NSA: Huge Vacuum Cleaner

First of four articles

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Seventeen miles northeast of Washington on the edge of Ft. George G. Meade is a huge office complex surrounded by a high chain-link fence, then six strands of electrified wire and then another chain-link fence topped with barbed wire.

The thousands of people who work there refer to the heavily guarded buildings as "the puzzle palace," "Disneyland," or just "the agency."

They are employees of the super-secret National Security Agency, which has the massive task of electronically intercepting foreign communications throughout the world and then deciphering the coded messages to provide intelligence for the U.S. government.

To do its highly classified work, NSA probably spends between \$1 billion to \$1.2 billion annually. The agency's budget is officially hidden, but that is the best estimate of former intelligence officials interviewed.

They believe NSA spends more than twice the FBI's estimated \$434 million budget this year and more than the annual spending for either Congress (\$744 million this year) or the State Department (\$871 million).

NSA has at least 20,000 employees in nearby Maryland and 50,000 to 100,000 military personnel around the world feeding back intercepted communications by the thousands, according to former employees of NSA and other intelligence agencies.

"They've got a huge vacuum cleaner turned on sucking in information from around the world," said Harry Howe Ransom, a Vanderbilt University professor who has written extensively about the American intelligence establishment.

Patrick J. McGarvey, a former U.S. intelligence officer, wrote in "CIA—The

See NSA, A16, Col. 1

NSA, From A1

Myth and the Madness," that the volume of NSA's communications intercepts "is beyond the imagination of most laymen. I would judge that upwards of a hundred tons of paper a day record the radio and Morse Codes of other nations' communications intercepted by NSA."

All informed sources interviewed agreed that NSA is larger than the CIA, both in personnel and budget. For example, Victor Marchetti and John D. Marks, in "The CIA and the Cult of Intelligence," estimated that NSA has 24,000 employees and a \$1.2 billion annual budget, compared with an estimated 16,500 employees and \$750 million budget for CIA.

Since its creation 23 years ago by a still-secret presidential directive, NSA had worked hard and largely successfully to stay unnoticed. Even the Congressional Directory that lists the CIA and every other federal agency says nothing about NSA.

"They're about as anonymous as anybody is in our government," said a former high CIA official of "the other agency." NSA officials aren't at all unhappy that the CIA has gotten most of the public attention given to members of the American ntelligence establishment.

However, special Senate and House committees are preparing to examine not only the CIA—which accounts for only about 15 per cent of the nation's total annual spending for intelligence-gathering, most often estimated at \$6 billion.

The committees also are charged with reviewing NSA and the other intelligence organizations within the Defense Department that together are estimated to spend 85 per cent of the U.S. intelligence funds. Thus far, NSA and the other intelligence agencies have been largely free from congressional review.

The congressional probers are likely to ask whether there have been questionable uses of secret power like those recently acknowledged by CIA Director William E. Colby, who testified that the CIA infiltrated agents into antiwar and dissident groups in this country and kept files on 10,000 Americans.

The investigating committees also are likely to inquire how well NSA, CIA and the other intelligence agencies are doing their jobs and, in regard to NSA, whether all the electronic eavesdropping and codebreaking is really necessary.

NSA was not created by Congress, but by a top-secret 1952 directive from President Truman that established it as a separately

drganized agency within the Defense Department.

The directive has never been made public—its top-secret status was reaffirmed as recently as last year, and requests to see it were rejected by NSA. So only a few government officials know what the authorizing directive says NSA should be doing and should not be doing.

The NSA director also serves as chief of the Central Security Service (SCS), which in 1972 was established in accordance with a memorandum from President Nixon "to provide a more effective cryptologic organization within the Department of Defense."

The only official, public

description of NSA is a brief, vague mention in the U.S. Government Manual:

"The NSA?CSS provides centralized coordination and direction for certain very highly classified functions of the government vital to the national security...

"The NSA-CSS provides primary missions—a securit mission and an intelligence mission. To accomplish these missions, the director (of NSA) has been assigned the following responsibilities:

"Prescribing certain security principles, doctrines and procedures for the U.S. government.

"Organizing, operating

and managing certain activities and facilities for the production of information.

"Organizing and coordinating the research and engineering activities of the U.S. government which are in support of the agency's assigned functions; and regulating certain communications in support of agency missions."

NSA is divided into these basic units:

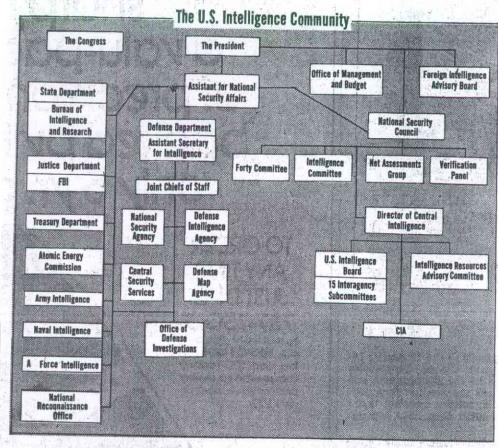
- An operations division that oversees the global collection of intercepted communications.
- An office of production that has the job of breaking the intercepted coded messages, translating and analyzing them. It has by far the most employees at NSA's Ft. Meade complex.
- An office of research and development with responsibility for developing communicating and intercepting equipment needed in the never-ending war between the code-makers and the code-breakers.
- An office of communications security that is charged with maintaining the secrecy of this country's coded communications.

According to a number of former employees of NSA and other U.S. intelligence agencies, NSA's general operation is known as SIGINT for "signal intelligence." By far the largest SIGINT activity is COMINT, communication intelligence," which essentially is the interception of radio and teletype messages.

