2600

The Hacker Quarterly
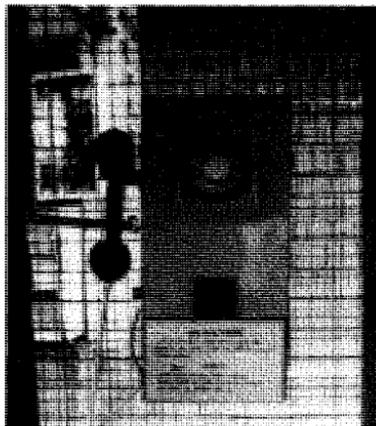
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VOLUME TEN, NUMBER FOUR
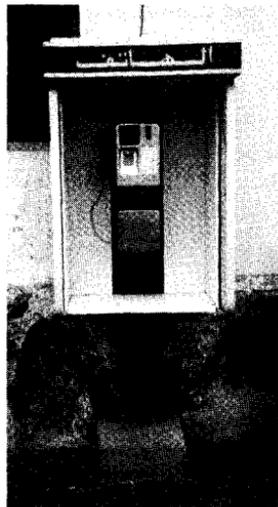*WINTER 1993-94*

INDIAN PAYPHONES

(complete with goat)

PHOTOS BY SYNTHETIC MAN

AFRICA

CLOCKWISE FROM TOP: Voi, Kenya; Kampala, Uganda (photos by friend of Daniel Jones); Zagora, southern Morocco (photo by Drew Lehman).

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"At this time the Secret Service has no reason to believe that the suspect(s) in its investigation, or the plaintiff in this case, are aware of the nature of the Secret Service's investigation, who is under investigation by the Secret Service, what information is in the possession of the Secret Service, or who has provided information to the Secret Service in regard to this matter." - Secret Service affidavit responding to CPSR Freedom of Information Act request concerning the breakup of the November 1992 Washington DC 2600 Meeting

Writers: Billsf, Blue Whale, Eric Corley, Count Zero, John Drake, Paul Estev, Mr. French, Bob Hardy, Inhuman, Kingpin, Knight Lightning, Kevin Mitnick, The Plague, Marshall Plann, Peter Rabbit, David Ruderman, Bernie S., Silent Switchman, Scott Skinner, Tommy The Cat, Mr. Upsetter, Dr. Williams, and one who waits.
Technical Expertise: Rop Gonggrijp, Phiber Optik, Geo. C. Tilyou.
Shout Outs: Robert Steele, Len Rose, Wiley.

Hackers in Jail, Part Two

Yet again, we must pay sad tribute to a hacker who has been imprisoned. Last issue we mentioned that two New York hackers, Acid Phreak and Scorpion, had been sent to prison for six months for "crimes" that nobody was ever able to define in clear terms. Before them were the three Atlanta hackers, who served time for reading a worthless BellSouth document on a password-free computer. And Kevin Mitnick, locked up in solitary confinement because the authorities were afraid of what he could do if he got near a phone. Not to mention Shadowhawk and Len Rose, who downloaded programs that some huge company didn't want them to have and were sent away for it. They weren't the only ones but they were the ones you might remember by reading *2600* over the years. And now, there's one more.

What was unique about the Phiber Optik case was the attention it got. Here was a hacker who was not afraid to go public and show people exactly what it was he was talking about. It's precisely this kind of openness that we here at *2600* have been trying to get across for nearly ten years. After all, standing behind voice synthesizers and digital distortion tends to convey the image of somebody with something to hide. Phiber Optik was one of the first hackers to shed this mask and come forward with information. His tutorials went well beyond hacking - anything concerning high technology was a topic worth pursuing. Over the past couple of years, he guest lectured for various college courses on the subject of technology and the general public, made numerous appearances at panel discussions and conferences, was a frequent guest on

WBAI's *Off The Hook* radio program in New York where he would answer numerous telephone and computer related questions from listeners, and helped design three separate public access UNIX systems in New York City, the most recent one being Echo (echonyc.com), which introduced hundreds, if not thousands, of people to the Internet. Not exactly the life of a criminal, one has to admit. As people who have come to know Phiber well over the years, we've see what his driving force has been: the ability to answer questions and figure things out. In the eyes of the U.S. Department of Justice, it was subversive.

On November 3rd, Phiber Optik was sentenced to a year and a day in federal prison. The charges dated back several years and were sufficiently vague to convince Phiber to plead guilty this past July. After all, a hacker can always be convicted for something and the mystery of not knowing what it is they're going to come after you for is enough to convince many people to plead guilty. (Read a little Kafka if you doubt this.) The penalty for being found guilty after pleading innocent can be much more severe. And there is also the financial consideration - legal costs can be crippling, as in the case of Craig Neidorf, even after the government dropped its case against him. In Phiber's case, the charges were conspiracy and access to a federal interest computer. Conspiracy is very difficult to disprove, especially when you're friends with other hackers and you believe in sharing information. It also doesn't help when the government fears hackers as much as any national enemy. As for accessing

computers, this was never something that Phiber denied doing. But it happened years ago, it happened because of bad security, no damage was ever alleged to have been done, and Phiber always was willing to talk about security problems with anyone willing to listen. The government didn't want to hear it.

Judge Stanton, in sentencing him, said, "Invasion of computers is seductive to the young both because of the intellectual challenge and the risk. A message must be sent that it is serious.... The defendant stands as a symbol because of his own efforts; therefore, he stands as a symbol here today." In other words, because he has come to represent so much to so many, what better target for severe punishment? The total sentence was for a year and a day in prison, 600 hours of community service, and three years of supervised probation. The judge imposed no restitution because there was no evidence of any damage.

Assistant U.S. Attorney Geoffrey Berman was positively ecstatic with the decision. He said, "The sentence is important because it sends a message that it is a crime to intrude in public data networks. MOD was one of the biggest hacking organizations in the country. The case was very significant." MOD was the name of the group that Phiber and a few others were in at one point. Hearing it referred to as an "organization" only confirms how clueless the prosecutors were in this case. Basically, they succeeded in sending a few friends to prison for trespassing. Forgive us if we forego the champagne.

So what do *we* get out of this, we being the people on the receiving end of this message? Well, we've got another prisoner to take care of at a cost equivalent to four years in college. What we *don't* have is somebody who can help us hook into the Internet for the first time. We don't have the opportunity to hear another side of the story when the next technological innovation is heralded. We don't have someone to explain what might have gone wrong the next time the phone system crashes. What we've got is a warning - a warning not to stray from the safe curriculum, ask too many questions, expose embarrassing truths, or try to find answers through unconventional means.

Sending hackers to prison is a mockery of justice and one day will be recognized as such. Until that day comes, we can only hope that their lives will not be irreversibly harmed and that those of us on the outside won't push each other into a pit of paranoia as we desperately struggle to remain innocent.

On a personal level, we all feel a deep sadness here at *2600* for what has happened. We don't mean to diminish all of the other cases that have taken place and those that unfortunately will occur in the future. But this one hit rather close to home. It's going to be very difficult to go to a *2600* meeting, analyze the latest *Star Trek,* argue over UNIX, or hang out in our favorite Ukranian restaurant without thinking of the familiar voices that have been locked out.

For those of you who would like to write to a hacker in prison, Scorpion's address is:

Paul Stira
32095-054
LEC Camp #1
P.O. Box 2000
Lewisburg, PA 17837

Please remember that all incoming mail is read by prison authorities.

cellular phone biopsy

by Kingpin
617
RDT Syndicate

Cellular phones have been a popular topic discussed by media and the underground for the past couple of months. With the rumors about cellular phones causing cancer, cellular scanning laws, large flow of articles describing cell phones, and the recent news clips on cellular fraud, people of all kinds have become interested and aware of cellular technology. Many articles have been written on the technical aspect of cellular phones, but there is a lot of information dealing with the cellular phone itself which is not usually shared publicly with the entire community. As stated in the first issue of *Wired Magazine*, cellular phones have many hidden functions and abilities which the normal user does not know about.

Since owning my cellular phones, I have been constantly experimenting to uncover unknown functions. Like many people, I feel that obtaining free phone calls is not the only reason to reprogram and reconfigure a cellular phone. Going inside your cellular phone seems to be the most true form of hacking. Exploring somewhere where people don't want you to be, gaining knowledge which most people don't have, and having the ability to do things which most people cannot.

Starting at the beginning, getting an owner's manual for your phone will help explain some of the user-available functions. You should also try to get ahold of a service/technician's manual. These manuals usually contain the more technical side of the phone, including schematics and sometimes, reprogramming and reconfiguration codes to use from the keypad of the handset.

When you open up your phone, you should observe all of the components. The first one you should find is the EPROM (Erasable Programmable Read-Only-Memory. This chip is easily found, because it has a little glass window and a number,

usually 27xxx, somewhere on it. This 24, 28, or 40-pin chip contains the cellular phone's software, and other information which is "cast in stone". The data stored in this chip is unchangeable, unless you read the chip, change the code, and rewrite it.

Disassembling the code is a laborious task, but should definitely be done. The microprocessor in the phone is often a custom-made applications processor based on a specific instruction set. Z80, 8051, and 8085 microprocessors are all very common in cellular phones, but are not limited to these types. Be prepared to spend many hours exploring the code to find out how the phone operates and what kind of functions are available. Most EPROMs in phones have more capacity for data than actually needed, and sometimes there is plenty of room for customization.

Another key component is the EEPROM (Electronically-Erasable Programmable Read-Only-Memory). Usually just battery-backed RAM, this chip can be programmed and configured to your liking from the keypad of your phone. In my own phones, the following (and plenty more) can be accessed and changed by using reprogramming codes:

Electronic Serial Number (ESN)
Initializing the repertory memory
  (INIT REP)
Changing/Setting the Lock Code
  (LOCKCODE)
Allow Quick Recall (QRC SET)
Allow Quick Store (QST SET)
Turn the Wake-Up tone on/off (WUT SET)
Mobile to Land Hold (MLH CLR)
Land to Mobile Hold (LMH CLR)
Call Round-Up (CRU CLR)
Extended DTMF (EE SET)
No Land to Mobile (NLM CLR)
Horn Alert On/Off (HAL CLR)
Online Diagnostics (ONL CLR)
System ID Enable/Disable (MAN)
Mobile Identification Number (MIN)
Service Providers ID (SIDH)
Initial Paging Channel (IPCH)
Extended Address On/Off (EX SET)

IPCH Scan Start - Bank A (IDCCA)
IPCH Scan Start - Bank B (IDCCB)
Access overload class (ACCOLC)
Group ID (GROUP ID)
Long-Distance Call Restriction (LU SET)
SID "black list" (INVLD ID)
System Selection (IRI CLR)
Signal Strength indicator (SSD CLR)
Audio receive On/Off
Transmit Audio On/Off
Supervisory Audio Tone On/Off (SAT)
Channel Number
Volume Control
Power Control
Hands-Free On/Off

As you can see, there is plenty of opportunity for configuration. Some phones require special codes to let you change the settings, and other phones require a special handset, cable, or dongle-key proprietary to the specific manufacturer. If your phone requires such a device, it is possible to modify an existing handset or build your own cable.

Anything that is stored in the EEPROM can be changed one way or another. The EEPROM can be read in most standard EPROM programmers. The RAM usually emulates a 2716 or 2764 EPROM, but try to get specifications on the particular chip before you plug it into your programmer. Many manufacturers store the information on the EEPROM in plain-text, as to not complicate it for the technicians who are performing tests on the phone.

Some companies are aware that their phones can easily be manipulated, so in order to increase security, a few steps are taken. Some phones contain LCC EPROMs instead of the standard DIP EPROMs. These EPROMs are about 1cm x 1cm, the size of the window on a standard EPROM. They perform just like standard EPROMs, except they are surface mounted, harder to erase (although they still use UV light), and because of the size, more difficult to desolder and/or clip onto. In some cases, instead of using an EEPROM or RAM to store the ESN, a NOVRAM chip is used. This chip *cannot* be read by an EPROM programmer, thus making it extremely difficult to do without chip-specific hardware.

Security for changing the ESN is also incorporated into most of today's phones. Due to increasing problems with call-sell operators, drug dealers, and other people using "cloning" techniques, security has increased greatly. An example follows: The software in one phone provides access to change the ESN three times from the keypad. This is done so the phone can be sold to another user, and be reprogrammed. Every time the ESN is changed, a counter, stored in the NOVRAM of the CPU, keeps track. Once the ESN is reprogrammed three times, a flag is set in the EEPROM and the NOVRAM, preventing any more access to the ESN from the keypad. It *is* possible to rid the flag in the EEPROM, but since the NOVRAM is located in the CPU, and extremely difficult to read and program without special equipment, it cannot be changed and, in order to be able to use the phone again, it must be sent back to the manufacturer for a replacement EEPROM and a clearing of the CPU NOVRAM. The only way to get around this security is to change the ESN by "hand", directly reading the EEPROM, changing the ESN, and reprogramming. I am sure there are ways around this type of security. There always are.

There are many things which can be done by reconfiguring a cellular phone. For example, by setting the Service Provider's ID (SIDH) to 0000 (and sometimes the Group ID), the phone will be placed in "roaming mode". This mode basically means that you are not confined to the service of one cellular carrier, and can choose carriers depending on your location. I will not go into the advantages and disadvantages of roaming, which can be found in other articles.

Configuring the phone so it is able to receive cellular phone conversations is particularly fun. Since a cellular phone is able to receive much of the 800MHz band, by setting the audio receive mode to constantly be active, you will be able to hear any audio transmitted on that particular channel. By changing channels, you can scan through the cellular frequencies, receiving other people's transmissions.

Another interesting trick which can be done is to transmit on a channel which is occupied. To do so, first set the transmit audio selection to constantly be active, and after finding a channel you want to interrupt, trigger the SAT (Supervisory Audio Tone). This will drop the person from the current call, and then you can transmit through the cell site for about five seconds. I do not know exactly how this works, but I assume that you would have a higher priority for use of the channel, which would drop the other call.

Here is a partial list of cellular phone and integrated circuit manufacturers to aid in obtaining information:

AT&T: 800-225-6604
AT&T: 800-232-5179 (Cellular Services)
Dallas: (408) 980-0414
Intel: 800-628-8686
Motorola: 800-331-6456 (Repair)
NEC: 800-338-9549
NEC: 800-367-6321 (Customer Service)
NEC: 800-632-3531 (Technical Department)
Novatel: 800-231-5100
Novatel: 800-766-8283 (Cellular Accessories Sales)
Sanyo: 800-421-5013
Sanyo: (201) 825-8080
Sony: 800-222-7669
Sony: (816) 891-7550
Sony: (714) 229-4197 (Integrated Circuit Group)
Uniden: (317) 842-2483
Uniden: (317) 842-1036 ex. 598 (Customer Service)
Uniden: 800-447-0332 (Cellular Technical Support)
VLSI: 800-473-8574
VLSI: (408) 434-7227

This article should be used as a starting block, and was written to inform people of the vast possibilities of cell phones. You should experiment with your own phones to see what else can be done.

ELEMENTARY SWITCHING

by 910

Signals are sent over the telephone network to control its operation and indicate its status. Signalling is essential to the internal coordination of transmission and switching facilities. It also allows the user to submit requests to the network and allows the network to provide the user interpretable responses.

At the beginning of time, human beings employed at the local telco central office watched for flashing lamps on their consoles to learn that someone wanted to make a call. The flashing was initiated by my Great Aunt Muriel turning a crank on her phone. The operator plugged her headset into Muriel's jack and determined through verbal interaction the person or number Muriel wanted. If the lamp at the receiving party's jack was unlit, the operator rang the party's phone and connected Muriel's jack to the receiving party's. If the receiving party's lamp was lit, the operator informed Muriel that the line was in use.

If the receiving party was served by another exchange, the operator called an operator at the distant exchange through an interoffice trunk, and told her the number of the receiving party. If the receiving party's lamp was unlit, the distant operator rang the receiver's phone and completed the connection.

More recently, the request for service is made by simply lifting the handset, closing a 48 volt direct current (DC) circuit. The flow of current is interpreted by the switch at the central office as a request for service. This current carries two concurrent sine waves, one 350Hz and one 440Hz, which produce a reassuring sound in the user's earpiece, often called "dial tone". The flow of DC continues as long as the phone is off-hook, and the switching facility uses this information in supervising the line, specifically, in determining whether the line is still in use.

The number of the party to be called is conveyed to the switch by the caller with either tones or pulses. The early telephone was equipped with a spring-loaded rotating disk, which had numbered "finger holes". After the caller spun the disk until blocked by a stationary "finger stop", the disk would unwind to its original position at a fixed speed. During its return the disk would interrupt the DC flow as many times as the number dialed (except ten times for 0). If the number dialed was 4, as the disk rewound, the DC circuit would be broken four times for about 6/100 of a second, and restored in between each break for 4/100 of a second. Each pulse cycle took about 1/10 of a second. Newer, non-rotary phones, capable of pulse dialing, interrupt the current similarly, using an electronic control circuit. A very nimble finger can accomplish the same thing with the hang-up button. More modern phones emit a concurrent pair of sine waves to communicate numbers to the central office. On a standard dial pad, each button on the top row (1, 2, and 3) emits 697Hz; second row, 770Hz; third row, 852Hz; and fourth row (*, 0, and #) 941Hz. Each button in the first column (1, 4, 7, and *) emits 1209Hz; second column, 1336Hz; and third column (3, 6, 9, and #) 1477Hz. These tone pairs are interpreted by the switching facility as the number pressed on the dial pad. Although ancient switches cannot interpret tones, new (all) switches can interpret pulses.

The central office provides callers with an aural representation of the receiving party's phone in the act of ringing with a simultaneous pair of tones called "ring-back". They are 440Hz and 480Hz, and bleep for two of each six seconds while the distant phone is ringing.

The famous "line-busy" signal is comprised of simultaneous 480Hz and 620Hz tones, bleeping one half of each second until the caller hangs up.

The "trunk-busy" (also called "reorder")

signal is issued when switching or transmission facilities are unable to handle the call. It is identical to the line-busy signal but bleeps at twice the rate.

When all goes well, the receiving party's telephone is sent a ringing signal, not audible at the earpiece, but usually inciting a loud bell, chirping sounds, or flashing lights, often invoking considerable excitement. This is accomplished with a 20Hz signal of about 75 volts, issued for two of each six seconds until the ringing phone is picked up or the caller interrupts the flow of DC in her phone by hanging up.

A call to a party served by a central office other than one's own requires the use of one or more interoffice trunks. Older long distance lines used a 2600HZ tone to indicate that a trunk is available. When the switch began using the trunk, the caller's central office ceased its issuance of the tone. The distant office was alerted to an incoming request for service by this change.

More recently, interoffice signalling has been moved from the voice transmission circuit to a separate, dedicated circuit. A single data circuit can control thousands of voice circuits, conveying telephone number, trunk availability, and other information.

"Line-busy" signals are no longer sent from the distant office. A data signal is sent via the signal circuit, initiating the generation of the audible signal at the caller's office. Previously, sending an audio signal from the distant office required the use of a voice circuit, which is now left free for other users' conversation.

The caller's telephone number is also conveyed through the separate circuit. The distant office knows the caller's number, and the receiving party may also get it. It is sent to the receiving party's equipment as a short burst of digital data, encrypted by phase shift keying. The receiver's equipment must decrypt the signal, and display or otherwise act on it. Depending on the number, the call may be automatically rejected, preventing the phone from ringing, or it may be forwarded to another location.

KNOW YOUR SWITCH
by Rebel

If you've ever wondered what kind of switch serves your exchange, you can just pick up your phone and listen. That's right - you can listen for particular sounds your line makes to find out whether you are on a #1 or #1A ESS, a #5 ESS, or a DMS 100 switch. Also, when you make a call, you can tell what kind of switch you're calling.

For example, when calling from a #1 or #1A ESS, which is an electronic switch, you will notice two short "kerchunk" sounding clicks before the phone number you are calling begins to ring. If you are calling a number that is on one of these switches, you will notice a click when the ringing line is picked up.

