

---

# GLOSSARY

---

## *AAU*

See Actual Air Usage.

## *Access #*

The access number for the 289H LSS represents the relay card and pin number where the device is connected. Displayed on E2A system reports, the Access Number refers to the LARP pin identification number to which a device is wired. Displayed on Chatlos systems, access numbers would reflect the Pin numbers. For a Sparton system, the access number would reflect the device number which is the first three numbers in the location field.

## *Accumulation Meter*

A mechanical device that measures the number of cubic feet of air flowing through a central office panel. It couples with a B-flow transducer to report automatically to the office CPAMS.

## *Actual Air Usage*

(AAU) The amount of air actually being used by a route or cable.

## *Address*

In PressureMAP, a name or numeral up to 30 characters in length designating the location of a particular manhole, transducer, contactor, or other CPAMS-related devices.

## *Addressable Transducer*

Devices that measure either pressure or flow and relay the information to a central location. Each device has a unique address number that responds to a coded transmission from the CPAMS. Multiple addressable transducers may be installed on a single pair of conductors.

## *Aerial*

An elevated (overhead) cable, or a transducer that is associated with an elevated cable.

## *Aged Dispatch*

Dispatches that have aged (those that have not been cleared from one day to the next) are distinguished from new dispatches by a hyphen (-). For example, an original 3 star dispatch that has aged two days will appear as --\*.

## *Air Dryer*

See Central Office Compressor.

## *Air Pipe*

See Pipe.

## *Air Pipe Manifold*

See Manifold.

### *Air Pipe Purification*

A procedure that provides accountability for all air consumption on an air pipe route and identifies all the pneumatic sections on the route. Purification helps to ensure complete monitoring of the pressurization system.

### *Air Source*

Any type of cable pressurization equipment designed to introduce air into a pressurized system. This equipment includes central office compressors (air dryers), air pipe manifolds, distribution panels, nitrogen cylinders and remote air dryers.

### *Alarm Condition*

Condition refers to transducer readings. Basically, you can have either a normal condition or an "alarm" condition. An alarm condition is a transducer reading that deviates from a standard reading enough to trigger PressureMAP to call attention to it. Either a low pressure reading or a high flow reading will cause an alarm condition.

### *Alarm State*

See Alarm Condition.

### *Alert Condition*

The System Studies 289H and 289H-M LSS monitors can be set up to initiate an alert to PressureMAP when a potential alarm condition is detected during the 289H's continual scan of devices. PressureMAP then determines if the condition qualifies as an "alarm" for distribution to the assigned Alarm Centers. PressureMAP permits a variable alert sensitivity level to be assigned to a 289H LSS office. This level dictates how much pressure transducer readings can drop and flow transducer readings increase before the 289H calls PressureMAP with the alert condition.

### *Alphanumeric*

An abbreviation or designation consisting of both letters and numbers.

### *Arrow Keys*

While working on some terminals, pressing an arrow key will finish the current data entry screen, regardless of which data field you are working on at the time. We recommend that you avoid using the arrow keys.

### *Associated Device Information*

The term, associated devices, refers to the transducers at the four locations closest to the transducer causing an alarm. Along with data from the transducer causing the alarm, PressureMAP will, if requested, include data from any of these associated transducers that has changed since the previous reading.

### *Async Modem*

An async modem is asynchronous as opposed to bisynchronous or synchronous.

### *Auxiliary Air Source*

A supplementary source of pressurized air (from a source other than the central office), such as a remote dryer or nitrogen tank.

*Averages*

The AVERAGES section of a device history report has four columns that represent the weekly averages over the past four weeks of readings. The READING, SETTLED READINGS, and AVERAGES columns are updated daily with the current system information.

*B-Meter Panel*

See Distribution Panel.

*Backup*

As a noun: A copy of the data from a fixed disk (e.g. PressureMAP Engine hard drive) to a data disk, CD/DVD ROM, tape cartridge, LAN/WAN file or other backup medium that is created to safeguard data in case the original becomes corrupt.

As a verb: The process of duplicating data from a fixed disk to one of the available storage media to ensure the availability of data in the event of loss or damage to the original.

*Baud Rate*

The speed at which a computer communicates with another device.

*Bit*

The smallest unit of electronic data used by computers. A bit can be in either one of two states: "on" or "off".

*Bind. Post*

This field on a data entry form is for the binding post terminal designation.

*Boot*

The act of turning on a computer system and loading into memory the operating system which the system runs. AKA "Boot Up".

*Broadcast Address*

UNIX network function that masks the local host number of the IP address, allowing a message to be sent to all computers on a particular network.

*Bring Up*

Computer jargon for the loading of a particular software program. Also, the deliberate selection of an item in a program, by the user, and its subsequent appearance on the screen.

*Buffering*

A supplementary supply of air applied to cable system in order to maintain pressure in a cable during splicing or maintenance activity.

*Buried*

A cable, transducer, or other pressurization equipment that is direct-buried with no protective conduit.

*Bypass Valve*

An arrangement of tubing designed to circumvent a pneumatic plug in a cable. The bypass has a shutoff valve so that air flow around the cable can be controlled. It is primarily used to facilitate maintenance techniques.

## DATA ENTRY

---

### *Byte*

Computer terminology for a single unit of electronic data consisting of eight bits.

### *C-Gauge*

A hand-held gauge used to measure air pressure from a pressure testing valve.

### *Cable*

Paired insulated conductors (fiber optics, quads, videos or coaxials) formed into a compact core and covered with a protective sheath.

### *Cable Pressurization Automatic Monitoring System*

(CPAMS) A microprocessor-based system designed to remotely monitor a pressurized cable network. It is a user-programmable system that interfaces with standard teletype printers or computer terminals to provide pressure and flow information upon request or at predetermined time intervals.

