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SMITIAL  
FORM 2085 (Rev. 6-18)

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(check appropriate box or boxes) to be handcarried

REGULAR MAIL  AIR MAIL  SPECIAL DELIVERY  REGISTERED MAIL

IN REPLY REFER TO  
RTOS-1:SHH  
Ser: 06159

Naval Research Laboratory (\$100)  
Department of the Navy  
Washington 25, D.C.

REFERENCE

DATE  
17 April 1962

VIA

FORWARDED FOR

RETENTION  INFORMATION AND RETURN  LOAN  RETURN FROM LOAN

40-10  
5100

MATERIAL FORWARDED

3 copies BUWEPS WEPTASK, RTOS 200 16/6521/F019-02-009, Ser: 05768 of  
10 April 1962, Title: Satellite Engineering Functions Development (U).  
Cognizant BUWEPS Engineer, Samuel H. Hubbard, RTOS-21.



By direction

Authorized for Handcarry.



4/17/62

Assistant Security Officer

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PLEASE SIGN DUPLICATE AND RETURN

RECEIVED BY

DATE RECEIVED

Chief, Bureau of Naval Weapons RTOS  
Department of the Navy  
Washington 25, D. C.

SENDER'S MAILING ADDRESS

Address reply as shown at left; or return receipt in window envelope (size 8 7/8" x 3 7/8"), if not classified as Confidential or higher.

DOWNGRADED AT 1 YEAR INTERVALS  
DECLASSIFIED AFTER 12 YEARS  
EOD DIR 520010

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05558

D-04100

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OFFICE OF NAVAL WEPTASKS  
WASHINGTON 25, D.C.

See latest issue of WEPTASK FORM 4  
for details on completing this form.

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SER: 05769  
10 APR 1962

PAGE 1 of 1

Director Naval Research Laboratory Washington 25, D.C.		WEPTASK NO. BTOS 200 16/6521/7019-02-009	WEPTASK TITLE
ASSIGNED TO CARDEL H. HUBBARD		PROBLEM ASSIGNMENT NO.	WEPTASK ID
WEPTASK CODE BTOS-21		REPORT LEVEL NORMAL	CLASSIFICATION OF WEPTASK CONFIDENTIAL

1. The WEPTASK/Problem Assignment described below is assigned in accordance with the indicated effort level and schedule. Funding authorization for WEPTASKS will be provided in separate correspondence. If this WEPTASK/Problem Assignment cannot be accomplished as assigned, advise Chief, Bureau of Naval Weapons.

2. Technical Instructions:

a. Title: Satellite Engineering Functions Development (U)

b. Purpose: The purpose of this WEPTASK is to provide instructions and authority required to provide those long lead-time components and common or standard payload subsystems necessary to support increased satellite operations.

c. Background Information: A series of small satellite payloads sharing certain common engineering functions have been developed for a wide variety of purposes. The success of these payloads has supported a proposal to standardize to a greater degree those subsystems that are independent of mission. Such standardization will permit some accumulation of components and subsystems thereby shortening leadtimes associated with development of flight payloads.

Anticipated increases in Navy Astronautics activities require expansion of payload production capabilities. In order to maintain the standard of engineering that has been established it is necessary to develop that backlog of equipment that will permit support of the accelerated program.

d. Detailed Requirements:

- (1) Provide design and development exclusive of detailed mission requirements of those components and sub-systems that are standard among satellite payloads authorized under related tasks.
- (2) This task is to provide technical support in the form of engineering activity and hardware procurement required to support existing payload production requirements.
- (3) This task also requires similar preparation for a program estimated to commence in January 1963 that will consist of operations approaching twenty (20) payloads per year.
- (4) This task also authorizes and requires development of techniques, including necessary arrangements, for launch of multiple payload assemblies from single rockets, as appropriate.

DATE  
5 April 1962

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05558

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Page 2 of 2

~~CONFIDENTIAL~~WEPTASK No.: RTOS 200 16/6521/FO19-02-009  
SER: 05768  
10 APR 1962Title: Satellite Engineering Functions Development (U)

3. Schedule: It is estimated that during CY 1963 support of three (3) composite type launch operations will be required under this task. It is required, however, that by January 1964 a capability of supporting four (4) multiple payload operations on an annual basis be achieved.

4. Reports and Documentation:

(a) Reference to this project through technical papers, scientific journals, and similar media is encouraged. All such information, however, including press releases and press conference material requires prior clearance from the Bureau of Naval Weapons (Code RTOS).

(b) Detailed estimates of funding requirements to support this task are required on a semi-annual basis to facilitate budget analysis and yearly budget submission.

5. Contractual Authority: Contracts to perform all or portions of this WEPTASK are hereby authorized within the funding limitations imposed by the WEPTASK cost estimate.

