

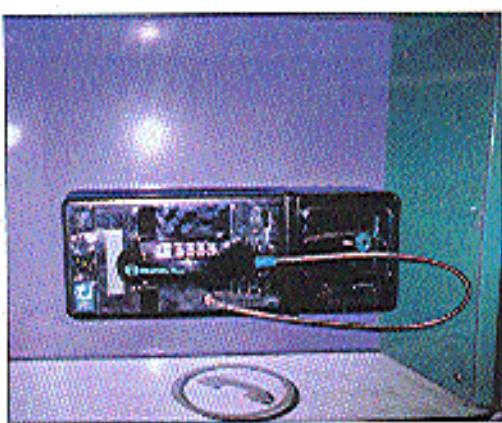
Volume Sixteen, Number Four
Winter 1999-2000
\$5.00 US, \$7.15 CAN

2600

The Hacker Quarterly



Foreign Payphones



Santiago, Chile. This is what that ugly metallic phone will get you - glare and lots of it.

Photo by Sol Perez



Santiago, Chile. Living proof that a bright red phone always brightens up a street.

Photo by Sol Perez



Kyoto, Japan. An ISBN phone that looks too nice to speak for its own good. We wouldn't be surprised if it speaks.

Photo by eclipse



Athens, Greece. Found at the base of the Parthenon.

Photo by Peter Photopoulos

Come and visit our website and see our vast array of payphone photos that we've compiled! <http://www.2600.com>



WHAT REALLY MATTERS

HOPE 2000
Hotel Pennsylvania
New York City

July 14th to July 16th, 2000



H2K

Full details on page 56.
Updates on www.h2k.net.
Join us for this historical event!

violence, vandals, victims	5
accessing forbidden ntfs drives	6
security through nt? not likely	7
countermeasures revisited	10
DATUS - the tool of the new age phreak	12
messing with staples	18
i own your car!	20
telecabable	23
intro to pocsag/Rex interception	24
hack the media	27
letters	30
how to create new urban legends	40
hacking explorer (the car)	43
netnanny nonsense	44
why redboxing doesn't work	45
spoofing cell waiting id	46
sprint /on	47
understanding microsoft exchange	53
marketplace	56
meetings	58

"Hacking can get you in a whole lot more trouble than you think and is a completely creepy thing to do." - DOJ web page aimed at kids to discourage hacking (www.usdoj.gov/kidspage/do-dont/reckless.htm)

hacking

(www.usdoj.gov/kidspage/do-dont/reckless.htm)

STAFF

Editor-in-Chief
Emmanuel Goldstein

Layout and Design
shapeShifter

Cover Design
SAC, The Chopping Block Inc.

Office Manager
Tanner

Writers: Bernie S., *Must, Blue Whale*,

Naomi Chomsky, Eric Corley, Dr. Helam,

Dermeral, Nadia Nourman, John Drake,

Pauli Silvia, Mr. French, Thomasicon,

JoeG30, Kungpuk, Wiff, Kevin Mitnick, The

Prophet, Danni Rutherford, Seal, Silent

Switchman, Scott Skinner, Mr. Upsetter

Webmasters: Kerry, Mack

Network Operations: ESS, tazac

Broadcast Coordinators: Johnz, Shmooch, Absolution, Silence, Gnoie, Anatolia

IRC Admins: audiotrack, ress

Inspirational Music: Joe Strummer, Sri Karran, real early Raybd, Ron Geesin, Svetlana, real early Raybd, Ron Geesin

FOR LETTERS AND ARTICLE

SUBMISSIONS, WRITE TO:

2600 Editorial Dept., P.O. Box 99,
Middle Island, NY 11953-0099

Letters: letters@2600.com,
articles@2600.com.

2600 Office Line: 516-751-2600
2600 FAX Line: 516-474-2677

Violence, Vandals, Victims

As the 90's fade into history, it's not likely the unhealthy trends of our society will do the same. Arising soon. In many ways we've become practically enslaved to the corporate agenda, to the great detriment of the individual.

The signs have been around for a while. You've seen them, repeatedly, in these pages. People interested in technology who ask too many questions or probe too deeply or thoughtlessly are seen as a threat because they might adversely affect profits or embroil us in authority. The net has steadily been transforming from a place where freedom of speech is paramount to one where it all revolves around the needs of business.

Now there's nothing wrong with commerce, people making a profit, or even people who just don't care about the things others value. After all, there's room for all types in the world as well as on the net. But what's not now is it's running out. Increasingly, the needs of the individual are being sacrificed for the needs of big business. Corporate mentality is replacing our sense of individual liberty. And it's pointing us down a very dark road.

Consider things that have happened in the very recent past. A teenage hacker from Washington State pleaded guilty to hacking several [notorious] government Web sites, including the White House and the United States Information Agency. Despite there being no damage caused to any of the sites (a part [sic] from harassment and having the [sic] cultural [sic] renamed), the government felt that 15 months in prison and a \$40,000 fine was appropriate. Reporters say he could have gotten 15 years and a \$250,000 fine.

Later that same month, coincidentally in the same state, police fired tear gas and shot rubber bullets at a crowd of peaceful demonstrators who were protesting the World Trade Organization's meeting in Seattle. Many said it was the worst civil unrest since Vietnam.

At first glance, you might not think these stories have very much to do with one another. But when you analyze them a little more closely, it's not difficult to see that they are both symptoms of the same disease.

Much of the unprovoked brutality inflicted by the Seattle Police went unnoticed, despite the abundance of sound and picture images. But every major network dutifully ran & story about the violent anarchists who started all the trouble. In the end, whenever the word "violence" was mentioned, one thought only of those people.

Zylon caused no damage to any of the systems he got into. Yet the mass media painted him as someone dangerous. He re-

named a file, but all reports say that he shut down the USA for eight days. This is how long it took them to miss decent security. Something that had never bothered to do in the first place. He didn't take away their security... they never had it to begin with. But this fact wasn't seen as relevant in any of the stories that ran. And what about the act of taking a young person away from his friends and family for more than a year and forcing him to live with potentially dangerous criminals? Well... [oh] justice.

In both cases, which is most previous to our society - the individual - was made to suffer because their actions and term of expression caused humiliation of some greater power. We've seen this before in the Jacker (which is still scheduled for release on January 21, 2000). People who go to forbidden places, utter forbidden speech, or are just seen as an inconvenience are stepped on, abused, even tortured.

In Seattle, the discontents between what happened and what was reported were almost comical - vandalism of commercial property being reported as violence whereas violence against individuals was mostly glossed over, with the exception of certain far-right and alternative media. What kind of a society are we turning into when commercial losses are more important than the human injuries? Have we lost the good people of Microsoft and General Electric (MSNBC)? Or even Disney (ABC)? Why would such bastions of journalism ignore the real stories? Were they maybe more concerned with whether the WHO would continue to look out for Usain and their interests?

We may indeed have developed a horrific outlook on society. It's hard not to when things like this are so often tolerated. But the upside is that our view of the individual has only strengthened. If there's one thing we've learned from recent events, it's that people aren't as brain dead as we were led to believe. People do care, they are paying attention, and they see the ominous forces of the future. Few persons seem to trust the government anymore, big business is increasingly seen as a threat to our freedom, and individual troublemakers are filling our expanding prison system.

It's not very difficult to see how we got to this sorry state. All of the mergers and consolidations of power have earned a heavy and inevitable price. The real question is how do we regain control of our destinies?

Continued on Page 55

ACCESSING FORBIDDEN NTFS DRIVES

BY NUMBERSY

The following information is described for the purposes of education. I'm aware this procedure could be and has been used to circumvent the security of any Windows NT machine which the user has physical access to. I do not condone the use of this information for illegal purposes, nor am I responsible for anything stupid anyone does with this information. NTFS support in Linux is still Beta, reading and copying from the drive is safe, but copying to the drive is an "at your own risk" deal.

INTRO
One of the many misconceptions about Windows NT is that it's a secure operating system and that by formattting a disk with NTFS and properly setting permissions, nobody can access the information on that disk without permission to do so.

There are two problems with this theory. First, it is wrong. Second, all it really does is make crash recovery more difficult. I will describe a method for circumventing NTFS security: using a Linux boot disk. This can be useful in many ways. From the system administrator's view, this is an excellent way to get access to important files on a system that has crashed before formatting the hard drive and reinstalling NT. From the hacker's view, it gives access to the system files. He would not normally have access to the registry, user profiles, PST files, etc.

In order to accomplish this you will need some knowledge of Linux. It is possible to do this with a DOS bootable floppy, but the only NTFS drivers available are read-only and therefore useless to me. In all fairness, Linux has this vulnerability as well.

The first thing you need is a copy of the latest version of Trinux. This is a Linux mini distribution designed for network administration and it has many useful features. Its best feature though is its ability to boot from a floppy on virtually any machine which has more than 8 MB of RAM.

Get two blank floppy disks, go to www.trinux.org, and download the following files: boot.gz, classic.gz, mfs.o, and rawrite.eve. The current version as of this writing is 0.62, however use version 0.61 as there is not enough room for extra

files on the 0.62 boot disk. Follow the instructions for unzipping and making the boot disk and the data disk. If you can't get this far, you have no business doing this in the first place.

When this is done, copy mfs.o to the boot disk, edit the Modules file, add the line "mfs" to it (no quotes), and save the file. At this point it is best if you boot the disk a few times, first to test it and second to get familiar with what will happen and how Trinux will respond to commands given it. This way there are no surprises.

WHAT NEXT

Now take the two floppies to the machine you want to access. Boot the first disk. When it asks if you have a data disk, put in the second disk and type "y" then hit return. It will then ask you again. Type "n" and hit return.

When it is finished booting, you will have a "Trinux 0.61" prompt. Type "insmod ntfs.o" - this loads the NTFS support. Type "mount -t ntfs /dev/hda1 /mnt". This will mount the first partition on the first hard drive. This assumes the first partition on the first hard drive is an NTFS partition. If not, the following table will give you an idea of how to mount the proper drive. These are for IDE drives:

(/dev/hda1)
(/dev/hda2) second partition on the first drive
(/dev/hdb1) first partition on the second hard drive
(/dev/hdb2) second partition on the second hard drive

You get the idea. Now you should have access to the drive. You can now put a third floppy in the drive and type "mount -t msdos (/dev/fd0) /floppy". This gives you access to the floppy so you have someplace to save files to. Alternatively, if you are really clever you could get the proper modules for zip/disk support which connects to the LPT port (scsi.o and ppa.o), which would give you more flexibility in copying files.

I would like to give creative credit to CM, who challenged me to find a way to access an NTFS system from a floppy disk.

SECURITY THROUGH NT? NOT LIKELY

by Kurruppt2k

For quite some time, hacking has meant knowing a decent amount about LAN/TX, or for you old school hackers, VMS, TSO, or whatever. Maybe you would have to know a lot about Netware, but that was as far into the PC world as you cared to dive. Well, it's 2000 now, and Microsoft is getting its foot into the World Wide Web, increasing the percentage of NT machines on the net is increasing. A lot. Now, many of you UNIX-style hackers refuse to even glance in the direction of a Windows box, but NT is only going to get bigger as time goes on, not to mention Windows 2000 (active directory... eww!). And what if the web page you want to decipher happens to be sitting on an NT Server? You're just going to have to suck it in and learn to break into NT machines too.

My last favorite thing about Windows is its poor socket capabilities. This means less open ports when you scan, which means less chances to play with, which means less points-of-security. And if you search the exploit archives for NT stuff, you won't find much besides DOS spuds and stuff that needs to be executed basically on the NT LAN. All of a sudden your ocean of UNIX hacking techniques is flooded (0 percent applicable in the NT world). For starters, NT is an NOS, meaning a client/server environment. If you're tied to a LAN machine and execute a command, your request is processed on that machine, using its resources. If you connect to a Windows box and issue a command, the process is handled entirely on your computer, using your resources, and if it's a command that requires system information, it gives you info on your own computer. How dry you execute commands to be flat on your back. Windows machine? So why do these NT machines seem unbreakable. Not true.

How to hack an NT box all depends on what exactly your goal is. With UNIX, you're usually looking to get a root shell. As I'm sure you know, you can have a "shell" on a remote NT box. NT is set up to share resources - files, applications, printers, you get the idea. Moving each workstation in its network access as an entity in itself (yes, dumb terminals logging into a large UNIX machine), and if it needs something from a server, you have to connect to it via NetBIOS. In Windows networking, this means mapping a logical network drive to a particular share.

Microsoft Networking
Shares: The heart of Windows networking. A share is just like a volume in Netware - a directory setup to be accessed from a selected person's workstation inside the network's internetwork. Shares can either use share-level security, or user-level security. Share level security means that the resource is protected by a single password, and anyone knowing that password can access the share. User level security is more UNIXish. In short, your permissions to a particular share depend on who you are logged in as. Now, this entire article refers to breaking into NT over the Internet, so logging in isn't feasible (though it is possible; see the "File Hacking" below). If port 139 is open though (which it almost always is on an NT Server), and oftentimes is on NT Workstation and Windows 9.x, you can use Cifnix for Microsoft Networks to connect to it. Just make sure you have the client installed - go to Control Panel, then Network (you should also have NetBIOS, NetBEUI, and TCP/IP installed). You will use the Net command to do this. Once you find your target NT machine and set an open port (139), your first step is to find out if there are any open shares. To find out, type this at a command prompt:

C:\> net view [ip address]
You get an error message, it probably means that the computer you attempted to connect to had no open shares (or possibly that you don't have Windows Networking set up correctly on your machine, so check). If shares exist, you will see a list of them, including the share name, share type (disk, printer, etc.) and any options the system owner wanted to maximize. For most NetBIOS infor-

mation on this machine, use the "ifstat" command. If you see no open shares, there is still a possibility of hidden shares. Common hidden share names include:

* (samba)

*SMB (samba)

*SAMBA SERVER (samba)

ADMINS (remote administration - can you say "root shell")

To connect to any share, visible or hidden, you again use the Net command, in the following fashion:

C:\>net use [ip address]\share name

To check for hidden shares, just try to connect to the names given above, or any others you can think of. If it exists, you'll connect. Once you receive the "The command was completed successfully" message, you are connected to the NT machine. Logical drive L: (or whatever drive letter you assigned) now becomes that share - you've mapped a network drive to it. This is similar to mounting remote file systems in UNIX. So to see what you've received so far, change to drive L: and issue a "dir". You can now use any DOS commands to explore the share. The share, however, may be password protected. You may be prompted for a password right after issuing a Net Use, or after connecting when trying to browse the filesystem. Typical locker methods can be used to defeat this. If, however, you get a message that you do not have privileges to that resource (or "access denied"), this means that the share is user-level, and since you can't trivially log on, you won't be able to access the share. Once in, you will have either read permissions, meaning you can look at or execute (but not modify) your RAMP a file, or "read/write," meaning you can edit any file as well. To check, make a file and delete it. Create a directory and delete it.

Utilities

Here I will outline a few useful tools you should have when planning to break into an NT box. Legion is a Windows share scanner - it will attempt doing Net View commands on an entire subnet (or multiple subnets). Launch it, sit back, and watch as it scans networks for open shares. If you prefer doing everything from UNIX, Wfslack

will do the same thing.

NAT (Network Auditing Tools) is a great program by the makers of Legion. It will attempt to connect to any open share you specify, attacking with passwords you provide in a wordlist. It also looks for hidden shares.

LdpfCrack is an NT password cracker. Getting NT Passwords can be tricky - see the "Password Cracking" section.

And finally, AGENT SMITH. This program will essentially turn off the kill switch on your target, and log all responses to a file of your choice. Of course this will be your only way to break.

All four of these programs are available at The Cyberspace (http://www.users.wustl.edu/~jdc-lab/rp2k).

Powered Cracking

All the tasks reside in the SAM (Security Accounts Manager) tree of the registry. To get the machine doesn't mean that it allowed FTP access. So get the password hashes, crack them, and try to FTP into them all!

If the sysadmin thinks he's set, he'll rename the Administrator (root) account. Either way, if you crack the password, you'll have FTP access with administrative privileges. You can now delete web pages, get more passwords for other accounts on the network, upload trojans, etc. Here's a trick: Windows NT yourself, you can install LdpfCrack and attempt a Remote Registry Dump. If the cracking you're targeting allows for registry sharing, you will have the entire SAM hive imported into Ldpf. Most often, though, this doesn't work. You could always do a core dump, convert the unencrypted data into ASCII, and pack on the hashes. But that can be time consuming and messy (not to mention you'd have to upload software to perform a core dump). So you may have to resort to going after the SAM file stored on the hard disk of the machine (or any other Domain Controller on the network). The file you are looking for is "sam_".

The problem is that NT locks this file from users and essentially disables it from being accessed while NT is running. To get it, you'll have to boot the computer to an alternative OS (Linux, DOS, etc.) and get it that way. Another problem is that the box is an NTFS partition. DOS, of course, uses FAT, and Linux uses EXT2, so you'll need a program to access the alien partition (such as NTRSDOS). Installing another OS onto the remote machine will most likely be tough, as will forcing it to reboot, through programs exist that will do it. If nothing else, try forcing it to force it into reboot-

ing. So before you devise a wise plan to pull DOS 6.22 and reboot over onto your target, and charge the boot up, look around for backup copies of sam_. It's not unheard of to find an old copy in something like "C:\winnt\priv\temp\".

Also, if you prefer to crack passwords natively, you'll have to convert the hives to a UNIX password file (ax and paste the hives).

FTP

The closest thing a hacker can do to targeting in to an NT machine is connecting via FTP. The problem is that just because an account exists on the machine doesn't mean that it allowed FTP access. So get the password hashes, crack them, and try to FTP into them all!

If the sysadmin thinks he's set, he'll rename the Administrator (root) account. Either way, if you crack the password, you'll have FTP access with administrative privileges. You can now delete web pages, get more passwords for other accounts on the network, upload trojans, etc. Here's a trick: copy the Event Viewer (program to a shared directory, then Net View to it. You now have access to all logs on that machine.

Elite Tactics

Okay, let's pretend you have FTP access. The problem is, you can't execute programs or do anything else that's any fun. The answer - a trojan. Get one that allows you complete filesystem access, allows for services of your target computer, and lets you open and kill active windows (NetPus does all of this). But how do you run the trojan once you upload it? You have a few options. Put it in the start folder, boot or autorun it, and force it into rebooting (possibly with a DoS attack), or just wait until someone reboots it. Another ploy: if the machine is a web server, upload the trojan into a CGI directory (cgi-bin, cgi.dos, cgi-sel, etc.), then recompile the web service will spawn (through the trojan) for you. Now just connect with your client, and you have complete control of the computer.

Here's another scenario. Let's say you want to heck their web page. You have a few passwords, but the FTP service has been disabled. Well, if the web pages reside in a share (unlikely) you can use MS

DOS EDIT to edit the default.htm or index.html file. Otherwise, you can always use HTTP to upload your file. Netscape and Internet Explorer both have clients to upload files via HTTP - just use the user names and passwords you cracked.

Network sniffers can also be put into place. Ldpf, sniffer, Search the net for other NT, Ethernet, or Iomega Ring sniffers. The point here is that if there is even one Windows 9X machine on the network, a sniffer cleaver (ASCII) password when network traffic, or a sniffer will always catch them.

There are also a huge variety of exploits for NT. The trick is working through the Das quote and the local cores. One remote exploit, iischeck.exe (disk.sys) (www.exploit.com) theoretically will upload any file (in your case, a trojan) right through IIS's HTTP channel. IIS ships with most NT Server packages, and comes with one of the earlier service packs. Even if the machine isn't stalled. One popular web server for NT is WebSite Pro, which has a vulnerability in its packaged CGI executables. Specifically, upload.exe allows you to upload files to the computer - without password.

Now, when I said that you can't log on to an NT Server over the Internet, that was partially wrong. The only way to log into an NT network is to be a member of the domain. So you'll have to make your computer a member. How? Hack the PDC (Primary Domain Controller) or a BDC (Backup Domain Controller). Now, chances are if you've gotten far enough ("in" to make yourself a member of the domain, you probably have all the permissions you could ever want. If so, launch the program called User Manager for Domains and add yourself, with your IP address.

In Summary

All in all, NT is a very different environment than UNIX or Win32. It also demands very different skills and techniques to hack. Doing so is just as rewarding as breaking into a Samba station, and will provide you with all kinds of new, cool useful information. This is, after all, why we do what we do.

COUNTERMEASURES REVISITED

By Seuss

The most prevalent information on telephone counter-surveillance has been floating around for at least 15 years. Short the pair at the demark and measure resistance. Open the pair at the demark and measure the resistance. Abnormally high or low resistances indicate a phone tap. Forrest Ranger wrote about it in text files, M.L. Shannon and Paul Brookes included it in their books, and an untold number of phone phreaks have employed this technique. Despite its popularity, the technique has its shortcomings: it fails to detect devices installed in the outside plant, split pairs are undetected, and transmitters built into the phone are not tested for.

What you'll need:

- 1) Access to a local DATU.
- 2) A multimeter with high impedance scales (several meters that measure into the giga-ohm range are available) and a capacitance meter.
- 3) An induction probe.
- 4) A frequency counter or near field detector.
- 5) Something that makes continuous noise, like a tape player.
- 6) Ancillary tools (screwdrivers, a car wrench, etc.).

First, call the phone company to ask about your line's address for ISDN or DSL. High-speed services demand a line with no loading coils and a minimum amount (less than 2500 ft.) of bridged taps. Either will cause inaccurate measurements. Begin by taking the phone off hook and turning on your tape player (to turn on voice activated transmitters). Now give your phone a pass with your near field detector or frequency counter. Transmitters in the phone will hopefully be picked up at this point. (Note: some speakerphones are

prone to normal RF leakage.) Next, measure the capacitance of the line, dividing the value by .83 (the average mutual capacitance for a mile of phone line). This is roughly the length of your line. Write it down; you'll need it later. Remember that .83 is an average value, which can range from .76 to .90 depending on line conditions. To get a more accurate measurement you can fine tune your figure by comparing capacitance measurements on a section of plant cable of a known length, or use a TDR.

Disconnect all the phones from the line you want to test. Go to your demark and disconnect your pair on the customer access side. Short the pair and measure the resistance of the line from the farthest jack with the meter set to its lowest scale. Reverse the polarity of the meter and measure again. If either resistance is more than a few ohms, it would suggest a series device wired into the line somewhere on your property. Now return to your demark, open the pair, and cover the ends in electrical tape. Measure the resistance of the pair with the meter set to its highest scale. A less than infinite resistance would suggest a device wired in parallel to your line.

Testing in the outside plant should be conducted from the *teleco* side of the demark point, in order to avoid measurement error from the station protector circuit. Call for DATU and short the pair, then measure the resistance of the line. Compare the value you got for your line's length with the figures below:

(Note: SESS switches incorporate a "star bus" that will add about 500 ohms to the shorted pair.)