On digital switches such as the #5 ESS or the DMS 100, there are no clicks when calls are placed or when the other line picks up. However, there are ways to tell a #5 ESS from a DMS 100. In the New York Telephone network, if an exchange is served by a digital switch, you can dial that exchange plus the suffix "9901" and a recording will come on and tell you where the switch is located, what exchanges are on the switch, and what type of switch it is. But there is another way to tell for those outside New York. For instance, a #5 ESS has a slight single click before the dialtone when the phone is picked up. A DMS 100 has no click before the dialtone.

Also, when you call a number that is on a #5 ESS, you will sometimes get a partial first ring. When calling a number that is on a DMS 100 switch, you will always get a full ring on the first ring. Also, the first ring on a DMS 100 tends to be slightly longer than on the #5 ESS.

Hacking Smartphone

by Tech Rat

Smartphone is a soon to be released service available in some areas that will incorporate all the currently available services (call waiting, three way calling, call forwarding, caller ID, etc.,) into one complete easy to use package, and combine that with a new type of phone that will access these services though an easy to use interface, which will also allow you to use custom services set up by third party providers available through Smartphone only.

The Smartphone itself has no dial and no keypad. Instead, the device is about the

The interface is built around the concept of a hierarchical file system, similar to Windows or Macintosh, with a series of buttons on screen that lead you to other buttons down the menu structure. You can create and delete directory entries, and they are entered through an alpha-numeric keypad displayed on the LCD. You can set up a hierarchical structure for organizing your numbers such as "friends", "contacts", "relatives", and "emergency". Under each of these buttons on the menu tree is a listing of the names of people you have entered into the system for that button area. Touching a displayed name on a particular "button" automatically dials the entry. To those of you who work with similar "smart"

Handset — Touch Sensitive LCD
Date, Time & other info
You Dialed
Touchscreen Keypad
Menu for Buttons Area
Hierarchical Buttons Area
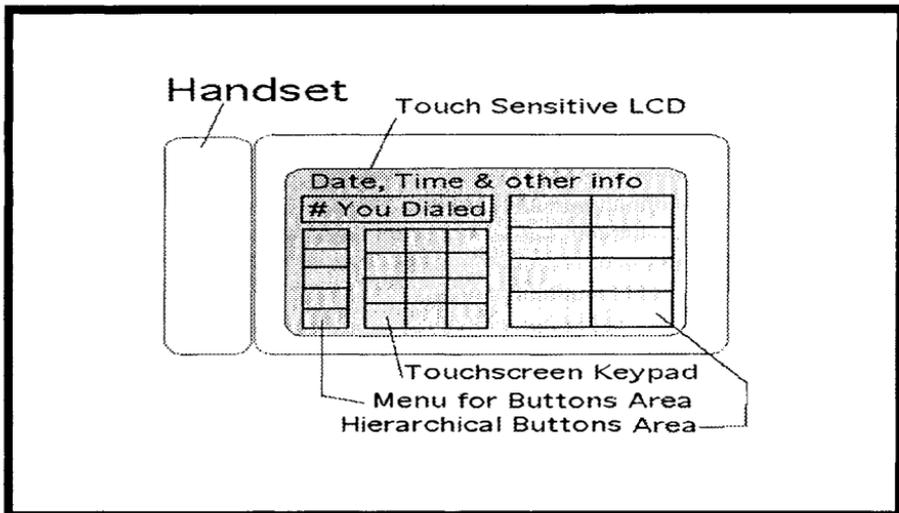
size of a large office phone, having the hook and handset off to the side. The main unit consists only of a touch-sensitive LCD screen that contains the interface. It sort of looks like a large Sharp Wizard with a phone handset attached. The computer that controls the Smartphone is a simple device, needing only a small 16 bit microprocessor and only about 128K of RAM. Upon startup, the phone reads the operating system from ROM, and then loads your phonebook from battery backed RAM, similar to the way a Sharp Wizard works.

systems, all of this will seem very academic. However, what makes the Smartphone really smart is the number of services being created to take advantage of its LCD screen and computer interface.

The first service is the white pages: Imagine being able to look up anyone by dialing into the RBOC computer through a packet switching network and local dial-in point and accessing it legally through Smartphone. Anyone listed in the white pages is listed in this database stored by

the RBOC computer. You can search by area code, prefix, name, address, etc.... Any database type field is available here.

The next service is personal mailboxes: Here, you can retrieve voice messages, fax messages, email, etc.... Voices are played back through your handset, faxes are printed to your screen and can be stored locally if they are short, and E-mail can be read, but currently not replied to, since the smartphone lacks a keyboard that can be touch-typed on. This service also allows you to route your calls to another number you may be at at the time.

Next is something called Mach Services. This allows you to do all banking transactions (except deposits and withdrawals) through the Smartphone interface. In this mode, the LCD screen acts like a retarded ATM, except that it contains a few features not available on an ATM. They are: verify check, authorize credit card purchase, and checking transactions (wire money to another account). This service requires a PIN (obviously). Like all the other services, it is meant to be dialed into (and is therefore hackable, once put into service) and then accessed through the Smartphone, which is really just an LCD terminal similar to France's Minitel service.

Lastly are the Righttouch services, which allow you to turn on and off, at your discretion, call waiting, three way calling, call forwarding, caller ID, etc. As services are added, so are buttons on your interface. This service also requires a PIN.

After reviewing code for the interface that is being built into the Smartphone, I can honestly say that anyone with half a brain will be able to build a Smartphone compatible interface for their PC and be able to also dial into these services and hack away. While there is nothing about the interface that is unique, its touch screen and buttons would make it difficult for anyone to emulate without a windowing and mouse compatible computer.

All of these services and Smartphone itself are being installed as part of ISDN services, and will be made available to consumers probably near the end of 1995. Basically, to access these services, the Smartphone dials a local number into the RBOC's packet switching network, then enters a code that corresponds to an address that connects to the service you wish to contact. While the dial-in number is always the same, it will be the addresses that vary, and it will be finding those addresses that will be the challenge of future hacking. As more services become available, you have the option of subscribing to them through the Smartphone, in which case the packet address of the service is added to your personal directory. Theoretically it should be possible to link a Smartphone with another Smartphone through the network to trade phone directories.

If you wish to try finding addresses within a packet switching network, here's the RBOC Pac-net for the New York metro area: These numbers are the ones I know, but there are certainly others that you can find.

212-385-2551
718-875-6504
914-723-2666
914-425-0202
516-599-2525
516-665-7878

In all cases, once connected, type HH and then hit return. You'll see a prompt. Then try an address. It's similar to a regular phone number, like 2129250054 (this connects you to *Newsday,* a local newspaper). If you are smart, you'll be able to write a special scanner for such a network.

They Can Never Win

Ohio Bell

Comptroller

45 Erieview Plaza
Cleveland, Ohio 44114
Phone (216) 822-7252

TO ALL OHIO BELL EMPLOYEES:

As you know, Ohio Bell faces competitive challenges on every
front. Increasing numbers of competitors are entering our
markets and vigorously pursuing our customers. In this
environment, information means competitive advantage and
continued competitive vitality depends on preventing the
unauthorized release of our proprietary information.

Recently, in some of the face-to-face meetings, reports have
been made regarding former employees accessing or copying
Company information. Any such copying or accessing of
information is improper and prohibited. All Company information
is an asset of the Company and must be protected from
unauthorized release. Marketing plans and analyses, product
plans, switch replacement and cable plans, detailed sales and
customer-specific data and other proprietary information are
particularly sensitive. Such data must be kept confidential and
should only be made available to authorized individuals, such as
employees having a need to know such information in order to
perform their jobs. Proprietary information should never be
made available to   employees without appropriate
written approval.

It is part of all our jobs to protect Company information. If
you observe someone accessing Company information and you do not
think the person has a legitimate reason to do so, ask the
person's identity and inquire as to the purpose of the person's
business. If the person is not an active employee with a reason
to know such information, ask the person to leave the area and
inform the Security Department as soon as possible. Should you
have any questions relating to security of information, please
contact the Legal or Security Departments.

Comptroller

Cool Letter Department

SHERIFF'S
DEPARTMENT

P.O. Box 1748
Austin, Texas 78767

COUNTY OF TRAVIS
STATE OF TEXAS

DAN T. RICHARDS
Sheriff

(512) 322-4610
Fax   322-4735

October 2, 1992

Mr ~~█████████~~   *Minor Threat*

Mr ~~████████~~,   *Threat*

Our office has recently received information that you or other
persons of your acquaintance may attempt to gain access to the
computer system of the Travis County Sheriff's Department.

This letter is to serve as legal notification of the Criminal
Violations that such a breech would involve. Thereafter, if any
further information is received or a violation of applicable laws
is attempted, the courts will be made aware that you have been
served legal notice of the violations thereof. Pursuant to
requirement of state laws, notwithstanding applicable Federal or
Telecommunications Statutes, this office of the Travis County
Sheriff's Department will prosecute to the full extent of the law,
any and all such persons involved.

Investigator Michael G Hemby 783
Internal Affairs
Travis County Sheriff's Department

cc: Inmate file

*Minor Threat always manages to get interesting letters like this.
But getting one while in prison, now that's something....*

High School Mac Hack

By The Bard

Following up on 999's article on high school PC hacking, I have some tips to pass on to hopeful high school Mac hackers....

To begin with, Appleshare is hard to hack. There are precious few Mac hacks around, so you must exploit the weakest link in the chain - the user.

Collecting Passwords

There are thousands of ways to get passwords from people. The most obvious is simply asking for the password, or offering to help them login. Still, administration will probably infect most users with a paranoia about someone stealing their passwords - enough to make shoulder surfing impossible. One trick works really well, however: if you know enough programming to write a program with a passable Mac interface, you can get them to enter their passwords! Simply draw a dialog box with something like "Invalid login, please reenter your name and password", (with some appropriate technobabble), and save the results to a text file, to be retrieved at leisure. Of course, if they've locked the hard drive, then you won't be able to put the program on in the first place. The solution is to make a startup disk with a slimmed down system, put your dummy program into the startup items folder, and leave it in the drive.

Don't forget that most people use obvious passwords, and if you see someone typing on the numeric keypad, try using his phone number or student ID.

Getting Superuser Privileges

Not for the faint of heart. If you do spot a computer science teacher hard at work on his Appleshare, hang around discreetly, trying to look as stupid as possible. When he leaves the room for one reason or another, quickly leap over to his computer, make an alias of his Appleshare, and copy to disk. Then when he logs out for the day, you can go back to the computer he used, and open the alias Appleshare. If you're lucky, it should give you all his/her privileges.

The Joys of ResEdit and Norton (Not to mention Broadcast)

If the hard disk isn't locked, you can use tools such as ResEdit to "personalize" applications (remember, you can really screw things up if you don't know what you're doing). I haven't taken a copy of Norton disk editor to the drive yet, but, since you can uncover hidden files, and hide visible ones, you can hide your password program, while digging for the password file (I haven't found it yet).

Let me introduce you to a great extension called Broadcast. It enables you to send messages to other computers on Appleshare - all you have to have is a copy of it in the Extensions folder. Makes for great practical jokes - especially on Mac virgins.

I am personally opposed to destructive hacks. Destroying people's files, crashing the network, stuff like that blackens the hacker's name. Yet, there are thousands of non-destructive practical jokes for the Mac. For example, write a program that shuts down the computer when it is launched (use code from Shutdown.p in *THINK Pascal*), and put it in the startup folder. Thus, the computer turns off as soon as it loads up. (To get around this after the joke's gone stale, boot with the startup disk.)

End Word

The one last place to infiltrate the system is to start early - late enough so that the Appleshare is loaded in, but early enough so the guards are not up. Try logging in as "admin" or "administration" with no password. Also, if you see something like "Fileguard" being installed, you can probably slip in an account with full privileges if you get in early enough.

Remember, most network supervisors hate what they can't control. They can snoop around your files, and do anything they want with them (remove copies of ResEdit...), but doing something as simple as DES encrypting a file called "List of passwords" or "Viral source code" can drive a supervisor crazy.

hacking computer shows

by Walter S. Jaffee

The trading grounds of the ancient Mesopotamians, the desert auctions of Bedouin nomads and even the Crystal Palace Exhibition of 1851 can be taken as demonstrations of one proof: If you want to work the buyers into a frenzy, pack them into a tight space surrounded by warez - I mean wares - or do I?

Those who have attended any computer industry trade show or exposition must have been struck by the desire to own many of the products being displayed. Unfortunately, price is prohibitive and theft is both crude and illegal. However, it is possible to convince those running the booths to give you what you want. Usually they will be delighted to do so, and offer to send you other products not on display. In a good show, I have collected as much as five thousand dollars worth of software, plus books and some peripherals.

This advice results from years of attendance at many shows, both as an observer and as a corporate representative. Every tip which follows has been used successfully, either by me or against me.

A successful show requires preparation. First, you must get yourself inside without paying. This is simple: ask yourself the question "what group can improve the success of this show?" Call the show organizers, present yourself as a representative of this group and, I promise, they'll send you a complimentary pass. Typically, I present myself as a member of the media. I have been affiliated with a mass media outlet for many years, which gives me a legitimate address and letterhead for this claim. You may want to create a dummy corporation for the same effect.

This raises a difficult question: should you pretend to be affiliated with a *real* group? On the one hand, it raises the possibility of their identifying you as a fake; on the other hand, it will greatly increase your yield of goods collected. I have toyed with the idea of setting up a dummy consulting firm called "Walter S. Jaffee, Inc." (incorporation costs around $65 in most states). I could then get the badge printer at a show to put WSJ as my corporate ID. Most computer sale-creatures would sell their grandmothers for a good writeup in the *Wall Street Journal*. The WSJ badge would be magic.

Dress the part — printing a company T-shirt would be perfectly in line for regional media outlets. A suit would be better for a national firm. Have business cards.

Once in the doors, you have two basic routes to getting free things: you request review copies, or complain about copies you already "possess." I will take these in order.

If you presented yourself as a member of the media to get in the door, by all means keep up the disguise. Many sales people will see your badge and hand you their product without your saying a word. Others will have to be asked. Many will copy the information from your badge and mail you the product at home. Finally, many will tell you to contact them. By all means, do so. A typical conversation runs like this:

"Hello, Sally? This is Walter Jaffee, with WQQQ television; we met at the Acorn Expo last week."

"Of course, Walter, what can I do for you?"

"We're running a comparative review next month on word processors. We'll be looking at WordChopper 1.0, Microfluff Paragraph, and a few others. I was very impressed with the new release of PhallusWriter and would love to include it in the review."

"Do we have your address, Walter? I'll have that in the overnight mail."

Sometimes they send a crippled copy. Call back to explain that you have experienced computer users testing these programs in head-to-head style, and that

PhallusWriter will suffer grievously in such tests if it can't save, print, or copy. They'll send you the real thing.

Never give away that you are an experienced computer user yourself. Misuse terminology just slightly, to give the impression that you have been working in the field for a while, but don't feel comfortable with it.

For more specialized shows, present yourself as a representative of an organization with substantial buying power. Of course, you need to be high enough in the organization to influence purchase decisions, without being so high as to decide on a purchase yourself. Try being a "Systems Consultant" or the like. I highly recommend the *Dictionary of Organizations*, which you can find in any good library and which will give you an almost endless list of appropriate, real organizations which you may want to represent. The National Science Teachers Association is a perennial favorite. Beware, real members may be at the show. Your BS skills must be well-practiced to escape from such an encounter.

If the idea of collecting goods in this way bores you, try the second approach: complaining about the ones you "already have." Imagine the effect on a small company, which has shelled out 30% of its annual advertising budget to attend a show, of having a screaming, dissatisfied customer at the mouth of its booth. The sales representatives will do *anything* to get rid of you. At the MacWorld Expo in August, a young lady approached the booth in which I was working and gave a furious dressing-down to the company president, complaining of bugs in our software. Several things she said made it perfectly clear that she had never owned the software, but had seen our demo. However, rather than challenge her, one of the booth personnel ran over and gave her a copy of the new release. This got her out of the way.

Later in the day, I tried the same technique on another booth and found that it worked quite well. I think it works best when women use it against men.

The most serious weakness of the technique is that you can't use it on two booths anywhere near each other.

Finally, if you have anything to *trade* for goods, you can probably find the opportunity to do so. Groups of firm representatives get together for parties in which they trade software. You can get into these without much trouble if you have a friend in the booths. You can trade T-shirts for $600 packages without guilt. Parties of homosexual or minority programmers take place at most major shows. These are excellent targets. You can also go booth-to-booth trading, though this is a bad idea until the last few hours of a multi-day show.

Big companies are just as generous as small ones. Many firms will want feedback from you; send some if you can. At the same time, job turnover in press/industry relations is so quick that the person to whom you promised a copy of your review might be gone by the next show anyway.

nynex voice mail

Following is a list of telephone exchanges, the type of switch they're on, the CLLI code for the switch, the location of the switch, and the local telephone number for NYNEX voice mail. Customers can subscribe to this service and retrieve their messages or leave messages for other people by calling this number. This service allows you to leave a message for someone without ringing their phone. Exchanges that don't have this service are not included. We regret that there are a couple of gaps in this list but be advised that certain people risked their lives to get it.

Thanks to CEILO

MANHATTAN (212)

