

PICK YOUR WAY TO FAME & FORTUNE

by

Alexander Mundy

Many of our readers have expressed an interest in making lock picks because they cannot purchase them from a local locksmith supplier. A work of caution must prevail because in some states possession of lock picks may be considered possession of burglar's tools and we wouldn't want any local authorities to consider TAP readers burglars now, would we? To make lock picks you need either high carbon spring steel or a steel (or is it "steal"?) called SAE 1074. It should be approximately 5/16" wide and .020 or .025 thick. In most cases the .020 is preferred. You will also need a set of files: warding, triangle, and coarse round. In addition you will also need some emery cloth, a small vice, a bench grinder or a dremel tool. To start, pick out a pick pattern from the ones shown or make your own following the ideas of picks shown. Cut out the pattern. Then polish a length of spring steel on one side and glue the pattern to the polished side. Grind the pick to 1/16 of an inch from the outline taking care to avoid burning the steel. Finish the pick by using the files or dremel tool until the same shape is obtained. The pick is finished by polishing it with emery cloth which is slightly wetted with oil. The pick handles can be made more comfortable by building up the handles with two strips of steel or by covering the handles with tape or neat shrink tubing.

To make the tension wrenches (You will need them-this is NOT the movies!) you will need the following sizes of spring steel:

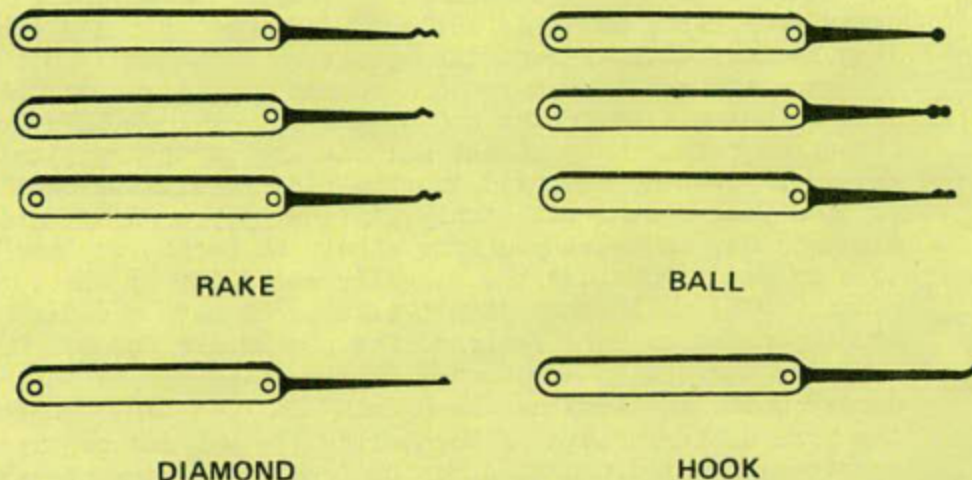
Heavy wrench ----- .045 x .125
Medium wrench ---- .030 x .125
Light wrench ----- .025 x .105

To make the wrench the steel has to be bent at a right angle. (Don't we all?) In order to do this the steel must be heated until it is red hot and then bent. After the wrench is bent it has to be heat treated to regain its original strength. Instructions on heat treating can be found in metalworking text books. After heat treating the wrench can be finished off with an emery cloth. It is VERY important that you not only use a high quality steel but that you use a high quality steel of the correct hardness. If the steel is too soft the picks will bend and if the steel is too hard the picks will break. Now wouldn't you feel foolish if after all your work making your own lock picks you still couldn't get into Mommy's & Daddy's strong box because you used inferior materials?

For all you up and coming young thieves may I recommend THE COMPLETE HANDBOOK OF LOCKS & LOCKSMITHS available from TAB BOOKS, Blue Ridge-Summit, Pa. 17214 \$6.95 plus postage.

And on a final note let me report that several enterprising TAP readers have written in to report moderate success using their picks attached to an electric toothbrush. It seems that several electric toothbrush manufacturers have just the right vibration frequency for very effective lock picking! Can this be the return of the evil Mr. Tooth Decay?

PICKING TOOLS



All picks shown are reduced from actual size.



SPECIAL DOUBLE EDITION

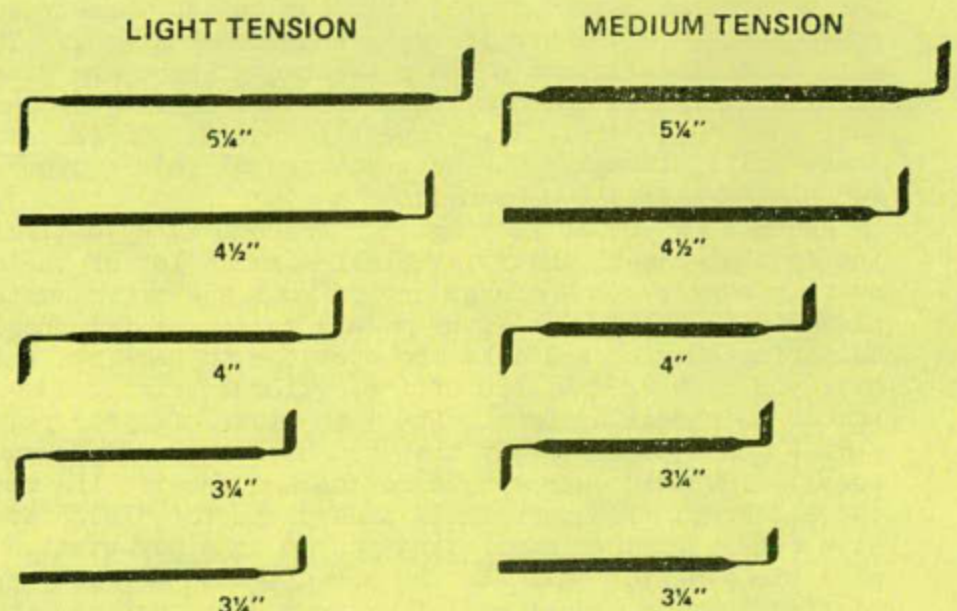
7th ANNIVERSARY ISSUE

MAY-JUNE 1978

NO. 50

\$1.00

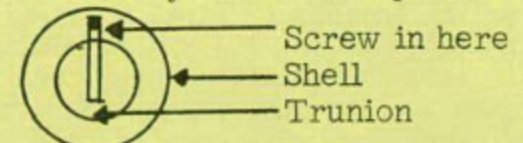
TENSION WRENCHES



Dear TAP,

Are safe deposit boxes really safe? Of course not !!!!!

Have you ever wondered how certain persons are opening a large quantity of these boxes in a short period of time in certain hotels? Well, I'll tell you. First, most of these lock cases are made of die cast metal, therefore, it breaks quite easily. To gain "admission" obtain an automotive dent puller making sure that it's the heavy duty type. Next get some sheet metal screws that will fit the key hole of the lock and a large screwdriver or a small crow bar. To open the box screw the dent puller into the keyhole in this position:



Give the puller a few shots and it should open the box completely or far enough to stick a screwdriver or crow bar in to finish the job.

Open Sesame,

Alexander Mundy

© 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.

Electronics for the Dope Dealer

or

How to Beat The Man

by Don Victor Harbolt

If you're into dealing or smuggling, there are a number of precautions and countermeasures you can take that will definitely increase your chances of survival. No longer do you have to be a paranoid personality in order to suspect that your telephone is tapped, that someone is following you, or that your best friend is wearing a bug when he comes to make his next buy.