### *Case Sensitivity*

The determination of whether or not a user switching between upper and lower case letters while inputting data will affect the program operation. The same combination of upper and lower case letters must be used every time the User ID, Password, and Full Name characteristics are entered. Case is not critical when selecting menu options. In order to avoid confusion, it is highly recommended that lower case letters be used for all input. PressureMAP will automatically capitalize all letters that need to be upper case.

### *CD*

See Compact Disk.

### *Central Office*

(CO) The starting point, or "hub", of a cable pressurization system—the inside plant. When pertaining to the PressureMAP software, all the pipe routes and devices within a specified area (commonly referred to as an office).

### *Central Office Compressor*

A device that compresses ambient air and extracts the moisture from it. The dry air is then regulated and pumped into the cable network via the central office panels.

### *Central Office Manifold*

A collecting tube which combines the low side or high side air outputs of two air dryers into a single air source. This collected air is then directed to the pipe alarm panels and distribution panels.

### *Central Office Sector*

The circular area surrounding the central office that contains all cables fed by the distribution panel. The boundary of the CO sector is located at the first pressure transducer location on each route.

### *Central Terminal*

The keyboard and monitor of the computer that is hosting the PressureMAP program.

### *Check Valve*

A valve which allows air to flow in one direction only. The check valve is commonly installed in-line on tubing connecting the manifold to the air pipe.

***Circuit #***

The one- to four-digit device circuit identification number used with the Chatlos/Hercules and TMACS automatic monitoring systems.

***CKT #***

For Chatlos/Hercules and TMACS systems, this field on a data entry form displays the circuit number of the device.

***CO***

See Central Office.

***Compact Disk***

(CD or CD-ROM) A portable, high capacity storage medium for digital data and software. The disk is composed of plastic with a reflective metal layer where data is recorded and read using laser optics.

***Compatible***

The ability to transfer programs, data, and/or devices of one computer system to another computer system, without the need for modification.

***Computer***

Any device which can receive and store a set of instructions, and then act upon those instructions in a predetermined and predictable fashion. The definition implies that both the instruction and the data upon which the instructions act can be changed. A device whose instructions cannot be changed is not a computer.

***Console***

A console may be thought of as a software window through which a user can access the program. Once a user enters data into the System Computer and receives a login prompt, s/he is logged into a console. Multi-user systems have the ability to run more than one console simultaneously.

***Consolidated***

Joined together into one whole. The "System Indexing" option produces a consolidated listing for an office.

***Contact***

A pressure-sensing device that switches off or on to indicate that pressure is above or below a preset level.

***Corrupted***

A term used with computer diskettes and data indicating a negative condition—i.e., ruination or destruction.

***CPAMS***

See Cable Pressurization Automatic Monitoring System.

***CPAMS Backup***

PressureMAP's weekly function of automatically backing up CPAMS memory (device information).

## DATA ENTRY

---

### *Cursor*

A special symbol that cues position on a video display terminal. The cursor on the computer is a bar of light that indicates where data entered from the keyboard will appear on the display.

### *Customized Files*

Customized files store information that directs the MAP System communication functions. This information includes the modem call numbers as well as instructions for Dispatcher.

### *Data*

Any representation of a fact or an idea that can be manipulated, and to which meaning can be assigned. Information.

### *Data Interrupt Key*

<Esc> is the data interrupt key. It interrupts the current program's data output.

### *Dedicated Pair*

A pair of wires exclusively assigned to report data for a particular monitoring device.

### *Default Option*

At some of the prompts, a default option will appear. A default option is a value or entry that is preprogrammed into the system. The default option may be selected by pressing <Return>.

### *Delivery Pressure*

The measurement of pressure taken at the point where air enters the pressurized cable system.

### *Detail Box*

The detail box is commonly used on the pressure record, where it contains coded data concerning an air source or monitoring device. On Location Code Maps, the Detail Box has been replaced by a Location Code.

### *Detailed Task Reports*

A Detailed Task Report contains all of the information relevant to a particular problem. This includes the transducer readings from the device that caused the alarm and readings from the two locations on either side of the one causing the alarm. The Detailed Task Reports will also contain a description of the probable cause as well as a recommended procedure for tracing the leak.

### *Device #*

This data entry form field is reserved for the Monitoring Device Number which is the letter/number identifier of the transducer, contact alarm, volume counter, or trunk/toll contactor selected. See Remote Monitoring Device.

### *Device Log Reports*

A report that lists all of the devices included in the PressureMAP database.

### *Device Type*

A device designation based on the device's position and function within the pressurization system.

*Dial-a-Ducer*

Small, self-contained monitoring device that can be accessed remotely over a standard POTS line. Provides multiple monitoring capability (flow, pressure and contact alarming) on one phone line. Can be used with PressureMAP or as a true stand-alone unit. Programmable to send alerts to pagers.

*Digit*

Any of the Arabic numerals between 0 - 9.

*Disk*

In computer terminology, a flat, circular plate with magnetic surfaces on which electronic data can be written. The disk may be hard or floppy. (Also see "Compact Disk".)

*Disk Drive*

A device for reading and writing on magnetic media in the form of disks. The disk drive works like a record player—it "plays" the disk for the computer.

*Diskette*

A storage device consisting of a flexible magnetic disk inside a protective plastic jacket. Also referred to as a "floppy disk." (See "Disk".)

*Dispatch*

The term "dispatch" has taken on several meanings in the telephone industry. Originally dispatching was a verb that meant sending technicians out to work on a problem. Then the report that described the problem for which the technicians were sent out was called a dispatch. Now, "dispatch" also refers to the report that contains the individual dispatches.

*Dispatch Condition*

A change in a device reading that indicates a problem and warrants investigation.

