

LOCKHEED MISSILES & SPACE COMPANY
INTERDEPARTMENTAL COMMUNICATION

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DATE 23 Apr 55
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EXT.



SUBJECT: FEDR SUMMARY - POST DD250 SUPPLEMENT NO. II - VEHICLE 1614

The attached Supplement has been prepared to summarize the FEDR's generated subsequent to Supplement No. I. The Supplement is as follows:

Section II - FEDR's functional in nature, against equipment on vehicle.

Section III - FEDR's, non-functional in nature, against equipment on vehicle.



Chief
Program Product Assurance

Prepared By:



Vehicle Reliability Engineer
Product Assurance



Distr:



Declassified and Released by the N R O

In Accordance with E. O. 12958

on NOV 26 1997

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13 Apr 61

EQUIPMENT INSTALLED AT VL B.
Post DD-250 Supplement II

S/N	S/N	NAME	EDR	REPORTED
1461822	117	Magnetometer	None	-
1461833-3	59326	H ₂ Pressure Transducer		
1345158-505	1071-1009	Sw Motor Module	None	*
1461718-01	5250	Sw Sampling Motor	None	*
25-140606-25	307	S-Band Transponder	None	x
1345158-505	1071-1001	Sw Motor Module	282287	Post DD250 Supp. No. II Section II
1461687-3	26	H ₂ S/O Valve (S-Flonid)	808401	Post DD250 Supp. No. II Section III
1345158-505	1071-1032	Sw Motor Module	282217	Post DD250 Supp. No. II Section II
1461718-01	4139	Sw Sampling Motor	130287	Post DD250 Supp. No. II Section III
1461895-3	63-821	Programmer, Type VIII	85193 208029 218036 219187 253158	Post DD250 Supp. No. II Section II, III " " "

* Replacement - Original unit cannibalized to install on 1611
 * Replacement - Original unit cannibalized to install on 1613

FEDR'S WRITTEN AGAINST EQUIPMENT ON VEHICLE

Form Post DD-250 - Supplement II

ITEM	PART NAME & NUMBER	S/N	FEDR NUMBER	DATE FOUND AREA FOUND	DESCRIPTION OF FAILURE/TROUBLE	RELIABILITY FOLLOW-UP, REPAIR AND/OR REPLACEMENT DATA, COMMENTS & CORRECTIVE ACTION
1/1	Aft Section 1397368-505	1003- 1011	255237	4-14-65 VAFB	Leak at 1/8 line "B" nut at reducer on N ₂ regulator. N ₂ pressure was pressurized to 2780 psig.	Engineering Disposition: Install conical seals, retorqued and retest per [REDACTED]
1/1	Aft Section 1397368-505	1003- 1011	253229	3-17-65 VAFB	During TP Run (V50064C) a hydraulic leak was detected at "B" nut on inlet fitting of Yaw actuator.	Fitting retorqued to maximum value. Retest OK per V50064C.
2/15	Sw Meter Module 1345150-505	1071- 1032	251147	3-11-65 VST (1616)	During MFP run, meter speed was 27% sls (max 25%)	Motor Removed and Replaced. Motor S/N 5362 removed, RTV 4-10-65 - no C/A information from vendor as yet. New motor S/N 4139 installed. Unit retested OK per ATP/MFP.
11/50	Sw Sampling Motor 1461718-11E		243037	10-2-64 VST (1173)	Total accumulated time is 233.87 hrs with test time at VAFB added. Unit will be over 250.0 hour ground limit.	Unit removed. RTV. Motor refurbished by vendor (is new bearings, new gears, new brushes). Motor run-in, tested OK per a.i.p.

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VEHICLE 1614

23 Apr 65

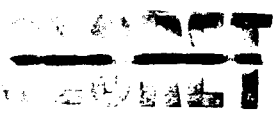
FEDR'S WRITTEN EQUIPMENT ON VEHICLE

Post DD-250 - Supplement II

ITEM	PART NAME & NUMBER	S/N	FEDR NUMBER	DATE FOUND AREA FOUND	DESCRIPTION OF FAILURE/TROUBLE	RELIABILITY FOLLOW-UP, REPAIR AND/OR REPLACEMENT DATA, COMMENTS & CORRECTIVE ACTION
1.1/55	Programmer, Type VIII 1461895-27* (Mech. Unit) (63-821)		85193	10-11-63 VST (1602)	When brushes are in groove, contact is intermittent. S/B continuous action.	Contact drums examined under 10 power glass. Drums show evidence of residue. Fairchild Representative cleaned unit per Fairchild per [redacted] Unit retested OK per [redacted]
1.2/56	Programmer, Type VIII 1461895-29(x) (Elect. Unit) (63-821)		208029 VAFB	4-18-64 VAFB (1604)	Subcycle counter will not advance by console command, or by tape advance mechanism.	Failure investigation revealed that relay K was intermittent. Subcycle module removed. sent to vendor for failure analysis. Module replaced - Unit retested OK per ATP.