206	#1A	NYCMNY18CG0	W. 18th St.	929-8070
207	#1A	NYCMNY56CG2	E. 56th St.	355-1088
210	#5E	NYCMNY37DS1	E. 37th St.	682-2022
213	#1A	NYCMNY30CG1	E. 30th St.	683-0085
216	DMS	NYCMNY36DS0	W. 36th St.	630-2580
219	#1A	NYCMNYVSCG0	Varick St.	334-9280
221	DMS	NYCMNY42DS0	W. 42nd	575-7500
222	#1A	NYCMNYMNCG0	Manhattan Ave.	662-9554
223	#1A	NYCMNY56CG3	E. 56th St.	750-5274
226	#1A	NYCMNYVSCG0	Varick St.	334-9280
228	DMS	NYCMNY13DS1	Second Ave.	387-7330
229	#5E	NYCMNY18DS1	W. 18th St.	366-5055
230	#1A	NYCMNY56CG4	E. 56th St.	751-1283
234	DMS	NYCMNYCADS0	Convent Ave.	234-3112
237	#5E	NYCMNY50DS1	W. 50th St.	582-2040
239	#1A	NYCMNY36CG1	W. 36th St.	947-2869
241	DMS	NYCMNY97DS0	E. 97th St.	369-6608
242	#1A	NYCMNY18CG0	W. 18th St.	929-8070
243	#1A	NYCMNY18CG0	W. 18th St.	929-8070
245	#5E	NYCMNY50DS1	W. 50th St.	582-2040
246	#1A	NYCMNY50CG0	W. 50th St.	262-0940
247	DMS	NYCMNY50DS0	W. 50th St.	767-8030
249	DMS	NYCMNY79DS0	E. 79th St.	452-0166
251	DMS	NYCMNY30DS0	E. 30th St.	447-2800
252	#5E	NYCMNY50DS1	W. 50th St.	582-2040
253	#5E	NYCMNY50DS1	W. 50th St.	582-2040
254	#1A	NYCMNY13CG0	Second Ave.	674-8490
255	#5E	NYCMNY18DS1	W. 18th St.	366-5055
258	#5E	NYCMNY50DS1	W. 50th St.	582-2040
259	#5E	NYCMNY50DS1	W. 50th St.	582-2040
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268	#5E	NYCMNY36DS1	W. 36th St.	736-0344
270	#5E	NYCMNY37DS1	E. 37th St.	682-2022
272	DMS	NYCMNY37DS0	E. 37th St.	476-5300
274	#5E	NYCMNYVSDS0	Varick St.	274-8180
278	DMS	NYCMNY36DS0	W. 36th St.	630-2580
280	#1A	NYCMNYMNCG0	Manhattan Ave.	662-9554
281	DMS	NYCMNYCADS0	Convent Ave.	234-3112
283	DMS	NYCMNYCADS0	Convent Ave.	234-3112
286	#1A	NYCMNY37CG1	E. 37th St.	949-1490
289	#1A	NYCMNY97CG0	E. 97th St.	860-2680
296	#5E	NYCMNY36DS1	W. 36th St.	736-0344
297	DMS	NYCMNY37DS0	E. 37th St.	476-5300
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521	#1A	NYCMNY56CG2	E. 56th St.	355-1088
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527	DMS	NYCMNY56DS0	E. 56th St.	527-1300
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532	#1A	NYCMNY30CG0	E. 30th St.	481-1150
533	DMS	NYCMNY13DS1	Second Ave.	387-7330
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559	DMS	NYCMNY56DS0	E. 56th St.	527-1300
560	#1A	NYCMNY36CG1	W. 36th St.	947-2869
561	#1A	NYCMNY30CG1	E. 30th St.	683-0085
563	#1A	NYCMNY36CG1	W. 36th St.	947-2869
564	DMS	NYCMNY36DS0	W. 36th St.	630-2580
567	DMS	NYCMNYTHDS0	Thayer	567-5190
568	#5E	NYCMNYWADS0	W. 176th St.	795-0836
569	DMS	NYCMNYTHDS0	Thayer	567-5190
570	#1A	NYCMNY79CG1	E. 79th St.	737-0335
573	#1A	NYCMNY37CG1	E. 37th St.	949-1490
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576	#1A	NYCMNY30CG1	E. 30th St.	683-0085
578	DMS	NYCMNY30DS0	E. 30th St.	447-2800
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595	DMS	NYCMNY73DS0	W. 73rd St.	721-5200
598	#1A	NYCMNY13CG0	Second Ave.	674-8490
599	#1A	NYCMNY37CG1	E. 37th St.	949-1490
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628	DMS	NYCMNY79DS0	E. 79th St.	452-0166
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641	DMS	NYCMNY50DS0	W. 50th St.	767-8030
643	DMS	NYCMNY36DS0	W. 36th St.	630-2580
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662	#1A	NYCMNYMNCG0	Manhattan Ave.	662-9554
663	#5E	NYCMNYMNDS0	Manhattan Ave.	865-4599
664	DMS	NYCMNY50DS2	W. 50th St.	977-7330
666	#5E	NYCMNYMNDS0	Manhattan Ave.	865-4599
673	DMS	NYCMNY13DS1	Second Ave.	387-7330
674	#1A	NYCMNY13CG0	Second Ave.	674-8490
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685	#1A	NYCMNY30CG1	E. 30th St.	683-0085
686	#1A	NYCMNY30CG1	E. 30th St.	683-0085
687	#1A	NYCMNY37CG0	E. 37th St.	983-9550
688	#1A	NYCMNY56CG3	E. 56th St.	750-5274
689	DMS	NYCMNY30DS0	E. 30th St.	447-2800
690	DMS	NYCMNYCADS0	Convent Ave.	234-3112
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694 DMS NYCMNYCADS0 Convent Ave.     234-3112
695 DMS NYCMNY36DS0 W. 36th St.      630-2580
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697 #1A NYCMNY37DS0 E. 37th St.      476-5300
698 DMS NYCMNY50DS0 W. 50th St.      767-8030
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708 #1A NYCMNY50CG0 W. 50th St.      262-0940
713 DMS NYCMNY50DS0 W. 50th St.      767-8030
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715 #1A NYCMNY56CG2 E. 56th St.      355-1088
721 DMS NYCMNY73DS0 W. 73rd St.      721-5200
722 #1A NYCMNY97CG0 E. 97th St.      860-2680
724 #1A NYCMNY73CG0 W. 73rd St.      362-5544
725 #1A NYCMNY30CG0 E. 30th St.      481-1150
727 #5E NYCMNY18DS0 W. 18th St.      463-0041
730 DMS NYCMNY42DS0 W. 42nd          575-7500
735 #1A NYCMNY56CG4 E. 56th St.      751-1283
737 #1A NYCMNY79CG1 E. 79th St.      737-0335
741 #1A NYCMNY18CG0 W. 18th St.      929-8070
744 #1A NYCMNY79CG1 E. 79th St.      737-0335
745 #1A NYCMNY56DS0 E. 56th St.      527-1300
746 DMS NYCMNY79DS0 E. 79th St.      452-0166
749 #1A NYCMNYMNCG0 Manhattan Ave.   662-9554
750 #1A NYCMNY56CG3 E. 56th St.      750-5274
751 #1A NYCMNY56CG4 E. 56th St.      751-1283
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756 DMS NYCMNY56DS0 E. 56th St.      527-1300
757 DMS NYCMNY50DS0 W. 50th St.      767-8030
758 DMS NYCMNY56DS0 E. 56th St.      527-1300
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773 DMS NYCMNY56DS0 E. 56th St.      527-1300
777 #1A NYCMNY13CG0 Second Ave.      674-8490
779 DMS NYCMNY30DS0 E. 30th St.      447-2800
781 #5E NYCMNYWADS0 W. 176th St.     795-0836
787 DMS NYCMNY73DS0 W. 73rd St.      721-5200
793 DMS NYCMNY56DS0 E. 56th St.      527-1300
795 #5E NYCMNYWADS0 W. 176th St.     795-0836
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808 #1A NYCMNY37CG1 E. 37th St.      949-1490
818 #1A NYCMNY37CG1 E. 37th St.      949-1490
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830 DMS NYCMNY50DS0 W. 50th St.      767-8030
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865 #5E NYCMNYMNDS0 Manhattan Ave.   865-4599
866 #5E NYCMNYMNDS0 Manhattan Ave.   865-4599
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873 DMS NYCMNY73DS0 W. 73rd St.      721-5200
874 #1A NYCMNY73CG0 W. 73rd St.      362-5544
875 DMS NYCMNY73DS0 W. 73rd St.      721-5200
876 DMS NYCMNY97DS0 E. 97th St.      369-6608
877 #1A NYCMNY73CG0 W. 73rd St.      362-5544
879 DMS NYCMNY79DS0 E. 79th St.      452-0166
883 #1A NYCMNY37CG0 E. 37th St.      983-9550

886 #1A NYCMNY18CG0 W. 18th St.      929-8070
887 DMS NYCMNY50DS0 W. 50th St.      767-8030
888 #1A NYCMNY56CG3 E. 56th St.      750-5274
889 DMS NYCMNY30DS0 E. 30th St.      447-2800
891 #1A NYCMNY56CG3 E. 56th St.      750-5274
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903 DMS NYCMNY50DS0 W. 50th St.      767-8030
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916 #1A NYCMNY37CG1 E. 37th St.      949-1490
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925 #1A NYCMNYVSCG0 Varick St.       334-9280
926 DMS NYCMNYCADS0 Convent Ave.     234-3112
929 #1A NYCMNY18CG0 W. 18th St.      929-8070
932 #1A NYCMNYMNCG0 Manhattan Ave.   662-9554
935 DMS NYCMNY56DS0 E. 56th St.      527-1300
939 DMS NYCMNYCADS0 Convent Ave.     234-3112
941 #5E NYCMNYVSDS0 Varick St.       274-8180
942 DMS NYCMNYTHDS0 Thayer           567-5190
947 #1A NYCMNY36CG1 W. 36th St.      947-2869
949 #1A NYCMNY37CG1 E. 37th St.      949-1490
951 #1A NYCMNY30CG0 E. 30th St.      481-1150
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956 DMS NYCMNY50DS0 W. 50th St.      767-8030
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963 #5E NYCMNY50DS1 W. 50th St.      582-2040
966 #5E NYCMNYVSDS0 Varick St.       274-8180
967 DMS NYCMNY36DS0 W. 36th St.      630-2580
969 DMS NYCMNY50DS0 W. 50th St.      767-8030
971 #1A NYCMNY36CG1 W. 36th St.      947-2869
972 #1A NYCMNY37CG0 E. 37th St.      983-9550
973 #1A NYCMNY37CG0 E. 37th St.      983-9550
974 #5E NYCMNY50DS1 W. 50th St.      582-2040
975 #1A NYCMNY50CG0 W. 50th St.      262-0940
977 DMS NYCMNY50DS2 W. 50th St.      977-7330
979 #5E NYCMNY13DS0 Second Ave.      529-8337
980 #1A NYCMNY56CG3 E. 56th St.      750-5274
982 DMS NYCMNY13DS1 Second Ave.      387-7330
983 #1A NYCMNY37CG0 E. 37th St.      983-9550
984 #1A NYCMNY37CG0 E. 37th St.      983-9550
986 DMS NYCMNY37DS0 E. 37th St.      476-5300
988 DMS NYCMNY79DS0 E. 79th St.      452-0166
989 #5E NYCMNY18DS0 W. 18th St.      463-0041
995 #5E NYCMNY13DS0 Second Ave.      529-8337
996 #1A NYCMNY97CG0 E. 97th St.      860-2680
998 #5E NYCMNY13DS0 Second Ave.      529-8337
                         BRONX (718)
220 #1A NYCXNYTBCG0 Tiebout Ave.     364-4600
231 #5E NYCXNYCRDS0 Cruger Ave.      405-2211
293 DMS NYCXNYJEDS0 167th/Jerome     590-1640
295 DMS NYCXNYTBDS0 Tiebout Ave.     584-2300
324 #5E NYCXNYCRDS0 Cruger Ave.      405-2211
325 #5E NYCXNYCRDS0 Cruger Ave.      405-2211
328 #1A NYCXNYHOCG0 Hoe Ave.         542-5556
364 #1A NYCXNYTBCG0 Tiebout Ave.     364-4600
365 #1A NYCXNYTBCG0 Tiebout Ave.     364-4600
367 #1A NYCXNYTBCG0 Tiebout Ave.     364-4600
378 #1A NYCXNYHOCG0 Hoe Ave.         542-5556
405 #5E NYCXNYCRDS0 Cruger Ave.      405-2211
515 #5E NYCXNYCRDS0 Cruger Ave.      405-2211
519 #5E NYCXNYCRDS0 Cruger Ave.      405-2211
538 DMS NYCXNYJEDS0 167th/Jerome     590-1640
542 #1A NYCXNYHOCG0 Hoe Ave.         542-5556
543 DMS NYCXNYKBDS0 Kingsbridge      543-3100
547 #5E NYCXNYCRDS0 Cruger Ave.      405-2211
548 DMS NYCXNYKBDS0 Kingsbridge      543-3100
549 DMS NYCXNYKBDS0 Kingsbridge      543-3100
562 #1A NYCXNYTBCG0 Tiebout Ave.     364-4600
579 DMS NYCXNYJEDS0 167th/Jerome     590-1640
584 DMS NYCXNYTBDS0 Tiebout Ave.     584-2300
588 DMS NYCXNYJEDS0 167th/Jerome     590-1640
589 #1A NYCXNYHOCG0 Hoe Ave.         542-5556
590 DMS NYCXNYJEDS0 167th/Jerome     590-1640
601 DMS NYCXNYKBDS0 Kingsbridge      543-3100
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617 #1A NYCXNYHOCG0 Hoe Ave.   542-5556
652 #5E NYCXNYCRDS0 Cruger Ave.   405-2211
653 #5E NYCXNYCRDS0 Cruger Ave.   405-2211
654 #5E NYCXNYCRDS0 Cruger Ave.   405-2211
655 #5E NYCXNYCRDS0 Cruger Ave.   405-2211
681 DMS NYCXNYJEDS0 167th/Jerome   590-1640
733 #1A NYCXNYTBCG0 Tiebout Ave.   364-4600
796 DMS NYCXNYKBDS0 Kingsbridge   543-3100
798 #5E NYCXNYCRDS0 Cruger Ave.   405-2211
842 #1A NYCXNYHOCG0 Hoe Ave.   542-5556
881 #5E NYCXNYCRDS0 Cruger Ave.   405-2211
882 #5E NYCXNYCRDS0 Cruger Ave.   405-2211
884 DMS NYCXNYKBDS0 Kingsbridge   543-3100
893 #1A NYCXNYHOCG0 Hoe Ave.   542-5556
920 #5E NYCXNYCRDS0 Cruger Ave.   405-2211
933 DMS NYCXNYTBDS0 Tiebout Ave.   584-2300
991 #1A NYCXNYHOCG0 Hoe Ave.   542-5556
992 DMS NYCXNYJEDS0 167th/Jerome   590-1640
994 #5E NYCXNYCRDS0 Cruger Ave.   405-2211

BROOKLYN (718)

209 DMS NYCKNYAIDS0 Ave. I   444-2900
221 DMS NYCKNYTYDS0 Troy Ave.   771-1977
237 DMS NYCKNYBRDS1 Bridge St.   237-2026
241 DMS NYCKNYAIDS0 Ave. I   444-2900
243 #5E NYCKNYBRDS0 Bridge St.   243-0056
245 DMS NYCKNYTYDS0 Troy Ave.   771-1977
251 DMS NYCKNYAIDS0 Ave. I   444-2900
252 #5E NYCKNYKPDS0 Kenmore Place   253-9675
253 #5E NYCKNYKPDS0 Kenmore Place   253-9675
260 #5E NYCKNYBRDS0 Bridge St.   243-0056
270 #1A NYCKNYTYCG0 Troy Ave.   756-5245
272 DMS NYCKNYRADS0 Rockaway Ave.   495-1030
282 #1A NYCKNYALCG0 Albemarle Road 284-5606
283 DMS NYCKNYALDS0 Albemarle Road 693-1024
284 #1A NYCKNYALCG0 Albemarle Road 284-5606
287 #1A NYCKNYALCG0 Albemarle Road 284-5606
326 DMS NYCKNYFADS0 Fairview Ave.   417-4002
330 DMS NYCKNYBRDS1 Bridge St.   237-2026
345 DMS NYCKNYRADS0 Rockaway Ave.   495-1030
363 #1A NYCKNYTYCG0 Troy Ave.   756-5245
366 DMS NYCKNYFADS0 Fairview Ave.   417-4002
369 DMS NYCKNY14DS0 14th St.   369-2800
381 DMS NYCKNYFADS0 Fairview Ave.   417-4002
384 DMS NYCKNYWMDS0 Williamsburg   388-7388
385 DMS NYCKNYRADS0 Rockaway Ave.   495-1030
386 DMS NYCKNYFADS0 Fairview Ave.   417-4002
387 DMS NYCKNYWMDS0 Williamsburg   388-7388
388 DMS NYCKNYWMDS0 Williamsburg   388-7388
403 #5E NYCKNYBRDS0 Bridge St.   243-0056
416 DMS NYCKNYFADS0 Fairview Ave.   417-4002
417 DMS NYCKNYFADS0 Fairview Ave.   417-4002
435 #1A NYCKNYFTCG0 14th Ave.   972-0797
436 #1A NYCKNYFTCG0 14th Ave.   972-0797
438 #1A NYCKNYFTCG0 14th Ave.   972-0797
443 DMS NYCKNYBUDS0 Bushwick Ave.   919-7701
444 DMS NYCKNYAIDS0 Ave. I   444-2900
451 DMS NYCKNYAIDS0 Ave. I   444-2900
452 DMS NYCKNYBUDS0 Bushwick Ave.   919-7701
453 DMS NYCKNYBUDS0 Bushwick Ave.   919-7701
455 DMS NYCKNYBUDS0 Bushwick Ave.   919-7701
456 DMS NYCKNYFADS0 Fairview Ave.   417-4002
462 #1A NYCKNYALCG0 Albemarle Road 284-5606
467 DMS NYCKNYTYDS0 Troy Ave.   771-1977
469 DMS NYCKNYALDS0 Albemarle Road 693-1024
485 DMS NYCKNYRADS0 Rockaway Ave.   495-1030
486 DMS NYCKNYWMDS0 Williamsburg   388-7388
488 DMS NYCKNYBRDS1 Bridge St.   237-2026
492 DMS NYCKNY77DS0 77th St.   921-8983
493 DMS NYCKNYTYDS0 Troy Ave.   771-1977
495 DMS NYCKNYRADS0 Rockaway Ave.   495-1030
497 DMS NYCKNYFADS0 Fairview Ave.   417-4002
498 DMS NYCKNYRADS0 Rockaway Ave.   495-1030
499 DMS NYCKNY14DS0 14th St.   369-2800
522 #5E NYCKNYBRDS0 Bridge St.   243-0056
531 DMS NYCKNYAIDS0 Ave. I   444-2900
574 DMS NYCKNYBUDS0 Bushwick Ave.   919-7701

596 #5E NYCKNYBRDS0 Bridge St.   243-0056
599 DMS NYCKNYWMDS0 Williamsburg   388-7388
604 DMS NYCKNYTYDS0 Troy Ave.   771-1977
624 DMS NYCKNYBRDS1 Bridge St.   237-2026
625 DMS NYCKNYBRDS1 Bridge St.   237-2026
628 DMS NYCKNYFADS0 Fairview Ave.   417-4002
629 DMS NYCKNYAIDS0 Ave. I   444-2900
633 #5E NYCKNYFTDS0 14th Ave.   853-1669
643 #5E NYCKNYBRDS0 Bridge St.   243-0056
649 DMS NYCKNYRADS0 Rockaway Ave.   495-1030
680 DMS NYCKNY77DS0 77th St.   921-8983
693 DMS NYCKNYALDS0 Albemarle Road 693-1024
694 DMS NYCKNYTYDS0 Troy Ave.   771-1977
735 #1A NYCKNYTYCG0 Troy Ave.   756-5245
754 #5E NYCKNYBRDS0 Bridge St.   243-0056
756 #1A NYCKNYTYCG0 Troy Ave.   756-5245
763 DMS NYCKNYAIDS0 Ave. I   444-2900
768 DMS NYCKNY14DS0 14th St.   369-2800
771 DMS NYCKNYTYDS0 Troy Ave.   771-1977
773 #1A NYCKNYTYCG0 Troy Ave.   756-5245
774 #1A NYCKNYTYCG0 Troy Ave.   756-5245
778 DMS NYCKNYTYDS0 Troy Ave.   771-1977
782 DMS NYCKNYWMDS0 Williamsburg   388-7388
788 DMS NYCKNY14DS0 14th St.   369-2800
797 #5E NYCKNYBRDS0 Bridge St.   243-0056
802 DMS NYCKNYBRDS1 Bridge St.   237-2026
821 DMS NYCKNYFADS0 Fairview Ave.   417-4002
826 #1A NYCKNYALCG0 Albemarle Road 284-5606
832 DMS NYCKNY14DS0 14th St.   369-2800
833 DMS NYCKNY77DS0 77th St.   921-8983
834 DMS NYCKNYBRDS1 Bridge St.   237-2026
836 DMS NYCKNY77DS0 77th St.   921-8983
851 #1A NYCKNYFTCG0 14th Ave.   972-0797
852 #5E NYCKNYBRDS0 Bridge St.   243-0056
853 #5E NYCKNYFTDS0 14th Ave.   853-1669
854 #5E NYCKNYFTDS0 14th Ave.   853-1669
855 #5E NYCKNYBRDS0 Bridge St.   243-0056
856 DMS NYCKNYALDS0 Albemarle Road 693-1024
858 #5E NYCKNYBRDS0 Bridge St.   243-0056
859 #5E NYCKNYKPDS0 Kenmore Place   253-9675
871 #5E NYCKNYFTDS0 14th Ave.   853-1669
875 DMS NYCKNYBRDS1 Bridge St.   237-2026
894 DMS NYCKNYFADS0 Fairview Ave.   417-4002
919 DMS NYCKNYBUDS0 Bushwick Ave.   919-7701
921 DMS NYCKNY77DS0 77th St.   921-8983
922 DMS NYCKNYRADS0 Rockaway Ave.   495-1030
927 DMS NYCKNYRADS0 Rockaway Ave.   495-1030
935 #5E NYCKNYBRDS0 Bridge St.   243-0056
940 DMS NYCKNYALDS0 Albemarle Road 693-1024
941 DMS NYCKNYALDS0 Albemarle Road 693-1024
951 #5E NYCKNYKPDS0 Kenmore Place   253-9675
953 DMS NYCKNYTYDS0 Troy Ave.   771-1977
963 DMS NYCKNYWMDS0 Williamsburg   388-7388
965 DMS NYCKNY14DS0 14th St.   369-2800
968 DMS NYCKNYAIDS0 Ave. I   444-2900
972 #1A NYCKNYFTCG0 14th Ave.   972-0797

QUEENS (718)

