

Telecommunications Terms

- ☎ **800 Service** – Also 888 & 877 - A generic and common term for the long distance provider for IN-WATs service. All these IN-WATs services have “800” as their area code. Dialing an 800-type number is free to the person making the call. The call is billed to the person or company being called. The telephone company suppliers of IN-WATs services use various ways to configure and bill this service. In 1993 the FCC has mandated that all 800-type numbers will become portable. That means that customers can take their 800-type number from one long distance company to another, and still keep the same number. This has allowed for better competition with rates averaging around \$0.10 per minute charge.
- ☎ **10 Based T** – is a standard for operating Ethernet local area networks (LANs) on twisted-pair cabling using the home run method of wiring (exactly the same as a phone system uses) and a wiring hub that contains electronics performing similar functions to a central telephone’s switch or data network.
- ☎ **900 service** – A generic and common term for a long distance carrier or local telephone company service. 900 is the area code for this service. Dialing a 900 number is free to the company or person receiving the call, but costs money to the person making the call. 900 service was introduced as the industry’s information service area code. The charge is related to the service provided. The money for that charge is paid through the phone company directly to the owner of that 900 number.
- ☎ **Abandoned Call** – The non-technical explanation is: A call that is answered, but disconnected before any conversation happens. The technical explanation is: A call which has been offered into a communications network or telephone system, but which is terminated by the person originating the call before it is answered by the person being called. Follow this sequence for an explanation: You call an airline. You hear ringing. Their phone rings. A machine, called an automatic call distributor, answers that call, plays you some dumb message, “Please don’t hang up. A real human will answer eventually.” You, the caller, are put on Eternity Hold. You get bored waiting and hang up before a live operator answers. You have just abandoned your phone call. Thus the term, Abandoned Call.
- ☎ **All Call Paging** – A phone system feature. A user can broadcast an announcement – page – to someone through the speakers of all phones on the system and, possibly, any external loudspeakers. If you want instant fame, ask someone to call the airport and page you. A famous movie mogul used to have his secretary perform this wonderful task, giving gigantic egos a whole new meaning.
- ☎ **Amphenol Connector** – Amphenol is a manufacturer of connectors. They make many connectors, many of which are made by other companies. Their most famous connector is the 25-pair connector used on most key telephone systems. The telephone companies call the 25-pair Amphenol connector the RJ21X. The RJ21X connector is made by other companies including 3M and TRW.
- ☎ **Analog** – Comes from the word “analogous” which means “similar to”. In telephone transmission, the signal being transmitted – voice, video, or image is “analogous” to the original signal. In other words, if you speak into a microphone and see your voice on an oscilloscope and you take the same voice as it is transmitted on the phone line and ran that signal into the oscilloscope, the two signals would look essentially the

same. In correct English usage, “analog” is meaningless as a word by itself. But in telecommunications, analog means telephone transmission and/or switching which is not digital.

- ☎ **ACD (Automatic Call Distributor)** – A specialized phone system used for handling many incoming calls. Once only used by airlines, mail-order companies, hotels, etc., it is now used by any company that has many incoming calls (i.e. order taking, dispatching service technicians, taxis, help desks, etc.). An ACD performs four functions: 1. It will answer an incoming call. 2. It will look in its database for instructions on what to do with the call. 3. It will send the call to a recording that “someone will be with you very soon, please don’t hang up”. 4. It will send the call to an agent as soon as that operator becomes available and/or the caller has heard the canned message.
- ☎ **Digital Subscriber Line** – A three-channel digital line that links the ISDN customer’s terminal to the telephone company switch with four ordinary copper telephone wires. The DSL can carry both voice and data signals at the same time, in both directions, as well as the signaling data used for call information and customer data. Up to eight different users can be served by a single DSL.
- ☎ **ISDN (Integrated Services Digital Network)** – An ISDN is another type of digital circuit provided by a local telephone company for either voice or data transmission. ISDN’s have been in use for several years for Internet connectivity and for voice connectivity. The speed of an ISDN is 128k to 160k for Internet connectivity. It is two times the speed of a 56k modem 1/10th the speed of a cable modem location or a DSL (Digital Subscriber Line). An ISDN could be the way for a smaller company to go for Internet connectivity because of cost and better ease of installation. Unlike a DSL that uses two pair of wires or four conductors, an ISDN only uses one pair of wires so this would make installation of this type of line into a home or business easier for the phone company and cheaper to install.
- ☎ **Trunk** – A communication line between two switching systems. The term switching systems typically includes equipment in a central office (the telephone company) and PBXs. A tie trunk connects PBXs. Central office trunks connect a PBX to the switching system at the central office.
- ☎ **Station** – A dumb word for a telephone. Also called an instrument or a telephone instrument.
- ☎ **RJ21X** – RJ (Registered Jack) - An Amphenol connector under a different name. Amphenol is a manufacturer of connectors. Their most famous connector was the 25-pair connected used on 1A2 key telephones and for connecting cables to many electronic key systems and PBXs. The telephone companies call the 25-pair Amphenol connector the RJ21X.
- ☎ **Key System** – A system in which the telephones have multiple buttons permitting the user to select outgoing or incoming central office phones lines directly. With a key system you don’t have to dial “9” to get an outside line. With a PBX, you do have to dial “9” to make a call outside the building. Dialing 9 is the major difference between a key telephone system and PBX.
- ☎ **PBX** – Private Branch eXchange – A small version of the phone company’s larger central switching office.

