DO YOU SPEAK OUR LANGUAGE?

Glossary of Familiar DEC Terms and Jargon

ALTERNATE ROUTE

A secondary path used to reach a destination if the primary path is unavailable.

AMPLITUDE MODULATION (AM)

A method of transmission whereby the amplitude of the carrier wave is modified in accordance with the amplitude of the signal wave.

ANALOG

Pertaining to signals, and other quantities, which can occur anywhere on some continuous scale. Contrast with digital.

ANALOG TO DIGITAL CONVERTER

An A/D (or ADC) is a device that converts continuous electrical signals from sensors (analog signals) to a digital form that can be handled by a computer. Used primarily for monitoring instruments or processors, or as part of a control arrangement.

AND GATE

A circuit with multiple inputs which output a logical 1 (TRUE) only if all its inputs are logical 1's.

ANSI

American National Standards Institute

A/P

Accounts Payable

APL

A Programming Language

A/R

Accounts Receivable

ARGUMENT

1. A variable or constant which is given in the call of a subroutine as information to it.
2. A variable upon whose value, the value of a function or other operation depends.
3. The known reference factor necessary to find an item in a table or array (i.e. the index).

ARITHMETIC UNIT

The part of a computer's central processing unit (CPU) that actually performs the instructions and manipulates and tests the contents of accumulators or other locations.

ARRAY

A set or list of elements, usually subscripted variables or data.

ASAP

As Soon As Possible

ASCII

American Standard Code for Information Interchange. Established by American Standards Association to standardize a binary code for Alphanumeric Characters.

ASSEMBLE

To translate from a symbolic program to a binary program by substituting binary operation codes for symbolic operation codes and absolute or relocatable addresses for symbolic addresses.

ASSEMBLER

A program which translates assembly language instructions into machine language instructions and assigns memory locations to variables and constants.

ASSEMBLY LANGUAGE

A symbolic language that translates directly into machine language instructions. Usually there is a one-to-one relation between assembly language instructions and machine language instructions.

ASYNCHRONOUS

1. Pertaining to the scheduling of hardware operations by "ready" and "done" signals rather than by time intervals.
2. Pertaining to the method of data transmisson in which each character is sent with its own synchronizing information.

AUDIO FREQUENCIES

Frequencies which can be heard by the human ear (usually between 15 cycles and 20,000 cycles per second).

AUTOMATIC DIALING UNIT

A device capable of automatically generating dialing digits.

BIT	Contraction of "Binary digit", a bit is the smallest unit of information in a binary system of notation. It is the choice between two possible states, usually designated one (1) and zero (0).
BIT RATE	The speed at which bits are transmitted, usually expressed in bits per second.
BLOCK	A set of consecutive machine words, characters or digits handled as a unit, particularly in reference to I/O. Each type of mass storage has its own block size, its own smallest unit of storage; (e.g. PDP-8 DECtape has 201 12 bit words per block).
BLOCK CHARACTER CHECK (BCC)	The result of a transmission verification algorithm accumulated over a transmission block and normally appended at the end; (e.g., CRC, LRC).
BLOCK DIAGRAM	A summary of a system, instrument, computer, or program in which selected portions are represented by annotated boxes and interconnecting lines
BOD	Board of Directors
BOOTSTRAP	A program of several instructions which is executed immediately after a computer is turned on and whose purpose is to load and usually start a complex system of programs.
BOOTSTRAP HARDWARE	See: Hardware Bootstrap.
BOTTOM LINE	True reality of something after all is said and done.
BPG	Business Products Group
BPI	Bits Per Inch
BRANCH	A point in a routine where a choice is made about which part of that routine to process next. Also, to pass control to the chosen part of the routine, to jump.
BREAKPOINT	A location in a program in which that program's execution may be suspended, so that partial results can *be examined*. These are useful in locating bugs.
BROADBAND	See: Wideband.
BROADBAND EXCHANGE (BEX)	Public switched communication system of Western Union featuring various bandwidth full-duplex connections.
BUFFER	A temporary storage area which may be a special register or an area of storage. Buffers are often used to hold data being passed between processes or devices which operate at different speeds or different times.
BUG	A mistake in the design or implementation of a program yielding erroneous results. Occasionally applied to other things besides programs.
BUS	One or more conductors used for transmitting signals or power from one or more sources to one or more destinations but usually with many connections.
BUY IN	Agreement
BYTE	A group of binary digits usually operated upon as a unit. (Typically 1/2 or 1/4 word depending on the computer.)

C

CAD	Computer Aided Design
CAI	Computer Aided Instruction

CLEAR

1. To erase the contents of a storage location by replacing the contents with zeros or spaces.
2. In binary code, to set to zero.

CLOCK

A device that generates periodic signals for synchronization.

CLOCK REAL-TIME

See: Real-Time Clock.

CLOSED LOOP

A control arrangement where data from the process or device being controlled is fed to the computer to affect the control operation – i.e., the computer can perform all control functions without intervention of an operator.

