	The second secon				A 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		' · W
33	en e	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SECRET	CARTESTS OF STREET		n too late 164 189 b	
C FILE INFO	We will respon to the control of the		Yhen Filled In)			ercours 140	
##.		1.(4)	БОСТІОН РВОНІВ		/ ft8/1 2		0 z
ACTION	2	5 7		11 12		16	
t manufacture special control of the	3 4	, ii	ngo yana a a a a a a a a a a a a a a a a a	13		18	
	5	iğ i		15		19 2ø	
IN 50248	A STATE OF THE STA	And Wareham				7	- / · · · · · · · · · · · · · · · · · ·
· TOPSECI	r e î 17205	5Z FEB 71	CITE	2431.		-	, *
- IMMEDIATE VA	, 2	4		- Companies Comp	MANOR.	· · · · · ·	*
		2.153	O INTOKALA		CHHOA :	*	• · · · · · · · · · · · · · · · · · · ·
SOLAR, PLUM,		*	er a strategy		e e e e e e e e e e e e e e e e e e e	New -	, ••
REAGT : - N		, , , , , , , , , , , , , , , , , , , ,					
A. 1115							
	and the second of the second o						
11 3. 51 8130 NO 8	es white	IUFF GORF.	LICENCE STELL P	DEWAY OF	· • nersi	L 3	
UNK NOW N . AT	THIS TIME	*	a xx , t	. et i. i. i.	\$ &	ا د ساوره و	
•	THIS TIME		3		Section 1997 Annual Sectio		
C. I MILE DUE	E SOUTH OF I	LAUNCH PAD		en e		e de la companya de l	According to the same
•	E SOUTH OF I	LAUNCH PAD		AT US UNI	(NOWN.	and the second s	
C. I TILE DUE	E SOUTH OF I	LAUNCH PAD		AT US UNI	(NOVN.	and the second s	
C. 1 MILE DUE	E SOUTH OF I	LAUNCH PAD		ATUS UNI	(NOVN.	The second secon	
C. I MILE DUE D. SEARCH IS E. UHKNOWN F. O. P. D. D. O. F.	E SOUTH OF I	LAUNCH PAD		ATUS UNI	(NOWN.		
C. 1 MILE DUE D. SEARCH IS	E SOUTH OF I	LAUNCH PAD		ATUS UNI			
C. 1 TILE DUE D. SEARCH IS E. UHKNOWN FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI			
C. I MILE DUE D. SEARCH IS E. UHKNOWN F. O. P. D. D. O. F.	E SOUTH OF I	LAUNCH PAD		ATUS UNI		The second secon	
C. 1 TILE DUE D. SEARCH IS E. UHKNOWN FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI		The second secon	
C. 1 TILE DUE D. SEARCH IS E. UHKNOWN FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI			
C. 1 TILE DUE D. SEARCH IS E. UHKNOWN FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI			
C. 1 TILE DUE D. SEARCH IS E. UHKNOWN FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI			
C. I MILE DUE D. SEARCH IS E. UHKNOWS FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI		The second secon	
C. I MILE DUE D. SEARCH IS E. UHKNOWS FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI		The second secon	
C. I MILE DUE D. SEARCH IS E. UHKNOWS FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI			
C. 1 TILE DUE D. SEARCH IS E. UHKNOWN FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI		The second secon	
C. 1 TILE DUE D. SEARCH IS E. UHKNOWN FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI		The second secon	
C. I MILE DUE D. SEARCH IS E. UHKNOWS FOR PORT OF	E SOUTH OF I	LAUNCH PAD		ATUS UNI			

FILE INFO		SECR (When File	led in)		0229410
		REPRODUCTION	PROHIBITED I	FEB71 02 582	4
ACTION	1 2	6 7	111	16	,
	3	8	12	17	
	5	9 10 .	14	19	
IN 55924	131	1.01	115	20	5.5
nuabin-A nuf i Chaho	1800 1870 PX1		(WAHOO)	7 - 4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
CONTINGENCY	PLAN DISCUS	ESTABLISHED AND SEED IN REF B. POINT THE PROPERTY OF THE PROPE	LAN HAS		
-	TIMES DETWE	EN ACTIGATELLIT		NEXT AVAILABLE L MISSION BASI	
. randi Dê	FIRINGS ARE	Draw a marriage at the safety			
. was Did		ENCES ARE PUNCH	ED OF THE H-I	IMER. TAPE PRIO	R
. sand_ Of Condwa Dab	: FIRING SEQU				R
. sand_ Of Condwa Dab	: FIRING SEQU	ENCES ARE PUNCH			R

