

# The National Security Agency: The High Technology of Global Surveillance

In his recently published book, *The Puzzle Palace*, James Bamford has unveiled the activities of America's top-secret National Security Agency and, at the same time, has aroused a great deal of controversy. His book — and the operations it revealed — has led to the resurgence of the debate over the proper role of intelligence activities in the United States.

Bamford's previous affiliation with the intelligence community has also been the focus of much controversy. During the Vietnam War he served with the Naval Security Group which mans many of the NSA's listening posts, and he testified before the Senate Intelligence Committee about certain activities he witnessed while on active duty with the Reserves. Bamford maintains that he relied on purely external sources for his book and that he did not take advantage of his previous affiliation and involvement with intelligence activities in the writing of his book. Instead, Bamford relied on interviews with former officials, documents in government repositories and information obtained through the Freedom of Information Act. (Recently, the U.S. Justice Department has tried to reclassify some of the information released to Bamford, and an Executive Order allowing documents to be reclassified took effect on 1 August 1982).

In the following book review and interview, Bonnie Brennan and Katherine Gilbert critique Bamford's discussion of the National Security Agency and highlight some of the critical issues brought out by "The Puzzle Palace."

*The Puzzle Palace: A Report on America's Most Secret Agency.* By James Bamford, Boston: Houghton-Mifflin Co., 1982, pp. 465. Cloth.

Reviewed by BONNIE BRENNAN and KATHERINE GILBERT

In *The Puzzle Palace*, James Bamford explores the effects of rapidly advancing technology on intelligence-gathering activities. His test case

---

Bonnie Brennan and Katherine Gilbert are both MALD candidates at the Fletcher School of Law and Diplomacy.

is the National Security Agency (NSA), the United States technical intelligence agency charged with gathering signals intelligence (SIGINT).<sup>1</sup>

In this highly controversial work, Bamford examines some of the issues surrounding the surveillance activities of the NSA. These issues include whether the NSA has abused its extensive capabilities (particularly in the area of domestic monitoring), whether the NSA's "extra-legal status" provides it immunity in such cases where abuses might have occurred, whether the NSA operates to maximum effectiveness and whether NSA's counterintelligence procedures are adequate.

Bamford's treatment of the history of American cryptography, while thorough, is not original. David Kahn, in his 1968 book *The Codebreakers*, provides essentially the same information.<sup>2</sup> Bamford's real contribution lies in his gathering and assembling of information on the structure and activities of the modern NSA which, until now, has been almost impossible to obtain.

Bamford has done an admirable job of sifting through the discursive records of the Senate Intelligence Committee's investigations of the mid-1970s, which revealed what he argues to be two abuses of NSA power: Operations Shamrock and Minaret. In Operation Shamrock, the NSA, with the collusion of several major cable companies, monitored the international telegram communications of Americans for almost thirty years. In Operation Minaret, the NSA targeted the communications of those involved in civil disturbances or in the anti-war movement. Minaret was terminated in 1973 at the behest of the attorney general. From their inception, both operations had presidential approval.

Bamford points out that in both cases the NSA was aware of the probable illegality of the operations. In an effort to keep the operation secret, the Minaret charter went so far as to state that "an equally important aspect of MINARET will be to restrict the knowledge that information is being collected and processed by the National Security Agency."<sup>3</sup>

Bamford fails to consider another point of view also aired before the Senate Intelligence Committee; the question of who actually ordered Operations Shamrock and Minaret. NSA, a strictly technical agency, does not itself determine targeting priorities.<sup>4</sup> Rather, they are defined by other

