```
    ((___))                                               ((___))
    [ x x ]          cDc communications, inc.             [ x x ]
     \   /                 presents...                     \   /
     (` ')                                                 (` ')
      (U)                                                   (U)
                 Frankie's YELLOW PAGES ... Volume I
                 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
             The third file from the Cow's Information Series
             (C.I.S.), FYPs is a testament to the fun-filled
             world created by those zany Bell technicians...
             Herein, the serious phreak will find a complete
             encyclopedia of Bell System terms and acronyms.

                 Courtesy of High Priest and Scribe, F. Gibe

                    -cDc- CULT OF THE DEAD COW -cDc-
```

_____

~~~~~~

ABD   See Average Business Day
~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~

Access Arrangement
~~~~~~~~~~~~~~~~~~~
Another name for a protective connecting arrangement. Access ar-
rangement is normally used in reference to the interconnection
of customer-provided data modems or automatic calling units in
which data access arrangement (DAA) service includes the provision
of a DAA with appropriate loop conditioning (including adjustments
for loop loss) to meet data requirements. Got that?

ACD   See Automatic Call Distributor
~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

ACH   See Attempts per Circuit per Hour
~~~   ...also See Abbreviation for CB Achievement Test.

Actual Work Time (AWT)
~~~~~~~~~~~~~~~~~~~~~~~
The average time an operator requires to handle a call. This
corresponds to the expected value (mean value) of the holding
time distribution used in the ol' Erlang C model. Bob the Cow
enjoys the Erlang C model. Very much, in fact. Moo.

Adaptive Transversal Equalizer
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
A transversal filter that automatically adjusts its characteristics
to compensate for linear distortion. Adaptive equalizers are par-
ticularly important in data modems where their use has permitted
voiceband data rates to be increased from about 3000 bits/per/sec
to about 10,000 bps. This ain't no run-of-the-mill transversal
filter, let me assure you.

Address
~~~~~~~

(1) Where fascist pig postal people deliver their letters.
(2) A sequence of #'s that identifies the phone to which a call
    is directed. An address is usually 7 to 10 digits, depending
    on whether the destination is in- or outside the NPA where
    the call originated. Also called a Destination Code (or,
    far more technically, a p-h-o-n-e n-u-m-b-e-r).
(3) Digital info. (a combo. of bits) that identifies a location
    in a storage device or equipment unit (ie, a computer, etc.).

Address Signals
~~~~~~~~~~~~~~~~
Signals used to convey call destination info., such as telephone
station codes, c.o. codes, and area codes. Some forms of address
signals are called pulses; dial pulses, MF pulses, etc.

Administration
~~~~~~~~~~~~~~
In operating companies, dial or network administration is a number
of related functions with the aim of ensuring the overall provision
of service by a switching system. This includes assignment of lines
and trunks to switching terminals, collection of traffic data,
analysis of troubles and customer gripes, and requests for
additions and modifications to switching systems.

AFT   See Analog Facility Terminal
~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

AIC   See Automatic Intercept Center
~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

AIS   See Automatic Intercept System
~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Alerting (Alerting Signal)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~
This is a signal sent to a customer, PBX, or switch to indicate an
incoming call. A common form is the signal that rings a bell in
your average telephone, usually arousing the customer from
sleep, the shower, the climax of Pudenda-Around-the-Globe, etc.

All-Number Calling (ANC)
~~~~~~~~~~~~~~~~~~~~~~~~~~
The system of telephone numbering that uses all numbers and
replaces the 2-letter plus 5-number (2L + 5N) numbering plan.
ANC offers more usable combo's of numbers than the old 2L+5N
numbering plan and has just about become nationally standard.

Alternate Routing
~~~~~~~~~~~~~~~~~~
A way to selectively distribute traffic over a number of routes
which ultimately lead to the same destination. Sometimes called
Call Detouring.

AM
~~
Amplitude Modulation; that is, when an EM wave is transmitted
(such as radio waves), that wave is given an "identity" by

modulating its amplitude (i.e., its 'heigth', in very rough
terms).

