

THE COMPUTER-ABUSER SUBCULTURE

Raiders are "getting a kick" out of entering unauthorized systems and pirating software. But crime stoppers are finally catching up.

Interview by Pam Horowitz

WarGames was just a movie. But it brought the fantasies and realities of computer raiding to America's attention.

The reality is that a lot of computer users are performing some less-than-legal computing feats. And they're doing it "for the fun of it." Some raiders do it because they get a kick out of "beating the system." And some see computer access (to anybody's computer) as just another puzzle to solve.

Here's a rundown of what the newborn computing subculture is doing most:

Software piracy—hooking their computers to modems to copy software.

Phone phreaking—using telephone lines and modems illegally. This often involves the abuse of Telenet or Tymnet communications systems.

System hacking—using the computer and modem to tamper with bank balances or conduct transactions such as ordering concert or airline tickets without paying for them.

The computer users responsible for this networking abuse often don't think they're doing anything Photo Collage: Marc Tauss

wrong. In fact, at press time, there was no actual federal law against unauthorized intrusion into computers (going into other computer files without permission).

But there are laws against wire fraud, interstate transport of stolen property, and the use of telephones to get computer services without paying for them. Recent headlines show the confusion and comment this kind of computer exploration is eliciting:

- Computer Capers: Trespassing in the Information Age—Pranks or Sabotage?
- FBI Raids Homes in Snooping by Computer
- The 414 Gang Strikes Again
- Thrills and Lax Security Cited in Computer Break-In

Why do computer users take the risk? K-POWER recently talked with some active members of the teenage computer-abuser subculture. The names of those interviewed have been changed. Although

they've all tried their hands at all sorts of computer activities, pirating software remains one of the most popular pastimes.

What is the most serious form of computer abuse you've participated in?

PAULA: Using a modem, I tied into an attorney's computer. I read the messages and accidentally deleted them. Some of them seemed important. They related to patents, etc.

JIM: While searching for the CableVision computer, I added material to a data bank. I don't know who the bank belonged to. I've also been with kids who got free airline tickets, but I didn't participate. I was an observer.

KEITH: I called the cash manager of Citibank using a number I found on an electronic bulletin board. I could have broken in and transferred funds, but I didn't want to go that far. Any pirate can call into a pirate bulletin board and access many cracked programs. I've also found illegal MCI and Sprint codes, and cheating and cracking techniques. All you need is a telephone and a computer.

HANK: I've logged on to unattended computers after finding carelessly hidden passwords. (The way the *WarGames* star accessed the school's computer with a password found under a secretary's desk.) Or, I've sent electronic mail to someone's terminal and imbedded a hidden control code in the message. The codes let me within the system. For gaining access to remote systems, I'll use random-number-generating programs to try and discard phone numbers in different area codes.

MARK: I've hooked up two computers and two mo-

dems and had them exchange numbers until they found the right one. This way I get Sprint numbers for a lot of California software and hardware companies. They don't all have 800 numbers and it would cost me a bundle to call them up and pay for it myself. The Sprint number lets me call them for free.

Do you consider these kinds of computer hijinks to be criminal? For instance, how would you compare shoplifting to the sorts of things you're doing with your computer?

JIM: There's no physical substance to something like pirating software. I've paid for the disks I use to copy on, and I would never pay the store prices for games. I hardly ever use them. I only collect them. But if it's done for money, it's wrong.

MARK: It is crime. It's illegal and wrong. Anyone who doesn't admit it just doesn't want to admit it to himself. Sprint is losing money when I use their numbers illegally.

PAULA: If I shoplift, I'm taking something away from someone. If I pirate, I'm not really taking anything. There's no loss of sale, because I wouldn't have bought the software. I'd have done without it.

I think that hard-core piracy for destructive purposes is morally wrong. I don't think it's wrong if it's done for fun.

KEITH: With piracy, there's little risk of getting caught. It's fun because you learn so much about the computer by doing it. You don't even have to be gutsy!

STOP THE PIRATE: LOCK IT UP

Jeff Gold is battling against a favorite pastime of many of his own peers—piracy. And he's bringing in \$2,000 a week doing it.

It all began two years ago, when Jeff wrote a program called *Rubik's Cube Unlocked*. The program was a big hit and earned him \$20,000. After that success, he turned his attention to filling what he saw as a gap in the computer market-place. He saw the need for a software-protection device and created a program called *Lock-It-Up*. Now 17-year-old Jeff is president of the \$100,000-a-year company (named Double-Gold Software

Inc.) when he's not busy at the University of California in Santa Cruz.