These figures will vary with temperature, splices, wet sections, and a host of other reasons. Large deviations could (out

don't necessarily) suggest something wired in series with the line. This measurement may be supplemented by either a resistance to ground measurement of both sides of the pair and a capacitance balance test or a voltage measurement. A resistive imbalance of more than 10 ohms or a noticeable drop in off-hook voltage calls for further inspection.

To test for parallel devices in the outside

plant, open the line with the DATU and re-

Wire Gauge	Looked Pair	Unlooked Pair
240	9.09	5.49
220	3.67	2.20
200	1.73	1.01

demark point. If you hear the tape player through the jacks, your phone's bookswitch has been compromised.

Checking for splits on your line requires an induction probe and access to a plant wiring cabinet. Add a tone to either end of your pair with the DATU. Probe all the conductors in the binder pair, listening for the trace tone. If you hear the tone on more than two leads (the ones connected to the line you're checking) your line has been split. This can be either a bad splicing job, or someone intentionally breaking a pair up to your line.

If any of the above tests suggests that there is something on your line, remember that there are plenty of innocent reasons a test could turn up positive, so a detailed physical search is in order. Disassembling the phone in question and comparing the innards to a schematic would be a wise idea at this point. Take the covers off your phone jacks, dig around in your demark point, peek inside wiring cabinets if you can, and so on. There are some places that are likely out of your reach, but keep in mind that they're likely out of reach to many wiretappers as well.

BUY 2600 ONLINE!

Yes, it's true. You can finally buy 2600 and 2600 accessories without having to waste valuable energy getting out of your chair or licking a stamp! Best of all, you can get a lifetime subscription and pay for it over the course of your entire lifetime, all through the magic of credit cards. We will also be offering online registration for H2K to avoid waiting on line once you get there! No more writing checks or pacing the halls for weeks waiting for your stuff to arrive - online orders usually ship in one week. Check in often for new items and special offers.

W W W . 2 6 0 0 . c o m

D A T U S - The Tool of the New Age Phreak

by MMX

Most of this article is about wordless from the administration manual. But be honest with yourself before criticizing me for "skating" this article. When was the last time you called Harris and SEC'd it out of them? Huh? Didn't think so much.

The Harris Direct Access Test Unit Remote Terminal covers the field technician's testing capabilities of subscriber lines through the non-verbal environment of a pair gain system. Typical pair gain systems include SLC 96, SLC Series 5, etc. The system has three major components: the Direct Access Test Unit (DATU), the Pair Gain Applique II (PGAI), and the separately located Metallic Access Unit (MAU).

Direct Access Test Unit - Remote Terminal

The DATU RT is a printed circuit card that provides microprocessor control of line supervisory functions, voice prompted menus, and status reports to the technician. It allows technicians to access and perform specific loop conditioning and tone generating functions on any working subscriber line to prepare the line for use with CO test equipment. The card is installed in the Metallic Facility Terminal (MFT) bay and connected to the Central OES switch.

Pair Gain Applique II

The PGAI II is a printed circuit card that extends the DATU RT capabilities into the pair gain environment. The PGAI II is a printed circuit card that extends the DATU RT capabilities into the pair gain environment and serves as the interface between the DATU RT and the switch's Pair Gain Test Controller (PGTC). It determines the status of the PGTC and its module ICs test pair, provides carrier channel signaling and transmission test results, and controls the DATU-RT's access to the MAU. The card is installed in the MFT frame and connected to the switch.

Metallic Access Unit

The MAU provides the standard DATU-RT line conditioning functions as dictated by the DATU-RT and eliminates the need for manual bypass pairs from the

switch to the remotely located pair gain terminal. The entire card is isolated inside the customer housing. The pair gain is spliced. One DATU-RT and one PGAI II, working together in the same switch, may serve a maximum of 212 separate MAU locations. The RT system provides the technician the ability to perform a series of diagnostic functions to subscriber lines. These functions are established and maintained by software reserved.

Now, onto my part of the article.

I won't be speaking about 800 number mode for three reasons:

1) If you accidentally screw something up, the DATU probably won't work.

2) You don't own any DATU that you're using (nor do you have permission), and therefore you're contributing a crime by accessing one.

3) I think we'll talk about things like changing the NFT Busy Test, you will do something naughty. Very naughty.

However, I will consider releasing an article on DATU Administrator functions in the future.

To access the DATU, dial the telephone number assigned to it. Upon connection, you will hear a <40Hz "Ring tone" indicating that the DATU has answered and is ready for password entry. Did the password of the DATU, which is defaulted to technicians at 1111. If the first digit of the password is not entered within seven seconds after the DATU answers, it will release the line. Upon entering a successful password, another DATU dial tone is heard, prompting you to dial the seven digit subscriber line number (in other words, the number you want to user). Occasionally, something will be wrong at the CO, for DATU will say "Error, bad no test trunk" and a pulsing <40Hz tone will be heard. If you ever get this, then you probably are accessing a DATU offstar a CO where someone is sitting at their desk or in a remote office. I have yet to get this error at a heavily manned CO. You also won't be able to run tests if you get this message.

After the DATU prompts you to dial the subscriber line number, a few things can happen. If you dialed a

number not served by that DATU, you will get the message: "INVALID PREFIX" and another DATU dial tone. Upon dialing a correct number, if the line is live, the DATU answers the line and you will hear "Connected tooddoddOK. Auto Monitor." You can then enter <40Hz tones in the event an exceptionally

long period of time before the menu is presented. If the line is busy, the DATU will say "Connected to oddodd Busy line. Auto Monitor." The busy line will then be monitored for 10 seconds. It should be said at this point that all audio traffic is intelligible. After the ten seconds of audio monitoring, the DATU will send two 61Hz tones-in rapid succession to indicate the end of the monitoring feature that would be displayed to a call in progress are not available if the DATU-RT detects a busy line condition. These functions include "High-Low Tone," "Open Subscriber Line," and "Short Subscriber Line."

There are theories about confusing the DATU by changing its busy test in administrator mode. Theoretical, if you change the busy test on the NFT, you could say, open your ex-girlfriend's line while she was on the net, never finding her new boyfriend. This function is used for the purpose of combating pair identification. It only a single lead (Tip or Ring) is selected. The opposite lead is unmonitored.

4 - High Level Tone. This function places 57Hz

dial-high (<22dBm) interrupted tone bursts on the Tip lead. Ring lead, or both. If a single lead is selected, the opposite lead is grounded. This function is typically used for the purpose of combating pair identification. It only a single lead (Tip or Ring) is selected. The opposite lead is unmonitored.

5 - Low Level Tone. This function places 57Hz

low-level (<12dBm) interrupted tone bursts on both the Tip and Ring leads. Because the tone signal is logarithmic, use of this function does not disrupt calls on a busy line. Tone bursts can be heard only on a telephone in-

stantaneous between Tip or Ring and Ground.

This function is typically used for the purpose of com-

bining two subscriber lines.

6 - Open Subscriber Line. The "Short Subsriber Line" function removes Ringer and Ground potentials from the subscriber's

Tip and Ring leads.

7 - Short Subscriber Line. The "Short

Subscriber Line" function provides an elec-

trical short across the subscriber's Tip and

Ring leads.

* - Hold Function (Keep Tone After

Disconnect). The "Hold Test" feature provides a means by which a line condition as-

set by the DATU-RT is maintained for a specified time interval after disconnecting from the DATU-RT. The duration of the Hold Test interval is entered through the telephone keypad and is specified in minutes. Any interval may be entered; however, the DATU-RT will not maintain a line condition longer than the Access Timer interval. The programmed duration is automatically canceled by the DATU-RT when the speci-

-2-Audio Monitor. Provides a way to verify that the busy test was correct. Traffic on the line is audible but unintelligible. Auto Monitor is automatically disabled at regular intervals to insure that the DATU-RT is able to detect DTMF tones in the event an exceptionally strong audio signal is present. This occurs at regular six-second intervals and is of approximately two seconds duration.

J - Short to Ground. The "Short to Ground" function is used to connect the Tip, Ring, or both leads to ground potential. If only a single lead (Tip or Ring) is selected, the opposite lead is unmonitored.

5 - Line Test Loop. This function places 57Hz

dial-low (<22dBm) interrupted tone bursts on the Tip lead. Ring lead, or both. If a single lead is selected, the opposite lead is grounded. This function is typically used for the purpose of combating pair identification.

6 - Line Test Loop. This function places 57Hz

low-level (<12dBm) interrupted tone bursts on both the Tip and Ring leads. Because the tone signal is logarithmic, use of this function does not disrupt calls on a busy line. Tone bursts can be heard only on a telephone in-

stantaneous between Tip or Ring and Ground.

This function is typically used for the purpose of com-

bining two subscriber lines.

7 - Short Subscriber Line. The "Short

Subscriber Line" function provides an elec-

trical short across the subscriber's Tip and

Ring leads.

* - Hold Function (Keep Tone After

Disconnect). The "Hold Test" feature provides a means by which a line condition as-

set by the DATU-RT is maintained for a specified

time interval after disconnecting from the DATU-RT.

The duration of the Hold Test interval is entered through the telephone keypad and is specified in minutes. Any

interval may be entered; however, the DATU-RT will

not maintain a line condition longer than the Access

Timer interval. The programmed duration is auto-

matically canceled by the DATU-RT when the speci-

Time-out interval has object. At this point, it is good to note that upon setting up a DATU, the administrator defines the Access Timeout Interval, which is basically a timer to say "good-bye" once you've barged too long on the DATU. By default, the Access Timeout is 10 minutes. Also, after timing \leq , the DATU will accept you with either "DIAL NUMBER OF MINUTES" or "DIAL 2 DOTS FOR NUMBER OF MINUTES." With respect to single digit entries, "0" is interpreted as 10 minutes. Also, after you use this function, the DATU will expect you to be released and will say "PLEASE HANG UP".

g - New Subscriber Line: This function releases the currently held subscriber line so that another subscriber line may be accessed.

Before invoking **e0**, there is one other function that is worth mentioning.

g - Permanent Signal Release: The "Permanent Signal Release" function causes the removal of Buskey and Ground potentials from a permanent signal line served by a step-by-step switch. This function is typically used in certain buskey conditions resulting from a line fault so that no other line tests may be performed. After pressing "g" on the keypad, the DATU responds with "PERMANENT SIGNAL RELEASE" and a vocal warning message.

The required sequence of operations, the DATU uses the **g** character per line to determine whether the buskey condition has been cleared. The result of this test is then announced as either "OK" if the line is idle or "BUSY LINE" if the line is busy. This function is not available unless specifically enabled by the DATU administrator. Unless enabled, any attempt to use this function results in the message "ERROR - PERMANENT SIGNAL RELEASE DISABLED". Permanent Signal Release will function only on lines for the P-MTU that is identified as busy. An attempt to use this function on a line that is not busy results in the message "ERROR - NO LINE".

Single Line Access

You may be saying at this point, "Gee, MMX, how do you find the number of the subscriber line of a regular telephone?" If you're saying this, you probably are on a large number of prescription drugs. Moving right along... If you should find yourself "peering" the line out while talking the DATU with you will realize that you can't use the line, since you're using it to call the

DATU. An interesting postscript: The DATU is programmed to always to handle your pattern by dialing "0" before the subscriber line number; the DATU will wait until you hang up, and then test the line. Pretty sick, eh? Oh yes, and for those who wonder why there is no "auto monitor" during single line access, after you execute the last function, the DATU will ask you for the "number of minutes" (the testing doesn't start until one minute after you hang up).

So far, the usual Administrator's Guide: next are more details on the use of each feature of the DATU more than three lines by the end of it. Suppose you're just now on the use of each feature of the DATU product.

Conditioning of Carrier System Lines

Note: Unless you have a fairly basic grasp of the way pair gain systems operate, I would suggest skipping this section.

After clearing the subscriber line number, if the line is on a pair gain system, the DATU answers, "ACQUSING" and appears the subscriber telephone number at hand. The DATU announces the state of the subscriber line/HIT with one of the following voice messages:

- PAIR GAIN LINE PROCESSING" - if the line was successfully connected by the Pair Gain system.
- "BUSY LINE" - if the line is busy.

If the selected line is busy, the DATU is more clear about whether the line is served by a carrier system. It is also easier for line to determine whether the buskey condition has been cleared. The result of this test is then announced as either "OK" if the line is idle or "BUSY LINE" if the line is busy. This function is not available unless specifically enabled by the DATU administrator. Unless enabled, any attempt to use this function results in the message "ERROR - PERMANENT SIGNAL RELEASE DISABLED". Permanent Signal Release will function only on lines for the P-MTU that is identified as busy. An attempt to use this function on a line that is not busy results in the message "ERROR - NO LINE".

Remote Terminal (RT) Access

After the DATU has successfully addressed the subscriber line and acquired channel test results, the DATU will say "PLEASE ENTER PAIR GAIN SYSTEM ID/DIAL STAR TO END." This Pair Gain System ID is the unique line from Control Office using the bypass pair, enter "0" for the following section (Alphanumeric Pair Gain, System ID Entry). If Pair Gain System ID includes alphabets or punctuation characters, it should be bypass pair must be in place between the last digits of the DATU at the Central Office and the RT.

"SINGLE-PARTY LINE" - if a single-party channel and rail is detected.

"MULTI-PARTY LINE" - if a multi-party channel unit is detected.

"COIN-IN-0" - if a coin-channel rail is detected.

If the DATU is unable to activate the RTGIC or the PRTC encounters a problem in using the carrier channel, the DATU issues one of the following voice messages:

- "BYPASS PAIR BUSY OR RTC FAILURE" - if the DC Bypass pair is in use, all BGTC test circuits are busy or the BGTC cannot complete carrier system connection.

"PAIR GAIN SYSTEM ALARM" - the carrier system is saving the selected line is in a major abnormal condition.

"CHANNEL NOT AVAILABLE" - channel test results were not provided by the BGTC.

"BAD CHANNEL" - channel test failed - possibly bad channel unit.

After a failure in carrier channel test or in activating the BGTC, the DATU remains in Menu Item Selection mode so that the central office personnel may more easily determine the problem. If one of the above error messages is heard, however, the DATU is probably not connected to the line to be tested. Therefore, line programming commands will be accepted and confirmed by the DATU but the codebook may not necessarily exist on the line as planned after one of the above error messages is heard.

d. The second key depression identifies a single character from the group (typically three letters) selected with the first keypress. The character is identified by its position on the key. To select the first, press "P"; If the character is the second or the third, press "Q"; Press "Z" if the desired letter is the third of the group.

e. Repeat steps c and d for each alpha character in the Pair Gain System ID. When the 1st character has been entered, enter "0" or "0" just as previously done in step b. This requests the "numerical entry" mode. Specification sequences are assigned to the letters "Q", "Z", and certain punctuation characters. Table 1 below outlines these.

f. Enter any matching numbers that are part of the Pair Gain System ID.

g. Any combination of letters and numbers may be entered in this manner. Repeat the appropriate steps as necessary.

h. Enter a single sign ("") to complete the Pair Gain System ID entry.

i. After the Pair Gain System ID has been successfully entered, the DATU will say "PLEASE ENTER PAIR NUMBER/DIAL STAR TO END." Enter the pair number for the subscriber's line using the telephone keypad.

j. The DATU performs verification of the Pair Gain System ID entry with a voice message. If a valid ID was entered, the DATU answers "ACQ-TSS" followed by the ID previously entered. If the Pair Gain System ID is

Alphanumeric Pair Gain System ID Entry

This section describes the method by which alphanumeric letters may be entered using a standard 12-key telephone keypad.

Pair Gain System ID is the textual names:

a. Enter "0". This key sequence places the RT sys-

tem in a special mode in which alpha and control other non-alphanumeric characters may be entered as a series of two-digit key codes.

b. The first key depression simply identifies the key on which the desired character is stamped or printed. For example, if character is "A", "B", or "C", press the "2" key.

c. The second key depression identifies a single character from the group (typically three letters) selected with the first keypress. The character is identified by its position on the key. To select the first, press "P"; If the character is the second or the third, press "Q"; Press "Z" if the desired letter is the third of the group.

d. Repeat steps c and d for each alpha character in the Pair Gain System ID. When the 1st character has been entered, enter "0" or "0" just as previously done in step b. This requests the "numerical entry" mode. Specification sequences are assigned to the letters "Q", "Z", and certain punctuation characters. Table 1 below outlines these.

e. Enter any matching numbers that are part of the Pair Gain System ID.

f. Any combination of letters and numbers may be entered in this manner. Repeat the appropriate steps as necessary.

g. Enter a single sign ("") to complete the Pair Gain System ID entry.

h. After the Pair Gain System ID has been successfully entered, the DATU will say "PLEASE ENTER PAIR NUMBER/DIAL STAR TO END." Enter the pair number for the subscriber's line using the telephone keypad.

i. The DATU performs verification of the Pair Gain System ID entry with a voice message. If a valid ID was entered, the DATU answers "ACQ-TSS" followed by the ID previously entered. If the Pair Gain System ID is

not valid or if the bypass port was selected, the DATU

answers "USE BYPASS PORT."

Two-Key Sequences-Non-Numeric Keypad

1st Key	2	3	4	5
6	(Space)			
7	A	B	C	
8	D	E	F	
9	G	H	I	
J	K	L	M	N
P	R	S	O	T
Q	U	V	Y	X
W	Z			

Note: maximum from CO

Access Line Interface (Ground Start)

1. Tip and Ring Parameters in Off Hook Mode

*Modem FCC Part 68 Requirements

*Resistance is 120 ± 20 ohms at 20 to 90 mA

*Minimum DC current required is 20 mA

*Typical AC impedance at 1 kHz is 60 ohms

2. Tip and Ring Parameters in On Hook Mode

*Modem FCC Part 68 Requirements

*Minimum ring (dial) level is 65 volts AC rms

*Uninterrupted pre-dialing duration is 300 ms

*Ringer equivalence is 0.5B

3. Secondary Dial Tone

*Secondary dial tone is provided upon ring tip,

password entry, and new subscriber line

selection

*Dial tone is silenced when a digit is dialed or

when the DATU/T/R times out

*Dial tone level is -15 dBm ± 3 dBm

*Dial tone frequency is 440 Hz ± 8 Hz

*Harmonic distortion is less than 10%

4. DTMF Dial Decoding:

*Each incoming telephone signal is translated into

one of the 12 character sets shown in Table 2.

*Frequency deviations of up to ±2.5% are ac-

cepted and all deviations greater than ±3.5% are re-

jected

*DTMF tones greater than 90 ms are accepted

*Enddigit timing is greater than 40 ms and less

than seven seconds are rejected

*Signal amplitude per frequency of 20 to 0 dBm are

accepted

5. Voice Message Clipping

*Average voice level is -13 dBm

*Voice frequency range is 200 to 3,000 Hz

*At 10.000 dBm feed from the CO is -19 dBm

*High Level Tone Test (Definition)

*Tip-to-ring signal strength is +22 dBm ± 1 dBm

*Tip-to-ground or ring-to-ground signal strength is +17 dBm ± 3 dBm

Annonyms That You Are Too Stupid To Know

DATU = Direct Access Test Unit

HLLARY = Guess!

RGA = Far Gain Average

RFTC = Far Gain Test Controller

RT = Remote Terminal

Table 2
translation from CO of the 12 character sets shown in

Table 2

DTMF and VLF Encoding

Frequency	0000	0111	1111
Low	0.00	1.00	2.00
High	0.50	1.50	2.50
Low	0.00	1.00	2.00
High	0.50	1.50	2.50

DTMF and VLF Decoding

Frequency	0000	0111	1111
Low	0.00	1.00	2.00
High	0.50	1.50	2.50
Low	0.00	1.00	2.00
High	0.50	1.50	2.50

4. Low-Level Tone Test

*Typical signal strength measured tip-to-ground

*At the CO is -12 dBm ± 3 dBm

*At 10.000 dBm feed from the CO is -19 dBm

*High Level Tone Test (Definition)

*Tip-to-ring signal strength is +22 dBm ± 1 dBm

*Tip-to-ground or ring-to-ground signal strength is +17 dBm ± 3 dBm

Annonyms That You Are Too Stupid To Know

DATU = Direct Access Test Unit

HLLARY = Guess!

RGA = Far Gain Average

RFTC = Far Gain Test Controller

RT = Remote Terminal

THIS JUST IN
THT 2600 BLUE BOX SHIRTS ARE BACK, only this time they really have a blue colored box on the front. (We cardo ourselves sometimes) To order, send \$18 for one shirt, \$30 for two, to:

2600 Shirts, P.O. Box 752
Middle Island, NY 11953

Physical and Electrical Specifications

(directly copied from administrator manual)

* Each incoming telephone signal is translated into

one of the 12 character sets shown in Table 2.

* Frequency deviations of up to ±2.5% are ac-

cepted and all deviations greater than ±3.5% are re-

jected

* DTMF tones greater than 90 ms are accepted

* Enddigit timing is greater than 40 ms and less

than seven seconds are rejected

MESSING WITH STAPLES

by Maverick (212)

Well, as you might guess, I used to work for Staples. The office superstore. Used to. Still is, until they lied me over something which was, even for them, ridiculous. So, here I am, spilling my guts about the technical gags used in their stores.

Phones

The stores use a standard Meridian phone system with six lines. The first three are regular local and the last three special lines. These special lines are only good for 800 calls and calls to other stores and cannot be used for regular local and/or long-distance calls.

To dial another store, enter the one of the regular line buttons and dial the regular phone number, or, if there are no lines, dial the store's 700 number. Each store has two 700 numbers, one for voice and the other for fax. The voice lines are always 1-700-444-XXXX, where XXXX is the 4-digit store number, preceded with initial 0's, if needed. The fax lines are always 1-700-555-XXXX. As far as I know, these 700 numbers are only good when calling from inside a store.

Sometimes, the outgoing lines require a password. This is not too common, but is easily circumvented. By punching FEATUE* from your telephone, you can access the phone system's configuration menus. It does ask for a login and password, but the defaults are invariably 266234 ("GUNFIG"). The only phone line in the stores that will work is a power outage is the one the fax machine at the copy center is plugged into.

The phones also feature, in the lower right corner, a "page" button. "May I have your attention, Staples shoppers..."

RIBBON COMPUTER

Staples' ribbon computer is located next to the selection of tapestries and printer ribbons in every Staples store is an old 386 computer that is constantly running a program which is supposed to assist customers in finding the proper ribbon. This stand-alone system has no security whatsoever. Simply pressing the spacebar to click off the screen saver and hitting Ctrl-Break is enough to drop you to a DOS prompt. Rebooting and breaking out of the interface, it is also trivially possible. Unfortunately, once you are at a DOS prompt, there is really nothing to do, as all the ribbon-loader files are in a special format. One thing that is possible is changing the screen saver image. It's located at C:\Unlhd\Staples\2\Lock, and is a standard 640x480 bitmap.