- 
1. SIGINT includes communications intelligence (COMINT) and electronics intelligence (ELINT). Eavesdropping, codebreaking, codemaking and collection of signals from the air are all part of SIGINT.
  2. David Kahn, *The Codebreakers: The Story of Secret Writing* (New York: Macmillan, 1968).
  3. Quoted by Bamford; see also the Senate Intelligence Committee, "Charter for Sensitive SIGINT," *The National Security Agency and Fourth Amendment Rights*.
  4. Targeting is the process of turning intelligence requirements into specific data collection line items. For example, if the Army is interested in finding out about drug use by East German soldiers, it makes that request to the NSA. The NSA analyst decides what German words or

agencies including the CIA, FBI, State Department and the military intelligence units. The NSA merely collects the data they request. As Senator John G. Tower testified,

the NSA is the wrong target [for investigation]. The real issues of who told them to take actions now alleged to be questionable should be addressed to the policy level. It is more important to know why names were placed on a watch list than to know what the NSA did after being ordered to do so.<sup>5</sup>

Bamford devotes a great deal of space to describing the enormous capabilities of the NSA to monitor, sort and analyze communications. He argues that, according to the yardsticks of budget and size, the NSA wields significantly more influence in the intelligence community than even the CIA. Yet size and technical capabilities are not themselves credible measures of power. True influence lies in the hands of the policy maker, not the technician. Within the intelligence community, the policy makers are those agencies which determine the information to be targeted. The NSA is not among those agencies.

The NSA did, nonetheless, carry out orders that were clearly illegal. Are there checks and balances within the American system which prevent the use of NSA capabilities by policy makers for Orwellian-like purposes?

As is the case with every federal agency, the NSA is subject to the budgetary constraints imposed by the Office of Management and Budget and by Congressional appropriations procedures. The NSA therefore must face all the distributional difficulties entailed by finite resources that plague her sister agencies. The Orwellian scenario assumes unlimited financial resources which, owing to these budgetary constraints, are not available to the NSA.

Bamford makes several well-taken points, however, on the extralegal status of the NSA. Brought into being by an executive decree, National Security Council Intelligence Directive Number 6, the NSA was born without a legislative charter and continues to exist without one. Bamford further argues that externally imposed legal constraints such as the Foreign Intelligence Surveillance Act (FISA) are insufficient.

FISA, signed into law by President Carter in 1978, establishes the Foreign Intelligence Surveillance Court. This court issues warrants enabling agencies, among them the NSA, to use eavesdropping technology within

---

phrases might be used in conversations involving drugs and East German soldiers. The NSA computers then look for the use of these words while sifting through communications collected by the NSA.

5. Senator John G. Tower, testimony for the U.S. Senate, Select Committee on Intelligence, Book II, *Intelligence Activities and the Rights of Americans* (29 October and 6 November 1975), pp. 2-3.

the United States. But as Bamford points out, "In the court's first fifteen months, ending in December 1980, it approved all 518 applications including one order that granted even broader authority than that sought by the Justice Department." Since that time, only one application has been turned down. Former CIA director William Colby argued that this cannot be construed as evidence incriminating the court; it merely demonstrates that the government is being careful about the cases it brings before the surveillance court.<sup>6</sup> Even so, it is difficult to imagine that, however careful the government may be, it could build 518 flawless cases. It seems that the record of the Foreign Intelligence Surveillance Court merits closer scrutiny.

Perhaps the most fascinating aspect of the book is Bamford's creative use of requests under the Freedom of Information Act. In part through information gathered in this manner, he discovered the location of NSA listening stations in Sugar Grove, Virginia and Yakima, Washington and posited that these sites were selected because of their proximity to COMSAT earth stations. Bamford thus implies that the NSA's intent is to monitor the communications of Americans. Given Operations Shamrock and Minaret, his reasoning seems plausible.

On the other hand, "informed sources" have rejected Bamford's implication on two grounds: First, it is not the proximity of these locations to COMSAT earth stations that is their attraction, but rather the fact that "freedom from electronic interference enables them to pick up weak signals given off by Soviet satellites in deep space." And secondly, NSA simply does not have the resources to monitor the vast flow of communications passing through these stations.<sup>7</sup>

It has been suggested that NSA operations must remain secret to be effective. The question therefore arises whether Bamford should have revealed the locations of these two stations. Bamford argues that the Soviet Union has satellite photographic capabilities that would have enabled it to watch these stations being built anyway. But William Colby posed the question: "How many telecommunications installations do you think there are? Thousands!" The Soviet Union does not have the resources to focus on all of them.

