Call and Tell

Dialing 1-800 gives marketers a lot of personal information

The zip code tells the U.S. Postal Service where to deliver the mail. It also tells direct marketers what to deliver. Combining the zip code with census and other data provides marketers with a rich vein of demographic information concerning your income, buying habits and socioeconomic preference for squash instead of handball.

If all this is not enough, the past decade has given direct marketers another wedge into the collective psyche of American consumers: your telephone number. Combining the resources of massive computer data bases with the ability of an emerging "smart" telephone network to identify callers, the direct-marketing industry is using the telephone number to track down a person's name, address—and life-style. If your household is deemed "desirable" to a marketer—perhaps one of the "Pools & Patios" crowd, as one telemarketer puts it—an 800 or 900 line service representative may know it before the call is answered.

Target direct marketing is not new. A company that subscribes to an 800 or 900 service can receive a monthly listing of the numbers of callers, which can then be matched with names and addresses using a reverse telephone directory. Correlating that information with demographic data produces valuable mailing or phone lists. (An 800 call is toll free, whereas the caller pays for dialing a 900 number. A caller interested enough to pay a fee is more likely to buy a product, marketers reason.)

To the consumer, all this means that products can be more closely matched to personal tastes, with the result that the junk mail might just contain something worth buying. What's new is that information-age marketers have begun to acquire the technology to carry out this screening process instantly and without the caller's knowledge.

Beginning this year, Telesphere Communications, Inc., an Oakbrook Terrace, Ill., company with $550 million in annual sales, will offer a service to 900 subscribers that can peg the location of an incoming call using an area code and the number's three-digit prefix. Knowing where the call originates allows a salesperson to prepare a pitch. Later a reverse directory can be used to identify the caller, and a data base can determine which of 40 demographic "clusters" fits that person. In the near future, these services may be provided while the caller is still on the line.

Telesphere gets its demographic information from PRIZM, a data base owned by Claritas Corporation in Alexandria, Va. PRIZM can pinpoint a neighborhood for virtually everyone in the U.S. using census and other public demographic information. "It works on the theory that birds of a feather flock

Is Morse Code Signing off?

Dit Dit Dit. Dah Dah Dah. Dit Dit Dit. Help! Is SOS about to become 1010011 1001111 1010011? Is Morse code, that hand-me-down from the days of telegraphy, destined to become just a binary blob?

That question might well be put to the Federal Communications Commission, which, as of February 14, allowed a new type of ham radio license that does not require a Morse code test. (A code requirement still exists for licenses that permit shortwave transmissions, that is, those below 30 megahertz, which are used for around-the-world communications.)

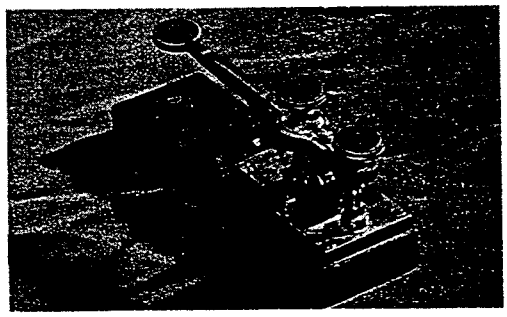
The advent of the code-free Technician Class may have inspired some purists to key out "What hath God wrought!"—the message that Samuel F. B. Morse tapped out on the world's first telegraph link from the Capitol Building in Washington, D.C., to Baltimore in May of 1844.

A code-free license had been resisted by the nation's half a million hams for years, in part because it might destroy the fraternitylike quality of owning a license. The Morse code test was also viewed as a measure of commitment to the numerous rules of operation of amateur radio—it can take weeks of study before an examinee is capable of sending the minimum of five words a minute.

The last time the FCC asked for public comment about establishing a new class of license, in 1983, the agency ended up dropping the proposal after it was opposed 25 to 1. "There has been a concern that amateur traditions might be sacrificed," says David Sumner, executive vice president of the American Radio Relay League (ARRL), the nation's largest ham organization, with 160,000 members.

It was the ARRL, among others, that proposed the present change in 1989, largely because the growing popularity of computer communications equipment is rapidly turning the amateur-radio bands into a network of wireless electronic mail. Tens of thousands of new users of what is called packet radio are transmitting computer data each year via the airwaves. The radio spectrum has also become more crowded. "There was a fear that unless we demonstrated greater receptivity to newcomers, some of our frequencies would be reallocated for commercial use," Sumner says.

Packet-radio devotees, called packeteers, can now sign on using the new license. And by sending a computer message through one of the amateur-owned satellites, they can communicate worldwide without violating the restriction on using shortwave frequencies. Amateurs have also installed 10,000 radio-repeater stations throughout the U.S. that allow a very high frequency transmission to hop from one repeater to another.



MORSE'S FIRST telegraph key. Source: The Granger Collection.

Morse code—which was actually devised by Morse's associate Alfred L. Vail—will still be used on the shortwave bands to get a message through when voice transmission would be unintelligible. Then there is the sheer pleasure that hams derive from communicating with their key sets. Sumner likens it to sailing. "People just get more satisfaction hoisting a sail rather than puttering around with the motor turned on," he says. —*Gary Stix*

together," says Harvey B. Uelk, a Telesphere sales director.

