On a recent trip to Vermont, $I$ was reading the front pages of the local telephone directory. I noticed some information there that i did not recognize from my directory in the Great Metropolis of New York. This was surprising, and so 1 thought that many other TAP subscribers might consider it forbidden Knowledge also. It was a list of milage's between Bell system Rate Steps.

| Rate <br> Step | Number <br> of Milles |
| :---: | ---: |
| 1 | $1-10$ |
| 2 | $11-22$ |
| 3 | $23-55$ |
| 4 | $56-124$ |
| 5 | $25-292$ |
| 6 | $431-430$ |
| 7 | $926-1910$ |
| 8 | $1911-3000$ |
| 9 | $3001-4250$ |
| 10 | $4251-5750$ |

Rate steps 10 and 11 are farther than calls within the contiguous 48 states can go, and are used only on calls to Alaska Hawaii. Rate Steps within individual states are set by the public Utilities commission in each state. Write to the PUC in your state Capitol, and ask for the rate steps within your state. It makes for some interesting reading. It also upsets them that someone takes an interest in such things.

The Bell System computes the Airline Milages between central offices by giving each co a $v \varepsilon_{H}$ (Veritcal and Horizontal) grid co-ordinate. By feeding the $V \& H$ co-ordinate into an equation, you can derive any airline distance. A program in Basic to do this would read as follows:
110 DATA NEW YORK,4997,1406
120 DATA SAN FRANCISCO,8492,8719
130 DATA CHICAGO,5986,3426
140 DATA WASH DC,5622,1583
150 DATA ATLANTA, 7260,2083
160 DATA BOSTON,4422,1249
170 DATA LOS ANGELES,9213,7878
180 DATA MIAMI, 8351,0527
190 DATA SEATTLE,6336,8896
200 READ A1\$,V1,H1
210 READ A $2 \$, \mathrm{~V} 2, \mathrm{H} 2$
220 PRINT "THE DISTANCE FROM "; Al\$;

240 PRINT SQR( (V1-V2) $2 / 10+(\mathrm{H} 1-\mathrm{H} 2) \sim 2 / 10)$;
250 PRINT " MILES"
260 A1\$=A $2 \$: \mathrm{V} 1=\mathrm{V} 2: \mathrm{H} 1=\mathrm{H} 2$
270 GOTO 210
999 END
This program will end on an error condition "End of Data", or something similar. This is a "quick s dirty" program to get the job done. You canclean it up as you like.

If anyone wants the $V \delta H$ of any telephone exchange, write to me at TAp with a stamped, addressed envelope for me to reply with. I'll look it up from my hard copy, \& send it to you. There's talk of doing a book on this subject, complete with the programs, and where to find remote facilities to handle this stuff. Write if you're interested in more info. Bell has the vor info on Mag Tape for you folks with "real" computer facilities (Apples can't handle "real" mag-tape yet). If you need the address of where to order the tape (at $\$ 125.00$ per) just let me know.

## Inmates were making money

RICHMOND. - Inmates, apparently have been counterfelting $\$ 100$ bills inthe Virginia State Penitentlary print shop, state and tederal officials say Beveral of the counterfelt bills were passed in Richmond stores edither this week, a Secret Service agent said yesterday. "The th dinim Department of Corrections has uncovered evidence that bogis dutency is being produced in the primt shop," said state, Coprections fylkector RK. Procunier. "There are saspeets."'said William Sutberland, special agent In charge of the Richrmind office of the secret Service. "They're people tnatde (the pentitentiary) and outside the orranh avtem."


## APRIL 1983

No. 84

Modifying Your Phone For 1633, Hz
(with apologies to The Magician)
by Fred Steinbeck

In TAP issue number 63, The Magician told how to add the 1633 Hz ( 4 th column) tone to your TouchTone phone. Well, times change, as do phones. Recently, phones in the pacific Telephone area (and probably elsewhere, as well), have an integrated circuit which produces those familiar Touch-Tones. For some unexplained reason, Bell used chips which are capable of generating 1633 Hz mixed with another row, making our job that much easier.

First, take your genuine Bell Touch-Tone phone and unscrew the screws on the bottom. Now remove the cover. Pretty good so far, huh? Then unscrew the two screws which hold the Touch-Tone pad to the base of the telephone. Remove the Touch-Tone pad from the pieces of metal which anchor it to the telephone.

Turning the Touch-Tone module over (to the left, that is, rotating the module in a counterclockwise direction), we see several wires running out of it, and a brown wire connected to its bottom by a screw. Well, unscrew that, removing the screw and wire entirely. But save 'em for later.

Next remove that clear plastic covering which is on the bottom (the top, as we are now looking at it, since we've turned it over) from the TouchTone module.

Obtain a small, SPST momentary, normally open, pushbutton switch. Along the bottom of the PC board on the Touch-Tone module, there should be 8 soldered connections. In order from left to right (as viewed when the module is turned over, as it should be now), they are: (1) power, (2) row (l, (3) column (3, (4) column (2, (5) column 11, (6) row 4, (7) row \$3, (8) row 1. To produce the lowest series tone (Priority, or $1633 \mathrm{~Hz}+941 \mathrm{~Hz}$ ), connect half of the switch to connection (6) from the left. This is probably the one you want, as it allows access to toll-free loop-arounds (see TAP (62).

Now, the crux of it all: the IC. About $1 / 2$ inch above the connections on the bottom of the board, there are number of connections going to the IC. Most of these connections have PC board traces going to them, except for a few. Go along the row from the right untilyou come to the first connection that doesn't have a trace going to it. This is the one you want to solder the other half of the switch to. Remember, you're soldering directly to an IC, so use a low-wattage soldering iron, and be quick about it.