Bamford has pieced together the puzzle from information available in the public forum. While bringing such information before the public eye may be legal, some would argue that it is not responsible. But the Soviet Union could have made the same use of the Freedom of Information Act to obtain this information. There is no provision in the act forbidding

6. The statements by William Colby in this essay come from a telephone interview with him that took place on 20 October 1982.

7. See David C. Martin, "Unveiling the Secret NSA," *Newsweek*, 6 September 1982, p. 28.

foreign nationals — including representatives of Tass — from requesting the release of information under the Act. It is not obvious, therefore, that Bamford has acted irresponsibly in this case.

Although Bamford does not explore the question of the efficiency of NSA's intelligence-gathering in depth, he does raise several pertinent questions. One such question is whether it is wise to focus the majority of NSA's technical resources on surveillance of the Soviet Union at the expense of the Third World. William Colby argues that this concentration of effort is justified because the Soviet Union constitutes the gravest threat to American security and is difficult to penetrate except by the most sophisticated means. Therefore, the focusing of NSA's attention on the Soviet Union is justified.

This explanation seems inadequate, however, in view of the fact that the post-war "hot spots" have invariably cropped up in the Third World. The more convincing argument has been made that intelligence-gathering in Third World countries can often be conducted more cost-effectively by other means since they are much less difficult to penetrate. One must therefore survey the coverage of the Third World by the entire intelligence community in order to determine whether there is a need for the use of highly sophisticated NSA capabilities or whether other less sophisticated means such as human intelligence would be sufficient.

Bamford further raises the question whether the procedures used to determine NSA targets are efficient. NSA listening posts pick up all microwave signals which pass within their hearing range. (This is often called the "vacuum cleaner" approach.) Massive computers then sift through these raw communications looking for certain targeted words or phrases. The choice of these targets is the crucial step in this operation.

As mentioned above, these targets are not chosen by the NSA but rather by the other members of the intelligence community through a formal interagency procedure. This has consistently led to a problem of targets not being defined specifically enough. Either the translation of each agency's requirements into a coordinated list of targets means that specific needs are lost in the shuffle, such as the need for Korean intelligence prior to the Korean invasion, or else the competition for limited computer time and space leads to the consolidation of specific intelligence requests into overgeneralized targets.

Finally, Bamford discusses at length the inadequacy of NSA's own counterintelligence procedures. That this issue arises with regard to the NSA is ironic when one considers that at one time its very name was classified information. Yet, in a lengthy chapter entitled "Penetration," Bamford describes the defective security of NSA facilities. He details the inadequate personnel screening practices which led to the double defection to Moscow

of two NSA employees in 1960 and other acts of treason on the part of NSA personnel. Bamford is led to conclude that the NSA has "managed the distinction of becoming not only the most secretive and most hidden member of America's growing intelligence consortium but also the most thoroughly penetrated." While he may have overstated his case, the allegation should not be passed over lightly.

While Bamford's research should be commended, *The Puzzle Palace* does not explicitly state its assumptions or provide adequate analysis of the issues it raises. The most prominent analytical gap is Bamford's failure to establish what is, in his view, an appropriate standard of secrecy for the intelligence community. Bamford himself recognizes the need for counterintelligence, i.e., the safeguarding of one's own secrets. How then does one balance this need with the public's right to know?

There is a margin at which an additional unit of national security requires a cost in civil liberties (and vice versa) which Americans are unprepared to pay. Clearly, to perform the implied cost-benefit analysis would entail the impossible task of quantifying intangibles. Difficult as this may be, the need to define this margin remains essential.