

20 Dec 1965

14 00062380

[REDACTED]

~~TOP SECRET~~ 221615Z

[REDACTED] CITE [REDACTED]

CORONA

ATTN: [REDACTED]

FROM: [REDACTED]

SUBJ: J-22 PREPAD CHECKOUT FAILURE

1. ON 6/8/65, DURING PREPAD CHECKOUT OF J-22, FILM WAS PULLED FROM THE RAILS OF THE SLAVE INSTRUMENT.

2. THE CONTRACTOR HAS COMPLETED ALL KNOWN INTENDED SPECIAL TESTS TO ESTABLISH A FIX FOR THE FAILURE. TO OUR KNOWLEDGE, NO TESTS HAVE BEEN RUN TO DUPLICATE THE FAILURE TO FIRMLY ESTABLISH THE CAUSE. THE SPECIAL TESTS PERFORMED AND THE RESULTS ARE SUMMARIZED AS FOLLOWS:

A. CHECKED B CASSETTE ALIGNMENT AND FOUND TO BE NOMINAL.

B. MEASURED FORCE REQUIRED TO PULL EK SPLICE THROUGH B CASSETTE HUB ROLLERS. FORCE DETERMINED TO BE 18 OUNCES (SPEC VALUE UNKNOWN).

C. A BUCKET CASSETTE TENSION CHECKED:

	PUCK ARM (HUB)	SPEC	PUCK ARM (RIM)	SPEC
CASSETTE SPOOL 1	40 OUNCES	44-48 OZ	20 OUNCES	19 OZ MIN.
CASSETTE SPOOL 2	47 OUNCES	44-48 OZ	20 OUNCES	19 OZ MIN.

[REDACTED]

D. CHECKED A BUCKET CASSETTE RPM AT 27 VOLTS. SPEC VALUE PLUS OR MINUS 5 PERCENT OF AP RECORDED VALUE (120 RPM FOR BOTH).

NO 1 117 RPM

NO 2 118 RPM

E. WITH J-22 ASSEMBLED, RAN THREE (3) EK SPLICES AND FOUR (4) BOSTON SPLICES THROUGH B BUCKET SLAVE CASSETTE AT A HIGH CYCLE RATE (3 SEC/CYCLE).

NORMAL OPERATION OBSERVED.

F. CHECKED SUPPLY CASSETTE TENSION. SPEC VALUE 13 PLUS OR MINUS 1 OUNCES.

NO 1 14 OUNCES AT 0 DEGREES

14.5 OUNCES AT 270 DEGREES

NO 2 13 OUNCES

3. IN NONE OF THE ABOVE TESTS WAS AN ATTEMPT MADE TO DUPLICATE THE FAILURE IN ORDER TO VERIFY OR ESTABLISH THE CAUSE, I.E., THE CAUSE IS GENERALLY BELIEVED TO BE A HANG UP OF THE EK SPLICE DUE TO OPERATION OF THE SLAVE INSTRUMENT AT A SLOW CYCLE RATE (APPROX 5 SEC/CYCLE).

4. BECAUSE OF THE CATSTROPHIC NATURE OF THIS FAILURE IT IS FELT THAT PREFLIGHT PREPARATION OF J-22 SHOULD NOT CONTINUE UNTIL VERIFICATION OF THE FOLLOWING FROM YOUR OFFICE:

A. AGREEMENT WITH THE CONTRACTOR ANALYSIS AND SUBSEQUENT SOLUTION TO THE FAILURE: TO PROGRAM ONLY A HIGH CYCLE RATE DURING PASSAGE OF AN EK SPLICE THROUGH THE B CASSETTE.

B. AGREEMENT WITH THE RESULTS OF THE SPECIAL TESTS PERFORMED.

C. AGREE THAT NO ADDITIONAL TESTING IS REQUIRED AT VAFB IN REGARD TO INVESTIGATING THIS FAILURE.

5. AGAIN, BECAUSE OF THE CATASTROPHIC NATURE OF THIS TYPE OF FAILURE, IT IS STRONGLY RECOMMENDED THAT ADDITIONAL CONSIDERATION BE GIVEN TO ATTEMPTS TO DUPLICATE THE SUSPECTED FAILURE MODE EITHER WITH J-22 OR AN UP STREAM SYSTEM. SHOULD THE FAILURE NOT BE DUPLICATED, IT WOULD INDICATE THE NEED FOR CONSIDERABLY MORE INVESTIGATION BEFORE PROCEEDING WITH THE NEXT LAUNCH.

~~TOP SECRET~~

END OF MESSAGE