204 #1A NYCQNYASCG0 Astoria   956-7796
217 DMS NYCQNYHSDS0 Hollis   464-2053
224 #5E NYCQNYBADS0 Bayside   279-3068
225 #5E NYCQNYBADS0 Bayside   279-3068
229 #5E NYCQNYBADS0 Bayside   279-3068
248 DMS NYCQNYLIDS0 L.I. City   361-1046
261 #5E NYCQNYFHDS0 Forest Hills   268-2600
262 DMS NYCQNYJADS0 Jamaica   526-8600
263 #5E NYCQNYFHDS0 Forest Hills   268-2600
264 DMS NYCQNYHSDS0 Hollis   464-2053
267 #1A NYCQNYASCG0 Astoria   956-7796
268 DMS NYCQNYFHDS0 Forest Hills   268-2600
274 DMS NYCQNYASDS0 Astoria   721-1006
275 #5E NYCQNYFHDS0 Forest Hills   268-2600
276 DMS NYCQNYLNDS1 Laurelton   527-5535
278 #1A NYCQNYASCG0 Astoria   956-7796
279 #5E NYCQNYBADS0 Bayside   279-3068
281 #5E NYCQNYBADS0 Bayside   279-3068
291 DMS NYCQNYJADS0 Jamaica   526-8600

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297 DMS NYCQNYJADS0 Jamaica         526-8600
321 #5E NYCQNYFLDS0 Flushing        353-3540
322 DMS NYCQNYOPDS0 115th Ave.      848-6600
327 #5E NYCQNYFRDS0 Far Rockaway    327-0057
337 #5E NYCQNYFRDS0 Far Rockaway    327-0057
341 DMS NYCQNYLNDS1 Laurelton       527-5535
343 #1A FLPKNYFPCG0 Floral Park     343-7810
347 #1A FLPKNYFPCG0 Floral Park     343-7810
349 DMS NYCQNYLIDS0 L.I. City       361-1046
353 #5E NYCQNYFLDS0 Flushing        353-3540
357 #5E NYCQNYBADS0 Bayside         279-3068
358 #5E NYCQNYFLDS0 Flushing        353-3540
359 #5E NYCQNYFLDS0 Flushing        353-3540
361 DMS NYCQNYLIDS0 L.I. City       361-1046
383 DMS NYCQNYLIDS0 L.I. City       361-1046
389 DMS NYCQNYLIDS0 L.I. City       361-1046
392 DMS NYCQNYLIDS0 L.I. City       361-1046
423 #5E NYCQNYBADS0 Bayside         279-3068
424 #1A NYCQNYNWCG0 Newtown         507-5887
426 #1A NYCQNYNWCG0 Newtown         507-5887
428 #5E NYCQNYBADS0 Bayside         279-3068
429 #1A NYCQNYNWCG0 Newtown         507-5887
441 DMS NYCQNYRHDS0 Richmond Hill   847-9677
445 #5E NYCQNYFLDS0 Flushing        353-3540
454 DMS NYCQNYHSDS0 Hollis          464-2053
459 #5E NYCQNYFHDS0 Forest Hills    268-2600
460 #5E NYCQNYFLDS0 Flushing        353-3540
461 #5E NYCQNYFLDS0 Flushing        353-3540
463 DMS NYCQNYFLDS0 Flushing        353-3540
464 DMS NYCQNYHSDS0 Hollis          464-2053
465 DMS NYCQNYHSDS0 Hollis          464-2053
468 DMS NYCQNYHSDS0 Hollis          464-2053
470 #1A FLPKNYFPCG0 Floral Park     343-7810
471 #5E NYCQNYFRDS0 Far Rockaway    327-0057
472 DMS NYCQNYLIDS0 L.I. City       361-1046
476 #1A NYCQNYNWCG0 Newtown         507-5887
479 DMS NYCQNYHSDS0 Hollis          464-2053
481 DMS NYCQNYLNDS1 Laurelton       527-5535
507 #1A NYCQNYNWCG0 Newtown         507-5887
520 #5E NYCQNYFHDS0 Forest Hills    268-2600
523 DMS NYCQNYJADS0 Jamaica         526-8600
525 DMS NYCQNYLNDS1 Laurelton       527-5535
526 DMS NYCQNYJADS0 Jamaica         526-8600
527 DMS NYCQNYLNDS1 Laurelton       527-5535
528 DMS NYCQNYLNDS1 Laurelton       527-5535
529 DMS NYCQNYOPDS0 115th Ave.      848-6600
539 #5E NYCQNYFLDS0 Flushing        353-3540
544 #5E NYCQNYFHDS0 Forest Hills    268-2600
545 DMS NYCQNYASDS0 Astoria         721-1006
546 DMS NYCQNYASDS0 Astoria         721-1006
565 #1A NYCQNYNWCG0 Newtown         507-5887
575 #5E NYCQNYFHDS0 Forest Hills    268-2600
626 #1A NYCQNYASCG0 Astoria         956-7796
631 #5E NYCQNYBADS0 Bayside         279-3068
639 #1A NYCQNYNWCG0 Newtown         507-5887
641 DMS NYCQNYOPDS0 115th Ave.      848-6600
657 DMS NYCQNYJADS0 Jamaica         526-8600
658 DMS NYCQNYJADS0 Jamaica         526-8600
659 DMS NYCQNYOPDS0 115th Ave.      848-6600
712 DMS NYCQNYLNDS1 Laurelton       527-5535
721 DMS NYCQNYASDS0 Astoria         721-1006
723 DMS NYCQNYLNDS1 Laurelton       527-5535
726 DMS NYCQNYASDS0 Astoria         721-1006
728 #1A NYCQNYASCG0 Astoria         956-7796
738 DMS NYCQNYOPDS0 115th Ave.      848-6600
739 DMS NYCQNYJADS0 Jamaica         526-8600
740 DMS NYCQNYHSDS0 Hollis          464-2053
762 #5E NYCQNYFLDS0 Flushing        353-3540
776 DMS NYCQNYHSDS0 Hollis          464-2053
777 DMS NYCQNYASDS0 Astoria         721-1006
786 DMS NYCQNYLIDS0 L.I. City       361-1046
793 #5E NYCQNYFHDS0 Forest Hills    268-2600
803 #1A NYCQNYNWCG0 Newtown         507-5887
805 DMS NYCQNYRHDS0 Richmond Hill   847-9677
830 #5E NYCQNYFHDS0 Forest Hills    268-2600
835 DMS NYCQNYOPDS0 115th Ave.      848-6600

843 DMS NYCQNYOPDS0 115th Ave.      848-6600
845 DMS NYCQNYOPDS0 115th Ave.      848-6600
846 DMS NYCQNYRHDS0 Richmond Hill   847-9677
847 DMS NYCQNYRHDS0 Richmond Hill   847-9677
848 DMS NYCQNYOPDS0 115th Ave.      848-6600
849 DMS NYCQNYRHDS0 Richmond Hill   847-9677
868 #5E NYCQNYFRDS0 Far Rockaway    327-0057
886 #5E NYCQNYFLDS0 Flushing        353-3540
896 #5E NYCQNYFHDS0 Forest Hills    268-2600
897 #5E NYCQNYFHDS0 Forest Hills    268-2600
932 DMS NYCQNYASDS0 Astoria         721-1006
937 DMS NYCQNYLIDS0 L.I. City       361-1046
939 #5E NYCQNYFLDS0 Flushing        353-3540
949 DMS NYCQNYLNDS1 Laurelton       527-5535
956 #1A NYCQNYASCG0 Astoria         956-7796
961 #5E NYCQNYFLDS0 Flushing        353-3540
962 #1A FLPKNYFPCG0 Floral Park     343-7810
977 DMS NYCQNYLNDS1 Laurelton       527-5535
978 DMS NYCQNYLNDS1 Laurelton       527-5535
997 #5E NYCQNYFHDS0 Forest Hills    268-2600
         STATEN ISLAND (718)
226 DMS NYCRNYSSDS0 S. Staten Island 966-7602
273 DMS NYCRNYNSDS0 N. Staten Island 727-5210
317 DMS NYCRNYSSDS0 S. Staten Island 966-7602
350 #1A NYCRNYNDCG0 New Dorp        667-3558
351 #5E NYCRNYNDDS0 New Dorp        987-0059
354 #1A NYCRNYNDCG0 New Dorp        667-3558
356 DMS NYCRNYSSDS0 S. Staten Island 966-7602
370 DMS NYCRNYWSDS0 W. Staten Island 370-3258
390 DMS NYCRNYNSDS0 N. Staten Island 727-5210
442 DMS NYCRNYNSDS0 N. Staten Island 727-5210
447 DMS NYCRNYNSDS0 N. Staten Island 727-5210
448 DMS NYCRNYNSDS0 N. Staten Island 727-5210
494 DMS NYCRNYWSDS0 W. Staten Island 370-3258
667 #1A NYCRNYNDCG0 New Dorp        667-3558
698 DMS NYCRNYWSDS0 W. Staten Island 370-3258
720 DMS NYCRNYNSDS0 N. Staten Island 727-5210
727 DMS NYCRNYNSDS0 N. Staten Island 727-5210
761 DMS NYCRNYWSDS0 W. Staten Island 370-3258
816 DMS NYCRNYNSDS0 N. Staten Island 727-5210
876 DMS NYCRNYNSDS0 N. Staten Island 727-5210
948 DMS NYCRNYSSDS0 S. Staten Island 966-7602
966 DMS NYCRNYSSDS0 S. Staten Island 966-7602
967 DMS NYCRNYSSDS0 S. Staten Island 966-7602
979 #1A NYCRNYNDCG0 New Dorp        667-3558
980 #5E NYCRNYNDDS0 New Dorp        987-0059
981 DMS NYCRNYNSDS0 N. Staten Island 727-5210
983 DMS NYCRNYWSDS0 W. Staten Island 370-3258
984 DMS NYCRNYSSDS0 S. Staten Island 966-7602
987 #5E NYCRNYNDDS0 New Dorp        987-0059
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The Magical Tone Box

by FyberLyte

Intro

The tone box is my latest mad invention. This device will satisfy your phreaking needs well into the future. There is a new technology out called DAST: Direct Analog Storage Technology. What this is is an EEPROM which writes analog data directly, without A/D or D/A, on a single chip. What this means for you is, *any* tone related box you need is yours with this simple and very compact project. The cutoff for the high frequency output is at 2700 Hz, so red box tones and blue box tones will fit in, so there shouldn't be any problem. Besides, phones cut off at around 3000 to 3500.

Advantages

1. Compact package and low voltage.

2. Better than a microcassette recorder, because when their batteries go down, the amplitude as well as the frequency decreases, resulting in unworthy tones and pissy operators. When the batteries go down on this (from 5 down to 3.5v) it gets stuck in play mode, so it has its own lo-batt alarm. Thus, no loss of quality.

3. Record any tones. One day you can have a red box, the next a blue box. Any tone can be yours.

Purchasing

Radio Shack is where you can (never) find this ISD1000A. That was my problem - none of the local ones had it. I should take this opportunity to bitch about Radio Shack and their incompetence, but you all would rather get on with the box. The part number is ISD1000A and is made by Archer and the chip will run you exactly $18.80 including tax. The total cost will be around the price of a Radio Shack 33 memory red box conversion, but probably a bit more.

Pre-Construction

You will want to check inside your computer for a Soundblaster, as this is needed to create tones, or if you don't have one, you could record red box tones from a Radio Shack conversion. What I am saying is, you need something that generates tones that you will want to record.

The following is what I used, not including the electronic components.

Parts List

ISD1000A (the chip)

Small 6VDC battery (an Energizer A544 will be perfect)

Case (I use a film case, you know those little black and gray canisters)

16 Ohm speaker (go to a dollar store and buy some cheap Walkman headphones)

28 pin socket (do not buy the Radio Shack ones if you can help it, find one with an open design, instead of Radio Shack's weird design)

Soldering iron, of course

Microphone

The breadboard is important. What you will be doing is building the record circuit on the breadboard, and then the play circuit right on a 28 pin socket. You can pop the chip into the breadboard when you need to record and then pop it back into the play circuit when you are ready to play. This will prevent any etching and will keep the play circuit small.

As soon as you buy the chip, open the package. Inside there will be a

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manual. Turn to page 6 and buy all those components and some solid wire. Skip S4 and R7-R14 since we will start recording at the beginning address, and also skip the 8 ohm speaker and the electric microphone, since you will be using a normal, higher quality microphone and a 16 ohm headphone speaker.

Building

When you get home, unpack everything. Breadboard the circuit on page 6, noticing that you will choose the simpler construction (bottom right corner). Then solder the play circuit that is on page 7 onto the 28 pin socket. Remember that you will fry the chip if you solder directly onto it, so use the socket! If you must use the Radio Shack socket, try to make sure no rosin or solder slithers down the pins into the clips. I had this problem on two sockets which wouldn't allow me to play. Pop the chip into the recording circuit, load up QUARTER.VOC or use the Radio Shack dialer or whatever else and record. Recording instructions are found on page 7. Then pop the chip into the play circuit. If it works then you now have a red box. Remember, as long as you have the tones, you can record them.

How to Build the Film Case Container

Take the top off of the case and your headphone speaker should fit perfectly in the gray cap. Cut a hole in the top and glue the speaker into the cap. You might want to use a speaker grille. Next, cut a hole in the bottom of the black cylinder big enough for your pushbutton switch. You should know how to wire up a switch. The chip, battery, socket, switch, and speaker all fit in perfectly. Everything fits in mine, but you might need to cut off the bottom part of the speaker, the unnecessary plastic part.

Use

If you can find BlueBeep, versions 004 and above, you can use the red box tones included. The QUARTER.VOC that I use has worked successfully on all phones to a live AT&T operator. In places where the Radio Shack didn't work, the .VOC did. As a red box the simple play circuit is fine because all you have to do is hold down the switch. Even though blue boxing is not possible for most people, the tone box can be used as a blue box. For a blue box, you need to do some addressing, which is explained in the manual. Depending on which pin (pins 1-10 only) you connect to ground you can address that corresponding address in memory. So, for a blue box you would set for address 1 the 2600 blast, address 2 the KP1, and address 3 the ST. So, to seize, hit 1, 2, dial on the phone's keypad (or your own dialer), then 3.

LETTERS TO REMEMBER

Fun Telco Numbers

Dear *2600*:

I am writing in regards to Mouse Balls' request for the ANAC for 310/818. Well, there are two that I've found - on Pacific Bell phones you use 211-2345, and the 114 that you published works only on GTE phones. I also found that on GTE payphones, oftentimes pressing 111 will get you a complete test for payphones. It is "menu-driven" and is surprisingly "user-friendly". I have tried these three numbers in 818 and parts of 213 with 100 percent success on 211-2345 and 114 but only about 50 percent success with 111.

Beetle Bailey
Arcadia, CA

Dear *2600*:

I remember reading somewhere in your magazine that you published a list of local automated services. Could you tell me the most recent issue that would have those for my area (813, Clearwater, FL)?

Here are a few of the ones I can remember, and I know they work in my and the surrounding calling areas:

311 and 711 identify your phone number, 117 occasionally leaves you with an open line, 112 is the Proctor Test Set which has the following menu: 2 - line test, 3 - coin collect test, 4 - coin refund test, 5 - coin relay timing, 6 - coin test, 7 - party ground test, 8 - ringer test, 9 - party 2 ringer test, 0 - dial test, 10 - express telephone test, 12 - reverse line, 13 - line open, 14 - complete data mode, 15 - express test 1, 16 - express test 2, 17 1A coin relay test.

Macgyver, Interpol
Clearwater, FL

The exact same thing happens in area codes 310 and 213 when dialing 111. Additional tests are 18 - 5.02 ... F123, 19 - Access to other tests: 2 - Milliwatt test, 3 - Zero tone test, 5 - three tone test, 6 - ten tone test, 7 - ten tone express test, 8 - to access SLC bypass circuit, 9 - to test regular SLC circuit.

Dear *2600*:

Hello again, here's a number your readers might like. It is an 800 number for AT&T information. But here's the catch. It's a TDD line so not only can you call for free but you can use your terminal too. All you have to remember is to type "GA" whenever you're done talking. It means go ahead and when you're totally done type "SK" i.e. stop keying. You get the point. The number is 800-855-1155. I've found that the TDD operators are a lot nicer than talking the voice operators.

It's not much but I've been reading the mag for a while so I had to send something in even if it's piddely info like this....

Uncle Waldo

Hacking Traffic Lights

Dear *2600*:

In the process of gearing up for the 1996 Olympics, Atlanta city officials announced several months ago that they were going to begin to upgrade the city's traffic lights. By far the majority of the traffic lights here are "dumb" lights, with no pressure plates or flow sensitivity at all.

This announcement got me thinking. Anyone out there have any experience in hacking traffic light controllers? I find myself *extremely* curious about how these damned things work. Especially the "intelligent" ones.

Lone Wolf
Atlanta

Traffic lights can be a lot of fun to play with. Many people aren't aware of how the sensors work or even where they're located. More recently we've heard of traffic lights that can instantly turn green when exposed to a strobe light. This is supposedly to allow ambulances to get through intersections more easily. We've heard rumors of rapidly flashing headlights having the same effect which could definitely lead to some interesting traffic situations. It goes without saying that if you're going to hack traffic lights, you should be very careful not to put anyone's life in danger. So we won't insult our readers' intelligence by saying it.

Past Hacker Prime?

Dear *2600*:

Ever since I've had a conscious knowledge of computers, I've wanted to hack. I haven't always known it was called hacking, but I've just had the mental inkling akin to hacking. The problem is basically I neither have the equipment nor the know-how needed. Right now I'm 15 years old and about to enter my junior year of high school and I feel that I'm almost past my prime for hacking (this may just be a popular misconception). But, regardless of my age or scholastic ranking, I feel I should start now. So I was wondering if you could steer me in the right direction in terms of literature and an affordable, but good, system.

Darkhold Page
Pittsburgh

We don't really recommend one system over another because everybody's needs and tastes are different. What you need to do is play around on as many different systems as you can in order to find out what you're comfortable with. We advise using friends' systems or those in school or computer stores. Otherwise you run the risk of getting something you don't want or can't use. Read some of the literature featured in 2600 in order to become more familiar

with the culture. Any good bookstore or library should provide you with much material. With regards to age, you are hardly past your prime. Most hackers are young because young people tend to be adaptable. As long as you remain adaptable, you can always be a good hacker.

Info and Questions

Dear *2600*:

This is the best H/P magazine I've found - keep up the good work. I'm pretty new to hacking, but there are a few questions I would like to ask.

What is the ANAC for area code 201? What are the issues that contain information about voice mail, COCOTs, telco payphones, and H/P boxes (red, blue, green)? What is a silver box? Would it be possible to form some sort of phreak and hacker directory?

I have noticed that some COCOTs in New York, after you get the unrestricted dialtone, have a long distance block on the line, but I also noticed that they dial some sort of extender owned by the service provider to the COCOT. Here is something fellow readers might want to try: dial a number direct from a COCOT and insert the correct coinage, then if this particular COCOT dials an extender number and it is audible, hook up a telephone pickup microphone (readily available from Radio Shack) to a DTMF decoder and then experiment from there. If the COCOT does not use an extender, just hack it from there. If you are not sure, find out by listening carefully to the COCOT dialing in the background and if it is using an extender then try clipping onto the line or any other way that will work. I hope this has helped some people in the H/P community.

An interesting number is (206) 626-0830. It's some service called Free Phone. Also, there was an interesting number at (201) 644-2300 but all of a sudden all the numbers in 644-23xx are continuously busy with no chance of getting through. The strange thing is that this is not a real busy signal - it is a fake. Now just in case you wanted to know what was so special about this line, it was some sort of text to speech converter that would transfer you to various extensions. There were some interesting extensions like touch tone shell, Bellcore directory, and others.

Whistler

The ANAC for at least part of New Jersey is now the same as New York: 958. In many digital switches, 511 also works. Silver boxes are nothing more than modified touch tone pads that can produce an extra row of tones (A,B,C,D). Other than telco tests and internal military applications, there don't seem to be many uses for these extra tones, at least not yet. The topics you're interested in are covered in some form in nearly all of our issues. One day soon we hope to have a comprehensive index. Hacker directories have been tried before but they're usually filled with inaccuracies and taken as gospel by law enforcement.