CLOSED LOOP CONTROL

Sensing the output of a process and automatically making adjustments to maintain the output at a desired level without relying on a person. Contrast with open loop control.

CMS

Corporate Message System

COD

Central Order Desk

CODE

1. A set of unambiguous rules specifying the way in which data may be represented, e.g., the set of correspondences in the Standard Code for Information Interchange.
2. In data communications, a system of rules and conventions according to which the signals representing data can be formed, transmitted, received, and processed.
3. In data processing, to represent data or a computer program in a symbolic form.

COG

Corporate Operations Group of Software Services

COMMAND

A user order to a computer system, usually given through a Teletype keyboard.

COMMAND DECODER

That routine in a computer system which interprets user commands.

COMMUNICATION CONTROL CHARACTER

In ASCII, a functional character intended to control or facilitate transmission over data networks. There are ten control characters specified in ASCII which form the basis for character-oriented communications control procedures. See also: Control Character.

COMMUNICATIONS COMPUTER

A computer that acts as the interface between another computer or terminal and a network or a computer controlling data flow in a network. See also: Front End Computer, Switching Computer, Concentrator.

COMPATIBILITY

The ability of an instruction, source language, or peripheral device to be used on more than one computer.

COMPILE

To translate a source (symbolic) program into a binary-coded program. In addition to translating the source language, appropriate subroutines may be selected from a subroute library. Linkage is supplied, and everything is output in binary code along with the main program.

COMPLEMENT

1. (One's) To replace all 0 bits with 1 and all 1 bits with 0 in a given number.
2. (Two's) To form the one's complement and then add 1.

COMPUTER NETWORK

An interconnection of assemblies of computer systems, terminals, and communications facilities.

COMPUTER UTILITY

A service which provides computational resources such as machine time, peripherals, and software, usually on a timeshared basis, and also provides secure, private on-line storage area for its users.

CONCATENATION

The joining of two strings of characters to produce a longer string.

6

CPC	Certified Paths of Restraint
CPG	Commercial Products Group
CPU	See: Central Processing Unit.
CR	Central Region
CRASH	Fail totally. When a system crashes it will not function at all and must be re-bootstrapped.
CREATE	To open, write, and close a file for the first time.
CROSS-TALK	Unwanted insertion of signal from an adjacent communication channel.
CRT	See: Cathode Ray Tube.
CRT DISPLAY	A device used to present data (alphanumeric, graphical, or a combination of the two) that incorporates a cathode-ray tube as the presenting element. See also: Soft copy, Terminal.
CSS	Computer Special Systems
CYCLE REDUNDANCY CHECK (CRC)	An error detection scheme in which the check character is generated by taking the remainder after dividing all the serialized bits in a block of data by a predetermined binary number
CYCLE TIME	A basic unit of time in a computer usually equal to the shortest time required to execute an instruction.

D

DAM	District Administrative Manager
DATA	A general term used to denote any or all facts, numbers, letters, and symbols.
DATA ACCESS ARRANGEMENT (DAA)	Data communication equipment furnished by a common carrier permitting attachment of privately owned data terminals and data communication equipment to the common carrier network.
DATA ACQUISITION	The retrieval of data from remote sites initiated by a central computer system, e.g., retrieving data during off-hours processing from a previously mounted magnetic tape at an unattended terminal or taking periodic readings from an unattended real-time station.
DATA BASE	1. The entire collection of information available to a computer system. 2. A structured collection of information as an entity or collection of related files treated as an entity.
DATA BREAK	A facility on the PDP-8 which permits I/O transfers directly to memory to occur on a cycle-stealing basis without disturbing program execution.
DATA COLLECTION	The act of bringing data from one or more points to a central point.
DATA COMMUNICATION	The movement of encoded information from a sender to a receiver by means of electrical transmission systems.
DATA COMMUNICATION EQUIPMENT	The equipment that provides the functions required to establish, maintain, and terminate a connection, the signal conversion, and coding required for communication between data terminal equipment and data circuit. The data communication equipment may or may not be an integral part of a computer. (e.g., a modem). See also: Terminal Installation, Data Link
DATA COMPRESSION	A technique whereby a repetitive string of data (usually on a byte basis) is transmitted as a count plus a string value.