No matter what you read or hear, there is no perfectly reliable way that you can use to find out if your telephone is bugged. If you ask the telephone company to run a check and your local law enforcement agency is listening, the telephone company will cheerfully report that there's not a bug anywhere on your line. Sophisticated equipment for determining if you're bugged is very expensive and more often than not, it's subject to false reporting - or worse, non-reporting. So, it logically follows that if you can't make sure your line is clear, don't say anything on it that you wouldn't want Clarence Kelley to hear. It's easy to call back your friends from a pay station when they want to talk about that last kilo or the next one. To make perfectly sure that our boys in blue don't stumble onto you because they were monitoring his line, it's suggested that you both go to a telephone booth and discuss your dealing...and even then, it wouldn't be cool to keep going to the same booth.

Occasionally, friends will ask me about voice scramblers for using with the phone. These instruments are expensive and aren't that secure. If you simply need time after your phone conversation, these units will give it to you, but the Government has equipment that can decode these recorded conversations - whether it takes an hour or a week. The more sophisticated units use a technique where the code is changed every few moments, thus the unscrambling is made that much more difficult. Expect to pay \$4 000 for each of these units, though. One manufacturer of this equipment is Technical Materials Company.

Another method of keeping your freedom is by utilizing the "pocket-pager" that's available from a lot of the answering services. Whenever one of your customers wants to play "Let's Make a Deal", he merely calls the telephone answering service and asks the operator to page you and have you call Fred at the office, without telling her the number he's calling from. She then picks off your page number and a pocket pager that you hide on your person beeps. You then depress the button and receive the message to call Fred. You previously made plans for "Fred" to be at a pre-determined number and you go to a pay station and give him a call. This has the advantage of not only never missing that important call from your best customer, but it also prevents your best customer from knowing what your home telephone number is and consequently, what your address is. There's no implication here that your customer might be dissatisfied with your product, but rather, that he got busted and has been playing a little "Let's Make a Deal" himself with The Man. If you really want to get slick, you can use a call diverter which simply is a device that dials you at another number whenever your usual line rings, and then automatically connects you with the calling party wherever you are. This system, when used with the Rovaphone^R, makes an extremely secure system. The Rovaphone^R is a device that transmits your calls over a radio frequency. So, you put the transmitter (which connects to your regular telephone line) in an apartment, and across the street, where you really live, you have the Rovaphone^R itself. It looks like a regular telephone, but instead of having a cord coming out, it has an antenna. Your call is received in the "empty" apartment and is then transmitted to your phone in another nearby apartment. This way, when the narcs come busting in after finding out what your address is through your telephone listing, they're confronted with an empty apartment - no stash or dealer anywhere to be found.

In a lot of instances, it's wise to monitor the radio frequency of the Drug Enforcement Agency (DEA) or that of your local narcs. Receivers are available at your local electronics store that do this very nicely. If the constant chatter and screech of cops talking on their radio makes you paranoid, then get one of the units which has a built-in cassette recorder which records these calls. Then you can sit down at the end of the day when your head's together and review what all transpired during the preceding twenty-four hours in about thirty minutes. Many electronics stores will be happy to supply you with crystals for your receiver that are on the appropriate

frequencies. There is an exception, and that's the Federal Government frequencies. Very few people know what they are but you can find out by getting next to a two-way technician who services these units (a kilo will do nicely). The Federal Government uses only General Electric and Motorola two-way equipment and they're listed in the Yellow Pages under Radio Communications Service and Equipment...so let your fingers do the walking. Most of these frequencies (FBI, DEA, Border Patrol, etc.) are in the 168-170 MHz portion of the spectrum, with the exception of some areas near the borders where they use a 450MHz repeater system. As of now, few (CIA & Secret Service) of the Federal agencies are using scramblers. If they should ever go to them, then try using a descrambler. A number of good models are made by PDQ Electronics in North Little Rock, Arkansas. Also, if you're a traveling man, there's a directory of police frequencies available from Communications Company, P.O.Box 56, Commack, NY. It's best, however, to check with a local electronics dealer to find out what channels the narcs are on.

Possibly you are wondering what you can do to immunize yourself from being bugged by your best customer when he comes to score. If he's wired for sound when you make your deal, you're in real trouble. Most of the units used are portable transmitters which allow agents to listen in and to record this conversation in their car. They operate in the area of 58 to 108 MHz, with some Treasury bugs operating on the same frequency as their two-way radio. Once again, your neighborhood electronics dealer can supply you with a "field strength meter" which will rat on these rats when they walk in the door and get close to it. Spend a little extra and get a good one. It could save you a little time - like about ten years. But what about the guy who's wired for sound with a miniature tape recorder? The best protection here is to look your man over well and have some background music playing while you discuss the pertinent parts of your transaction. Some of these recorders are the size of a billfold, so use caution. However, on the small units playing and recording time is limited to about thirty minutes.

In increasing numbers dealers have been using two-way radio equipment themselves in order to get their game down tight. In one instance, it caused a bust. The dealer made his mistake by using a mobile telephone and a housewife who was also a radio amateur and had nothing better to do than eavesdrop on mobile calls, reported him to the Arizona narcs. Mobile telephones are definitely no-no. They aren't private by any means. If you need good, dependable radio communications equipment, go to used FM commercial two-ways in the 30-50 MHz band. The chances of somebody overhearing you are small. Even then, it's good not to openly discuss the going prices and where The Man is. Use a simple code that you can work up in a few minutes. Anyone hearing "121 a code 3, section 2 at 4" would never guess that it means a highway patrol unit with a roadblock four miles ahead. Citizens band units are a joke and should never be used. These commercial units, unlike citizen's band, are professional pieces of equipment like The Man uses himself. They can be bought cheap from used two-way dealers like Gregory Electronics, 249 Route 46, Saddle Brook, NJ or on the West Coast, try Mann Communications in Tarzana and Phoenix. The price for a used General Electric progress line unit can be as low as \$100.

It wouldn't be a bad idea to take that "field strength meter" out to the car occasionally. Walk around your car and check the meter for movement while the ignition is on. Frequently, The Man will use a "bumper beeper" to tail you from a distance. This transmitter lets him keep up on your location without his having to get close enough for you to realize he's following you. If you are bugged with one of these units, you might consider attaching it to the underside of some police cruiser after you've removed it. Incidentally, there are two types, one which obtains its power from the vehicle's battery and the other uses a self-contained battery. The advantage of using your car's power is obvious - no more of those embarrassing battery changes need take place.

There are a lot of ways to decrease the likelihood of a bust by using electronics and only a few of them have been discussed here. Many of the methods are quite complicated and could even be employed to stop rip-off artists beating you for your stash. It's only limited by your imagination, electronics, and what you know about the people who are out to stop you. Consider the smuggler who flies by the border radar (ADIZ) as if they didn't exist. He uses a radar counter-measures unit designed for the US Air Force. Or the smuggler who checks the border fences using one of the "star-scope" units the Army has been using in Viet Nam. These are the more esoteric ways of countering The Man and require the services of a trained electronics freak. If your operation is large enough, you should start looking for one of these men, because the larger your operation, the better the chances The Man is hip to it.

Piracy on the High Poles

Last fall, a man in upstate New York was fed up with seeing ghosts on his girl friend's TV screen. So he connected her set to a neighbor's cable and wound up seeing bars for 45 days in the local jail.