- ☎ **Call Sequencer** – Its main function is to direct incoming calls to the next available person to answer that phone. They also might answer the phone, deliver a message and put the person on hold. They can also keep statistical tabs of incoming calls, how fast they were answered, how long the caller waited, how many people hung up while waiting, etc.
- ☎ **IVR** – Interactive Voice Response – Think of IVR as a voice computers. A computer has a keyboard for entering information; an IVR uses remote touchtone phones. The computer has a screen for showing the results; an IVR uses a digitized synthesized voice to “read” the screen to the distant caller.
- ☎ **Internet** – Internet is a computer network which joins many computers together over the phone lines. It traces its origins to a network set up in 1969 by the Defense Department.
- ☎ **Internet Address** – A unique 32-bit identifier for a specific TCP/IP (Transmission Control Protocol/Internet Program) host on a network. Also called an Internet Protocol or IP address.
- ☎ **Hunt Group** – A series of telephone lines organized in such a way that when the first line is busy, the next incoming call will hunt (or roll) to the next available line.
- ☎ **Hybrid Key System** – A system which has the attributes of both Key Telephone Systems and PBXs. A hybrid key system can use normal single line phones in addition to the normal electronic key phones. Also not every trunk appears as a button on every phone in the system as does an electronic key system manufactured today.
- ☎ **Hookswitch** – The cradle where you lay your handset has a little button (or plunger) and is pushed down when you hang up the handset. This is the hookswitch. Originally the hookswitch was an electrical “switch” connected to the “hook” on which the handset was placed when the phone was not in use.
- ☎ **Hello** – We can credit Thomas Edison for the “Hello” greeting. He saw the telephone being used by businesses with permanently open lines. He wondered how anyone would know that the other party wanted to speak. He sent a letter dated August 15, 1877 to the President of the Central District and Printing Telegraph Company in Pittsburgh. “Friend David, I don’t think we need a call bell as Hello! Can be heard 10 to 20 feet away. What do you think?” At that time, Alexander Graham Bell insisted on the answering the phone with “Ahoy”. Hello first appeared in the Oxford English Dictionary in 1883.
- ☎ **Headset** – A telephone transmitter and receiver assembly worn on the head. You see receptionists, console attendants, telemarketers, customer service reps, etc. wearing them.
- ☎ **Voice Mail Box** – A voice mail system is a device to record, store and retrieve voice messages, similar to an answering machine that you might have at home. These messages are stored in a voice mail box. You can forward messages to other voice mail boxes, leave or pick up messages, edit messages and pass them on, etc.
- ☎ **Auto Attendant** – A device that answers a call, announces the name of the company you have reached and gives you further directions on their voice mail system.
- ☎ **Fractional T-1** – This is a digital line that’s not as fast as a full T-1. It is used for LAN interconnection, video conferencing, high-speed mainframe connection and computer imaging.

- ☎ **Fiber Optics** – A technology in which light is used to transport information from one point to another. Fiber optics are thin filaments of glass through which light beams are transmitted over long distances carrying enormous amounts of data.
- ☎ **Videoconference** – To videoconference is to communicate with others using video and audio software and hardware to see and hear each other.
- ☎ **Twisted Pair** – Two insulated copper wires twisted around each other to reduce induction (interference) from one wire to the other. The twists are varied in length to reduce the potential for signal interference between pairs and several sets may be enclosed in a single cable. The thicker the cable is, the better the quality of the conversation and the longer cable can be and still get acceptable conversation quality.
- ☎ **Tip and Ring** – An old fashion way of saying “plus” and “minus”, or ground and positive in electrical circuits. The tip was connected to the tip of the operator’s cordboard plug and the ring wire was connected to the slip ring around the jack.
- ☎ **Titanic Ship** – Why did the “unsinkable” ship sink? The last few hours before the Titanic struck an iceberg, other ships were sending wireless messages that they were about to enter an ice field. Investigations proved that when the wireless operators’ work was done, they often shut off their sets and went to sleep. In fact, when the ice warnings were sent to the Titanic, their operators were too involved in sending private messages from the wealthy passengers to take the incoming messages. When the Titanic operator’s sent their distress signals after hitting the iceberg, the operators on the other ships were in bed.
- ☎ **Call** – Two or more people on the phone talking to each other for the purpose of entertainment or exchanging information.
- ☎ **Central Office** – Telephone company facility where subscribers’ lines are joined to switching equipment for connecting to other subscribers to each other.
- ☎ **Telco** – The local telephone company.
- ☎ **Switchless Resellers** – They buy long distance service in bulk from a long distance company (such as AT&T) and resells that service to smaller users. They do not own any communications facilities – switches or transmission. They get their monthly bill on magnetic tape and then rebills the bulk service to their customers.
- ☎ **Call Accounting System** – A computer and type of software attached to phone system. This system is used to record information about telephone calls, organize that information and prepare reports (either printed or to disk). This information records which extension the call came from, which number is called, which circuit is being used, length of call. It can also report information on incoming calls – which trunk was used, where the call came from, which extension took the call, if it was transferred and to where and how long it took.