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SCAG~~TOP SECRET~~

29 March 1951

MEMORANDUM FOR (See Distribution Below)

SUBJECT: Meeting on SCAG, 28 March 1951

ENCLOSURE: Draft Minutes of Meeting

1. The Enclosure is sent you for concurrence or for additions, corrections, and changes. Please expedite return.
2. a. Dr. Kullback notes the absence from the proposed SCAG membership list of a specialist in the field of probability and statistics, and points out that such a specialist would probably be very helpful to us. He suggested Dr. Willy Feller of Princeton University as an excellent candidate, if clearable.
- b. Your comments on this point, and if you concur, suggestions for other potential candidates in case Dr. Feller cannot be obtained, will be appreciated.

1 Encl
Draft Minutes of MtgWILLIAM F. FRIEDMAN
Chief, AFSA-OOT

Distribution:

- ✓ Capt. Waugel
- ✓ RADM F. E. Stone, DIPAFA

Mr. F. B. Rowlett)
Mr. Oliver Kirby) AFSA-02
Dr. Albert E. Highley)

- ✓ Dr. S. Kullback)
- ✓ Dr. H. Campaigne)
- LCDR A. I. Gleason) AFSA-03
- LCDR Marshall Hall)
- Dr. Hugh F. Gingerich)

- ✓ Capt. T. H. Dyer, AFSA-14

No comments from Capt. Dyer~~TOP SECRET~~~~TOP SECRET~~

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(Special Cryptologic Advisory Group)

- References: (a) SECRET DIRAFSA Memo for Chairman, RDB, 23 Feb 51, Subject: Special Cryptologic Advisory Group.
 (b) CONF. Memo for DIRAFSA, 20 Mar 51, in response to Ref. (a).
 (c) SECRET Memo from AFSA-OOT, 21 Mar 51, Subject: Meeting to discuss plans for SCAG.

Enclosure: (A) Tentative Agenda for First SCAG Conference.

1. The first meeting of AFSA personnel in response to Reference (c) was held at 1400 hours on 28 March 1951, in the AFSA Conference Room, 19-125.

Those present:

	RADY E. E. Stone, DIRAFSA		
	Mr. William F. Friedman, AFSA-OOT, Acting Chairman		
Dr. S. Kullback	} Representing AFSA-03	Mr. F. B. Rowlett	} Representing AFSA-02
Dr. H. Campaigne		Mr. Oliver Kirby	
LCDR A. M. Gleason		Dr. Albert E. Highley	
LCDR Marshall Hall			
Dr. Hugh F. Gingerich			Capt. T. H. Dyer, AFSA-14

2. a. The Chairman opened the meeting by referring to, and reading extracts from the references. He then read a note written by Captain Wenger, AFSA-OOB, to DIRAFSA, indicating the steps which he has taken in the matter of approaching the various potential members of SCAG with a view to gaining their assent to serve on SCAG.
- b. Captain Wenger's note indicated that upon his return he expects to continue his endeavors to firm up and complete the membership of SCAG.
- c. LCDR Gleason suggested that Dr. Tompkins would be the best man to approach Dr. Von Neumann.
3. a. The Chairman indicated DIRAFSA's desire to add to the present list of potential members of SCAG (See Enclosure 1 to Reference (a)) representatives from certain large industrial firms with which AFSA has contractual relations and which are not yet represented on SCAG. The following additional names were suggested:

Dr. John Howard - Burroughs Adding Machine Co.
 Mr. Stephen F. Dunwell - International Business Machine Corp.
 Mr. Arthur Tyler - Eastman Kodak Co.
 Dr. A. Melvin Skellett - National Union
 Mr. High Duncan - Remington-Rand
 (Name to be suggested) - Teletype Corporation

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b. Admiral Stone indicated that these additional names would be sent to the Chairman, RDB, who would either himself arrange for approaching the companies and candidates concerned, or delegate this to AFSA.

4. DIRAFSA mentioned briefly the interest of CIA in the establishment of SCAG and for that reason indicated the need for having SCAG be prepared and briefed as soon as practicable so as to enable its members to undertake without delay a consideration of the specific COMINT problems of primary concern to CIA as well as AFSA.

5. a. LCDR Gleason outlined his general suggestions as to a proper program, indicating that it might well consist of the following four phases:

- (1) Introductory indoctrination and briefing, with assurances of AFSA's appreciation of the fact that there must be a complete disclosure of the details of the specific problems AFSA desires SCAG to consider, if the members of SCAG are to make worthwhile contributions to their solution. Nothing essential or desirable for them to know should be withheld.
- (2) Arousing interest in those problems by indicating the importance and value their solution would have in national defense.
- (3) Presentation(s) to give those members of SCAG who have had no previous contact with COMINT some idea as to the scope and complexity of, and the general or special conditions encountered in COMINT operations in actual practice, as distinguished from those of purely theoretical situations or principles.
- (4) Presentation(s) as to AFSA's current position with respect to analytic machinery and the ideas AFSA personnel have on new methods and new apparatus for high-speed analysis.

b. He went on to suggest that World War II E-operations would make an excellent subject for a 1-hour presentation pertinent to phase (3) above, and would, moreover, be useful in providing background for wired-wheel problems. The E-presentation should not be exhaustive and should be slanted toward laying the foundation for an understanding of the "scratching" principle and machinery therefor.

