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25 November 1968

MEMORANDUM FOR: Director, Office of Special Projects  
SUBJECT : Plan of UTB Task Team Analysis  
REFERENCE : [redacted]

A preliminary plan for analysis of the CORONA UTB problems has been established. The task team is going to assess, in concert with the Project Office,

1. The testing done to date on UTB, both transport and "Dr. A."
2. The testing done specifically on CR-5 that lead to a decision to fly with UTB.
3. The physical characteristics of UTB and their importance in the J-3 system.
4. The accuracy and validity of "Dr. A" testing for UTB as well as the needs for additional tests.
5. The effect of tension and lift on film flatness.
6. The likelihood of future success with UTB, and a test program aimed at assuring such success.

Attached for your information are the following TABS:

TAB A - A synopsis of the analysis of Mission 1105-2 conducted at the processing site on 23 November 1968.

TAB B - Our current assessment of the problems affecting CR-5 and UTB analysis.

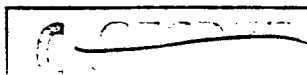
TAB C - Our immediate recommendations

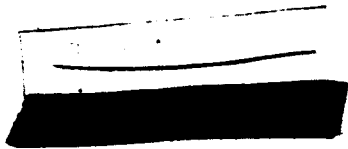
TAB D - A schedule of immediate activities

Declassified and Released by the N R C

In Accordance with E. O. 12958

on NOV 26 1997





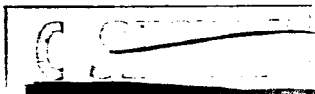
SUBJECT: Plan of UTB Task Team Analysis

We currently envision a preliminary report by 31 December 1968 and a final report by 1 April 1969.



  
Vernard H. Webb

Distribution:





TAB A

MISSION 1105-2 PRELIMINARY FILM ANALYSIS

- FILM PLANE IS LOCATED AFT OF FOCAL PLANE
- MORE VARIABILITY EXISTS IN FILM PLANE LOCATION  
(FOCUS) THAN NORMAL FOR CORONA MISSIONS  
(VARIABILITY IN FILM LIFT)
- MORE VARIABILITY IN LATERAL FILM MOTION (X AND Y)  
DURING EXPOSURE THAN NORMAL (INCREASED SMEAR  
CONTRIBUTION)
- FILM PRESSURE MARKING MORE SEVERE FOR UTB THAN STB
- 3404 STB STRIP EXHIBITED LESS VARIABILITY AND SMEAR,  
BUT WAS NOT AS GOOD AS EXPECTED. SHORT LENGTH,  
LACK OF SI COVERAGE, AND AFT CAMERA POSITION HAMPERED  
ANALYSIS.
- SO121 SHOWED SEVERE FILM BOW NOT EVIDENCED ON SO 180



TAB B

PROBLEMS AFFECTING CR-5 AND UTB ANALYSIS

- DATA ON FILM PHYSICAL CHARACTERISTICS IS IN GENERAL INADEQUATE ON ALL FILM TYPES.
- A GROSS DEFICIENCY EXISTS IN DATA ON VACUUM CHARACTERISTICS OF ULTRA THIN BASE AND OTHER SO TYPE FILMS.
- NO CAPABILITY EXISTS FOR VACUUM RESOLUTION TESTING ON THE CORONA PROGRAM.
- FILM FLATNESS TESTS ARE LIMITED IN CAPABILITY TO DETECT DEFECTS DUE TO BOTH SENSITIVITY AND SAMPLING PROCEDURES.
- EFFECTS OF FILM TRANSPORT SYSTEM TENSIONS ON FOCAL PLANE FILM FLATNESS ARE NOT KNOWN.
- UTB TESTING HAS BEEN ON SO MANY SYSTEM CONFIGURATIONS THAT CORRELATION OF DATA IS DIFFICULT, E.G.  
BRASSBOARD, 299, CR-3, CR-5, CR-6/7, CR-8 AND SUB. ALL HAVE SLIGHTLY DIFFERENT FILM TRANSPORT CHARACTERISTICS.
- THE VAST MAJORITY OF UTB DR. A TESTING HAS BEEN DONE IN AIR. PROBABLY NOT APPLICABLE TO THE IN VACUUM CONDITION.

TAB C

RECOMMENDATIONS

- NO FURTHER FLIGHT TEST WITH UTB UNTIL AFTER GROUND TEST PROGRAM COMPLETED.
- ONLY CR-8 AND SUBSEQUENT SYSTEMS BE CONSIDERED FOR UTB FLIGHTS.
- A TEST PROGRAM SHOULD BE ESTABLISHED TO ANALYZE BOTH FILM PROPERTIES AND FILM-SYSTEM INTERACTIONS.
- A BRIEFING ON THE 1105 MISSION AND THE TEST PROGRAM SHOULD BE GIVEN TO THE DNRO IN LATE DECEMBER.
- A FINAL REPORT FROM THE TEST PROGRAM SHOULD BE PUBLISHED PRIOR TO THE CR-8 FLIGHT.

TAB D

ACTIVITY SUMMARY

Date	Place	Activity	Participants
23-24 Nov	[REDACTED]	Film Breakdown Meeting -Preliminary Review of Mission 1105-2	[REDACTED]
26-27 Nov	Bstn.	UTB Program Review I -Review J-3 UTB Test History -Review CR-5 Dr. A Test Results -Examine Adequacy of Dr. A Test -Develop Preliminary Film Test Plan -Develop Preliminary System Test Plan	[REDACTED] Webb,
3-5 Dec	Wash.	1105 PET -Examine 1105 Material in Detail -Conduct Comparison of 1105 and 1103 UTB Tests -Conduct Comparison of 1105 and 1104 Color Tests	[REDACTED] Webb,
12-13 Dec	[REDACTED]	Film Properties Conference -Examine [REDACTED] Data of S.O. Physical Properties Testing	[REDACTED]
19-20 Dec	A.P.	UTB Program Review II -Finalize Film Test Plans - Finalize System Test Plans	[REDACTED] Webb

[REDACTED]