In Southern California, the president of an electronics supply store, under pressure from the district attorney, agreed to stop selling devices that enabled purchasers to tap into the local pay-TV channel. He also handed over a check for \$1000 as penalty.

A patrolman in a large Eastern city recovered some stolen Home Box Office converters. He skimmed off a few for his fellow officers of the law. As a result, he was fired, two other officers were fined and the acting chief of police is reported to have chosen early retirement rather than face possible criminal charges.

But theft of service is still a big problem for cable-TV operators. Although some still speak of it guardedly, fearing too much talk could produce a national epidemic—it is a fact of life that no cable company can ignore.

At the start of this year, cable TV had nearly 10 million subscribers. About 415,000 of them were also pay-cable subscribers. The number of illegal connections is unknown, but it is large. Recently passed state laws against "theft of cable-television services" are an indication of the industry's concern. Eleven states already have such laws; several others are considering legislation.

According to Leonard Cohen, coordinator of New York City's Office of Telecommunications, the number of "illegals" in Manhattan (the only one of the city's five boroughs with cable TV) is somewhere between 30,000 and 40,000. Compared with 132,000 paying customers, it's not a pretty picture.

At Manhattan Cable Television (one of the two companies serving the city), Thayer Bigelow, executive vice president, agrees with the 30,000 estimate, and assumes that one-third to one-half of that number is in his franchise area. He translates the piracy problem into dollars and cents. "At the current fee of \$10 a month, if we're missing 10,000 customers, we're losing \$1.2 million a year. And the city and state, which get 5 per cent and 2 per cent of our revenues respectively, are losing \$60,000 and \$24,000 annually."

Joseph Taylor, president of Teleprompter Manhattan, calls "communications shoplifting a persistent problem; one that we intend to stop." His company is the first to use the state's new theft-of-services law, under which violators are subject to a maximum penalty of one year imprisonment and a \$1000 fine. (In pressing for this legislation, the New York State Cable Television Association estimated that there were 100,000 persons in the state pirating basic cable or pay-cable services.) "We now have a 30-man crew policing our system daily, and we expect to prosecute every case we uncover," Taylor says.

When cable first went into the big-city high-rise buildings in the late '60s, the simplest method for installing it was to drop a line vertically from one apartment through to another. It also turned out to be the simplest system to tamper with. (In New York City, 50 per cent of Manhattan Cable's buildings are wired this way; 1.7 per cent of Teleprompter's.) The parts needed to make a connection are, in themselves, above suspicion and readily available in any electrical supply store. It costs the illegal tapper between \$17 and \$25 to hook himself up.

Company-made connections include a converter that expands the number of channels available, bringing the subscriber foreign-language programs, public-access channels, and the home games of the Knicks and Rangers. Black-market converters are sometimes sold in TV repair shops; and obliging superintendents may have one or two tucked away. The going rate is \$30-35 for the box; \$50 includes installation.

For those who do not have a cable drop conveniently running through their living closet, tapping the system involves a greater risk of detection. But it can be done and often is.

Most of the country's cable is still situated in nonurban areas where it is strung along telephone poles; a drop runs to each subscriber's house. While climbing a telephone pole might seem a dangerous stunt, it is quite popular in college communities and near military bases, where people have the technical expertise to do it. (Steel footspikes protruding from the poles make the climb relatively easy.)

But fun-and-games is not the prime motivation of cable pirates. Something for nothing is. Subscriber fees now average \$7 a month, up from an average of \$5 three years ago. In Manhattan, the fee, which had been \$6 since 1965, jumped to \$9 in March 1974 and was raised another \$1 last fall.

Although obtaining the paraphernalia for making an illegal connection is simple, successfully tapping in is not. Many "illegals" are discovered when neighboring subscribers complain of reduced signal or loss of service. (In Manhattan, a well-made connection, without a converter, can cause ghosts on other tenants' screens.)

Cable companies are not passively waiting for trouble calls to tell them the pirates have boarded. They know, and they have increased their efforts to find the freeloaders. For example, there are periodic audits that call for inspection of cable drops, comparing each connection with a printout of paying customers.

Auditors' reports can be embarrassing. A fair amount of "illegals" are disconnections that were ordered by subscribers and never made. In some cases, expert installations (or reconstructions) have been arranged by moonlighting cable-company employees. Manhattan Cable offers its installers a bounty for "keeping their eyes and ears open for illegals."

There's also technology. Companies offering pay-TV use one of three security methods for restricting their product to those who pay for it.

(1) Midband. Programs are broadcast on a midband channel between two regular channels. A device attached to the subscriber's set converts the signal to a standard channel.

(2) Descrambler or converter-descrambler. The video portion of the signal sent on the pay-TV channel is scrambled. A device in the subscriber's home decodes the picture.

(3) Trap. An electronic filter placed in the cable drop outside the home blocks the signal from reaching non-subscribers. When you sign up for pay-TV, the company removes the trap. This method requires no converter in the subscriber's home.

Home Box Office, which provides programming for more than half the Nation's pay-cable channels, reports that 60 per cent of the 100 systems it services are currently using traps (approximate cost: \$5 each); 32 per cent are scrambling signals (cost: \$40-50 per descrambler); and 8 per cent are broadcasting on the midband (cost: \$38-45 per converter).

Midband is the least secure option. While a few companies and individuals who have advertised "detuning" services or peddled converters door-to-door have been prosecuted, underground merchants still flourish.

Descrambler devices (introduced less than two years ago) are still relatively scarce on the black market. And companies are now recording the serial number of each device given to an installer and a subscriber.

Will traps (the security method most recently introduced) trip up the pirates? For a while, yes. "It's extremely difficult to bypass them," says Thayer Bigelow, whose company uses converter-descramblers, "but it can be done." Uptown, at Teleprompter, the choice is traps.