```
AMA          See Automatic Message Accounting
~~~          ...also See American Medical Association
```

American Standard Code for Information Interchange (ASCII)
~~~~~~
A 7-bit code for providing as many as 128 different characters. An
eighth bit can be added as a parity check to detect data errors.

Analog Facility Terminal (AFT)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
A voice-frequency facility terminal that performs signaling and
transmission functions and includes analog channel banks. It
interfaces between an analog carrier system and a switching system,
a metallic facility, a digital facility terminal, or another
analog facility terminal.

Analog Signal
~~~~~~~~~~~~~
A signal that varies in a continuous manner, such as voice or
music. An analog signal may be contrasted with a digital signal
which represents only distinct states. The signal put out by
a data set has both analog and digital characteristics.

```
ANC          See All-Number Calling
~~~          ~~~~~~~~~~~~~~~~~~~~~~~

ANI          See (gasp!) Automatic Number Identification
~~~          ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Answer Delay
~~~~~~~~~~~~
Just what you think it is: the time from the beginning of a phone's
ringing to the moment the receiving end answers. Answer delay
patterns are one of the traffic indicators your friendly non-ess
CO looks at when trying to nab boxers (since boxing, from the CO's
frame of reference, is just a longer-than-normal, unsuccessful
answer delay).

Area Transfer
~~~~~~~~~~~~~
The process of assigning a group of customers to a new wire center.

```
ASCII        See American Standard Code for Info. Interchange
~~~~~        ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Attempts per Circuit per Hour (ACH)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
An indication of calling pressure. See also CCH.

Automatic Call Distributor (ACD)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
A system for automatically providing even distribution of incoming
calls to operator or attendant positions; calls are served in the
order of arrival and are routed to positions in the order of

their availability for handling the call.

Automatic Intercept Center (AIC)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
A centrally located set of equipment that is a part of an Automatic
Intercept System and provides arrangements, having stored program
control, whereby the caller is automatically advised, by means of
either recorded or electronically assembled announcements, of the
situation that prevents completion of connection to the
called number.

Automatic Intercept System (AIS)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
A type of Traffic Service System consisting of one or more
automatic intercept centers and a centralized intercept bureau for
handling intercept calls.

Automatic Message Accounting (AMA)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
The automatic (the key word IS automatic...) collection, recording,
and processing of info. relating to calls for billing purposes.

Automatic Number Identification (ANI)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
The automatic identification of a calling station, usually for
automatic message accounting (and thus, in the end, for billing).
ANI, to you neophytes, is one of the scourges of ess. It's the
magic that makes using Bell Calling Cards unwise...et cetera.

Automatic Ringdown
~~~~~~~~~~~~~~~~~~~
A technique for supervision alerting on a nondial trunk in which
the application of a 2-second burst of ringing at the originating
end results in a supervisory signal at the terminating manual
PBX. See Ringdown.

Automatic Voice Network (AUTOVON)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
A private voiceband nerwork serving the Dept. of Defense. AUTOVON
uses automatic switching and handles both voice and data traffic.
It is worldwide; the continental U.S. portion is known as CONUS
AUTOVON.

AUTOVON   See Automatic Voice Network, above.
~~~~~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Average Business Day (ABD)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Refers to the average of the parameter in question over the
business days during the period considered; for example, busy-
hour traffic, phreak traffic, etc. Business days include Mondays
through Fridays but exclude holidays (in case you were curious).

AWT   See Actual Work Time
~~~   ~~~~~~~~~~~~~~~~~~~~~

Balance

~~~~~~~~
(1) To distribute traffic over the line terminals at a CO as
    uniformly as possible. Without load balancing, a portion of
    the switching equipment may become overloaded even though the
    total capacity of the system has not been exceeded.
(2) To adjust the impedance of circuits and balance networks to
    achieve specified return loss objectives at junctions of 2-
    wire and 4-wire circuits.

Balance Network
~~~~~~~~~~~~~~~
An adjustable impedance used to terminate one port of a hybrid
such that the hybrid characteristics approach the ideal when used
to provide 2 to 4-wire conversion.