Lock-It-Up is a disk copy-protection and duplication system that prevents pirates from breaking into software systems.

The young entrepreneur says he's always been opposed to software piracy. His reason: "It's not legal. You're cheating the person who worked so hard to build the product."

He advises hackers to "come up with new creative uses with the computer. Do something profitable. Pirating isn't profitable."

—P.H.

Why do you do it?

PAULA: I want to keep adding to my software collection. Piracy is a social event, a big game. It's like belonging to an elite club.

JIM: Piracy is condoned by everyone—even in school. Many software authors do it themselves. I never thought about it being wrong. At this point it's sort of a habit. It's definitely a learning experience. You have to be creative in your methods of cracking and you have to keep expanding on old knowledge. Our parents don't care. Sometimes they ask us to pirate certain programs for them. They don't condone using fake phone numbers on the modem or "hard core" piracy, though.

HANK: I subscribe to a self-imposed code of honor. When I enter other systems I don't erase files, write ridiculous or obscene messages, and I don't eliminate other people's work. It's not the publicity or the acclaim I want. Cracking systems is just for the fun of it.

KEITH: I like to play video games and piracy is the easiest way to acquire them. Cracking is fun—it's

like working a puzzle. I would consider a kid a "geek" or a "goon" if he had a computer and didn't pirate. But peer pressure isn't a factor in piracy. We do it for personal satisfaction. Cracking software stimulates your imagination—it's a trial-and-error problem-solving process.

What other computer-related things could you be doing that would be challenging?

KEITH: I could try writing software to sell.

JIM: I could participate more in the "stories" told on electronic bulletin boards.

PAULA: I could spend more time developing original programs and fooling around with graphics. □

PAM HOROWITZ is a contributing editor to K-POWER. She lives in Westport, Connecticut, where piracy as a pastime is big.

A TALE OF BROOM-CLOSET COMPUTING

Lots of people can't resist letting their fingers do the walking on the keyboard—no matter where the keyboard is or whose computer it's attached to. CHALLENGE lights up in their eyes in flashing capital letters.

Kyle Cassidy, 17, is one of these people. Kyle sent K-POWER his true tale of computing hijinks. Now \$150 poorer because of his actions, Kyle has advice for other curious computerists: Next time you get itchy fingers, don't scratch!

"My temptation to check out my school's new Corvus hard-disk system led me to a broom closet, better known as 'The Pit.' This is where the school's four Apple IIs are kept.

"CORVUS DISK SYSTEM PLEASE TYPE YOUR NAME. I typed KYLE. No good. Password protection. I tried names of teachers. Nothing. Hmmm, something easy. TEACHER. The screen cleared and four words appeared. YOU HAVE ENTERED CORVUS. I was in!

"I experimented and discovered I could only access volume one. I wanted the password to the other volumes. So I went home and ingeniously devised a program to cause people to believe there had been an error, and get them to reenter their password. When they did, the password would be pushed into my file. For this reason, I

called the program The Pusher.

"The next day, I typed *The Pusher* into the school's computer and saved it. There was another student in the broom closet, but I paid no attention to him. Two periods later, I was down in the main office.

"Well, they knew their system was bugged and they knew it was me. The busy student was a rat! But also, their FORTRAN programming language had locked and was inaccessible to anyone. I was sent to see the principal.

"We talked for a long time about what I did. But he was more interested in why I did it for the challenge.

"We finally got down to the nitty-gritty—my punishment. Well, the school ended up paying a computing consultant a \$65-an-hour fee to fix the system—and it came out of my pocket.

"Sure, I became an instant folk hero in the eyes of the other school hackers, but the damage I caused to myself and others was not worth the fame or the challenge. Breaking into someone else's computer system is a dangerous venture. And it also tarnishes the image of every single computer user."

KYLE CASSIDY lives in Glassboro, New Jersey.

THE CASE AGAINST COPYING, BREAKING & ENTERING

Not all computer users are abusers. According to a K-POWER mini-poll of hackers across the country, many are turning thumbs-down to software piracy and to poking around in unauthorized computer data files. Here's what a few said:

According to Stephanie Kaufman, a 17-year-old from Lowry Air Force Base in Denver, Colorado, what's really needed are stiffer penalties for raiders. She says, "Old laws are ambiguous and don't address our new technology directly. Raiders can be charged only with breaking and entering, and the details of that charge make it easy to slip through the loopholes. What we really need is a change of attitude. Invasion of data is considered a game—an exercise in persistence and intelligence. People even admire computer criminals."