*Dispatch Information*

Dispatch information describes how and where to send the daily dispatches. It includes the phone numbers for the modems at the report centers, the baudrate, and the priority level of calls requested.

*Dispatch Priority*

A ranking of dispatches according to their potential for system damage. A four star (\*\*\*\*) dispatch is the highest ranking; an "r" (routine) is the lowest.

*Dispatch Report*

The report received each morning by a Report Center indicating the top five problems associated with an office. A dispatch Report contains information for all the offices in the system or those specified during data entry.

*Display*

As a noun: In computer terms, an electronic device (such as a cathode ray tube in a computer) that presents information in visual form, i.e., a video screen.

As a verb: In computer jargon, the exhibition of information on a display device.

## DATA ENTRY

---

### *DTMF Modem*

DTMF stands for "dual tone multi frequency." Rather than send synchronous or asynchronous communications signals over a dedicated or subscriber pair, this modem transmits data using tones identical to those produced by a touch tone phone. A DTMF modem can be used to converse with a Dial-A-Ducer.

### *Distribution Panel*

A central office panel used in an air system. Usually considered the first manifold on the run, the distribution panel is often referred to as the "B-meter panel."

### *Dual Feed*

A cable pneumatic section or cable that is supplied with air from both of its ends.

### *Duplex*

Duplex is a term describing the method of communication between two computers. In "full duplex", characters sent from point A to point B are echoed back from point B before they appear on point A's terminal. In "half duplex", characters sent from point A to point B are sent directly to point A's terminal, as well as to point B. Point B does not echo the characters back to point A.

### *Dynamic Condition*

A device reading that has changed over a specified period of time. PressureMAP has the ability to perceive small changes over an extended period of time.

### *Dynamic Dispatch*

A PressureMAP dispatch that flags serious changes in air flow or pressure over a given amount of time.

### *Emergency Boot Floppy*

A programmed floppy disk that is used to boot up a PressureMAP computer when a problem will not allow the system to boot from the hard disk.

### *End-Point*

The pneumatic end of a pipe or a cable.

### *Enter*

In computer jargon, to put in, or insert, data into a computer.

### *Ethernet Address*

The Ethernet address is the unique, six-byte physical address of an Ethernet card, which is assigned by the manufacturer of the Ethernet card.

### *Execute*

To perform the intention of a command or instruction. Also, to run a program or a portion of a program.

### *External Device*

See Peripheral.



### *Flow Finder*

A Flow Finder is a sensing instrument developed by System Studies to measure the rate of air flow. A Flow Gauge is attached to the Flow Finder to read the rate in Standard Cubic Feet Per Hour.

### *Flow Gauge*

A Flow Gauge is an instrument developed by System Studies to read and display, in Standard Cubic Feet Per Hour, the rate at which air is passing through a Flow Finder.

### *Flow Range*

The quantity or amount of air that a flow transducer is capable of measuring.

### *Flow Rate*

The quantity of air that is leaked or consumed by a cable or route over a given period of time.

### *Flow Transducer*

A device that remotely monitors air flow into a pressurized cable system.

### *Format*

To lay out in a specified form or style.

### *Formatting*

Formatting refers to a process which establishes a pattern on a computer disk that the operating system will recognize. Each operating system has its own pattern. Formatting is analogous to subdividing the disk into distinct lots and neighborhoods that the computer can then add addresses to.

### *FTD*

See Flow Transducer.

### *Full Name*

The full name is a characteristic assigned to a User ID. It allows a long descriptive name to be attached to the User ID. The Full Name can be modified at any time by access User Management's Modify a User procedure.

### *Gateway*

A gateway provides interconnections among two or more networks, routing data packets among them, accepting data that arrives over one network connection, and routing data out over another connection.

### *Hard Disk System*

A computer system that uses one hard disk and one or more floppy disks for its storage requirements.

### *Hardware*

When speaking of computers, the term "hardware" refers to the physical components of a computer system.

### *Help Screens*

Entering a ? <Return> at most of the MAP System prompts will bring up a help screen which explains the current procedure. Help screens are not available for menus. However, at prompts

## DATA ENTRY

---

where a question mark is entered to retrieve a list of available offices, type **HELP** to request the help screen.

### *Hexadecimal Numbering System*

Beginning with PressureMAP Version 26 and PressureMAP Server 1.00, the base 16 hexadecimal numbering system is used to create task numbers on morning reports and alarms. This numbering system allows many more task numbers to be deployed in PressureMAP (65,535 versus 9,999, which is the four character maximum for a decimal numbering system).

In the hexadecimal numbering system the Indian/Arabic numbers 0 through 9 are used, plus the letters A-F which represent the numbers 10 to 15. The farthest-right digit is the ones place; the digit next to the left is the 16s place; the next place to the left is  $16^2 = 256$ , etc. Each place is 16 times the place immediately to the right of it. A beginning segment of the hexadecimal numbering sequence is shown below:

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F
20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F

In this example, the hexadecimal number 18, for example, would represent 24 in the standard decimal numbering system ( $1[16] + 8=24$ ). The hexadecimal number 1F would represent 31 ( $1[16]+F[15]=31$ ).

### *Initialize*

The process of setting certain variables on a piece of equipment so that it can communicate with other hardware or software. Printers and modems often have to be initialized.

### *Input*

Data which flows from the outside world into the computer to be processed.

### *Input #*

A number used in Sparton systems that designates the Frame Interconnect Block pin number on which a device pair terminates.

### *Input Pressure*

See Delivery Pressure.

### *Installation*

The necessary steps performed to set up and use a computer program for the first time.

### *Interlacing*

The connection of one cable to another, originally designed to increase pair capability. When cables are interlaced, air pressures equalize, thus masking leaks. All interlacing should be plugged.