* Now to latest modification as a -33
 * Now to latest modification as a -35

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FEDR'S REVIEWED AND NOT LISTED IN SECTION II

Post DD-250 - Supplement II

FEDR NUMBER & DATE	NOMENCLATURE	PART NUMBER	COMMENTS
253270 3-31-65 7AFB	T/C Finish	1264752-511 WSN	Tape on black finish of booster adapter. Slight flecks of paint were removed when tape was removed. Disposition: Touch up the finish as required per [redacted] Inspected OK.
219036 3-16-64 (1604)	Programmer, Type VIII (Elect. Sect.)	1461895-29 (63-821)	Case has numerous gouges near Plug HL92J2. Burnish to remove, burra, touch up paint to conform to B/P.
219187 3-23-64 (1604)	Programmer, Type VIII (Mech. Sect.)	1461895-31 (63-821)	J3 plug bracket has four (4) rivets sheared. Rivets replaced. Torque requirements for subject plug and retainer to be reviewed for possible overstressing of rivets.
253158 3-10-65 (1613)	Programmer, Type VIII (Mech. Sect.)	1461895-33	Tape Drive Motor removed and replaced per [redacted] dtd 9 Mar 65. New motor contains welded rotor instead of soldered configuration.



APPROPRIATE AND DEARNS

WAS NO.	AFFECTED ITEM	EFFECTIVITY SERIAL NO.	DATE LOGGED	INSTALLED SERIAL NO.	WAS STATUS	DATE CLOSED
75A	Pin Pusher, H/S Fairing	All Vehs.	1-14-65	NSN	Comp	1-14-65
75A	Grnd Wire, H/S	AD 82 & dwn	No Record	1005-1001	"	1-2-61
81A	Signal Cond., Type 2h	All Units	10-8-64	1102-1010 1152-1011	"	11-20-64
83	Switch & Cal Unit	" "	No Record	1190-1018	"	Closure Ltr dtd 8-27-64
92	Prop Vent Coupling	" "	" "	1053-1010 1053-1029	"	Closure Ltr dtd 8-27-64
93A	DC/DC Conv., Type X	" "	" "	13249	"	1-2-61
94	FM/FM TIM, Type V	" "	6-30-64	1147-1013	"	1-27-65
95A	TM Counter	300-399	12-22-64	1196-1014 (393)	"	11-21-64
96A	Bellows, Tee	AD 62 & up	11-9-64	1076-1013	"	11-12-64
113	Ox & fuel Fill Doors	All Units	No Record	NSN	"	1-2-61
114	Reducer, Fuel & Ox	" "	No Record	1072-1014 1073-1017	"	1-2-61
117	VM Accel. Elect. Pkg.	423 & dwn	No Record	1196-1015	"	Closure Ltr dtd 8-27-64
120	DC/DC Conv., Type X	1103h & dwn	" "	13249	"	ATTN: 1-2-61
105	Coax Plug	AD 84 & dwn	" "	NSN	"	1-2-61
131B	Decoder, IX	As Requested	1-8-65	1142-1117, 1119,1119, 1122,1117, 1145,1119	"	1-21-65 1-27-65 1-27-65
135	Connector	J-1000	11-12-64	NSN	"	11-13-64
137	Tee Ox Feed	1610-1620	10-28-64	NSN	"	11-5-64
146	DC/DC Conv., Type X	11655 & dwn	11-10-64	13249	"	1-21-65
141	DC/DC Conv., Type IX	11379 & dwn	11-14-64	1082-1010 (9197)	"	11-30-64
150	Bolts, Inid. Module	1608 & up	2-3-65	NSN	"	2-3-65
160	Thrust Valve Cluster	All Units	2-5-65	1070-1126(95) 1070-1128 (136)	Comp. "	2-10-65 "
169	Programmer, Type VIII	63-855 & dwn	3-12-65	Not Installed	Open	
175	Primary Battery	1613-1615	3-26-65	Not Installed	"	Sqk #69
177 182	Valve S.O., H.C.	1613-1623	4-22-65	131A	Comp	4-23-65

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LOCKHEED MISSILES & SPACE COMPANY
INTERDEPARTMENTAL COMMUNICATION

TO

[REDACTED]

DEPT.
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BLOG

PLAN/7
FAC. 1

DATE 23 Apr 65

FROM

[REDACTED]

DEPT.
ORGN

BLOG

PLAN/7
FAC. 1

CO. 2515

SUBJECT: VEHICLE 1614 READINESS REVIEW QUALIFICATION STATUS

Ref: Veh. 1614 Component Serial Number List, Updated 22 Apr 65

All Program [REDACTED] Peculiar Components as noted in the referenced list
are qualified.

[REDACTED]

Lock Engineer
Program Product Assurance

Approved:

[REDACTED]

Chief
Product Assurance

cc: [REDACTED]

[REDACTED]

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FOR OFFICIAL USE ONLY

Control No.:

Revision:

[Redacted]

3

VAFB PRODUCT ASSURANCE
VEHICLE/AGE STATUS SUMMARY

The following summary depicts the status of Vehicle 1614 and the AGE, PALC I Complex, Pad 1, used in support of this vehicle, as of 0800 hours, 26 April 1965. Vehicle pre-launch processing to this date, including all Product Assurance functions, are complete with the exceptions listed herein.