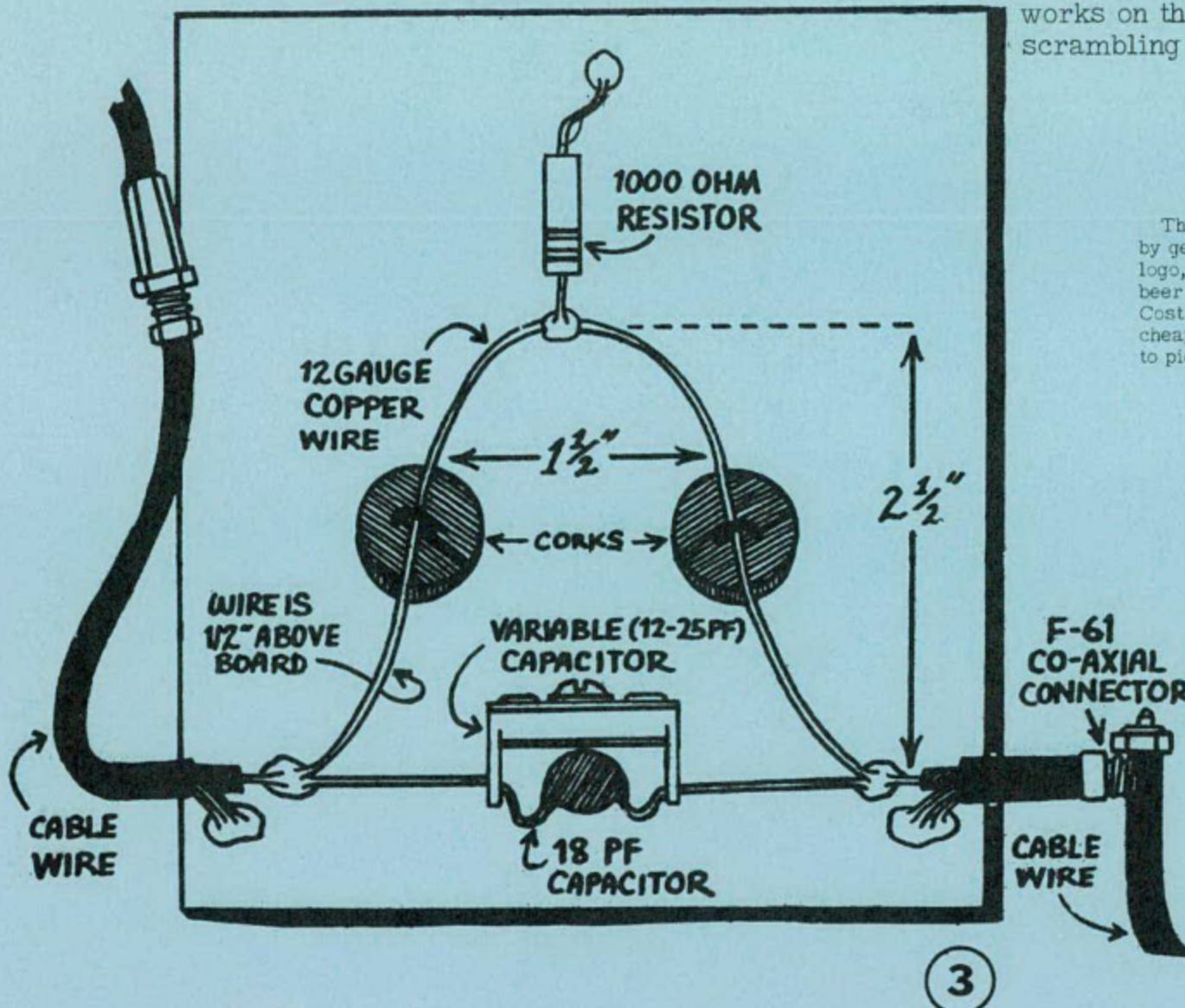
Meanwhile, a new Ultimate Weapon that eliminates both traps and scrambled signals has been announced. Called the addressable tap, it would give a cable company computerized control of any number of channels going into a subscriber's home. Will that end piracy? One industry source shakes his head. "Anything one man can design, another man can beat."

Honesty is hard to beat. And far more endearing than technology. At bottom, it's what the cable companies must bank on. Their current battle plan calls for accelerated policing of their systems, prosecuting when necessary, and publicizing all successful convictions. They reason that no one wants to risk jail for a "take" of between \$100 and \$200 a year.

Sometimes, merely letting "illegals" know they are liable to prosecution does the trick. When local papers carried the story of the new New York State law, Elmira Video, Inc. was deluged with calls from persons who wanted to know if they or their landlords were supposed to be paying for their cable service. General Manager John T. Moore smiled knowingly; and picked up quite a few subscribers.

When he can, Moore prefers speaking softly to shaking the big stick. Though he will prosecute continuing violators, he rarely mentions that possibility on first meeting. "I just say, 'I'm sorry but we'll have to disconnect,' and at least 50 per cent turn right around and become paying customers."

This filter schematic diagram was sent in by an Austin, Tx. TAP reader who says that it works on the Home Box Office scrambling frequency. Try it!



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.

IMPORTANT NOTICE!!!!!!!!!!!!!!

All TAP subscriptions are pro-rated. For all you burn-outs, that means that if you send us the old sub rate, you will get only 8 issues. Issues are 50¢ each, whether you buy them as back issues or through a regular subscription.

THE TELEPHONE COMPANY

In New York decided to save money by charging 10¢ for local information calls. As a result, the company is losing about \$700,000 this year. Customers, in order to avoid paying for information calls, have been ordering free telephone directories in such volume that the phone company has spent \$2.3-million additional for the books.

TANDEM SCANNING

by
Dr. JOHN

Tandem scanning is the most risky of all because it has to be done with a Blue Box. It is recommended that you use pay phones. Tandems usually have some rather interesting codes. So let's talk about them for a while - there are routing codes, operator codes, exchange codes, area codes, translation codes, service codes (special). Each will be discussed in detail.

OPERATOR CODES - usually the last few digits sent - follows the routing codes. Here are the standard operator codes:

- 101 - test board for the specific toll office. Their purpose is to do trunk measurement and testing.
- 121 - Inward operator - usually assists your local "O" operator in connecting to party. The 121 operator will not dial anything out of the toll area. As long as requests of assistance in dialing is in the LOCAL DIALING AREA or HER SERVING AREA, the operator will never question a call.
- 131 - Directory assistance operator - this is similar to a 555-1212 type except it is what the operator dials.
- 141 - Rout and Rate - this is what the operator dials to get:
 - 1. Rate information
 - 2. Routing information such as special overseas routing etc. The routing usually is to an overseas operator - usually to get them to connect you to a strange country not on the 10TC list of direct dial countries
 - 3. 800-141 is a special WATS information service where the operator gets alternate routing info on WATS
- 160-XXO - Overseas operators to various countries
- 11XXX - Special marine verify operators where there are non standard codes. This is good scanning material - ie. from 11000 to 11999 can yield very interesting operators such as "leave word and call back" also "conference operators"

TRANSLATION CODES - used for inwats and overseas dialing- also in verify. Most all translation codes start with a "1".

INWATS - Some typical inwats codes are: 125, 135, 145, 163, 164, 165. The third digit is the "Band" of the wats.

08X is also used where X is the band number. For example you can reach any 800 number regardless of where you are disregarding what band it is by dialing 085-424-9337 - you are band 5 to 800-424-9337, 084-424-9337 - you are band 4 to 800-424-9337. You can also dial 145-9337 or 144-9337 etc. if you are in the 202 area code. The complete number is 202-145-9337.

OVERSEAS - 18X codes are overseas operators access codes.

To dial overseas, the standard operator code is: KP 011 + OCC ST where CC is the country code. You then get routed to an appropriate "sender" at one of the gateway cities and then you key in the country code + city code + number. The "senders" are:

- 182 = White Plains, N. Y.
- 183 = N. Y. City
- 184 = Pittsburgh, Pa.
- 185 = Orlando, Fla.
- 186 = Oakland, Ca.
- 187 = Denver, Colo.
- 188 = New York -(NOT MONTREAL)

To find out what "sender" you get, key in KP + 000-0000 + ST to any of the above senders. For example, suppose you wanted to find out the sender that New Zealand is routed through. The CC for New Zealand is 064 so you would key in KP + 011 + 064 + ST, wait for your beep-click - tone, then key in KP + 000-0000 + ST. You would then hear "This is the international switching center in Denver, Colo. - This is a recording - 3031 " You now know that 187 was used.

SERVICE ROUTING CODES - these codes go to Route and Rate computers, credit card check computers, etc. In L. A. Bell installed a computer to check credit cards. This computer not only checks the RAO code with the actual credit card number (CCN) but it actually checks its actual validity. A considerable amount of scanning was

done to retrieve the code. It is KP-213-000-ST or KP-000-ST into any California tandem. You get a brief tone followed by a kachunk, then you key in a 3 digit office code which identifies the operator office that has asked for the check followed with the actual credit card number without the area code. For example, to check a credit card whose phone number is 264-2999 and RAO code is 293, you'd make up an 3 digit office code (any will do) and dial 375-264-2999-293-J and the computer would give one of the following four responses:

1. "Negative, negative 264-2999-293 Negative negative 264-2999-293
2. "OK OK (Re-order)"
3. "Re-key Re-key" (You must key in the CCN again)
4. "Re-dial Re-dial" (You must do the KP - 000 - ST or KP-213-000-ST again).