À

FILL THE NO -FIRING (UNPERTURBED) LOCATION ASSOCIATED WITH THE SAME

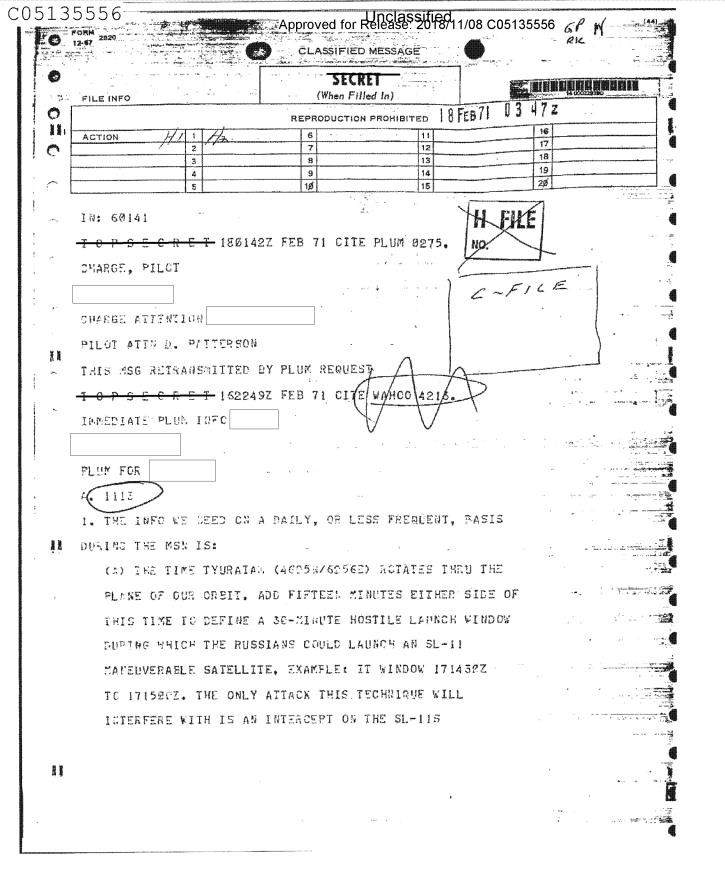
C05135556

HOW WILL FIRE AT MEY 7.75, LATITUDE 458, APPROXIMATELY
HE HIGHTES AFTER POGD ACQUISITION.

THOSE THIS EXAMPLE ASSUME VEHICLE IS 20 MINUTES PRIOR TO THOSE ACQUISITION WITH ANTICIPATED ANTISATELLITE INTERCEPT

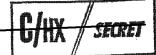
... HEV & AT TYURATAM LOCATION (KEV 8.37).

N N



(b)(1)

(b)(3)



BYE-107756-71 Copy <u>/0</u> of 14 19 February 1971

MEMORANDUM FOR: Director of Special Projects

SUBJECT

: Photo Reconnaissance Systems Report No. 80

I. CORONA

And Burgar

A. Accomplishments

1. CR-13 (Mission III3) was launched on 17 February 1971 at 2001Z.

2. Software is being prepared to support the antisatellite-satellite contingency plan requested by the SOC. This software will prepare a report of possible antisatellite launch times and possible evasive maneuvers using the DMU system.

B. Problems

CR-13's booster main engine appeared to malfunction followed by a self-destruct at approximately lift-off plus 30 seconds. An Air Force Board of Inquiry is in progress at VAFB.

C. Projected Status

- 1. CR-14. Launch preps.
- 2. CR-15. Back-up preps.
- 3. CR-16. Block preps.
- 4. CR-8. Subsystem acceptance.

