



Exploding The Phone

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Bibliographic Cover Sheet

Title	Weirdo Scientists Siphon Off Phone Co's Profits
Publication	<i>National WEED</i>
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Author(s)	Suki, Samson
Abstract	Basic article described phone phreaks various methods and the phone company's efforts to prevent them.
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Source	An anonymous phone phreak

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WEIRDO SCIENTISTS SIPHON OFF PHONE CO'S PROFITS

Cheating the phone company is becoming big business for basement inventors and the monopoly's own disgruntled ex-employees.

Despite AT&T's flustered pronouncements that phony credit card losses have been cut in half since the ruse cost them up to \$15 million in 1971, the Bell System still claims to have a hole in its pocket to the tune of millions per annum. And other methods of cheating, it says, are actually on the rise.

AT&T's tormentors are as varied as customers on a party line. In addition to the thousands of widely separated callers ready to snatch at any chance to reduce their long distance bills and the heavy commercial users who view it merely as another smart business move, there are radicals who see the Bell System as a particularly odious segment of the military/industrial complex, ex-company employees in pursuit of vengeance and the "phone phreaks" who find in AT&T the ultimate challenge to their technological wizardry.

HOW THEY DO IT

The basic tools used by phone phreaks are variations on the original **Black Box**. About the size of a cigarette pack, the Black Box is electronically attached to the phone line and prevents the return of a billing signal.

Since its invention roughly a decade ago, the Black Box has been joined by a host of similar devices constantly being updated to keep pace with the Bell System's ever expanding technology.

The phone phreak's arsenal includes:

The **Red Box**, also compact in size, simulates the sound of nickels, dimes or quarters dropping into the coin slot depending on which of its three buttons you push.

The **Blue Box** bears all the digits of a touch tone phone (but with different tones) and allows access to AT&T switching facilities

By Samson Suki

down. This device earned its name from the illustrious "Cheeze Box" Callaghan, a syndicate bookmaker who could make contact with his confederates through the two linked numbers without either party being traceable. The fact that the phone calls were free was icing on the cake.

COTTAGE INDUSTRY

The phone box racket is a big one. Excluding labor, it costs as little as \$10 to make a Black Box and \$30 for a Red Box to as much as \$100 for a Blue Box with manufacturing costs easily doubling for a computerized Blue Box.

Consumer prices range from as little as \$50 for the Black Box to \$550 for a Purple Box.

Designs vary in sophistication according to the whims and skill of the designer. Some boxmakers are engineering students, others are phone company pros. The latter are thought to be the main source of the security leaks that bedevil the Bell cartel.

Two guerilla outlets of Bell secrets are the widely circulated newsletters *Tap* and *Tel*.

Tel, at 22035 Burbank Blvd., Woodland Hills, Ca. 91364, was founded in 1964 and features such exciting articles as "The Intricacy of Credit Card Fraud" and "Toll: A General Introduction."

often just imprecise.

But technical carping seems petty when you consider that crooks, however well-prepared, seldom have blueprints of their capers available to them.

TALK IS CHEAP

The phone phreaks antics are not limited to credit cards and boxes. They use ordinary tape recorders to reproduce the triggering tones of the Red and Blue Boxes. One musical genius figured out that some of the necessary tones can be duplicated on an ancient Wurlitzer 1060 organ with the eight-foot flute stop pulled all the way out. Another method (see inset) requires nothing more elaborate than one's own two hands.

Almost all the basic information about how the switching systems work is laid out in Bell Lab's own Journal, once freely

available in the libraries of most college engineering departments but now "red-tagged" or, in effect, withdrawn from circulation.

David Tally's books *Basic Telephone Switching* and *Basic Carrier Telephony*, both published by John Rider Publications, have also been greatly in demand recently.

GUERRILLA WARFARE

One phreak told the **National WEED**: "It's guerilla warfare. Whatever the phone company comes up with somebody will figure out a way to counter. Dig, recently they added a second tone to the pay phone bleeps which, for a while made my (red) box unuseable." Then he grinned, "but engineers had it worked out in about a week or so."

Some sources maintain that

there may be as many as 200,000 "boxes" in use throughout the country, more than one quarter of them in New York state alone.

What can the Bell System do to stamp out the "Phony Express"? Not much more than they can do to stop summer from getting hot.

At this point, AT&T's only recourse is to alter its basic hardware. And next year, in a partial attempt to do just that, the company is to introduce a new system called CCIS (Common Channel Inter-office Signalling) in Chicago. This new system won't sink all pirate boxes, but it will limit the use of existing box designs to areas where the CCIS is not in use.