NSA also operates a worldwide ELINT program to obtain "electronic intelligence." This is the collection of electronic signals not intended as messages to anyone, such as those that emanate from radar equipment. The varying levels of such signals can tell a lot about a nation's military capabilities.

Another form of signal intelligence is RADINT, or "radar intelligence." The opposite of ELINT, RADINT involves the active transmission of radar signals to spot such things as missile and plane movements.

NSA has almost unbelievable technological capabli-



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ties. It not only can listen to thousands of conversations simultaneously, it has highly sophisticated equipment to then discover what is being said and by whom.

Retired Air Force Col. L. Fletcher Prouty, who wrote "The Secret Team" on U.S. intelligence activities, said recently that NSA is able sometimes to identify an individual's voice from among thousands it is monitoring by computerized comparison of voice patterns.

Nations routinely use various sophisticated techniques to make interception of their radio messages more

difficult. For example, they may compress a message of many minutes' duration into a spurt taking only a few seconds or less. NSA regularly intercepts such messages by capturing them on tape and then replaying the tape very slowly until the highly compressed message can be sorted out.

Electronic interception is the easy part of the job for NSA. More difficult codebreaking is then required to understand almost all important foreign communications.

NSA's cryptologists don't use the codebooks of a less complex era. They rely on computers. David Kahn, author of "The Codebreakers," wrote in 1967, "NSA probably has more computer equipment than any other installation in the world."

The agency also has a great deal of communications equipment, some of which is visible on the roofs of its buildings. "Somebody told me they're giant golf balls," said an NSA escort as two visitors looked up at the sensitive equipment.

Two NSA alumni who devised valuable inventions were each awarded \$100,000 by Congress, the agency said.

NSA needs the special skills of many different kinds of people. A former employee said that a number of blind people work at the agency because their particularly sensitive hearing makes them able to hear sounds on tapes that others would miss. He recalled a military guard's having to

break up a fight at the agency between two seeing-eye dogs.

NSA has an extensive global network of listening posts. Kahn estimated that NSA and the American military had more than 2,000 intercept positions, some emplaying thousands of personnel and others consisting of one person at a radio set.

Former intelligence officers generally estimate that NSA now maintains at least 50 basic communications-intercept land stations.

McGarvey wrote three years ago that "there are slightly over 50 stations ac-

tive at any given time of the day. They are located in at least 14 countries . . . A minimum of 4,000 radio intercept consoles are in operation at all times."

Winslow Peck, a former Army enlisted man who did electronic surveillance for NSA in Turkey and Vietnam, said in a 1972 article in

Ramparts' magazine," As far as the collection of data is concerned, the military provides almost all the people ... The three agencies are the U.S. Air Force Security Service (USAFSS), the Army Security Agency (ASA) and the Navy Security Group (NSG)."

"The Army Security

Agency is conducting an unprecedented variety of cryptologic missions," a 1969 Army booklet stressed. "ASA's cryptologic officers are assigned to field stations, some of which are in Okinawa, Japan, Ethiopia and the United States."

The booklet gave as an example an Army lieutenant in Chitose, Japan, who it said supervised two warrant officers and 90 enlisted men "engaged in analysis and some special compartmented projects." It added, "Other officers of similar experience are serving in special units throughout the world."

Peck recalled that in his Istanbul assignment, "I had about 25 Morse operators who were listening to Morse signals for me, and about five non-Morse and voice operators. It was a pretty boring job for them. A Morse operator just sits there in front of a radio receiver with headphones and a typewriter copying Morse signals."

Retired Maj. Gen. David M. Shoup recalled recently that when he became Marine corps commandant in 1960 he was surprised to discover there were so many Marine units around the world assigned to intercept foreign communications.

Shoup said, "You could go all around the world and you'd run into these organizations. They'd be sitting up on a hill somewhere. Generally speaking, they were small-sized units, but wherever I went, these people were considered very important."

Shoup said these Marine units weren't under the commandant's command, adding, "Damn if I ever knew who they were attached to."

NSA also receives reams of intercept intelligence from military ships and planes such as the USS Pueblo and EC-121 reconnaissance plane that were, shot down by the North Koreans.

A special House Armed Services subcommittee that investigated the two incidents reported that the Pueblo was one of a dozen Navy ships then assigned to electronic surveillance.

"The U.S. conducts hundreds of reconnaissance missions each month to acquire intelligence data for national security purposes," the subcommittee reported.

To obtain and maintain its electronic eavesdropping bases, the United States has made commitments to foreign governments without informing Congress or the American people.

A Senate report in 1970 on U.S. commitments abroad said that in return for permission to operate a major intercept station in Ethiopia secret commit-

ments were made.

"Involved in this agreement was not only a commitment to support a 40,000-man Ethiopian army, but also a pledge for continued military assistance (which totaled \$147 million through 1970) and economic assist-

ance (totaling \$97.2 million in loans and \$131.5 million in grants through 1970)," the subcommittee reported.

It said the United States also secretly pledged "continuing interest in the security of Ethiopia and its opposition to any activities threatening the territorial integrity of Ethiopia."

The subcommittee concluded, "These programs and pledges appear to stem primarily from our declared need for Kagnew Station, a communications base in the northern part of Ethiopia." The subcommittee said more than four years ago, "The original unique need for Kagnew appears to have been overtaken by events as well as technology."

However, it noted in a statement, even more relevant today, "In implementing ing this 1960 agreement, the United States has now become involved in the military structure and activities of the Ethiopian army. Inevitably this has given us a role — albeit an indirect role according to the statement of American officials — in aidling Ethiopia to put down insurgents in Eritrea."

Many of those Americans recently evacuated from Eritrea, where the Ethiopian civil war is raging, apparently are dependents of American personnel assigned to the base there that NSA uses to intercept communications of Middle Eastern and African governments.

NEXT: Domestic activities.