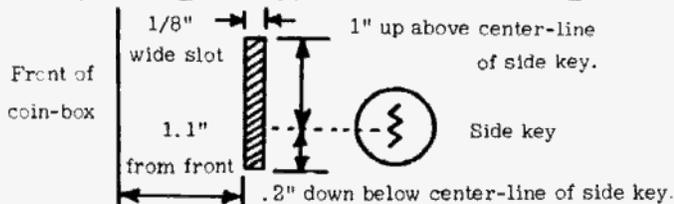


MORE FORTRESS FUN !

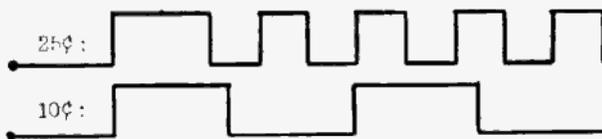
Last week, I met with "CJ" and "The Professor" and told them how much I would like a Fortress Fone of my very own to play with. About 1/2 hour after they left, they returned with one and gave it to me to open. "The Professor" was able to pick the upper lock after removing the shroud around it. It's only 4 levers. I immediately went to work on it while "CJ" bashed open the coin box. After he opened it, we made the following discoveries:

1. The drill pattern you published in #30 for the front plate would make it almost impossible to get the box open, because the bolts go thru double sets of slots before going into the outer shell of the phone. When the rotary plate is drilled as in #30, it should rotate and retract the bolts.
2. The right-hand bolt is really wide and protects the side lock (interlock).
3. The following cutting pattern would be better than a drilling pattern providing you have access to the side:



The cut should be 1.2" long, 1/8" wide, and 1" deep. It can be done with a special grindstone drill bit, and will shear off the interlock mechanism as well as cut the spiral front plate free so it can turn. We are checking reports of a puller for the cover. If there is such an animal, and if it does work, you'll hear about it first in TAP!

4. The tones' intervals are not generated by the coins pushing levers on the red box mechanism (like everyone thinks) but by a little relay which reverses the direction of the wheel that the levers cock. In other words, when a coin is dropped, the coin pushes a lever which cocks a wheel. The coin then drops into the drop chute, and the red box goes thru a 70ms delay to allow the coin to clear the mechanism. After that, a unijunction-timer circuit pulls in a relay which unwinds the wheel until it is back where it started. The number of times the relay ticks, pulling the wheel, is the number of beeps. If the wheel went 5 notches forward, a switch drops, telling the unit to do 35ms beeps (for a quarter). However, the first beep will always be the same as the above-mentioned 70ms pre-beep delay, because the coin will just be clear, and all of the pulses (beeps) are actually symmetrical square waves:



I will restate the specs on these tones because they are very important and must be known by all TAP readers. The 25¢ tones are 70ms on, 35ms off, 35ms on, 35ms off, 35ms on, 35ms off, 35ms on, 35ms off, 35ms on. The dime is 80ms on, 80ms off, 80ms on. These can be fudged to 70ms if needed, and better be generated digitally, because they'll fuck up with analog timers, "windows", and analog delays.

Then I made a few discoveries myself:

1. Coin Drop Mechanism - In my last letter, I asked about the "coin-sense relay" but couldn't figure how Bell knew about the money. Now I know! First, they use a low current (20ma) high voltage (50v) relay to release the money. Second, the relay resets a vane which senses the presence of the money. This vane cannot be checked by the operator. However, she can see the current drain caused by the drop relay pulling in. If the vane hasn't been hit by money, the coin-drop relay won't pull in even when the operator tries to make it. The good part is that she can't check the vane until she drops the money. So it doesn't matter when you drop your nickel, as long as you drop one before each time she collects. Also, she can't check it on



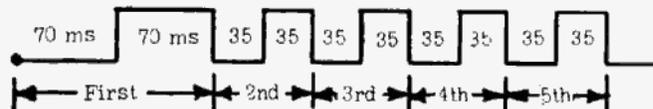
MAR-APRIL 1978

NO. 49

the initial three minutes because that drops automatically, and so you can talk for at least three minutes for free.

2. The pay phone red box tones drift with the outside temperature. So... before boxing away, make sure the pay-phone frequencies match your red box frequencies or you'll get screwed when you drop your 5¢.

3. As I told you last time, the 25¢ set of tones are 5 beeps, the first one twice as long as the rest:



All of the above info is confirmed by an in-depth experiment which can be done on any phone without taking it out of the booth!

1. Drop 5¢ into a pay phone. Listen to the side and hang up. The relay will pull the wheel back once and click.

2. Drop two nickels into the phone, one at a time. Listen to the receiver or the side of the phone. When the second nickel is dropped, two clicks of the relay are heard - as if a dime had been dropped.

3. Now for some fun: Drop a nickel, and then a dime. There are three clicks! Amazing, a 15¢ piece!

4. Now try dropping two dimes right together and you'll hear both dimes hit the bottom of the coin holding chute before you hear four clicks! a 20¢ piece!

5. Try a nickel and a quarter and get six clicks (30¢).

6. If you're fast enough, this will work too: Drop a nickel. Then two dimes together and you'll hear the familiar quarter sequence and not five nickel beeps.

Whether you are listening to the beeps thru the receiver or clicks on the side of the phone, you'll find these experiments interesting.

If you don't believe me about the timing of the tones on the 25¢ beeps, try tape recording them (have a friend call you from a pay phone and drop money) at 7 1/8 ips on a reel-to-reel recorder. Slow down the tape on playback to as slow as possible and mark the tape at the beginning and end of each beep. When done marking, measure the marks and you can determine the tone durations. You will find most phones adjusted perfectly, whether single tone or mf phones, so the first beep is twice as long as the rest.