Proteva

Staples sells custom-built Proteva computers. These are displayed and sold through a stand-alone system at one end of the computer wall. The "kiosk" simply allows customers to look at specs, select various system packages and options, and print out a price quote. This system runs Windows NT, and is susceptible to the old dosbox trick. Booting from a floppy and running the shareware program nbtrees allows read-only access to the hard drive. Copying the SAM file and running L0phtCrack reveals five different users and passwords. The Administrator password is at least somewhat secure - a full two weeks running L0phtCrack didn't reveal it. The other logins/passwords are:

"Guest" - this account is disabled.
"Customer" - this account is used for regular customer browsing.
"Admin" - STAPLES1234 - this one automatically leads new features/pricing from a diskette.

"MSI" - STAPLES1234 - this allows you to change the current pricing and make sample diskettes which can be loaded on the same or other machine using account "User".

Compaq B-to

Staples also sells Compaq Built-to-order computers. These are viewed and ordered from a Compaq computer, which is usually placed right next to the Proteva. Unlike the Proteva, however, the Compaq "kiosk" has a power-up BIOS password and is networked into Staples' corporate WIM. This is necessary because the BIOS is only used as a viewer for Compaq's web site where the BIOS, options lists, and ordering forms really are. The site is available at www.compaq.com/bto. Login and password are "STAPLES", where XXXX is the 4-digit store code, preceded with initial 0's as needed. There is very little security on this computer. Simply pressing Ctrl-Alt-Del, and "End Task"-ing the kiosk software (really Microsoft Internet Explorer) run full-screen without the toolbar, etc.) drops you directly into a new browser can be fired up and whoosh, you can surf the net. Or you can go into Network Neighborhood and look around a little. What else is on the local network?

Years ago, all each Staples store had in

the way of computers was an AS400 terminal.

This ran over a 9600 leased line to the corporate headquarters and was used for inventory control, printing price signs, entering damages, and many other tasks. About two years ago, Staples installed Frame Relay to all its stores and upgraded to three actual computers in each store. The Sales Manager's office received a computer for employee use, usually General Managers. The third was set up as a training computer for employee use, usually in the latter of the two offices. These were generally 286 to 333MHz Pentiums with either 32 or 64 meg of memory. All ran Win NT 4.0 SP3.

The computer in the Sales Manager's office was usually kept running a terminal program that simulated the AS400 terminal that had been removed. The General Manager's computer was used for making employee schedules and keeping track of employee punches at the timesclock. It was also used every Sunday to do employees' payroll. The training computer was loaded with various certification and educational software and kept track of which employees had passed which "course" at Staples. All three computers had browsers and could surf Staples' intranet and the internet.

Using nbtrees and L0phtCrack on these machines revealed the following accounts: "Administrator": 0123456789 - Thought they'd make it more secure using a serial. "WebUser": - Disabled.

"Guest": - Disabled.
"Sales": "AS400" - Used, obviously, for maintenance and installation.

"StaplesService": "ActiveSync/MIS" - Yes, the login backwards.

"Associate": "SELL" - What we were supposed to do.

"Manager": "CAGE" - What the managers didn't.

"MSI": "PASSWORD" - Yes, this account actually exists. Someone must have taken the instructions a little too literally when asked to type in their user id and password.

With the arrival of the office computers, Staples stores also received a remote terminal hooked up into the system. This "gun" has a small lcd screen, an alphanumeric keypad and a scanning laser. Almost any function you can do from the AS400 terminal is available from the gun, including price checks, sign printing, and inventory functions.

Security Devices

Certain Staples stores, usually those with the highest sales, have gotten a security system installed. It consists of a set of "gates" set on either side of the entrance and exit doors, and rolls or sliders which are placed on high-ticket items. The sliders interrupt the weak magnetic field put out by the gates which causes the gates to beep. This can obviously be defeated easily by removing the sliders from the merchandise. Some stores also have cameras, usually aimed at the main entrance, and possibly one in the money room.

Well, that's enough for now. When I dig up some more information, I'll be sure to write another article. Until then - happy hacking!

WWW.2600.COM

Security Personnel
Most Staples stores have a security guard at the front door. He sits usually a helpful person who asks you to leave your bag with him when you enter the store. He's basically powerless to do anything, though. If pushed hard enough, and backed by a store manager, he can refuse you entry to the store most of the time, but let you in with a "I'll have to check your bag when you leave. Of course, you don't have to let him, and he can't make you."

Own Your Car!

by Stamat

I work the night shift for a major auto company near the motor city in Michigan. One night all the bosses went home early and left us there alone. We had learned earlier that day (on the news) that a bunch of us were being laid off and the rest were being transferred or strong-armed into quitting. The executives didn't even have the decency to tell us first, or in person. We had to hear it on TV. So needless to say, no one was in a good mood.

Where I work there is no getting out. If you quit, you have to take 30 days (unemployment) before you can work at another related facility. The software we use is only used by other related facilities. Still they wouldn't release us from our contracts. Most of us had put in years of service and worked overtime to get projects out to match deadlines set by executives who had no idea of the work involved.

Even forsaking our families at times, and for what? To be walked on and thrown out like yesterday's newspapers, to perfect a vehicle that we will never be able to afford? No parks at this job, poor pay, no employee discount, no job security, and night shift makes getting anything done impossible. Basically, they own us.

After learning of our imminent doom, everyone was sitting around wondering what would become of us. Three of us who were as close to mud-happy employees as you could get - did our jobs and didn't screw around while other people slacked off and played solitaire. We never took advantage of our jobs. That is, until that one night.

I was the first who mentioned a scheme, half jokingly and half seriously. "We should go down into that restricted area and try to get in." The other two guys agreed we really didn't have anything to lose. So we decided to go for it. We knew what was in there because you could see all the experimental cars from the solid glass walls. The sliding doors were about 10 feet high and 15 feet wide. The only problem was that they were locked by an executive level passkey card. We knew they wouldn't let us walk right in - none of

us fit the description of an executive type.

We were obvious computer geeks, as our coworkers would say. So we thought of a plan. We gathered a bunch of door parts, a frame here, a sealing strip there, got some calculators, sketch pads, pencils, and a few compasses left over from the manual days.

We picked up some heavy blueprints to back up our story and typed up a fake work order. Our Pass cards would let us in most machines, but that would have been destructive and nonproductive. Instead, serial engineering would be our key.

A voice spoke from the intercom. "Can I help you?"

I replied. "The reader won't read my card."

The voice came back. "You're not in the computer for this area."

"I have a job that requires my unrestricted access to this area."

"I'll be right down," the voice shot back.

We showed him our ID badges that proved we worked there and he asked what we were doing. We explained that we needed to get in the restricted area to do some last minute changes to the seats in one of the vehicles before this year's auto show, which was only a few weeks away.

Unconvinced, the guard wouldn't let us in. Though we unrolled the blue prints and showed him where the trouble was. Being the senior he was, he couldn't read the blueprints or make heads or tails of it.

"There is an airflow problem throughout the door system, which at high speeds causes wind deviation thus amplifying cabin noise and increasing internal pressure." We drove in some more technical BS and buzz words and finally he was convinced after we showed him the phone work order. He slipped his passkey through the door and opened it for us. He watched us for about a half hour until he got a buzz from another part of the building and had to go. We told him this will take us most of

the night and we could let ourselves out. There were push buttons on this side. Now the fun would begin.

Most of you won't see the vehicle we were about to play with until 2002. It's a prototype and there were six of them there.

In the trunk was a fuel cell, holding about 50 gallons of racing fuel. The tires of the car were kicked out and set out about 6" in the rear, and mostly to the corners of the car. It was super charged, none of that cheap turbo charge triad. Under the hood was well you wouldn't believe me if I told you. Needless to say this wasn't the fuel economy car that everyone thinks we're all working on to save the environment. This car was pure evil. Oh, did I mention that we are one of the most prestigious car companies, that we are the definition of luxury and class? Most older folks want one of our cars when they retire. So this car will be a shock when it's released.

And it will be released. We drooled enough. Now it was time to test out our made-up theory. There are always keys in these vehicles and full tanks of gas. No problems on the car so no one will know what is if they see it. Heck, at 2 am who would be out on the roads anyway? We fired her up and two of us went out, leaving one behind to open the door so we could get back in. I took the second spin at the wheel and oh my gosh, talk about power and speed. I had never driven a super charger before. There was no waiting for the turbo to kick in. You hit the gas and it was pure power. The tires would squeal as long as you held the gas down. At 80 mph it seemed like we were crawling and every time I tapped the peddle the tires would squeal. At 95 mph they would squeal! I think I got a whiplash that day. A red light a Corvette pulled up next to us, a new sleek one. He gunned his engine and when the light changed I floored the gas. Bad mistake - the car just sat there spinning its wheels like we were on ice. OK, I'm a computer geek, not a drag racer. I came off the entrance ramp to I-75 at 75 mph. I was looking for a certain switch that I had heard existed. I flipped off the headlights and hit the switch. Night Vision. A camera is mounted in the hood in the symbol. It displays the image on the windshield and you can see through fog and rain. It makes everything white and is very cool. Like it because I can drive with no head-

lights on. The ride was smooth, and steering was tight and effortless even at speeds over 150. The car also has GPS installed in the car.

care you get lost or you lock your keys in it - or if the car is stolen. If you get in an accident and the airbag goes off, it activates the headrests and patches you into a 24 hour receptionist who can listen in on your cabin and talk directly to you using cellular towers. This system and features are commonly referred to as telemetry, another new buzzword that will be popping up later this year. The home base of this networked and the receptionist can watch your car's movement on her screen. She can patch her screen to other receptionists too. Other features of this system allow you to navigate and even hold histories of the towns that you're driving through.

No per-minute fees, just one yearly fee. Had I not been having so much fun I would have thought to get the dial-in number to the automated computer.

It was nearing our lunch time so I hit the blue button which connected the car to the 24 hour lady. She gave us her name and asked how she could help us. I said we needed the location of a 24 hour restaurant. She gave us a few of them and then told me to turn right at the next exit and guided me there no problem. All without even asking my name, or where I was calling from. I later learned this service will cost about \$400 a year but that is unlimited service calling. Data travels at a slow analog speed of 2400 bps. This should change soon as more digital towers are put up along the expressways. These all vehicles will use spread-spectrum.

The lady said she was getting a reading of engine compartment heat and suggested I take the radiator was full, even though it appeared full to her. It might have been due to my driving over 100 mph for so long before I called her. "I'll check it out,"

I told her. Just think what other people could do if this fell into the wrong hands. This service makes the Platinum II ID feature look like small potatoes.

Hacking in the future will soon find its way into the automobile. This car itself is one large computer; there are microchips in every part of the car, each controlling components, mirrors, windows, seats, door locks, power brakes, etc. Windows will be easily inserted into the car's onboard system via the CD player which will soon be a

direct link to the car's CPU. A hacker could make the horn honk every time the brake pedal is pressed. Just think what a program like Back Office could do on one of these cars.

I see it like this: A voice announces to the irritated driver: "What's wrong - you don't like Rob Zombie?" "No!" yells back the executive driver. "Fine, turn it off. Oh that's right, you can't. I own your car!"

Most of the top automakers are secretly making it their goal to turn their luxury cars into a virtual onboard LAN. And it was highly evident in the car I was driving. Behind closed doors, execs discuss their future plans. They want their vehicles to be able to access the Internet. It would have to be wireless and they know what that

means. A high price would have to be paid to the companies that own the rights to the specific radio spectrum which would be required by this system. They figure they will pass the cost to the consumer and have them pay for the service like we do now for the Internet. (Mental note: Invest in AT&T stock.) With all the talk of what they want to do, no one is talking about what they're going to do to make it secure. They are relying on digital spread spectrum to be their firewall saying that will protect them from their signals being intercepted. In my opinion this is very naive, yet typical. What they don't realize is that sometimes the demon comes from within.

I've seen the future, and it is sweet. I've seen the future, and it is sweet.

This is inspired with respect to our brothered Catastrophe Dismay who wrote "Copper Pair Color Coding" in 154. I was enlightened to read the article so that others reading about their was written in understanding the information in their quest for knowledge in the Information Age. What was explained was the color code. The color code is the foundation to understanding the wires that are used for our telephone connections. When you see a telephone cable, it will be a dull silver/greyish color and will have a variety of different colors of wires. When you strip the wire, it is copper. And of course, copper is a conductor of electricity.

All of the wires have different specified colors with respect to the color code. Understanding the sequence will help you understand how to connect it to a 65 block, for example. Encountering other types of cable with the wires inside will show the various colors of the wires. It will be in a different sequence, but the concept applies as it does to all other telephony cable. Now that there is a standard for the wire, I'll expand on the different types of terminology pertaining to how the cable is defined.

For the standard telephony cable, inside there are 25 pairs of color-coded wires. The definition for the 25 pairs of wires is called a binder. From the definition of a binder, we can expand our telco jargon. One super-binder has 25 binders with 625 pairs.

Telco-Babble

by Android

The etymological origin of the word telecommunications is derived from the Greek word *tele* as defined in the book of Webster as to travel a distance over. And communication defined as a system for sending and receiving messages, as by telephone, telegraph, radio, etc. Now that we have an understanding of the concept, let us proceed into the subject and shed some light on it.

This is inspired with respect to our brothered Catastrophe Dismay who wrote "Copper Pair Color Coding" in 154. I was enlightened to read the article so that others reading about their was written in understanding the information in their quest for knowledge in the Information Age. What was explained was the color code. The color code is the foundation to understanding the wires that are used for our telephone connections. When you see a telephone cable, it will be a dull silver/greyish color and will have a variety of different colors of wires. When you strip the wire, it is copper. And of course, copper is a conductor of electricity.

That was the foundation for understanding the various telephone cable sequences with respect to the color code. Practice using the terminology with a telco person who works outside the field and that person will be impressed. As for understanding the various networking protocols, packet-switching, TCP/IP, to name a few, they rarely understand it (not to castigate their intelligence). This is from my social engineering with others in the field. In contrast, the telcos provide us with services that are vital to the connections to the communities terminals so that we can have our Internet and telephone connections.

As a techo-dweeb dilettante, the telco realm was different compared to the computer/electronics realm: two completely different entities. I rarely

use the color code, but it's good to share the knowledge with others not familiar with it. When the two are integrated there is an appreciation for the cabling, terminals, and connec-

tions making it possible for communications to be in existence. Yet, it's fascinating to ponder how a connection per wire with plastic wrapped around it in various colors is vital to the communications that we are using today and for tomorrow.

An Intro to Paging Networks and POCSAG/FLEX Interception

by Black Axe

Pages are very, very common nowadays. Coverage is widespread and cheap, and the technology is accepted by most. Ever wonder, though, what happens on these paging networks? Ever wonder what kind of traffic comes across those pager frequencies? Ever listen to your scanner on a pager frequency in frustration, hearing the data stream across that you just can't interpret? Want to tap your radio, get a decoding program, and see what you've been missing?

Before I begin, let's cover just exactly how those precious few digits make it from the caller's keypad to the display of the pager in question. Or perhaps your monitor...

Let's entertain a hypothetical situation in which I would like to speak with my friend, Dave. First, I pick up my phone and dial Dave's pager number (555-1234). I hear the message "Type in your phone number and hit the pound sign.". So I comply, enter 555-4321# and then hang up.

Here's where the fun starts. This is all dependent on the coverage area of the pager. The paging company receives the page when I enter it, and looks up the captain code of the pager it is to be sent to. A captain code is somewhat akin to an ESN on a cellphone; it identifies each specific pager on a given frequency. The paging company will then send the data up to a satellite (usually), where it is rebroadcast to all towers that serve that particular paging network. (Remember last year, when everyone's pagers stopped working for a few days? It was just such a satellite that went out of orbit.) The paging towers then transmit the page in all locations that Dave's pager is serviceable in. In this case, let's say that Dave's pager has a coverage area that consists of a chunk of the East Coast, going from Boston down to Washington DC, and out to Philadelphia. The page intended for him is transmitted all through that region. Since a pager is a one-way device, the network has no idea as to where the pager is, what it's doing, etc. so it just transmits each page all over the coverage area, every time.

"So?" you may say. "What's that do for me?" Well, it means two different things. First, pagers can be cloned with no fear of out the pages, and any pager with that cap-

code on that frequency will beep and receive the data. Second, it means that one can monitor pagers that are not based in their area. Based on the example of Dave's pager, he might have bought it in New York City. He also could live there. However, because the data is transmitted all over the coverage area, monitoring systems in Boston, Washington DC, and Philadelphia could all intercept his pages in real time. Many paging customers are unaware of their paging coverage areas and usually do not denote the NPA (area code) from which the page is being received. This can cause problems for the monitoring industry, who must always remember that seven digit pages shown on the decoder display are not necessarily for their own NPA.

The Pager Decoding Setup

Maybe you know this, maybe you don't... Paging networks aren't encrypted. They all transmit data in the clear, generally in one of two formats. The older format is POCSSAG, which stands for Post Office Code Standards Advisory Group. POCSSAG is easily identified by two separate tones and then a burst of data. POCSSAG is fairly easy to decode. FLEX, on the other hand, is a bit more difficult, but not impossible. FLEX signals have only a single tone preceding the data burst. Here's how to take those annoying signals out of your scanner and onto your monitor. You will need:

1. A scanner or other receiver with a discriminator output. A discriminator output is a direct connection to the output of the discriminator chip on your scanner. This is accomplished by soldering a single wire to the output pin of the NFM discriminator chip to the inner conductor of a jack installed on the scanner. RCA jacks are commonly used for convenience. A list of scanners and their discriminator chips can be found at:
<http://www.contronics.net/flexdata.dat>.

For obvious reasons, the larger and more spacious a scanner is internally, the easier the modification is to perform.

2. A computer is required to actually interpret and display the pages. Most pager decoding software runs under Windows. This includes all software which uses the sound card to decode signals. If you have a data slicer, there are a few programs which will run under DOS.

3. You will need a Soundblaster com-

patible sound card. This will let you snag FOCSSAG traffic. Or you can build a dark slicer and decode FLEX traffic too. Or you can be lazy and buy one from Texas 2-Way for about \$80 or so. The Soundblaster method will obviously tie up your computer while decoding pages. Using the DOS box and will let you use your better computer for more important stuff.

4. Antennas, cabling, etc... You will need an RCA cable (preferably shielded) to take the discriminator output either into the sound card or into the slicer. If using a slicer, you will also need the cable to connect your slicer to your computer. As far as antennas go, pager signals are very strong, so you won't need much of an antenna. A rubber duckie with a right angle adapter attached right to the back of the radio will be more than enough. The signals are so damned strong that you might even be able to get away with a paper clip shoved into the antenna jack. Think of what kind of an antenna your pager has; this should give you a good idea of what the requirements are in the antenna department.

Connect your scanner's discriminator output to either your data slicer or your sound card. If using a sound card, be sure to use the line in connection. If using a data slicer, connect that to the correct port on your computer. Turn yourself a nice, strong (they're all strong, really) paging signal.

Where are they? Well, the vast majority of numeric pagers are crystallized between 929 and 932MHz. Try there. Or if you want to try decoding some alphanumeric pagers, try the VHF range around 158MHz. There is also some activity in the 460-470MHz range.

Now, what about software, you say? That is where things start to get somewhat difficult. Motorola developed most paging protocols in use and holds licenses to them. Any software that decodes POCSSAG or FLEX is a violation of Motorola's intellectual property rights. So one day the people at Motorola decided that they didn't want that software floating around. They

proceeded to lock up everyone who had copies posted on the Web and told them that if they didn't take those specific programs off of the Web, it was court time. The threatened automakers removed the Bill Check and Keith Knippschild from the United States Secret Service arrested offending copies, fearing a lawsuit from Motorola. After this, our good friends from

the United States Secret Service arrested Bill Check and Keith Knippschild for mass-mailing around with decoding hardware and data slicers illegal. Of course, these arrests were ridiculous, but nobody wanted to get busted... so the vast majority of resources on American websites disappeared. Checking around English or German sites may yield some interesting results.

Now you're ready. Fire up the software. Get that receiver on a nice, hot frequency. Look at all of the pages streaming across the network. Give it a few hours... getting bored yet? Okay... now that you have a functional decoding setup, let's make use of it. Know someone's pager that you want to monitor? Here's how to snag them. First you need the frequency; it's usually inscribed on the back of the pager. Also, you can try to determine what paging company they use, and then search engine the freq out of the company: www.percom-corp.com also has a search function where you can locate all of the paging transmitters (and frequency) in your area. Need by who owns em. Not bad. So you have the frequency... now what? Well, wait until you have to actually talk to this person. Get your setup cranking on the frequency that this person's pager is using. Now, page him. Pay close attention to the date coming across the network... see your phone number there? See the capsule that your phone number is addressed to? That's it. Some barrier decoding programs have provisions to log every single page to a certain page code to a logfile... this is a good thing. Get a data slicer, set everything up on a dedicated 486, and have fun gathering data. For updates to this article visit the Phone Punk Network (<http://M3.anypcap.com>). Mail can be sent to the Phone Punk address and it will find its way to me.

DO YOU HAVE A SECRET?

Is it something so sensitive you can't risk us backtracking your fingerprints from the envelope you mail us? We understand. That's why our fax machine is always ready to talk to you. 516-474-2677 (note: we will soon be forced against our will to use the new 631 area code - make the most out of the old code while it lasts!)

STARTLING NEWS

We've decided to turn back the hands of time and embark on a shrewd marketing ploy. Effective immediately, our subscription price will revert to what it was nearly ten years ago - a mere \$18!

Why are we doing this? Have we completely lost our minds? We will not dignify that with a response. But we will say that we are looking to get more subscribers and, since the vast majority of people buy 2600 in the stores, this seems as good a way as any. Plus it'll shut up those people who complain that subscribing is more expensive than buying it at the stands. That's no longer the case. Now, in addition to not having to fight in the aisles for the latest issue and being able to place free marketplace ads, you will also save money over the newsstand price. Just like Time and Newsweek.

We're also lowering the price of our back issues. With every issue we stockpile, we lose more space so we'd really like to get rid of the damn things. You can now get back issues for \$20 per year or \$5 per issue from 1988 on. Overseas those numbers are \$25 and \$6.25 respectively.

