

for. Many different prefixes will correspond with that one suffix. In Arlington, Texas, a popular suffix for loops is 1893 and 1894, and a lot of prefixes match with them to make the number.

For Example: 817-460-1893/4

817-461-1893/4

817-465-1893/4

817-467-1893/4

817-469-1893/4

...are all loops...

or a shorter way to write this is:

817-xxx-1893/4

xxx= 460, 461, 465, 467, 469

Note: You can mix -and-match a popular suffix with other prefixes in a city, and almost always find other loops or test numbers.

Note: For Houston, the loop suffixes are 1499 and 1799. And for Detroit it's 9996 and 9997. When there are a large number of loops with the same prefix format, chances are that many loops will be inter-locked. Using the above example of Arlington loops again, (I will write the prefixes to save space) 460, 461, and 469 are interlocked loops. This means that only one side can be used at a given time. This is because they are all on the same circuit. To clarify, if 817-461-1893 is called, 817-460 and 469-1893 cannot be called because that circuit is being used. Essentially, interlocked loops are all the same line, but there are a variety of telephone numbers to access the line.

Also, if the operator is asked to break in on a busy loop line he/she will say that the circuit is overloaded, or something along those lines. This is because Ma Bell has taken the checking equipment off the line. However, there are still many rarely used loops which can be verified and can have emergency calls taken on them. As you have found out, loops come in many types. Another type of loop is a filtered loop. These are loop lines that the tel co has put a filter on, so that normal human voices cannot be heard on either line. However, other frequencies may be heard. It all depends on what the tel co wants the loop to be used for. If a loop has gotten to be very popular with the local population or used frequently for conferences, etc. the tel co may filter the loop to stop the unwanted "traffic". Usually, the filter will be removed after a few months, though.

## **94. How Ma Bell Works by The Jolly Roger**

In this article, I will first describe the termination, wiring, and terminal hardware most commonly used in the Bell system, and I will include section on methods of using them.

### **LOCAL NETWORK**

The local telephone network between the central office/exchange and the telephone subscribers can be briefly described as follows:

From the central office (or local exchange) of a certain prefix(es), underground area trunks go to each area that has that prefix (Usually more than one prefix per area.) At every few streets or tract areas, the underground cables surface. They then go to the telephone pole (or back underground, depending on the area) and then to the subscribers house (or in the case of an apartment building or multi-line business, to a splitter or distribution box/panel). Now that we have the basics, I'll try and go in-depth on the subject.

### **UNDERGROUND CABLES**

These are sometimes inter-office trunks, but usually in a residential area they are trunk lines that go to bridging heads or distribution cases. The cables are about 2-3 inches thick (varies), and are either in a metal or pvc-type pipe (or similar). Rarely (maybe not in some remote rural areas) are the cables just 'alone' in the ground. Instead they are usually in an underground cement tunnel (resembles a small sewer or storm drain.) The manholes are heavy and will say 'Bell system' on them. They can be opened with a « inch wide crowbar (Hookside) inserted in the top rectangular hole. There are ladder rungs to help you climb down. You will see the cable pipes on the wall, with the blue and white striped one being the inter-office trunk (at least in my area). The others are local lines, and are usually marked or color coded. There is almost always a posted color code chart on the wall, not to mention Telco manuals describing the cables and terminals, so I need not get into detail. Also, there is usually some kind of test equipment, and often Bell test sets are left in there.

### **BRIDGING HEADS**

The innocent-looking grayish-green boxes. These can be either trunk bridges or bridging for residences. The major trunk bridging heads are usually larger, and they have the 'Western Electric' logo at the bottom, whereas the normal bridging heads (which may be different in some areas - depending on the company you are served by. GTE B.H.'s look slightly different. Also, do not be fooled by sprinkler boxes!) They can be found in just about every city. To open a bridging head: if it is locked (and you're feeling destructive), put a hammer or crowbar (the same one you used on the manhole) in the slot above the top hinge of the right door. Pull hard, and the door will rip off. Very effective! If it isn't locked (as usual), take a 7/8 inch hex socket and with it, turn the bolt about 1/8 of a turn to the right (you should hear a spring release inside). Holding the bolt, turn the handle all the way to the left and pull out. To Check for a test-set (which are often left by Bell employees), go inside - First check for a test-set (which are often left by Bell employees). There should be a panel of terminals and wires. Push the panel back about an inch or so, and rotate the top latch (round with a flat section) downward. Release the panel and it will fall all the way forward. There is usually a large amount of wire and extra terminals. The test-sets are often hidden here, so don't overlook it (Manuals, as well, are sometimes placed in