DIRECT DISTANCE DIALING (DDD)	A telephone exchange service which enables a user to directly dial telephones outside his local area without operator assistance.
DDT	Dynamic Debugging Technique. An interactive program for finding and correcting bugs in user programs; like ODT except that the user communicates with DDT in symbolic language.
DEBUG	To detect, locate, and correct mistakes in a program.
DECIMAL	A number system with a base or index of ten; the standard American numbering system.
DECTAPE	A convenient, pocket-sized reel of random access, magnetic tape developed by Digital Equipment Corporation. One reel holds the equivalent of about 190K 12 bit words of information. It features full redundancy, random access, and a directory.
DECTAPE DRIVE	A tape transport for DECtape.
DELAY DISTORTION	Distortion resulting from non-uniform speed of transmission of the various frequency components of a signal through a transmission medium.
DELIMITER	A character that separates and organizes elements of data.
DEMODULATION	The process of retrieving an original signal from a modulated carrier wave. This technique is used in data sets to make communication signals compatible with machine signals.
DEVICE	In computers, a physical hardware unit which performs a useful function, most often I/O.
DEVICE DRIVER	A program similar to a device handler, but usually smaller and may call on some other routines to do its job. The device handler is a complete package.
DEVICE HANDLERS	Routines that perform I/O for specific storage devices and translate logical block numbers to physical disk, tape, or drum addresses. These routines also handle error recovery and provide device independence in conjunction with operating systems.
DEVICE INDEPENDENCE	The ability of a computer system to divert the input or output of an already-assembled program from one device to another, either automatically, if the specified device is out of order, or by a keyboard command to the monitor.
DIAGNOSTIC	Pertaining to the detection and isolation of malfunctions or mistakes.
DIAL-UP	The use of a dial or pushbutton telephone to initiate a station-to-station telephone call.
DIBOL	Digital Business Oriented Language
DIGITAL	In this context referring to electronic quantities in discreet signal form, with noncontinuous values. For computers, "digital" implies binary digit form, or bits.
DIGITAL-TO-ANALOG CONVERTER	AD/A (or DAC) is an interface that converts data in a digital form to data in analog form. Used to permit analog output from a digital computer
DIRECT ACCESS	Same as Random Access.
DIRECT ADDRESS	An address which specifies the location of an instruction operand.
DIRECT LABOR	Manpower dollars charged directly to a particular P/L.

DOUBLE PRECISION	Pertaining to the use of two computer words to represent one number. In the 12-bit PDP-8 computers, a double precision result is stored in 24 bits.
DUPLEX	In communication, pertaining to a simultaneous, two-way independent transmission in both directions. Sometimes called "full duplex". Contrast with half-duplex and simplex.

E

EAE	See: Extended Arithmetic Element.
EBCDIC	(ebb-se-dick) Extended Binary-Coded-Decimal Interchange Code, an 8-bit code for representing alphanumeric characters used very much by I.B.M. and, therefore, somewhat of a standard.
EBOD	Engineering Board of Directors
ECHO	The printing by an I/O device, such as teletype or CRT, of characters typed by the programmer.
ECHO CHECK	A method of checking the accuracy of transmission of data in which the received data are returned to the sending end for comparison with the original data.
ECHOPLEX	An echo check applied to network terminals operating in two-way simultaneous mode.
ECHO SUPPRESSOR	A device used to suppress the effects of an echo.
ECO	Engineering Change Order
ECP	Engineering Computation Products
EDITOR	A program which interacts with the programmer to enter new programs into the computer and edit them as well as modify existing programs. Editors are language-independent and will edit anything in alphanumeric representation.
EDP	Electronic Data Processing
EEO	Equal Employment Opportunity
EFFECTIVE ADDRESS	The address actually used, that is, the specified address modified by indexing or indirect addressing rule.
EHQ	European Headquarters or Geneva
E-1's	Emergency one (part must be sent out in 7 days).
ELECTRONIC INDUSTRIES ASSOCIATION (EIA)	A standards organization specializing in the electrical and functional characteristics of interface equipment.
EMC	European Marketing Committee
EMS	Engineering Model Shop
ELECTRONIC SWITCHING SYSTEM (ESS)	The communications switching system which uses solid state devices and other computer equipment and principles. It operates in millionths of a second and gives customers many new services. There is less maintenance with ESS and the space and power requirements of the system are reduced.
EMULATOR	A hardware device that permits a program written for a specific computer to be run on a different type of computer system.

FLOPPY DISK

Disk storage wherein the medium is a magnetic oxide on a base of flexible plastic. A capacity range of 0.25 to 0.5 megabytes is common for such disks.

FLOWCHART

A block diagram showing the operations required to carry out a data processing operation and the order in which the operations are to be performed.

FOREGROUND PROCESSING

High-priority processing, usually resulting from real-time entries, given precedence by means of interrupts over lower priority "background" processing.

FOREIGN EXCHANGE LINE

A line offered by a common carrier in which a termination in one central office is assigned a number belonging to a remote central office.

FORMAT

1. The arrangement of characters representing data.
2. A FORTRAN statement which specifies the arrangement of characters to be used to represent a piece of data.

FORM FEED

A non-printing character which causes a printer with pages to advance the paper to the beginning of the next page.

FORTRAN

Developed for the scientific community, it was one of the first and most popular high-level programming languages.

FORWARD CHANNEL

A data transmission channel in which the direction of transmission coincides with that in which information is being transferred. C.f. Backward Channel.

FORWARD SUPERVISION

Use of supervisory sequences sent from the primary to a secondary station or node.

FP & E

Facilities Planning and Engineering

FPP

Floating Point Processor

FREQUENCY DIVISION MULTIPLEXING (FDM)

Dividing the available transmission frequency range into narrower bands each of which is used for a separate channel.

