

War Toys for Adults

Smugglers on the US-Mexican border are being spotted by Air Force "Pave Eagle" planes - unmanned, remote-controlled drones - formerly used in the Igloo White anti-infiltration program in Laos. Flying over remote stretches of the border, the planes of the US Border Patrol relay signals from hundreds of ground sensors to an Infiltration Surveillance Center, where huge computers diagnose the data. But as in Vietnam, the sophisticated electronic systems can't distinguish friend from foe. A wandering burro can send the border patrolmen scrambling for their jeeps. The

ground sensors are adaptations of devices used to detect the sounds and vibrations of troop movements and supply trucks on the Ho Chi Minh Trail. Their use on the Mexican border began in the summer of 1970, when the Border Patrol - an arm of the Justice Department - received a proposal for a sensor surveillance system from Sylvania Electronic Systems of Mountain View, California, which had produced sensors for use in Indochina. "The political implications of using surveillance equipment along a friendly foreign border," noted Sylvania, "have been considered by selecting equipment that can be deployed without attracting attention and easily concealed."

Other surveillance sensors are sprouting up all over. Beeping madly if someone comes near them, they surround prisons, vital utilities and industrial and governmental facilities. Near Washington, DC electronic sensors are hidden in shrubbery inside a fence enclosing a "maximum security subdivision" of 67 homes, each costing over \$200,000. Westinghouse sensors help the Secret Service guard the White House.

Another technological Vietnam veteran now coming home is a black box that sees through walls. Engineers at the Army's Land Warfare Laboratory at Aberdeen, Maryland are modifying the PPS-14 foliage-penetration surveillance radar originally developed for spotting Vietcong in the thick jungles of Vietnam. Prototypes of the "Americanized" version of the radar - which will be capable of seeing through brick and cinder-block walls - will be available to police departments by the spring of 1972.

The police can already see through the dark, thanks to night vision devices developed for Vietnam. In New York City and Kissimmee, Florida police departments are using such devices to perform covert night surveillance while on routine patrol. The devices, capable of amplifying light levels 40,000 times, were developed by American industry during the 1960s to help the military detect night-fighting Vietnamese guerillas. The equipment was declassified in 1969. Such military suppliers as RCA, Raytheon and Aerojet General now sell police versions at prices ranging from \$2000 to \$8000 each, and the Justice Department's Law Enforcement Assistance Administration (LEAA) hopes to make available to the police a "snooperscope" priced under \$600.

The Electronics Industries Association has estimated the annual market in law enforcement electronics at \$400 million, most of which comes from LEAA grants. The police can spend their money on command and control systems, voiceprint equipment, mobile digital teleprinters, and laser fingerprint analyzers: a Dick Tracy bonanza.

Sylvania's SocioSystems Laboratory has reported on "The World's First Police Operated Low-Light-Level Television System." The equipment, which they claim is capable of displaying a man-sized object in extreme darkness from more than a half-mile away, has been



installed high above the streets of Mt. Vernon, New York. The Justice Department, which financed the project with a \$47,000 grant, hopes to assess the public reaction to 24-hour covert surveillance. "Only time will tell," concluded the Sylvania engineers, "if citizens will object to a 'Big Brother' type atmosphere."

Some engineers and government officials are not waiting for time to tell. Earlier this year, a study funded by the Justice Department recommended 24-hour television surveillance of city streets. The recommendation was made by a committee of the National Academy of Engineering, a group of corporate engineering executives that advises the government on technological matters. The committee members are executives of industries that would profit if their recommendations were accepted. To test the effectiveness of 24-hour TV surveillance, the committee urged the Nixon administration to implement a pilot program using 140 low-light-level television cameras deployed at every other intersection throughout an urban neighborhood covering two square miles. Of the estimated \$1.5 million yearly cost, over \$600,000 would go for the salaries of 175 "viewers."

The current sensor and TV surveillance projects are small-scale, but the combined interests of engineers, industry and government are pushing for rapid escalation, unimpeded by legal regulation. "There is a great unrestricted area of electronic surveillance and electronic countercrime measures in which there needs to be expansion and further innovation," Kentucky's assistant attorney general, Howard E. Trent, told engineers at the 1969 Carnahan Conference. Generally no legal limitations on electronic surveillance of large public areas exist, he added, and "the challenge is wide open."

Robert Barkan

MR. BARKAN was a member of the technical staff at Bell Telephone Laboratories and a senior engineer at Sylvania Electronics Systems.

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--A man from Westinghouse corporation, traveling with a Special Forces unit, tested transponder devices for keeping track of U.S. troops. These devices would prevent the electronic battlefield computer from accidentally targeting its own forces. Transponders may also find a market at home. --NARMIC

Science fiction--or tomorrow's U.S.?

By Robert Barkan
Pacific News Service

Washington

"1984" may arrive ahead of schedule.

While Army intelligence agents have been quietly amassing extensive files on dissidents, scientists have even more quietly been developing the technology that will enable a computer to control "criminal" actions and emotions.

"1984" is still fiction, but no longer science fiction. The technology of the police state is ready. All that remains is for the government to implement it.

The first covert step in that direction may have already been taken. In the January issue of Transactions on Aerospace and Electronic Systems, engineer Joseph Meyer proposed attaching miniature electronic tracking devices to 20 million Americans. These "transponders" would be linked by radio to a computer which would monitor the wearers' locations and implement curfew and territorial restrictions.