Baseband
~~~~~~~~
The frequency band occupied by one or more info. signals that
either modulate a carrier or are transmitted at baseband freq.
over a suitable medium.

Baud
~~~~
A unit of digital signaling rate. The signaling rate in bauds is
equal to the reciprocal of the length in seconds of the signal
element when all signal elements have equal length. If sig.
elements are not of equal length, as in "stop-start" character
asynchronous operation, the signaling rate in bauds is expressed
as the reciprocal of the length of the shortest signal element.
The information rate in bits per second may be greater than the
baud rate because one signal element can represent more than one
bit. So, okay?

BCS   See Business Communications Systems
~~~   See Business Customer Services

Bell System Practice
~~~~~~~~~~~~~~~~~~~~~~
A document in a comprehensive series prepared to spread detailed
technical info. and operating methods within the Bell System.
Certain series of BSPs cover manufacturing, installation,
computer crime/prevention (ha!), and equipment performance
requirements; these things are mainly of interest to Western
Electric. Other series are instructions for engineering, operation,
and maintenance, and repair of the telephone 'plant'; these are
mainly of interest to operating companies. Other BSPs are prepared
for the instruction and training of telephone company personnel
(the Being a Bitch BSP for TSOs, etc.).
Most BSPs are edited by Western Electric. Bell Labs prepares
certain BSPs and is responsible for the accuracy of technical
content of all BSPs. AT&T authorizes the preparation and release
of all Bell System Practices.

Bell System Repair Specification (BSRS)
~~~~~~
A Bell System document that specifies detailed repair procedures
for apparatus- and equipment-coded units. These docs. are not for

standard field maintenance purposes, but rather for detailed
major repairs usually performed at a Western Electric serv. center.

Binder Group
~~~~~~~~~~~~
A group of cable pairs within a cable sheath that are twisted and
bound together during cable construction.

Bipolar Group
~~~~~~~~~~~~~
A digital signal technique that uses either a positive or negative
excursion (always alternating) for one state, and ground for
the other state.

BIS   See Business Info. Systems
~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~~

BISCUS/FACS
~~~~~~~~~~~
See Business Info. System Customer Services/Facility Assignment
and Control System (gasp...)

Bit
~~~
(1) An abbreviation of binary digit. A bit can be one of the two
    binary characters, 1 or 0.
(2) Perfect indicative of 'byte'. HAHAHAHA. Ahem.
(3) A unit of info. One bit of info. is sufficient to specify one
    of two equally likely possibilities.

Bits per Second (b/s)
~~~~~~~~~~~~~~~~~~~~~~
Digital info. rate expressed as the number of binary info. units
transmitted per second. See Symbol. If a channel produces errors,
the info. rate (as defined by Shannon) will be lower than the
figure noted above, but this lower figure is rarely used.
Typically, a data channel is described as having a stated bit rate
and a stated expected error rate.

Blocking
~~~~~~~~
The inability of the calling party to be connected to the called
party because either a) all suitable trunk paths are busy or b)
a path between a given inlet and any suitable free outlet of the
switching network of a switching system is unavailable.

Bridged Tap
~~~~~~~~~~~
A cable pair connected in parallel with a customer loop. The
connection (tap) may occur at the CO or at some point along
a cable route.

BSP   See Bell System Practice
~~~   ~~~~~~~~~~~~~~~~~~~~~~~~

BSRS   See Bell System Repair Specification
~~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

```
BTE              See Business Terminal Equipment
~~~              ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Buried Service Wire
~~~~~~~~~~~~~~~~~~~~
A buried wire pair connecting the customer's premises to a pair
in the distribution cable. Above many BSWs will be a warning
sign, put in place by Mother Bell, to insure the safety of those
in the general public who plan to dig around said wires. Hmm...

Business Communications Systems (BCS)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Systems, such as key telephones, pbx's, automatic call distrib-
utors, and telephone answering systems, that are used to fill the
communication needs of business customers and the discerning
phreak. Because BCS has become a term used by other companies, the
term is being replaced by Customer Switching Systems (CSS).