62107 1 Excluded from automotic generating and destructionsies

Gin / const

HANDLE VIA BYEMAN CONTROL BYSTEM ONLY

旗

Unclassified Approved for Release: 2018/11/08 C05135556-

G/HX / SECRET

SUBJECT: Photo Reconnaissance Systems Report No. 80

II. HEXAGON

A. General

- 1. WCPO analysis of the SV-l orbit study case indicates significant gaps in coverage during the first two buckets and recommended to SPO and STC a period change that would improve coverage. The Operations IFWG has "approved" the study case for SV-l; however, plans to rerun some orbit cases to see if improvement is feasible in time for SV-l.
- 2. The planning for on-orbit contingencies relating to SS operations is proceeding in a satisfactory manner.
- 3. TRW personnel successfully checked out the initial "HOPE" versions on the WCPO computer. Copies of the program decks were left with WCPO personnel to allow "HOPE" support of A-2 Chamber testing on SV-1.
- 3. Recent film tracking difficulties at both PE and LMSC resulted in a meeting at PE with EK on 18 February. The data presented by PE gives some correlation between takeup mistracking and film taper. Whether this is a new problem caused by an increase in film taper or an old one which had been masked by more severe film tracking problems is not determinable. EK agreed to undertake two actions to alleviate and/or explain this anomaly: (1) data on several Mylar base runs will be compared to determine if the taper has changed recently, (2) samples from the head and tail of segments of film will be measured for taper, and this information will be used to determine maximum lengths between splices, with reversals of taper direction between splices, in constructing two new supplies for the flight load for SV-1.

BYE-107756-71 Page Two



C/IIX SECRET

SUBJECT: Photo Reconnaissance Systems Report No. 80

4. A spares data package technical certification was held at PE on the uncage command and control box (8A1), the remainder of the auxiliary takeup, the takeup rollers, and the power bus module. The packages were satisfactory except for two open items on the 8A1--an integrated circuit test report anomaly and the lack of system reverification requirements for this box.

5. PE's film core design for the systems 7 through 12 is incompatible with the Kodak film spooling equipment. Kodak met with PE on 18 February to discuss this matter. The spooling machine mandril is affected, and EK is now assessing the problem and will determine whether new ones will be required or if the existing ones can be modified.

B. Model Status

447

1. Development Model (SDV-III)

During this reporting period, the AVE system umbilical drop tests were completed. The phase I VTS compatibility test has also been successfully completed. Phase II SCF-VTS compatibility test has been initiated with the midsection portion beginning on 18 February.

2. SV-1 (SN-003)

SV-1 is undergoing A-2 Chamber tests. The inair portion of this activity has been completed, and data evaluation began on 18 February.

3. SV-2 (5N-002)

a. Forward Section

Buildup activity has halted awaiting the receipt of builder roller retrofit parts.

BYE-107756-71 Page Three C/HX / SECRET

SUBJECT: Photo Reconnaissance Systems Report No. 80

Functional testing of the system will resume immediately after the accomplishment of these mods. At present RV/TUA's have been installed in F/S Bays 4, 3, and 2. TUA S/N 017 scheduled for Bay 1 is undergoing R&I.

b. Midsection

Chamber "A" acceptance tests at 70°F are being run today. The chamber will be repressurized, and the film removed tomorrow (20 February).

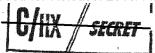
4. SV-3 (SN-004)

- a. The 2A3 box test program has been completed and the system now has its final complement of electronics of the proper configuration except for the 16A1 (due in on 23 February) which is not critical for the MFN 3.09 tests.

 MFN 3.09 is scheduled to begin 23 February.
- b. The simulated takeup has been replaced with the EM-1 takeup.
- c. The "A" side has successfully completed the MFN 3.05 test matrix. The "B" side has experienced a film shift problem which seems to be velocity sensitive. The looper is suspect (at the housing attachment), and this will be verified and hopefully corrected by 20 February.
- d. A special engineering test will be conducted on 20 February with the crossover to determine the effect of adding rollers to the crossover/film drive interface.

