R-15 -1 (10-48)

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MEMORANDUM

**DECLASSIFIED IN FULL** Authority: EO 13526

Chief, Records & Declass Div, WHS

Date: AUG 1 9 2015

DATE: 6-24-49

**11**-1337

FROM:

TO:

J. S. King, Jr.

F. R. Collbohm

MEETING AT AMC ON JUNE 15, 1949 REGARDING CONTINUATION OF COLLINS' RAND

PROGRAM AND COMPLETION OF CENERAL ELECTRIC POWER SUPPLY

COPIES TO: J. R. Goldstein, L. J. Henderson, Jr., L. A. Young

This memorandum will confirm the verbal report I made to you on Friday, June 17, concerning the subject meeting. The purpose of this meeting, which was directed by Mr. Rappaport of the Aircraft Radiation Laboratory of the Electronic Subdivision, Engineering Division, AMC, appeared to be twofold:

One, Rappaport wanted an expression of interest from the University of California, at Berkeley, and from the Collins Radio Company on submitting an engineering proposal for a new tube to be used for defensive radar jamming, a high priority project in the Air Force. Both the representatives from the University of California and Collins agreed to submit a proposal within the next two months.

After a rather exhaustive discussion of this proposed new tube, the California people left the meeting and the second topic of discussion, concerning the Rand-Collins work, was discussed.

Dr. Salisbury described to the group in some detail the high intensity radiation work that he had been doing for Rand, including the biological effects of radiation on rabbits and dogs. At this point a representative of the AeroMed Laboratory was invited in to informally evaluate the advisability of continuing the Collins biological phase of the radiation study. In short, the Aerolied representative was not particularly impressed with the necessity for the work since he felt that the hazard involved in exposure to radiation is not great except when the period of close exposure was so long as not to be realistic. Dr. Salisbury also discussed their findings concerning the eye cataracts resulting from such exposure, which he said has subsequently been confirmed by experimentation at the Mayo Brothers Clinic.

The use of radiation as a defensive weapon was then discussed and the problem of power supply and power source, and effective concentration and the difficulty of accurate aiming all were given a pretty thorough going over.

Dr. Salisbury was then asked what funds he would need from the AMC to continue the Rand program. He suggested that for the first year they would probably need \$300, 000, comprising \$100,000 for completion of the General Electric power supply including cooling and housing the unit, and an additional \$200,000 for correlated investigation. The second year he felt he might need in the neighborhood of \$300,000. It was his off-hand guess, at this time, that by the end of the second or the third year the theoretical concepts under which they are now proceeding would either be proved or disproved as to practicability.

At this juncture, the writer was asked that in view of the fact that the Rand Corporation was the evaluation group for the Air Force what was Rand's evaluation of continuation of the Collins program. I hastened to reply that I was not qualified to answer and asserted that our dropping the Collins work was not a result of a

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lack of interest on our part, but, rather, was caused by budgetary considerations and the relative priority of the various projects we are now undertaking, which priority has been concurred in by R and D Headquarters, USAF.

I was then asked the remaining cost on the General Electric power supply purchase order and informed them that, according to advice from General Electric, the remaining amount to be paid was \$160,000, less the amount we have paid through May 31, 1949 of \$72,000. If we were to terminate the purchase order immediately, the termination cost would approximate 80% of the \$160,000. No counter-proposal was made by the Wright Field people that Rand pay the termination price with AMC paying the remaining 20%, but they appeared to accept responsibility for all payments above the \$72,000 we have paid.

In general, not much enthusiasm was generated among those present in favor of continning the Collins-Rand work as presently planned, but the indication was that if Collins should receive support from the AMC (other than the G.E. power supply) Collins' effort would be diverted to tube development for defensive radar research.

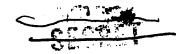
I was informally advised by both Mr. Rappaport and Mr. Johnstone that the Collins work, if it should be continued by AMC, and the General Electric power supply will be financed out of the Office of Air Research fiscal year 1950 funds and administrated by the Electronic Subdivision.

The remaining point of discussion of the meeting, primarily among the AMC representatives, concerned the adaptation of the General Electric power supply to what AMC considers more urgent uses than the high power radiation. Toward this end representatives of AMC, Collins, and the General Electric Company will meet in the near future in the General Electric plant at Pittsfield, Massachusetts to inspect the equipment and study this possible adaptation.

Following the Pittsfield meeting, Mr Rappaport plans to call another meeting at Wright Field for the purpose of solidifying their future course of action.

In passing, it should be noted that the immediate financing of the General Electric equipment is not an urgent problem since the periodic schedule of payments called for in the General Electric purchase order has been completed by us, through Collins, prior to May 31, 1949 and that no further payments are due until final delivery of the equipment. This delivery date has been estimated as October, 1949. By that time AMC should be certain of its course of action and its funds should be available.

A list of those present at the meeting is enclosed for your information.



## SPECIAL CONFERENCE - JUNE 15 (at Wright-Patterson Air Force Base)

## Attendance

MCREER-3 - AMC George Rappaport MCREES-3 - AMC F. E. Wenger MCKEEP-4 - AMC R. A. Krutz J. W. Clark Collins Radio Company H. V. Noble MCREEP-4 - AMC Ben B. Johnstone OAR - MCRR A. S. Brown MCREEO - AMC The Rand Corporation J. S. King, Jr. D. H. Sloan University of California Collins Radio Company Winfield W. Salisbury University of California L. C. Marshall Cambridge Field Station, USAF L. M. Hollingsworth R. S. Whitlock MCREES-33 - AMC SCEL - Fort Monmouth, N. J. S. H. Anderson

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Date: AUG 1 9 2015

Office of the Secretary Chief, RDD, ESD, WH Date: 19 Aug 2015 Declassify: K Declassify in Part:	
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