switchboard Wire:** Colored bulk wire of the type used in local cable.

**Tight Twisted Pair:** (See Pair, Tight Twisted.)

**Triple:** Three wires twisted together.

**U Wiring:** Shielded wire or cable. Designated "U", "U1", "U2", etc, "CU", "EU", or "RU" depending upon the type of wire or cable.

**Unequipped Wires:** Regular wires, other than spare wires, which are formed out for future components but which are not used initially. The unused wires in universal local cables are classed as unequipped wires.

**Unused Wires:** Regular wires, other than spare or unequipped wires, which are not required for future use and which are generally left dead in the form or at apparatus fanning strips.

**"X", "Y", "Z", etc. Wiring:** Wires so designated on circuit drawings in cases where it is necessary to distinguish between several wiring arrangements for a particular part of a circuit, the particular wiring to be used is specified on circuit drawings, wiring list drawings, or in job specifications.

Engineering Planning Manager  
Common Installation and Services

**Reason for Reissue:**  
Combine Sections 11, 111 and 112  
into one (Minus-) section.