FREQUENCY MODULATION (FM)

A method of transmission, whereby the frequency of the carrier wave is changed to correspond to changes in the signal wave.

FREQUENCY SHIFT KEYING (FSK)

A method of transmitting binary information by means of varying the frequency of a modulating tone to one of two frequencies which would correspond to binary ones and zeroes.

FRONT-END PROCESSOR

A communication computer associated with a host computer. It may perform line control, message handling, code conversion, error control and application functions such as control and operation of special-purpose terminals. See also: Communications Computer.

F/S

Field Service

F/U

Follow Up

FULLY CONNECTED NETWORK

A network in which each node is directly connected with every other node.

F.Y.I.

For Your Information

FY78

Fiscal Year 78 (July 77 – June 78) (Months follow 4 weeks, 4 weeks, 5 weeks).

HIGH LEVEL LANGUAGE	A language in which single statements result in more than one machine language instruction. (e.g., BASIC, FORTRAN, COBOL).
HOLDING TIME	The length of time a communication channel is in use for each transmission. Includes both message time and operating time
HOMOGENOUS (COMPUTER) NETWORK	A network of similar host computers such as those of one model of one manufacturer. C.f. Heterogeneous (Computer) Network.
HOSS	Home Office Software Services
HOST COMPUTER	A computer attached to a network providing primarily services such as computation, data base access or special programs or programming languages.
HOST INTERFACE	The interface between a communications network and a host computer.
IAS	Interactive Applications System
IC	Integrated Circuit
IDACS	Industrial Data Acquisition Control System, pertaining to products for the industrial market.
IDEA	Interactive Design & Engineering Automation
IDENTIFICATION	1. The process of providing personal, equipment, or organizational characteristics or codes to gain access to computer programs, files, or data. 2. The process of determining personal, equipment, or organizational characteristics or codes to permit access to computer programs, processes, files or data.
INDIRECT ADDRESS	An address in a computer instruction which indicates a location in memory where the address of the referenced operand is to be found.
INFORMATION	A quantity related to the organizational content of the signal.
INFORMATION BIT	A bit which is generated by the data source.
INFORMATION PATH	The functional route by which information is transferred in a one-way direction from a single data source to a single data sink.
INFORMATION RETRIEVAL	A branch of computer technology concerned with techniques for storing and searching large quantities of data and making selected data available This may or may not involve real-time operations.
INFORMATION (TRANSFER) CHANNEL	1. The functional connection between source and the sink data terminal equipments. It includes the circuit and the associated data communications equipments. 2. The assembly of data communication and circuits including a backward channel if it exists.
INHIBIT	To prevent. Normally used with signals rather than hardware
INITIALIZE	To set counters, switches, addresses and variables to zero or other starting values.
INPUT	1. Data to be processed. 2. The process of transferring data to memory from a mass storage device or from other peripheral devices which read data from other media (a paper tape reader or ADC). 3. The process of transferring data from a paper tape reader, ADC, or devices reading other media onto a mass storage device. 4. The peripheral device used in the transfer described above.

K

K

1. An abbreviation for the prefix kilo, i.e., 1000 in decimal notation
2. In the computer field, loosely two to the tenth power, which is 1024 in decimal notation. Hence, a 4K memory has 4096 words.

KEYBOARD

On a typing device, the array of buttons which cause letters to be generated when pushed.

KEYBOARD LISTENER

A routine in a monitor which inputs keyboard commands, decides which command has been issued, and passes control to an appropriate routine to perform the requested operation.

L

LABEL

One or more characters used to identify a source language statement or line.

LANGUAGE ASSEMBLY

See: Assembly Language.

LANGUAGE MACHINE

See: Machine Language.

LANGUAGE SOURCE

See: Source Language.

LARS

Labor Activity Reporting System

LAST IN, FIRST OUT (LIFO)

A storage/retrieval method in which the last item stored is the first item retrieved; a push down stack.

LATENCY

On rotating storage devices, delay between the instant the device is notified that a transfer is coming and the instant the device is ready to perform the transfer. The time required to rotate the desired area under the head (or move the head to the correct track in moving head devices).

LCG

Large Computer Group

LCEG

Large Computer Engineering Group

LDP

Laboratory Data Products, Laboratory Data People, etc. Digital's people and products for the Lab research market.

LEASED LINE

A line reserved for the exclusive use of a leasing customer without interexchange switching arrangements. Also called Private Line.

LEAST SIGNIFICANT DIGIT

The right-most digit of a number.

LIBRARY

A collection of standard routines which can be incorporated into other programs.

LIGHT PEN

A device resembling a pencil or stylus which can detect a fluorescent CRT screen. Used to input information to a CRT display system.

LINE

A string of characters terminated with a line feed, vertical tab, or form feed character (and usually also a carriage return). The terminator belongs to the line that terminates it.

LINE FEED (LF)

The teletype operation which advances the paper by one line.

LINE NUMBER

In source languages such as FOCAL, BASIC, and FORTRAN, a number which begins a line for purpose of identification.