Dear *2600*:

This letter is concerning the article written about the cable descrambler. Upon looking for a 75-100pf variable cap., I noticed that there was no one around that carried that large of a variable cap. After talking to some friends who are EE's (electrical engineers), they suggested using a smaller variable cap, and just have a fixed capacitor so that their totals would add up to be within the 75-100 range. Example: using three 22pf fixed caps. and one 4-34pf variable cap. and just tune the variable cap. This works since the total cap. is added up when they are placed in series. I have yet to go out and try this, but I am going to. I will write back with results.

Also, there are MCI phones around here that mute out the mouthpiece. Even when you call up someone else, it re-mutes it again. I cannot use my "quarter" on it. Luckily there are Pac Bell phones it does work on, but I was wondering if anyone knew of a method to get the MCI phone mouthpieces to unmute. Thanks.

Will Chung
San Luis Obispo

Dear *2600*:

A letter in your Spring 1993 issue asked where you can purchase a phone that has A, B, C, and D keys. I work with a family operated business. We manufacture a DTMF encoder which goes into radios, phones, systems, and other applications. The encoders are sold separately. We carry all types of encoders, 12 key and 16 key (which has ABCD).

According to the response someone gave to the letter, it seems that someone at *2600 Magazine* needs one of the keypads with the ABCD. If interested, can we swap a subscription for a keypad?

Pipo Communications
P.O. Box 2020
Pollock Pines, CA 95726
(916) 644-5444

Send a keypad and we'll send you a subscription. How's that?

Potential Discovery

Dear *2600*:

After setting up my answering machine with the wrong number recording (to distract *69's after a scan), I noticed that when a call was placed from a COCOT, the message would be played and the COCOT, recognizing the tones, would hang up and return the caller's money. Blasting the wrong number tones after a conversation gave the same response. Do you know if this is standard of all COCOTs or just my area?

Maldoror
Florida

It's quite likely that some cheaply made COCOTs simply listen for the intercept tones and assume that there was no connection made if they appear. What a wonderful thing.

Security Concerns

Dear *2600*:

A friend of mine was recently considering a *2600*

subscription. "Of course," he said, "it'd probably put me right onto the Fed List."

This brought to mind a few interesting questions. What measures are taken to insure a subscriber's privacy? As the staff of 2600 has always taken an interest in the individual citizen's privacy, I have always assumed you don't sell subscribers' addresses to any kind of mailing lists. But what else is going on? Is there any possibility of outgoing 2600 mail being monitored by some form of federal agency that you're aware of? If so, is there anything being done to prevent it?

Radiation X
California

All we can tell you is that we do everything possible to maintain our subscribers' privacy. We don't show our mailing list to anyone else. It's hard to imagine federal agents jotting down the name and address on every piece of mail we send out as we send out quite a lot.

Dear 2600:

I have been considering subscribing to your zine, 2600, but I have second doubts. I am not resisting to subscribe because of the price, but I have heard a rumor that when/if someone subscribes, they are put on a fed list. I really don't want to have the finger pointed on me if there is some hack around my area. If they really do get a list of subscribers, then the chances of that happening are greatly multiplied by what they usually would be, I'm sure.

Is this just a rumor that 2600 is run by/with the Feds, and subscribers are put on a list, or someone is able to GET a list of subscribers fairly easy?

Bleed The Freak

As we said, we don't show the list to anybody. But really, if 2600 were run by Feds, do you think we'd tell you?

Starting a Meeting

Dear 2600:

I picked up my first copy of 2600 this summer. I'm no hacker but I liked the idea of the "Quarter" and having had a college electronics education, proceeded to assemble it. I ran into timing and frequency problems but by attending the August Citicorp meeting I was able to resolve my problems by working with some very helpful fellows. I would especially like to thank the "Phoenix" for supplying the 6.50 rock as well as his expert technical advice. Seemed like a nice bunch and quite a mellow time was had by all (I thought World War III would break out from what I read in your magazine about previous meetings, but quite the opposite proved true!). Let me know how I can start a meeting in my area if possible, as well as how I can further educate myself in this delightfully sneaky hobby. Thanks much. (I can't make the next meeting as I got sent away to a re-hab.)

Johnny "The Quarter" Burpo
Rubber Room Restinghouse
Upstate, NY

If you want to start a meeting in your area, just contact us with a place that you have in mind. It should be publicly accessible and fairly open. There is also some degree of responsibility which you must take in order to ensure that things go smoothly. The best way to start the process is to call us at (516) 751-2600 and leave a number where you can be reached.

Questions

Dear 2600:

I'm new to phreaking. I was at a recent New York meeting and I want to learn more. I have a few questions:

1) Do blue boxes still work? Is there any safe way to use them? If not, how can you explore the phone system's hidden numbers as you once could with a blue box?

2) What does an ESS or crossbar switch look like? Is it a building? Would it fit on a desk? Is it one switch per prefix? More? Fewer?

3) Are 2600's phones tapped? Will mine be once I've called and faxed you?

4) I'm pleased to report that my Radio Shack experience was nothing like that of The Apple II Evangelist. I just walked in, asked for 43-141, gave them fake info, paid, and walked out. Then again, I didn't buy a switch or any wire, so that may have been it. In any case, perhaps it's best to make separate trips.

5) What should I do to protect myself from searches and seizures at 2600 meetings? Why did people actually give mall security correct information at the November meeting in Washington?

M
Great Neck, NY

Blue box tones still do things so in certain places, a blue box would still work. Within the United States, it's pretty rare however. A crossbar switch is a huge room-sized monster filled with clicking relays, racks, and wires. ESS switches are computers that take up much less room and hardly make any noise. It would be nice if we could answer #3. For more details on meeting strategy, we suggest reading the article on page 35.

Dear 2600:

The article by Bootleg in the Spring issue mentions a cellular service manual marketed through Motorola, item #68-093-00a60. I have tried to acquire this manual through my sources at Motorola Canada, and have been told flat out that it can't be had. Can 2600 or whoever give me a hand in its acquisition?

DY
Weston, ONT

The word is out.

Dear 2600:

In the USA (in Boston I think) there's an anti-car theft tracking device called "lojack". Stolen cars transmit a signal to suitably equipped police cars, so the police know the car you're driving is stolen, but you don't know that they know.

The same system is being introduced in the UK

under a different name very soon and I was wondering about ways to get around it (purely for educational uses). This, of course, excludes finding the damn thing and ripping it out so the cops end up arresting a waste paper bin on a street corner.

Can you or any of your readers help?

Owen
Halifax, UK

Why Hack Cable?

Dear 2600:

Your little magazine blew me away. I used to get the old *TAP* back in the early eighties and I thought this sort of thing was dead. It's a good thing it isn't.

Anyway, your cable TV descrambler is basically just a bandpass or band stop filter that might kill one kind of scrambling, where a "jamming" signal is mixed with the video and your box notches it out. But from the description given, I wouldn't even try to build one - you could come up with any of several circuits. In the future, please give us a schematic; a picture is worth a thousand words.

The Graf and Sheets book on video scrambling is probably the most direct source. Your local library may well have it or can get it for you.

But a more relevant question might be, why hack the cable TV? If you just want to enjoy the trip, great, but the vast majority of the stuff on cable really sucks and you will spend way too much time watching this dogshit. I had free unlimited cable for five years and finally had to physically uproot the cable so as to "dry out".

I intend to keep reading your superior parrot cage liner and I would really like to see more on UNIX. Especially more on how to get "real" UNIX on your PC so you can play with it and also on UNIX history and fundamentals.

Finally, for you crypto-heads: Are any of the old NSA cypher machines (boxes with model numbers like KG- or KY- something) now in the public domain and out there with hackers or hamfesters? I'm given to understand these things were just beautifully built, but then again so are the toys Pantex makes.

A-$tring
Lenexa, KS

How to Learn About Your CO

Dear 2600:

There is a very simple way to learn about your local phone company - go to the central office! Find out where the CO is in your area and head on down with some notebooks and other academic accessories. Tell whoever is working there you are doing a project (for school) on the phone company (b.s. your way through this explanation as necessary), and that you wanted to see just how things work. Act real innocent (and dress nice) and the people there should give you a tour. In my town, I went for multiple tours, learning new things each time. You can see how a call is routed, and get a glimpse of the ESS computers. But

more importantly, you can get great info off of papers on the walls and general bulletins. You can get phone company internal numbers and other useful information. At our New England Telephone office, there were a few terminals with external AT&T dataport modems. So visit your local CO today!

Hook
Belmont, MA

Observations

Dear 2600:

I just wanted to comment on a couple of things from your Autumn 1992 issue. First of all, from your "Shopper's Guide to COCOTs" article, I've found great use of the "combo-box". By eliminating the pretty much worthless beeper circuit in it (which lets you know that a number has been successfully stored in memory), I was able to keep both crystals, as well as two mercury switches to activate the crystals, internal (eliminating the beeper circuit for space). This way, when the dialer is right side up, I get the normal tones, and when I hold it upside down, I get the second crystal (the concept was mentioned in a letter "The Facts on ACD" by Kingpin in the same issue, the extra space was needed so that I could use Radio Shack mercury switches PN 275-040 because I was unable to find anything smaller).

I've found that here, the operators like to come on line and bother you for no apparent reason (I'd have to assume that it happens when I send the tones too quickly one after another), so rather than storing five *'s in the P1 location, it's best to store five *'s and a *pause*. This way you can hit the P1 several times and not have the tones run on too quickly. Speaking of operators coming on line for no reason, I dialed a number on one phone, it asked for 55 cents, so I kicked in three "quarters", after which I got a loud "beep" and an "Operator... please deposit 55 cents". I responded "I already dropped some money in" (not stating an amount) and without another word I was connected to the party I had dialed (which I ended up hanging up on figuring that the conversation would end up being monitored anyway). How odd!

I still haven't found a way to place *local* calls using the red box here, and if anyone has information on how to do it, I'd appreciate it. And as far as I've been able to find, all the COCOTs I've run across here in California are newer models and the "dial the 800 number and let them hang up on you" trick doesn't work at all (the phone resets before you even hear the dial tone). I did find an odd one though where I dialed the 800 number, the phone clicked a couple of times and then gave me a dial tone which I was able to dial from using the COCOT keypad. It was apparently a fluke because I haven't been able to do it again on the same COCOT (or any other COCOT).

Finally, there was some guy who wrote in advertising his BBS (Tin Shack) claiming to offer free elite access to all *2600* readers. Is this guy joking or something? I called the thing and he's got five lines

call forwarded to a single line, real names only, BBS system (disguised to look like a multi-line system), which won't give you access until you've been "callback verified". He even has a list upon logon of the "most downloaded files", which all just happen to be hacker/phreaker files. But upon examination of his file base, the file names listed don't even exist! He even mentioned that he didn't want any "wannabe's, phonies, or pheds", but I can't think of anything a phreaker or hacker would want to do more than give some pseudo BBS his real name and home phone number. Gee, either a very paranoid sysop (in which case he shouldn't advertise his BBS in a hacker magazine to begin with), or something fishy is going on in Canoga Park!

<div align="right">

The Lung
Sunny Southern California
</div>

It is possible to activate the ACTS computer on local calls by coming in on a long distance carrier using a carrier access code. That's one way a red box would work on a local call, if that kind of dialing is allowed in your area. As for bulletin boards, all we can say is that we're not affiliated with any except for our own voice BBS. Anything is possible out there.

New Technology

Dear 2600:

Enclosed is a copy of an advertisement for Modem Mate I and Modem Mate II. "Modem Mate I secures your modem by foiling the hacker. By attaching Modem Mate I to your existing modem, you make your computer system virtually undetectable. When a hacker attempts to call your modem, Modem Mate I intercepts the call by answering with a realistic sounding 'Hello.' The hacker will simply hang up, not realizing that a computer system even exists on the other end. Only someone who knows the proper codes and procedures can gain access to the modem." Modem Mate II only allows predefined calls using Caller ID.

<div align="right">

Julian
Cleveland
</div>

Would we love to hear that "realistic sounding hello".

Modem Back Door

Dear 2600:

I do not know if this is the kind of stuff you are interested in but I have some interesting information on the Digicom 9600 Scout modem and possibly any other Digicom 9600 model.

I bought my modem for $150, a good deal for a 9600 internal modem. Digicom sells a 14.4 modem called the Scout Plus for around $220. They will let you upgrade the Scout to the Scout Plus for $50. The Scout Plus also includes a fax. Well, here is where the fun starts. There is an undocumented command for the modem. It is AT*Z1/AT*Z0. This command turns your 9600 Scout into a 14.4 Scout Plus. I'm not sure if AT*Z1 actually makes the 9600 as fast, but the

modem connects with others at 14.4 and the CPS jumped from 1100 to 1600. That's one hell of an improvement for nothing.

<div align="right">

Antoch
</div>

Foreign Pay Phone Flash

Dear 2600:

In the Autumn 1993 issue of *2600* you asked "does Bhutan have payphones?"

Buried deep in my Bhutan photo files there is a photo of the public payphone booth in the main plaza in downtown Thimphu, Bhutan's capital city. Unfortunately, I don't have enough time to search through unsorted negatives to find a picture for you.

I can tell you, however, that these public payphone booths are all attendant operated by private entrepreneurs - and while they are metered payphones, they are not coin operated; one pays the attendant for the number of message units rung up on the phone.

Bhutan's telephone network is in its infancy stage and being installed primarily with the help of Japanese firms. It is an extremely modern, all-digital network using the latest satellite transmission technologies to bind the remote valleys together with the outside world. It replaces the wireless communications system that is still used in parts of the country where the new network hasn't yet reached. There is no reason to think that coin operated phones won't be appearing on Bhutanese streets in the future, but as of November 1992, there were none.

<div align="right">

LN
APO AE
</div>

Your letter is living proof that there's nothing 2600 readers can't find out.

How to Really Abuse a Payphone

Dear 2600:

Just a while ago I picked up a copy of the Summer '93 issue and since then have read it from cover to cover many times. Reading the article about toll fraud in pay phones, I began to think about using the Macintosh's exceptional sound qualities to produce the required quarter tones. Unfortunately, the Mac I have is too slow to produce the sounds up to speed. I do have a solution for all of the people who don't have the expertise to build the Quarter described. It involves finding a payphone with no one around it (no one!), and with the wire going into the payphone exposed (not in a pvc or metal conduit). Get a knife and strip the wire going in to the phone without cutting it. Next get a set of head phones and cut the cable in half, stripping the wires on the plug end. Use alligator clips to attach the wires together and plug it into a tape recorder. Next record as you put a quarter into the phone, hang up, get your quarter back and rewind the tape. Now all you have to do is play the tape into the phone's mouthpiece for a quarter. Make sure you put electrical tape on the the phone's wires so it doesn't

short out. I have tried this and it does work, but you must make sure that you have the alligator clips on the right wires on the phone cord. You might want to practice the part with the wire stripping at home to get it down. Other than that, have fun!

Peter
Manchaca, TX

Technology Moves Backwards

Dear 2600:

I am writing to you in your capacity as the great unmasker of AT&T's true motives. When the Public Phone 2000's came out, they were the first visible sign of AT&T's rhetoric about being the deliverer of the telecom revolution, global information convergence, etc. I checked my e-mail from airports a few times, just for the novelty value. Not long after they appeared, just about all special functions (modem, information services) were *disabled* on all phones, thus dumbing them down to no more than regular pay phones. No one seems to have commented on this setback. I can only imagine that sprinkling public thoroughfares with avenues for anonymous login and mischief must have suddenly seemed like a risky proposition. Do you know if there were any specific incidents that called this to the telemarketers' attention? Was there any explanation proffered?

Martin

This is the first we've heard of it but it's certainly not the first time a good idea has been discontinued.

Corrections

Dear 2600:

In your Spring '93 issue, there are two wrong numbers in your "Getting Your File" article. I have provided the correct numbers: Trans Union (313) 689-3888 and TRW (214) 390-9191.

Jeff

Bless you.

Dear 2600:

While cruising around text files in the ftp sites on the Internet, I found some information on the logical counterpart to the red box: the green box, which will supposedly return someone's money once they've used a pay phone to call you. The tones are: 2600 Hz for 90 ms, silence for 60 ms, 2600 Hz for 900 ms, and then (it is not specified whether this should follow immediately or after a silence) 1100 Hz+1700 Hz (the duration of this tone is not specified either).

On my Amiga, I've managed to synthesize the right tones, or a near thing to them. I haven't yet used them. The reason is that while I know the point of hacking and phreaking is for a beginner to figure things out on his own by trying them, I also know that one shouldn't go shooting 2600 Hz tones into one's own phone without knowing exactly what one is doing. So I turn to you for advice. Is this safe? Are you going to get into the kind of trouble doing this that you

would blue boxing? It seems like a great alternative to building all my friends Radio Shack red boxes or copies of "The Quarter," but I don't want to screw around without knowing what I'm doing.

King of Birds
Chapel Hill, NC

If you're asking whether engaging in phone fraud from your house is safe, our answer is definitely not. But there's nothing wrong with finding out whether or not it works, at least not in our eyes.

Red Box Concerns

Dear 2600:

Regarding: True Colors, Autumn 1993, Page 9 - in a quote from your section on red boxing, you said... "Use of the above parameters in a real red box is probably the safest method of phreaking, since it forces you to use a coin phone. Use of the modified dialer with the 6.5536 MHz crystal, now very popular in the States, is anything but safe! Do not use!" How do you back up the claim, that using a "real red box" is safer than using the 6.5536 modded phone dialer? They both accomplish the same task, that is simulating a quarter tone, however one just does it more precisely than the other. As long as your call goes through on an operator-free, automated system (e.g. AT&T Long Distance), what difference does it make? Does the extra precision of the "real red box" tones lessen your chances of being detected, and somehow immediately detained at the payphone? I will consent to the fact that red boxing today is very unsafe, at best, but I do not see how using the "real red box" versus using the 6.5536 modded dialer, makes any difference. Please explain.

Annon.

Dear 2600:

First off let me say I've been an avid reader the last couple of years (and missing an issue here and there prompted me to become a subscriber). Your publication has brought me many happy hours. Keep up the excellent work!

What concerned me though, was Billsf's article "True Colors" in your Autumn '93 issue. He says, "Use of the modified dialer with the 6.5536 MHz crystal, now very popular in the States, is anything but safe! Do not use!" There are some local kids here in the (505) area that insist to me that it's perfectly safe as long as you don't try using it with telco personnel online. When I told them about the article one of them told me he'd read it but that it was just unsafe in some places and the equipment here wasn't sensitive enough to detect the red box. Any more information on this?

Nexus

Dear 2600:

I just finished reading the Fall issue of 2600 and I read the article on various color boxes. In the sub-article about redboxes, it mentioned that red boxing was very dangerous. What is this shit? Do you know something that I don't? A lot of red boxing goes on in 612 and I have never heard of anyone actually getting

charged with any crime for for red boxing. Although the telco has become more privy to red boxing activities, nothing has come of it, so far.

Concerned

As explained in a letter in our Winter 1991-92 issue, that particular modification will always produce tones of 1721.0 Hz and 2208.1 Hz and the timing will always be 54.62 mS on and off. The concern is that theoretically it would not be difficult for those unique traits to be looked for by the phone companies. We're unaware of this ever actually happening.

How Easy It Is

Dear *2600*:

My school is running on an Ethernet, ICLAS system, (IBM Classroom Administration). It is a real easy network to hack, and the thing that happened a few weeks back that really showed me how loose the security was, was this: A hacker wannabe logged in to the network as sysop with a valid password when, lo and behold, the teacher was 10 feet behind him. With this ICLAS software when you login as sysop or supervisor, it makes this really *loud* annoying sound. I am really surprised that the teacher, who is also the computer coordinator for our school, did not notice. It just goes to show that even with a title like "Network Computer Coordinator" people can't do a simple job of watching if someone logs in as sysop *right in front of your face!*

CopKiller
Bethesda, MD

Dear *2600*:

I just read the review of NTPASS in the Autumn 1993 issue, and I must tell you that there is a much better and cheaper way to accomplish the same results or better. I have an NLM on my BBS (see Phrack #40) which will create a temporary SUPERVISOR equivalent account with a name that you specify.

The name of this wonderful NLM is TEMPSUP, and all you have to do is stick this puppy on a floppy and type LOAD A:TEMPSUP <account> at the server. An account will be inserted into the system with SUPERVISOR privileges, which will allow you to create an account using SYSCON, among other things.