Anyway, once the phone is re-assembled (be sure to hook that brown wire back up to the Touch-Tone module) and hooked up to the line, when you press your button, you should get 1633 Hz mixed with whatever row you decided upon. What will they think of next?



I (Oz Y.M.) received the letter exerpted below some time ago from J.J.Flash, a Kansas reader, but I was so stunned at getting any feedback/info that it took me until now to type it up for publication:

Tell the phreakx to have nothing to do (except get free batteries 8 maybe rip 'em off) with Radio Shack. Not only are they purveyors of a very iimited selection of cheap shit, they have stopped selling certain components as they were uned, "by phone cheats to build little blue boxes to steal phone services." So sald the mgr. of 1 of these. Just to pet even, 1 ran an E-Bow over some floppies by the Trash 80/III.

A wav to get free Software: go into a computer shop, put in your own cass. or flpy. and load up (down, actualiy). Also Rad. Shack is demoing, its rovafone-type thing heavily. Call a friend in Kuala Lumpur, Tokyo, etc. Know anvthing about the TRS 80/IV? I have only heard rumours... supposed to be D.K. The TRASH 80 Seriea is probably the onlv thing Rad. Shack has done right - but even it has problems (the nhvical durability of these is suspect; it doesn't look very tough).

You are absolutely ripht; a lot of computer phreak are assholes. There 1 vent to school the computer room was clogsed with the bipgest idiots in existance. Phy do so manv assholes go into computine? It would be nice if TAS mould putilsh effective jari pronramn like the old BrICAF-O (

10 ETK. X=0
20 :IEXT X
30 END... )
BASIC program is rettinn, a little old but still works on H2n200n-tvo timeshare prems. (Ties up terninals). Hint: Numbers \& signon codes can be had from teenapers at high achools and even Jr. hirh's - these $\mathrm{T} / \mathrm{S}$ sustems have a surprisins. amt. of choice sames, etc., in them, all in BASTC. HP BASIC will run (I think) on an Apple w/o much hassie. The new IB' 'rersonal' svatem sucks dick to the max - It makes Apple look real pood \& is more bucks to boot.

1 have tapes of hoth Kans.City stones Gigs and the Zappa shov (s the ' 78 Chicapo/Ramones/Blondie sig). llov to tape concerts: (Easy!) I mounted a converted tase dictation machine onnverted to full track mono (surplus data head) \& double speeded (Zeners \& a $45 v$. flash battrv.) in a Tampax box (opened with a hot wire) \& stuck it in my pirlfriend's purse. l'pon arrivine, she tore open the box, plupged in the mike and started the machine. Flavback is on a tascam nortastudio, which is a 4 -track cassette recorder w/board - -sped, onto another machine. Sound fidelity is pretty pood. This is a surefire way to do it \& these tapes might make it on vinvl themselves. A friend has some Elvis boot stampers; know anvone that' 11 run off a few? Know any wave to fuck up a station? The local KC radio stns, refuse to plav anvthing but B,S.(I won't even call it music). Know Jerry falwell's c.c. ? This is one motherfucker who deserves tus bief thek oovet efforts.
--- Jumpin' Jack Flash
by Oz Y. Mandias
'Tell America it is a cringing, backstabbing coward because it cannot, has never tried to, exercise ita will without violence, -- Jack Abbott

The Sund, 17 October $/ 82$ Rocky Mountain News out of Denver carried a feature story about 'Bob', ace ecoteur, \& his exploits in abotaging the equipment \& plans of the enemies of a green Earth. Remember the Zelazny SF atory about the Children of Earth guerrilla environmentalists, who assassinated corporate pigs \& politicians who allowed pollution? Lons live dynamite!

Interested in armour-piercing ammo? Write or call American Ballistica Co.. Inc.. Box 1410. Marietta, GA 30061 (or 404-434-8078). This kind of ammo mav be 1mprovised bv inserting a small plece of carbide drill bit into a hole drilled in the bullet slus or a 12 -guage rifled shlug (like the new one by Federal).

Worried about handwriting or tupewritten letters being traced back to you. Either make a typewritten carbon copy or Xerox. Efther of these methods will prevent analysis from tracing the tvpeface back to your typewriter.

Pot growers take note. The 23 Sept $/ 82$ New Scientist details the positive effects of a tab of aspirin on plant grouth \& well-being, Just put a tab in the soil a felw inches from the stalk. A birth control nill apparently also bas beneficial effects

The 25 Sept/82 issue of 'The Economist' contains an article on software pirates $\delta$ anti-pirate teehnology. The $25 \mathrm{Nov} / 82$ nolling Stone contains an article on the notorious '60s acid chemist orslev sitanlev.

The Church of the Tree of Life ( 405 Columbus Ave., Can Trancisco, CA 94133) is concerned itht lenol himha, herbal \& ciemical \& the dispersal of info concernine them. Send them a buck or 2 donation for more information on this interesting orpanization, Associated vith this group is Tnner Center, Fox 362, Hermosa Beach, CA 90254. Fend $25 ¢$ and an EASE for their 'Sacramental lierald' \& info packet. The" sell some of the Church's sacraments at nrett, reasonable prices (es. \$20/eran for vohimbine). Certain sacraments are restricted to members only.

Some where over the Shining Path, this is $n_{z}$ sifninp. off.


## Pac-Man gobbled up

Quicker than you can say "blip, blip, blip." three gunmen entered a Staten Island dell and tole Pac.Man video game, police said yesterday.
The bandits walked into the Old Amboy Delt In Great Kills about 11 p.m. Monday But when the employe started for the cash But the bandits shouted "Don't move we register want the machine." only want the machine.
Then they wheeled the 150 pound video game, valued at 82,700 , out the door to a waiting van and took off