Name: _____ Antl. Enclosed: _____

Address: _____

City: _____

State: _____

Zip: _____

Individual Subscriptions (North America)

1 Year - \$18 2 Years - \$33 3 Years - \$45

Overseas Subscriptions

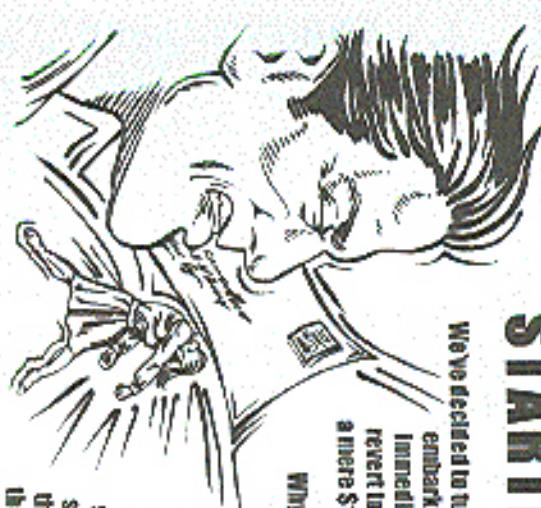
1 Year, Individual - \$26
Lifetime Subscription
(anywhere)

\$250
Back Issues

\$20 per year (\$25 overseas), 1984-1998

Indicate year(s): _____

Photocopy this page, fill it out, and send it to:
2600 Subscriptions, P.O. Box 752, Middle Island, NY 11953



HACK THE MEDIA

by Jim Nieken

Much has been said lately about journalists and the media from their outright disregard for the likes of Kevin Mitnick and others. To MTV's much criticized foray into the lives of hackers. Few

would deny the power and influence of journalists - yet no one seems to like them. They tend to prime hackers and most other "underground" subcultures in a negative light, and there are a number

of reasons for this. Among them, deadlines and other time constraints, the betraying nature of the news gathering process, and the necessity to simplify information. But there are ways to turn the idiosyncrasies of journalism to your advantage, and you might even find something good written about you in the paper.

First, some background. I have been working for various newspapers for years, both in freelance and staff reporter positions. My byline has graced the pages of papers both big and small, but I grew up working with local papers and tend to prefer them. I haven't done very much work with television, but the news gathering process is mostly interchangeable. Although a writer by trade, I am a geek at heart and must sympathize with the poor treatment my colleagues often give hackers.

This article is intended to explain how print and television journalists investigate and report a story, and what you can do if you are ever asked for an interview. The Deadline: Your Ticket to Increased Adrenaline Output Years ago, when I was just getting into the newspaper business, a grizzled old editor took me aside and explained what I was really supposed to be doing there. "My job," he said, "is filling up newspapers. Your job is meeting deadlines." His point was that while journalists' integrity was all well and good, newspapers couldn't print blank pages. Deadlines are not just a part of the job; they are often the single most impor-

tant concern. Reporters need to get their work in on time, and that can sometimes mean sacrificing accuracy for haste.

No one wants to print an untruthful story, but the fact is that the less time you spend researching, the less quality information you will get. That information also needs to be analyzed if it is to be conveyed correctly, which also takes time.

Loosing deadlines are not the only factor in inaccurate reporting, but if you ever find yourself the subject of a story you should take them into account. If a reporter says that he or she has a day or less to cover a story, be concerned. If they have more than a few days they probably won't totally misrepresent you, and if they have several weeks the deadline is not likely to affect the quality of the reporting at all. This is why local television news reports are often so shoddy. Local TV reporters (carpenters, etc.) often work under deadlines of a few hours or less. They are told to run off to a location, pose in front of a building or a car accident, and rattle off a few facts provided by local law enforcement. They don't have time to actually investigate, which is the curse of all time constraints.

As a subject, there is little you can do about deadlines, but you may want to when your story is due. If you want to help yourself end create a better story, try to be available to media sources. You can't get your side out if you won't talk, and newspapers may be forced to print only what they have heard from other sources. Those may be your friends and family, but they could also be the police and other government agencies, or the FBI whose life was ruined because he missed the season premiere of *Ally McBeal* when you took out the electric company.

The Interview as Seduction and Betrayal

In college, a journalism professor once told me that there are only two kinds of people in the world: those who are interviewed often and those who know how to be interviewed well - and those who aren't and don't. As a reporter, I get most of my information via the interviewing process, but no other news gathering technique has a greater potential for distorting information. Unlike a school district budget, or the winner of an election, or something equally unpredictable, conversations are more subject to interpretation than most people realize. You ideas must survive the transfer into your own words, into my head or into my notes, into new words in the final story, past the merciful tempering of various editors, and finally back into the heads of a hundred thousand readers. It's not at all uncommon for people to complain that they were misquoted or misrepresented when they see their words in print. I hear it all the time.

The distortion extends beyond merely getting the exact wording of a quote wrong. Words are usually taken totally out of context, poorly extrapolated from sloppy notes, or even shamelessly fabricated. It's very uncommon for a reporter to totally fake quotes (we tend to be pretty anal when it comes to what's inside quote marks), but danger lies in how quotes are set up. It all depends on how your comments are explained and what context they are placed in.

You could say something like: "I don't really like people who break into other people's computers just to mess with stuff. I mean, the idiots usually deserve what they get for leaving stuff wide open, but it's really mean and no one should take advantage of people like that."

But a week later this might be printed in the local paper: ...One hacker said that he feels no sympathy for people whose computers are attacked or vandalized. "The idiots usually deserve what they get for leaving their stuff wide open," he said casually."

The quote was reproduced accurately, but the context was totally reversed. Because of this, reporters love juicy, colorful, or controversial quotes. They spice

up a piece of writing like you wouldn't believe. If you're not careful they could even end up right in the headline. If it

takes three minutes of set up and hypothetical situations and philosophical justifications before you can say something like, "...so I guess if looked at it that way we should probably just blow up the phone company building..." you can be assured they will not print the philosophical justifications and skip right into your admission of a terrorist plot.

As an interviewee, you can help in a number of ways. First, don't say anything that needs a lot of background or buildup. We work with sound bites, and you should never say anything you don't want printed unless you make it clear that it's off the record. All reporters will respect your wishes to not have a quote printed, but always pay attention to what you are saying. Don't say anything too sensitive. Go slowly. We can only write so fast, and it allows you to choose your words more precisely. If you're ever suspicious, ask the reporter to read your

words back to you. Make sure you like what it says, because they may come back to haunt you and this is the only chance you are going to get to change them.

Also, always realize that you never have to answer any question asked by a reporter. We're not cops, and we can't force you to do anything. On the other hand, most journalists have large expense accounts and bribes are an extremely common industry practice. You might suggest that you sit down over dinner to talk. Be sure to order a dessert.

Journalists May Be Stupid, But

Our Readers Are Even Stupider

My handy Microsoft Word grammar checker tells me that this document is written at or around the 10th grade reading level. This means that if you can read this paper without moving your lips, you are capable of reading at least that level. Most magazines and nearly all newspapers are written at or around the 6th grade level. This is not because this is all the average American can handle. Rather, it keeps Joe Public from choking on his coffee at 7:30 AM as he slams into words like "ontological." Put simply, newspapers are mass media. They are consumed by the general public, and are

written so people don't have to know anything about the subject being reported.

Newspapers are expected to provide only general information and basic facts. You might succeed in explaining the intricacies of exploiting a CGI loophole and stealing root access on a server to a reporter, but the writer still needs to explain that to 500,000 non-technical people. Most journalists are fairly good at assimilating information, but they are still not likely to get technical details correct. Even if they do understand it for some reason, it is likely to get twisted in the translation.

There is little you can do in this regard, other than to try simplifying your language. Assume that the reporter has no clue when it comes to technology, and no intention of printing anything the least bit technical anyway.

Journalism is a Business: A Lesson in Economic Theory

New reporting organizations are not a public service. They are a business-like entity that wants to make money. They must remain profitable if they want to continue printing or broadcasting. In order to do this, they must run interesting stories about interesting events. If that means slanting an issue or exaggerating a point, it can easily be justified. Most of my journalism classes in college centered on giving otherwise mundane stories enough "size" to make them interesting. But there is a duality at work, "size" versus "responsibility." Most reporters have no desire to print a false story, but most reporters have no desire to print a boring story either. Often the two sides are at least partially in conflict. But it could be worse than that, depending on the particular ethics of the organization doing the news gathering.

The journalistic reputation of the network or newspaper doing the story is typically a good barometer of how concerned they are about responsible reporting. I would trust PBS or *The New York Times* with just about anything, although they make errors like anyone else. I would trust the *Boston Globe* or the *Washington Post* to get most of the story right. I

would expect the Associated Press, CNN, ABC, and the average local paper to at least get the basic information correct. I would bet some amount of money that

CBS, NBC, MSNBC, Fox News, and most larger city papers retain at least a passing resemblance of reality. As for most television news clearinghouses, any local television news station, or the likes of MTV, their efforts are more akin to self-serving propaganda than journalism. I wouldn't trust MTV to report anything accurately, let alone something as delicate as what it means to be a hacker.

Every news-gathering company has a different perspective on sensationalism versus responsibility. It's probably in your best interest to evaluate how much you trust the particular organization before you consent to a story about or involving you. If you don't already trust most or all of what they tell you, don't expect that you and your story will fare any better. One thing you can do to help is to constantly mention how much you distrust the media and how they let you down considerably in the past. Being in the forefront of the reporter's mind too accurately is more important to you than what is provocative. Make him or her think that they will be betraying you if they misrepresent you in any way. It usually helps a lot.

Conclusion: Reporters are People, Too

If you ever find yourself the subject of a news story, be aware that the end product will probably not show you the same way you see yourself. Complicated details tend to be simplified, and that can mean a significant change for something as technical as computer hacking.

Like I said, no reporter and no news paper wants to print an untruthful story. It's not likely that they will totally fabricate facts, but they can be taken out of context and reworked to create a more interesting story. Reporters often go into a story with preconceived ideas, and it can be difficult to change them. Just act natural, be truthful, and explain things as clearly as you can. If the reporter is any good, you may actually like what you read in the paper or see on TV a few days later.

PEOPLE WHO CAN'T KEEP QUIET

Inquiries

Dear 2600:

I was recently listening to the S11709 Off the Block and reading the latest copy of *Popular Science*. While looking through the ads in the back of *PopSci* I came upon the part in the show where you discussed the fact that DirecTV and Fox Mogen for having information on how their technology works as well as ads for technology that bypasses their encryption and I noticed something. *PopSci*, a reputable and widely distributed magazine, runs ads for cable abbreviations. These, I recall, are illegal in most areas and have virtually the same function as the encryption bypassing technology advertised in *Popular Science*. Upon further investigation I found that *Popular Mechanics* (PopMech's sister magazine), runs ads for cable abbreviations. These, I

recall, are illegal in most areas and have virtually the same function as the encryption bypassing technology advertised in *Popular Science*. Upon further investigation I found that *Popular Mechanics* (PopMech's sister magazine) also runs these ads. What the hell is the hell with this? Not to mention that the whole case violated the First Amendment and is complete and utter balish.

Ackbar

As this was a "vial" issue, it was relatively easy for a large corporation like General Motors (you do know that General Motors owns DirecTV, don't you?) to shut down a pretty publisher like "Scientific Home News." In this case, the fact that PopMech devoted so much space to this DSS segment could be disastrous or weigh heavily on GM's behalf. Even with the First Amendment and many loyal subscribers in over 3 state, it can often be impossible to remove the implication that a corporate giant can censor. By the way we will cheerfully print any criticism on the subject of decoding DSS signals.

The Politics of Hacking

Dear 2600:

About the letter in 1662 by RGBKnight, I've come to the conclusion that most of the people in "hacker groups" are just idiots warning people to avoid them so they can step on them. All it is passing by a bunch of jerks who want everybody to know how "elite" they are. Real hacking takes place behind closed doors with people who don't want publicity or social recognition, who learn for the sake of learning. Personally I don't participate in any of the honeypots that seem to pass for "hacking," anymore, like ware trading or even electronic breaking and entering. I discontinued helping the "elite's" "educational" system is really an advertisement system and that if you want to learn anything useful you have to learn it yourself. My point is that I call hacking is to learn as much as I can about technology, including

but not limited to that which is forbidden. If the group to know. In a society in which knowledge is forbidden

knowledge is truly power, I don't belong to any group. I

don't seek approval from "peers" or peers. I know fine the sake of helping. About Kevin in Minnick, I think that

the real crime he committed is not that which he was charged with (or even what he was not charged with). What he pled to was rather small potatoes. Social engineering doesn't deserve four and a half years in prison. But I know when the government thinks does deserve it. But I know when the government thinks does deserve it. Minnick's forbidden knowledge. Similalry put, Minnick knows too much for the rules comfort. As I said before, when knowledge is forbidden, it is useless. I flushed off my copy of *The Executive Coder* a few days ago and felt on the basis, owner Minnick says: "They're saying that Tim John Dillinger, that I'm an idiot; that it's shocking that I could get this screws-one-penny... People who use computers are very trusting, very easy to manipulate. I know the computer systems of the world are not as safe as they think."

The is Kevin's real crime: exposing the facts times in the power of the ruling class. Therefore, we should say that he is morally guilty as charged, and that the government's Orwellian psychological torture experiment on Minnick is just a symptom of how fragile their hold is on those who have the knowledge. Jane Keay for the sake of Kevin, but also to show that the Power can be fought successfully. Kevin Minnick, and Bonnie S. have already shown us that it is truly We the People, and not They the Robins, who have the power - when we have the knowledge. And that, nor social recognition or publicity, is the true purpose of hacking.

Disagreement

Re: self

Dear 2600:

Thanks for letting me see what you had to say. I am an East Timorese myself and was glad to see that wecar post in so many ways to get our message across. Just wanted to say thanks for letting me see how I can present. Never thought about it. Cheers

long live xanana

FT 4 life

Philip

While the *Rawed Indonesia with Roger Phillips* (which appears in my backlog) date back to 1997, my car has been the focal show in working a converged aperture, breaking and entering. I determined long ago that America's "educational" system is really an advertisement system and that if you want to learn anything useful you have to learn it yourself. My point is that I call hacking is to learn as much as I can about technology, including but not limited to that which is forbidden. If the group to know. In a society in which knowledge is forbidden

saying that hacker didn't want to damage their karma or get caught. Not only did this person not take anything, but he/she left the door open to the truck, so the driver would come back and see that someone had been in the truck.

This way the driver would harm himself and not keep the door unlocked again. Now, there are some people who believe that that is the right and moral thing to do. I am not necessarily retweeting these people, but here is my take:

This anonymous person said, "My hacking philosophy has usually been one of education." This is my philosophy as well. If I steal equipment out of a cable or Bell truck, I could educate myself by examining it, or maybe even use it for some jolting plan. If I were to steal any handbook out of these trucks, then I definitely would be educating myself. There may be valuable information in those books that I could not find anywhere else. By doing this I am "teaching" that a life of crime is my goal." Yet a life full of knowledge and education is.

I think it is important to talk about because stealing for the sake of knowledge is a subject that factors and photons on any level can disagree upon.

Tekxx3

Bronx

You raise an interesting point. We strongly believe that obtaining knowledge of how something works isn't a bad thing. But if you then use that knowledge in a destructive way, that is where you're gone wrong. As far as how the knowledge is obtained, that too can make a big difference. If you break and kill a laboratory because you want to read over of his manual, the knowledge is not necessarily gained the right way. If you crack it, figure out what needs to be done to make it work or steal something, you're actually physically breaking the something and you're destroying knowledge of something that is others' findings. Thank you for your response.

Breaking into a car to steal something, you're actually physically breaking the something and you're destroying knowledge of something that is others' findings. Thank you for your response.

The only way to succeed is to educate others and the only way to succeed is to educate others. We just don't believe it's quite or that point yet.

Dear 2600:

This is in response to rokings' letter in 1662. I must say I am in complete agreement. Sadly, in this day and age most everyone judges a book by its cover. Therefore, to further advance our tenures, I think it is really important to remain ever so "underground" even if that means being conforming on the outside. After being involved with computers for quite a few years now and also involved with the general public, I have found it is far easier to get what you want and get along with it if people feel you are like them. If writing Tommy Holler and Oliver Klein keeps people from being suspicious and even judgmental, then all the more have at it. Nevertheless, keep doing whatever you want in your own time. Then again, if you feel it is necessary to spit your hair three feet over your head, dive a pirate, and dislocate every loose piece of skin you possibly can. I am living very stereotypical here and I am not quite placing myself there.

This needs also if you're going "undercover" for a specific project. You may simply expand this to include our school, work, and family life, all for the sake of meeting management. Only problem there is that the more you play that game the more you need to. When your dog agrees, you're not in a manager you just a random border to turn on the situation when you feel like it. If you don't sell our joint values from the start, you'll find it is an easier to hold onto them to different situations. You might also be surprised how quickly you can get away with while being "weird."

Difference of Opinion

Dear 2600:

I read the informative article in the CNN Internet section (www.TECHwebcheck.com/cnn). I believe it was your editor who responded to the questions by CNN. I really do appreciate your honesty and candid response. I am a person who believes that the government and the organizations have been misleading us for decades. There is much evidence that this is true. I do not believe that everything I read or see on a web site is accurate. On the contrary, being a thinking person, I take everything that I hear or read with a grain of salt. Being a thinking person, I feel I should respond to your response. First off, I believe your logic is quite flawed. Laptops, cell phones, and computers are primarily communication devices. They are not toys. According to your mentality it is okay to steal something if others don't want it in the open. Your philosophy leaves much more for the justification of breaking and entering, and cracking web pages that don't belong to you. One could perceive your actions and the actions of all of your group as the selfish benefits of individuals who have very little respect for the privacy of other individuals. In response to your opinion that break-ins should not be prosecuted and put in prison, it's not fair to say considering that most criminals do not understand why they are in jail. We as a society cannot let our private belongings and documents be subject to the criminal class. As long as your organization believes that the right to steal from others (just because you can) and take advantage of new technology for the detriment of your fellow brothers and sisters, I will never support hackers or their belief systems. It is interesting that you feel like selling this community a great service by being the first to break in and sacrifice legitimate web sites, believing that if your organization did not do it first, that internet scoundrels would get around to it. But that is not the way it happened. Is it? Unfortunately, your organization has become the notorious you say you so adequately op-

Major Mutation

This needs also if you're going "undercover" for a specific project. You may simply expand this to include our school, work, and family life, all for the sake of meeting management. Only problem there is that the more you play that game the more you need to. When your dog agrees, you're not in a manager you just a random border to turn on the situation when you feel like it. If you don't sell our joint values from the start, you'll find it is an easier to hold onto them to different situations. You might also be surprised how quickly you can get away with while being "weird."

Jeffrey Stidham
Milwaukee

PEOPLE WHO CAN'T KEEP QUIET

Interviews

Dear 2600:

I was recently listening to the #1789 Off the Block and reading the latest copy of *Popular Science*. While looking through the ads in the back of *Popular Science* upon the part in the show where you discussed the fact that DirecTV sued Dan Morgan for having information on his technical work as well as ads for technology that bypasses their encryption, and I noticed something. Popular, a reputable and widely distributed magazine, runs ads for cable decoders. These, as I recall, are illegal in most areas and have virtually the same function as the encryption bypassing technology advertised in *Scientific American*. Upon further investigation I found that Popular Sciences (*Popular*) (sic) magazine also runs these ads. What the hell is the deal with this? Not to mention that the whole case violated the First Amendment and is complete and unserious!

As my next "true" case, I was relatively easy for a large corporation like General Motors (you do know that General Motors own Disc TV, don't you?) to claim a pony publisher like "Scientific American." In this case, the fact that GM dared to go into such detail regarding how DSS signals could be decoded was enough to impress our GM's switch. Even with the First Amendment and many loyal subscribers on one's side, it can often be impossible to survive the allegation that a corporate giant can censor. By the way, we will obviously prove any accusations on the subject of decoding DSS signals.

The Politics of Hacking

Dear 2600:

About the piece in 16/2 by RGRKnight, I've come to the conclusion that most of the people in "hacker groups" are first class wanna-be's who worship them so they can step on them. All it is is posing by a bunch of jerks who want everybody to know how "elite" they are. Real hacking takes place behind closed doors with people who don't want publicity or social recognition, when I am for the sake of learning. Personally I don't participate in any of the wanna-be's who seem to pass for "real" nowadays. The wanna-be's, mailing or even threatening and victimizing I determined long ago that America's "educational" system is really an indoctrination system and that if you were to learn anything useful you have to learn it yourself. My goal in what I call hacking is to learn as much as I can about technology including but not limited to that which is forbidden for the stupid to know. In a society in which knowledge is forbidden

knowledge is truly power. I don't belong to any group. I don't seek approval from "peers" or peers. I learn for the sake of learning. About Kevin Mitnick, I think that the real crime he committed is not the tool which he was charged with, for even what he was not charged with. What he did is to win rather small justices. Social engineering doesn't deserve four and a half years in prison. But I know what the government thinks does deserve it. Minnick's knowledge. Simply put, Minnick knows too much for the rulers' content. As I said before, when knowledge is forbidden it is power. I think off my copy of *The Fugitive Game* a few days ago and right on the back cover Minnick says: "They're saying that I'm John Dillinger, but I'm terrible, that it's looking that I could get this awesome power... People who use computers are very useful, very easy to manipulate. I know that computer systems of the world are not as safe as they think."

That is Kevin's real crime: exposing the fact that in their power of the ruling class. Therefore, we should say that he is probably guilty as charged, and that the government's Orwellian psychological torture experiment on Mitnick is just a symptom of how fragile their hold on those who have the knowledge. Use Kevin for the sake of Kevin, but also to show that the Power can be fought successfully. Kevin Mitnick and Birnie S. have already shown us that it is truly We the People, and not the the Rules, who have the power - when we have the knowledge. And final, real social marginalization or publicity is far more effective than being a hero.

Desaparecido

AKTII and

Dear 2600:

Thanks for letting us see what can be done. I am as fast-timer myself and was glad to see that we are greatest in so many ways to get our message across. If you wanted to say thanks for letting me see how I can protest. Never thought about it. Cheers.

long live anarchism

ET-4 LIFE

philip

While the lack of *hackerspace* web pages (which according to our analysis date back to 1997) may not have been the final straw in spurring a successful uprising, many did open up some over time, too (not to mention to keep it around). That is likely where the potential power of a means of expression.

Dear 2600:

This is in reply to the letter in 16/2 about how this anonymous person refused to steal from a cable truck

saying that he/she didn't want to change their home for 2600 (right). Not only did this person not take anything, but he/she left the door open to the truck, so the driver would come back and see that someone had been in it. This way the driver would learn a lesson and not keep the door unlocked again. Now there are some people who are not necessarily prioritizing these people but here is my thought:

This anonymous person said, "My hacking philosophy has really been one of education." This is my philosophy as well. If I steal equipment out of a cable or Bell truck, I would educate myself by examining it, or maybe even use it for some phreaking plan. If I were to steal any hardware out of these trucks, then I definitely would be educating myself. There may be valuable information in these books that I would not find anywhere else. By doing this I don't believe that "A lot of crime is my goal." Yet a life full of knowledge and excitement is.

