

[REDACTED]

6 AUG 1952

E.B.Giller/ms/1B691/74178
5 August 1952

SWPEF 1 113

Dr. A. F. Robertson, Acting Chief
Fire Protection Section
National Bureau of Standards
Washington 25, D. C.

Dear Dr. Robertson:

Reference is made to:

- a. National Bureau of Standards letter, reference 46 10, H3-145, dated 29 July 1952, Subject: Advance payment for classified project.
- b. Proposal for Further Support of Thermal Radiation Project, NBS Project 4490, Army Ordnance Project TPO-1241.
- c. AFSWP letter to Assistant Chief of Staff, G-4, Department of the Army, dated 9 July 1952, Subject: Technical Supervision of NBS Project on Effects of Thermal Radiation.
- d. Assistant Chief of Staff, G-4, letter to AFSWP, reference G4/F4, 42724, dated 14 July 1952, Subject: Proposal for Continuation of Work on Thermal Radiation Project at National Bureau of Standards.

The Armed Forces Special Weapons Project has reviewed the referenced proposal (paragraph b above) which was forwarded by Assistant Chief of Staff, G-4, Department of the Army (paragraph d above), to the Chief, AFSWP. The original proposal was for \$60,000 for FY 1953. The AFSWP desires to support certain objectives of the proposal in the amount of \$30,000 for FY 1953. Standard Form 1090 in the amount of \$30,000 has been received (paragraph a above) and is being processed.

It is requested that the AFSWP funds be used to support those studies listed under paragraph 2 of referenced proposal as modified below:

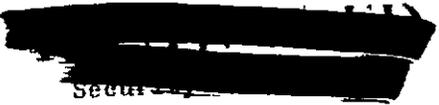
- a. Extend the time-intensity relationship to cover the case of very large weapons.

Declassified by DNA, Chief, ISTS

Robert E. Giller
Date: 8/12/94

HRE-0285

DNAI.540720.001



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b. Investigate the possibility of extending the theoretical mathematical analysis to include the phenomena of diathermancy.

c. Investigate the possible role of self-heating in the ignition of primary fires from large yield weapons.

It is expected that this level of effort will complete the thermal studies of the NBS supported by the AFSWP barring unforeseen developments.

It is requested that:

a. Your office submit Form 1A to the Research and Development Board of the Department of Defense showing the AFSWP as the supporting agency.

b. Copies of semi-annual and final reports be sent to the AFSWP Thermal Radiation Distribution List with fifty extra copies to the Chief, AFSWP.

c. The following block of AFSWP numbers be utilized for your interim technical and final reports:

AFSWP-279 through 294.

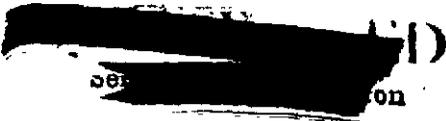
Sincerely,

L. J. AUGUSTY
Colonel, USAF
Chief of Staff

Copy furnished:
Logistics Division

M/R: This project was financed by AFSWP during FY 52; however, it was contracted through Army Ordnance. Army Ordnance has requested and the AFSWP has agreed that further support of this project should be made directly with the NBS. The original NBS proposal for \$60,000 came via Army Ordnance prior to the above-mentioned agreement. The Panel on Thermal Radiation recommended the AFSWP support this project for \$30,000 during FY 53 to study only certain portions of original proposal. It is expected that these funds should complete the NBS thermal

OFFICE SYMBOL	1. SWPEF	2. SWPSV	3. SWELG	4. NV	5. <i>506</i>
GRADE AND SURNAME OF COORDINATING OFFICERS	<i>Col Hillen</i>	<i>Capt Dawson</i>	<i>W. W. Martin</i>	<i>Mendenhall</i>	<i>Thompson</i>
	<i>Capt V. Blum</i>	XXXXXXXXXX	XXXXXXXXXX	<i>C/S</i>	<i>Donnelly</i>



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M/R: (Continued)

studies. The Chief, AFSWP, Deputy Chief (USN), and DCS, Technical Services, have approved the recommendation of the Panel. Referenced verbal authorization did not commit the AFSWP to the support of this program, but merely indicated that it was under consideration. The attached Form 1080 came via personal mail to the Chief, Radiation Branch.

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