6. Source and Disposition of Equipment:

(a) All needed equipment to be procured as required for satisfactory project progress within overall project scope and funding limitations. Maximum utilization of available equipment and development facilities is required.

(b) Disposition of all equipment to be evaluated and determined on a semi-annual basis.

7. Aircraft Requirements: NONE

Copy to:  
R-3 (4 cys)  
RTOS-2 (5 cys)  
RTOS  
RT

~~CONFIDENTIAL~~~~CONFIDENTIAL~~

Prepare 4 copies, retain 1 for file and send 3 to the Program Records Office.

5. FROM

6. TO

Director of Research

7. REFERENCES

BuWeps ltr 05768 of 10 April 1962

8. ENCLOSURES

10. ABSTRACT OF PROBLEM

Components and structures are to be procured and/or designed and constructed and tested which are basic to NRL satellite payloads that require long lead time to make available for launches of the COMPOSITE type.

9. SHORT TITLE OF PROBLEM

Satellite Engineering Functions Development

MANPOWER AND COST ESTIMATES

ITEM	CURRENT HALF F/Y 1962		NEXT HALF F/Y 1963		NEXT YEAR 1964			
	FROM APR '62	TO JUN '62	FROM JUL '62	TO DEC '62	FROM JAN '63	TO JUN '63		
	MAN-WEEKS	COST	MAN-WEEKS	COST	MAN-WEEKS	COST		
11. DIVISION SCIENTIFIC MANPOWER (Including accrued leave)			22	4.3	23	4.5	45	8.8
12. SUPPORT SERVICES MANPOWER								
ESD	177	27.4	439	68.0	439	68.0	878	136.1
PWD								
OTHER								
13. OVERHEAD		22.5		60.6		60.9		121.5
14. TRAVEL AND PER DIEM								
15. MAJOR CONTRACTUAL SERVICES AND PROCUREMENTS (\$5000 and above)		200.1		700.0		3,000.0		8,000.0
16. ROUTINE MATERIALS				167.1		866.6		1,733.6
17. OTHER COSTS								
18. TOTALS		250.0		1,000.0		4,000.0		10,000.0

19. SOURCE OF FUNDS	RESEARCH DIVISION ESTIMATE	INITIALS	FY 1962		FY 1963		FY 1964	
			AMOUNT	DESCRIPTION	AMOUNT	DESCRIPTION	AMOUNT	DESCRIPTION
BUDGET DIVISION	5-4-C2 WSS		\$250,000	BUWEP5 P.O R-0061, RDTEN, 1962	\$326,000	BUWEP5 P.O2-0061 Approp. RDTEN, 1962	\$674,000	BUWEP5 TBS
							10,000,000	BUWEP5 TBS

20. SPECIFY PROBLEM(S) ON WHICH ABOVE SCIENTIFIC MAN-WEEKS WERE INDICATED ON PREVIOUS "A-1" OR "PAR" FORMS

If answer to any of the questions below is "yes," give detailed explanation on a separate sheet.

21. WILL THIS PROBLEM INTERFERE WITH ANY COMMITMENTS OR WITH WORK NOW IN PROGRESS  
 YES  NO

22. WILL ADDITIONAL PERSONNEL BE REQUIRED  
 YES  NO

23. WILL NRL HAVE TO PROCURE ADDITIONAL PLANT ACCOUNT EQUIPMENT  
 YES  NO

24. WILL ADDITIONAL SPACE AND/OR FACILITIES BE REQUIRED  
 YES  NO

SIGNATURES

OPERATING DIVISION SUPERINTENDENT	DIVISION	DATE	DIVISION	DATE
			5100	4/23/62
PROBLEM ACCEPTANCE REQUES				5/15/62

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INSTRUCTIONS

For NRL problems the divisions will fill in items 1, 2, 6, 7, 12, 13, 17, 20, and 21. For Bureau problems the divisions will fill in items 6, 7, 13, and 17.

TYPE OF REPORT

1. PROJECT TITLE		2. SECURITY CLASSIFICATION	3. PROJECT NUMBER
		4. INDEX NUMBER	5. REPORT DATE
6. BASIC FIELD OR SUBJECT <b>Support for Satellite Payload Development</b>		7. SUB FIELD OR SUBJECT	
8. COGNIZANT AGENCY		12. CONTRACTOR AND/OR LABORATORY	
9. DIRECTING AGENCY		CONTRACT/W.O. NUMBER	
10. REQUESTING AGENCY		13. RELATED PROJECTS <b>R02-35</b> <b>R06-29</b> <b>R01-36B</b>	
11. PARTICIPATION AND/OR COORDINATION		14. DATE APPROVED	
		15. PRIORITY	
		16. MAJOR CATEGORY	
		17. EST. COMPL. DATES	
		RES.	
		DEV. <b>Cont.</b>	
		TEST	
		OP. EVAL.	
		FY 18. FISCAL ESTIMATES	
20. REQUIREMENT AND/OR JUSTIFICATION			
21. BRIEF OF PROJECT AND OBJECTIVE			