Business Customer Services (BCS)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
This term refers to a class of services generally used by business
customers, including pbx service, key tele. service, automatic
call distribution service, and tele. answering service.

Business Information Systems (BIS)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
A collection of computer-based systems for performing voluminous
business and administrative operations associated with the
provision of telephone service by operating companies. Just
ask mom about this one...she'll know.

Business Information System Customer Services-Facility Assignment
and Control System (BISCUS/FACS)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
One of the BIS's developed at Bell Kitchens. BISCUS/FACS is used
to assign cable facilities, cable terminations, telephone numbers,
and CO line equipment to service orders.

Business Office
~~~~~~~~~~~~~~~~
The part of the telephone company that a customer contacts
regarding requests for service, subsequent changes in service,
questions relating to billing, questions regarding Bell's
liability for customers' coronaries caused from billing, and
requests from phreaks disguised as Palestineans for an official
Bell CO Tour. Yeah.

Business Service
~~~~~~~~~~~~~~~~~
Telecom. service used in a business environment, i.e., jungle.

Business Terminal Equipment
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Refers to the terminal equipment used by business customers
including teletype machines, data sets, key telephone systems,
pbx's, etc.

```
Busy Hour
~~~~~~~~~
That hour during which the portion of the telephone network in
question carries the most traffic. Traffic peaks caused by
holidays or special events are not considered. Switching systems
and trunk groups are normally sized for the busy hour load.

Busy Hour, Bouncing
~~~~~~~~~~~~~~~~~~~~
The highest load may not occur at the same hour on all days, need-
less to say. If the highest load is selected for each day without
regard to the hour in which it occurs, the average of these loads
is said to occur in the bouncing busy hour. Traffic measurements
are usually made over the five working days of each week.

Busy Hour, Fixed
~~~~~~~~~~~~~~~~~
(Okay, this is the last busy hour def. Bear with me. This stuff is
great for social engineering. Really. Anyway, you never know.)
When the hourly loads are averaged across days for each hour of the
day, the max. of these averages defines the fixed busy hour, also
called the time consistent busy hour. Traffic measurements are usu-
ally made over the five working days of each week.

Busy Tone
~~~~~~~~~
An audible signal indicating a call can't be completed because
the called line is busy. The tone is applied 60 times per minute.


Cable Fill              The percentage of pairs in a cable sheath actually
~~~~~~~~~~              assigned and used.

Cable Vault             An area, generally on the lower level of the telco,
~~~~~~~~~~~             where cables enter the building.

Call Forwarding
~~~~~~~~~~~~~~~~
One of those amazing custom calling services. When call forwarding is
activated by a customer, all calls to that line are automatically routed
to another line designated during activation. [C.F. is ESS's answer to
the diverter]

Call Store
~~~~~~~~~~
The equipment unit of an Electronic Switching System that provides temporary
memory storage of information pertaining to call processing & maintenance.

Call Waiting
~~~~~~~~~~~~
The custom calling service adored by millions that provides a tone burst
to a customer on an established call when a second call has been directed
to that line. The notification tone is heard only by the called customer,
whereas the incoming caller hears regular ringing. The customer can place
the existing call on hold, connect to the calling party, and then repeat
the procedure to reestablish the original connection. This operation can
```

be done ad nauseum. [See File on the Call Waiting Tap...available to some]

```
CAMA                    See Centralized Automatic Message Accounting
~~~~                    ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~


CAMA-ONI                See CAMA- Operator Number Identification
~~~~~~~~                ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Carried Load
~~~~~~~~~~~~~
(1) The load you tote around on the Big Date, and try to control [eew!]

(2) The average number of calls that are in progress. The unit, one call,
    is called...shucks, y'know this...an Erlang.

Carrier System
~~~~~~~~~~~~~~~
A system for transmitting one or more channels of information by processing
and converting to a form suitable for the transmission medium used by the
system [got that?]. Many information channels can be carried by one broad-
band carrier system. Common types of carrier systems are frequency-division,
in which each info. channel occupies an assigned portion of the frequency
spectrum, and time-division, in which each info. channel uses the trans-
mission medium for periodic assigned time intervals.