BYE-107756-71 Page Four





SUBJECT: Photo Reconnaissance Systems Report No. 80

III.	Meetings Requiring Participation of Headquarters Personnel					
	<u>Date</u>	Subject	Attendees			
	HΩ					
-Ni	24-26 Feb	Follow-on Negotiations				
	25 Feb	Qual Status	Staff, SETS			
	PE		•			
	23 Feb	Electronic Qual Review				
	23 Feb	Performance Review	Patterson Kohler,			
	Westover AF	"B	•			
	22-26 Feb	SN-002 Performance Data Review	Kohler,			
	WCPO	•				
	23-25 Feb	A-2 Test Data Review				

DONALD W. PATTERSON D/PRS/OSP

BYE-107756-71 Page Five





SUBJECT: Photo Reconnaissance Systems Report No. 80

Distribution:

Cy 1 - D/OSP

Cy 2 - ADD/OSP

Cy 3 - D/PRS/OSP

1

Cy 4 - EO/OSP

Cy 5 - SA/IS/OSP

Cy 6 - CS/OSP

Cy 7 - C/PAD/OSP

Cy 8 - C/SB/OSP

Cy 9 - C/SS/OSP

Cy 10 - RB/OSP

Cy II - PRS/file

Cy 12 - PRS/chrono

Cy 13 - NEPO

Cy 14 - WCPO

BYE-107756-71 Page Six C/HX / SECRET

BYE-107829-71 Cy <u>/o</u> of 14 26 February 1971

MEMORANDUM FOR: Director of Special Projects

SUBJECT

: Photo Reconnaissance Systems Report No. 81

I. CORONA

A. Accomplishments

- 1. CR-14 was pulled up for Mission 1114 launch on 24 March 1971, or 31 March if a P-11 payload is desired.
- 2. A study of the six-pack configuration has begun. The goal is to complete the study (integrated with vehicle considerations) by 26 March 1971.
- B. Problems

No major problems.

C. Projected Status

- 1. CR-14. At launch preps.
- 2. CR-15. Pre-back-up preps.
- 3. CR-16. Block preps.
- 4. CR-8. Integrated assembly.

BROW 1
Excluded from automotic
sowngrading and
declassification

C/HX SECRET

HANDLE VIA BYEMAN CONTROL BYSTEM ONLY G/IIX / SECRET

SUBJECT: Photo Reconnaissance Systems Report No. 81

II. HEXAGON

A. General

There's

- 1. SETS personnel have been at the WCPO during most of this week to prepare the "HOPE" Report (REBOUND-830) for the A-2 Chamber test of SV-1. No problems are expected, and the report will be provided to users on 26 February.
 - 2. Film deliveries his week:
 - 2 110,000 ft. rolls Type 1414 to PE
 - 1 26,000 ft. roll SO-255 to PE
 - 2 10,000 ft. rolls SO-255 to PE
 - 4 10,000 ft. rolls Type 1414 to RCA
- 3. A Qualification Program Status Review was held at Headquarters with SETS participation. The Headquarters position was derived and PE is being advised of the remaining open items and action items which must be completed before the system is considered qualified.

B. Model Status

1. Development Model (SDV-III)

The SCF/VTS Phase 2 compatibility test was completed. EMI test run No. 1 was successfully accomplished and run No. 2 has begun.

2. SV-1 (SN-003)

SV-1 is undergoing A-2 Chamber tests now scheduled for completion on 27 February. No real-time

BYE-107829-71 Page Two

C/HX SECRET

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

Approved for Release: 2018/11/08 C05135556

C/HX SECRET

SUBJECT: Photo Reconnaissance Systems Report No. 81

anomalies have been observed. Recovered film will be sent to EK for processing on 28 February.

3. SV-2 (SN-002)

a. Forward Section

The forward section buildup continues at a slow pace while awaiting the corrected procedures for builder-roller retrofit. Activities since the last reporting period involved roller alignment verifications and articulator mods.

b. Midsection

The 70°F, and 49°F. Chamber "A" tests have been completed. The 93°F, tests are scheduled for 28 February. Shipping preps are scheduled to be completed on 5 March.

4. SV-3 (SN-004)

Midsection

The new crossover configuration is being tested in two steps. The first test with an added cluster roller on the return side of the film drive did not show improved tracking. A second test with a cluster roller added on the output of the crossover on the looper side is now underway. This and other day-to-day problems have delayed the start of MFN 3.09 on SN-004. The crossover testing is scheduled for completion 27 February, and MFN 3.09 should commence Tuesday 2 March

BYE-107829-71 Page Three

C/HX SECRET

HANDLE VIA BYEMAN CONTROL SYSTEM DNLY

Approved for Release 2018/11/08 C05135556

C/HX / SECRET

SUBJECT: Photo Reconnaissance Systems Report No. 81

Since the supply (No. 5004) has an MRB against the beliews, it will be pulled out of the system, probably after the first 70° in-air run and replaced with supply No. 5002. Supply No. 5004 will be reworked for a later model. The schedule now projects a 4/13 ship date.