Stephanie thinks people admire computer abusers because they're really afraid of the new technology and like to see that computers are fallible. She says, "A combination of tighter security, tough laws, and an educated attitude are necessary to insure our protection."

Fourteen-year-old Eric Fisch of St. Paul, Minnesota, thinks it's immature kids who're breaking into other people's data files and copying software. He told K-POWER, "To them, locked data files are like hidden treasure!"

Tom Spindler, 14, of Park Ridge, Illinois, is another computer user who's against breaking into computer files and piracy. He tries to put himself in the place of the company or person being

abused: "Let's suppose someone broke into your computer system, got your favorite program, saved it on their computer, erased your copy of it, and sold it. You'd lose a lot of money!"

"I don't like piracy," says 13-year-old Eric Saberhagen of Albuquerque, New Mexico. "When people pirate, the company doesn't get anything from it. If you want to play a game, you should buy it."

Tom Peterson, 14, of Vancouver, Washington, agrees: "When a company is selling a product and you pirate their software, you're stealing from them. Going into someone else's computer files is the same thing."

Peter Green, a tenth grader in Cupertino, California, says computer break-ins can cause embarrassment. "If someone breaks into a school's computer files and finds private information about a student, it could be embarrassing," he said. And dangerous, he added. He pointed out that if the 4-1-4s who broke into the New York Memorial Sloan-Kettering Cancer Center had complete access to all of the patients' files, those records could have been accidentally rearranged and patients could have suffered.

Vipa Dever, 15, of Troutville, Oregon, sums up the issue by saying, "People who break into private computer data files or pirate software ignore the fact that they're hurting other people. The weird thing about it all is that most of the time, these people end up hurting themselves."





Win a modem and connect with K-POWER's network!

Are you dying to reach out and access someone? Well, you've come to the right place.

For K-POWER'S K-NET, we're looking to networking technology. We'll hook up computer users all across the country—to each other, to K-POWER magazine, and through monthly K-NET features . . . to YOU!

Networkers from seven spots around the U.S. already are on-line. Five more to go. Don't waste your big chance to write and tell us why you should be the next to connect! K-POWER will give you a modem and pick up the K-NET networking tab for a year.

From California to Connecticut, from New Mexico to Minnesota, and Miami to New York—plus points in between—the K-NET CompuServe connection will bring K-POWER readers the latest in computer-user news.

K-NET will address current computing problems

and issues (like this month's question: Accessing unauthorized files—a threat to privacy, or just a good movie plot?). They'll talk electronically about—and to—the most popular software designers, review the hottest new computer software, and discuss the latest technology.

Interested? Let us know! Tell us about yourself, your age, where you live, the kind of computer you have, anything else you think is interesting, and why you want to be part of the K-NET connection.

Give us the lowdown on your computing experience and answer these questions:

Is computing a fad? How do you see it fitting into your life five years from now?

Send your entry to K-NET, c/o K-POWER, 730 Broadway, New York, NY 10003. March 25th is our deadline. After that, who knows, you may see your face here each month—as a K-NET regular!

K-NET best computer game picks

We asked the K-NET to list a couple of their favorite computer games. Let us know if you agree or disagree!

BLUE MAX

(Synapse)
Jill Bassett

CHIVALRY

(Xerox)
Daniel Horowitz

CHOPLIFTER

(Broderbund) Scott Moskowitz, Eric Fisch

DROL

(Broderbund) Steve and Daniel Horowitz

FROGGER

(Sierra On-Line) Dara Cook, Scott Moskowitz

HARD HAT MACK

(Electronic Arts) Eric Fisch

M.U.L.E.

(Electronic Arts) Jill Bassett

PARSEC

(Texas Instruments)
Tom Peterson

POLE POSITION

(Atari)
Jill Bassett,
Daniel Horowitz

REPTON

(Sirius) Eric and Tom Saberhagen

SNACK ATTACK

(Funtastic)
Jodi Moskowitz

SNOOPER TROOPS

(Spinnaker)
Jodi Moscowitz

WIZARDRY

(Sir-tech) Steve Horowitz, Eric and Tom Saberhagen

ZORK I

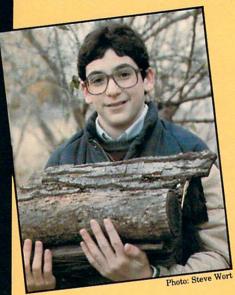
(Infocom) Jill Bassett

ZORK III

(Infocom) Eric and Tom Saberhagen

Accessing unauthorized files—a threat to privacy, or just a good movie plot?