The advantages to this are obvious over NTPASS... no change to the SUPERVISOR password, doesn't generate a broadcast, and it doesn't cost you $245. Plus, you don't have to call the company every time you want to use it.

This program is, of course, solely to demonstrate how insecure an unlocked NetWare 3.x file server is, and should never be used for any other purpose!

Erreth Akbe

Bypassing Restrictions

Dear *2600*:

First off let me say that *The Hacker Quarterly* is one of the best publications I have read in a long time. It talks of all the things that Mr. Computer Science Prof should have told you but wouldn't, most likely because it might endanger his/her control over students. However, I am sending this mail mainly because our neo-Nazi sysadmin (I don't really know if he is a Nazi, or just scared of free access to information) has so severely restricted our access to the Internet that most of the newsgroups are academic related or tea-time conversation topics. Anything that might pertain to socially deviant behavior (hacking, learning something not government regulated, etc.) has been deleted. In fact this morning over 1000 newsgroups have been screened out from our system. Is there any way for a person to get around sysadmin control over net access for users or access Internet before the screening process goes into effect?

I have tried to get more info on Internet, but even anything more than a story-like explanation of the system is impossible around here. Shameful, doesn't even trust his own computer science students.

Any help would be greatly appreciated.

Lost and regulated in
NB, Canada

Your story is not unique, unfortunately. Oftentimes, people in charge feel the need to restrict or cut off access. Apart from making sure we never turn into people like that, the best thing we can do is look for ways around it. Since you already have access to the Internet, it shouldn't be too difficult to telnet out to another site that isn't as restrictive. Perhaps you could trade accounts with a student at another school or subscribe to a cheap public UNIX system. With the Internet in its present form, anything is possible.

A Way Around Caller ID?

Dear *2600*:

I recently finished last issue's article on Caller ID. After reading this interesting piece, I came up with a thought for jamming CID:

1) Call xxx-xxxx and hang up immediately before you hear the ring. This will send a ring through to the called party, prompting their CID unit to answer, provided CID uses a normal modem hookup. It will attempt to connect, even though there is nothing to connect to.

2) Call xxx-xxxx *immediately* after you hang up. If you use an autodialer and time this right you should be able to get through with two or three seconds between the calls. The called party will receive the ring, but the CID unit will not have recovered in time to receive the signal from the telco. This would allow a quick and easy way around Caller ID, especially if *67 is not available. I would try this myself but Caller ID is not yet available in my area (i.e., New York Tel hasn't flipped the right switch yet.)

Levendis

Sorry. It doesn't work. The Caller ID box is in a state of perpetual receiving; it doesn't have to make a connection. The data is sent between the first and second rings and the Caller ID box is designed for that one special moment.

School Phone System

Dear *2600*:

My school's got an interesting phone system. Because all the numbers on campus start with the same two digits (2 and 5), every phone on campus is set so you only need to dial the last five digits to get where you need to go. For example, for dorms you dial 3-xxxx, and offices can be had by dialing 4-xxxx and 5-xxxx.

What's interesting is that this town also has other phone exchanges, such as 257 and 256. However, to dial these exchanges you need to hit "9" first, and then dial the full number. To dial toll free numbers, you hit "7" and then the full number - "9" also works for this.

I'm fairly sure the school has its own switching system, but it doesn't quite make sense. I've tried to hit both "9" and "7" at public campus phones, with no luck whatsoever. It only works on phones in the dorms. Hitting either of those at public phones produces an alarm of alternating high and low pitched tones.

What hacking potential exists? Can you please explain how this works? It's fairly interesting, and I'm quite curious how the system differentiates between the phone in my room and the public speakerphone outside my building.

lexis
cyberspace

There is plenty of hacking potential in any system like that and it involves dialing all sorts of other numbers. You have to keep looking until you find something that acts differently. Your room phone has a different class of service as a public hall phone so the restriction level is not the same. No doubt there are other restriction levels as well.

2600 Wins Over Class

Dear *2600*:

I recently picked up my first copy of your magazine and couldn't put it down for days. It is the source for information I have been looking for that you can't find anywhere else. By showing how different systems can be manipulated, I have gained a much better understanding in their operation. One of my current classes is an operating systems class in which I am studying how a UNIX-like system works. By demonstrating a shell process that uses many of the features available in UNIX, your article gave me a much more tangible grasp of the system than my class ever could. Thanks for the enjoyment.

BG
Georgetown, TX

The Honesty Test

Dear *2600*:

I just finished perusing your Autumn '93 issue, and immediately wished it had arrived at the local Barnes and Noble just a week earlier. That week, while applying for a job at an arcade of all places, I was asked to (and took) one of the very honesty tests you described in your latest issue.

The manager I submitted my application to referred to the test (formally called a "PSI Examination") as a personality evaluation, completed so the company could ascertain "what kind of a person I am." Previous to taking this test I had not been familiar with this type of evaluation, so I went in knowing and expecting nothing. Almost immediately after reading the first few questions, I pegged the "test" for what it was, with its misleading questions geared to force one to trip up.

Unfortunately, even realizing the testmaker's motives, I screwed up according to your article. I attempted to answer The Questions in a way that normal, mostly honest people would (even down to choosing the lowest denomination on the question referring to the approximate value of all monies or properties taken from a non-job location.) On a better note, the job wasn't all that important to begin with, and it fazes me not that an honesty test might have lost me a job with this company. Incidentally, the manager of the arcade "Tilt", had no clue how the test was scored or evaluated when I inquired. What she did know was that the possible answers are all assigned a number, and the numbers chosen by the test-taker are recorded and read over the phone to the district headquarters of the company. The company presumably feeds the numbers into its computer and out pops one's rating as an honest individual. There was also a free-form written part of the test where the testmakers asked if there were any inconsistencies and/or confusing questions on the test that we would like to comment on. Needless to say, I wrote them an essay....

The Vampire Gabrielle

PASSAGEWAYS TO THE INTERNET

Eindhoven University, Netherlands
+31 40 430032 300-9600
+31 40 435049 300-2400
+31 40 455215 2400

University of Manitoba
204-275-6100 2400 or less
204-275-6132 9600 & 14.4

University of Washington
206-685-7724 2400
206-685-7796 9600 and above

Columbia University, New York, NY
212-854-1812 1200-2400
212-854-1824 1200-2400
212-854-1896 1200-9600

New York University
212-995-3600 2400 and lower
212-995-4343 2400 and up

Southern Methodist University, TX
214-368-1721
214-368-3131

University of Pennsylvania
215-898-0834 9600+
215-898-4781 1200
215-898-6184 2400

Case Western Reserve University, OH
216-368-8888

South Bend, IN
219-237-4116 300-2400
219-237-4186 300-2400
219-237-4413 300-2400
219-262-1082 300-2400

Fort Wayne, IN
219-481-6905 300-1200

Northwest, IN
219-980-6653 300-2400

219-980-6866 300-2400

Purdue University, IN
219-989-2900 VAX

University of Maryland, College Park, MD
301-403-4444 v.32 bis

Illinois State University
309-438-8070 9600 E71 - ISUNET
309-438-8200 9600 N81 - LANACS

Depaul University, IL
312-362-1061 9600 E71

Cisco Terminal Servers, Chicago
312-413-3200 7 bits mark parity
312-413-3212 8 bits no parity

Ball State University, IN
317-285-1000
317-285-1108

Kokomo, IN
317-455-2426 300-1200

Purdue University, IN
317-494-6106

Indiana University East
317-973-8265 300-1200

University of Central Florida
407-823-2020

University of Maryland, Baltimore, MD
410-333-7447 v.32 bis
410-788-7854 2400

University of Pennsylvania, Oakland
412-621-2582 300-2400
412-621-5954 300-2400

University of Pennsylvania, Greensburg
412-836-7123 300-2400

412-836-9997 300-2400

University of Pennsylvania

412-938-4063 .

Laval University, MO

418-656-3131 ST/V32 bis

Laval University, MO

418-656-7700 2400

University of New Mexico

505-277-5950 IBM 300-2400

505-277-6390 IBM 7171 300-1200

505-277-9990 CDCN 300-2400

505-277-9993 CDCN 9600

505-277-9994 CDCN 1200-9600

**Southwest Texas
State University**

512-245-2631

University of Waterloo, ONT

519-725-5100

Simon Fraser University, BC

604-291-4700 2400

604-291-4721 2400 (v.42bis)

604-291-5947 14.4

University of Victoria, BC

604-721-2839

604-721-6148

University of Kentucky

606-258-1200 1200

606-258-1996 v.32 bis or lower

606-258-2400 2400

Eastern Kentucky University

606-622-2340 2400-9600

Princeton University, NJ

609-258-2530 2400 OUTDIAL

Princeton University, NJ

609-258-2630 9600 OUTDIAL
(ATDT9 7d 5d code)

**Rider College,
Lawrenceville, NJ**

609-896-3959 9600

Vanderbilt University, TN

615-322-3551 2400

615-322-3556 2400

615-343-1524 High speed (v.32
bis v.42 bis)

**University of Tennessee
at Knoxville**

615-974-3021

615-974-4282

615-974-6711

615-974-6741

615-974-6811

615-974-8131

**Northeastern University,
Boston, MA**

617-373-8660 14.4

**University of Nevada,
Las Vegas**

702-895-3955

**George Mason University,
Fairfax, VA**

703-993-3536

**Humboldt State University,
Arcata, CA**

707-826-4621 2400

University of Houston

713-749-7700 300-1200
DECserver

713-749-7740 2400 DECserver

713 749-7750 19 200 Xyplex

**Colorado College,
Colorado Springs, CO**

719-389-6574

719-389-6759

719-389-6889

719-389-6890

**University of California
at Santa Barbara**

805-893-8400 300-2400

Bloomington, IN

812-855-4211 300-1200

812-855-4212 1200-2400

812-855-9656 1200-2400

812-855-9681 9600

Southeast, IN
812-944-8725 300-2400
812-944-9820 300-2400
812-945-6114 300-1200
University of Pennsylvania, Johnstown
814-269-7950 300-2400
814-269-7970 300-2400
University of Pennsylvania, Bradford
814-362-7558 300-2400
814-362-7597 300-2400
University of Pennsylvania, Titusville
814-827-4486 300-2400
Sherbrooke University, QUE
819-569-9041 2400
819-821-8025 Zyxell
Bishop University, QUE
819-822-9723 2400
Michigan Tech
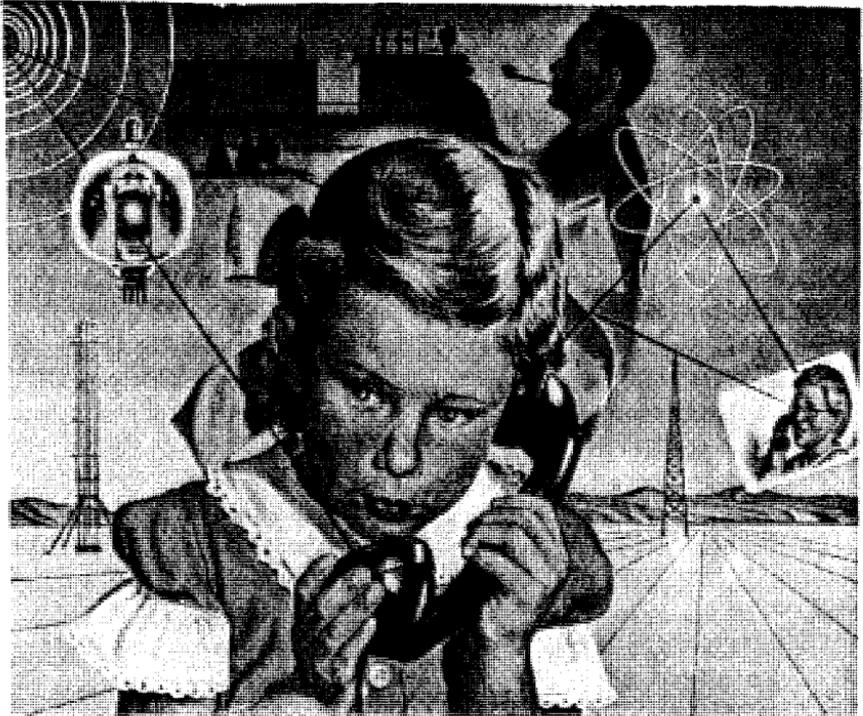906-487-1530
Pomona/Pitzer College, CA
909-621-8455
Sacramento State, CA
916-456-1441
Wake Forest University, NC
919-759-5814

HACKERS FOR "BOB"

MORE MEETING ADVICE

by The Judicator of D.C.

"Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances."

"All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

These two paragraphs are the First and Fourteenth Amendments to the Constitution. The First says that as a citizen you have a legal right to peaceably assemble and the *federal* government cannot take that right away from you. It does not say that a State has to allow you to assemble. This was the case until June 9, 1868. The Fourteenth Amendment applied the Constitution and its protections to the States. Before this, each individual State could prohibit the free assembly of persons.

Presently, we can gather on public space and discuss whatever subject comes to mind. There are exceptions to this, however. You cannot stand on the corner of Broadway and discuss the violent overthrow of the government. Nor can you discuss the intimate details of your love life.

So what have we learned? The First and Fourteenth amendments allow us to gather for meetings anywhere we want, and no one can stop us. Right? Wrong! The Constitution applies to governments and is limited in its application of powers to private industry. For example, in Washington, D.C. there is a law called Unlawful Entry. It states that any person who willfully remains on any property after being asked to leave by the rightful owner or person then in charge is guilty of a misdemeanor and subject to arrest. The constitutionally of this law has been tested and affirmed. Your local jurisdiction may have a law similar to this under different names (Criminal Trespass or Trespassing). The easiest way to find out is to pick up a (pay) phone and call your local police department. Ask them. Don't be afraid. You cannot get in trouble for being a concerned citizen.

What is the basis for these laws? Consider this: You own a beautiful piece of property that overlooks a great seascape. People are using your property for religious gatherings and artistic inspiration without your permission. If the constitution applied to private property you couldn't stop these people. But since it does not, you can have them removed or arrested, if your local law allows.

Of the 20 *2600* meetings that take place throughout the U.S., 13 take place in malls, five in other private places, and two are unknown to this writer. Citicorp Center and Amtrak are private institutions. It sounds like the Galleria on South University and Union Station are also private but I cannot tell by their names. Malls are almost exclusively privately owned. I cannot recall seeing a government owned mall lately. Being privately owned, the rightful owner or the person then in charge can ask you to leave (depending on your local law). The sad thing is that you will have to follow his directions and then follow up with a civil suit. What you base that suit on is another problem. It would not fall under a racial bias, nor a gender bias. If you do not leave at their request, you leave yourself vulnerable to arrest. What does this mean to us dedicated 2600ers?

When you are attending a *2600* meeting, be sure to know the law in your area. If you are hosting a party or attending a party at a mall or on other private property, be informed. When approached by a security officer, police, or the management, don't go on blabbering how the First Amendment allows you to gather any place you like. It *doesn't*. Instead, do the following:

1) If the area you are meeting in has stores, purchase some merchandise that is sold in these establishments *prior* to your meeting. When approached by the charging person, explain that you have just made purchases from the establishments. Does he/she really want to throw out a buying customer?

2) Explain to the charging person your intentions of the gathering. Don't forget these points: You chose this area because of a) its successful reputation, b) its great location, c) the fine merchants, d) all of the above. This sounds like a bunch of crap (which it is), but it will strengthen any court case you bring about in the future.

3) As a last resort, inform them of your research into the local laws and ordinances of

trespassing. If possible, give them a copy of the law. Ask them to have the police respond. When an officer arrives, explain that this security officer is unlawfully asking you to leave when you wish to stay. But, if a police officer asks you to leave, *do so!* Do not ask for his name and badge number; you can see that. If you can't, find his car and write down the ID number. Then call the station he is from and ask to speak to a supervisor. Inform the supervisor of the squad car number, the description of the officer, and what happened. Make a written complaint if possible.

You must remember to be *calm* and *rational* during these proceedings. If not, you could be placed under arrest for disorderly conduct or some such. Although not what you were originally bothered with, the security officer has succeeded in his task to get rid of you.

2600 meetings are great ideas for the free exchange of ideas and are, in theory, what this country was founded upon. *But,* they are not worth getting arrested for if you are wrong. There are plenty of legal places to hold meetings. Try a public park or parking area. Call your local seat of government and ask to use their meeting room. How about that for irony! Using a government establishment to hold a *2600* meeting! Under the First Amendment, they cannot deny you. Look at the court record of such groups as the KKK. They meet and march on any *public* space they like with the proper permits. 2600ers can do the same.

In writing this, a few friends have raised valid questions, which I am sure other 2600ers will ask. What about conspiring to commit a crime? Isn't meeting to discuss committing crimes illegal? Yes and no.

Conspiracy is defined as an agreement to perform an illegal act. Most states, in defining the acts that constitute conspiracy, require an overt act. The best definition would be an example itself. John and Bill are eating dinner while discussing robbing a bank. They talk about the getaway car, what type of gun to use, and the best time to commit the robbery. Both finish dinner and go their separate ways until they meet at work the next day. John tells Bill he bought the gun and obtained the getaway car. As of this moment, John and Bill can be arrested for conspiring to commit a bank robbery.

The First Amendment protects our freedom of speech to a degree. If John and Bill had not done anything else but talk about the bank robbery, no harm could have come to either of them. Since John purchased the gun and getaway car, he showed his intentions to follow through with their plan. This was the overt act. This was what got

them into trouble. Both can be arrested, but the case of innocence for Bill is very strong. It must be proven in court, requiring the expense of thousands of dollars for an attorney. A court-appointed attorney can be assigned, depending on financial need, with his/her cost coming out of taxpayer money.

One can see the parallels of this story to that of *2600* meetings. Yes, 2600ers gather in places to discuss illegal acts. Are they conspiring to commit these offenses? Maybe. It depends upon each individual person. Let's say a conversation was entered dealing with the sale, not possession, of proprietary information. No one from the discussion group does anything to forward the idea of the sale. Is this legal? Yes, under the First Amendment. What if one of the members contacts an underground fence offering the document for sale based on information he discussed at the meeting? Is this conspiracy? I'm sure Law Enforcement could substantiate enough evidence to bring about the arrests of the discussion group, but would they have enough evidence to prove "beyond a reasonable doubt" their case in court? Maybe not. However, they have succeeded in harassing the group and costing both the taxpayers and the group members several thousands of dollars in court and attorney's fees. Do you have any means of redress? You could try to sue for damages incurred due to the inconvenience of the arrest, but if the Law Enforcement agency did its job correctly, you will not win.

I cannot speak for all states but the basis for most laws are the same. As mentioned earlier, call your local police or the nearest state police office. You cannot get in trouble for asking. Also ask for examples and a written reply.

The writer is "heavily involved" with the law enforcement community.

BOOK REVIEW

Virtual Reality
by Howard Rheingold
Published by:
Touchtone, Simon & Schuster Inc.
New York, NY
Distributed in Canada by:
General Publishing
Don Mills, ONT
416 pages, $12.00 (United States)
Review by W. Ritchie Benedict

The first time I ever heard the term "virtual reality" was not in connection with computers, but was in reference to the mental world we all carry around wi us in our heads. Which, I suppose, does pretty we describe what happens on the latest frontier in computer technology. About a month ago, I had th opportunity to observe virtual reality in action at a display at the Calgary Stampede. There were thre enclosed cockpits with the participants wearing headsets that cut them off from their surroundings. TV monitors depicted the scenes transmitted into the headsets, which in this instance involved a game with a lot of stairways. One participant became so enthralled in attempting to zap his opponent that he totally forgot there was an audience "outside" and hi language left a lot to be desired. Such is the power of this ultra-futuristic technology.