Carterfone Decision
~~~~~~~~~~~~~~~~~~~~
The MONUMENTAL decision made by the FCC in 1968 to the effect that telco
customers should be allowed to connect their own equipment (i.e.
DATA MODEMS) to the public telenetwork provided that this interconnection
not adversely affect the telco's operations or the utility of the tele-
phone system to others. Prior to this wonderful decision, only telco
provided equipment could be hooked up to the network. Let's take a
few moments to thank the Modem Deity for Equal Access.

```
CCH                     See Connections per Circuit Hour
~~~                     ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~


CCIS                    See [yawn] Common Channel Interoffice Signaling
~~~~                    ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~


CCITT                   See Intl. Telephone & Telegraph Consultative Committee
~~~~~                   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~


CCS                     See Hundred Call Seconds
~~~                     ~~~~~~~~~~~~~~~~~~~~~~~~~


CCSA                    See Common-Control Switching Arrangement
~~~~                    ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~


CDO                     See Community Dial Office
~~~                     ~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Central Office (CO)
~~~~~~~~~~~~~~~~~~~~
(1) An Overrated Bulletin Board System.

(2) A switching system that connects lines to lines and lines to trunks. The
    term is more often used to refer to the telco building itself in which
    a switching system is located and to include other equipment (such as
    transmission system terminals) that may be located in such a building.

Central Office Code
~~~~~~~~~~~~~~~~~~~~
A 3-digit identification number under which up to 10k station codes are
subgrouped. Exchange area boundaries are associated with the CO code which
accordingly has billing significance. Note that SEVERAL CO codes may be
served by a single CO. Also called NNX code...the prefix...the exchange.

Central Office Work Order
~~~~~~~~~~~~~~~~~~~~~~~~~~
An order for work to be done in the operating company to make or change
equipment assignments for switching system line or trunk access.

Centralized Automatic Message Accounting (CAMA)
~~~~~~
(Phantom Phreak's Phavorite...) A process using centrally located
equipment, including a switchboard or a traffic service position,
associated with a tandem or toll switching office, for automatically
recording billing data for customer-dialed extra-charge calls originating
from several local central offices. A tape record is processed at an
electronic data processing center.

Centralized Automatic Message Accounting- Operator Number Identification
(CAMA-ONI) Operator
~~~~~~
An operator located at a position that is connected temporarily on a
customer-dialed station-to-station call. The operator secures the calling
number from the customer and keys the number into the centralized
automatic message accounting equipment.

Centralized Intercept Bureau (CIB)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
That type of bureau that is part of an Automatic Intercept System and is
associated with one or more automatic intercept centers. It provides
facilities whereby operators situated at auxiliary service positions
furnish assistance to calling customers whose calls have been intercepted
and who require help beyond that furnished by the auto. intercept center.

Centrex
~~~~~~~
A service for customers with many stations that permits station-to-station
dialing, one listed directory # for the customer, direct inward dialing
to a particular station, and station identification on outgoing calls.
The switching functions are performed in a central office.

Channel
~~~~~~~
A transmission path between two points. The term channel may refer to a
one-way path or, when paths in the two directions of transmission are
always associated, to a 2-way path. It is usually the smallest subdivision
of a transmission system by means of which a single type of communication
service is provided, i.e., a voice channel, teletypewriter, or data channel.

Channel Bank
~~~~~~~~~~~~
Channel terminal equipment used for combining (multiplexing) channels on a
frequency-division or time-division basis. Voice channels are combined into
12- or 24-channel groups.

Channel Busy Tone
~~~~~~~~~~~~~~~~~~
An audible signal indicating that a call cannot be completed because of
trunk or switching system blocking. The tone is applied 120 times per
minute. Also called fast busy or (the ever-popular reorder) tone.

CIB   See Centralized Intercept Bureau
~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Circuit
~~~~~~~
(1) A communication path between two or more points.

(2) A network of circuit elements, such as resistors, inductors, capacitors,
    semiconductors, etc., that performs a specific function.

