MEMORANDUM

1989X
(Ref: 722X)

NATIONAL SECURITY COUNCIL

INFORMATION/ACTION
5 April 1976

~~TOP SECRET~~/XGDS-5B-(2)&(3)

MEMORANDUM FOR: BRENT SCOWCROFT

FROM: ROBERT SMITH RS

THROUGH: DAVID ELLIOTT DE

SUBJECT: Soviet Microwave Intercept Problem

You asked for items you could suggest to Secretary Rumsfeld to improve DOD's responsiveness in implementing the measures to deal with the Soviet microwave intercept problem. You also inquired as to the status of near-term steps, including movement to cable, increased monitoring, and jamming. These are summarized in the following:

I. Near-Term Measures

DUCKPINS I, the project to move all critical government circuits to cable in the Washington area, has moved and/or tagged approximately 9,000 circuits and is complete except for six AUTOVON satellite circuits which will be rolled off microwave within a few weeks. DUCKPINS II, which will extend similar protection to critical government circuits in the New York City and San Francisco areas, is now with the President for approval (copy at Tab A). These programs will secure all critical government circuits in all identified threat areas. DOD (DTACCS and DCA) has been very cooperative and responsive in these elements of the program.

We are limited in our monitoring of the Soviet take at the various intercept sites. More trained personnel and equipment could increase our coverage, and also allow us to undertake a survey of the other Bloc embassies to determine if they are carrying out interception. For technical reasons, however, we will be limited in our coverage at any individual site (e.g., at the Soviet Embassy, we might increase our coverage from about 2% to 10%).

~~TOP SECRET~~/XGDS-5B-(2)&(3)
Classified by: Brent Scowcroft

WARNING NOTICE — SENSITIVE
INTELLIGENCE SOURCES AND METHODS INVOLVED

Jamming has been examined in some detail by NSA as a near-term measure. NSA has provided us with a detailed report, laying out the cost, schedule, and effectiveness of the available jamming options for all five of the confirmed intercept sites (a separate report was given to Bill Hyland for just the Washington Embassy site). NSA concluded that high confidence jamming is only possible at the Washington Embassy. The potential for effective jamming at the San Francisco Consulate and the Soviet School in Washington can only be characterized as fair, and as poor at the other sites.

Jamming of the Embassy on Sixteenth Street could be fully operational within four months at an initial cost of $120,000. Interim partially effective jamming operations could be started in two to three weeks if necessary. Jamming at three sites could be accomplished within six months at a total initial cost of $1,760,000 including the new monitoring equipment which would be needed at the Consulate and the Soviet School. Annual operating costs for these three sites would be about $590,000 per year including monitoring. (Even though jamming of the Soviet Mission at the UN and the residential complex in Riverdale, New York, is considered a high priority objective, it would not be effective because of the geographic locations--remote from possible jamming sites.)

NSA has consistently opposed initiating jamming operations, however, because they believe the U.S. will be a net loser in a jamming war. In view of the Soviet advantage in number of facilities, freedom of movement, and greater variety of accessible U.S. communications, NSA is concerned that we could be put out of business abroad while the Soviets would probably continue to operate here. Jamming, therefore, is a political gesture more than a technical solution to the intercept problem.

NSA has started to accumulate one set of the necessary equipment for jamming the Soviet Embassy. Jamming the other Soviet sites would require acquisition of jamming locations in nearby buildings, as well as additional sets of equipment. This might take some time; so if the President wants a broader immediate jamming capability, NSA should be directed to secure the jamming sites and equipment.

II. Longer-Term Measures

Bulk scrambling techniques, such as Protected Radio Modulation (PRM) and end-to-end cryptographically secure technology such as the Executive Secure Voice Network (ESVN) are now under development at NSA as longer term solutions to the intercept problem. From the outset DOD (DTACCS) has not been providing the necessary attention to and support for these programs at NSA; partly because they are related to communications

needs which are outside the normal DOD charter and which will ultimately be transferred to some other agency for implementation; partly because the narrowband ESVN, which is designed to operate over the commercial telephone net, is viewed by some in DOD as a competitor and threat to the wideband AUTOSEVOCOM Phase II Program, which is being pursued by DOD to meet military needs; and partly because the longer-term applications of these technologies represent major contenders for the DOD communications budget. There are numerous examples of this DOD attitude which have tended to delay the program--the following examples are a typical cross-section:

(1) DOD has not given the communications security problem sufficiently high priority. In spite of the Presidential direction expressed in NSDM 296, and continuing pressure from NSC, DOD bureaucratic delays in funding (DDR&E and DTACCS) prevented starting the necessary NSA technology activities for over six months. This funding problem was only resolved when NSC intervened with Congress to get the needed funds earmarked for NSA.