LP

Line Printer

LINK

1. A one-bit register that is complemented when overflow occurs in the Accumulator in the PDP-8's.
2. An address pointer to the next element of a list or next block of a file

MACRO

A body of instructions defined and named by the programmer so that he can instruct the assembler to insert these instructions in his program everywhere he writes its name. The programmer can also command the assembler to slightly modify his macro before inserting it at a specified place in his program. This saves the programmer much typing and makes his program easier to read.

MACRO INSTRUCTIONS

An instruction in assembly language that is equivalent to a specified sequence of assembler instructions. It calls for the assembler to insert the equivalent statements, previously defined by the program, at the location where he writes the macro instruction.

MAG-TAPE

Industry compatible magnetic tape with no directory, serial access, no redundancy, high speed, and large reels.

MAINFRAME

All the computer parts and options that fit into the basic mounting box: CPU, power supply, possibly memory, interfaces, and other processor options.

MAR

Mid-Atlantic Region

MARK

Presence of a signal. In telegraphy, mark represents the closed condition or current flowing. Equivalent to a binary one condition.

MASK

A combination of bits that is used to clear selected portions of any word, character, byte, or register while retaining other parts for use. Also, to clear these selected locations with a mask.

MASS STORAGE

A device such as disk or DECtape which stores large amounts (at least 32K words) of data readily accessible to the central processing unit.

MASTER STATION

See: Primary Station.

MATRIX

A rectangular array of elements. A table can be considered a matrix.

MDC

Market Data Center

MDG

Market Development Group

MEMORY

1. The main storage in a computer from which instructions must be fetched and executed.
2. Pertaining to a device in which data can be stored and from which it can later be retrieved.

MEMORY CYCLE-TIME

The cycle-time of magnetic core memory is made up of two subcycles: the read cycle which destructively extracts information from a location, and the write cycle which is used to restore the memory location to its original value. The memory cycle often sets the basic cycle-time of a machine.

MEMORY PROTECTION

A method of preventing the contents of some part of main memory from being destroyed.

MEMORY REFERENCE INSTRUCTION

A computer instruction that accesses the computer memory during its execution, as opposed to a register instruction which only accesses registers in the CPU, and I/O instructions which are commands to peripheral devices.

MESSAGE SWITCHING

The technique of receiving a message, storing it until the proper outgoing circuit and station are available, and then re-transmitting it to its destination.

MIS

Management Information Service

MLP

Maynard List Price

NER	Northeast Region
NESTING	1. Placing a program loop inside another program loop, or other similar occurrences within one another. 2. Algebraic nesting such as [A + B + (C + D)] where execution proceeds from the innermost level to the outermost level.
NETWORK	1. An interconnected or interrelated group of nodes. 2. In connection with a disciplinary or problem-oriented qualifier, the combination of material, documentation, and human resources that are united by design to achieve certain objectives, (e.g. a social science network, a science information network). See also: Computer Network.
NETWORK CONTROL PROGRAM	That module of an operating system in a host computer, which establishes and breaks logical connections, communicating with the network on one side, and with user process within the host computer, on the other side.
NETWORK OPERATIONS CENTER	A specialized network installation that assists in reliable network operations. Typical activities are monitoring of network maintenance, accumulation of accounting and usage data, and user support.
NETWORK REDUNDANCY	The property of a network to have additional links beyond the minimum number necessary to connect all nodes. See also: Link Redundancy Level.
NETWORK SECURITY	The totality of measures taken to protect a network from an unauthorized access, accidental or willful interference with normal operations, or destruction. This includes protection of physical facilities, software and personnel security.
NETWORK TOPOLOGY	The geometric arrangement of links or nodes of a network.
NODE	An end point of any branch of a network, or a junction common to two or more branches of a network.
NOISE	In communication theory, an undesired disturbance in the system.
NON-DIRECTORY DEVICE	A device such as magnetic tape (not including DECtape and LINCtape) or paper tape which does not contain a file containing the layout of the storage and cannot allow random access.
NON-EXEMPT	Hourly employee.
NON-PROCESSOR REQUEST (NPR)	High-priority data transfers to the PDP-11 Processor. These are direct memory access type transfers, and are honored by the processor between bus cycles of an instruction execution. NPR data transfers can be made between any two peripheral devices without the supervision of the processor. Normally, NPR transfers are to and from a mass storage device such as disk and core memory. An NPR device has very fast access to the bus and can transfer at high data rates once it has control. The processor state is not accepted by the transfer; therefore, the processor can relinquish control while an instruction is in progress.
NON-SHARABLE SEGMENT	A data area used by a pure or re-entrant routine. Each program that calls a re-entrant routine must supply its own data area which the routine manipulates and thus need not manipulate itself.
NON-SWITCHED LINE	A communications link which is permanently installed between two points.
NON-TRANSPARENT MODE	Transmission of characters in a defined character format, (e.g., ASCII or EBCDIC, in which all defined control characters and control character sequences are treated as such).
NO-OP	Contraction of No Operation. An instruction which specifically instructs the computer to do nothing for one cycle, and then to get the next instruction.

