Blue Boxes Spread From Phone Freaks To the Well-Heeled

Singer Admits, Actor Denies Cheating on Long Distance; The Hekimian-Printout Bit

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Singer Lainie Kazan did it, and the phone singer Lame Kazan did it, and the phone company caught her. Actor Bob Cummings says he didn't do it, but telephone-company detectives and the police say they caught him redhanded. People you never heard of have done it, too, though it's illegal, and they probably consider themselves basically become honest.

honest.

"It" is using a small, lightweight device called a "blue box" to avoid paying for long-distance phone calls. Blue boxes, portable noisemakers that make highly specialized noises, aren't new. The first one showed up about 14 years ago. But for years they were used mostly by electronics tinkerers who got a charge out of things like reaching the recorded weather report for Tokyo without paying for the call. Blue-box users came to be known in some underground circles as "phone freaks" or "phreaks."

Today, however, the phone company

Today, however, the phone company says, businessmen, doctors, brokers and en-tertainers use the illegal devices. "More and more in recent years we've found people of substance," says William Caming, an American Telephone & Telegraph Co. attorney specializing in security matters. AT&T can't be sure just how much the blue-box cheaters cost the company, but Mr. Caming estimates the losses at \$10 million to \$20 million a year. a year.

Fair Game
Why are otherwise law-abiding people attracted to the devices? John E. Miller, New York Telephone Co.'s general security manager, says the reason is a combination of greed and "the attitude that it's all right to rip off the phone company."

Anyone with a basic grasp of electronics can make a blue box, using parts available in most audio-equipment stores. But business and professional people caught with blue boxes have generally bought them. from underground sources. "Some have sold for as much as \$3500 each." Mr. Caming for as much as \$3 500 each," Mr. Car says. According to AT&T detectives, usual price is \$800 to \$1.000.

One blue-box manufacturing and distribuone bue-fox manuacturing and distribu-tion operation, based in Minneapolis, was smashed three years ago before it really got going. Agents of the Federal Bureau of In-vestigation and detectives of the Bell Sys-tem raided locations in Dallas, Houston, Chi-cago and Cleveland that had been set up to market the devices nationwide.

Some blue boxes confiscated by New York Telephone are compact enough to slip easily into a sport-jacket pocket. The device has 13 buttons, each producing a different tone. They are the same tones produced when long-distance operators place calls: 10 tones for digits 0 through 9, one tone that "tells" long-distance switching equipment that the line is close switching equipment that the line is close switching equipment. Some blue boxes confiscated

tones for digits 0 through 9, one tone that "tells" long-distance switching equipment that the line is clear, one tone signaling that dialing is about to begin, and one tone signaling that dialing has been completed.

The key to which tones represent what, and how the long-distance system uses them, appeared in 1960 in an AT&T technical publication available in hundreds of college libraries.

Seizing A Circuit

To make a blue-box call, a cheater first dials a toll-free number; an 800 number or an out-of-town operator. When the called an out-of-town operator. When the called phone is answered, he picks up his blue box and pushes the clear-line tone. When that tone enters the mouthpiece, it disconnects the called phone but leaves the circuit open for calling any phone reachable by direct dialing. The circuit thus seized, the cheater proceeds with the other tones; dialing about to start, the number, dialing completed. Since it's the tone that counts, the cheater doesn't need the blue box itself; he can use tape-recordings of the various tones.

The call won't show up on his phone hill

The call won't show up on his phone bill because AT&T's billing equipment considers it a toll-free call. But the call is logged by a phone-company computer, as all AT&T programs computers to print sepa-rate lists of toll-free calls lasting longer than the usual time for these calls; the printouts, which list all such calls from a given city, include the number of the phone making the call.

Studying these printouts is the main way AT&T detectives spot blue-box users. But some long-winded toll-free calls are legitimate, says Mr. Miller, the New York Telephone Co. security manager, so a lot of legiti-Co. security manager, phone lot of checking has to be done. If a suspicious calling pattern emerges, a device called a Hekimian Dialed Number Recorder, named for mian Diales area. Hekimian Laborawasits manufacturer, Hekimian Laborawasits Inc. of Rockville, Md., is placed on the suspect's phone line. It prints each number hetween a plain pect's phone line. It prints each a plain called and distinguishes between a plain whome call and a blue-box call. If blue-box each is a search warrant.

It was a Hekimian printout that suggested that Bob Cummings used a blue box in an apartment he occupied in Seattle for several weeks while appearing in a play printout that

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Continued From First Page there. Last Dec. 16, police and Bell security agents, armed with a search warrant, burst into the apartment and, they allege, caught the actor holding a blue box. He has been charged with two misdemeanors and faces a year in jail and a \$1,000 fine. He has pleaded innocent and is free on his promise to appear for trial, which is set for March 1.

Lainie Kazan, the singer, pleaded guilty in Los Angeles last November to a charge stemming from blue-boxing. No devices were found, however, and a city prosecutor says that tape-recorded blue-box signals were probably used. Miss Kazan originally was charged with eight counts of defrauding Pacific Telephone & Telegraph Co. Subsequently she pleaded guilty to one count, paid a \$440 fine, was placed on 18 months' probation and was ordered to make \$300 restitution to the phone company.

Within a single 24-hour period on Oct. 29, 1974, according to court papers, Morris Sohnen, a New York City coin dealer, made blue-box calls to Israel, Germany, Switzerland and several places in the U.S. He pleaded guilty to intent to steal services, paid a \$500 fine, was put on a year's probation and paid back the phone company \$4,886.68.

The blue box shouldn't be confused with the black box, the red box or the cheese box. The black box is a device attached to a cheater's phone that enables other people to call him long-distance without charge. The red box simulates the sounds made when different coins are dropped into a pay phone. The cheese box, favored by such busy people as bookies, is a black box attached to a phone in another city that enables people anywhere to call the cheater long-distance free by dialing that other phone's number.

Various publications have printed instructions on blue-box construction, though AT&T tries to restrain the circulation of such information. Publishers of a monthly magazine, "Amateur Radio 73," printed an article on blue-box construction last June. Recently the Los Angeles Superior Court enjoined publication of further articles of this nature by the publisher, 73 Inc., and ordered that the magazine, in its next issue, carry anotice saying use of the information may be unlawful. In agreeing to the judgment, the publisher didn't admit any wrongdoing.