Pentagon silent

Meyer, a computer specialist, has spent his last 17 years working for the Defense Department. Yet the Pentagon has made no public statement concerning his proposal. Interestingly, Meyer neglected in his article to name the particular Defense Department agency he works for and he gave his home rather than his business address, an uncommon practice in technical journals. Reached by phone in their suburban home, Meyer's wife nervously refused to divulge Meyer's telephone number at work, insisting that he could be reached only at home, early in the morning. The next day, Meyer laconically refused to name which agency of the Defense Department he works for, but a check with the switchboard operator at the National Security Agency (NSA) found an extension for him there.

Meyer's reticence in naming the National Security Agency is understandable. The NSA is the most secretive of the dozen or

so agencies that make up the U.S. intelligence community. Established in 1952 by a still-classified presidential directive, the agency has remained shrouded in secrecy. The NSA has more personnel and larger facilities than the Central Intelligence Agency and twice its budget, yet while volumes have been written about the operations of the CIA, very little has been discovered or disclosed about the NSA.

A condition for bail

The transponders proposed by Meyer would be attached to the "subscribers" as a condition of bail or parole. Each subscriber would be identified by a code transmitted several times a minute to a computer via a network of transceivers deployed around town like police call-boxes. The computer would record the "subscriber's" location and compare it with his "normal schedule," checking for any "territorial or curfew restrictions." If the subscriber was out of line, the computer would instruct the transponder to "warn" the subscriber of his violation.

The transponders would be "attached" to "subscribers" in such a way that they couldn't be removed without the computer knowing it. Tampering with or discarding transponders would be a felony and a subscriber who did so would be forced into hiding "everywhere he goes," sought by the FBI. Meyer wants the transponders assigned "on a fairly long-term basis," so that the "subscriber" "will acquire long experience in not committing crimes."

The scheme's purpose, says Meyer, is to "constrain criminals and arrestees into behaving like law-abiding citizens," but in practice the computer—and its human programmer—would control the everyday activities of the people plugged into it. "Subscribers" would be identified by a code transmitted several times a minute to a computer via a network of transceivers will "stay close to home, to avoid being implicated in crimes." At work a "human surveillance system" will keep them under

control.

Estimating that the number of transceivers needed for surveillance in a large city would be about the same as the number of policemen, Meyer has all the details worked out. In New York City's black community of Harlem, for example, the transceivers would be strung at one block intervals "along 110th Street, 114th, 118th, etc., from 8th Avenue to the river." North-south strings of transceivers would be installed "on 8th Avenue and several main streets to the east." Only about 250 transceivers would be "capable of monitoring the whole region on a street-by-street basis."

Like every good engineer, Meyer covers all the "system parameters" in his proposal—including its social implications. If laws, police, prosecutors, courts, prisons, news media and the "society at large" were perfect, he says, then his scheme could be approved on the basis of its "efficiency." But he admits that criminal acts are frequently a response to "the social and economic system." Most people arrested are poor, members of minority groups, or "products of deplorable circumstances."

Cost a problem

The Pentagon engineer nonetheless comes out predictably on the side of law and order. The basic problem in preventing the poor and the black from committing the "criminal acts" with which they respond to the system and their deplorable circumstances is to "persuade or condition" them to "play by the rather arbitrary rules of the social system." This can be done, says Meyer, "by providing costs for misbehavior and payoffs for compliance." But the costs are much clearer than the payoffs—"attaching transponders to arrestees and criminals will put them into an electronic surveillance system that will make it very difficult for them to commit crimes, or even to violate territorial or curfew restrictions, without immediate apprehension." Joseph Meyer recognizes that

his transponder surveillance system could lead to a "police state," but "the same could be said about police, jails, courts, laws, taxes and so on."

Transponders, he thinks, will help the government protect itself from the people. For example, they might be used as "punitive devices" against political "criminals," that is, "for arrests following riots or confrontations." If the system is successful, Meyer proposes that plans be made for "monitoring aliens and political subgroups." Later, when the U.S. again meddles in the internal affairs of another country, transponders might be used for "defense purposes, to monitor guerrilla or dissident activities in foreign areas."

Rent a transponder

Meanwhile Meyer worries that his system will not work. "To evade the street-surveillance system," he fears, "tunnels could be dug under the streets or movement through the sewer system could be tried." Worse yet, there might be "massive destruction" of transponders in "mutinies and large-scale confrontations."

"An outright revolt by 25 million arrestees and criminals," Meyer warns, "would be troublesome."

Personalized electronic surveillance for one-tenth of America, estimates Meyer, would cost about \$2 billion a year. In order to minimize the cost to those who, through successful social conditioning, have achieved their median level of affluence—the taxpayers—Meyer believes that the "obvious" way to pay for the transponders is to "lease them to the subscribers at a low cost, say \$5 per week." In the case of juveniles, it might be necessary to find work for them "so they could meet the payments, if their families were unable to pay." (Twenty million subscribers at \$5 a week comes to \$5 billion a year, but Meyer does not say what would be done with the \$3 billion profit.)

"By placing the cost of the system onto the criminal population...and putting the subscribers back into the economy to earn the cost of their freedom," Meyer exclaims, "a certain poetic justice is achieved."

For more information about automated methods of warfare in Southeast Asia NARMIC has available a slide show called "The Automated Air War" (\$50 plus \$5 postage).

Domestic methods of counterinsurgency are covered in our book Police on the Homefront (\$1.35)

Write to: NARMIC
160 North 15th Street
Philadelphia, Pa., 19102

National Action/Research on the Military-Industrial Complex