I think this is important to talk about because stealing for the sake of knowledge is a subject that hackers and phreaks on any level can disagree upon. In Bronx, NY raise an interesting point. He strongly believe that obtaining knowledge of how something works is a big thing. But if you then use that knowledge in a destructive way, that is where you've gone wrong. As for him the knowledge is obtained, that too can make a big difference if you shoot and kill a molester because your son or read one of his remains, the knowledge isn't to match the issue on is how you obtained it. Something with breaking into a van to steal something. You're actually showing that it is truly We the People, and not the the Rules, who have the power - when we have the knowledge. And final, real social marginalization or publicity is far more effective than being a hero.

Difference of Opinion

Dear 2600:

I read the informative article in the CNN Internet section from one TECHpointshackerspace.com. I believe it was your editor who responded to the questions by CNET. I really do appreciate your honest and candid response. I am a person who believes that the government and the corporations have been misleading us for decades. There is much evidence that this is true. I do not believe that everything I read or seen on a web site is accurate. On the contrary, being a thinking person, I take everything that I hear or read with a grain of salt. Being a thinking person, I feel I should respond to your response. First off, I believe your logic is quite flawed. Pictures, cell phones, and computers are primarily communication devices. They are not toys. According to you basically it is okay to steal something if others leave it out in the open. Your philosophy leaves much room for the justification of breaking and entering and copying web pages that don't belong to you. Once you perceive your actions and the actions of all of your group as the selfish behavior of other individuals in response to your opinions that hacking should not be persecuted and put in prison its not surprising considering that most businesses do not understand why they are in jail. We as a society cannot let our personal belongings and documents be subject to the criminal class. As far as your organization is concerned it is the right to steal from others just because you can and take advantage of new technology to the detriment of your fellow brothers and sisters. I will never support hackers in their beliefs by any means. It is interesting that you feel you are doing this country a great service by being the first to break in and rearrange legitimate web sites, helping them conform to the norms of society. I will never support your organization did not do it first, that international terrorist would get around to it. But that is not the way it happened. Is it? Unfortunately your organization has become the terrorists you say you so adamantly op-

by all means please do. However, I said many more like me. feel it is for more beneficial to bear society at its own gain and superfluous game.

Major Monk

The words free if you're going "undercover" for a specific project. But many people expand this to include their school, work, and family life all for the sake of making things easier. Only problem there is that more you play that game the more you need to. When your signature turns into a mugshot you find it much harder to turn on the television when you feel like it. If you don't sell out your future from the start, you'll find it a lot easier to hold onto more in different situations. Buy myself into being "wired."

Page 30

There's nothing like a letter that starts off really nice and then plummets into name-calling and foolish trifling. Now, I'd try and stay civil. We do set ourselves up. However, your definition of stuff is so insanely broad as to include things like "any web page." You need to realize what they really is: taking someone else's flat out yours to take. Simple enough? Who's your specie private, perhaps you should look at who it is that's trying yours. How much "junk mail" do you get from *hackers*? Does many times have we entered your name into a database and shared it with several thousand of our friends? How many times have we left your private info lying around for anyone to stumble across? Hackers have learned these things through experience and hacking, believe everything they're told. Hackers manage the use of encryption in order to further protect over-the-pipe traffic. A good look at who opposes strong encryption and other *peer* efforts that way. We're sorry you don't think of us as anything but a bunch of *script-kiddies*.

Dear 2600:

First thing's first, I know since I'm on an IP, a "lamer" or whatever you wanna call me, but I'm still on my IRC, but the reason I'm writing this letter is because I want FUCK UP AOL, and I found some "Stupid" things to make "gudges" "therez" "targets" and "tins" if 2600 puts this in a Mag or the Stringz might be dead cause they charge them monthly but since I'm SUCH a Hackkar if you need them or need the new one's of them Dood Dood I will go all out use Subject "Jokborkz" or something. Like that well here are the String and go OSW the FLICK orca's some Gutter "A" Gutter String-NYC WebUSA Range-Ota int="WTF".
Keep it Real, In the sick and PHEW, the Fuck India's seen HOGZ for me.

Da "Stup" -

Hi 2600, the MTV special didn't help. Always we really need to check up with the writer of the letter before posting. There's an end to what the two of you could teach each other.

MiNICK

Dear 2600:

Out of thousands to Kevin Mitnick, the 2600 team, and everyone who played a part in exposing the world, Justice still evaded Kevin. He was 29, no means trusted fairly, and the remaining agents of his sentencing are still unacceptable given his time in jail without trial.

It's the same as saying it. None you can argue that this doesn't make it right and maybe that's true. But it doesn't make it equivalent to whatever crime you want to punish people for. As for your little issue on our inability to respect privacy, perhaps you should look at who it is that's trying yours. How much "junk mail" do you get from *hackers*? Does many times have we entered your name into a database and shared it with several thousand of our friends? How many times have we left your private info lying around for anyone to stumble across? Hackers have learned these things through experience and hacking, believe everything they're told. Hackers manage the use of encryption in order to further protect over-the-pipe traffic. A good look at who opposes strong encryption and other *peer* efforts that way. We're sorry you don't think of us as anything but a bunch of *script-kiddies*.

But before you're making the mistakes right now stand. **FBI/MIT**

Pascal in around 250 kids. During the two weeks that I taught and had fun (it was a blast surprisingly), I would constantly talk with a group of my students about books and explain to them the whole Mitnick affair, what happened, what went wrong, etc. I've never seen so many little kids filled with such enthusiasm on a political-social issue such as this. It was awesome the reactions that were raised from our discussions. Now, there are some 250 kids ranging from 8-13 or so running around in Atlanta with an insatiable determination. Free Kevin naturally about them, which can only help the situation. I think that we (as in those who took Mitnick and wait to fight the hell he's going through) should try and educate the upcoming generation on the whole affair whenever the opportunity arises. I think a lot of times people just try and forget an older generation because they can't see something about it right now, rather than the generation who is five or six years old will have the power to make a difference. We have to think of the future, not just the present.

Kevin Mitnick. And as our colleague in Atlanta was wondering what all the noise was, now you know. **sk8b0y**

Dear 2600:

The lesson taught by the U.S. government prosecution of Kevin Mitnick should clearly point out that all hacking should unite for the common purpose of bringing down the U.S. government through the disruption of its computer systems. There is already a replacement government ready. It's manifest can be observed at www.waplin.com/waplin/megacodex.html. Thank you.

Kevin Mitnick should clearly point out that all hacking should unite for the common purpose of bringing down the U.S. government through the disruption of its computer systems. There is already a replacement government ready. It's manifest can be observed at www.waplin.com/waplin/megacodex.html. Thank you.

Dear 2600:

Well, now that the replacement government is ready, where are we waiting for?

Dear L:

I just wanted to let you know that while I was at school one day, we had a guest speaker from the FBI. He was a Special Agent from the Kansas City Branch. When I asked him about his thoughts on Kevin, he didn't say much. This got all my other classmates wondering who Kevin was, and he still wouldn't talk about it. It's like the agents are told not to talk about him. He did say that he thought that those who takes are all related. Mitnick did something that really hurt no one and Mitnick did something that affects the family in the trip, the police force, and probably a lot of other people. You do Mitnick a disservice trying to blame the two people. So stick to your story, and don't try to change it.

Barth, Tampon
Klippe

Run the money, save his position. will soon be behind him, so we can at least celebrate that. I look forward to meeting in Kevin alongside Bernice S. on Off The Hook sometime in the future, and I look forward to exposing the "Free Kevin" bumper sticker on my car with a "Kevin is Free" sticker. A good job all around.

EDB/MiNICK

Dear 2600:

Over the summer I was a counselor at a national etiquette camp (Georgia Tech University in Atlanta) where I taught 16-12 bit level self assembly, C, C++, and Pascal to around 250 kids. During the two weeks that I taught and had fun (it was a blast surprisingly), I would constantly talk with a group of my students about books and explain to them the whole Mitnick affair, what happened, what went wrong, etc. I've never seen so many little kids filled with such enthusiasm on a political-social issue such as this. It was awesome the reactions that were raised from our discussions. Now, there are some 250 kids ranging from 8-13 or so running around in Atlanta with an insatiable determination. Free Kevin naturally about them, which can only help the situation. I think that we (as in those who took Mitnick and wait to fight the hell he's going through) should try and educate the upcoming generation on the whole affair whenever the opportunity arises. I think a lot of times people just try and forget an older generation because they can't see something about it right now, rather than the generation who is five or six years old will have the power to make a difference. We have to think of the future, not just the present.

Kevin Mitnick. And as our colleague in Atlanta was wondering what all the noise was, now you know. **sk8b0y**

Dear 2600:

For many we're sure, we will try to keep up-to-date on many as possible.

Dear 2600:

How in the world do you actually think the Mitnick case is unfair when there are so many more unfair cases in this world? Kevin, sorry to say suddenly but you are the last of anyone's concern. There are people right now on death row. And you are sitting here in a stale jail cell getting money from big time snitches also think you are their shrine. How can you tell me that you think five years is bad compared to someone who is right there on death row for life and every week you are writing a letter saying this is the last week of your life. Well Kevin, sorry but life, that's five years should be like heaven as opposed to one week on death row. Sorry see you guys promote it so it won't happen again? Stop trying to raise money for this new guy. We are not playing flavor however here. Let's get some money to all of the people in jail, not just one sick who got busted for computer fraud or whatever he got charged with. I subscribed to 2600 for years and years. Then finally the whole book is a Kevin Mitnick book I'm paying for. Do us a favor just drop it.

BAUDRUM

Dear 2600:

The last thing the U.S. government prosecution of Kevin Mitnick should clearly point out that all hacking should unite for the common purpose of bringing down the U.S. government through the disruption of its computer systems. There is already a replacement government ready. It's manifest can be observed at www.waplin.com/waplin/megacodex.html. Thank you.

Dear 2600:

Dear 2600:

I was recently reading a letter written by Brother Lucifer in issue 16.3 about how the Mitnick case and the Mitnick Alta 3 trial issue were severely ruined. Let's think about the facts for a moment. Mitnick is a person because he murdered a cop (whether out of cold blood or self defense). Mitnick progressed on computer systems and caused \$40,000 of damage (who did a theft, that Chinese disk, and now he's a millionaire). Or can we even think that those who takes are all related? Mitnick did something that really hurt no one and Mitnick did something that affects the family in the trip, the police force, and probably a lot of other people. You do Mitnick a disservice trying to blame the two people. So stick to your story, and don't try to change it.

Sabotard

Dear 2600:

I was recently reading a letter written by Brother Lucifer in issue 16.3 about how the Mitnick case and the Mitnick Alta 3 trial issue were severely ruined. Let's think about the facts for a moment. Mitnick is a person because he murdered a cop (whether out of cold blood or self defense). Mitnick progressed on computer systems and caused \$40,000 of damage (who did a theft, that Chinese disk, and now he's a millionaire). Or can we even think that those who takes are all related? Mitnick did something that really hurt no one and Mitnick did something that affects the family in the trip, the police force, and probably a lot of other people. You do Mitnick a disservice trying to blame the two people. So stick to your story, and don't try to change it.

Sk8b0y

Dear 2600:

I was recently reading a letter written by Brother Lucifer in issue 16.3 about how the Mitnick case and the Mitnick Alta 3 trial issue were severely ruined. Let's think about the facts for a moment. Mitnick is a person because he murdered a cop (whether out of cold blood or self defense). Mitnick progressed on computer systems and caused \$40,000 of damage (who did a theft, that Chinese disk, and now he's a millionaire). Or can we even think that those who takes are all related? Mitnick did something that really hurt no one and Mitnick did something that affects the family in the trip, the police force, and probably a lot of other people. You do Mitnick a disservice trying to blame the two people. So stick to your story, and don't try to change it.

A book is a lot of work to spend up like that. The judges are the authors, after the math and about the system are the authors, after the math and about the system are the authors, after the Mitnick case and others, it becomes much easier to take older much easier seriously whereas those who never question the authority to never consider this for a second. It seems quite apparent that there are more than a few representatives in the press who argued the word *confidence* for a new trial is something that should be taken seriously. And, for the record, Mitnick is innocent.

Dear 2600:

It's supposed to be in the parking lot of the Navy Hospital in Beaufort, SC today and saw a car with a "Free Kevin" bumper sticker on it. I've been following the story since first read it in 2600 and explained it all to my wife. We are both glad that it is winding down but are still annoyed over the treatment of him. I was just amazed that your concern is so far that bumper stickers turn up in the tiniest places.

Also, in the 16.2 2600, there were about a dozen in total in Beaufort, SC today and saw a car with a "Free Kevin" bumper sticker on it. I've been following the story since first read it in 2600 and explained it all to my wife. We are both glad that it is winding down but are still annoyed over the treatment of him. I was just amazed that your concern is so far that bumper stickers turn up in the tiniest places.

Dear 2600:

I was recently reading a letter written by Brother Lucifer in issue 16.3 about how the Mitnick case and the Mitnick Alta 3 trial issue were severely ruined. Let's think about the facts for a moment. Mitnick is a person because he murdered a cop (whether out of cold blood or self defense). Mitnick progressed on computer systems and caused \$40,000 of damage (who did a theft, that Chinese disk, and now he's a millionaire). Or can we even think that those who takes are all related? Mitnick did something that really hurt no one and Mitnick did something that affects the family in the trip, the police force, and probably a lot of other people. You do Mitnick a disservice trying to blame the two people. So stick to your story, and don't try to change it.

Dear 2600:

We'll report the rest of it here. It's not so much the actual goal or outcome but the fact that when you do this for us for us

for us

for us

You're absolutely right about the study's importance on Asbestos. We were also skeptical at first so we decided to try it out one of our favorite sites. Politics does. "How To Become a Political Master" had our number again.

I was watching C-SPAN on Sept. 20th at about 3 pm, and Max Dodge and Mike Kinsey (of slant.com) were being interviewed by the show's usual guest, Brian Landis. After his usual political congevoing ranting, Dodge launched into an attack on hackers, calling them scamps. He tried to get Mike Kinsey to join in, but he'd have none of it. Dodge claims that it's "hackers" who mess up his web site dedicated to scandal, yellow "journalism," libel, invasion, and sensationalism. He also phoned that he talked against hackers on a radio show (I'm not sure if it was a guest or if he new has his own show). He also will criticize them onwards.

I'm not shocked that an uninvited guest like Dodge would liken "hackers" as a person who acts in an illegal fashion. Nor am I shocked that he'd lump them all together. What does shock me is that he was stupid enough to challenge "hackers" to his site again.

Dear 2600:
Trish does her web site all free if she can't afford it.

Dear 2600:
Recently, I was perusing my October 5, 1999 edition of the Orlando Sentinel, the local paper for most of us in the Central Florida area. On page A.11, in the Op-Ed section, I noticed Phil of the Tribune Media Services had an article about how Verizon chief Summer Redstone said the news media was being insensitive to Chasen and Cuban workers. Mr. Phil was very sincere with all of this and then made a general apology to "all the nation's readers, drivers, drivers, bakers, carpenters, editors, reporters, salesmen, managers, and mistakes." He then goes on to say "It's just because they're the sum of the entire group of people he mentioned that pissed me off." Now guess what? At the end of the article, he seemed to say that "borders can contact Leonard Phil via e-mail at leonard@verizon.com or by calling him toll-free at 1-800-457-3881." I encourage everyone with that time to contact him and explain in a polite and intelligent manner that bidders do not belong in the semi-category as writers and journalists. If you can't explain your position to him without being a moron, don't e-mail or call him.

Dr. Rupipes
Dear 2600:
In the November 8, 1999 *Business Week*, page 6, it is noted in an article entitled "The List: Native American Style," Part of the *Star's* "Top of all Americans" say that they would act on their own beliefs of right and

wrong..." Basically, infiltration (which by itself might not be a bad thing), regardless of legal ramifications involved with controversial issues, products, or services."

Really interesting to be sure. The plot thickens. Or the six previous pieces would not be able to overcome as you might expect, white supremacists, gun manufacturers, tobacco companies, breast implant manufacturers, and HMOs were on this list — "anyone holding

placed second, a mere 12 persons behind the white supremacist and five percent above gun manufacturers, some with tobacco and eight percent above both breast implants and HMOs.

With an eight-hour bust of the Insanity of this country for words inquiry, Kevin might be a hard luck story readers can connect with on an abstract level, but these kinds of surveys should wake the hacker community up to the fact that the police is now gunning for you.

To expand below

FATIGUE'S zinc

Dear 2600:
I work for a financial services company here in the

UK. Recently, I was part of an evaluation effort on a product called Session Wall. This is a straight scanning program that can take by content type and other hookups, or scan an archive of sites. The categories are what you would expect: Sex, Terrorism, and so on. One category which caught my eye was "Criminal or Subversive Content". The IT guy said that the settings for the blocked sites were as the provider came out of the box. The only two sites listed as Subversive or Criminal were www.2600.com and www.karimnick.com.

Thought you'd like to know.
Awoodath
Scotland

OK, we're convinced. Nobody likes us.

Dear 2600:
I found out how screened up this world is over the course of two to three weeks. I minimized this window that comes up in boot up. The screen went over to the computer and freed up and rebooted it. Later on the day when I went back to the library, she pulled me aside and asked me why I turned up the brightness. I was like what the hell. She threatened to give me two days of in-school suspension if I didn't tell her what I did to mess up her computers. Up. Also, my friend asked about Kevin Minck and if they had any books about him. The library ran freedom again and made him walk through the little screen thing two times and empty his pockets to make sure he didn't steal anything. The world has all the wrong ideas about us. I think it's quite to think that we all have malicious intentions. What do you think about this?

Simply freuds in schools.
J.W.

Dear 2600:
The High Cost of Learning

Dear 2600:

I found out how screened up this world is over the course of two to three weeks. I minimized this window that comes up in boot up. The screen went over to the computer and freed up and rebooted it. Later on the day when I went back to the library, she pulled me aside and asked me why I turned up the brightness. I was like what the hell. She threatened to give me two days of in-school suspension if I didn't tell her what I did to mess up her computers. Up. Also, my friend asked about Kevin Minck and if they had any books about him. The library ran freedom again and made him walk through the little screen thing two times and empty his pockets to make sure he didn't steal anything. The world has all the wrong ideas about us. I think it's quite to think that we all have malicious intentions. What do you think about this?

Simply freuds in schools.

Dear 2600:

I would like to add another incident to the ever growing "guilt by association" section. I was also caught in school reading your zine when I got sent to the office for a lecture and apparently marked as a computer aficionado (but I was accused of stealing a Macintosh-LaserWriter which they later discovered was due to the owner's disc). Then I was accused of "hacking" on a teacher's computer, when it didn't even have a modem. After that I was told that I had "made an alien hard drive" on one of those Macs which was complete crap. I don't even know what the hell that is, if it's even an actual term at even possible. I have no experience with Macs whatsoever,

most of the cases, it's very cool!

J. Arthur Ballard
Los Angeles, CA

We found this to be amazingly accurate in just about every exchange we entered. What a great way to find location of your eventual object!

Dear 2600:
Yo, ever heard of *www.2600.com*? That's a thing I discovered in it where you can surf without the damn ads. Here's how: After you download the software and sign-up and shit, just open up the program as usual, then wait until it loads completely. When you see "Free Network" on the taskbar, right click it and select "Close". When it says "Discarding from Fresh, it may take a few minutes" or something like that, press Ctrl-Alt-Del and select "Goodbye from Fresh" and press "End Task". When the "End Task" process shows up, press "End Task", and voila! The Internet connection says and the ads go away.

I'm only eleven years old, by the way...
Mad Kow Disease
and already figuring out how to digital commercialization of the art.

Dear 2600:
The High Cost of Learning

Dear 2600:

I found out how screened up this world is over the course of two to three weeks. I minimized this window that comes up in boot up. The screen went over to the computer and freed up and rebooted it. Later on the day when I went back to the library, she pulled me aside and asked me why I turned up the brightness. I was like what the hell. She threatened to give me two days of in-school suspension if I didn't tell her what I did to mess up her computers. Up. Also, my friend asked about Kevin Minck and if they had any books about him. The library ran freedom again and made him walk through the little screen thing two times and empty his pockets to make sure he didn't steal anything. The world has all the wrong ideas about us. I think it's quite to think that we all have malicious intentions. What do you think about this?

Simply freuds in schools.

Dear 2600:

In case for beside my apartment complex there is a BellSouth building. I've never seen anyone go through the front door or come out of it, but I have seen a few people driving out of the backed gate gates in the evening. The building has no windows, flood lights on all sides, and the front door (which is glass) opens into a very small, empty room with another door. The second door is significantly heavier (wood or metal) with one of those suspended security boxes. There is no office or secretary, and I'm not sure why they even have a front door. What is this place? I imagined it was some sort of subscription thing but why does it look like a maximum security prison? What is so important inside that they have to be around? Are they just really paranoid about someone breaking in?

Unbelievable but you never hear about this.

Dear 2600:
droboom

Dear 2600:
I would like to add another incident to the ever

growing "guilt by association" section. I was also caught in school reading your zine when I got sent to the office for a lecture and apparently marked as a computer aficionado (but I was accused of stealing a Macintosh-LaserWriter which they later discovered was due to the owner's disc).

Then I was accused of "hacking" on a teacher's

computer, when it didn't even have a modem. After that

I was told that I had "made an alien hard drive"

on one of those Macs which was complete crap. I don't even

know what the hell that is, if it's even an actual term at even

possible. I have no experience with Macs whatsoever,

yet I got banned from my computer lab and sentenced to a month of ISS (in school suspension). I slowly fell be hind because of the school's apparent apathy about my further education (you see, they don't let you out of ISS until you are completely caught up with your work and tests). You're complicit yet seems. I finished the grade because of that. After a rough start in the next year of high school I dropped out. I think that the whole fiasco has put quite a mental spell over many people. Seems as though the media dropped the logic when the tables were turned. The government has made quite an example and 1984 is just around the corner.

Highbeam
Yo, ever heard of *www.2600.com*? That's a thing I discovered in it where you can surf without the damn ads. Here's how: After you download the software and sign-up and shit, just open up the program as usual, then wait until it loads completely. When you see "Free Network" on the taskbar, right click it and select "Close". When it says "Discarding from Fresh, it may take a few minutes" or something like that, press Ctrl-Alt-Del and select "Goodbye from Fresh" and press "End Task". When the "End Task" process shows up, press "End Task", and voila! The Internet connection says and the ads go away.

I'm only eleven years old, by the way...
Mad Kow Disease
and already figuring out how to digital commercialization of the art.

Dear 2600:

Why are people so afraid of hackers? People in my school are afraid. I'll do something to their credit or a mailing, and never even threatened any of them. I'm starting to wish I did.

Unbelievable but you never hear about this.

Dear 2600:
Value

Dear 2600:
I would like to add another incident to the ever

growing "guilt by association" section. I was also caught in school reading your zine when I got sent to the office for a lecture and apparently marked as a computer aficionado (but I was accused of stealing a Macintosh-LaserWriter which they later discovered was due to the owner's disc).