OR GATE

[Inclusive] A multiple-input logical circuit whereby if *any* input or inputs are 1 (true), the output is 1 (true). If *all* inputs are 0 (false), the output is 0 (false).

[Exclusive] A multiple-input logical circuit whereby if *any one* input is 1 (true) and *all* the other inputs are 0 (false), the output is 1 (true). If all inputs are simultaneously either all 1's (true), or all 0's (false), the output is 0 (false).

ORIGIN

The absolute address of the beginning of a section of code.

OS

Operating System

OS/S

The operating system for the PDP-8, it features: choices of system's device, small core-resident monitor segment, device independence, expandability a user service routine, and a solid set of systems programs.

OUTPUT

1. The results of processing data.
2. The process of transferring data from memory to a mass storage device or from memory to a copying device such as a line printer or paper-tape punch.
3. The process of moving information from a mass storage device to a copying device.
4. The peripheral device receiving the information described above.

OVERHEAD BIT

A bit other than an information bit, (e.g., check bit, framing bit).

OVERFLOW

A condition that occurs when a mathematical operation yields a result whose magnitude is larger than the program is capable of handling.

OVERLAY

The technique of repeatedly using the same area of memory during different stages of a program. When one routine is no longer needed in memory, another routine can replace all or part of it. Overlaying replaces parts of programs; chaining replaces the whole program and does not have to be as sophisticated.

P

PACKET

A group of binary digits including data control elements which is switched and transmitted as a composite whole. The data and control elements and, possibly, error-control information are arranged in a specified format.

PACKET SWITCHING

A data transmission process utilizing addressed packets, whereby a channel is occupied only for the duration of transmission of the packet. NOTE: In certain data communication networks the data may be formatted into a packet or divided and then formatted into a number of packets (either by the data terminal equipment or by equipment within the network) for transmission and multiplexing purposes. See also: Circuit Switching, Message Switching, Store and Forward.

PAGE

On the PDP-8, a 128_{10} word section of core memory, beginning at an address which is a multiple of 200_8.

PAGE COPY

Same as Hard Copy.

PAL

Programming Assembly Language, the name of the assembly languages on the PDP-8 (PAL-III, PAL8, PAL-D) and the PDP-11 (PAL-11R).

PARALLEL TRANSMISSION

Method of information transfer in which all bits of a character are sent simultaneously on different paths. Contrast with Serial Transmission.

PARITY BIT

A binary digit appended to an array of binary digits to make the sum of all bits always odd or always even.

PARITY CHECK

A check that tests whether the sum of all the bits in an array is odd or even.

POWER FAIL

Logic circuits that protect an operating program in the event computer primary power dies. The circuits automatically store current operating parameters, and restore them and resume processing when power returns.

PPN

Project Programmer Number

PRC

Product Repair Center

PRINTER

A device to provide *hard copy* output. Unlike a terminal, there is virtually no communication from printer to central processor. Printers tend to output copy more rapidly than hard copy terminals.

PRINTOUT

A loose term referring to almost anything printed by a computer peripheral device; any computer-generated hard copy.

PRIMARY STATION

The station which at any given instant has the right to select and to transmit information to a secondary station, and the responsibility to insure information transfer. There should be only one primary station on a data link at a given instant. The assignment of primary status to a given station is temporary and is governed by standardized control procedures. Primary status is normally conferred upon a station so that it may transmit a message, but a station need not have a message to be nominated primary station.

PRIORITY INTERRUPT

An interrupt that is given preference over other interrupts within the system because it has been designated as being more important.

PROCEDURE

The course of action taken for the solution of a problem; a program.

PROCESS

1. A systematic sequence of operations to produce a specified result.
2. A set of related procedures and data undergoing execution and manipulation by one or more computer processing units.

PROCESSOR STATUS WORD

A register in some computers that indicates the current priority of the processor, the condition of the previous operation, and other basic control items.

PRODUCT LINE NUMBER

Number delegated to particular market group.

PROGRAM

The complete sequence of instructions and routines necessary to solve a problem in a computer.

PROGRAM COUNTER

A register in the CPU that holds the address of the current instruction being executed plus one; in other words, it holds the address of the next instruction unless the current instruction causes a jump.

PROGRAMMABLE

Can be controlled by instructions in a program.

PROGRAM SHARING

The ability for several users or computers to utilize a program at another node.

PROM

Abbreviation for "programmable read-only memory," a *ROM* that can be user programmed. ROM/PROM is generally used.

PROTOCOL

A formal set of conventions governing the format and relative timing of message exchange between two communicating processes. See also: Control Procedure, Line Discipline.

PS

Programming Systems

PSA

Personnel Service Administrator, works with Personnel Representative.