(3) A closed path through which current can flow.

(4) A term no 'philter' would ever dream of asking.

Circuit Order
~~~~~~~~~~~~~
The document used to transmit engineering design of a public telephone
network trunk or special-service circuit to the department that
implements the design. (Good Social Engineering term...)

CLASS   See Custom Local Area Signaling Service
~~~~~   ~~~~~~

Class 5 Office
~~~~~~~~~~~~~~~
A local central office that serves as the network entry point for station
loops and certain special-service lines. Also called an end office. Other
offices, classes 1,2,3, and 4, are toll offices in the telenetwork.

CO   See Central Office
~~   ~~~~~~~~~~~~~~~~~~

Code
~~~~
(1) Any of a wide variety of schemes for representing info. such as a color
    color code for values resistors, Morse code for telegraphy, and a ZIP
    code for a mail address.

(2) A system of rules for representing information by digital signals such
    as teletypewriter code. See ASCII (Vol. I).

(3) A numbering system for telephone addresses. See Central Office Code,
    Station Code, and Number Plan Area.

(4) A set of standard abbreviations for equipment and facility names. See

Common Language Code.

(5) A set of rules for representing the amplitude of a signal sample by
    digital signals. See Pulse Code Modulation.

(6) The least impressive achievement or possession of the common phreak.
    See also Codezz, Kodezz, K0dezz, etc.

Coded Ringing
~~~~~~~~~~~~~~
A form of semiselective ringing. The customer is required to identify his
own code by the number of rings and/or their duration. A variation of
coded ringing is one of the CLASS services.

Coherent
~~~~~~~~
(1) Something the CULT is not very often.

(2) Refers to a fixed phase relationship that provides certain advantages
    in signal detection.

Coherent Modulation System
~~~~~~~~~~~~~~~~~~~~~~~~~~~~
(For the SERIOUS amongst you)...A modulation system that requires a carrier,
either transmitted or locally derived and having the same frequency and
phase as that associated with the received signal, for recovering the
original modulating signal.

Coherent Phase-Shift Keying (CPSK)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Modulation techniques for transmitting digital info. in which that info.
is conveyed by selecting discrete phase changes of the carrier relative
to a reference. See Coherent Modulation System or a physicist near you.

Coin-First Service
~~~~~~~~~~~~~~~~~~~
Coin telephone service in which an initial rate deposit is required to
obtain a dial tone. Coin-first service is being replaced by dial-tone-
first, an improved service requiring additional functions in the station
and in the switching system. (Thus the BIOC concept that areas with
coin-first fortress phones are served by older switches.)

Coin Relay
~~~~~~~~~~~
A relay in a coin telephone that collects or returns the coins under the
control of the central office. This relay is activated by CO tones,
and in areas that do not use out-of-band signaling, Red Box tones can
mean free calls by activating this relay.

Common Channel Interoffice Signaling (CCIS)
~~~~~~
This is as precise a definition as I could find. I remember on Phreak Klass
2600 (in 806), the arguments used to rage as to what CCIS is and how
it negates or prevents boxing. Sigh. I'll go into all that here, since
CCIS is one of the Top Five most-likely Philter Questions.

CCIS is a signaling system, developed for use between stored program

switching systems (i.e., ESS et alia), in which all of the signaling info.
for a group of trunks (i.e., operator or 'blue box' MF tones, Green and
Red tones) is transmitted over a dedicated high-speed data link, rather
than on a per-trunk basis (i.e. inband signaling, whereby tones
were actually 'shuttled' on your voice trunk). CCIS can reduce call setup
time and save money (yeah!) compared with individual trunk signaling.

That is the definition. Now, you may wonder what the difference
is between out-of-band signaling and CCIS. Alright, though some will
say that they're the same, that's not quite so. CCIS is out-of-band, but
out-of-band is not always CCIS. Got that? That is to say, out-of-band
is the generic label of signaling that occurs outside the voiceband.
This method usually places signaling at frequencies beyond the voice
frequencies, but not necessarily on a dedicated-trunk (CCIS). Thus,
per-trunk signaling COULD be out-of-band. CCIS, on the other hand,
devotes a separate trunk to signaling data. Thus, all such signaling
is carried over a trunk separate from the voice trunk. This is out-of-
band in a sense, then. The following is a letter I wrote to 2600 Mag. and
their response. It's not too explicit, but it may help clarify a touch.