Then I was accused of "hacking" on a teacher's

computer, when it didn't even have a modem. After that

I was told that I had "made an alien hard drive"

on one of those Macs which was complete crap. I don't even

know what the hell that is, if it's even an actual term at even

possible. I have no experience with Macs whatsoever,

yet I got banned from my computer lab and sentenced to

a month of ISS (in school suspension). I slowly fell be

hind because of the school's apparent apathy about my

further education (you see, they don't let you out of ISS

until you are completely caught up with your work and

tests). You're complicit yet seems. I finished the grade

because of that. After a rough start in the next year of high

school I dropped out. I think that the whole fiasco has

put quite a mental spell over many people. Seems as though the media dropped the logic when the tables

were turned. The government has made quite an example

and 1984 is just around the corner.

Highbeam

I wonder what is that?

From what we're told, this has something to do with the financial difficulties "Diggler Shredder" says Gary Coleman has gotten into. Since he gets a royalty removed from his library will receive a bill every time you do that with the help of the secret locator chip that comes with all upgrades.

Hotmail Hijinx

Dear 2600:

In 16:2 Letters, ZedLogixKo wrote about hidden text located at the top of Ikrumill's website. His assumption was that Microsoft was "watching" information from viewers. That's not the case at all. What Microsoft was doing was attempting to improve their search engine listings by changing the level of a spammier.

Thing text in web pages is fairly common practice, and it's done by matching the text color to the background color. The hidden text will usually have something to do with the topic of the page itself, and oftentimes, it'll be nothing more than large groups of similar words. The idea is to add the page's content with even instances of key words, in hopes of being listed higher in search results. Close in point, at Hamill, the hidden text talked about "Free Email (Electronic Mail)" on the Internet."

You'll find the same phenomenon at many poem sites - visit say form site and do a Search All. Cheesecake sex fack" etc. The site's webmaster has placed these words on the page, hoping that his site will be listed first when someone heads to America and searches for some thing naeey.

Of course, what most webmasters obviously don't realize is that these search-engine spamming techniques don't work. Search engines, for the most part, aren't run by sicks, and the folks who operate the major search engines are always installing new filters to combat spam. For example, most search engines now check for the presence of a **BOT** or **CORP** tag in every page, and will ignore any text that's set to the background color. Some engines take this a step further and ignore text that's anywhere near the background, e.g. **AEF-3E** text on a **FFFF** background would be ignored. Most search engines also filter out words which occur too often, large groups of words with no punctuation, etc.

You'd think that Microsoft of all companies would know that hidden text is the most outdated (and useless) trick in the book. Regardless, I guess what surprises me most is that Microsoft would even want to spam the search engines like some stinky pooh site. And if there's a person on the planet who doesn't already know what Hamill is, or where to find it,

Retail Tips

Jack

Dear 2600:

I am sure you have all seen the credit card boxes in most stores. They have an LED message bar at the top, a numeric keypad, and a place to swipe the card. I have seen them almost everywhere, including Blockbuster, Wal-Mart, and Toys R Us. They are out in the checkout counter for all the patrons to use. The base of these machines is a simple modem setup. Hmmm, modem. The modern calls the store's system, whenever may be, each time a credit card is used.

Here's the kicker. The setup program for each machine is accessed through the credit card keypad. I found this out by accident one day while mousing with the box in Blockbuster. After trying different key combinations, I was presented with the setup options on the little green LED screen. I reset the modem, and the system hung. The lights working there were like "What the heck happened?" As it turned out, they apologized for a "power surge" (heh) and gave us our rentals for free!

So I know what you are thinking. "That's great, but how do I do it?" Well, the answer is simple. Every one of these machines is made by the same company, and therefore there is a default key sequence that will enter setup on most any machine. By default, no password is required, however I have encountered machines with password protection (in Wal-Mart). To enter setup you must press the upper right and lower left keys simultaneously; then the lower right and upper left keys simultaneously. This should get you into setup on 90 percent of all boxes. If you find that the box is password protected, then it is the score number which is on all receipts. I have rarely encountered protected ones. Apparently, most stores that did the protection they need is an choices key sequence. Typical.

Once you are in, there are plenty of options, such as changing the number to dial, resetting the modem, setting the hold rate, and even better stuff. I am not telling you this, though, so that you can steal credit card numbers. This is to simply give you more knowledge. If you steal credit card numbers, you are reflecting poorly on yourself and the hacker community, so don't. Have fun with this, and keep information free.

Will-A. AKA Verba

Updater

Dear 2600:

Couple add-ons to Jim's letter about ATMs and OSZ in 16:2. OSZ is very widely used in banks. NationalBank and Bank of Boston being two of the biggest. In addition to banks, POS systems use OSZ, as Leslie stated in his letter about Kinkos. Take a look next time you are at Ruby Tuesday or a bar with a touch screen system, eight out of ten times it'll be an OSZ driven system.

Kaos

flag as soon as you start stealing. That destroys value we don't like. At the actual non-monetary value of a crime. Not the spreading of information, not the theorizing, nor even the documentation. Random and theft are easily detected yet our culture seems to mainly live water by extending their definitions as encompass speech and simple nothing had changed. I got back into the Hackbox and found that the original file was restored. I don't know if AOL reads 2600, but somehow they figured it out and found a way to ditch it. If anyone knows how to get around this, please let us know. Anyways since reading that article, I've been fixing all my programs that have

bugs. I only had 30! on me. It just so happened that there was an older edition of that book that was only \$9.95. I swapped the price tags. When I went to the front counter, the lady didn't even think twice when she asked for 30 books. I started to get really curious about this. I came back the next day and found another expensive book but this time switched the price tag with a book on a completely different subject. I went to the checkout and the lady said it was the wrong tag and she had to look up the real price. A few days later I was at CompUSA and they had two versions of visual C++ : professional, which was \$499, and learning, which was \$89. I switched those tags and it worked.

SenorPuno

Recently I was in Borders Books and I really wanted to get this Linux book with a three disc set but it cost 70 bucks. I only had 30! on me. It just so happened that there was an older edition of that book that was only \$9.95. I swapped the price tags. When I went to the front counter,

the lady didn't even think twice when she asked for 30 books. I started to get really curious about this. I came back the next day and found another expensive book but this time switched the price tag with a book on a completely different subject. I went to the checkout and the lady said it was the wrong tag and she had to look up the real price. A few days later I was at CompUSA and they had two versions of visual C++ : professional, which was \$499, and learning, which was \$89. I switched those tags and it worked.

Good luck. Now try this. You can avoid the hassle of paying entirely by simply running out the door while holding the item you wish to take. This may result in legal notices, abusing people, and return of various items. We suggest experimenting as much as possible and keeping a log of what different stores do. And if by some bizarre reason of fair you wind up in a courtroom, show the judge this letter. They need to know too.

Dear 2600:

Couple add-ons to Jim's letter about ATMs and OSZ in 16:2. OSZ is very widely used in banks. NationalBank and Bank of Boston being two of the biggest. In addition to banks, POS systems use OSZ, as Leslie stated in his letter about Kinkos. Take a look next time you are at Ruby Tuesday or a bar with a touch screen system, eight out of ten times it'll be an OSZ driven system.

Signature

Dear 2600:

In response to a letter from Chaz in 16:2, the newer version (3.0) of AIM will not let you have the AOL.com file and get away with it. I tried having it as usual. Then I found yet another way to modify the water by extending their definitions as encompass speech and simple nothing had changed. I got back into the Hackbox and found that the original file was restored. I don't know if AOL reads 2600, but somehow they figured it out and found a way to ditch it. If anyone knows how to get around this, please let us know. Anyways since reading that article, I've been fixing all my programs that have

bugs. I only had 30! on me. It just so happened that there was an older edition of that book that was only \$9.95. I swapped the price tags. When I went to the front counter, the lady didn't even think twice when she asked for 30 books. I started to get really curious about this. I came back the next day and found another expensive book but this time switched the price tag with a book on a completely different subject. I went to the checkout and the lady said it was the wrong tag and she had to look up the real price. A few days later I was at CompUSA and they had two versions of visual C++ : professional, which was \$499, and learning, which was \$89. I switched those tags and it worked.

Loggia

Recently I was in Borders Books and I really wanted to get this Linux book with a three disc set but it cost 70 bucks. I only had 30! on me. It just so happened that there was an older edition of that book that was only \$9.95. I swapped the price tags. When I went to the front counter,

the lady didn't even think twice when she asked for 30 books. I started to get really curious about this. I came back the next day and found another expensive book but this time switched the price tag with a book on a completely different subject. I went to the checkout and the lady said it was the wrong tag and she had to look up the real price. A few days later I was at CompUSA and they had two versions of visual C++ : professional, which was \$499, and learning, which was \$89. I switched those tags and it worked.

Scholastic

Dear 2600:

Another Bell Atlantic update. Their recently upgraded voice mail has a special feature. Try dialing 7 or 9. This used to be used for moving back or forward through a message. Now when you press 7 or 9 you can hear parts of other people's messages. Messages that are from someone else's voice mail entirely. Another invasion brought to you from Bell Atlantic.

Dear 2600:

We strongly suspect this was a temporary position and that it was only in your area's system and not in every system, at least not at the same time. However, it's yet another reason why getting voice mail through another phone company is a pretty dumb move.

Dear 2600:

To check your long distance carrier (times-LATA), you just as always 1-700-555-4141. The new number to check your intra-LATA carrier is 700-4141 (just the seven digits).

Dear 2600:

You can actually enter any four digits after the 700 for any new number. In addition, you can sometimes get some rather interesting results. Is none greater we're heard on 1700-NYXEX, a company that had 2000 river 1997.

Dear 2600:

A letter from Chaz in published in 16:2 add of a line of string which will make a pop-up and pop-right back down again afterwards. Well, there's an easy way to keep the darn thing from popping up at all. The HTML inscript's tag does what it says it does. If script runs the tag is undone ([noscript]). Well, since the pop-up ads are popped up by java scripts, a well placed [noscript] tag will keep the script from ever happening. For those who use Triplet, the script is automatically placed in the [head], so putting a [noscript] before the head (and a [noscript] after, if you use simple code on the [head]) will do the trick. Interestingly, no script will pop up if you simply do not use a [head] tag at all, but that's usually not practical. If you also use scripts in your [head], it shouldn't be too hard to figure out where exactly the script goes, and place your [noscript] and your scripts strategically. (I think you can put a [noscript] after the

(file), and then just your script, but I'm not sure.) For those of you unfortunate enough to be using Geocities, I believe the script is just at the very end of the page, so just slip it in (script) at the end. Personally, I prefer to use the many free web space providers that are actually free, with no ad requirements or anything.

St. Reginald

Dear 2600:

I am writing in response to the article in your last issue about hacking the landline company Telephone entry box. Whenever wrote this might be because he giving such little info. I looked all over my apartment building's box for the manufacturer, but it wasn't displayed. Luckily, the tool broke soon after (as said a repair technician was dispatched). When he arrived, I went right up and asked him who manufactured the box. He also let me have a peek inside. He said it was for Service Systems Trinity 'T' Series. You can download information about these machines at www.sscs.com/elements.htm. I found that it is rather simple to dial into these boxes if you set up your terminal properly. You must use TEL 910 extension, 500, all you REN 95 lines, or you can't use HyperTerminal, get a serial term prog. Set data bits and parity to 8N1, XON/XOFF, and the manual also says null bytes (DLE) but I didn't need to set that in mine. The local rate is tricky so you may need to re-connect at different speeds starting from 1400 and working your way down until you get it right. The particular box I was dialing into gave up thelandsline's default any further configuration, but the troubleshooting's manual downloaded from the website states that some units are configured in require a user followed by a six digit access code before the landline starts. Fortunately, the factory default is 000000. The backdoor code for pre-954 models is 75839. There is no logging mechanism for dial-in, so a bot-right can force break even several nighes should work. This same tool can be used from the keyboard to enter "program mode," type "99" and then the six digit code. Once inside, there's not much to do. You can make the door open at certain times if you want or change the unlock time. Although it is pretty cool that instead of my last name, my friends have to scroll down to SATAN when they come over.

Wishing he was back in New York
Dear 2600:

Regarding the article on infiltrating MailOnline, if I may correct a few points... The biggest trick is the password thing. MailOnline's default password is never "password" and if the tech that set this up set it to first, he is a moron and probably doesn't work there anymore. In my experience it's always been HSD then a random number, and I think they've changed it since then. Also, you can call tech support and change your password that is very old through the web page. There also seems to be this strange idea that MailOnline doesn't like people running Linux. They actually don't care what you run, but the tools are only limited to do installations on Win-

does sell Macintosh systems. Once they leave you can pour x into your Linux box, call up tech support, tell them you new mac address, and you're good to go. But slip in a (script) at the end. Personally, I prefer to use the many free web space providers that are actually free, with no ad requirements or anything.

Sir Reginald

Dear 2600:

I am writing to ask for them to be removed.

SadOffer

Dear 2600:

In "Internet Radio," the last recommendations point in ring the Real Audio server to get the port 80's number on. It would be a hell of a lot easier to just connect to the server, restart & then pick out the connection you're looking for. The single connection would look like this: for less suspicious than an entire portcast on a 2003 port range. (By the way, I've found many servers on port 2003.)

emdro

Dear 2600:

I just wanted to add a little bit of info to ADK89's modchip/Cause Enhancer letter. FFS, there are a few different versions of modchips and if you're dopoed in buying an older one, you'd find more newer games don't work. The latest version uses the Superia program, which is only detected by the newer Japanese games and a very few crappy American releases. So the stealth modchip is perfectly viable right now. I own one. The Japanese version of FFS detects the stealth modchip but Square (good guys, them) removed it for the American release. My guess is they realized they'd be locking out a good portion of their audience.

If some game you want to play detects a modchip, you can either use a game enhancer code that fools the modchip detection used in the game, or apply a simple patch to the ISO image you're copying. These can be found all over the web, and are mainly for PAL/NUS/SC versions. A note abt using game enhancers exclusively instead of modchips, though: I've read that you cannot use them to play multi-disc games. A second note: modchip burners can be made for less than \$20 and the software is freely available. I recommend going this route if you're in for a challenge. If not, I bought my modchip from www.gamers.com and am completely satisfied.

On the complete opposite end of the spectrum are, I'm envious in the Air Force, and they do not TEMPEST in buildings and computer systems that deal with classified information. However, we don't talk anything about it other than the fact that it exists. I don't work around anything classified (heh, or so I'm led to believe), so snooping around probably wouldn't do any good. But I know it's just through the web page. There also seems to be this strange idea that MailOnline doesn't like people running Linux. They actually don't care what you run, but the tools are only limited to do installations on Windows.

Dear 2600:

I must have had a day of the fingers in my letter to you. The phone test number in Long Beach, CA is 115 (not 1170 like I wrote). Did it wait a moment, and a voice will come on the line saying something like "Please Test..." and then give you a verbal menu of all the key you can do by pressing the numbers (it's a long list).

SAR

Dear 2600:

(Yes, remember that trick for Hotmail where you could get into someone's account if they were logged in? I must first it immediately but there is another way. However, it is hard to implement. You need netbeans or some other remote admin tool, where you can get a screen dump. When you are logged into Hotmail, you will notice in the footer box a bunch of gibberish. If you can get a screen dump while your victim is logged in to their account, and you type /etc/gibberish into your browser box, you can get into their account as long as they are logged in!

Hidden101

Dear 2600:

Observation 05: Jumping through loops.

Hi again:

In response to your 16.1 article "Locking a Sony PlayStation" and the letter from me in 16.2, I would like to follow up. First, if you look on the bottom of your PSX, in the top right corner of the label, you will find the model series. The PlayStation has evolved throughout the years - even changing the position of the label, changing the writing on the bottom (i.e., "PS1" vs "PS2" is still the same (although the 1000 series is supposed to be slightly faster). I myself am the proud owner of a 3002 model. There is no locking mechanism for dial-in, so a bot-right can force break even several nights should work. This same tool can be used from the keyboard to enter "program mode," type "99" and then the six digit code. Once inside, there's not much to do. You can make the door open at certain times if you want or change the unlock time. Although it is pretty cool that instead of my last name, my friends have to scroll down to SATAN when they come over.

work!

snapshot

Ripoff

Dear 2600:

On this month's telephone statement (Bell Atlantic) I noticed there was a \$3 charge for switching telephone carriers. The switch was from MCI WorldCom, with an address in Denver, to WorldCom Inc., with an address in San Antonio. As we know, these companies are now the same company.

I called to complain, received a credit and apologies, of course. Bell TomTom (now many MCI WorldCom customers) will be billed for a non-existent switch to WorldCom and pays, not noticing the problem.

Terry

Cos

Observations

Dear 2600:

I'm not sure if you've gotten letters like this before, but I thought this might be of interest. I've noticed a little

for us. Please have a section bocoring the U.S. Navy Seals. Thank you.

Black Knight

We'll devote a whole issue to them if you all as how to kill me nominate me of them.

Dear 2600:

I don't know if you are in a position to answer this but thought I would give it a try. I am completely fed up with people and their cell phones. Especially people who can't resist answering and talking on the phone in movie theaters, restaurants, etc. An inability to drive and talk at the same time is also high on my list. I was hoping to find plans for a box that would automatically disconnect cell phones or cause so much static that the owners could not use them. Given my limited understanding of how cell phones work I expect the easiest design would be to create a great deal of noise by transmitting noise across the correct frequency range. Making them call back and adding spurious readings several times before they give up would be very satisfying. Even better would be the ability to make it ring again and again until they turn it off. I'm fairly sure that is not possible.

Ross

Dear 2600:

I just picked up your Fall '99 issue, a couple of days ago. Great stuff. I always get excited when I peruse through your mag and find code, especially socket code. I'm a beginner socket programmer, and any articles that have code in them really help me out (the socket programming articles in 15.5 and 16.1 got me started). If I would just ask one thing of people who submit source code for their articles, it's to please, please, add comments to your code. You may be able to understand it, but others may not. Thanks again, and keep up the good work!

continued on 48

HOW TO CREATE NEW URBAN LEGENDS

by Jim Johnstone

Urban legends are fantastic stories people tell each other. They hear the story from a friend, who heard it from someone else, and so on. The result is the same as playing that kid's game of telephone; the stories evolve, often becoming funnier, scarier, or wackier. They also take on local characteristics, sometimes naming local streets or cities or even names of people. And, of course, they become impossible to verify.

The growth of the Internet has provided an ideal medium for the transfer of urban legends. They can now be e-mailed to people around the world quickly and easily.

Common Characteristics of Urban Legends

Many urban legends contain similar characteristics. Usually they have a moral to tell. "Don't do this" or "Watch out for this." Many e-mailed legends come from innuendo them onwards, often by using guilt or appealing to a sense of ethics. Some legends are downright gruesome. They tap into our subconscious fears causing us to exclaim, "I knew it!" Other urban legends complain of the women who found a stray dog in New York City. She took it into her home, fed it, washed it, bought it a flea collar, and took it to the vet. The vet examined it and told the woman she had actually caught an over-sized what rat!

Three New Urban Stories

The Excited Chiropractor
This happened to my friend's chiropractor instructor at a college in Vancover, BC. He said that one day during class the president of the college walked in and announced that the professor had been promoted to head of the department. Everybody clapped and congratulated the beaming man. Later that night when he went home and announced his good fortune to his family he was so excited that he gave

his five year old son a big bear hug. He was rushed to Vancouver General Hospital. The x-rays revealed that the boy had fractured three lower lumbar. (A broken back.) Not only did the chiropractor instructor not accept his new promotion, the next day he tearfully announced to the class that he was resigning immediately.

Analyst: Any story where a kid dies or is hurt gets passed around by sycophants. This story works because it's ironic. It's a chiropractor of all people who broke his kid's back. He goes from being on top of the world to resigning in disgrace, all in one day. The story also plays on people's fears about cracking backs. Every story needs a hook that makes people pass it around.

Moral: Don't hug people too hard,

especially if you are a chiropractor who just got a promotion.

The Miracle Diet

My son's friend worked with a woman who was always trying these crash diets. One day she came across a small classified ad for a revolutionary pill that guaranteed rapid weight loss. She paid and was sent the pills in the mail about a week later. To her delight she started losing weight. Slowly at first then faster and faster. She went from 200 pounds to 125. Unfortunately, by the third month, she was feeling more and more laugous. One day her doctor took some x-rays of her intestines and found a three-foot tapeworm growing inside her! The diet company had sent her a pill infested with tapeworm eggs.

She was given anthelmintics, a drug that kills worms, and put on a diet high in iron salts. The salt caused her to gain all her weight back, and she ballooned again to 215 pounds.

Analyst: Have you ever imagined what it would be like to have a three-foot worm attached to your insides? Stuffed up all the food you just digest? You probably have. I just took

this fear and escalated it. To add some humor, I made the woman gain all the weight back as punishment for her being so goddamn stupid.

Moral: Don't try miracle pills or crash diets. Also notice how I used the word authentimities. Using jargon makes your story more believable. (I also need jargon in the chiropractor story with lumber.)

Man Dies Proving Internet is Safe for Children
AP - Jesse Solomon, 55, died yesterday after a bomb that he was building exploded in his arms near Flagstaff, Arizona. Solomon was apparently proving to a friend that the Internet did not provide dangerous information about how to construct bombs. Molotov cocktails, and poison gas substances.

Jason Riggs, Solomon's friend, said the two had been arguing the week before about the dangers of the Internet. "I told him that children could find stuff that could do a lot of damage. I said the net should be more regulated." According to Riggs, Solomon disagreed. "I downloaded a text file about how to use household chemicals to make a bomb right in your kitchen," said Riggs. When he showed Solomon the information, Solomon denied that the recipe would work. "He called it a hoax and an urban legend and said that he would prove it to me."

The next day Riggs was phoned by Flagstaff police and asked to identify the body of his friend. Constable Samantha Heathers said that an amateur was called to Solomon's residence after neighbors complained of an explosion. Police found remains of a makeshift bomb and evacuated two nearby apartment buildings. Solomon was taken to Hotel Dieu Hospital but was pronounced dead on arrival.

"It was trying to prove to his friend that the instructions for making the bomb were bogus," said Heathers. "People should be very cautious about what they receive on the Internet," she added. The police are still investigating the incident.

Analyst: You will notice right away that I made this story sound like a news report. Don't be afraid to try different styles. In this case, a news report adds

credibility to an otherwise unbelievable story. Again, I used humor and irony as the tools. The big thing going for this tale is that it panders to society's fears of technology.

Moral: The Internet is evil.