### *Interrupt*

A signal, condition, or event that causes normal processing operations to be suspended temporarily.

### *IP (Internet Protocol) Address*

This address is a four-byte numeric value that identifies the network and computer containing the Ethernet card on the LAN (Local Area Network).

*Julian Date*

A date recorded by the Julian Calendar which numbers the days consecutively through the year beginning at 1 on the first day of the year. The Julian date is displayed as the first three digits of the PressureMAP task number.

*LARP*

See Line Access Relay Panel.

*Lateral*

A single feed pneumatic section. A lateral is normally a cable that branches out from a main feeder cable.

*Latitude*

Certain PressureMAP reports and screens include a data field that contains a device location's position expressed as degrees, minutes and seconds of latitude.

*Level*

This field on a data input form represents the alarm level of the CPAMS unit.

*Levels of Dispatch*

In this case, a PMAP dispatch is a report on a single problem. A problem is either a low pressure reading or a high flow reading from a transducer somewhere in the cable system being monitored. PressureMAP ranks the problems based on how much the readings are below normal and how long they have been that way.

*Line #*

This device data form entry field indicates the line position on the Sparton printout where the device appears.

*Line Access Relay Panel*

One of a number of panels which comprise an E2A Remote Terminal. Each LARP contains field monitoring device termination points that can be read directly by the PressureMAP software.

*Linux*

An open-source implementation of UNIX created by Linus Torvalds which runs on many different hardware platforms. Unlike proprietary operating systems such as Windows or Mac OS, all of Linux underlying source code is available to the general public for anyone to use, modify, and redistribute freely. Linux has gained the support of major corporations such as IBM, Sun Microsystems, Hewlett-Packard, and Novell for use in servers and is gaining popularity in the desktop market. It is used in systems ranging from supercomputers to mobile phones.

*Loc*

This database field is for the unique PressureMAP location number of all devices at a particular physical location in the pressurization system. This number cannot be duplicated within an office.

*Location*

The term "location" as it is used in the PressureMAP world means the site of one or more transducers.

## DATA ENTRY

---

### *Location Code*

A permanent, non-duplicated number that represents the unique physical location of a monitoring device or devices within an office.

### *Location Code Map*

An improved, condensed version of the standard stickmap consisting of Location Code Numbers instead of detail boxes. The Location Code Map was developed to compliment PressureMAP's Device Log by Location feature.

### *Login*

The term login, when used as a noun, refers to the combination of terms that a user must type in before s/he can work in the computer program. PressureMAP's login consists of both a User's ID and a password. When login is used as a verb, it describes the process of typing in the series of terms that will allow access into the system.

### *Log Off*

See Log Out.

### *Log On*

The act of signing on to a multi-user computer, usually done through a remote terminal.

### *Log out*

Exiting the program through the proper procedures is called logging out. Since exiting the program without following the prescribed steps may result in a loss of data, users should always log out properly. When logging out, the actual computer is not turned off, but is left on for other users to access.

### *Longitude*

Many of PressureMAP's device-specific reports and screens include a data field that contains a device location's position expressed as degrees, minutes and seconds of longitude.

### *Loop*

This database field is used to record the total loop resistance in kilohms from the central office to an operated contactor and back to the office.

### *Loop Resistance*

The sum resistance of two wires in a pair, as measured between two different points.

### *Manifold*

Pressurization equipment located in the field that is used to distribute air from an air pipe to a cable pressurization system.

### *MAP Engine*

Latest generation hardware platform used to run PressureMAP. The MAP Engine consists of a powerful, high-speed Pentium computer, equipped with the necessary random access memory (RAM), disk storage, monitor, keyboard, CD/DVD ROM and tape backup capability required for the latest PressureMAP software. A MAP Engine VIII computer is required for all PressureMAP Version 27 systems running the SCO UNIX 5.0.7 operating system. Version 27 systems and higher that run CentOS Linux can use the MAP Engine VIII or any comparably equipped computer platform.

*Media/Medium*

A storage material for electronically-generated data. Storage mediums include hard disks, floppy disks, magnetic tape cartridges, laser disks (CD/DVD ROM), removable RAM disks, etc.

*Memory*

Memory refers to the physical components of a computer in which both data and instructions to perform operations on that data are stored prior to processing. The computer has two types of memory: RAM (Random Access Memory) and ROM (Read Only Memory).

*Menu*

An assortment of offerings listed by a computer as available program choices.

*Menu Levels*

Each User Account is assigned a Menu Level. This designation determines how much control over the MAP System each account will have. The Menu Level can range from a relatively powerless one such as CableMAP, to a very powerful one such as User Management. A CableMAP user can only read data, whereas a User Management user has the power to allow or deny access to the system.

*Meter Panel*

The meter panel (also referred to as the "B-meter" or the "distribution panel") divides and distributes air supplied to the individual cables in the vault.

*MH*

Manhole.

*Mode*

A condition or set of conditions under which a certain set of rules apply.

*Modem*

An acronym for Modulator/DEModulator, a modem is a device which converts digital data into audio tones suitable for transmission over regular telephone lines.

*Module/Module Type*

A packaged functional assembly of electronic components for use with other such assemblies. A module can be one of four types: binary, addressable, dedicated, or subscriber.

*Module*

This field on a data input sheet refers to the designated module type to which a device is wired. Module types are DT and DED (dedicated), ST and SUB (subscriber), ADD (addressable), CC (contact card), BIN (binary), SS (status alarm), VF (volume counter), RC (contactor), MA (status alarm), MF (volume counter), TT (addressable), SA (high priority), SA (high priority status alarm), CC (control card), or D (long haul).

*Monitor*

The viewing screen that is attached to a computer. See Display.