A complete scan was done on the 3 digit office codes. This was done in 1972 when the computer went into service. No one has done it since then. It might be possible now to remotely program it - to make it say OK OK to your favorite phone number. Another special code is 317-009. This is affectionately known as the "Golden Goose" computer. It is very handy and I'm going to wxplain what has been found, again by scanning. KP-317-009-ST gets you Beep Kerclink. Then KP-999+XXXXX XXXXXX-ST where XX are from 2 to 11 digits. If you key in less than 2 digits it will say "short short" and if you key in more than 11 digits it will say "long long". However, if you stay within the range, it will repeat back each digit you sent into it. The purpose is to check the operation of your Blue Box. Yes! I kid you not! It is an MF checker that works great! For example, if you key in KP-317-009-ST then KP-999-1234567890-ST and it says "one, two, three, five, six, eight, nine, zero", you know that four and seven aren't getting through and guess what-yah, you guessed it- the 700 Hz oscillator is either off frequency or lower in amplitude than the rest. The tolerance on the 317-009 is much tighter than the regular tandems so it is great to use to keep your MF equipment up to par, however, getting through to 317-009 is possible and getting it to respond might be hard if all your tones are off frequency so try to tune your "little Blue toy organ" as close to frequency as possible before you tie up the line checking with the 317-009. It would be criminal to tie up this line checking your out-of-tune organ while other young Boxers are eagerly awaiting to check their handy work.

Now let's suppose you are having trouble getting 202-456-1212 to work and you want to find the routing code. First you key in KP-317-009-ST or KP-009-ST if you're already in 317. Then key in KP-202-456-ST and it will say "route area plus one two one" which means that 202-121 will get you the proper operator. To get the proper operator for the number 707-777-9999 you key in KP-317-009-ST then KP-707-777-ST and you should hear "route area plus zero zero one" - "check nine" which means that 707-001 will get you the operator for the 777 exchange. The "check nine" tells you that 707-777-9999 is a pay phone. (After the three digit area code and the three digit exchange the first digit in the last four digits is usually a "9" indicating a pay phone although some of the newer pay phone exchanges are starting to use "8")

Maybe now I should clarify the difference between scanning and hacking. Scanning is usually sequentially trying numbers while hacking is randomly trying best bet numbers. While scanning or hacking up tandems, the thing to remember is never stay on longer than 3 to 5 minutes at a time. Always use working numbers when scanning and stay away from all 800 numbers or 555-1212 numbers as they are VERY unsafe. Do your scanning after 11 PM your time and remember if the trunk or code supes it can only cost you 25¢ at the most. Most of the time you will be getting tandem recordings and dropping cards like crazy which is why you should dial back in every 3 minutes or so. Normally, you don't ring numbers more than 3-5 minutes if there's no answer. The "schmuck" in the 4A will probably try to track you down because of all your card droppings and you shouldn't want to stay there sitting like a "duck" beeping into the phone. You could be traced but that takes time, at least 2-3 minutes. It usually takes 30 seconds to determine which city you are coming from but quite a lot longer to get your exchange. This ties up at least 3 people on your end and at 11 PM or later, those "schmucks" got better things to do. Since you are not ripping them off by using 800 numbers or 555-1212 numbers, they really couldn't bust you anyway, and

if you fuck up and supe a few - so what! Your AMA won't look funny so the security department won't catch on. If someone does come on the line you will hear a high pitched tone around 2,000 Hz and a few "clicking" noises. Remember, the guy in the 4A has to send an identifying tone to trace. This is a very soft 2,000 Hz tone. If this happens, STOP!!! Hang up and do it again a few hours later or scan another tandem from another pay phone.

Other uses include automatic rate information. For example, if you can scan around and determine the codes for day rate, evening rate, weekend rate, and coin control, you can scan by keying KP-(Rate codes)-(Area code)-000-0000-(Area code)-000-0000-ST. The first area code and number are yours and the second area code and number are the number you're calling. The computer will then say "Rate-one, four, five-coast to coast current pay phone rate." This means \$1.45 for the first three minutes.

Here are some progressions to try :
000-009, 022-029, 032-039, 092-099. Skip 011 because it is for the overseas sender and skip 010 and 012-019 because these are reserved for TWX. (See TAP issue #49 for more info on TWX Phreaking.) Follow each code with 121. If it goes to an operator and she picks up, blow it off. Don't worry about not blowing her off fast enough. If you do your scanning from a pay phone, there's not a damn thing that she can do about it. Keep a log of all numbers and codes tried with results :

Pass 1 (121)	Pass 2 (111)	Toll	Verify
022 opr	9143	yes	---
027 opr	9148	no	---
033 opr	9145	yes	---
034 busy	2039	no	yes
056 busy	2167	yes	no
099 opr	9144	no	---

- Step 1 - Go through the 3 digit codes via the progression above using "121" after each code: KP-000-121-ST, KP-001-121-ST, etc. If an operator answers with the name of the city she is in, blow her off and mark "opr" next to the code. If you get a busy signal, mark down "busy".
- Step 2 - Go through only the opr ones and add 111 instead of 121 after the code. These will give different tandem recordings. For example, 022 will give 9143.
- Step 3 - Find out which of the codes are for toll switching. To do this, add 182, 186, or 001-0CC and see if it switches overseas. Mark "yes" under TOLL column.
- Step 4 - Now go through all "0" and "1" codes with the suffix of a "busy" number. For example, let's suppose that 936-1212 is "busy" for you. Start keying in KP-000-936-1212-ST, KP-001-936-1212-ST, etc. If you hear a click and then silence, or a conversation, you have auto-verify and should mark a "yes" under the VERIFY column.

Some of the codes in the "182" column will go through into the busy. There will be ones marked "yes" under the "182" column. After going through "0" codes, start on the "1" codes omitting 101, 121, 131, etc., then try the 18X codes and WATS translation codes. If you don't know them, it's easy to find them, just dial 800-XXX-YYYY. You get the XXX from your 800 prefix scan sheet. Suppose you're scanning 9141. You look for a 9141 on your scan sheet and presto! You have 800-431-YYYY. Get a working number, preferably a computer or ARU if you found one and dial it. Blow it off and try :

KP-125-XXXX-ST where XXX is the last 4 digits of the ARU
KP-135-XXXX-ST -tandem
KP-145-XXXX-ST -tandem
KP-155-XXXX-ST -tandem
KP-165-XXXX-ST -Ring - Beep WE FOUND IT!!!
Make sure to log down this 165 code, remembering that the "5" is the Band #.

After scanning the VAR code, do some further testing. You are looking for a click and if you find it, you've found a verification code. Now you can tap lines in that area. Record the exchanges it works on. Will it work for the whole area code or just a specific city? Get to know its limitations. Is it scrambled? Does it drop off in 10 seconds? Next you should scan the 5 and 6 digit codes. This takes the longest. Try these codes : 11000, 11999, 160-XXX, and 150-XXX where XXX is 000 thru 999. Who knows? You might find all kinds a neat things!