(2) DOD has treated communications security as a business-as-usual problem within their existing bureaucratic structure. DTACCS has continually resisted the ESVN program--largely because it was moving out ahead of the military-supported AUTOSEVOCOM Phase II Program being developed by TRI-TAC. DTACCS is currently planning to place the management responsibility for the second phase of ESVN (which follows the initial pilot program of 100 units which are already on contract) within the DOD TRI-TAC program office (Tri-Service Tactical Communications), as opposed to NSA. This is likely to result in "goldplating" the ESVN to satisfy a number of military requirements which don't really apply and further delay decisions by tying the development schedule into the TRI-TAC schedule for milestones such as selection of an algorithm.

(3) DOD has given insufficient management attention to the program and resolution of outstanding problems. This is illustrated by their recent submittal of the ESVN implementation plan required by NSDM 296. DOD (DTACCS) had major disagreements with NSA over sections of the plan--but rather than elaborating on these differences and finding a reasonable answer, DOD stamped the offending paragraphs of the NSA Proposed Plan "OPTIONAL" and sent the plan to the President with a disclaimer. A further indication of this lack of interest has been the declining DTACCS attendance at the meetings of the Telecommunications Security Panel since Tom Reed left.

These examples highlight the need to do the following within DOD:

(a) The NSDM 296 communications security problem must be given higher priority within DOD, including the assignment of responsibility to an appropriately high-level OSD individual to expedite the program.

(b) A special project management arrangement should be established to permit the problem to be worked outside of the normal bureaucratic organization so as to minimize the number of "decision makers" involved.

(c) The communications security program must be assured adequate resources and funding; i.e., the head of DTACCS, Currie, and the Comptroller must not fight or ignore the program's needs.

III. Policy Issues

It should be recognized that there are also several issues that transcend the DOD aspects, including a number of difficult policy questions related to the government role in development, financing, management and regulation of extensions of communications security protection to the private sector. These questions are being addressed by the Ed David panel, but ultimately solutions to these policy questions will require major reconstitution and strengthening of an organization like OTP if security is eventually to be provided across the entire national telecommunications system.

Attachment:
Tab A -- cc Log #722X

REWRITE

722X

~~TOP SECRET~~/XGDS

ACTION

3 April 1976

MEMORANDUM FOR: THE PRESIDENT

FROM: BRENT SCOWCROFT

SUBJECT: Soviet Intercept of Microwave Communications

NSDM 266 (Tab A) directed that critical Government communications be routed on cable until well out of the Washington area in order to prevent Soviet microwave intercept. This program is now nearing completion. However, the continuing NSA evaluation of the threat has now verified that the Soviets are also intercepting microwave links in New York City, and there is strong evidence that they are conducting intercept operations in San Francisco as well.

If we are to prevent continuing Soviet intercept of Government telephone communications in the several-year period until the technology for longer-term solutions is available, it will be necessary to extend the coverage of NSDM 266 to include protection of critical Government circuits in those two areas.

The one-time cost of moving the Government microwave circuits onto cable in the New York and San Francisco areas is approximately $3.3M, and the annual recurring cost is approximately $0.8M. These funds would be accommodated within the current DOD budget and would not require a supplemental appropriation. OMB has reviewed these cost estimates and concurs.

RECOMMENDATION:

That you approve extension of NSDM 266 to include protection of critical Government circuits in those additional areas where the Soviet intercept threat has been confirmed.

APPROVE _____ DISAPPROVE _____

Rewrtn:GenS:ms:4/2/76

~~TOP SECRET~~/XGDS-5(B)-3

Classified by: Brent Scowcroft

Warning Notice - Sensitive Intelligence Sources and Methods Involved