We are still a long way from the realism of the holodeck depicted on TV's *Star Trek: The Next Generation*, but at the present rate, it won't be long before we see extraordinary developments. After all, in only 15 years, we have gone from the first crude video game "Pong" to CD-ROM with stereo sound and prodigious amounts of memory. The author in this first detailed exploration of the "Virtual Age" is one Howard Rheingold, the editor of the *Whole Earth Review*, who (appropriately) lives in the San Francisco Bay area. He traces the dawn of the new era back to the Cinerama/ Cinemascope/ 3D movies of the 1950's. A man named Morton Helig actually made plans for an "Experience Theatre" back in 1955, and patented a head-mounted stereophonic television display in 1960. Helig is still alive, in his sixties, and is delighted to see the seeds of his dream coming to fruition. William Gibson, the well-known science-fiction writer, had the honor of originating the word cyberspace (in his 1984 novel *Neuromancer*), which is now used widely to describe the internal computer-generated reality that is the subject of this book. The point is made that the computer industry in its early years was not oriented towards the highly creative approaches that virtual reality needs.

I recall a computer demonstration I attended back in the very early 80's where you could touch the screen to choose an option. This in turn led to glove-mounted sensors. The author was one of the first to try a NASA prototype in 1988 that demonstrated the amazing potential capabilities of the system - the major drawback being a time-lag when the operator moved his hand. So, what good is it all, other than the ultimate in video-game realism? Well, for starters, it holds promise for architectural design, flight training, planetary exploration, medical and chemical research, and even simulated sex! There are currently moves underway to bring the dimension of tactile sensation to the simulations, possibly by means of a lightweight body suit with many sensors built into it. There is undoubtedly going to be a race (already in the very early stages) between Japan and America to see who will reap the glory (and the profits) of producing the first viable system for the public. There are applications to the amusement park field so Disney will naturally be interested. Finally, virtual reality may change our perceptions of what we think of as "real" forever, making it hard to determine what is an illusion and what is not. Rheingold does an excellent job of detailing all of the various elements that go into producing virtual reality. He even mentions a couple of potential dangers in the concluding chapter. What if the virtual worlds turn out to be so seductive that people will want to spend *all* of their time there instead of in the so-called "normal" reality? Addiction in other words. Then there is the weapons potential - it has always been easier to kill people if you are distanced from them by machines, as any bomber pilot from World War II will tell you. A dictator could zap rebels with a laser-mounted cannon combined with a virtual/robot system, without ever leaving the comfort of his presidential palace many miles away. However, we must not fall into the trap of arbitrarily rejecting new technology just because of the possibility of misuse. There is a huge potential for paralyzed or physically handicapped individuals to experience things that would otherwise be closed to them forever. It seems that eventually we may never have to leave our homes in order to perform work, entertain ourselves, or learn new skills. Huxley's *Brave New World* may yet prove to be prophetic. Ultimately it may change the way we look at ourselves as human beings or perhaps we will start to view ourselves as hybrids between human and computer. It will be that profound a change.

The book gives the average person a stunning insight into just how far along the road to a science fiction reality we are. Ironically, it uses the very earliest virtual reality device to do so - i.e., the printed word. Well, everyone has used reading at one time or another to turn off the annoyances of the "outside". The difference is that in the future there will be a new and fantastic means of doing so. This is a book that will leave you gasping - don't miss it!
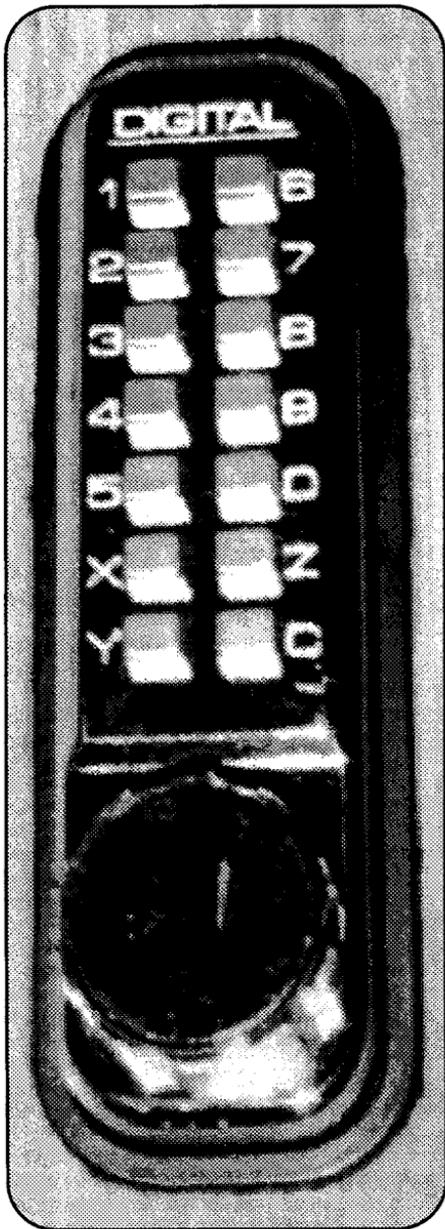
DIGITAL LOCKS
ANOTHER CONTRADICTION IN TERMS

With only 1287 possible combinations, the fully mechanical Digital locks are sure to be a hit with the kids. Even still, we hacked one (the one pictured in fact) and found the experience dull if not plodding. Call us sentimental, but for some reason, it just wasn't as fun as cracking a Simplex lock. Besides, they're hard as hell to find in the first place.

The lock's combination is always five alphanumeric characters long, chosen from a possible ten digits (0-9) and three letters (X-Z), and the order doesn't matter. Be sure to press the "C" before each combo entry to clear the lock.

01234	012XY	01459	0159Z
01235	012XZ	0145X	015XY
01236	012YZ	0145Y	015XZ
01237	01345	0145Z	015YZ
01238	01346	01467	01678
01239	01347	01468	01679
0123X	01348	01469	0167X
0123Y	01349	0146X	0167Y
0123Z	0134X	0146Y	0167Z
01245	0134Y	0146Z	01689
01246	0134Z	01478	0168X
01247	01356	01479	0168Y
01248	01357	0147X	0168Z
01249	01358	0147Y	0169X
0124X	01359	0147Z	0169Y
0124Y	0135X	01489	0169Z
0124Z	0135Y	0148X	016XY
01256	0135Z	0148Y	016XZ
01257	01367	0148Z	016YZ
01258	01368	0149X	01789
01259	01369	0149Y	0178X
0125X	0136X	0149Z	0178Y
0125Y	0136Y	014XY	0178Z
0125Z	0136Z	014XZ	0179X
01267	01378	014YZ	0179Y
01268	01379	01567	0179Z
01269	0137X	01568	017XY
0126X	0137Y	01569	017XZ
0126Y	0137Z	0156X	017YZ
0126Z	01389	0156Y	0189X
01278	0138X	0156Z	0189Y
01279	0138Y	01578	0189Z
0127X	0138Z	01579	018XY
0127Y	0139X	0157X	018XZ
0127Z	0139Y	0157Y	018YZ
01289	0139Z	0157Z	019XY
0128X	013XY	01589	019XZ
0128Y	013XZ	0158X	019YZ
0128Z	013YZ	0158Y	01XYZ
0129X	01456	0158Z	02345
0129Y	01457	0159X	02346
0129Z	01458	0159Y	02347

Digital locks:
Not as fun as Simplex.

02348	0257Y	0349Y	0457Y	057XZ	1237X	1268Z	1359X
02349	0257Z	0349Z	0457Z	057YZ	1237Y	1269X	1359Y
0234X	02589	034XY	04589	0589X	1237Z	1269Y	1359Z
0234Y	0258X	034XZ	0458X	0589Y	12389	1269Z	135XY
0234Z	0258Y	034YZ	0458Y	0589Z	1238X	126XY	135XZ
02356	0258Z	03567	0458Z	058XY	1238Y	126XZ	135YZ
02357	0259X	03568	0459X	058XZ	1238Z	126YZ	13678
02358	0259Y	03569	0459Y	058YZ	1239X	12789	13679
02359	0259Z	0356X	0459Z	059XY	1239Y	1278X	1367X
0235X	025XY	0356Y	045XY	059XZ	1239Z	1278Y	1367Y
0235Y	025XZ	0356Z	045XZ	059YZ	123XY	1278Z	1367Z
0235Z	025YZ	03578	045YZ	05XYZ	123XZ	1279X	13689
02367	02678	03579	04678	06789	123YZ	1279Y	1368X
02368	02679	0357X	04679	0678X	12456	1279Z	1368Y
02369	0267X	0357Y	0467X	0678Y	12457	127XY	1368Z
0236X	0267Y	0357Z	0467Y	0678Z	12458	127XZ	1369X
0236Y	0267Z	03589	0467Z	0679X	12459	127YZ	1369Y
0236Z	02689	0358X	04689	0679Y	1245X	1289X	1369Z
02378	0268X	0358Y	0468X	0679Z	1245Y	1289Y	136XY
02379	0268Y	0358Z	0468Y	067XY	1245Z	1289Z	136XZ
0237X	0268Z	0359X	0468Z	067XZ	12467	128XY	136YZ
0237Y	0269X	0359Y	0469X	067YZ	12468	128XZ	13789
0237Z	0269Y	0359Z	0469Y	0689X	12469	128YZ	1378X
02389	0269Z	035XY	0469Z	0689Y	1246X	129XY	1378Y
0238X	026XY	035XZ	046XY	0689Z	1246Y	129XZ	1378Z
0238Y	026XZ	035YZ	046XZ	068XY	1246Z	129YZ	1379X
0238Z	026YZ	03678	046YZ	068XZ	12478	12XYZ	1379Y
0239X	02789	03679	04789	068YZ	12479	13456	1379Z
0239Y	0278X	0367X	0478X	069XY	1247X	13457	137XY
0239Z	0278Y	0367Y	0478Y	069XZ	1247Y	13458	137XZ
023XY	0278Z	0367Z	0478Z	069YZ	1247Z	13459	137YZ
023XZ	0279X	03689	0479X	06XYZ	12489	1345X	1389X
023YZ	0279Y	0368X	0479Y	0789X	1248X	1345Y	1389Y
02456	0279Z	0368Y	0479Z	0789Y	1248Y	1345Z	1389Z
02457	027XY	0368Z	047XY	0789Z	1248Z	13467	138XY
02458	027XZ	0369X	047XZ	078XY	1249X	13468	138XZ
02459	027YZ	0369Y	047YZ	078XZ	1249Y	13469	138YZ
0245X	0289X	0369Z	0489X	078YZ	1249Z	1346X	139XY
0245Y	0289Y	036XY	0489Y	079XY	124XY	1346Y	139XZ
0245Z	0289Z	036XZ	0489Z	079XZ	124XZ	1346Z	139YZ
02467	028XY	036YZ	048XY	079YZ	124YZ	13478	13XYZ
02468	028XZ	03789	048XZ	07XYZ	12567	13479	14567
02469	028YZ	0378X	048YZ	089XY	12568	1347X	14568
0246X	029XY	0378Y	049XY	089XZ	12569	1347Y	14569
0246Y	029XZ	0378Z	049XZ	089YZ	1256X	1347Z	1456X
0246Z	029YZ	0379X	049YZ	08XYZ	1256Y	13489	1456Y
02478	02XYZ	0379Y	04XYZ	09XYZ	1256Z	1348X	1456Z
02479	03456	0379Z	05678	12345	12578	1348Y	14578
0247X	03457	037XY	05679	12346	12579	1348Z	14579
0247Y	03458	037XZ	0567X	12347	1257X	1349X	1457X
0247Z	03459	037YZ	0567Y	12348	1257Y	1349Y	1457Y
02489	0345X	0389X	0567Z	12349	1257Z	1349Z	1457Z
0248X	0345Y	0389Y	05689	1234X	12589	134XY	14589
0248Y	0345Z	0389Z	0568X	1234Y	1258X	134XZ	1458X
0248Z	03467	038XY	0568Y	1234Z	1258Y	134YZ	1458Y
0249X	03468	038XZ	0568Z	12356	1258Z	13567	1458Z
0249Y	03469	038YZ	0569X	12357	1259X	13568	1459X
0249Z	0346X	039XY	0569Y	12358	1259Y	13569	1459Y
024XY	0346Y	039XZ	0569Z	12359	1259Z	1356X	1459Z
024XZ	0346Z	039YZ	056XY	1235X	125XY	1356Y	145XY
024YZ	03478	03XYZ	056XZ	1235Y	125XZ	1356Z	145XZ
02567	03479	04567	056YZ	1235Z	125YZ	13578	145YZ
02568	0347X	04568	05789	12367	12678	13579	14678
02569	0347Y	04569	0578X	12368	12679	1357X	14679
0256X	0347Z	0456X	0578Y	12369	1267X	1357Y	1467X
0256Y	03489	0456Y	0578Z	1236X	1267Y	1357Z	1467Y
0256Z	0348X	0456Z	0579X	1236Y	1267Z	13589	1467Z
02578	0348Y	04578	0579Y	1236Z	12689	1358X	14689
02579	0348Z	04579	0579Z	12378	1268X	1358Y	1468X
0257X	0349X	0457X	057XY	12379	1268Y	1358Z	1468Y

1468Z	167XZ	2359X	2468Z	267XZ	347XY	3789Z	4789Z
1469X	167YZ	2359Y	2469X	267YZ	347XZ	378XY	478XY
1469Y	1689X	2359Z	2469Y	2689X	347YZ	378XZ	478XZ
1469Z	1689Y	235XY	2469Z	2689Y	3489X	378YZ	478YZ
146XY	1689Z	235XZ	246XY	2689Z	3489Y	379XY	479XY
146XZ	168XY	235YZ	246XZ	268XY	3489Z	379XZ	479XZ
146YZ	168XZ	23678	246YZ	268XZ	348XY	379YZ	479YZ
14789	168YZ	23679	24789	268YZ	348XZ	37XYZ	47XYZ
1478X	169XY	2367X	2478X	269XY	348YZ	389XY	489XY
1478Y	169XZ	2367Y	2478Y	269XZ	349XY	389XZ	489XZ
1478Z	169YZ	2367Z	2478Z	269YZ	349XZ	389YZ	489YZ
1479X	16XYZ	23689	2479X	26XYZ	349YZ	38XYZ	48XYZ
1479Y	1789X	2368X	2479Y	2789X	34XYZ	39XYZ	49XYZ
1479Z	1789Y	2368Y	2479Z	2789Y	35678	45678	56789
147XY	1789Z	2368Z	247XY	2789Z	35679	45679	5678X
147XZ	178XY	2369X	247XZ	278XY	3567X	4567X	5678Y
147YZ	178XZ	2369Y	247YZ	278XZ	3567Y	4567Y	5678Z
1489X	178YZ	2369Z	2489X	278YZ	3567Z	4567Z	5679X
1489Y	179XY	236XY	2489Y	279XY	35689	45689	5679Y
1489Z	179XZ	236XZ	2489Z	279XZ	3568X	4568X	5679Z
148XY	179YZ	236YZ	248XY	279YZ	3568Y	4568Y	567XY
148XZ	17XYZ	23789	248XZ	27XYZ	3568Z	4568Z	567XZ
148YZ	189XY	2378X	248YZ	289XY	3569X	4569X	567YZ
149XY	189XZ	2378Y	249XY	289XZ	3569Y	4569Y	5689X
149XZ	189YZ	2378Z	249XZ	289YZ	3569Z	4569Z	5689Y
149YZ	18XYZ	2379X	249YZ	28XYZ	356XY	456XY	5689Z
14XYZ	19XYZ	2379Y	24XYZ	29XYZ	356XZ	456XZ	568XY
15678	23456	2379Z	25678	34567	356YZ	456YZ	568XZ
15679	23457	237XY	25679	34568	35789	45789	568YZ
1567X	23458	237XZ	2567X	34569	3578X	4578X	569XY
1567Y	23459	237YZ	2567Y	3456X	3578Y	4578Y	569XZ
1567Z	2345X	2389X	2567Z	3456Y	3578Z	4578Z	569YZ
15689	2345Y	2389Y	25689	3456Z	3579X	4579X	56XYZ
1568X	2345Z	2389Z	2568X	34578	3579Y	4579Y	5789X
1568Y	23467	238XY	2568Y	34579	3579Z	4579Z	5789Y
1568Z	23468	238XZ	2568Z	3457X	357XY	457XY	5789Z
1569X	23469	238YZ	2569X	3457Y	357XZ	457XZ	578XY
1569Y	2346X	239XY	2569Y	3457Z	357YZ	457YZ	578XZ
1569Z	2346Y	239XZ	2569Z	34589	3589X	4589X	578YZ
156XY	2346Z	239YZ	256XY	3458X	3589Y	4589Y	579XY
156XZ	23478	23XYZ	256XZ	3458Y	3589Z	4589Z	579XZ
156YZ	23479	24567	256YZ	3458Z	358XY	458XY	579YZ
15789	2347X	24568	25789	3459X	358XZ	458XZ	57XYZ
1578X	2347Y	24569	2578X	3459Y	358YZ	458YZ	589XY
1578Y	2347Z	2456X	2578Y	3459Z	359XY	459XY	589XZ
1578Z	23489	2456Y	2578Z	345XY	359XZ	459XZ	589YZ
1579X	2348X	2456Z	2579X	345XZ	359YZ	459YZ	58XYZ
1579Y	2348Y	24578	2579Y	345YZ	35XYZ	45XYZ	59XYZ
1579Z	2348Z	24579	2579Z	34678	36789	46789	6789X
157XY	2349X	2457X	257XY	34679	3678X	4678X	6789Y
157XZ	2349Y	2457Y	257XZ	3467X	3678Y	4678Y	6789Z
157YZ	2349Z	2457Z	257YZ	3467Y	3678Z	4678Z	678XY
1589X	234XY	24589	2589X	3467Z	3679X	4679X	678XZ
1589Y	234XZ	2458X	2589Y	34689	3679Y	4679Y	678YZ
1589Z	234YZ	2458Y	2589Z	3468X	3679Z	4679Z	679XY
158XY	23567	2458Z	258XY	3468Y	367XY	467XY	679XZ
158XZ	23568	2459X	258XZ	3468Z	367XZ	467XZ	679YZ
158YZ	23569	2459Y	258YZ	3469X	367YZ	467YZ	67XYZ
159XY	2356X	2459Z	259XY	3469Y	3689X	4689X	689XY
159XZ	2356Y	245XY	259XZ	3469Z	3689Y	4689Y	689XZ
159YZ	2356Z	245XZ	259YZ	346XY	3689Z	4689Z	689YZ
15XYZ	23578	245YZ	25XYZ	346XZ	368XY	468XY	68XYZ
16789	23579	24678	26789	346YZ	368XZ	468XZ	69XYZ
1678X	2357X	24679	2678X	34789	368YZ	468YZ	789XY
1678Y	2357Y	2467X	2678Y	3478X	369XY	469XY	789XZ
1678Z	2357Z	2467Y	2678Z	3478Y	369XZ	469XZ	789YZ
1679X	23589	2467Z	2679X	3478Z	369YZ	469YZ	78XYZ
1679Y	2358X	24689	2679Y	3479X	36XYZ	46XYZ	79XYZ
1679Z	2358Y	2468X	2679Z	3479Y	3789X	4789X	89XYZ
167XY	2358Z	2468Y	267XY	3479Z	3789Y	4789Y	

2600 Marketplace

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Foulups and Blunders

Over the past couple of years, Suffolk County (New York) officials have been planning a state of the art computer system to handle everything from emergency phone calls to the police and fire departments to fingerprint data and court records. The system so far has cost $15.9 million, is two years overdue, and, last but not least, doesn't work. It was designed by Unisys and is supposed to do all kinds of magical things in an average of 3.5 seconds. In early tests, the system froze up entirely. More recent tests have seen functions take as long as 30 seconds to complete and an unexplained instance of garbage being sent throughout the network. According to County Executive Assistant John Gallagher, "It began to act strangely and started putting information into the records machine that was totally unrelated to the information called in." All in all, the system has failed nine tests. The county executive has reportedly lost faith and has referred to it as "unstable and unreliable". The system uses A-16 mainframe computers.

Touch Tone Registration

Colleges across the country are using a new method of registering students: touch tone phones! We checked out two universities near us and found similar systems operating at each. At Suffolk Community College, students simply dial (516) 696-4910. The only information required by the system is the student's Social Security number! Armed with this information, *anyone* can change the poor student's schedule, adding or dropping courses to their heart's delight. Of course, you also need a copy of the current academic schedule in order to obtain the proper four digit section numbers. This schedule is available throughout the campus. The State University of New York at Stony Brook has a more secure system. Yes, they use the Social Security number as the student identifier. But at least they have the good sense to require a password. Of course, without exception, the password is the student's birthdate (MMDDYY). It brings new meaning to the words "learning institutions". Right now, they're learning pretty slow. Oh yes, the number for that system is (516) 632-9393.