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c. Brief discussion then indicated the desirability of having a tour of COMINT operations follow rather than precede the E-presentation and this was agreed upon.

d. The question of the advisability of making a presentation directed toward the solution of problems in the field of additive systems was discussed and although some deemed it impractical and inadvisable to include such a presentation, because of lack of time, the nature of those problems, and the possibility of confusing SCAG members by giving them too much at first, it was finally agreed that a brief presentation thereon would be useful, if only to give the members of SCAG a general picture of the problems in the additive field and how they were solved in World War II. It was suggested that the GEE problem would not only be very interesting, but highly useful.

e. The decision to use the World War II E-operations as a basis for this presentation brought up the question of whether reference to UK-US collaboration should be avoided and whether the BLO was to be permitted to learn about SCAG and the proposed conference. DIRAFSA indicated that no special efforts toward maintaining secrecy in this regard were necessary but that AFSA need not take any active steps toward informing the BLO as to SCAG, or toward disclosing to SCAG full details as to UK-US collaboration.

f. Mr. Highley pointed out, and it was agreed, that a presentation regarding AFSA as an agency of the JCS and the Armed Forces would be useful for background of a general nature. This should include information regarding sources of raw material, how it gets to AFSA, what is done with it and with the end product, etc.

g. Dr. Campaigne suggested that a presentation dealing with the mathematical analysis of wired-wheel problems would be very useful as background for SCAG in studying Albatross; he suggested Mr. Albert E. Roberts of FRA as most competent to make this presentation, since he is most familiar with task S'FATTR.

h. Dr. Campaigne also suggested that a presentation be made regarding AFSA's program in the computer field and that this program be reviewed by SCAG.

i. It was proposed that as the final item on the program a list of problems in the solution of which SCAG might assist AFSA be drawn up and discussed.

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6. a. It was agreed that the first conference of SCAG should consume approximately three full days and that it should be primarily arranged for and directed toward briefing the mathematical members of SCAG since it was true, as pointed out by LCDR Hall, that most of the engineering members already have a good knowledge of the background of CO'INT and the subjects to be discussed.

b. A tentative agenda for this conference, based upon the items mentioned in Par. 5 above, is attached hereto(Enclosure A).

7. a. DIRAFSA indicated his desire to have everything ready for a first meeting of SCAG on or about 1 May 1951, and it was the concensus that "dry runs" of presentations were essential and should be made well in advance of the opening session so as to make the actual presentations suitable for the distinguished audience before which they will be given.

b. DIRAFSA indicated that he would try to have certain important officers welcome SCAG at the opening session, such as the Director, Central Intelligence and one or more of the Service Directors of Intelligence.

8. a. LCDR Gleason volunteered to prepare the presentation on E-operations and Mr. Kirby agreed to prepare that on additive problems; both agreed to be ready for "dry runs" on or about 16 April.

b. These presentations are to be brief, touch only the high spots, and be slanted so as to have an immediate bearing on the specific problems to be studied by SCAG. Exhibits will be used to illustrate points of special interest.

9. a. It was suggested that the ASA Conference Room (AHS) and Room 20202 at NSS would be most suitable for the general sessions, and steps will be taken to reserve them for this purpose.

b. DIRAFSA suggested that for the duration of the conference each member of SCAG be assigned a specific member of AFSA to serve as a guide and assistant to the SCAG member to whom assigned, such assignments to be made on the basis of community of interests.

c. "PV" badges will be provided the members of SCAG and all steps taken to facilitate their entry and exit.

d. DIRAFSA is to look into the matter of social arrangements and possible entertainment for the conference.

William F. Friedman
WILLIAM F. FRIEDMAN
AFSA-OOT

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Tentative Agenda

for

First Conference of SCAG

1-3 May 1951 (tentative)

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1. Briefing (for access to COMINT) of non-indoctrinated members.

To be done by Captain Wenger.

2. Opening session.

Addresses of welcome by appropriate VIPs, as arranged for by DIRAFSA. (See Para. 7b of minutes.)

3. Presentation regarding AFSA.

Organization; position in Department of Defense and Armed Forces; relationships with other U.S. agencies and bodies such as USCIB and AFSAC. (See Para. 5f of minutes.)

To be given by DIRAFSA.

4. Presentation regarding SCAG.

Purpose; composition; contribution it can make toward national defense; security considerations, etc. (See Para. 5a(1) of minutes.)

To be given by Capt. Wenger.

5. Presentation regarding the importance and value of COMINT in national defense.

(See Para. 5a(2) of minutes.)

To be given by _____ (Chief, AFSA-02?)

6. Presentations to illustrate how two complex COMINT problems were successfully handled in World War II.

- a. E-Operations. (See Para. 5a(3) of minutes.)

To be given by LCDR Gleason.

- b. Certain additive problems with special emphasis on GEP.

(See Para. 5d of minutes.)

To be given by Mr. Kirby.

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7. Presentation on STEATER (mathematical analysis of rotor problems).
(See Para. 5g of minutes.)
To be given by Mr. Albert E. Roberts, ERA.

8. Presentation on AFSA's position and program in the field of electronic computers (NOFAD, ATLAS, etc.).
(See Para. 5h of minutes.)
To be given by Drs. Campaigne and Eachus.

9. Tours of AFSA-02 and AFSA-03.
To be conducted by Chiefs of Offices concerned or by personnel designated by them. (See Para. 5c of minutes.)

10. Presentation and discussion of specific problems on which AFSA desires assistance from SCAG.
(See Para. 5i of minutes.)

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