New Hork Eimes

NEW YORK, THURSDAY, FEBRUARY 1, 1979-

25 cents beyond 50-mile some from Net Higher in air delivery cities

Security Agency Plays Major Role in Policies On Communications

By DAVID BURNHAM

Special to The New York Times

WASHINGTON, Jan. 31 — For the last quarter-century, one of the Government's most secret agencies has played an important, largely undisclosed role in shaping the nation's privately owned communications network of microwave towers, underground cables, satellites and computers.

Because of the Intense secrecy that surrounds the National Security Agency and its surveillance activities, the agency's full influence on the development and operation of United States communications cannot be precisely measured.

The mission of the agency is to protect the security of United States communications and collect intelligence.

Powerful Role in Policy

According to knowledgeable authorities and several unclassified reports and documents obtained by The New York Times, the agency, in pursuit of its mission of improving security, has had a powerful role in setting policies affecting communications links between individuals, businesses and governmental agencies in a variety of ways, including the following:

IA few months ago a classified briefing by agency officials helped persuade the Federal Communications Commission to reverse itself and permit construction of a \$200 million trans-Atlantic cable,

"ITwo years ago the agency was the principal advocate of the Carter Administration's decision to encourage American

Continued on Page A21, Column 1

businesses to spend millions of dollars to make it harder for anyone to intercept their communications.

a major source of research funds for the computer and telecommunications industries. As a result, it has helped shape a series of technological advances that have had vast impact on American society.

ety. "The N.S.A. is an entirely different animal than the Central Intelligence Agency and the Federal Bureau of Investigation," said a former White House official who requested that he not be identified by name. "The C.I.A. and the F.B.I., after all, are mostly super-detective agencies. The N.S.A., because of its special assignments, has a voice in setting communication policies that touch every American."

Pentagon officials familiar with the N.S.A. readily acknowledge its broad influence. But they contend that this influence has largely been a result of the agency's vigorous pursuit of its mission, laid out in a series of secret instructions from the National Security Council when the N.S.A. was established by President Truman in October 1952.

The agency's mission has two major elements, the first being the gathering of all possible intelligence about military forces, political developments and economic conditions in nations around the world by such means as long-distance listening devices and satellites. The N.S.A.'s sources of intelligence are extremely broad: radar signals given off by Soviet test missiles, routine radio traffic at important airports, telexed orders from foreign buyers of such American goods as computers, bulldozers and oil-drilling equipment. The data the N.S.A. collects are then sorted by computer and passed on to the C.I.A. and other users.

The agency's other job is to protect sensitive domestic communications from intrusion by foreign powers. The Government's definition of information that needs protection has gradually exanded from specific defense secrets to include a broad range of economic data — such as

crop yields, machine tool orders and oil production — that the Russians are believed to have begun using for strategic assessments of the American economy.

Changes in Supervisory Control

Until last year the agency carried out these functions under only indirect supervision by the Secretary of Defense. In January 1978, however, President Carter signed an executive order transferring some authority over N.S.A. operations to Stansfield Turner, the Director of Central Intelligence.

The Carter order was intended to centralize authority over intelligence gathering and to provide 'Americans greater protection against Government snooping. One White House official said in a recent interview, however, that the move made the agency less tightly supervised than it had been because authority over it is now divided between two overseers.

Neither the agency's budget nor the number of its employees is made public, and its funds, like those of other intelligence services, are concealed within the budgets of other agencies. However, an authoritative Pentagon source said that the agency controlled the largest single part of the nation's \$6 billion annual intelligence budget and had at least 20,000 employees. Its headquarters are in a closely guarded nine-story building in Fort Meade, Md., 23 miles northeast of the capital.

One of the few public challenges to actions of the N.S.A. involved an agency official's attempt to restrict the sale abroad of privately financed code research conducted at universities and in industry. People involved in the research, which devises ways of protecting against intrusion into information during its transmission, have charged that the restrictions not only threaten First Amendment rights and academic freedom but also, hamper the ability of private concerns to develop and sell a product. There is a growing private demand for code research as businesses, for example, seek to protect trade data.