### *Multi-port Serial Card*

A card within the computer which allows the modem to communicate with PressureMAP. Multiple ports allow more than one modem to be attached.

### *Multiplexer*

An electronic circuit which has many data inputs, a few selector inputs, and one output. A multiplexer connects one of its many data inputs to its output. The data input it chooses to connect to the output is determined by the selector inputs.

### *Netmask Setting*

The netmask setting is used to remove the network number from the IP address, leaving only the local host number. This keeps the size of the routing table small, and makes routing decisions more efficient. (See Subnet.)

### *Nightly Backups*

The MAP System automatically makes a backup tape of all data files and all customized program files every night. The backup is made at approximately 11 p.m. The same backup can be performed manually using the backup procedures in System Administration.

### *Nitrogen Tank*

A cylindrical steel container filled with liquid nitrogen and often used as an emergency source of air pressure.

### *Non-Variance Report*

A report on transducers which have readings that have not changed in the last 4 weeks indicating that they are "stuck" or "pegged". The non-variance report is valuable for identifying unmonitored pneumatic sections.

### *Number Keys*

Most keyboards have a <Num Lock> key which acts as a toggle switch for the numeric keypad. The number keys will work with the MAP system only if <Num Lock> is toggled **for** numbers. If <Num Lock> is toggled **against** numbers (application mode), the keys of the numeric keypad may send erratic messages that interfere with either PressureMAP or the communications software.

### *OAU*

See Optimum Air Usage.

### *Office*

See Central Office.

### *Office Files*

Office files store transducer data collected from individual offices. These files contain data for the past seven days as well as weekly averages for the past four weeks. The daily data is updated every night and extracted from the files after seven days. It is then used to create a weekly average reading. The weekly averages are saved for four weeks.

### *Office Index*

A system quality rating that measures the protection capabilities of a pressurization system. The index number is an equation based on the differences between the optimum and actual pressure and flow readings.

*Office List File*

A file that contains a list of all offices in the PressureMAP database.

*Office Model*

An engineering classification based primarily on office size and air pipe manifold spacing. There are four distinct office models.

*Operate*

To perform a function, work; bring about; affect.

*Optimum Air Usage*

The acceptable air consumption that a pressurized cable network should use under standard operating conditions (also known as the "allowable leak rate"). Optimum Air Usage (OAU) can be calculated by counting the number of sheath miles of cable being fed by an air source and multiplying the total by 1.25 SCFH (30 SCFD). An OAU can also be determined by assigning an acceptable flow value for each pressure tube that supplies air to a cable (generally 2 to 5 SCFH per tube, depending upon air pipe manifold spacing).

*Option*

Choice.

*Output*

As a noun: Data or information generated by a computer.

As a verb: The process of generating or transmitting data.

*Pair*

Two wires forming a single circuit, held together by twisting, binding, or a common jacket.

*Parity Bits*

Extra information sent in data communications, used to detect transmission errors.

*Password*

To prevent unauthorized access to the system, a unique Password is assigned to each User Account. The Password must be entered along with the User ID when logging onto the system. Passwords can be programmed to expire after a specified time with the Password Aging feature. The Password can be assigned or changed in the User Management Program. After a password has expired, a new and different password must be reentered by the user.

*Password Age*

A password may be programmed to expire after a given length of time. The period starts the first time the user enters a password. This Password Aging feature keeps the system clean of outdated passwords and makes it easier to keep track of the User Accounts that currently have access to the system. The Password Aging period is assigned or modified in the User Management Program. When a user's password expires, the user will be asked to reenter a new password (refer to the Reentering-an-Expired-Password Procedure).

*Path Name*

All files stored in a computer are organized in a hierarchy of directories and subdirectories. To find a file you must start at the lowest level, which is called a root directory, and follow a path through a series of subdirectories. The path name is a listing of all the directories that must be passed through in order to find the file.

## DATA ENTRY

---

### *Pegged*

A maximum reading by a flow transducer or flow rater, indicating the flow is at a range higher than the device is capable of reading.

### *Peripheral*

A device which is attached to a computer, but which is not a part of the computer itself. Printers and Modems are examples of peripherals.

### *Phone #*

This field on a the Device Data Form should contain the subscriber telephone number to which the monitoring device is wired. If the Sparton or Chatlos device is connected to a dedicated or addressable module, no **Phone #** field will appear in this position.

### *PIC*

See Plastic Insulated Cable.

### *Pipe*

For PressureMAP Device Coding, the designation of all devices associated with a particular air pipe route, CO sector, or remote air dryer. As a pressurization system component, the part of a system that delivers pressurized air from the central office pipe panel to the manifolds in the field.

### *Pipe Purification*

A procedure that provides accountability for all air consumption on an air pipe route and identifies all the pneumatic sections on the route. Purification helps to ensure complete monitoring of the pressurization system.

### *Plastic Insulated Cable*

Cable containing conductors that are covered with a coating of either polyethylene or polypropylene.

### *Plat*

A schematic record of a telco plat, also referred to as a "sheet".

### *Plat #*

This field on a data entry form is intended for the plant location record on which the device appears.

### *Pneumatic*

Moved or worked by air pressure; adapted for holding, or inflated with, compressed air.

### *Pneumatic Plug*

See Pressure Plug.

### *Pneumatic Resistance*

The natural blockage in a cable that restricts the flow of air through it. Resistance is affected by conductor insulation, the number of pairs, and conductor gauge (size).

### *Pneumatic Section*

Any cable or group of cables whose endpoints are defined by pressure plugs and/or air sources.

### *Portable Flow Rater*

A hand-held device that measures the amount of air flow through a pressurized cable system.