PS/8

Programming System for the PDP-8, an early, inferior version of OS/8

REAL-TIME CLOCK	A processor option that causes interrupts at regular intervals. Some real-time clocks have a programmable interval size.
REAL-TIME MONITOR	A monitor program specifically written to supervise the execution of real-time user programs and to call them into memory and start them quickly
RECORD	A collection of related items of data treated as a unit. Examples: A line of source code; a person's name, rank, serial number.
RECURSIVE STATEMENTS	A subroute capable of calling itself and returning, at some later point, to the program that called it.
REDUNDANCY	In a piece of code the portion of the total characters or bits that can be eliminated without any loss of information.
RE-ENTRANT PROGRAM	A two-segment program composed of a shareable segment of pure code and a non-shareable segment which is the data area.
REFRESH	On a CRT display, to again direct the electron beam to each point being displayed. The points must be written on the screen at least every 16 msec. or the display will appear to flicker. Thus a list of what must be displayed is kept in a buffer area.
REGIONAL (COMPUTER) NETWORK	1. A computer network whose nodes provide access to a defined geographical area. 2. A network whose nodes provide access to a specified class of users.
REGISTER	A device made of semiconductor components that is capable of storing a specified amount of data, usually one word.
REGULATORY AGENCY	In data communications, an agency controlling common and specialized carrier tariffs. (e.g., the Federal Communications Commission and the State Public Utility Commissions).
RELATIVE ADDRESS	The number that specifies the difference between the actual address and the base address (the address of the first instruction of the program).
RELOCATE	To move a routine from one portion of storage to another and to adjust the necessary address references to that the routine can be executed in the new location.
REMOTE JOB ENTRY (RJE)	1. Submission of jobs through an input device that has access to a computer through a communications link 2. The mode of operation that allows input of a batch job by a card reader at a remote site and receipt of the output via a line printer or card punch at a remote site.
REMOTE STATION	(Multipoint) Synonymous with tributary station. (Point-to-point switched network) A station that can be called by the central station, or can call the central station if it has a message to send.
REP	Personnel Representative
RESOURCE	Any means available to network users, such as computational power, programs, data files, storage capacity, or a combination of these.
RESOURCE SHARING	The joint use of resources available on a network by a number of dispersed users.
RESPONSE TIME	The amount of time elapsed between generation of an inquiry at a communications terminal and receipt of a response at that terminal. Thus it includes two-way communication time plug processing time.
RESTART	To resume execution of a program.

SECTOR	A physical portion of a mass storage device.
SELECTING	A process of inviting another station or node to receive data. C.f. Polling.
SERIAL TRANSMISSION	A method of transmission in which each bit of information is sent sequentially on a single channel rather than simultaneously, as in parallel transmission.
SEGMENT	1. That part of a long program which may be resident in core at any one time. 2. To divide a program into segments or to store part of a program on a mass storage device to be brought into memory as needed.
SERIAL ACCESS	Pertaining to the sequential or consecutive transmission of data to or from core. (e.g., paper tape, industry compatible MAGtape).
SERIAL TRANSMISSION	A method of information transfer in which the bits composing the characters are sent sequentially on a single path.
SERVICE ROUTINE	A program used for general support of the user; I/O routines, diagnostics, and other utility routines.
SHAREABLE SEGMENTS	A segment which can be used by several users at a time; pure code.
SHIPS	Goods shipped during fiscal period.
SJV	Standard Journal Voucher
SOFT COPY	Alphanumeric or graphical data (or both) presented in nonpermanent form, such as on a video screen.
SOFTWARE	Programs executed by a computer system to perform a required function.
SOURCE	1. The point of entry of data in a network. 2. A data terminal installation, that enters data into a connected channel. Data entry may be under operator or machine control as effected by a "message repeat" control signal.
SOURCE LANGUAGE	Any programming language used by the programmer to initially write his program, before it is translated into machine code.
SOURCE PROGRAM	The computer program written in the source language.
SPECIALIZED COMMON CARRIER	A company that provides private line communications services. (e.g., voice, teleprinter, data, facsimile transmission). See also: Common Carrier, Value Added Service.
SPOOLING	The technique by which output to slow devices is placed into queues on mass storage devices to await transmission. This allows more efficient use of the system since programs using low-speed devices can run to completion quickly and make room for others.
STAR NETWORK	A computer network with peripheral nodes all connected to one or more computers at a centrally-located facility. See also: Centralized Network.
STAR ELEMENT	In start-stop transmission, the first element in each character, which serves to prepare the receiving equipment for the reception and registration of the character.
START OF HEADING (SOH)	In Binary Synchronous Communications, precedes a block of heading characters.
START OF TEXT (STX)	In Binary Synchronous Communications, precedes a block of text characters.

