REF ID: A66079

FILE SCA-G

21 December 1951

MEMORANDUM FOR CHIEFS OF AFSA-02, AFSA-04

SUBJECT: Suggestions from SCAG in re Basic Research

Enclosures: (A) Ltr from Dr. H. T. Engstrom, Chairman, SCAG to DIRAFSA of 12 December 1951

(B) Memo from Dr. H. T. Engstrom, Chairman, SCAG to Mr. Friedman of 12 December 1951

(C) Ltr from Dr. C. B. Tompkins to Dr. H. T. Engstrom of 30 October 1951

- 1. Admiral Wenger has directed that the SCAG suggestions outlined in Enclosure (A) be studied attentively.
- 2. It is requested that you designate one or more representatives to meet with me soon to consider the SCAG suggestions and to report thereon to DIRAFSA.
- 3. Upon receipt of names of your representatives, date and place of meeting will be arranged.

Consultant

ENGINEERING RESEARCH ASSOCIATES, INC.

507 18th Street South, Arlington, Va.

12 December 1951

Maj. Gen. Ralph J. Canine, Director Armed Forces Security Agency Washington 25, D. C.

Dear Sir:

At the last meeting of SCAG, the question of basic research in connection with certain special problems of AFSA was discussed. On the basis of this discussion, SCAG strongly recommends that AFSA put forth additional effort in basic research.

SCAC suggests that AFSA appoint a committee to investigate the possibilities of implementing such a program, by contract or otherwise, and to delineate in general terms the nature of this program. SCAG, both collectively and individually, is prepared to offer you any assistance, either in the preparation of this program or in the implementation of it.

Very truly yours,

/s/ H. T. Engstrom

H. T. Engstrom

HTE:nlb

REF ID:A66079

### ENGINEERING RESEARCH ASSOCIATES, INC.

507 18th Street South, Arlington, Va.

12 December 1951

### MEMORANDUM TO MR. FRIEDMAN:

In connection with the proposed program of basic research, Dr. Tompkins has submitted the following information:

### I. Rand Corporation

- 1. Experience: Computing, exceeds that of any place other than MIT probably.
- 2. Estimated willingness: Neutral to favorable.
- 3. Security available: Perfect.
- 4. Staff available: Mathematicians.
  Electronics.
  Military Scientists.
- 5. Facilities now on hand: Large computing installation. Fair military library. Fair science library.
- 6. Housing (temporary) availability and help in finding: Fair.
- 7. Location: Santa Monica, California.
- 8. Ranking on list: No. 1.

# II. National Bureau of Standards

- 1. Experience: Computing good, and Director of INA is likely to be one of world's leading numerical analysts.
- 2. Estimated willingness: Willing to do anything.
- 3. Security available: Kone, except locked safes.
- A. Staff available: Good, but facilities to expand limited to

   (a) Civil Service appointments, or possibly
   (b) UCLA appointments.

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Seel. 2.

- 5. Facilities now on hand: 604 & CPC. SWAC not yet functioning. Good math library. Access to UCLA library.
- 6. Housing: Excellent.
- 7. Location: UCLA, Westwood Village, Los Angeles 24, California.
- Ranking on list: No. 2. (Possibly above RAND 1f UCLA cooperates fully.)

## III. Messachusetts Institute of Technology

- 1. Experience: Excellent.
- 2. Estimated willingness: Questionable,
- 3. Security available: Good.
- 4. Staff available: Excellent.
- Facilities: Large computing installation. Excellent libraries, except military.
- 6. Housing: Probably poor.
- 7. Location: Cambridge, Massachusetts
- 8. Ranking on list: No. 3.

# IV. Princeton University

- 1. Experience: Excellent.
- 2. Estimated willingness: Neutral to favorable,
- 3. Security available: Good at Forrestal Center.
- 4. Staff available: Superb, but loaded down now with first year activities of Forrestal Center.
- 5. Facilities: Good library four miles from Forreskl Center. No computing equipment now known to opeate at Forrestal.
- 6. Housing: Very poor.
- 7. Location: Princeton, New Jersey.
- 8. Ranking on list: No. 4.

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#### V. AFSA Contractors

Big 1. Raytheon 2. ERA Medium 3. Reed Research Small.

> May be able to set up separate facility at some location such as Newport Maval Station. Reed probably willing; others willingness unknown. Unattractive employers; however. Sandia Corporation seems successful.

#### VÌ. University of Chicago

Probably some objections about climate and housing, to using the excellent facilities which might be available.

#### VII. Bell Telephone Laboratories

Not recommended by BTL members of SCAG. Probably unwilling.

## VIII. The Johns Hopkins University

Probably willing, but they have not been spectacularly successful with either ORO or the ONR communications project.

#### IX. George Washington University

Willing, but probably not anxious. No security now available. Facilities on hand poor.

#### X. Stanford Research Institute

Probably incompetent. Probably willing. Know next to nothing about them. Friendly with, but not part of Stanford University.

#### II. American Power Jet

Certainly interested, but probably completely incompetent. Have some operations research contracts with Army and Navy. Montclair, New Jersey.

#### XII. Ridenour Research Associates (Approximate name).

New company. Robertson and von Neumann know Ridenour well. Possibly a good bet. Location probably near Laguna Beach, California.

/s/ H. T. Engstrom

HTE:nlb

H. T. Engstrom

30 October 1951 Address reply in care of the RAND Corporation, 1500 Fourth St. Santa Monica, Cal.

Dr. H. T. Engstrom, Chairman SCAG.

Dear Howard:

Speaking only for myself, but after conferences with you and others, I suggest that the SCAG contribution, at least in mathematics, could be materially strengthened by arranging for some time consuming research by members and possibly others in congenial surroundings. I believe that such research could be presented to AFSA people at SCAG meetings, and that those meetings might consist of three parts: (A) important new findings and developments at AFSA; (B) AFSA technical reports and recommendations including priorities; (C) SCAG technical reports and reactions to (B).

I suspect that a year around research facility could be established easily with perfectly adequate security guarantees, with good facilities for the congenial surroundings, and with high probability of productivity, especially in summers by means of a contract between CIA and the RAND Corporation. This might serve to provide a means for future effective employment of escaping Reserve Officers also. If such a contract is negotiated, I suggest that CIA immediately arrange for an adequate computing facility there — preferably the second IIOI — which I understand has already been ordered, or at least the third —

Sincerely

TOPRY

C. B. Tompkins