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(When Filled In)



FILE INFO

REPRODUCTION PROHIBITED

25 MAY 68 00 07

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[REDACTED]

~~TOP SECRET~~ 242155Z MAY 68 CITE [REDACTED]

[REDACTED] INFO [REDACTED], [REDACTED]

CORONA/RESIDENT OFFICE

Declassified and Released by the N R C

REF A [REDACTED]

In Accordance with E. O. 12958

B [REDACTED]

on NOV 26 1997

C [REDACTED]

ATTN: [REDACTED], [REDACTED]

SUBJ: MISSION 1103-1 ANOMALY

1. A MORE DETAILED EVALUATION OF 1103-1 PAYLOAD BY [REDACTED] AND S.C. HAS DISCLOSED A FILM ANOMALY, DESCRIBED BELOW, NOT PREVIOUSLY SEEN AT THIS POINT IN FILM REVIEW. THE ANOMALY PATTERN IS ASSOCIATED WITH CAMERA START AND APPEARS TO INCREASE AS MISSION 1103-1 PROGRESSED. THIS DISTURBANCE MANIFESTS ITSELF AS SOFT SPOTS; I.E., NOT SHARP IMAGERY, AND APPEARS IN THE FIRST FIVE OR SIX FRAMES OF THOSE OPERATED WHICH CAN BE USED FOR EVALUATION. THE MOST SEVERELY DISTURBED FRAMES ARE THE THIRD AND FOURTH WHILE THE SIXTH FRAME IS VERY NEARLY NORMAL. IN ALL CASES THE SEVENTH FRAME IS CLEAN AND DEFINITELY ACCEPTABLE FOR EVALUATION BY THE PHOTO INTERPRETER. THE EFFECT OF THIS UNDESIRABLE RESULT IS APPARENT IN BOTH CAMERAS WITH THE FORWARD LOOKING BEING WORSE.

2. IN AN EFFORT TO DETERMINE POSSIBLE REASONS FOR THIS PROBLEM,

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THE FOLLOWING HAVE BEEN INITIATED:

A. [REDACTED] HAS EXAMINED THE PREFLIGHT FILM WITH NO SIGNIFICANT RESULTS. [REDACTED] IS CONTINUING THIS ENDEAVOR.

B. INVESTIGATION OF [REDACTED] TEST HISTORY HAS BEEN COMPLETED. THUS FARR, NO OUT OF THE ORDINARY CONCLUSIONS HAVE BEEN REACHED; HOWEVER, THIS EFFORT IS ALSO CONTINUING AT [REDACTED].

C. MEASUREMENTS OF RAIL HOLES TO FILM EDGE HAVE BEEN MADE UTILIZING [REDACTED] PREFLIGHT TEST MATERIAL AND LIMITED SAMPLINGS OF FLIGHT MATERIAL. THIS WILL ASSIST IN DETERMINING MATERIAL TRACKING ACCURACY. THE RESULTS INDICATE NO UNUSUAL FILM SKEW PRIOR TO OR DURING 1103-1.

D. PREFLIGHT T/U TENSIONS WERE EXAMINED AND FOUND TO BE WITHIN SPECIFICATION.

E. [REDACTED] HAS BEEN REQUESTED TO EXAMINE THE 1103 200 PPS TRACES TO DETERMINE IF THERE WERE ANY SIGNIFICANT VARIATIONS IN SCAN VELOCITY.

F. [REDACTED] HAS ALSO BEEN REQUESTED TO MAKE A CORRELATION BETWEEN THE "SIT" PERIOD AND EXTENT OF ANOMALY DURING THE SUCCEEDING OPERATE.

G. A REVIEW OF THE FILM PATH GEOMETRY INDICATES THAT THE

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PAGE 3 ██████████ T O P S E C R E T

THIRD AND FOURTH FRAMES LIE WITHIN THE AREA OF THE INPUT METERING ROLLER WHILE THE REMAINDER, FIRST AND SECOND FRAMES, LIE WITHIN THE SHUTTLE AND INPUT A.O. ASSEMBLIES DURING "SIT" PERIODS.

4. A REVIEW OF 1101 AND 1102 ENGINEERING DP'S HAS BEEN INITIATED AND WILL BE COMPLETED BY 1 JUNE. THIS WILL DETERMINE WHETHER THE 1103 PROBLEM WAS PRESENT ON 1101 AND 1102 BUT NOT DETECTED.

3. OF THE MANY POSSIBLE HYPOTHESES AT THIS TIME, THE MOST PROBABLE IS THAT THE FILM FROM THE SUPPLY SPOOL TO THE FORMAT AREA DURING SHUT-DOWN (SIT PERIOD) HAS BEEN DEFORMED BY THE ROLLERS AND FILM TWISTS. THIS IS ATTRIBUTABLE TO THE FACT THAT SOME CORRELATION EXISTS BETWEEN VERY LONG SIT PERIODS, SIX HOURS OR MORE, AND THE WORSE ANOMALIES. IT IS EMPHASIZED THAT THESE ARE NOT DEFINITE OR FINAL CONCLUSIONS REGARDING 1103. NORMALLY THESE DEFORMATIONS ARE "IRONED OUT" BY THE DYNAMIC TENSION AND SCAN HEAD ROLLERS. THE FILM TENSIONS RUN DURING THE EARLY FRAMES OF SOME CAMERA OPERATES APPEARED TO BE LOWER THAN NORMAL IN THE A BUCKET. THIS LOWER TENSION IS PROBABLY THE CAUSE OF THE ANOMALY OUTLINED IN PARA 1 ABOVE. THE B BUCKET WITH A DIFFERENT TAKE-UP DID NOT EVIDENCE THE SAME ANOMALY.

4. CONCERNING PREVENTION OF A SIMILAR RECURRENCE ON 1104, 5 AND

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6, WE ARE RECONDUCTING DR. A. TESTS ON THESE INSTRUMENTS. CURRENTLY, WE ARE PLANNING TO CONDUCT DR. A'S CONCURRENT WITH HIVOS TESTS OF FUTURE SYSTEMS IF POSSIBLE WITHOUT UNDUE RISK OR MAJOR CHANGE FROM FLIGHT CONFIGURATION. THIS WOULD, OF COURSE, PROVIDE THE BEST POSSIBLE REVIEW OF THE FILM IN THE PLATEN AREA DURING DYNAMIC OPERATION IN THE SPACE ENVIRONMENT. ADDITIONALLY, WE WILL INCORPORATE CORRECTIVE ACTION RESULTING FROM THE 1103 PET MEETING CURRENTLY PLANNED FOR 11-12 JUNE PLUS ALL CORRECTIONS FROM THE ACTIONS OUTLINED IN 2 ABOVE.

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