Creating Your Own Legend
watch out. Some people will be up set set you for creating yet another un-

true legend that circulates through the Internet or people dedicated to de-

bunking urban legends (see Barb

Makelson's website - www.snopes.com

and the Computer Virus Myth's Page - komite.com/myths). They think we

waste our time passing on useless stories or hoaxes. It's also annoying to go on to your e-mail account to find messages, half of them silly stories that have been forwarded to hundreds of people before you. Then again, almost everybody enjoys a good tale.

Generally, folklorists don't think it's

possible for people to make up an urban legend. Ian Harold Brunvand, au-

thor of several popular books on urban legends, believes that true legends de-

volve from people changing details of a

story until the story develops its own

tradition. Scholars call this process

communal re-creation. But if your story is clever enough, it might get e-mailed to hundreds of different people and de-

velop its own tradition.

Okay, so how do we do it? Just think

of a good story. Make it funny, disgusting,

not too unbelievable, and perhaps

add a moral. Say that it happened to

your friend's mother's dentist. Keep it Israel, use street names if possible. I strongly suggest that you don't make it rare and sudden. There is nothing more annoying than reading about some

women who met the man of her dreams and blah blah blah. Keep it vicious and sadistic - for entertainment purposes! Feel free to use the ones I just made up or change them to your liking. Once they're out there, you can forget about copyright or anything like that. They're in the public domain. Just remember that by creating urban stories (they're not legends yet), you're not exactly making the world a better place to live.

Hacking Explorer [the car]

by Bob

again, makes Ford seem rather stupid as well.

Now What

Since I only have my own vehicle I can't be sure if this will work on earlier/later Explorers or any of Ford's other vehicles with keyless entry systems.

Entry

Given that the Explorer in question has a keypad entry system let's begin. The numbers on the keypad will range from 1 to 0 grouped in pairs of two. For instance: {1-2} {3-4} {5-6} {7-8} {9-0}. These keypad come preset with a five digit permanent code, which you can change if you so please. Unfortunately the permanent code still stays in memory. I've learned that you can hit any amount of numbers beforehand as long as you get the code in the right order. So you can pretty much punch random numbers without stopping for any length of time and not set off alarms, and still be allowed entry if you get the code in the right order. Also, hitting the {3-4} button after the code has been entered and the driver's side door unlocked (it does this automatically when the code is punched in) will unlock all the doors. Turning the key twice within four seconds in any of the car's locks also has this effect.

Getting the Code

Ford is very stupid if the following is true. The nature of the last three digits of my entry code, "911," made me think that Ford may actually preset their numbers to have this as the last three digits so that it will be easy to remember. If this is so then "XX911," where "XX" is any two number combination, would be the format to use in hacking the code. This will greatly reduce the hacking time. If this is not the case then the fact that you can just keep pressing buttons randomly until it unlocks, instead of having to wait five seconds before trying

again, makes Ford seem rather stupid as well.

Now What

Now that you have the code you get to decide what to do with it. You could change the code on the door, but that's useless because you can still use the permanent code. Nevertheless, here is how to go about adding your own personal code (useful for flinting your power over a friend).

Enter the permanent code. Within five seconds press the {1-2} button. Within five seconds of that, enter the new code. To erase a personal code, repeat steps 1 and 2 but skip step 3 (wait six seconds).

The car's alarm system (if equipped) can be armed from the keypad by pressing {7-8} {9-0} and disarmed by simply entering the code. The Autolock feature (if your car has it) can also be disabled and re-enabled using the keypad. Just enter the permanent code (not the user set code) and within five seconds hold the {7-8} button and then within five more seconds press and release the {3-4} button. (No, you can't let go of the {7-8} button - you just have to start there and look stupid.)

Just for Fun

Even without the entry code you can still lock all the doors on the car by holding in the {7-8} and {9-0} buttons at the same time. You can also set your friend's seat (if equipped) to all the way forward (if they are tall) or all the way back (if they are short). First, turn the car on. Then move the seat to the desired position. Press the set button, the light will even on. While the light is on, press control 1.

And while you're plucking with your friend's car, make sure you slap a "Troy Kevin" bumper sticker on the back too. Have fun!

To whom or to whom addressed PO Box 752 Middle Island, NY 11953	Trace desired PC COMM	Serial number 8492-012	Date of issue 10/1/95
<p>You retained with your car (check one or more)</p> <p><input checked="" type="checkbox"/> You retained items taken from your car</p> <p><input type="checkbox"/> Retained with your correspondence in securely prepared envelope manner.</p> <p><input type="checkbox"/> Possibly someone may be aware of your name and may own records.</p> <p><input checked="" type="checkbox"/> You retained unattached rental:</p> <p><input type="checkbox"/> Body shop</p> <p><input type="checkbox"/> Fuel Service</p> <p><input checked="" type="checkbox"/> Periodic Vehicle Rental (check)</p> <p><input type="checkbox"/> Other - specify below</p>			
<p>The correspondence or item has, however, been provided to the Bureau with a copy of this notice.</p> <p>Specific material retained</p> <p>Code.</p>			

RECORDED MAIL
FBI - NEW YORK
10/1/95

While we managed to suppress the urge to send body hair and plant shavings, we just couldn't resist sending two inches "of internet, web-site material printed in code." That happened to be Kevin's e-mail that we've been sending him for years which has helped to keep him sane all this time. To these people, anything they don't understand could be considered a "code" which pretty much includes it all.

Net Nanny Nonsense

by Raz

Net Nanny is one of those many Internet "parental" programs for Windows that is designed to allow parents to monitor and restrict their children's computer usage, and protect screen viewing from any people who will be exposed with this. This program is so obviously made I don't even want to start. So I'll just walk you through it.

Internet Monitoring

Net Nanny is supposed to watch web browsers and any other programs parents dictate. For my control that is defined, obviously. It has a list of web sites, removable groups, and words that allow that it looks for, plus the parent can add anything they want. In fact all, as of Net Nanny 3.10, it does ever work with Netscape 4.5 or higher, so if you plan on using this, do it ever think twice about this program. It does not, however, work Internet Explorer if you're a very picky user.

Getting into Net Nanny

If the default installation settings were used, Net Nanny will be in C:\Windows\NetNanny. It will be shared on the desktop, and in the Start menu, too. Net Nanny, though, will prompt you for a password. Type in Nanny, then it will prompt you for a password. Type in Nanny, and it goes into the log. In the log, if it was never used or added for a password, it will tell you there is none, and ask you if you would like to set a new one. Save and go.

This will work for getting into Net Nanny to administer it, but if you want to browse the web without being restricted or logged, just do the old Ctrl+Alt+Del and close the program named Winstart. Also, by simply running or closing Winstart from its Net Nanny folder, it copies Net Nanny from blacklisting to bypassing any filter or whatsoever it is web-sites or the characters or whatever.

This is all you need for some people - just delete the file or close the program and you're done. But others of you out there may want to be a little more discreet about your computer usage, or actually change the Net Nanny settings. First, I suggest copying Winstart to another folder. This is the log file, and keeps track of everything relating to the Net Nanny program with timestamps. Now, there are a few ways to get into the Net Nanny program. The easiest way is to move the file with the software, then start Net Nanny. Then make a password and exit. Move the new Winstart and do it all over again, but this time with a different password of the same length. Now you have two Winstart files on the same site, each with a different password. Everything

Why Redboxing Doesn't Work

by The Prophet

To understand why redboxing doesn't work, it is important to understand why it did at one point work (and still does in some areas), and to understand the various types of payphones and toll collecting systems.

There are two major types of payphones. Standard fortress payphones utilize a ground start and ACTS toll collection mechanism, and are usually operated by the incumbent local exchange carrier (ILEC) in any given area. Examples of ILECs are US West, GTE, Pacific Bell, etc. Such phones are usually manufactured by Western Electric or GTE, although in Alaska and Canada you still find

some old brown post-pay Northern Telecom payphones. COCOTS (Customer Owned Coin Operated Telephones) are operated primarily by private payphone owners. However, ILECs operate COCOTIized payphones of this type. BellSouth's operations in southern Florida are an excellent example of this. The primary difference between a "standard" payphone and a COCOT-type payphone is that with a "standard" phone, toll collection and verification is based in the central office. With a COCOT-type phone, it is handled by the telephone itself. This is a very important distinction, which you will appreciate later. There is another type of toll-free payphone, which is post-pay. You see these only rarely used in some parts of Canada, remote areas of the US, and in Alaska. I won't go into how post-pay phones work since they're so rarely seen.

Let's briefly consider how a standard toll-free payphone works. To make a local call on a standard payphone, you insert the amount of money required. In this area, it's 35 cents. After you deposit 35 cents, the payphone grounds itself. This "ground start" indicates to the central office that the proper amount of money has been paid and the central office lets the call go through. If you didn't put in the correct amount of money, then you'll be routed to a recording instructing you to deposit 35 cents before making your call. Because the ground start mechanism is not de-

pendent on any tones, you cannot redbox local calls - unless you route them through a long distance carrier.

Sometimes this is possible; try dialing a carrier access code before your local call. As an interesting sidenote, residential phones don't have a ground start mechanism, which can create very amusing results if their line class is inadvertently changed to

more complicated. It costs less money to call Portland, OR (503) from Seattle than it does to call Gander, Newfoundland (709) from Seattle. About \$3 less for the first three minutes. In fact, additionally, toll rates are not flat, and they vary by time of day. Clearly, a ground start mechanism isn't a good way to bill such calls. You can only set one fixed amount for ground start calls, and cannot easily limit the time, either. Recognizing this, payphones are equipped with a tone generator which plays an appropriate pulse to indicate the type and quantity of coin you've dropped in.

It used to be that when you placed a long distance call, an operator would come on, inform you of the charge, and then would listen to and write down every coin that you dropped into the phone (there is one pulse for a nickel, two pulses for a dime, and five pulses for a quarter). Which is how the operator could tell what you were depositing. She would proceed to connect your call upon your deposit of the correct amount, and would either collect the balance at the end of the call, or would break it every few minutes to get you to deposit more money. But with the golden age of layoffs and computerization, ACTS was born. ACTS stands for Automated Coin Toll System. It does the job of an operator by listening to the tones generated by the payphone when you deposit coins and tallying them appropriately. However, it's a computer and is not as smart as an operator. This is where redboxes come into play.

A redbox is, quite simply, a device

which generates the same coin deposit tones - and loosely the same

timing - as a payphone. Contrary to popular belief, it's not necessary to modify a Radio Shack tone dialer redbox (6.49MHz is a far better frequency anyway). You can record the tones directly from a payphone to a Hallmark greeting card or a micro-cassette recorder, and that will work. Whichever method you use to create a redbox I won't belabor the point of how to manufacture one. There are plenty of instructions elsewhere, its purpose is simply to fool ACTS into thinking you're putting money into the phone.

ACTS has rapidly disappeared over the past few years. The primary reason for this is the FCC. With the 1996 telecommunications bill, the FCC ruled that ILECs may not offer any services to their own payphone divisions which they do not also offer to independent operators of COs. This made offering ACTS and ground start billing problematic, since ACTS would have to be upgraded to charge different rates based on each COCOOT operator's criteria. Additionally, it would have been necessary for ILECs to handle separations and settlements for the CO than ILECs wanted - especially to maintain a system which was increasingly plagued by toll fraud.

As a result, many ILECs began replacing their phones with Northern Telecom Millenniums, or COCOOTizing their Western Electric payphones (such as what BellSouth did). Because the billing is all done in the phone itself, rather than via ACTS, there is no need to fool ACTS any longer. Therefore, you can play tones at a COCOOT or a COCOOTized ILEC phone all day and it won't work. Also, some ILECs who kept ACTS (usually by offering it to COCOOT owners) but making the fees so high that nobody took advantage) such as Pacific Bell have installed filter chips in their fortress phones. These filters block the handset microphone until the call supervises, which does an effective job of blocking redboxing.

Redboxing does still work in some places. However, it's eventually going away. What I really should go with redboxing are access charges - since long distance ought not be billed by the minute anyway. But I discuss....

Spoofing Call Waiting ID

by **Lucky225@hotmail.com**

In this article I will explain how Caller ID on Call Waiting (Call Waiting ID) works and how it is possible to display messages on Caller ID equipment.

How It Works

When you have call waiting, you will notice that you hear two tones if you have Call Waiting ID. The first is the Subscriber Alert Signal (SAS or "call waiting beep") tone. This is just your normal call waiting beep (440Hz for 330ms). The second tone is a (440Hz for 330ms). This second tone is a short alarm tone (DTMF "A" or "D" tone) to the central office to tell the CO that it is OK to send Caller ID information. Next, the central office sends out Caller ID information in FSK format. The name and number are displayed on the CPE and the CPE unmutes the handset.

Spoofing

To send a fake message to be displayed on the Caller ID box you will need a recording of an FSK transmission. We are currently working on a program that will create an audio file with whatever information you want. If you would like to help please e-mail me. In the meantime you can do the following. Order Call Waiting ID or go to a friend's house who has it. Call your phone when it's in use so you get a call waiting beep. Make sure there are no CPEs on the line. When you hear the GAC tone send an acknowledgement tone back and the central office will send the FSK signal over the line. Record this with a micro-recorder or some other recording device. Once you have your FSK recorded, call the person you want to put the CID message on and play a GAC tone. You'll hear his CPE chip back with an acknowledgement tone. Then play your recording of the FSK signal. If you did it fast enough the information will show up on his caller ID screen.

Obtaining Tones

You can make an orange box (GAC tone generator) by modifying a tone dialer. Just take out the 3.5MHz crystal and put in an 8.192MHz crystal and the star button will create a GAC tone. You can make acknowledgement tones by creating a silver box (parts easily found on the Internet).

The Sprint Integrated On demand Network [ION]

by **Prototype Zero**

Recently I happened upon a lot of information on Sprint's new ION technology. I decided to share this info with my community. ION stands for Integrated On-demand Network. The basic idea of ION is to provide customers with unlimited numbers of phone lines, etc. The system works by dynamically allocating bandwidth to the places it is needed.

You can pick up another extension in your home and link in to a conversation already going on, or make another call as if you had two phone lines, or more. No problems with paying for extra lines for your modem, fax, etc. You pay Sprint monthly by how much bandwidth you consumed. That could get pricey. Not to mention you could be constantly connected to the Internet as if through a T1.

Sprint has teamed up with Bellcore and Cisco, and are planning to sell their equipment through Radio Shack, who already carries a wide variety of Sprint products. Bellcore is providing the central software framework for ION's network, in addition to providing consultant services to ensure reliability of the new network. Cisco will provide critical hardware for the system, both in the CO and the home/business. They will also provide the ability of voice over Asynchronous Transfer Mode (ATM) and the ability to connect to other carriers' legacy circuit-switched networks. Several companies have committed to using ION, including Coastal States Management, Ernst & Young LLP, Hallmark, Silicon Graphics, and Tandy. (Remember back in the 80's when McDonald's volunteered to test ISDN?) The city-wide networks were deployed (to the best of my knowledge) last fall in Chicago, Atlanta, Dallas, Houston, Kansas City, Denver, and New York. The reason these

cities were chosen as the initial city networks was because of the existing conditions resident in each of them, including broadband MANs (Metropolitan Area Network) and strong customer bases. Sprint claims its ION lines can carry as many calls as Sprint, AT&T, and MCI currently carry put together. Minimun...

Here's how it works: The nationwide Sprint Fiber-optic network is connected to service nodes which in turn connect to the MANs. The fiber optic network is connected to the Internet and other data networks. The MANs connect homes and small and large businesses all over the city. Every residence/business would have a central hub which connects them to the MAN. A diagram provided by Sprint shows a home having a fax machine, a computer, and a phone line connected to a hub which has a direct line to the MAN. The general layout of the network is a star topology, with the fiber-optic network at the center.

The Future

We can only wait to find out the future of this emerging technology. I will write another article on the possible hackability of ION when the technology becomes more common-place (especially when I get to use it). The idea of an extremely wide Area Network sounds very interesting (hmm... how bout that Network Neighbourhood?), and if the network becomes a commonplace technology, it's our job to find out all about it. It would seem slightly scary to have your phone/fax/modem all hooked into the same line and controlled by the telco. Would you have a choice of ISPs? What are the possibilities for wiretapping? Or packet sniffing? We'll see soon.

My thanks to Veger125 for getting me a lot of info on ION. Blowapen, Clashing, and Cruciferous for reviewing this article.

continued from 39

phone in the machine and back down at the screen, you will see a prompt to put in your card. Start putting at random faces on the screen. You will notice that they all make the same low beeping noise. However, if you push in the upper right corner of the screen, you will hear a slightly higher-pitched beep. Once you've heard the sound, repeat the pushing twice. Then get away. A new screen will pop up asking for the user to put in a Citibank card. Even if someone tries to do this, nothing will work. Instead, the machine will freeze and make more beeps. Stares at the screen out of tiny unsuspecting persons. Luckily though, after about 30 seconds of the "beeps," everything will return to normal. Just a fun little trick I like to do at Citibank.

terpeshoff

We published this a few years back as truth. It's not a glitch but a feature for the visually impaired. It works quite well too. If you send to other numbers in a similiarly different manner, it's fun to figure out who we will call the beauty here. When you successfully complete a transaction, you get victory music. Different music follows all failures as well as all成功的. Always an afternoon task for great enjoyment of putting a bunch of ATMs into the mode of hearing the defeat music sequentially along the line.

Dear 2000:

I don't know if this is common knowledge but here goes anyway. I recently got a Nokia 6115 and was moving about the web looking for interesting information on my new phone. I found a review which makes reference to a string that would get you into the field test mode of the phone. I tried it out and let me tell you it offers a whole lot more than a simple field test mode. It's what ever the fun starts. The 6115 has two different codes you can setup, a lock code and a security code. The lock code is used to lock your phone, meaning that a locked phone will prompt you for the code if you try to make a call, get into the address book, etc. The security code is used to give you access to various rare system settings.

To try this with your own Nokia 6115:
1) Make sure "Phone Lock" is on by going to Menus->Settings->Security ->codePhone
lock and selecting on.
2) Turn your phone back on. It should say "Please lock" at the bottom of the display above "Please" and "Name".
3) Selecting "Name" will trigger the prompt for the lock code.

5) Say you forgot your lock code and you continue to get it wrong when prompted. After the five incorrect attempts you will be prompted for your security code. You forget that too? Never fear!
6) Key "back" from the prompt for the security code.

higher-pitched beep. Once you've heard the sound, repeat the pushing twice. Then get away. A new screen will pop up asking for the user to put in a Citibank card. Even if someone tries to do this, nothing will work. Instead, the machine will freeze and make more beeps. Stares at the screen out of tiny unsuspecting persons. Luckily though, after about 30 seconds of the "beeps," everything will return to normal. Just a fun little trick I like to do at Citibank.

electronic "push screen" tells machines at Citibank. If you go to a machine and back down at the screen, you will see a

prompt to put in your card. Start putting at random faces on the screen. You will notice that they all make the same low beeping noise. However, if you push in the upper right corner of the screen, you will hear a slightly higher-pitched beep. Once you've heard the sound, repeat the pushing twice. Then get away. A new screen will pop up asking for the user to put in a Citibank card. Even if someone tries to do this, nothing will work. Instead, the machine will freeze and make more beeps. Stares at the screen out of tiny unsuspecting persons. Luckily though, after about 30 seconds of the "beeps," everything will return to normal. Just a fun little trick I like to do at Citibank.

terpeshoff

task. You should be back at the main screen.

5) Enter the following string: *301#1#12345#

8) A nice hidden menu will appear with lots of things to look at. Who are really interested in the "Security" item so select it.

9) What you see looking at is the current security code for the phone. You can change it or merely memo

rate it once and for all.

10) Turn the phone off and then back on again.

11) When prompted, incorrectly enter the lock code five times.

12) When the prompt for the security code comes up, enter the security code.

13) The phone is now unlocked and ready for fun.

If none of this worked then you are either doing something wrong, have a different (bigger) version of the software, or are simply using a different phone. I beg Nokia, Sprint, or whoever is responsible, plans to offer a software upgrade that removes this back door. Looking there. As a side note, this should also work with the 6115 although I have not tried it.

Dunah

Dear 2000:

Just recently, I was exploring the plethora of channels on Cox Basic Cable in South Orange County, CA and I stumbled upon something rather interesting. On channel 113, there was some sort of service line-graph. It looked like some sort of organizational schematic. I turned on the same channel several hours later, and it looked like the same pattern. Perfectly looped. The same oscillated lines over and over. But every day, the loop changes. I'd like to know about the computer that puts this through the broadcasting network. What organization would be broadcasting such a thing? Why? Why would it be just a keypad pattern of very lines? Would you have any idea what this is?

Sinof Gnome

Dear 2000:

At least one phenomenon takes place with most phones (unless modified or so programmed) when in play mode. On one of the new calls, the phone will ring the last number it dialed without telling you on the screen. That phone will ring and the person who picks up will hear a somewhat rapid but sonorous ring. Am I paying digg, as for the screen setting, nor will alarm ringings in alarm like signal strength and transmission identifiers.

Shawn

Dear 2000:

I'm not your standard paranoid guy, but what's happened in my screen randomly, well...

I recently got to college and noticed that I was behind a set of firewalls. We got laptops that seemed to plug us guys via an auto-configuration script for Netscape. Before I had setup proxies for GCompo on my computer I had wanted to check e-mail to gpgl accounts that are outside the firewalls. In order to do so without bypassing the proxy servers I decided to use Netscape and sign up for a yahoo account (you can check gpgl accounts w/o). What happened next was what seems so odd.

While signing up for a yahoo account, they requested that I fill out a form that includes a special question that is used for recovering forgotten password. They automatically suggest a question and an answer. This question and answer fit very close to home.

The suggested question was "What is your favorite

pet's name?" and the suggested answer was "B.J."

I happen to have a dog named B.J. This is an immensely odd name, namely one of a kind and thus I conclude that it could not be a coincidence.

"What is Yahoo doing with personal information about me? How did they know it was me if I was my first time using this computer and the first time I used my

phone." The screen displays 1)Version 2) Programming 3) Field Debug.

In order to go into Programming or Field Debug, you have to enter a password. I have discovered the default password for the Field Debug screen is 007993 (or 0406560). This won't work to get into Programming mode.

Once in DEBUG mode, there are more options: 1)

Toggle QNC (0, 1) Screen Changes screen display into Hex values. 3) Test Calls.

Test calls is what I'm talking about. Once in DEBUG mode, I have specific to make the following types of calls: OutMarker, NewMarker, NewMark, Lopback, Slk, Lopback with an option below that says Star Call. Does anyone know what a Marker type call or Lopback type call is?

Every time I ask someone at Sprint (my PCS provider) or the people at Qualcomm, I get told to stay out of diagnostics mode or I might have to bring in my phone for reprogramming. Why do I have passwands on my own phone anyway? Is it my phone? Am I paying a license fee or does fed own my smartphone?

