WASHINGTON AREA KY-3 NETWORK PROPOSAL

1. OBJECTIVES

One objective of this paper is to establish a coordinated requirement for a single wide-band KY-3 U.S. Government secure voice automatic switching system in the Washington area. A second objective is to establish a coordinated requirement for NSA to develop a means for permitting the easy transfer of a single KY-3 instrument from one KY-3 crypto net to another. A third objective is to establish a coordinated sequence of actions to activate such a KY-3 capability concurrently among all Government agencies in the Washington area. Hopefully this will occur in the 30 day to 18 month mid-range period.

2. CONCEPT

The concept to accomplish these objectives is to provide each key official or selected subscriber with only one KY-3 unit. Each KY-3 subscriber will have the capability of being connected through an automatic switching system to any other KY-3 subscriber in the area. These KY-3 subscribers will be divided into separate crypto nets such as the Presidential net, the DOD senior officer's residence net, the DIA net, etc. by the issuance of separate cipher key materials unique to each net. One subscriber with one KY-3 terminal will have the capability of entering more than one crypto net. The automatic switching systems will consist of interconnected wide band circuits terminating in several switchboards throughout the Washington area. This automatic switching system will be furnished, managed and maintained by a commerical telephone company. Each subscriber will be connected to the nearest switchboard.

3. DISCUSSION

The only novel feature of the proposed automatic switching system is that it represents a U.S. Government coordinated single system designed to accommodate and permit the interconnection of all KY-3 users in the Washington area. The concept involved is compatible with the military VOCOM and related planning outside of the Washington area.

The novel feature of the proposed KY-3 crypto netting is the requirement for using a single KY-3 unit in several crypto nets. This, if accomplished, will reduce KY-3 equipment requirements and will extend by a large measure the flexibility of the capability of equipment.

4. ACTION REQUIRED

Upon agreement of the above concept by the NSC Sub-committee for communications a number of sequential as well as individual actions by each Government agency will be necessary in order to meet the mid-range planning schedule. These suggested actions are attached (Attachment I). Also attached is a conceptual chart showing the proposed system (Attachment II).