*Pounds Per Square Inch*

(PSI) A standard measurement of pressure. Roughly 0.5 PSI of air pressure must be maintained inside a cable to keep out one foot of water standing on top of the cable.

*Pressure*

The application of force to something by something else in direct contact with it.

*Pressure Plug*

An intentional blockage of air flow through a cable. The plug creates a pneumatic dam within the cable sheath.

*Pressure Transducer*

(PTD) A monitoring device used to read air pressure in a cable at the point of its installation. The pressure transducer is the equivalent of a C gauge; however, it is permanently installed on a cable and connected to a pair of conductors. The pressure transducer provides an electronic resistance value that is read by the office monitoring system and converted into a pressure reading.

*Prim Cable*

A data entry field that contains the "read" cable (the cable containing the transducer conductor pairs).

*Primary Cable*

The "read" cable that contains the device conductor pairs.

*Primary Pair*

The designated conductor pairs to which the device is connected.

*Printer Buffer*

A memory device that stores commands and data coming from the computer and feeds them to the printer at a rate that the printer can accommodate.

*Printer Spooler*

All reports to be printed are sent as files and routed through a printer buffer and a printer spooler. The buffer stores the files to be printed, and the spooler schedules the movement of the files from the buffer to the printer. The spooler also has the capability to detect problems in the printer. When the spooler detects a problem that may prevent the printing of the reports, it will shut down. This keeps the reports in the buffer rather than sending them on to the non-functioning printer where they could be lost.

*Printout*

Paper output from a program that is generated from the program data.

*Priority Levels*

Each Dispatcher Report Center is assigned a Priority Level. The Priority Level determines what Level of Dispatch (four star, three star, etc.) will include a Detailed Task Report. At the very least, the Report Center will receive summary information from the five worst problems at each office from which it requests information. In addition, the Report Center file can be programmed to request supplementary information about each of the problems.

## DATA ENTRY

---

### *Priority Rating*

This rating indicates degree of importance in the Dispatch Priorities option. A designation of four stars is the most critical, "R" signifies a "routine" dispatch.

### *Procedure*

A series of steps followed in a regular, definite order. In PressureMAP, five numbered task dispatching procedures deal specifically with leak locating. These procedures are referenced by Option #1 on the PressureMAP Master Menu (Dispatch Priorities).

### *Program*

A sequence of instructions that describes a process (often used to address a set of instructions given to a computer).

### *Programmed User Ids*

Programmed User Ids are a series of User IDs that are permanently programmed into the MAP system. Both the ID and the Menu Level are fixed for Programmed User IDs. These IDs, also referred to as Fixed Class IDs, are used for the QuickLogins. Each Programmed ID provides access to a different Menu Level.

### *Prompt*

Characters displayed on a computer screen signifying the computer is waiting for input from the operator.

### *PSI*

See Pounds Per Square Inch.

### *PTD*

See Pressure Transducer.

### *Pulp Cable*

Paper insulated cable. Each conductor is wrapped in paper insulation to inhibit electrical interference. Pulp cable has a relatively high pneumatic resistance.

### *Question Mark*

At many of the system prompts, you may enter a question mark (?) followed by <Return> to call up a help screen. If no help screen is available, the prompt will be re-displayed. However, at a prompt for an office name (e.g., **Which office?**), the user can enter ? to call up a listing of all offices in spreadsheet format.

### *QuickLogins*

A QuickLogin is a Login that allows the user to go directly to a specific place in the MAP System. There are eleven QuickLogins. Each takes the user to a different Menu Level by using Programmed User IDs. Using the proper QuickLogin can alleviate sorting through all the program menus to get to the desired utility.

### *Quit*

All MAP system menus include "Quit" as the last option. Pressing **Q** will return you to the previous menu. Quitting from the System Options menu will log you out of the MAP System.

### *Range*

Flow transducers display a number that signifies the maximum reading capacity of the device. For example, a common flow range for a type "SF" ("source flow") transducer is 0-50 SCFH. The value that appears in the **Range** data field is "50.0."

### *Remote Air Dryer*

An air compressor located outside the central office. The remote air dryer is designed to pump dry air into a cable pressurization system. It is generally used when air feed out of the central office is impractical.

### *Remote Air Source*

A source of air supply to a pressurization system outside the central office. These sources supplement pressure feed from the central office. Remote air dryers and nitrogen cylinders are one examples of remote air sources.

### *Remote Monitoring Device*

Any pressure, flow, temperature, or humidity sensing device that electronically reports information to a central location via a pair of conductors.

### *Remote Terminal*

Any terminal connected to a host computer via a modem or serial connection.

### *Report Center*

A Report Center is the location of a printer where PressureMAP dispatches are printed or distributed. Report Centers are usually maintenance garages. A printer attached to the main computer can also be designated as a Report Center by entering **PRINTER** into the **PhoneNumber** field in the Report Center File. A facsimile machine can also be dedicated as a Report Center by entering **FAX** into this data field.

### *Report Center File*

Dispatcher maintains a file on each Report Center. Each file contains up to 10 pieces of information regarding that Report Center including: file date, last edited, system phone, center name, phone number, baudrate, priority level, offices sent, and remarks.

### *Ring and Tip*

Used to identify sides of a conductor pair.

### *Riser Pole*

The pole or other point at which a cable emerges from the underground into an aerial environment.

### *Routed Design*

An engineering approach to cable pressurization which is based on the definition of clearly defined routes for air supply and monitoring purposes.

### *Routining*

Ongoing cable pressurization maintenance procedures. Routining can be contrasted with demand or dispatched maintenance procedures.

## DATA ENTRY

---

### *Run*

As a noun: In cable pressurization, the length of pipe, from beginning to end, that comprises a particular air pipe.