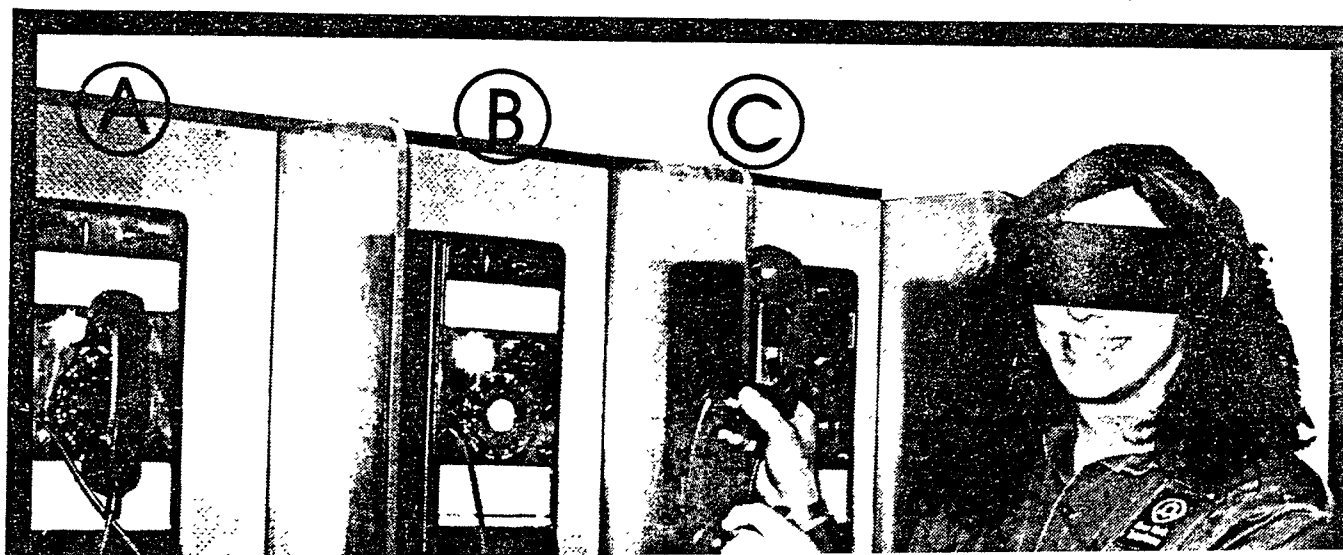
Bell's new computerized switching system, known as ESS, has already disrupted phone phreaks in areas where the system has been implemented. ESS puts an end to Black Boxes and

can detect a pattern of Blue Box use over an extended period of time.

"However," another phreak told **National WEED**, "it's pretty easy to get around the present ESS design, and as far as CCIS—well, it's going to take anywhere from five, maybe ten, years to get it set up all across the country."

"It will obsolete existing equipment but big deal. The state of the art is quite advanced today, our intelligence is good, we're getting greater accessibility to computer systems—it's really a joke, you know, they're going to spend maybe a half a billion dollars on a system that is going to have a hole in it somewhere, maybe several of them."

"They will change their hardware and we'll change ours. Big deal. The important thing is to be able to call your mother no matter where you are."



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The **Blue Box** bears all the digits of a touch tone phone (but with different tones) and allows access to AT&T switching facilities enabling you to make free "direct dialing" calls almost anywhere in the world.

The **Purple Box** is a combination of both Red and Blue Boxes in one handy package. Advanced models of the Purple Box have been disguised to look and operate like an ordinary hand calculator.

The **Cheeze Box** is two Black Boxes connected back to back and usually hidden in some innocent party's telephone equipment to provide a dead end to police investigators who finally track it