PREPARED BY:

[Redacted]

PR-PA Program Representative

APPROVED:

[Redacted]

PR Product Assurance Manager

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Control No.: [REDACTED]

Revision: 3

Page: 1

1.0 VEHICLE LOG BOOK

1.1 DD250 and attachments -- No exceptions.

1.2 Log of Design Changes -- No exceptions.

1.3 Log of Operations

Pad Recycle Item 11, "Perform Systems Test Phase I Backups per [REDACTED]
Acceptable less Discrepancy Item 83.

Discrepancy Item 83, dated 19 April 1965, states, "IS: TPCN required on [REDACTED] Systems Test Phase I per Recycle L.O.O. Item 11. S/B released TPCN to cover changes to T.P. (NC-2 TPCN released but did not cover Item 270, Page 65, Task 6.)"

Action Required: Released engineering documentation (NC-3 TPCN to cover omitted item on T.P. Open Item Index, Form LVF 1380.)

Pad Recycle Item 15, "Perform Systems Test Phase II Primary per [REDACTED]
Acceptable less Discrepancy Item 87.

Discrepancy Item 87, dated 20 April 1965, states, "IS: [REDACTED] was completed to write-in changes as noted on LMSC Form LVF-1380, T.P. Open Item Index, during run of T.P. S/B TPCN to cover changes to original T.P."

Action Required: Released engineering documentation.

R-Day Item 4.0, Page 1, "Perform Premate Pyro Installation per [REDACTED]
Separation System." Acceptable less Discrepancy Item 99.

Discrepancy Item 99, dated 23 April 1965, states, "IS: Step 4.9.4.5 of [REDACTED] deleted in part. S/B no deviation to T.P."

Action Required: Released engineering documentation.

R-Day Item 8, Page 4, "Perform Systems Test, Phase 3, (Vehicle Mate) per [REDACTED]
"Acceptable less Discrepancy Item 98.

Discrepancy Item 98, dated 23 April 1965, states, "IS: TPCN required on [REDACTED] T.P. changes listed on Form LVF 1380, T.P. Open Item Index. S/B released TPCN to cover changes made to T.P."

Action Required: Released engineering documentation.

1.4 Discrepancy Log

Item 84, dated 19 April 1965, states, "IS: No proof of UAS 169 being accomplished on Type VIII Programmer, P/N 1461895-33. S/B Programmer identified with decal indicating compliance with UAS 169.

NOTE: Inspect flight Programmer when released from SS/L during R-Days.

Action Required: Programmer delivered to vehicle and checked for compliance with UAS 169, or disposition.


Item 100, dated 23 April 1965, states, "IS: [REDACTED] was completed to write-in changes during test. S/B TPCN to cover changes to T.P."

Disposition States: TPCN to follow. [REDACTED] 77-13, 4-23-64.

Action Required: Released engineering documentation.

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Control No.: 
Revision: 3
Page: 2

1.5 Controlled Functional Equipment

The Absolute Life Limit Records have been reviewed. All components installed on this vehicle have sufficient calendar life remaining prior to the anticipated launch.

The Operations Records have been reviewed. The accumulated operating time and cycles of each component installed on this vehicle is within the ground life limit established for each of these components.

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SECRETControl No.: [REDACTED]
Revision: 3
Page: 3

2.0 A.G.E. LOG BOOKS

2.1 PALC I Complex, Pad 1 Area

2.1.1 Log of Design Changes -- No exceptions.

2.1.2 Log of Operations

R-Day Item 7.0, Page 16, "Perform Regulator Setting and Transducer Calibration per [REDACTED] Items 4.8 and 4.5 only. Leak check ports at working pressures upon completion of test."
Acceptable less Discrepancy Item 67.

Discrepancy Item 67, dated 24 April 1965, states, "IS: Reference [REDACTED] R-Day Item 7.0, Page 16; is revision to T.P. Page 7, Item 4.5.6 without TPCN. S/B TPCN to cover changes to T.P."
Action Required: Released engineering documentation.

2.1.3 Discrepancy Log

Item 70, dated 24 April 1965, states, "IS: [REDACTED] used to test Umbilical Q.D.'s. S/B "A" change on TP per [REDACTED] TPCN required."

Action Required: Released engineering documentation.

2.2 PALC I Complex, Pad 1 Blockhouse

2.2.1 Log of Design Changes -- No exceptions.

2.2.2 Log of Operations -- No exceptions.

2.2.3 Discrepancy Log

Item 15, dated 24 April 1965, states, "IS: [REDACTED] changed to conform to Systems Run per T.P. Open Item Index, LMSC Form LMF 1380, to T.P. 'Permanent Record' copy in LOB. S/B TPCN to cover changes.

Action Required: Released engineering documentation.

2.3 PALC I Complex R.F. Area--Pad 1 LOB

2.3.1 Log of Design -- No exceptions.

2.3.2 Log of Operations -- No exceptions.

2.3.3 Discrepancy Log -- No exceptions.

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