5. SV-4 (SN-005)

Midsection

The OB has been installed on the "B" side and tests are being conducted. There is a phasing problem with the platen being resolved. Testing of the "B" side will continue and should be completed by 10 March. The "A" side OB is scheduled to be installed by 12 March with a complete TCA buildup by 15 March.

III. Meetings Requiring Participation of Headquarters Personnel

Date	Subject	Attendees
PE		
1 Mar.	SN-004 Readiness Review	
3 Mar. (tent)	Film Taper Problem	
RCA		
4 Mar.	P4-3 Takeup Buyoff	

BYE-107829-71 Page Four



HANDLE VIA BYEMAN CONTROL SYSTEM ONLY

Approved for Release: 2018/11/08 C05135556

SUBJECT: Photo Reconnaissance Systems Report No. 81

Subject Attendees Date Westover AFB SN-002 and SN-003 Data 1 - 5 Mar. Burks Evaluation Kohler (5th only) EK Film Scheduling and Core 4 Mar. Data Review HQ 2 Mar. Q. A. Manual Revision

> DONALD W. PATTERSON D/PRS/OSP

Distribution:

Cy 1 - D/OSP

Cy 2 - ADD/OSP

Cy 3 - D/PRS/OSP

Cy 4 - EO/OSP

Cy 5 - SA/IS/OSP

Cy 6 - CS/OSP

Cy 7 - C/PAD/OSP

Cy 8 - C/SB/OSP

Cy 9 - C/SS/OSP

Cy 10- RB/OSP

Cy 11 - PRS/File

Cy 12- PRS/Chrono

Cy 13- NEPO

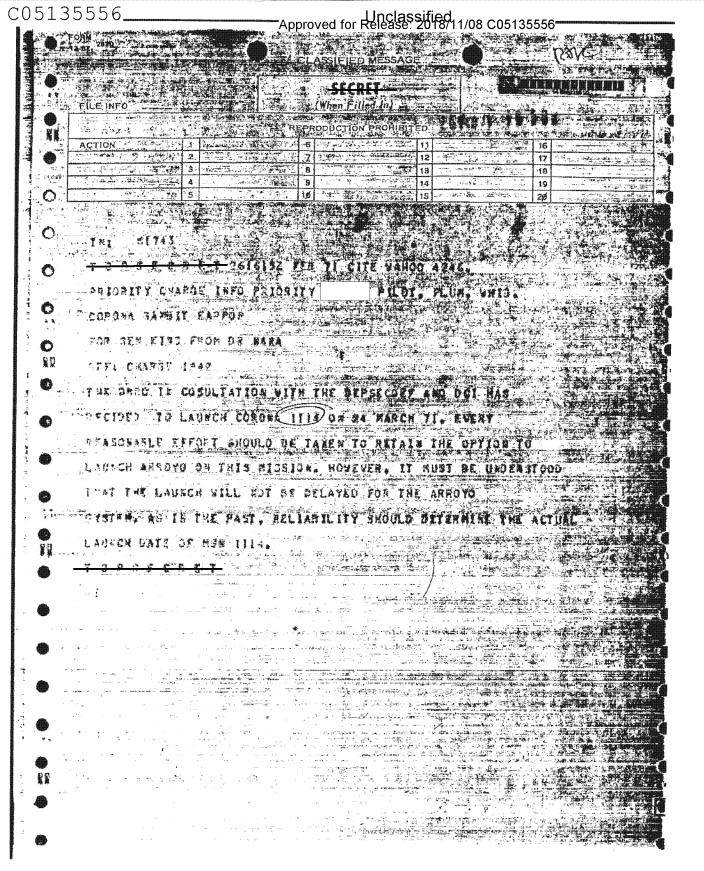
Cy 14- WCPO

BYE-107829-71

Page Five

Working Session

HANDLE VIA BYEMAN CONTROL SYSTEM ONLY



(b)(1)

(b)(3)