

mured, I had one more to go."

ESPIONAGE

CIA's Big Sister

On a pine-fringed 82-acre lot just northeast of Washington sprawls the capital's third largest, most tightly guarded building. Though smaller only than the Pentagon and the State Department, the modernistic nine-story headquarters of the U.S.'s biggest intelligence organ, the National Security Agency, is also official Washington's least-known edifice.

Protected by rings of electric wire outside and pistol-packing Marines within, NSA is a cathedral of cryptography—the occult art of secret codes. Bigger even than the Central Intelligence Agency, NSA headquarters houses about 14,000 employees, including some of the best analytic, mathematical and communications brains in the U.S. CIA's well-known headquarters in Langley, Va., has about 10,000 employees. Like CIA, NSA maintains a far-flung network of listening posts abroad, intercepting secret transmissions. At about \$1 billion, NSA's annual budget, hidden under special executive funds, is estimated at twice that of its sister agency.

And no wonder. In an age of intensive and instant communications, cryptography has acquired supreme importance in guessing and occasionally ascertaining the next step of friend and foe alike. Within the bowels of NSA, constant research is conducted into new theories and systems of communications and codes. Mathematicians probe the bowels of statistics and higher alge-

bra to solve or protect complex ciphers, while other experts focus on such esoteric topics as the effect of electromagnetic radiation on radio and satellite transmissions. To aid in this task, NSA harbors in its massive, concrete-walled basements what is probably the most sophisticated and largest concentration of computers in the world.

One Complaint. Established in 1952 under the Secretary of Defense, NSA, like CIA, is an outgrowth of the nation's post-World War II effort to centralize, tighten and sharpen the role of U.S. intelligence in the cold war. Almost unknown to the public, NSA has clearly been more successful at warding off journalistic attention than its sister agency. It is symptomatic of the extreme secrecy shrouding NSA that its director, Lieut. General Marshall S. Carter, is a nonentity even to Washington insiders. Yet, like CIA's, the agency's tentacles reach deeply into the academic community. For example, it regularly gets results of cryptographic research by the Institute for Defense Analyses, run by five universities; top-flight mathematicians and scientists serve as its consultants.

Last week official Washington's attention focused on *The Codebreakers*, a 1,164-page tome written by David Kahn, a 37-year-old journalist and amateur cryptographer. It is perhaps the best and most complete account of cryptography and the security agency's role yet published. A tribute to Kahn's thoroughness—he took six years to write the book—is that NSA officials have been astounded by his knowledge of the agency's operations. "He's certainly done his homework," said one awed expert. Foggy Bottom and intelligence types, who have made the book a best-seller in Georgetown bookstores, have only one real complaint: it costs \$14.95.