So if you are lucky, the pitchman will know if you fall in the fifth cluster in the data base: "Furs & Station Wagons." This group is described as " 'new money' living in expensive new neighborhoods.... They are winners—big producers, and big spenders." A not so fortunate caller might be lumped into the "Emergent Minorities" cluster. These people, says a promotional report, are "almost 80 percent black, the remainder largely composed of Hispanics and other foreign-born minorities.... Emergent Minorities shows...below-average levels of education and [below-average] white-collar employment. The struggle for emergence from poverty is still evident in these neighborhoods."

The risk that a household, through clustering, might become the telemarketing equivalent of a bad credit risk has not escaped the notice of the American Civil Liberties Union and other public interest groups who fear that minorities might be excluded from mortgage and credit opportunities or a gay neighborhood may be blacklisted by an insurance advertising campaign. A telemarketer might display different sales pitches on a service representative's computer screen, depending on whether the incoming caller hails from the "Money & Brains" or the "Coalburg & Corntown" cluster.

Marc Rotenberg of Computer Professionals for Social Responsibility likens calling an 800 or 900 number to walking into a store. "A person should have a right to enter a store without disclosing creditworthiness, residence or annual income," Rotenberg asserts. Lobbying by privacy groups has focused so far on supporting national legislation that would, in effect, allow a caller to keep his wallet in his back pocket until he decides to make a purchase.

The law would give the caller the option of blocking a number from being displayed immediately by a receiving party. This would be done by pressing "*-6-7," or a similar combination of numbers, before making a call. (Marketers could still get callers' 800 or 900 numbers with their statements each month, however.) Although the law failed to pass Congress last year, it is scheduled to be reintroduced this year.

Individual states are not necessarily waiting for Congress. A Pennsylvania court has banned "Caller ID" service—a decision that is on appeal—and a number of state public utility commissions have ordered that blocking be offered free of charge. For the moment, states' actions may not affect most telemarketers, whose 800 and 900 calls are usually routed over the long-distance phone network and displayed to a clerk using a service called automatic number identification.

Support for blocking has come not just from privacy advocates but from the White House's Office of Consumer Affairs, four of the seven regional Bell companies and the Direct Marketing Association in New York City. As with junk mail, the direct-marketing industry acknowledges that the consumer should have the right to choose not to receive unsolicited information.

On the opposite end of the line, a number of telephone companies contend that caller identification services are a clear boon to subscribers. Bell Atlantic, an ardent opponent of call blocking, has compiled a list of subscribers who have used the Caller ID service to stop obscene phone calls or fake pizza orders and to track down burglars.

For their part, some direct marketers assert that fears of misappropriation of personal information are greatly exaggerated: they are interested in patterns of group behavior, not the personal preferences of the individual. "We try to identify market segments that are most likely to respond to a particular marketer's products or services," explains Philip H. Bonello, director of corporate planning for Metromail, a Lombard, Ill., firm that owns a data base of 86 million households that supplies the direct-marketing industry.

But the public is clearly concerned about electronic privacy. In January Lotus Development Corporation, a Cambridge, Mass., software company, and Equifax, Inc., an Atlanta-based credit bureau, withdrew plans to market Lotus Marketplace on compact discs after some 30,000 people asked that their names be removed from the files. This data base contains demographic information on about 120 million individuals.

The public debate over privacy could grow still more heated if telephone companies try to market their internal data bases of information about residential customers. Limited attempts to do so have sometimes met with resistance. Recently New England Telephone and New York Telephone dropped a service offering residential and business directory listings when hundreds of thousands of customers asked that their names be taken off the lists.

Legislation may help stem abuses. A public outcry may force companies to lay low. But the irresistible lure of knowing name, phone number and lifestyle means that computerized telemarketing is here to stay. *Caveat salutator:* let the caller beware. —*Gary Stix*

Gas Vaccine

Bioengineered immunization could shield against nerve gas

A year ago the Defense Logistics Agency, an arm of the Department of Defense, had to fight to keep a budget item for a $2.5-million contract with Abbott Laboratories in Chicago to maintain its sole supply of atropine, a nerve gas antidote. Times have changed. Since last August the U.S. Army has ordered more than a billion atropine injectors at a total cost of $4.3 million and has had to look for additional suppliers.

Even when fully stockpiled, however, existing treatments for nerve toxins, organophosphorous compounds that pose the largest chemical battle and terrorist threat, are awkward to use and often produce side effects. So the army has also speeded up research efforts to make a genetically engineered immunization against nerve agents. If it works, the injection would free soldiers from debilitating garb that now limits movement and breathing, and it could reduce the efficacy of chemical weapons. The "gas vaccine" will not be available for years. But the renewed threat from chemical warfare will likely persist long after the conflict in the Persian Gulf ends.

For now, though, soldiers in the Gulf will continue to carry their "Mark I" kits with six autoinjectors—three with two milligrams of atropine citrate and three with 600 milligrams of pralidoxime chloride. The first compound binds with a nerve agent, preventing it from attaching to acetylcholinesterase, an enzyme that controls the transmission of nerve impulses.

The second drug frees enzyme molecules that have already been bound by the toxin. Other elements of the battlefield pharmacopoeia are an anticonvulsant that is a close relative of Valium and pretreatment tablets of a drug for myasthenia gravis, a disease that causes neuromuscular weakness.

Army officials say that these kits adequately protect U.S. troops. Still, current antidotes require that soldiers stop in the heat of battle after recognizing the symptoms of a nerve agent. They must administer the antidote within two minutes or else risk absorbing a lethal dose. The protective drugs may also slightly impair fine motor skills, affecting split-second judgment needed in combat.

Although researchers have tried to devise better means of delivery, such as time-release drugs, dermal patches