If you find something strange, play with it! Sweep it with a signal generator. Ask yourself, does it take MF, touch tone, 2600? Shake it apart! Take every little piece and shake that! After you "tore it apart", then go looking for more. Use your imagination, intuition, and common sense.

A further note on tandem scanning - you might want to try to make contact with a "friend" at the 4A office. The phone numbers to the 4A offices are AC+958+XXXX if there are more than one 4A offices in the area code in question. San Diego is 714-958-042 while if all the dial is 714-958, you'll get San Bernadino. By the way, some central offices - 5XB, 1XB, and step - will allow you to dial "1" and "0" as a 4th digit. For example :

914-027-1211 will get you Peakskill, N. Y.
914-182-1111 will get you an overseas sender
212-121-1111 will get you a N. Y. inward operator.

50 ISSUE INDEX

BACK ISSUES - 50¢ each - Issue #50 is \$1

- 1-Extensions, Conference Switches
- 2-Blue Box Story and Abbie on Ripoffs
- 3-Telecommand Story
- 4-Pay Phone Issue
- 5-Blue Box Part 1
- 6-Blue Box Part 2
- 7-Tuning Your Organ
- 8-Credit Card Code/1972 Code
- 9-Super Dooper Project
- 10-More Black Box Info
- 11-Receiving long distance calls free
- 12-Blue Box Plans
- 13-International calls/Box plans
- 14-International calls/AT&T papers
- 15-1973 Credit code/T network
- 16-Red Box Plans
- 17-Red Box/Line Relay
- 18-Call Stopper
- 19-Snoop Light
- 20-Cheese Box
- 21-Automatic Phone Tap
- 22-Answeroo
- 23-Free Electricity
- 24-Fraud Detectors, Index, 1974 Code
- 25-New Red Box/Free GAS
- 26-New Blue Box
- 27-Free Electricity
- 28-Computer Bills /1975 CC Code
- 29-Improved Blue Box& Snooplite, Int'l codes
- 30-Party Lines, Fortress extension & locks
- 31-Black Box, RAO Credit Card Codes
- 32-'76 CC Code, Improved Red Box
- 33-Supermarket codes and ripoffs, tax refusal
- 34-SS#, Inside the Fortress, Fone Fucker
- 35-Bulletproof vests, Parking meter locks
- 36-Ultimate(hah!) Red Box, TEL update
- Discovering unlisted numbers
- 37-Report from NW Canada, C C I S report
- 38-Jumping Water and Electric Meters and alternatives, Black Box info.
- 39-Fighting the Biggest Monopoly, Free Postage, Free Xerox
- 40-Black Box Update/Tuning Your Organ
- 41-Getting Busted/New CB Channels /1977 CC Code
- 42-Interview With A Grand Guy/Blue Box Keyboard
- 43-Report From England/Silver Box
- 44-Ringing Generator Circuits
- 45-Beginning Of The End/CB Frequencies
- 46-Bell's Blue Box Buster/Autovon Info
- 47-Radar Detectors/CB Info
- 48-Legal Blue Box/Info Rain Data Service/Edison's Interview
- 49-More Fortress Fun/TWX Phreaking/Marifat Codes
- 50-Special 7th Anniversary Double Issue/Tandem Scanning Free Cable TV/Making Lock Picks/Electronics For The Dope Dealer/Birth Certificate ID Info/50 Issue Index 1978 CC Code



GETTING HOOKED ON CABLE TV

ED. NOTE: Connecting any type of wire to cables belonging to a Cable TV company or public communications company can be construed to be "theft of communications" in many areas. This author does not support such interconnection or modification or any illegal activities. The following description is provided for purely informational purposes only. All companies referred to are fictitious organizations invented by the author for illustrative and explanatory reasons.

TOOLS

Wire cutters
Wire strippers } Try Radio Shack 3-way crimping tool
Crimping tool
3/8" Drill - preferably electric; a hammer drill speeds up drilling of holes in concrete or brick
Bits for drill - 24" x 3/8" for concrete, 3" x 3/8" for wood and steel
Screwdrivers - #1, #2, #3 Robertson (square)
Standard slot type
Wrenches - Adjustable, large size
Open end, 7/16" x 1/2"
Pedestal (nut driver), 7/16" x 3/8"
Hammer
Carpet knife
Optional: Stapler (with wire end)
Bash bit and handle (for making holes in concrete)
Stapler with cable adapter, staples

EQUIPMENT

Cable: #59 and #59 Messenger
F59 Connectors and rings
Splitters: 1:1 - F81
1:2 - 2 way
1:3 - 3 way
1:4 - 4 way
Electrical tape
SMT (Standard Matching Transformer)
For Drops: Span Clamp, Pole Hook, Lashing Wire Clamp, Drop
Wire Hook, Ground Strap, Ground Wire (#14), GB3
and F59G Connectors, Hiatts (6mm, 3mm)

INSTALLATION

Start at your TV. You need an SMT to adapt most 300 ohm TV inputs to Cable TV's 75 ohm. Newer TVs have this feature built right in - just set the jumper wire or switch to 75 ohms. The SMT is a small metal or plastic can with two spade lugs for attaching to the TV. They're available in most electronic parts stores.

Locate the nearest cable line, a 1/2" round wire that snakes around your building. Make sure it's not the phone wire. Trace a known cable tv hookup from the set to outside, then determine what lines are what. Remember that tapping into a nearby line using a splitter may be illegal and can also deteriorate others' reception if there are a number of outlets already in the area or just if the general signal level is low (CATV service is not perfect). Irrate subscribers watching lousy reception tend to call their local Cable TV serviceman who does a dB level check along the line and this could reveal any illegal or amateur taps.

Unprofessional or sloppy self-connections are signals to the serviceman that a connection is illegal and these are usually subject to the sub in question being forced into paying by a slick, threatening salesman. So the idea is to practice before doing anything - you only screw yourself if you do something wrong. Also, since Cable TV is destined to become one big Pa Bell type company someday, your close observation of equipment used and techniques employed can only result in ultimate benefit for the people.

The first basic mistake of all amateur CATV installers is not knowing how to put an F59 fitting on the end of the cable. Here's how:

1. Cut end of cable.
2. Strip outer insulation for 1 1/2" carefully. Note presence of ground braid.
3. Strip inner insulation 3/8" out from end of outer covering.
4. Slip crimp ring over outer insulation.
5. Push-twist (gripping with pliers if necessary) protruding end of F59 fitting over inner insulation until outer covering meets with large diameter part of fitting. Some installers make this easier by mashing the outer cable covering with the end of their pliers to soften and loosen it.

6. Crimp crimp ring 1/16" out from end of outer covering.

7. Trim/cut inner wire 1/16" out from end of fitting.

The gimmick in CATV installations is good manual dexterity and the ability to size up a situation so you can put a wire in the shortest distance between two points. Real professional work is neat. Good fittings, 90° corners, solid grounds, etc. This is what to strive for.

There are a number of ways to beat the system:

1. Share one line with one or more neighbors. Drill a hole in an inner wall and run to your set using a splitter. Try hiding the hole in adjoining closets and putting your SMT there too. Run regular flat 300 ohm wire to your set. Looks like an ordinary aerial hookup, right?
2. If they don't want to share, tell them you'll pay the couple of extra bucks if they get an extra legal outlet put in. You supply the TV or radio for the time of installation and place it close to where you will drill a hole to your place.
3. You're friendless. You'll just have to do it yourself. I'll attempt to cover most situations.