Dear 2600:
      In the course of two years of telecom, I've read countless Gfiles
which describe the (virtual) spectrum of 'boxes'. Yet few files give
a clear explanation as to why boxing is impossible in many electronic
switching offices. Would you mind explaining CCIS, and just how this
'prevents' boxing? Thanks.

Reply: "Put quite simply, it's impossible to blue box in an electronic
switching office under CCIS because the equivalent of the blue box tones
that a phreak would send are transmitted over a completely different line.
Since you don't have access to these lines, blue boxing no longer works.
This is ALSO called out-of-band signaling."

Common Control
~~~~~~~~~~~~~~~
An automatic arrangement in which items of control equipment in a switching
system are shared; they are associated with a given call only during the
periods required to accomplish the control functions. All Bell System
Crossbar and ESS systems have common control. This is in contrast to the
individual relays of Strowger switching.

Common-Control Switching Arrangement (CCSA)
~~~~~~
An arrangement in which switching for a private network is provided by one
or more common-control switching systems. The switching systems may be
shared by several private networks and also may be shared with the public
telephone network.

Common Language Code
~~~~~~~~~~~~~~~~~~~~~~
Codes used to ensure uniform abbreviation of equipment and facility names,
places, place names, etc. (Be nice to get ahold of a summary...anyone?)

Communications Satellite Corporation (COMSAT)
~~~~~~
Created by authorization of Congress in the Communications Satellite Act
of 1962. This private corporation (NOT any agency of the U.S. Government,

though subject to governmental regulation) was created primarily to
provide for the establishment, operation, and management of a commercial
communications satellite system. COMSAT presently acts as manager for
INTELSAT and also represents the U.S. in INTELSAT.

Community Dial Office (CDO)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~
A small automatic switching system that serves a separate exchange area
having its own numbering plan and ordinarily having no operating or
maintenance force located in its own building; operation is handled and
maintenance is directed from a conveniently located and beautifully
landscaped point referred to as an operator office.

Compandor
~~~~~~~~~
An abbreviation for compressor-expandor. A device used to compress the
range of talker volumes at the input to a carrier system (in particular,
to increase low-level talker volumes) and to expand the received volumes
at the output of the carrier system (to provide complementary function
and to make the transmission system transparent). This technique improves
the signal-to-noise ratio for low-level talkers and provides a
substancially reduced received noise level during the so-called quiet
intervals. A miracle, really.

Compandor Mistracking
~~~~~~~~~~~~~~~~~~~~~~~
If this shows up on a philter, leave me mail. Mistracking refers to the
failure of the expandor-characteristic of a compandor to complement
exactly the compressor-characteristics, thereby causing signal distortion.

COMSAT   See Communications Satellite Corporation
~~~~~~   ~~~~~~

Concentration
~~~~~~~~~~~~~~
(1) Applies to a switching network (or portion thereof) that has more
    inputs than outputs.

(2) In a traffic network, combining calls arriving on many lines or trunks
    to transmit them more efficiently in a trunk group.

(3) Locating as much equipment as possible at a given place to achieve
    economies in such things as building costs, maintenance, etc.

(4) Something VERY difficult to maintain when reading tech. manuals.

Connecting Arrangement
~~~~~~~~~~~~~~~~~~~~~~~~
The implementation for connecting arrangement service. A connecting
arrangement consists of an interconnecting unit, a Technical Reference,
and a tariff offering.

Connecting Arrangement Service
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
A service providing electrical connection to the public telenetwork of
customer-provided equipment. This service, whish is usually denoted by a

uniform service order code (USOC), is offered by tariff and is implemented with an interconnecting unit and a Technical Reference. (Great SE term!)

Connection
~~~~~~~~~~
(1) A point where a junction of two or more conductors is made.