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51X21-06

Notes (original)

SER: 05768  
10 APR 1962

PAGE 1 OF 2

ADDRESSEE Director Naval Research Laboratory Washington 25, D.C.	WEPTASK NO. RTOS 200 16/6521/F019-02-009	AMEND. NO.
	PROBLEM ASSIGNMENT NO.	AMEND. NO.
4010 COGNIZANT BUWEPS ENGINEER	EFFORT LEVEL NORMAL	
SAMUEL H. HUBBEARD	CLASSIFICATION OF WT/PA <del>CONFIDENTIAL</del>	
CODE RTOS-21		

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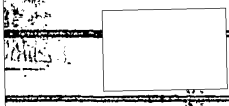
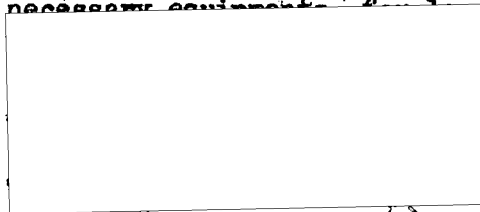
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(4) This task also authorizes and requires development of techniques, including necessary equipment, for launch of multiple payload assemblies from single rockets as I operation.



DATE  
6 April 1962

HANDLE VIA  
BYEMAN-TALEN... JOINTLY

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DOWNGRADED AT 5 YEAR INTERVALS  
EXCEPT AS NOTED

~~CONFIDENTIAL~~

05573

~~TOP SECRET~~

**PROJECT ORDER**  
NAFCOMPT FORM 2053 (12-58)  
412

1. TYPE <input type="checkbox"/> FIRM <input type="checkbox"/> RESERVE	2. DATE ISSUED <b>13 APR 1962</b>	3. EXPIRATION DATE 30 June 1962
---	--------------------------------------	------------------------------------

4. ORDERING COMPONENT

NAME AND LOCATION: Chief, Bureau of Naval Weapons MBD-3 SCS:med  
Department of the Navy, Washington 25, D.C.

5. PERFORMING ACTIVITY

a. NAME AND LOCATION Director Naval Research Laboratory Washington, D.C.	b. ACCOUNTING NO. 173	c. ACCOUNTABLE ACTIVITY 173
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6. PROJECT ORDER NO. 3100 3880 4000 PO-2-0061	7. AMENDMENT NO. 1	8. CUMULATIVE TOTAL \$2,076,000.00
---	-----------------------	---------------------------------------

9. ACCOUNTING DATA

a. APPROPRIATION AND BUDGET 17X1319.1922 RDT&EN 1962	b. ALLOTMENT 001	c. EXPENDED ACCOUNT	d. OBJECT CLASS	e. CHARGEABLE ACT'Y ACCT'G NO. 19	f. AMOUNT \$576,000.00
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10. DELIVERY INSTRUCTIONS

a. PLACE	b. DATE	c. METHOD
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11. DESCRIPTION OF WORK TO BE PERFORMED AND OTHER INSTRUCTIONS (# more space is required, attach additional sheets)

BPN 34.4 Satellite Application (88)

Provide long lead time components and common or standard payload subsystem to support satellite operations.

WEPTASK-RTOS 20 016/652-1/F019702-009 applies.

*4/10/62*  
*SP*  
BYE-057433-99

Copy to:  
R-34 (2 copies)

**SOURCE OF FUNDS**  
Accepted by NAL Budget Office  
Date 4-18-62  
Processed by HG  
Accepting Officer WJ  
By direction

~~TOP SECRET~~

12. This Order is placed in accordance with the provisions of 41 U.S.C. 23 and applicable project order regulations. Work to be performed and material to be procured pursuant to this Order are properly chargeable to the appropriation or other accounts indicated above until the expiration date of this Project Order. Funds, in the amount shown under Accounting Data, have been committed and will be obligated upon receipt of the acceptance copy by the ordering component.

a. AUTHORIZING OFFICER (Typed name and title) Ass't Director	b. SIGNATURE
The above terms and conditions are satisfactory and are accepted.	
13. ACCEPTANCE a. DATE APR 18 1962	b. ACCEPTING OFFICER (Typed name and title)

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WEPTASK No.: RTOS 200 16/6521/FOI9-02-009  
SER: 05768  
10 APR 1962

Title: Satellite Engineering Functions Development (U)

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7. Aircraft Requirements: NONE

Copy to:  
R-3 (4 cys)  
RTOS-2 (5 cys)  
RTOS  
RT

15 12 20 1962 APR

MAIL AND RECORDS

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HANDLE WITH CARE  
BYEMAN-TALENT-KEMBLE  
CONTROL SYSTEMS JOINTLY