Shawn

Dear 2000:

What's (we're) involved in? Something's when in play mode. On one of the new calls, the phone will ring the last number it dialed without telling you on the screen. That phone will ring and the person who picks up will hear a somewhat rapid but sonorous ring. Am I paying digg, as for the screen setting, nor will alarm ringings in alarm like signal strength and transmission identifiers.

Shawn

Dear 2000:

I'm not your standard paranoid guy, but what's happened in my screen randomly, well...

I recently got to college and noticed that I was behind a set of firewalls. We got laptops that seemed to plug us guys via an auto-configuration script for Netscape. Before I had setup proxies for GCompo on my computer I had wanted to check e-mail to gpgl accounts that are outside the firewalls. In order to do so without bypassing the proxy servers I decided to use Netscape and sign up for a yahoo account (you can check gpgl accounts w/o). What happened next was what seems so odd.

While signing up for a yahoo account, they requested that I fill out a form that includes a special question that is used for recovering forgotten password. They automatically suggest a question and an answer. This question and answer fit very close to home.

The suggested question was "What is your favorite

pet's name?" and the suggested answer was "B.J."

In 16.2, Eric wrote "What the hell is the background

of Issue 16?" I supposed to be? Your response was "Re-

lease, Surprise, Terror, For the future." That line is

from a Babylon 5 episode in which Kara and those

she hate process it, war is not something really impor-

tant network? I suppose they referenced me in a dot1 base and I was the only one with my name in their list, but it's not an uncommon name.

Paranoia? I don't know.

Disillusion X

We do.

Dear 2000:

As I was listening to the October 1988 edition of Off

The Book, I realized that while I am only 15, I really do

feel like I am part of something special. When I think

about computers, I think about them as "a gateway" to

another world. I think of them as marvels. I can sit there

for hours pondering over the internal workings of a

Commodore 64, or a VZ-20, an 1868 Imp-16, 385,

386, and so forth and so on. I've mocked today in the

"Computer" world, there are many people, young old

men, who don't understand, but also believe they do.

They think that "hacking" is composed of breaking up

their AOL, or any ISP connection for that matter, and find

away a nuker, egg-bomber, or some other exploit.

They don't understand that a hacker is not always some

one who is malicious, or someone who only gives to dis-

tiny, or runs a snarmer day. They don't know that a real

hacker is someone who wishes to understand how

something works... who wants to dive into the depths of

how this functions, how Perl & C++ is run, B, or how the

computer can interpret input from us, in our human lan-

guage, elegant and understand it in its own language.

whether it be since Assembly, Binary, Hex, C, C++, Java,

Visual Basic, Pascal, JavaScript, Perl, Cobol, and so forth.

I am only in the 10th grade but already I know that I

do not want to go into this world as one of the people

who don't know A from B, B from Q, D from Z, and

00110 from 496. I am not exactly sure why I feel the need

to write to you, but I needed to vent my voice. I want to

dig into the depths of science, computers, how they

work, how they will work. How the phone work (I don't

want to destroy, I don't want to break, I only want to

learn. I think that is what is wrong with society today.

The American media has shown hackers as people who

sit in their room all night, doing nothing but squinting at

their monitors, trying to mess up someone's computer.

Graphix

Do few people realize this sense of wonder that really

is an essential part of appreciating technology? If you

ever reach the point where you can talk to someone on

the phone or ever try to get someone to immediately

use their processor, it won't be something really impor-

tant.

Dear 2000:

Eric wrote "What the hell is the background

of Issue 16?" I supposed to be? Your response was "Re-

lease, Surprise, Terror, For the future." That line is

from a Babylon 5 episode in which Kara and those

she hate process it, war is not something really impor-

tant.

Graphix

What is Kara doing with personal information

about me? How did they know it was me if I was my

first time using this computer and the first time I used my

Kevi classic you have started is the most inspiring

ting (have read about in a log line).

Webmaster

After hours one TV show that has been a great influence to us, we're glad someone picked up "Crash."
—Ron, Now If Each Someone Would Pick Up "Crash"

Questions

Dear 2600:

I would like a little more info on the .ic.2600.net server. Isn't there a number that my modem must dial to access the server? And do you have any pointers how to switch servers back and forth? This is very necessary because I have to share the computer with other "family" who would absolutely freak if they knew where my interests lie (desolous to say) I use Magic Encrypted Folders to keep my personal files personal. I am trying to stay incognizant, and am very intrested in using the hocke server when I am actually online.

You must already be connected to the net before you can use the .ic server. It would connect the same as any other .ic server anywhere in the world. All you have to do is replace or add our server name in whatever "your .ic name" address is. Once things connecting to it is set up to get you in trouble since it's rather hazzardable from any other .ic server.

Dear 2600:

I have a question. I have two separate lines for my home, and on my answering line sometimes it will say "the connection you are calling isn't responding" so I plug the phone line into my phone and there are two numbers talking on my line and they can hear me. I was wondering what is going on?

Infrared

It's a prob in the dial-up or if you're that your phone line really belongs to someone else. Either that or either phone line belongs to you. No matter how you look at it, the same phone line is showing up in two places. The phone companies do plug all the time.

MTV

Dear 2600:

The among the MTV fans, or so I like to call them.

Most of us reading this magazine know the type: Harley wearing, trans loving, biker riding, spiced popular kids. Most schools probably have 25 percent of these kids, give or take a couple. Well, my school was around 90 percent. The remaining 10 percent are considered low life scum. As I read the article in the 2600 site (www.2600.com/reviews/1996/10/9.html) about MTV's "True Life: I am a biker," I realized that everyone at my school now thinks that they can all fit in the biker crowd.

I decided to post the article around school to inform everyone what a crock of shit it was. Bad idea. It looked like the principal's office with two Saturday-kidsons

that I had nothing to do with it and I rejected

anyone else to do their talking for them.

I half

existing media concerning our youth. They told me that it was a pro-admin act and against school policy.

Then they found three copies of 2600 in my shoulder bag. They said that it was unexcused reading material and they proceeded to confiscate it. I justified what they were doing was justified! Anyway, I told them that it was research for my computer class, because we were learning about servers, and then they burned me from using a computer at campus.

I went to my deans and was lying true for a week and my fourth period English class. I read a poem about school until they will then be returned of giving a

bad observance. Had we not tried to do this, no one same story would have come on stamp we wouldn't have made it back and they didn't care either (not the truth).

They were doing was justified! Anyway, I told them that it was research for my computer class, because we were learning about servers, and then they burned me from using a computer at campus.

I went to my deans and was lying true for a week and my fourth period English class. I read a poem about school until they will then be returned of giving a

bad observance. Had we not tried to do this, no one same story would have come on stamp we wouldn't have made it back and they didn't care either (not the truth).

Principals came again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

principal's office again. This time they called my parents and told them I was guilty of insubordination. After I explained the situation to them, they thought it was the stupid thing they had ever heard of. My mother called the

various cases of 2600 never showing up on the shelf.

Memorization

I half

memorized

the

TO: Tom Sawyer

FROM: October 27, 1997

Date: Subject: German Standards

My friends told me that there was a show on MTV about tracking a few weeks ago and started taking all of his shit. It was so funny to see that my uniformed friends thought they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

Over the years we have experienced similar or many friends though they could be better. They threw these stupid hats at me and my uniform turned to angst. I realized that the bulletin that MTV was producing was going to the rocker community kick ass. It was hard enough to explain anything about hacking to my friends in the first place, but after it's almost impossible because they don't believe MTV could actually be. So this really

isn't the end of our friendship.

image is the book, to be stopped and sent back to the distributor because this individual, \$6.50 on *Issue*, much better might think that the material is too sensitive for his/her community. Not to mention the bad name they give in inn-sent materials such as 2007 by D'Angry.

bigots and other such truly disturbing publications. If I were a company that sold of B&N, I must seriously consider it to make any decisions for my company, much less decisions that could potentially change my customers' privacy interests to run a book store, if you ask me.

We've contacted Barnes and Noble concerning whether or not their name actually has circulated. They say it could potentially explain some danger, not only for us but for a whole host of other publications, we'll wait to hear what they have to say on the matter. We also do think that the vast majority of books have people like me following writer in positions of power.

Dear 2600:
A customer called our store, the Barnes & Noble in Muskegon, Michigan to inquire and said that someone had written a story about our store in your magazine. We read it and wanted to reply. We have sold your magazine in our store since it opened three and a half years ago. It seems that on of times we sold out of your magazine. I'm not sure who that guy talked to, but obviously it was someone who didn't have a clue. We just wanted to let you know. Thank!

Muskegon, Michigan

Down Boxes
Bookseller at B&N
Muskegon, Michigan

Dear 2600:

For Staff
Dear 2600:
I found something quite interesting, annoying, and well, all around funny today. While going to an eye appointment today at the local military hospital (it's a small army base, very) I heard on the PA that "We see lots in ThreadCon Bravo." For those of you who don't know what ThreadCon is, it's Thread Condition...the base I was on has bases at ThreadCon Alpha since the Gulf episode. The higher in the alphabet, the worse conditions are. Anyways, ThreadCon Bravo is supposed to be pretty hot food. This kind of sparked me with when I received that this week was some sort of "peculiar" for the world's Windows sharing sound (scary, I am a little). This was his semi-email-anonymity. I opened the message and here's what I got:

"WE ARE REBELS AGAINST GOVERNMENT ENTITIES! WE OWN YOUR SYSTEM WE ARE BREATHING DOWN YOUR NECKS. YOU ARE FORTRESS."

I almost broke out into a laugh when I thought the burglar's system had been breached. Then, I finished reading the message:

"THIS IS A SECURITY EXERCISE FOR TEE. HOSPITAL."

Oh well, it was fun. A few moments later, another email arrived saying, "Please in ThreadCon Bravo. Just for my suspicious characters, and report them to security." Considering I was looking kind of suspicious (like dark, black beret pants, sunglasses, shirt on...what else to choose to wear than), I believed for the door. Good to know the mail is sorted. Love your site.

Sleek Paket

Stores of the Past

Dear 2600:

Enjoy your magazine! Thought I'd reminisce a little. Learned to program FORTRAN IV on punch cards back in 1980 at a junior college. When I got to a University, I got an account (account) and was able to program through a terminal. I was an engineering student and spent many hours into the early mornings programming and looking through areas I could get into. The only task I ever did was when a classmate's senator used one of the engineering terminals and left it without logging off. It happened upon me. I wrote a batch file that executed upon startup the next time he logged in. The batch file executed a program that told him to remember to log off before using the terminal. After days of me I found another terminal that someone had not logged off at. When I checked the account number I found out it was the same account as the last one I forced! I wrote another batch file that ran at login. It was a bit more exciting. Essentially it said, "That you just set, dumbshit." I thought to myself and forgot about it. Not two days later I found the same damn account open again! So this time I wrote a batch file that looked exactly like the begin script and asked for his account number and password. This second login was my back. It gave the password to a dummy account I had set up. I knew that the sysop could track me down if I used my own account. That's in open accounts. I had gathered from students who had purchased and never told the computer manager they had. Things were a bit less strict back then, anyway, the account number didn't even suspect a problem, even though he had to enter his password twice (big clue that something is wrong). As soon as the password was entered, I had the batch file change and log off. I passed the account number and password around the engineering department and we used the account so people knew where we were not supposed to. We were kind enough to leave the files intact. It only lasted a few days before the sysop changed our password again and I lost my play account. I played something fun to hack around with.

2. **HTTP**: Starting with Exchange version 5.0, Exchange has a feature called Outlook Web Access. A server equipped with IIS3.4, Active Server Pages, and Exchange 5.0 and

Understanding Microsoft Exchange

by Pay Lay

[PAYLAY666@yahoo.com](http://paylay666@yahoo.com)

Microsoft Exchange Server is one of the most popular and widely deployed groupware large corporations. A lot of smaller companies also use it because of the ease of installation and native support for Outlook mail rendering. Like all Microsoft products, it uses proprietary protocols and mail transfer methods. But it also supports most major standards of mail transfer and the like. "Out of the box"

Exchange supports many protocols, including the X.400, X.500, I.T.A.P, SMTP, POP3, and IMAP4. The X.400 and X.500 connectors can be quite fun, but that is a whole other article. Internally, it supports connectivity to other mail systems, such as MS Mail, Notes, CCMail, Groupwise, and SNA/DS. For Internet connectivity, it has a built-in SMTP server.

Connection and Authentication
Exchange Server supports four ways to connect to it:
1. **Exchange Client**: "Exchange" client is a MAPI program that can natively connect to an Exchange server. For a long time it was only the Exchange Client which shipped with early versions of Exchange and Microsoft Outlook 97/98/2000. These clients use NT Authentication, meaning you have to have an NT account on the server domain with appropriate permissions in order to connect. Recently, Microsoft announced that OpenMail for HP-UX and Linux supports Exchange server connectivity. I haven't seen it so I can't tell you how it works, but the Linux version sounds like something fun to hack around with.

2. **HTTP**: Starting with Exchange version 5.0, Exchange has a feature called Outlook Web Access. A server equipped with IIS3.4, Active Server Pages, and Exchange 5.0 and

above can present the Outlook interface through a web browser so users can access their mail. Challenge/Response authentication is the default, but it requires IE. Most administrators step the authentication down to clear-text so Netscape users can access their mail. This is a common mistake a lot of admins make, sacrificing security for usability. The default path to Exchange's OWA is "...". A lot of companies allow anonymous access to public folders. If you peek around long enough, a lot of information can be gained from reading public folders. A side note: OWA uses LDAP to do queries on the Global Address List. If you can access OWA from the Internet, chances are they have anonymous LDAP enabled. With a LDAP-enabled mail reader, you are browsing their corporate email list in no time. In most Exchange sites, email address = NT username. (Nuff said).

3. **POP3**: Exchange allows POP3 clients to connect to the mail server. If an administrator enables this, they usually enable clear-text authentication. I have noticed most admins would rather just enable clear-text than hassle with upgrading mail clients.

4. **IMAP4**: See POP3. Same authentication. Now that I have laid out various protocols, it's obvious there are various ways to connect to Exchange from the Internet. Microsoft has had their share of security problems with Exchange, which were subsequently fixed by an Exchange Service pack or hot fix. I have been working with Exchange for years now, and I have not once been to a site that had the latest service pack or hot fix. So, the first step in understanding Exchange's vulnerability is understanding what build you are working with.

Two ways to get this info: look at the mail headers:
[snip] with SMTP (Microsoft Exchange Internet Mail Service Version 5.5.232.9) ready
[snip] with SMTP (Microsoft Exchange Internet Mail Service Version 5.5.232.9) ready
[snip] 220 mail.paylay.com ESMTP Server (Microsoft Exchange Internet Mail Service Version 5.5.232.9) ready
Build: 4.0.837
4.0.838
4.0.993
Exchange Version
Exchange 4.0
Exchange 4.0 SP1
Exchange 4.0 SP2
[also referred to as Exchange 4.0a)

Exchange 4.0 SP3
Exchange 4.0 SP4
Exchange 5.0
Exchange 5.0 SP1
Exchange 5.5 SP1
Exchange 5.5 SP2

Exploits

Obviously, if you come across a server that is using a very early build, chances are they haven't bothered to install any NT or IIS service packs. This is a sad fact I find especially laughable. Give me my Palm and Palm modem and 10 minutes on an Exchange build 2252 on NT SP3 and I'll be out of the box, and I will be perusing payroll, tax, or bribe information or just looking at some jack's corporate contacts, or whatever. If you are interested, do a little research on general Server.

7. A lot of dumb-ass VP's want to check their e-mail from their Palm and cell phone from a desert island using their own ISP. Some common, open holes in an Exchange Server.

8. A lot of dumb-ass VP's want to check their e-mail from their Palm and cell phone from a desert island using their own ISP. Because a lot of admins are dumb, lazy, or scared of their boss, they have allowed anonymous access into the SMTP portion of Exchange. Check this first.

9. Exchange's SMTP connector has a feature that disables mail relaying. A lot of companies have this feature turned off because they probably don't understand what mail relaying is. Heh, they probably think it's a good thing. So check into this next.

10. If the build is 5.5.2448 or below and they have mail relaying disabled, there's still a way around it. If the e-mail is sent using what's called "Encapsulated SMTP", a way for Exchange to send mail to another Exchange via SMTP, you can relay email because it always relaying. If the mail appears to be coming from a specific Exchange server, Microsoft has a hot-fix for it, but most companies run NT Service Pack Nothing, so check this out.

11. Exchange uses NT authentication for mailboxes, so exploits used for NT passwords can be applied to Exchange. Hack the Administrator password and you just hacked the Administrator mailbox.

12. Any mail standard Exchange uses (IMAP4, POP3, SMTP, etc.) is, well, standard. So the general rules when dealing with those protocols also apply to Exchange.

Under the Hood

Exchange has what's called a Service Account. This is the NT account that Exchange uses to send/receive mail, stop and start services, and perform other Exchange-related duties. This account should be the most secure account on your mail server. So, let's find out what the Service Account user name is:

Click on Organization 'SiteConfiguration'

Continued from Page 5

reputationServer and bring up the properties for the current server, then click on Permissions. There is a box titled "Windows NT Accounts with Inherited Permissions". Scrolling through the permissions list, there is a set of permissions called "Service Account Admin".

Over the years, is unquestionable of great benefit to whoever decides to make use of it. The relatively open architecture of the Internet lends itself to a great variety of applications, not just for those with the most power. That is its magnetic allure and it's also the reason everyone in authority is scared to death of it. The net represents the true potential of the individual and individuals are the most formidable entity of any organization.

As the crowds were gassed and shot at, the mass machine loosed its effects. They found a small group who, in the darkness, had taken to vandalism, smashing windows and torching cars. This became the only "opposite" protest Americans saw on their television. Businesses were the victims. Individuals like those New Yorkers doing

fan editorials condemning this violent, apparent property, ignoring the assault on the people, and endowing the continued existence of the WTC. Anyone who was surprised by this simply hasn't been paying attention. When you look at how power has been consolidating in recent years, this kind

of coverage makes perfect sense.

But then there was the net. The same net that is entrenched upon daily by those in power. The one that governments around the world continue to try to regulate. It was the Internet that finally broke through the manipulation and allowed the world to see firsthand what was actually happening.

Strategically placed webcams showed everyone what was really going on in the streets. Making lists and newsgroups all over the world. And anyone who had ever been involved in just about any kind of protest and set them out to the rest of the world. Any person with a tape recorder was able to go out and get sound, then made it so that people from all over could listen.

Almost as many people managed to do the same thing with video. Within hours, dozens of these independent media pieces were traversing the planet, all without control or censoring. And, in one of the most chilling examples of free speech we've witnessed in a long time, a "pirate" radio station broadcasting live from the streets of Seattle was able to get its signal streamed onto the net so that people anywhere could listen to it's week but captivating signal. (We put quotes around the word "pirate" because it seems more that such free speech on the public airwaves would be illegal while it's perfectly acceptable for one single corporation to control close to a thousand more powerful stations.)

Yea, probably didn't hear about any of this in the mainstream media for the same reason you didn't hear about what Kevin Mitnick actually did to Warrant being locked away for five years. Why direct on how a network ought not to be designed.

Bennie S. endured all because the Secret Service was mad at him? Wouldn't more ad space be sold if Zylkoff were shown as an electronic terrorist rather than a simple juvenile delinquent? It's far easier to portray events with the smoke and mirrors we saw in a recent MTV slander piece on hackers as well as so many other corporate media fiascos. The facts only serve to complicate matters and muddy the message. And people are starved after all. All they want is to be entertained and nothing stands in the way of that more than the truth. Right?

The tide has turned. It may take some time, but it seems obvious to us that not everyone is buying into the propaganda. We'll see many more individuals whose punishment far outweighs their crime and we'll see the media distort the facts and lie again. But one thing we know we have now that may be the biggest comfort of all—answers. That, combined with the techniques that we must never let them take away, will be enough to start reaching others.

(Received May 29, 1998; revised Oct. 26, 1998)

1. Posting address of former citizen of publication is 222 West 72nd St., New York 10023.

2. Posting address of the Neighborhoods of Global Business

Office of the partners is 355 Sixth Ave., Manhattan, N.Y. 10010.

3. The series and segment of the *Washington Post*, and *Post* column of Dr. Robert L. Rosen, Entomologist, 2000 M St., N.W., Washington, D.C. 20036.

4. The *Post* & Co., 1200 12th St., N.W., Washington, D.C. 20004.

5. From *Businessweek*, September 13, 1996.

6. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

7. The *Post* & Co., 1200 12th St., N.W., Washington, D.C. 20004.

8. From *Businessweek*, September 13, 1996.

9. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

10. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

11. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

12. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

13. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

14. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

15. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

16. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

17. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

18. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

19. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

20. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

21. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

22. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

23. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

24. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

25. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

26. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

27. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

28. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

29. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

30. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

31. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

32. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

33. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

34. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

35. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

36. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

37. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

38. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

39. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

40. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

41. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

42. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

43. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

44. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

45. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

46. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

47. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

48. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

49. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

50. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

51. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

52. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

53. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

54. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

55. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

56. Post of 600,000 pages, of which 200,000 are secret, New York 10153.

Obviously, if you come across a server that is using a very early build, chances are they haven't bothered to install any NT or IIS service packs. This is a sad fact I find especially laughable. Give me my Palm and Palm modem and 10 minutes on an Exchange build 2252 on NT SP3 and I'll be out of the box, and I will be perusing payroll, tax, or bribe information or just looking at some jack's corporate contacts, or whatever. If you are interested, do a little research on general Server.

A Service Account Admin can do anything: read anyone's mail, contacts, calendar, journal, tasks, and public folders. You can send mail to them, receive mail, set incoming mail rules, forward mail, filter mail to another mailbox, anything. You can set up a filter and rules on the CIO's inbox that will copy all mail with the words "Confidential" or "Private" to the body, and have it automatically delete out of Sent Items so he never knows. With Service Account access, the possibilities are endless.

Now, your next question is, which is the Exchange Service Account in the user list? Good question - a jerk-hole administrator would make it the default NT account - "Administrator" or he thinks he's smart. Call him "Joe Rodriguez" with the user name "joe". Joe is obviously not a service account. Another good place to start is if you have access to the NT user list and the Exchange Global Address List. Start cross-referencing names. Some admins may have created a Service Account mailbox, but hit it from the address list. So, figure out what NT accounts don't have mailboxes. You may be looking at some kind of service admin account. Exchange or otherwise. Of course if you have weasled yourself into some kind of admin access in the NT domain, but you don't have access to the Exchange server, see what services are running on Exchange. With some crafty NT Resource Kit tools and some NT command-line tools, you will be able to bring up properties for services. With the "Start Up" properties for any Exchange service, who has "Log On As" permissions? You have just discovered one Exchange Service Account user name. It may not be the only one, but it is a slant.

This is a good basic introduction to Exchange. It is just as much a hacking tutorial as it is a how-to guide for Exchange admins to know a network ought not to be designed.