(a) Suburban homes, houses, etc: It's usually unwise to tap into a neighbor's line here for obvious reasons - visibility of line mainly. You might as well install your own line. Locate the main line by tracing back a neighbor's from his house to the street or phone poles or wherever. Look very closely. His drop wire may run along the main line to a tap (Just a heavy duty splitter). Hook your cable into one of the outlets not being used. This complete running of wire from house to tap is known as a drop. (See Notes on Drop and distinguishing cable line from phone line)

(b) Downtown houses, multiple family houses: Here it's usually easier to tap a neighbor. It's better to find the splitter on yours or a nearby house. If all the splitter taps are being used, get one with one more tap (for you) or put in a 2-way, by running a small piece of line to the input and putting 2 of the existing legal lines into it. DON'T YOU hook in here - these will be the suspect parties if checked by Service. In 90% of cases, no signal deterioration will take place. Besides, you will seem to be legal. Use your imagination to hide your line's route. Just remember, when a line goes into a hole in the wall, its destination is harder to trace.

(c) Apartments, High and Low Rise: These are set up with a master tap box usually. Its location can be on the roof, in a stairwell on each floor, in the meter room or in the garbage chute room, or finally, in the basement furnace room. This is the usual order of occurrence.

The lines run according to their source. Outside, down the side of the building ending in a loop outside a window, at appropriately located splitters or actually going into the apartment and terminated at an outlet box inside the wall. Inside runs go along hallways covered with plastic mouldings to hide them. In this case, the line is probably just outside your apartment (or it could run into a closet). Variations exist depending on building construction. For example, using garbage chutes as a main run or any hollow running the length or width of the building. Newer apartments usually use pre-wired outlets. Where there are mouldings outside in the hall, do this: Take moulding off carefully (the section right outside your apartment) noting how it is attached. Find the nearest dead-ended line. Drill a hole through the wall (preferably into a closet) behind the bundle of cables. If the cable has enough spare length, just push it through from outside. If not, put in an F81 connector outside and run a new line into your place.

For outside lines - drill a hole through a window sill, bring the line inside, etc. (Drilling out through a wall may involve going through brick or hard concrete, a job for a hammer drill. So, stick to easy, soft routes unless you have the tool or patience for heavy surfaces) To get signal, go to master box and hook in your apartment #. If no ID tags are present, put an audio buzzer or radio or output of your hi-fi to the apt. end of the cable. Check unhooked cables in the box using a radio earphone and alligator clips until you hear something. If box is inside - run, lines can be split in the moulding to a live line with a minimum amount of trouble. Locate the splitter down a bit from the apt. entry hole so it'll be harder to trace. Use the same technique as before. YOU run direct and split other's lines. If your main box has a lock on it or some other security device, this method of splitting to live lines inside (past) it works quite well.

(d) Underground cables, wireless subdivisions: Locate a Phonoco pedestal (metal rectangular box). Open using pedestal wrench or nut driver of appropriate size. Cables usually use lot number IDs - make sure it's a cable tap you've located, NOT a telephone-only tap. The metal door slides up. Unmarked lines can be traced using a buzzer (or radio signal) on house end and detection by earphone probes.

THE DROP: How to do it Right

Definition: installing a drop wire (Messenger 59 or BC6) from the line tap to the structure where outlets are to be located.

Procedure

Plan the installation first.

Locate the tap. Decide on the wire run and pace off the relative distance to house/bldg. for line length. Look for possible exterior ground locations in deciding where and how to place attachment. (See Grounds) Carry enough 59 cable to complete all interior work anticipated. Don't forget interior ground possibilities.

Size up interior cable run. Leave 6' at TV and run to exit hole (inside GND? - run past cold water pipe). Put SMT on TV and cable.

Place ladder at TAP (be careful) and Drop wire at attachment location. Put on 59 cable end while on the ground, it's easier. Separate drop wire from main cable for about a foot. Strip end and bend. Put on ID tag nos. Climb ladder. Temporarily attach wire to the strand (loose knot). Using wrench, place lashing wire clamp on metal strand near tap and tighten firmly. Attach pre-bent lashing wire to it and tighten. Make sure you have a sufficient drip loop for cable from separation to tap (about a foot). Put a plastic tie or tape at lash wire/cable separation. Next, put a span clamp on at the proper location (varies - a 90° run at strand to attachment location is best). Use ties or tape to attach wire to strand when running along it at 4 foot intervals. Separate lash wire from cable with a knife very carefully for about a foot where it passes span clamp. Wrap lashing wire 2 or 3 times around span clamp hook. Put ties or tape at separations of lash wire/cable.

Place ladder at attachment location.

Use a drop wire hook (ramshorn). Put an anchor in if attachment is to mortar, instead of wood.

Strip lashing wire from cable and wrap it around ramshorn 2 or 3 times and then twist back to drop wire. If drop is taut (only a foot max sag in 100 feet), cut or have cut the remaining cable below the ramshorn to about 3 feet. Form a drip loop back to the cable just after the ramshorn and tie or tape in place. Cut the end of the cable square, put on a 59 connector. Then use an F81 connector or splitter, running cable(s) to entry holes and using hyatts for attaching the cable to the mortar between the bricks. Don't forget the ground!

Note: Pole attachments

If a telephone pole is used as dropwire attachment, remember to put a pole hook in the side of the pole, not the face. The side has the rungs or is parallel with the strand.

GROUND

One common area of inspection is grounds. According to Specs, all cables must be properly grounded. This can be done at the following locations depending on the specific conditions. In order of preference:

1. Cold Water Pipe (copper): either before outside shutoff tap or any point on line after.
2. Cold Water Pipe (galvanized): before winter shutoff only (usually inside), or at any interior point before it.
3. Electrical Stacks: at a reasonable distance (one to two feet) from power input.
4. Ground Rods: must be fully inserted into the ground next to building.

Note:-All pipes used as grounds must be completely sanded/scraped to bare metal, for 75% of their circumference. All paint, rust, corrosion, coatings removed.

-Ground straps must be tight and immovable by hand and #14 ground wire used.

-Grounds After Splitters must be jumped using f59C and ground wire.

-Alternative methods utilize a ground wire and GB3's.

-Cable passing over water pipe shortcut: use a GB3 on cable and strap directly to cold pipe using GB3 screw/nut.

ABOUT INSTALLING

1. It's not easy. Use your eyes before you do anything.
2. Practice beforehand in your basement. That's how cable companies teach their installers. Monkee-see, monkey-do.
3. Be neat.
4. Read How to Hide Almost Anything by David Krotz. It'll help you get sneakier.

A study by the General Accounting Office, government watchdog for Congress, has concluded that 7 per cent of all the mail being distributed today by the Postal Service is being sent to the wrong address.

COUNTER CONTROL

THE BIRTH CERTIFICATE -PART 1

by Agent MDA

To exercise counter control effectively on landlords, bankers, police, Pa Bell, and other oppressors, it is often necessary to have false I.D. Sources for false ID are scarce, but almost anyone can make their own ID using easily accessible supplies and equipment.

Here is an overview of the process:

1. Obtain a birth certificate (BC)
2. Make some xerox copies of the BC.
3. White-out and paste-up on one of the xerox copies, blanking out the typed-in information to make a Master Copy (MC)
4. Use the Master Copy to run off as many blank BC's as desired.
5. Make or obtain a seal similar to the one on the original BC.
6. Finish the documents- apply seal, trim excess paper, apply rubber stamps, signatures, etc.; as needed.

The above process is relatively simple to comprehend, but doing it is a lot of hard work as some steps are more difficult to accomplish and are time consuming. Some tips on details may be helpful.