Eric Fisch, 14 St. Paul, Minnesota



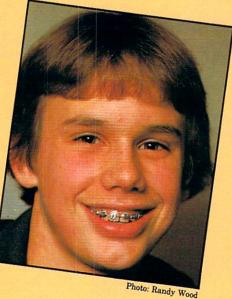
I believe unauthorized access to another's data files through the use of a computer and modem is a serious problem. The challenge of getting into data files became the name of the game. Kids started accessing files for kicks and then for spite, and laughed about it.

Eric has been computing with his Apple II plus for more than two years. He's written awardwinning BASIC programs and now is ready to tackle machine language and Pascal.

Tom Peterson, 14 Vancouver, Washington

Accessing other people's computers is more than a movie plot. Plots like that might give some kids bad ideas. I liked the movie and I like the

'Whiz Kids' show, but they might influence people in a bad way. I've heard a lot about people doing that kind of thing and I don't like it. I'd rather not get messed up in anything like that. Not many of my friends have modems yet, but I know they're like me—they don't want to get messed up with anything that might get them into trouble!

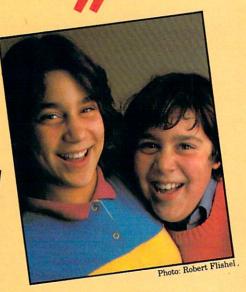


Tom Peterson is the proud owner of a TI he bought in early 1983. He and his brother John, 16, have both taught themselves BASIC and spend a lot of time creating their own programs.

Jodi Moskowitz, 12 Scott Moskowitz, 9 Toledo, Ohio

It's bad. It's other people's property and they don't have any right to go into it. —JODI

It's exactly like any old robbery. I don't think it's right to do it. Because you might end up in jail. —SCOTT



Jodi and Scott are part of a real computing family. Their dad, Gary, runs a computer school and teaches programming, which both Jodi and Scott are learning. That means the Moskowitz duo has access to Commodore 64, VIC-20, Atari 400, and Apple computers!

Steve Horowitz, 16 Daniel Horowitz, 14 Westport, Connecticut

It's a real challenge to find or figure out a password and get onto unauthorized systems—that's why people do it. It's curiosity. And it's fun to show your friends what you do. I think getting on and just looking is OK. If it's something unauthorized and people start messing with it, it's not OK.



If files are very important they shouldn't be on an unprotected computer system. People shouldn't be allowed to get into them. But I don't think it really hurts anybody if you get into a system and don't change anything around. —DANIEL

Steve and Daniel have an Apple II plus and an Atari 800. They both program.

Jill Bassett, 12 Miami, Florida

I loved the movie War-Games . . . but the plot scared me. I personally feel that adults as well as teenagers



view (breaking into computers) as a challenge—man versus computers. People don't mean to do harm; to them it's just like solving a puzzle. When they do, it gives them a feeling of power and accomplishment because they 'beat' the machines.

Jill is an avid Atari 800 programmer and recently won \$100 in a school programming contest.

Dara Cook, 9 Tuckahoe, New York



Photo: Nik Kleinberg

I think it's bad. People broke into a computer at a hospital and they messed up records. If they messed up their treatment, they could get sicker. Maybe they should change the password every day, or make passwords really hard to spell—like supercalafragelistic

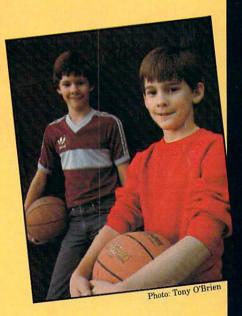
Dara admits to being addicted to computer games but says she wants to start writing her own programs. She has a TRS-80.

Eric Saberhagen, 13 Tom Saberhagen, 11

Albuquerque, New Mexico

It's your business what you do on the computer. I'd really be mad if someone got into my computer. It's your property and it's your time and effort. It's just like stealing anything else. —ERIC

WarGames was a little strange in the way the guy could just use his home computer to break into the government's huge computer. I don't think it's too likely. But if it's just a bunch of kids having some fun, it's not so bad. As long as they don't do anything, they're not hurting anything. —TOM



Eric and Tom come from a three-computer home: IBM PC, Apple II plus, and Commodore 64. They've both put their game-playing skills to work for K-POWER's Rating Game reviews section.

(See their review of Zork III on

(See their review of Zork III on page 58.) □