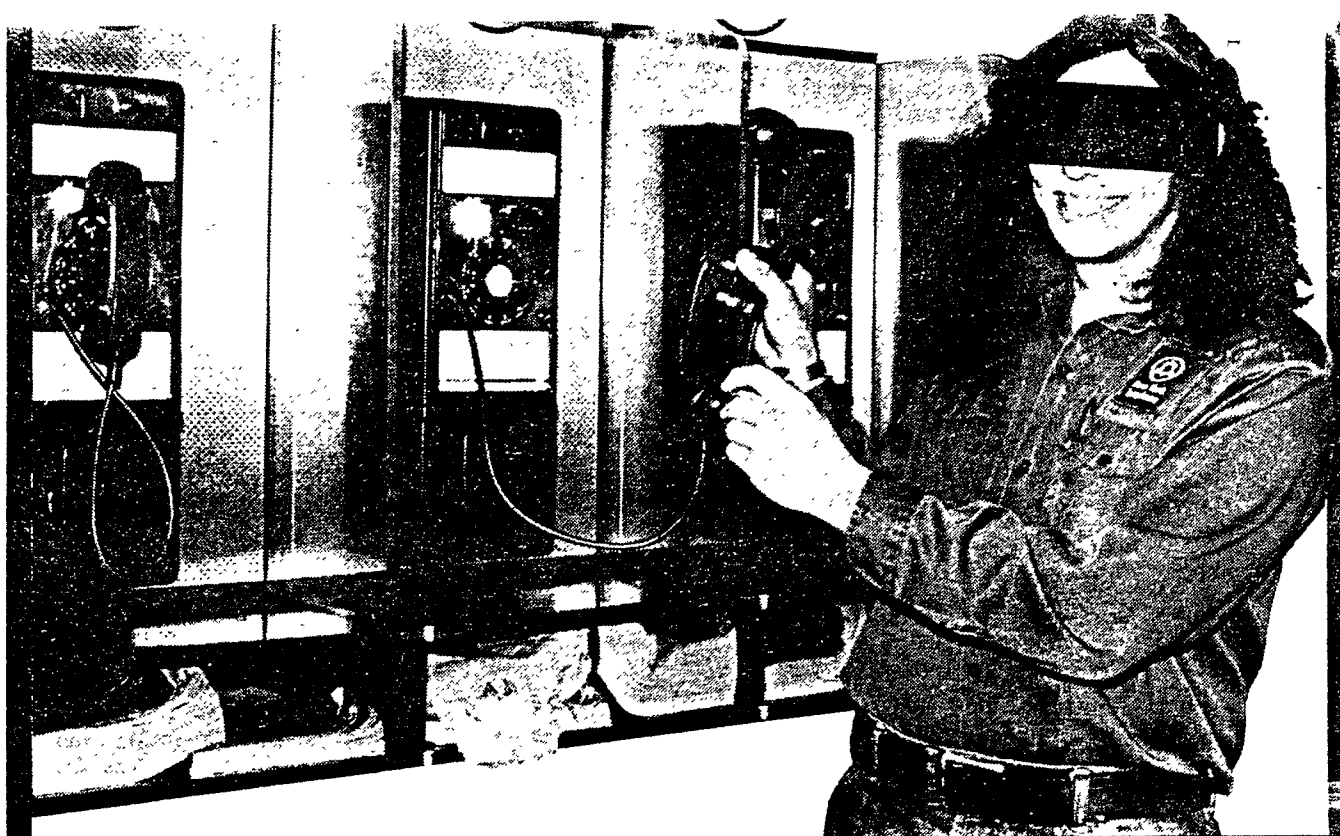
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Tap, is the older of the two and has even organized a "phone phreaks convention" in New York City. *Tap* can be reached at Room 504, 152 W. 42nd Street, N.Y.C. 10036.

Various other bands of phone phreaks, more subterranean than their previously mentioned buddies, seem to be very dissatisfied with the quality of information presented in the newsletters. "Monkey Bell," "Group Bell" and "The Bell Boys"—perfectionists to the end—are always griping that *Tel's* info is highly ambiguous while *Tap's* is



He Never Comes To Brooklyn So... "...I Call Kissinger Wherever He Is!"

Brooklyn lineman, Byron Wuzzy, thinks Americans ought to be able to give their Secretary of State a piece of their minds so he doesn't lose touch with the common people. But with Henry the K spending one night in Peking, one day in Tel Aviv, and breakfasting the next with KGB commissars in the Kremlin, he's a hard man to pin down.

So Byron invented this simple new technique that can put YOU in touch with HENRY KISSINGER.

"All you need," says Wuzzy, "are three phones in close proximity to each other... no incriminating Black Boxes or other costly equipment involved."

Here's how to do it:

- 1) Pick three phones. Think of them as A, B, and C.
- 2) Deposit dime in B and call A.
- 3) When A rings, pick up receiver and replace it in less than one second. (Long enough to stop ringing, but not long enough to start billing.)
- 4) Lift phone C, deposit dime, and dial the area code and the number you are calling or dial operator and give her these numbers. Remember to ask the operator to return your dime.
- 5) The operator will ask you to deposit your money. Hold

the earpiece of B to the mouthpiece of C and deposit the amount requested in A.

6) Hang up B and your dime will return.

7) Lift receiver on A, wait for dial tone and hang up. The money you have deposited here will also return!

REMEMBER:

Pay phones will store only \$4.00 before dumping cash into the coin box. If your call costs more than four dollars you will have to repeat procedure 2 thru 5.

If you talk for a lengthy period the operator may want you to deposit more money.

The procedure works only with ONE slot phones.

Have a lot of quarters on hand.

Wuzzy is also quick to point out that anyone wishing to call Kissinger should check first to see if the phone they're calling from is in an area where the phone company is using a switching system (ESS) that makes free pay phone calls impossible. You dial long distance information to see how long it takes the coin to return. If the coin returns immediately, you're in an ESS area, making free long distance calls impossible. If it takes several seconds for the coins to return, everything will be as easy as A-B-C.