If you should ever have access to a phone in a relatively private place, and wish to record the tones interference-free, get a phone pickup coil from someplace like Radio Shack (bletch!) and place it 3" behind the top keyhole on the right side of the Fortress Fone. It picks up the tones fine there. Computer Wizard

Some Fortresses must have a mechanism defect. It seems that they will take two dimes or two nickels - a 50% savings! Please advise readers to deposit two nickels first and listen for second dial tone. This is for a 20¢ local call area.

Mugs

© Youth Hot Line Reports, Inc. 1978 - Do not make checks out to Youth Hot Line Reports, PLEASE! Movement groups may reprint without permission with TAP's address given with all credits. Please send us a copy of reprinted work. WARNING: We will prosecute copyright violators.



Phone Call Is Rated X

Seattle (UPI) — It may work for Superman, but changing your clothes in a public telephone booth can mean trouble for the rest of us.
 Huber Martin, 31, stepped into a glass phone booth next to a public park and exposed himself while changing trousers, police said.
 He was arrested for changing into blue denim cutoffs while 25 to 30 persons of both sexes looked on.

FLASH! LATE REPORT!

KON-KLAVE KANCELLED

by Cheshire

There was to be a Phone Phreak Konklave at the New York Coliseum running concurrently with the Personal Computing Expo (PCX) over the Halloween weekend. About 1/4 of the TAP mailing list (those in the "Bos-Wash" and a few west-coasters) got the word a week or so before the event. The evening before the event was to begin, I was approached by people from Byte magazine, a co-sponsor of PCX. It should be explained that all negotiations had been handled by H A Bruno Associates in New York, who had arranged to rent the Coliseum for the show. I had already checked that no nearby hotel had function rooms (I didn't bother checking the Central Park South hotels), and approached Bruno Assoc. as a representative of a Communications Hobbyist Group wishing to rent function space. When the folks from Byte came into town, they had a fit.

In June 1975, 73 magazine published the schematic diagram for a Blue Box. Pa Bell came down hard, and sued The Magazine, The Publisher, and The General Manager. The judgement that each one signed stated that none of them would ever again aid, abet, or otherwise help Phone Phreaks again, etc. If the Phreaks held their meeting, it might be construed that Byte, and in particular, Byte's Publisher (then General Manager of 73) was aiding Phone Phreaks, and Byte magazine would no longer exist. This was not designated a goodness.

The meeting was cancelled, flyers were printed up to state this, but we were requested not to release details until after the weekend. This request was also honored. However, as we handed the flyers out, we informed the recipient that we intended to cry into our beer over the cancellation at 4PM at the cafeteria.

A happier bunch of melancholy drunks you never saw in your life! About 20-25 people finally showed up, and one thing was unanimous. THERE WILL BE A PHONE PHREAK CONVENTION WITHIN THE NEXT NINE MONTHS
 Our apologies to those who showed up and then couldn't find us. You, and all our friends will have a chance to get together soon.

Oh yeah, why did we try to have a konklave? Because any Phreak worth his whistle knows that digital is the way of the future. We expected a lot of our friends would be attending anyway and wanted to get together. We'll see you soon.

When I posed for the picture that accompanied the interview article in The Village Voice, reprinted in TAP #48, I had no idea that so many readers and friends would write in to ask where those "Ma Bell Is A Cheap Mother" T-shirts could be bought. The original shirt was made up special for me by a real Bell employee! I find it refreshing to know what Ma Bell employees REALLY think of Ma. As a result of all this reader interest, TAP now has a supply of "Cheap Mother" T's. This T-shirt is available in three colors, yellow, blue, and tan. Sizes - Medium, Large, and Extra Large. Cost: \$4 plus 50¢ postage. Total: \$4.50. Be the first on your block to show Ma what YOU really think of HER!

GET MUGGED !!!

That's right, get mugged!!! Start off the New Year right by getting your TAP mug. The mug is white with black TAP logo, 11 ounces, and stackable. Excellent for coffee, juice, beer or for using as a planter for your Columbian Gold! Cost: \$4 plus 50¢ for postage. Total: \$4.50. If you're a cheap mother yourself, stop by the TAP office on Wednesdays to pick up your mug and save the 50¢ postage charge.

AT&T's Profits Up 17% in Qtr.

American Telephone & Telegraph Co. posted its fifth consecutive billion-dollar quarter yesterday, reporting profits in the three months ended Aug. 31 climbed 17% to \$1.19 billion.
 AT&T's revenues in the period rose 10% to \$9.15 billion.
 John D. deHullis, chairman, said that while earnings show sustained improvements there are still a number of states "where earnings fall significantly below the level required to support continuing growth and modernization of Bell System facilities."
 In these areas, the company will continue to seek rate increases, he said, adding: "in the main, however, our aim is to increase earnings without raising rates."

HELP ROLL BACK PAY PHONE COSTS!

Please do not use this telephone unless your call is of an emergency nature. For more information write: Committee For A Five Cent Phone Call - P.O. Box 30669 - Seattle, Washington 98103.

Published for informational purposes only by Youth Hot Line Reports, Inc.

Address all mail and checks to:

TAP, ROOM 418, 152 W. 42ST, NY 10036

Employes Find Ways To Steal

There are 415 known ways to steal money and/or goods from employers and new methods are being discovered almost every day, according to a recent study by the Dale System, Inc.
 "A clerk in a busy New York City candy store under-rings every sale by one penny and takes home \$5 a day — for 22 years. A supermarket manager in Oklahoma City sets up his own cash register at peak periods and in three months collects \$75,000 his employers never knew about," noted Dale statisticians.