The White House, prompted by this criticism, last spring asked the Justice Department to examine whether such

limits violated the First Amendment. The department concluded, in a confidential 18-page memorandum prepared last May, that the restrictions were "unconstitutional insofar as they establish prior restraint on disclosure of cryptographic ideas and information" developed privately.

In a rare public statement, the head of the N.S.A., Vice Adm. Bobby Inman, said recently that critics' allegations concerning the restrictions "paint a false picture of N.S.A. as exerting some kind of all-powerful secret influence from behind closed doors. The truth is that the legal resources of the Federal Government to control potentially harmful nongovernmental cryptologic activity are sparse."

New Restrictions Sought

Admiral Inman then called for consideration of a new system of restrictions that would give his agency authority to prohibit domestic or foreign dissemination of nearly all such research, on the ground that it could be used by foreign powers against the United States.

Virtually the only public examination of the agency in its 26-year history was made about two years ago in a report by the Senate Select Committee on Intelligence after its investigation of the operations of all major branches of the intelligence community.

The committee concluded that, because of the agency's ability to monitor almost any electronic communication that travels through the air, "the N.S.A.'s potential to violate the privacy of American citizens is unmatched by any other

intelligence agency."

The committee report further said that the agency's pursuit of international communications resulted in "the incidental interception and dissemination of communications which the American sender or receiver expected to be kept private."

Concern over the what the committee found led former Attorney General Edward H. Levi to establish a secret set of guidelines that reportedly sharply limit the information about individuals that the N.S.A. can disseminate to other intelligence agencies but do not restrict the acquisition of information itself.

The Senate committee has never publicly raised the question of the N.S.A.'s influence on United States communications policies. Authorities in the Pentagon, the White House, Congress and the communications industry, however, said in recent interviews that the N.S.A.'s assignment to protect American communication links had inevitably given it a secret role in setting such policies.

Less than three months ago, for exam-

ple, the Federal Communications Commission voted to support construction, by a consortium of the American Telephone and Telegraph Company and foreign concerns, of a seventh trans-Atlantic telecommunication cable, reversing an earlier decision that the new link was unnecessary.

National Defense Cited

According to officials in both industry and government, the commission approved construction of the new cable, starting in 1983, after the N.S.A., in a classified briefing, said the link was essential for national defense.

One Government official with knowledge of the case noted that 40 percent of the installation and maintenance costs of the cable would be added to the telephone bills of all Americans. The cable would carry ordinary telephone calls by individuals, as well as business and government communications.

The N.S.A. has also played a key role in the development of the modern computer. According to an N.S.A. history of itself, a copy of which has been obtained by The Times, the secret research funds the agency provided to such companies and

America, the International Business Machines Corporation and the Massachusetts Institute of Technology "hastened the start of the computer age" and fed a stream of research and design advances.

The history does not mention specific sums, but authorities in the field agree that the agency's contributions to the computer industry have been substantial.

institutions as the Radio Corporation of

Another important long-term policy matter in which the N.S.A. was directly involved was the Carter Administration's decision to route all Government telephone calls in the Washington, New York and San Francisco areas through underground cables of the Bell Telephone System, which are considered more secure from eavesdropping than microwave transmissions.

As a result of two other, related decisions by the Carter Administration, the N.S.A. assisted several specialized communications companies in improving their security and was responsible for increasing the number of extremely expensive "scrambler" telephones used by companies doing defense work.

All three decisions were based on judgments of the Ford Administration, acceded to by President Carter, that the Soviet Union and possibly other countries had undertaken a large-scale effort to gain economic intelligence and that these efforts should be blocked.

Issues Not Discussed Publicly

The question of whether such intelligence was actually being sought was not discussed publicly. Neither were the costs of possible technical countermeasures nor the impact on society of increased security measures.

While no Congressional committee has publicly commented on the questions raised by the N.S.A.'s broad influence on policy, legislation proposed last year by the Senate intelligence committee and still pending would establish a charter for each of the intelligence agencies that would deal with the questions.

The charter legislation would require that the President's advisers on communications security include, in addition to officials in the intelligence community, the Secretaries of Treasury, Commerce and Energy and the Attorney General.

The Administration is now preparing its version of the legislation and hopes to submit it within a few months.