(2) Generally, a telfo connection is a 2-way voiceband circuit completed between two points by means of one or more switching systems. It contains two loops and may contain one or more trunks.

Connections per Circuit Hour (CCH)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
An indication of holding time of calls. Under normal circumstances, ACH= CCH which is about equal to 6 in busy hour for trunk groups excluding high-usage groups.

Connector
~~~~~~~~~
In Step-by-Step switching systems, a 2-motion electromechanical switch that operates on the last two digits of the telephone number to connect from a selector to any one of 100 customer loops. The connector performs the following functions:
o Tests for busy
o If busy, returns busy tone
o If idle, rings the called party and returns ringback tone to calling line
o Provides a supervisory signal indicating that answer has occurred and trips ringing
o Provides talking battery to the calling line on intraoffice calls and to the called line
o Disconnects when the customer hangs up

Construction Program
~~~~~~~~~~~~~~~~~~~~~
A detailed plan of placement, removal, and rearrangement of facilities to modernize and expand the capacity of the facilities network.

Conversion (Converting)
~~~~~~~~~~~~~~~~~~~~~~~~
In signaling, the substitution of one, two, or three digits for received digits for the purpose of directing the call through the next office.

Coordinate Network
~~~~~~~~~~~~~~~~~~~
A switching network consisting of incoming and outgoing talking paths arranged at right angles to each other with fine-motion or electronic switching elements at intersections.

CORNET Network
~~~~~~~~~~~~~~~
A private telephone network serving Western Electric and Bell Laboratories; CORNET is a contraction of corporate network. This network uses common-control switching arrangements (CCSA).

Country Code
~~~~~~~~~~~~
The 1-, 2-, or 3-digit number that, in the world numbering plan, identifies

each country or integrated numbering plan in the world. The initial digit
is always the world-zone number. Any subsequent digits in the code further
define the designated geographic area (normally identifying a specific
country). On an international call, the country code is dialed before
the national number.

Coupler
~~~~~~~~
An alternate name for an interconnecting unit.

CPSK   See Coherent Phase-Shift Keying
~~~~   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Crossbar Switch
~~~~~~~~~~~~~~~
The basic element of any Crossbar System. A crossbar switch is a relay
mechanism consisting of 10 horizontal paths and 10 or 20 vertical paths.
Any horizontal path can be connected to any vertical path by means
of magnets. A 2-stage operation is used to close any crosspoint. First, a
selecting magnet shifts all selecting fingers in a horizontal row, then a
holding magnet shifts a vertical actuating card to close the selected
contacts.

Crosspoint Array
~~~~~~~~~~~~~~~~~
An arrangement of switching elements used in some switching networks,
characterized by incoming and outgoing talking paths arranged at right
angles to each other, with switching elements at intersections.

Crosstalk
~~~~~~~~~
Undesired power coupled into a communications circuit from other communi-
cations circuits. Telephone crosstalk may be either intelligible (& thus
VERY amusing) or unintelligible (& thus VERY annoying).

CTRAP See Customer Trouble Report Analysis Plan
~~~~~   ~~~~~~

Custom Calling Services
~~~~~~~~~~~~~~~~~~~~~~~~~
A group of four keen services provided by ESS to business and residence
customers: 3-way calling, speed calling, call waiting, and call forwarding.

Custom Local Area Signaling Service (CLASS)
~~~~~~
The ultimate calling service. CLASS is one of the Bell Network's futuristic
services meant to prop-up profits and presumably make the customers' lives
a little better. This service includes such features as call-blocking
and filtering, coded/priority ringing, and customer-accessible ANI on
incoming callings. CLASS is but one facet of the ultimate telco network,
ISDN (Integrated Services Digital Network).

Customer-Premises Equipment
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Equipment normally installed on the customer's premises, such as telephone
sets, key telephones, PBX's, etc.

Customer Trouble Report Analysis Plan (CTRAP)
~~~~~~
A plan that provides manual and mechanized procedures for recording troubles
reported by customers and analyzing the reports to obtain statistical data
regarding customer service.

X-=-X