First, a good quality BC to use as an original to make the Master Copy from can be obtained by sending for your own BC or by borrowing one from a friend. A BC that is black print on white paper works best. Some BC's are black print on colored safety paper (check type paper) and will make good copies on some machines and unusable copies on others.

Second, the type of copy machine you are going to use is important. The "wet copiers" like the kind you find in many libraries make grey slimy copies that are unacceptable. A "dry copy" machine that prints on regular untreated paper is recommended. If you have trouble finding a dry copier try the yellow pages under copy or duplicating services. Xerox makes several machines that will print on almost any kind of paper, including safety paper and card stock. IBM makes some copy machines that have a lighter/darker copy feature that is useful in eliminating shadows blemishes in the background of your copies.

The first duplicate copies you make of the BC will be used to prepare a Master Copy.

"White-out or Daisy" correction Fluid is used to cover the typing over and to remove other data you don't want on the Master. Scissors, rubber cement, T-square, Papercutter, and other paste-make-up accessories will help produce better copies, but are not essential. The people at graphic art stores are generally very helpful and will give you some useful paste-up techniques tips if you should have any difficulty.

The MC when prepared right should look like a blank BC form. Run a test copy of the MC and make corrections on the MC as necessary, ie, white-out shadowed areas, blemishes, etc. When you are satisfied with the copy, run off as many as desired. The excess paper should be trimmed from your copies and you should try to make it look as close as possible to the original. A paper cutter with board and a rubber stamp kit with resettable type are almost necessary at this point, although a scissor and typewriter will do in a pinch. All that is needed now is to add the seal of the County Recorder, or a reasonable facsimile, to make the homemade BC complete.

1978 CC CODE

1 2 3 4 5 6 7 8 9 0
Q Z M A H X F T L R

the 7th digit

COUNTER CONTROL

THE BIRTH CERTIFICATE- PART 11

by Agent MDA

Here's a list of equipment and supplies needed:

1. 2 blocks of "FIMO" modeling clay \$2.00
2. 1 pint plastic casting resin 4.50
(hardware, paint or plastic wholesaler's)
3. 1 "OFFICIAL" seal handpress with insert (yellow pages under "seals") 5.00
4. 1 set of reverse letter punches 33.00
3/16 inch or smaller (Look in the yellow pages- "tools, Industrial Wholesale". this item may have to be special ordered.)
5. 1 jar of rubber cement .75
6. "Krylon" or other silicone spray 2.25
7. Regular unhardening modeling clay 1.00

Items 1-4 may not be easy to locate and it will save considerable time finding them thru the yellow pages.

Here is an overview of the manufacturing process:

1. Roll FIMO clay into a sheet 1/8 inch thick.
2. Make a shallow impression of the seal border into the FIMO using a male seal plate which is in the seal press. (The male plate is the one with the raised surface on it.)
3. You now have a border of a seal in the FIMO- use the reverse letter punches to make the lettering within the border. Draw a picture in the center of the seal similar to the one you are trying to copy. Most seals have a picture in the center- books and a scroll, a star, a tree, buildings, mountains, etc. The drawing does not have to be impressed in the clay very deeply in order to come out good.
4. The plate you've just made is a female- all the letters, pictures and border are indented. Trim off the excess FIMO around the edges of the border and bake in the oven according to the instructions on the FIMO package. FIMO when baked turns into a hard rubber like substance, and your plate is now very durable.
5. Roll flat some regular modeling clay. Put your female seal-plate on the clay lettered side up. Spray lightly with silicone. Using some more modeling clay, encircle the female plate with a little dam about 1/2 inch high, making a cup around the disk of the female plate.
6. Pour plastic casting resin 1/8 inch thick over the female plate. This will make the 2nd half of your seal- the male plate. One half of your seal will be FIMO, the other half will be plastic.
7. When the plastic hardens sufficiently, separate the two plates. If you used silicone spray before you poured the plastic, the two plates will come apart easily.
8. Rubber cement the two plates into the "insert", put the insert into the handpress, and make a few test seals on paper.

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

Address all mail and checks to:

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

50

WINTER PARK, Fla. (AP) — Somewhere there's a vandal with a screwdriver — and maybe with a screw loose.

When officials at Winter Park High School returned from the holiday weekend, they found the place littered with doorknobs, electrical outlet plates, toggle switches and other equipment.

Someone had unscrewed every screw he could reach.

Some of the unscrewed pieces were missing, but no other damage was done.

The culprit "must have spent hours, or else there was an army of them," Assistant Principal Bernard Bell said yesterday.

School maintenance crews spent most of the day putting the school back together.

Officials weren't sure how the vandal got in, but Bell had a hunch. "Probably with that screwdriver," he said.

The male seal plate that is to be used to make the initial impression in the FIMO (step 2) has to be worked on.

If you buy the Official Seal Hand Press, Modes 1-K, try to buy it with blank plates- it's much cheaper and easier to work on. One side of the "insert" will have a female brass plate with a border on it, and the other side will have a blank piece of plastic on it. To make a male plate with border, just lock the hand press closed and put the whole thing in an oven heated to about 425.

The blank piece of plastic will melt into the brass plate and you will have a good blank male plate with border to impress into the FIMO.

If you are using the plate from an already made seal (Moose Lodge, Notary, etc.), you will have to scrape the useless lettering off with a file, emeryboard, etc. A moto-tool does a good job of grinding off lettering. All you want is the border to impress into the FIMO- the lettering is done by pressing the reverse letter punches into the space between the margins in your FIMO copy.

Check the impression your seal makes in the paper. It should be an even impression, clear, readable, and have all the lettering, borders, and picture raised toward the printed side of your document.

If the seal impression is so strong that it rips the paper, you are either squeezing the hand press too hard or you have made your lettering into the FIMO plate too deep. Not a strong enough impression in the paper means the lettering in the FIMO plate is too light.

Weak spots on the seal can be made to impress the paper more strongly by rubber cementing small pieces of paper on the back of the flexible FIMO plate of the seal.

Often a letter is too raised and punctures the paper. This can be corrected by filing down the raised letter on the plastic male plate with an emery board.

Making seals this way is an art- the lettering and the picture in the center of the seal have to be done by hand. It may take several tries before you have a useable seal but once you master the process additional seals are quickly and easily made.

Back Issues are 50¢ each.

Subscriptions - 10 issues - US Bulk rate \$5.

US First Class in plain sealed envelope \$7.

Canada & Mexico First Class \$7.

Foreign \$8.

IMPORTANT! Include mailing label or Xerox copy when writing to TAP about your subscription.

Electronics Courses - 50¢ each. A - DC Basics,

B - AC Basics, C - Phone Basics, D - Amplifiers.

TAP mugs - \$4.50.

TAP T-shirts - \$4.50. Specify size and color: Small, Medium, Large, Extra Large. Black or red T-shirt with white TAP logo.

TAP "Ma Bell Is A Cheap Mother" T-shirts - \$4.50. Specify size and color: Medium, Large, Extra Large. Blue, tan, or yellow.

Send ONLY check or money order (No Cash) to:

TAP, Room 418, 152 West 42 Street, New York, N.Y. 10036

This is a mail drop only.

OFFICE: 1201 Broadway, Room 608, New York, N.Y. 10001

HOURS: WEDNESDAY, 5 - 9 pm.

Bulk Rate
U.S. POSTAGE
PAID
Permit No. 3
Kearney, N. J.