As a verb: Used in computer terminology to signify the following of a sequence of instructions which comprise a computer program and to complete the process outlined by the instructions.

### *SCF*

See Standard Cubic Foot.

### *SCFD*

See Standard Cubic Feet Per Day.

### *SCFH*

See Standard Cubic Feet Per Hour.

### *Scroll*

To move (usually upwards) all the text on a display to make room (usually at the bottom) for more.

### *Sec Pair*

A data entry field used to record backup conductors to the primary pair.

### *Secondary Pair*

A pre-assigned backup pair of conductors available for use if the primary pair becomes defective.

### *Serial Port Concentrator*

A multiport server module (external to the computer) which allows modem communications with PressureMAP via a network connection. Multiple serial ports allow more than one modem to be attached.

### *Serial Server*

A serial port module (external to the computer) which allows network communication between the PressureMAP computer and the 289H LSS monitor via a TCP/IP socket connection.

### *Settled Readings*

The "Settled Readings" section of a data input sheet has seven columns, one for each day of the week. "Tdy" represents the reading taken during the daily poll of devices; "-1" list yesterday's reading, "-2" lists the day before, and so on through "-6".

### *Sharp Sign Ratings*

A sharp sign (#) displayed in the level column on a dispatch report indicates that more than one device at the same location is in alarm. When more than one dispatch condition is found at a specific location, all dispatches will be grouped into one dispatch listing, and will be given a Sharp Sign Rating

### *Sheath*

The casing, made of polyethylene or lead, that surrounds the cable. Also, the alphanumeric designation of a monitored sheath.

*Sheath(s)*

This space on a data entry form is intended for the number which identifies the cable being monitored when used with a pressure device. For a flow device, it is for the identification of the cables being fed by the monitored air pipe manifold or distribution panel.

*Sheath Mile*

(S-M) A unit of cable measurement used to calculate Optimum Air Usage (OAU). A sheath mile is defined as one mile of pressurized cable.

*Simultaneous*

Occurring at the same time. The data interrupt procedure of pressing the <Ctrl> and <S> keys down at the same time is a simultaneous act.

*Single Feed*

A system whereby air is supplied to a cable by only one source.

*Software*

A collection of programs, routines, and sub-routines that facilitate the operation and programming of a computer.

*Source Diskette*

The original or "master" diskette from which information is copied.

*Spare Pair*

A pre-assigned conductor pair, available in case the primary pair becomes defective. (Also referred to as the "secondary pair").

*Standard*

Criterion. An established rule for the measurement of quantity, and/or quality.

*Standard Cubic Feet Per Day*

(SCFD) A measurement of air flow, showing the amount of air that passes a given point in a 24 hour period.

*Standard Cubic Feet Per Hour*

(SCFH) A measurement of the number of cubic feet of air that passes a given point in a 60 minute period.

*Standard Cubic Foot*

(SCF) The number of air molecules that will fit into a standard cubic foot of space at sea level (14.7 PSI).

*Static Dispatch*

A dispatch that flags an unacceptable, non-varying pressure or flow condition. A static dispatch is created for each device condition that is not better or equal to set system standards.

*Stickmap/Stickmap #*

The primary pressure record for an office. The stickmap is a graphic layout of a route showing all cables, manholes, transducers, air pipes, etc. The stickmap number is the reference number for pressure and flow transducer placement.

### *Stop Bits*

A synchronizing signal exchanged between the host computer and the receiving communication equipment.

### *Stuck Readings*

A reading which has not changed in four weeks, and may indicate a malfunctioning device. See non-variance report.

### *Stuck Transducer*

A transducer that continually reads the same non-varying measurement of pressure or flow when, in fact, the reading has changed.

### *Subnet*

A subnet enables several local networks to appear as a single network to off-site hosts.

### *Subscriber Pair*

A pair of conductors servicing a customer as a phone line. In some states, subscriber pairs may simultaneously be used for transducer hook-ups.

### *Summary Information*

"Summary Information" is a one-line description of a problem. The daily dispatches describe the five worst problems for each office in a summary information section. That line includes a task number, a device number, a brief description of the nature of the problem, and the level of dispatch that PressureMAP has assigned to it. Additional information about the problem is available in Detailed Task Reports.

### *System*

In computer terms, all of the elements that compose the body of a computer system: the computer, software, remote terminal, and all peripherals.

### *System Administration Password*

The password required to access the System Administration Menu. This particular password is changed by modifying the Fixed Class User ID account named "mapadm".

### *System Administrator*

Anyone who knows the System Administration Password has unlimited access to the entire MAP System. The System Administrator using User Management not only has the ability to determine who gets access to the MAP System, but also how much control of the system each user is granted. The System Administrator can delete users or change any user's password or menu level at any time. It is therefore intended that system administration responsibilities be delegated to only a few people.

### *System Computer*

The term "system computer" designates the computer on which the PressureMAP System is installed and running. While a remote terminal may also be a computer, only the computer on which the program is actually installed is referred to as the system computer.

### *System Console*

The system console is the screen and the keyboard attached to the system computer.

***System Error Report***

A report that tracks problems with the PressureMAP System or with the communications between the PressureMAP System and the other components of the monitoring system.

***System Indexing***

A rating system developed by System Studies Incorporated to numerically rank the quality of pressurized cable protection.

***SQI***

See System Quality Index.

***System Quality Index***

(SQI) The actual quality ranking of a pressurized cable system, computed by the System Indexing portion of PressureMAP.

***Target Computer***

When data is exchanged between computers, the source computer contributes data to the target computer.

***Task***

Job, assignment.