Electronic Mayhem

Earlier this year, motorists were startled when an electronic highway sign on I-95 in Connecticut suddenly announced "You All Suck". The person who did this and somehow managed to get caught claims it was an accident. He thought it was just a computer bulletin board system and that there was no password protection whatsoever.

In a similar story, a UC San Francisco student changed the outgoing message on the University Health Insurance line to say that the system had poor security. After initially calling the number for information, the student was able to see the flaws in the system. "It was

ridiculously simple," he said. "The menu actually offered a 'change personal profile' option, so I pressed it to see what would happen. Before I knew it, it was helping me change the menu and outgoing message, and I didn't even need a password." The student notified the campus newspaper and the University Health Insurance Office but declined to give his name, fearing disciplinary action. He said he wanted people to know that "technology is a really powerful tool."

The Latest From The U.K.

According to British Telecom, attacks by "organized and well-equipped criminals" on BT's 110,000 payphones rose from about 1,000 a month in September 1991 to around 6,500 by January 1993. But, thanks to a "determined campaign", the number of attacks has since been cut by around 50 percent. Part of this campaign includes payphones that speak, saying "Warning - tamper alarm; police have been informed." Warbling alarm tones are also being used. They really go all out on these studies, by the way. They have graphs, charts, press releases, you name it. But best of all are the sometimes startling conclusions they reach. Like: "These figures show there is a direct relationship between the number of attacks and the number of payphones in working order." Gosh.

Telephone competition is heating up in the U.K. Mercury, the number two company, recently announced that its new mobile phone service (One-2-One, a joint venture with US West) was offering free off-peak, local calls. Mercury's Lord Young claimed that "with the free calls, you'd be mad to use a BT phone." But a London newspaper, *The Independent*, wrote, "On present tariffs, anyone ripping out their BT phone from the socket and replacing it with One-2-One would be advised to consult an accountant or a psychiatrist. For Lord Young's free calls are only free once you have bought a handset for 250 pounds and paid a monthly fee of [nearly 15 pounds], and are prepared to pay tariffs up to 17 times those charged by BT to use the Mercury telephone at peak periods."

For those of you in Ireland, dialing 03 allows you to call any number within England. For instance, to reach (071) 2234567 in London, from Ireland you would dial 03 071 2234567. Domestic information are reachable at 190, Great Britain information at 197. International information is available by dialing 114, or 10 if calling from old style A/B coinboxes. The international prefix is 16. So to call us here at *2600*, using the United States country code of 1, you would dial 16 1 516 7512600. 999 is the number for emergencies. 1800 is the prefix for toll-free calls, called Freefone. 1199 gives you an 18 hour advance weather forecast from most locations. To call Ireland Direct from the United States, dial 800-562-6262 for AT&T, 800-283-0353 for MCI, or 800-473-0353 for Sprint. From Canada, dial 800-463-2050. From France, 1900 353; Spain, 900 990 353; the Netherlands, 06 022 0353; and

Britain/Northern Ireland, 0800 89 0353. If you haven't figured it out yet, Ireland's country code is 353.

In Perth, Scotland, the first tests of Call Return for the British Isles are underway. According to BT, "Customers using the service will enter a simple code on their telephone and an automatic voice at the exchange will immediately give details of the last calling number, whether or not the call was answered at the time. A second code will enable the number to be dialed automatically by the exchange if the customer wishes to return the call immediately, or the number can be noted so that the customer can ring back at a more convenient time:" Caller Display is the British version of Caller ID and it's being introduced in the same coercive style as it is in the States. BT claims that 90 percent of its customers enthusiastically support the service and that 74 percent "could see no reason why anyone would want to prevent the display of their number". They also claimed that when blocking was made available, only .01 percent of all calls used it. BT expects these services to be available to more than 95 percent of its customers in 1994. They also refer to the new technology as the C7 signalling process.

In more British news, the countdown to Phoneday has begun. On April 16, 1995, the biggest change to national and international dialing codes in 25 years will take effect. On that fateful day, which also happens to be Easter Sunday - presumably to emphasize the importance of the event, an extra digit . be added after the initial 0 of city codes. The extra digit is 1. So London, which only a couple of years ago v as 01 and is now 071 or 081, will soon be 0171 or 0181. The toll-free code of 0800, the mobile codes of 0860 and 0850, and the information and entertainment services code of 0891 will remain unchanged. The general idea is for codes beginning with 01 and eventually 02 to be geographical in nature, 03 to be more mobile numbers, 07 to be for "lifetime" numbers (the same idea as AT&T's EasyReach service), and 08 to be for specially tariffed premium services. 04, 05, 06, and 09 are not going to be used right away. Five cities (Leeds, Sheffield, Nottingham, Leicester, and Bristol) will get brand new city codes. Their current codes are 0532, 0742, 0602, 0533, and 0272 respectively. The corresponding new codes will be 0113, 0114, 0115, 0116, and 0117. Nottingham and Bristol will add a 9 in front of all local numbers, the other cities will add a 2. And, finally, the international dialing code will change from 010 to 00. This is in keeping with the new European Community standard, as is the transition of the emergency number from 999 to the standard 112. If you know anyone in the U.K., it's probably best to leave them alone for a while. These are traumatic times.

Collect Your Wits

So which collect service is really cheaper? Here's what

we were able to figure out. For a collect call from our Long Island office to an abandoned warehouse in San Francisco, the rate we got for dialing 0+ with AT&T was $2.20 for the first minute and 26 cents per minute thereafter. By using AT&T's 1-800-OPERATOR service, the rate was $1.73 for the first minute and 24 cents for each additional minute. MCI's rates were a bit harder to interpret. To start with, none of their operators know the rates. Each time you ask, you're transferred to the "rate operator" which is a neat way of saying customer service. Anyway, their rate for a 0+ call to the same number was either $3.76 or $2.20 for the first minute and 26 cents per minute thereafter. It really depends who you ask. By using MCI's 1-800-COLLECT service, the rate for the same call is $1.73 for the first minute and 24 cents for each additional minute, identical to 1-800-OPERATOR. Things started to get complicated when we asked about intr   ite calls. We tried to price a call to the governor' mansion in Albany, NY. AT&T's 0+ rate was 1.85 for the first minute and 20 cents for each addit   nal minute. We got different answers for using 1-8)-OPERATOR, ranging from it being impossible because it was within the same state to $1.85 for 'he first minute and 21 cents for each minute thereaf   r. MCI charged $1.82 for the first minute and 20 cents for each additional minute using 0+ and their 1-800-COLLECT rate (we think) is $1.65 for the first minute and 20 cents for each additional minute. One MCI representative quoted us a rate of one cent a minute for a night call and four cents a minute for a daytime call! We knew right away that those numbers were bogus but we have to wonder how many people would have fallen for it. With this kind of service, it's no wonder MCI has *never* attached their name to any advertisement of 1-800-COLLECT. Incidentally, AT&T ran a very strange promotion for their 1-800-OPERATOR service, or so they claim. Up until December 5th, there were *no* surcharges on collect calls and all daytime collect calls cost 15 cents a minute. If those numbers were true, then it was actually cheaper to call somebody collect than to call them direct! We should point out that it took an average of five minutes to get an answer to a single rate question from either company. It's no wonder consumers are totally confused since the companies themselves can't seem to figure it out. Phone trauma in the United States, unlike Great Britain, doesn't center on one day. It's with us all the time.

Fantasy World

People just love it when we publish information on Walt Disney World. So here's some helpful hints on their Guest Messaging Service, which everyone staying at the Walt Disney World Resort gets. Everyone. To retrieve messages from anywhere in the world, all you have to do is dial (407) 827-1888 (only the last five digits are necessary from within the hotel), then enter your room number and your secret password. You can easily remember your secret

password because it's set to the first four letters of your last name. Messages also stay alive for three days after you check out, unless you delete them. While you can no longer get messages once you've checked out, you are still able to access old messages by calling (407) 827-1699.

Start the Insanity!

Now that prepaid phone cards are starting to appear in the United States, crazed collectors are popping up in hot pursuit. Phone companies are encouraging this behavior by producing colorful and unique telephone cards, sometimes centered around special events, like the Democratic Convention in New York City in 1992. On September 25th, Richmond, Virginia hosted the first International Credit Card Collectors' Convention. Some see this euphoria for cards rivaling the current ecstasy that coin and stamp collectors constantly experience. You can drool over pictures of more than 400 telephone cards by getting the 1993 U.S. Telephone Card Catalog, available for $5 from Lin Overholt, P.O. Box 8481, Madeira Beach, FL 33738. You can also get information on a publication called International Telephone Cards by writing to 29/35 Manor Road, Colchester, Essex CO3 3LX, Great Britain.

Insuring Profits

Who really benefits from phone fraud? One has to wonder when all of a sudden the phone companies turn into insurance brokers. For $1,200 a month (don't get caught in the stampede) AT&T will cover all fraudulent phone costs above $25,000. This, naturally, doesn't include the sign-up fee. If AT&T fails to notify the customer of the fraud, the customer only has to pay $12,500. Sprint has a similar program, no doubt designed to provide the best service possible at the lowest cost. We'd like to know how much fraud would have to occur for the phone companies to lose even one cent on this plan.

New Numbers

Did you know that BellSouth is experimenting with three digit N11 codes? 211, 311, 511, 711, and 811 are going to be used for the next two years for various "pay" services run by independent companies. Does this mean you'll be able to be ripped off by a 900 number without having to dial ten digits? Anything's possible.

Meanwhile, in Canada, 711 is being allocated for deaf people who will be able to reach a relay services operator with a TDD text telephone.

Just when you thought·you were safe from 900 numbers, AT&T is arranging to have the 900-555 exchange offer still more pay services. The reasoning is that since many major companies block 900 calls, they *don't* block calls to 900-555 since everybody knows 555 is information and information wants to be free, etc. So AT&T's plan would put various services in the 555 exchange that are "business related" and have nothing to do with entertainment. (This means that USA Today's 900-555-5555 number would most certainly have to vacate.) Despite this restriction, it still sounds to us like AT&T is taking advantage of a security hole to push more pay services down our throats.

The 200 area code has reportedly been allocated to AT&T for its "one number" personal communications system. Other reports indicate that the 500 area code is being allocated to multiple carriers for similar services. We don't know if this means subscribers to AT&T's Easyreach service, currently reachable on 0700 numbers, will have to change their phone numbers. It would be pretty ironic though, since the service's initial selling point was that you would never have to change your number again.

Some new country codes for some new countries: the new Yugoslavia (Serbia and Montenegro) - 381 (formerly 38); Croatia - 385; Slovenia - 386; Macedonia (not the Greek one) - 389; and Bosnia/Hercegovina - 387. Don't expect to get through on that last one for quite some time.

Journalistic Integrity

Our local daily paper, *Newsday,* prides itself on being technologically savvy. All too often, though, their attempts fall flat. For instance, a story this summer screamed "Hacker Heard Plan for Baghdad Attack". In other words, somebody who can turn on a radio and listen to unencrypted phone calls is seen, in *Newsday's* eyes, as a hacker. Also, according to *Newsday,* "a pen register is a metal box roughly the size of a VCR, which is connected to telephone wires and prints out the telephone numbers of any outgoing calls. But with the flick of a switch, it can also be used to listen to phone conversations." Not any pen register we've ever seen. The Radio Shack CPA-1000 came out ten years ago and could fit in the palm of your hand. We suspect the professional stuff is even smaller. And pen registers are not used to listen in on phone calls. If they are, then they stop being pen registers. It's really quite simple.

The Joy of New Technology

Bergen and Morris County, New Jersey probation officials are experimenting with a computerized monitoring system to replace the ordeal of visiting probation officers. Once a month, probation clients call a special number to report any changes in their status and any problems they may have had with the law. It should probably go without saying that it's a 900 number. A computer speaks to them and, according to officials, it's very effective. "We have had people report violations that normally would not be reported to our probation officers," said Jude Del Preore, chief of probation in Morris County. "Clients believe there

is a verification system built in. They think the great computer network in the sky will somehow catch up with them if they're lying." Law enforcement types just love to spread those misperceptions around.

Caller ID News

BC Tel of British Columbia, Canada is offering a Caller ID option we haven't seen yet here in the States. Alternate Number Display (AND) allows a number unique to the customer and different from his/her phone number to show up on the called party's Caller ID box. The number can't be called back and anyone who tries will get a message to the effect of, "The party you are trying to reach does not accept calls at this number." It costs $3 a month for this privilege.

We discovered a brand new feature on Cable and Wireless 800 numbers. It seems that Caller ID boxes are able to read data from Cable and Wireless long distance calls. In other words, if you have your own 800 number and it terminates on a phone line with Caller ID, you will be able to see phone numbers from around the country show up on your Caller ID box. It appears that ANI information from the calling party is being picked up by Cable and Wireless and translated into Caller ID data on the called end. The good part about this is that companies (or people) with 800 numbers can now see who's calling them immediately without having to wait for the itemization at the end of the month. The current ability to do this right away through ANI is rather expensive and requires special equipment. With this new method, all that is needed is a Caller ID box. The bad part is that this technology could easily be extended over to regular long distance calls, not just 800 calls. For now, it appears that this is some time away. The Cable and Wireless system is still rather spotty and unpredictable. We noticed certain numbers that pass Caller ID data to us would not pass the data through the 800 number, although nobody could tell us why.

Corporate Ideas

Some helpful hints on choosing a good password from the Information Security Office of Sacramento: 1) Combine letters and numbers, such as the name and birthdate of a relative or friend, e.g., LISA105; 2) Take the first or last letters from each word of a phrase, e.g., IWADASN (It Was A Dark And Stormy Night) or EDESOEFT (wE holD thesE truthS tO bE selF evidenT); 3) Remove all vowels from a common word or words, e.g., TPSCRT (ToP SeCReT); 4) Make it as long as possible, with a minimum of 4 characters. They also remind employees not to use any of these examples, as many people will be reading this.

Here's another corporate tip: Please don't feed the dumpster divers. Posters are being designed that say "Properly Dispose of Proprietary Information. Dumpster Diving is a Real Threat." According to our corporate source "proprietary company information can travel fast once it's in the hands of a hacker. Hackers communicate via computer networks and even have their own underground newsletter, '2600 Magazine; the Hacker Quarterly,' based in New York." Our source goes on to advise us that "a good way to thwart dumpster divers is to either shred sensitive material or seal it in cartons and arrange to have the cartons picked up by the mail center, with instructions to destroy them." Our corporate source that leaked this company document to us was, incidentally, a dumpster.

Tidbits

Here are some fun facts: in 1992, New Jersey Bell disconnected 376,240 accounts, up from 275,855 in 1988. Supposedly, this tells us something about the economy. The number of business accounts disconnected was only 17,291, down from 19,428 in 1991. New Jersey Bell handles three million residential accounts and 524,000 business accounts.

There's an interesting service operating at (503) 520-2222 which gives you a free doorway into the Internet. The only catch is that you have to call using AT&T. Other carriers will get you a busy signal. From this site (ns.speedway.net), you can hook into various systems using telnet or rlogin or read Usenet newsgroups. You can get more details by emailing support@speedway.net.

For a demonstration of AT&T's True Voice service, call 800-932-2000. AT&T claims that they've figured out a way to make callers sound closer and more natural than ever before. To us, it sounds like they're just turning up the volume a bit. Either way, you can expect this service to spread to your area sometime soon.

AT&T has raised the rates of information yet again. Now it costs 75 cents every time you look up a number anywhere in the country. Overseas information (which only a couple of years ago was free and which still is free in many parts of the world) now costs a whopping $3.95 per request! When getting the number costs several times as much as making the call, it's quite likely that fewer calls will be made. Does it take a genius to figure this out?

As most of us know, hacker conferences in the United States tend to cause a bit of commotion. But sometimes it surprises even us. A recent flyer for Pumpcon II (Philadelphia) promised that "any proceeds above the conference costs will be used to help the victims of last year's conference." How could anybody resist a promotion like that?

And finally, Caller ID has come to the rescue once again. An escaped prisoner was captured when he called his mother-in-law from a phone booth. The mother-in-law had Caller ID, enabling the cops to zero in on his location. Next time he probably won't call first.

2600 MEETINGS

Ann Arbor, MI
Galleria on South University.

Austin
Northcross Mall, across the skating rink from the food court, next to Pipe World.

Baton Rouge, LA
In The LSU Union Building, between the Tiger Pause and Swensen's Ice Cream, next to the payphones. Payphone numbers: (504) 387-9520, 9538, 9618, 9722, 9733, 9735.

Bloomington, MN
Mall of America, food court.

Boise, ID
Student Union building at Boise State University near payphones. Payphone numbers: (208) 342-9432,9559,9700,9798.

Boston
Prudential Center Plaza, Terrace Food Court. Payphones: (617) 236-6582,3,4,5.

Buffalo
Eastern Hills Mall (Clarence) by lockers near food court.

Chicago
Century Mall, 2828 Clark St., in the 3rd Coast Cafe.

Cincinnati
Kenwood Town Center, food court.

Columbus, OH
City Center Mall, outside the lower level entrance to Marshall Fields.

Danbury, CT
Danbury Fair Mall, off Exit 4 of I-84, in the food court. Payphones: 203-748-9995, 203-794-9854.

Fort Lauderdale
West Hollywood Bowling Alley, 296 South State Route 7. Call voice mail for details or changes: 305-680-9214, 100#.

Houston
Galleria Mall, 2nd story overlooking the skating rink.

Kansas City
Food court at the Oak Park Mall in Overland Park, Kansas.

Los Angeles
Union Station, corner of Macy & Alameda. Inside main entrance by bank of phones. Payphones: 213-972-9358, 9388, 9506, 9519, 9520; 213-625-9923,9924; 213-614-9849, 9872, 9918,9926.

Madison, WI
Union South (227 S. Randall St.) on the main level by the payphones. Payphone numbers: (608) 251-9746, 9914, 9916, 9923.

Memphis
Hickory Ridge Mall, Winchester Rd., in the food court. Payphones: 901-366-4017, 4018, 4019, 4020, 4021.

New York City
Citicorp Center, in the lobby, near the payphones, 153 E 53rd St., between Lexington & 3rd. Payphones: 212-223-9011,8927; 212-308-8044,8162.

Philadelphia
30th Street Amtrak Station at 30th & Market, under the "Stairwell 7" sign. Payphones: 215-222-9880, 9881, 9779, 9799, 9632; 215-387-9751.

Pittsburgh
Parkway Center Mall, south of downtown, on Route 279. In the food court. Payphones: 412-928-9926,9927,9934.

Poughkeepsie, NY
South Hills Mall, off Route 9. By the payphones in front of Radio Shack, next to the food court. Payphones: 914-297-9823, 9854, 9855.

Raleigh, NC
Crabtree Valley Mall, food court.

Rochester, NY
Marketplace Mall food court.

St. Louis
Galleria, Highway 40 and Brentwood, lower level, food court area, by the theaters.

San Francisco
4 Embarcadero Plaza (inside). Payphones: 415-398-9803,4,5,6.

Seattle
Washington State Convention Center, first floor. Payphones: 206-220-9774,5,6,7.

Washington DC
Pentagon City Mall in the food court.

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EUROPE
Granada, Spain
At Kiwi Pub in Pedro Antonio de Alarcore Street.

London, England
Trocadero Shopping Center (near Picadilly Circus) next to VR machines. 7 pm to 8pm.

Munich, Germany
Hauptbahnhof (Central Station), first floor, by Burger King and the payphones. (One stop on the S-Bahn from Hackerbruecke - Hackerbridge!) Birthplace of Hacker-Pschorr beer. Payphones: +49-89-591-835, +49-89-558-541, 542, 543, 544, 545.

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All meetings take place on the first Friday of the month from approximately 5 pm to 8 pm local time unless otherwise noted. To start a meeting in your city, leave a message and phone number at (516) 751-2600.

OUR ADDRESS: