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20 November 1963

**MEMORANDUM FOR THE RECORD**

**SUBJECT :** Trip Report to [redacted]  
13-14 November 1963

**REFERENCE :** Trip Report to [redacted] memo dated  
4 November 1963 [redacted]

1. The undersigned and [redacted] reviewed the progress of [redacted] the KEMPSTER B project. Contractor progress is satisfactory, but continued emphasis on weight reduction of the system is necessary.

2. Progress has been made on the several details discussed in the referenced memorandum. The design of the KEMPSTER system has not yet been "frozen", so several exploratory avenues are still being pursued.

3. Actual operation of the PEB guns in the 170 Mc/sec wave guide have been successful. Additional sections of the wave guide were to be connected on the 15th of November. When this is done, the VSWR of the electron plasma can then be measured.

4. [redacted] discussed in considerable detail the RF-powered accelerator. Satisfactory progress is being made on the design. It is expected that construction will begin soon on an inverted magnetron design for this second-generation KEMPSTER B system. The advantages

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NRO review(s) completed.

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of this task promise a system at ground potential and of very light weight capable of high-temperature operations.

5. Contractor's permission has been secured to bring the scientists at [ ] who are working on the theoretical aspects of KEMPSTER to [ ] to present their theoretical calculations and to assist in the evaluation of the experimental results.

SIGNED

[ ]  
Engineering and Analysis Division  
(Special Activities)

EAD/OSA [ ]  
Cy 1 - EAD/OSA (thru ADD/S&T)  
2 - AD/OSA  
3 - D/TECH/OSA  
4 - CD/OSA  
5 - EAD/OSA chrono  
6 - RB/OSA

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