***Task Number***

Each night, PressureMAP scans the transducer readings which it gathers from every central office in the system. From all those readings, it pulls out the ones that are abnormal or changing rapidly. Since each of these abnormal readings indicates a problem that will have to be worked on, they are referred to as "tasks". PressureMAP assigns each of these tasks a unique seven character hexadecimal number. The first three digits represent the Julian date, which is a numeric representation of the calendar date, where January 1 equals 001. The four alphanumeric characters listed after the Julian date represent a hexadecimal base 16 order number assigned by the system. With hexadecimal numbering up to 65,535 unique task numbers are represented by unique four-character alphanumeric designations.

***TD***

See Transducer.

***Telco***

Abbreviation for Telephone Company.

***Temperature Transducer***

A transducer that converts changes in temperature into electrical resistance which is read and retranslated back into a temperature reading by the CPAMS.

***Terminal Options***

The MAP System will tailor its output to many different types of terminals. Some of the commonly used ones are listed on the Terminal Options Menu. This menu appears when you log onto the system.

***Threshold (Th, THR)***

A programmed setting in the CPAMS that determines when a device comes into alarm—e.g., pressure recordings that drop below the threshold generate an alarm. The name of two data entry

## DATA ENTRY

---

fields. For a Sparton device, it contains the programmed Sparton threshold for the specific monitoring device. Also, a few Device Types are configured with threshold parameters, with a default value supplied by PressureMAP.

### *Time Default*

After a specified amount of time, the MAP program will back out of some menus, and display the previous screen. This process will continue until the program redisplay the MAP Programs Menu. This feature is included because only one user at a time can access User Management. The Time Default prevents users from inadvertently tying up the program.

### *Title Block*

A graphic and descriptive information box located on a stickmap, which contains the map's title, map legends, completion dates, etc.

### *Transducer*

(TD) A device used to remotely measure pressure, flow or temperature in a pressurized cable system.

### *Tubed/Bevelled*

Pneumatically connected.

### *Tube Miles*

(TUBE-M) An alternative to calculating sheath miles when determining an air source's Optimum Air Usage (OAU). To calculate the Tube Miles for a flow device, the number of tubes that feed cables from the monitored air source need to be counted. Depending upon office type, either a value of 2 or 5 SCFH per tube mile is used in calculating OAUs. The Tube-M value (flow per tube) is entered in the Office Information Screen. PressureMAP then automatically generates an OAU based on the number of tubes entered for each monitored air source during device data entry.

### *Type*

On a data entry form, "Type" is a two-letter identification corresponding to the type and function of the device listed. Typically, the first letter pertains to the location or application of the device, and the second letter represents the device type. For example, "UP" describes an underground pressure transducer. See Device Type.

### *uM260 Micro Monitor*

A small stand-alone unit that provides monitoring and alarming for four binary devices, 16 resistive or current loop transducers and on contact control. There are two versions of this monitor: one for dial-up modem communications and one for access via a LAN.

### *Underground*

(UG) A cable or transducer that is located in conduit or ducts, but not direct-buried in the ground.

### *Unit*

Used in conjunction with Sparton CPAMS, a unit is a classification or grouping of device data.



### *Unit #*

This data entry field pertains only to Sparton monitoring systems. It represents the grouping or category of data which contains the device in question. For example, all flow transducers may be assigned the same Unit Number. Similarly, all of the devices on a specific route could be grouped together and given the same Unit Number.

### *Universal Stand-alone Module (USAM)*

The USAM is a small CO battery-powered, rack-mountable chassis containing a small computer with a scaled-down, single-office version of PressureMAP. When used with a 289H or 289H-M LSS, it fulfills the requirement for single office stand-alone monitoring, and it also provides a common interface when used with the variety of other types of CPAMS available. In addition, the USAM provides LAN connectivity, dial-up modem access, direct craft access, and independent monitoring for air dryers via 24 binary contact points, 15 control contact closures, and a power relay to allow remote booting of an attached monitoring system.

### *UNIX*

A multi-user, multi-tasking operating system developed by Ken Thompson, Dennis Ritchie, and others and originally licensed by AT&T's Bell Laboratories. It was originally designed for minicomputers, then revised for use on mainframes and personal computers. There are now many versions of UNIX which can be used on many different platforms. UNIX is written in the C programming language, which was also developed at AT&T. Because it allows multiple programs to run simultaneously and multiple users to access a single computer, it has been used by universities and businesses where many people use the same computer. It is the most commonly used operating system for Internet nodes.

### *User*

The person who is currently interacting with the computer.

### *User-Friendly*

A measure of a computer program's ease-of-use by those not well versed in computer science.

### *User Account*

A User Account has a unique User ID and Password and can be assigned to an individual or a group. A User Account is defined by the User ID and assigned four characteristics:

- Full Name
- Password
- Password Age
- Menu Level

The User Management program allows User Accounts to be added, deleted, or modified at any time. Up to 700 separate User Accounts are allowed on the MAP system.

### *User ID*

This is the unique identifier for a User Account. The User ID must be entered whenever a user logs onto the system. The User ID is assigned in the User Management Program.

### *Utility*

A utility is a part of a computer program that performs a specific function.

## **DATA ENTRY**

---

### *Volume Counter*

See Accumulation Meter.

### *Wall to Wall*

(WW) Standard measuring technique determining distances between manholes in order to measure sheath mileage and duct runs. ("Center to Center" (CC) is another measuring technique.)

### *Zero Activity*

Absence of activity, or lack of input over a given period of time.

### *Zero Leak Projection*

(ZLP) A formula that limits the area of search when a section of cable is being investigated for a leak. The calculation is used to determine the farthest point on a cable that a leak could be from an air source.

### *Zoned Design*

A method of re-engineering a pressurization system. In a zoned design, air supply and monitoring is divided based on a number of variables including the maintenance of existing neighborhood boundaries and previous pressurization engineering. No more than eight zones are defined for each central office.