STRING	A connected sequence of entities such as a line of characters.
STROBE	1. A signal which triggers a data reading, sampling, or transfer circuit: a signal that marks the instant of sampling. 2. To sample in this manner.
SUBROUTINE	A small section of code, usually performing one task, that is called frequently from various points of the main program.
SUBSCRIPT	A value used to specify a particular item in an array
SUBSYSTEM	An organization of computer components (e.g., a tape drive and controller) that comprises a functional unit that is part of a larger system.
SUPERVISORY PROGRAMS	Computer programs that have the primary function of scheduling, allocating, and controlling system resources rather than processing data to produce results.
SUPERVISORY SEQUENCE	In data communication, a sequence of communication control characters, and possibly other characters, that perform a defined control function.
SWAPPING	The movement by the monitor of user program while they are running between core and a buffer area on a mass storage device when something else is running in that place in core.
SWITCHED LINE	A communications link for which the physical path may vary with each usage. (e.g., the dial-up telephone network).
SWITCH REGISTER	A location in the CPU which can be loaded with a value by the operator, by his setting switches on the computer console for each bit he wants to enter.
SWS	Software Services
SYMBOLIC ADDRESS	Alphanumeric characters used to represent a storage location in the context of a particular program. They must be translated to absolute addresses by the assembler.
SYMBOL TABLE	An array which contains all defined symbols and the binary value associated with each one. Mnemonic operators, labels and user-defined symbols are all placed in the symbol table. (Mnemonic operators stay in the table permanently.)
SYNCHRONOUS	Pertaining to circuits where all changes occur simultaneously or in definite timed intervals based on worst-case times.
SYNCHRONOUS IDLE (SYN)	Character used as a time fill in the absence of any data or control character to maintain synchronization. The sequence of two continuous SYN's is used to establish synchronization (character phase) following each line turnaround.
SYNCHRONOUS TRANSMISSION	Transmission in which the data characters and bits are transmitted at a fixed rate with the transmitter and receiver synchronized. This eliminates the need for start-stop elements, thus providing greater efficiency. C.f Asynchronous Transmission.
SYSTEM	A combination of software and hardware which performs specific processing operations.
SYSTEM DEVICE	A peripheral mass storage device in which the system software resides.
SYSTEM SOFTWARE	DIGITAL-supplied programs which come in the basic software packages These include editors, PIP, assemblers, compilers, loaders, etc.

TEXT	A message or program expressed in alphanumeric characters.
THERMAL NOISE	Electromagnetic noise emitted from hot bodies. Sometimes called Johnson noise.
TIE LINE	A private line communication channel of the type provided by communications common carriers for linking two or more points together.
TIME-DIVISION MULTIPLEXING (TDM)	A system of multiplexing in which channels are established by connecting terminals one at a time at regular intervals by means of an automatic distribution.
TIME QUANTUM	In time-sharing, a unit of time alloted each user by the monitor.
TIME SHARING	A method of allocating CPU time and other computer services to multiple users so that the computer, in effect, processes a number of programs concurrently.
TO DRIVE AN ISSUE	To solve a problem or influence someone else to solve a problem, usually by interfacing with one or more people.
TO SOURCE INFORMATION	To obtain information especially from sources not commonly known.
TO WORK AN ISSUE	To solve a problem usually by interfacing with one or more people.
TOGGLE	Use switches to enter data into computer memory.
TORN-TAPE SWITCHING CENTER	A location where operators tear off incoming printed and punched paper tape and transfer it manually to the proper out-going circuit.
TOUCH TONE	AT&T term for pushbutton dialing. The signaling form is multiple tones.
TPL	Traditional Products Line
TRACK	The portion of a moving storage medium, such as disk, drum, or tape, that is accessible to a given reading head position.
TRAP	A conditional jump to a known memory location performed automatically by hardware as a side effect of executing a processor instruction. The address location from which the jump is made is recorded. It is distinguished from an interrupt which is caused by an external event.
TRANSPARENT MODE	Transmission of binary data with the recognition of most control characters suppressed. In Binary Synchronous Communications, entry to and exit from the transparent mode is indicated by a sequence beginning with a special Data Link Escape (DLE) character.
TRIBUTARY STATION	A station, other than the control station, on a centralized multi-point data communications system, which can communicate only with the control station when polled or selected by the control station.
TRUNK	A single circuit between two points, both of which are switching centers or individual distribution points. C.f. Local Line.
TRUNCATION	The reduction of precision by ignoring one or more of the least significant digits; not rounding off.
TU	Tape Unit
TURNAROUND TIME	1. The elapsed time between submission of a job to a computing center and the return of results. 2. In communications, the actual time required to reverse the direction of transmission from sender to receiver or vice versa when using a two-way alternate circuit. Time is required by line propagation effects, modem timing and computer reaction. See also: Network Delay.

WEEK 2, etc.	Second week of fiscal month.
WHAT'S THE BOTTOM LINE	Final cost.
WIP	Work In Process
WORD	A group of bits handled as a unit by a digital computer, generally comprising the largest such group handled throughout the central processor as a single unit. The wordlength (number of bits per word) varies between computer types (e.g., 12 to 16 bits for minicomputers, 32 to 36 bits for large-scale computers). Not to be confused with *byte*.
WOODS	Monthly off-site meeting of the Operations Committee. Generally used to describe off-site informal style meetings.
WP	Word Processing
WR	Western Region
WS	Word Station
WT	Word Terminal