

~~TOP SECRET~~

PRIORITY

TOP SECRET 282020Z

PRIORITY [redacted] 2351

1964 MAY 28 23 25Z

OUT53512 25X1

IDEALIST

ATTENTION: [redacted]

HFS 25X1

SUBJECT: EVALUATION OF MISSION GT 64-109

CJS

STC

1. CAMERA 112B WAS USED IN MISSION GT 64-109 FLOWN ON 21 APRIL 1964, PROCESSING WAS ACCOMPLISHED BY [redacted]

PWS 25X1

2. ORIGINAL NEGATIVE:

ACL

A. THE EXPOSURE WAS ADEUQATE AND THE RESOLUTION IS GOOD.

B. FORWARD (CAMERA I-2): THE FIRST 7 FRAMES ARE GROSSLY FOGGED. FRAMES 8 - 25 ARE FOGGED TO A LESSER DEGREE. RANDOM SAMPLINGS OF FORWARD OVERLAP WERE TAKEN AND THE RESULTS ARE AS FOLLOWS: FRAMES 216-217, 5 PERCENT; FRAMES <sup>442</sup>422-443, 14 PERCENT; FRAMES 498-499, 14 PERCENT; FRAMES 693-694, 0 PERCENT. FRAMES 703-708 ARE GROSSLY FOGGED. FOG OF LESSER INTENSITY APPEARS ON FRAMES 693-702. THE LAST TITLED FRAME IS 708.

Grace (File)

C. AFT CAMERA (I-1) - CREASES WITH ASSOCIATED PLUS DENSITY STREAKS ARE PRESENT ON FRAMES 219, 277, 278, 441, 442, 1492 AND 1493. MINUS DENSITY DOTS WITH TAILS ARE FOUND ON FRAMES 306, 337, 433, 800, 865, 958, AND 1477. A PIECE OF FOREIGN MATTER SURROUNDED BY A PLUS DENSITY RING AND FOLLOWED BY A PLUS DENSITY TAIL IS PRESENT ON FRAME 325. MINOR MINUS DENSITY STREAKS ARE FOUND BOTH PARALLEL TO THE EDGE AND SLOPING ACROSS EACH FORMAT. ONE CONTINUOUS MINUS DENSITY STREAK WAS NOTED 0.8" FROM THE LEADING

25X1

Excluded from automatic downgrading and declassification

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EDGE OF THE FILM. LIGHT HAS FOGGED FRAMES 1-32 AND 1490-1513. A PIECE OF TAPE IS IMAGED ON 14 OF THE LAST 23 FRAMES. OTHER SCRATCHES ARE LOCATED ON FRAMES 1, 2, 9-11 AND 13-17. FORWARD OVERLAP WAS SPOT CHECKED AND RANGED FROM ZERO TO 10 PERCENT. MANUFACTURING SPLICES ARE LOCATED ON FRAMES 717, 1069, AND 1459. THE LAST TITLED FRAME IS 1513.

D. BOTH CAMERAS: EDGE FOG IS CONTINUOUS THROUGHOUT THE MISSION. NUMEROUS LONGITUDINAL MINUS DENSITY STREAKS ARE ALSO CONTINUOUS. RAIL SCRATCHES OF VARIOUS INTENSITIES ARE PRESENT THROUGHOUT. TRANSVERSE BANDS OF VARYING DENSITIES ARE VISIBLE IN AREAS OF LOW CONTRAST,

E. THERE ARE SOME VERY APPARENT DISCREPANCIES IN THE DATA BLOCKS FROM THE PLANNED DATA BLOCKS ON THE SUBJECT MISSION. THESE ARE GROSS ENOUGH TO WARRANT A CHECK OF THE WIRING AND THE READOUT FROM THE CLOCK. LIGHT NO 17 IN THE DATA BLOCKS (2X10 SEC.) DID NOT LIGHT THROUGHOUT THE MISSION. THIS CAUSED CONSIDERABLE DIFFICULTY IN DETERMINING THE PROPER CYCLE PERIOD. LIGHTS NUMBER 3, 4, AND 5, WERE ALL LIT THROUGHOUT THE MISSION, THESE ARE RESPECTIVELY 1X8 HR, 1X4 HR, AND 1X2 HR. THIS ADDS UP TO 12 HOURS, THE 1X HR LIGHT SHOULD HAVE BEEN ON AND THE 8 HR AND 2 HR LIGHTS SHOULD HAVE BEEN OFF BY LOGIC. IF THESE LIGHTS REPRESENT G.C.T. THEN THE TOTAL OF ALL LIGHTS SHOULD NOT EXCEED 24 HOURS AND THEN SHOULD REVERT TO 0. THE LIGHTS THAT WERE SHOWN ON THE TEST MATERIAL TOTALED OVER 32 HOURS. THERE IS STILL NO 1/10TH SECOND READOUT

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ON THE DATA BLOCKS THEREFORE THE CYCLE PERIODS ARE NOT ACCURATE ENOUGH FOR SCAN RATE COMPUTATIONS. THE BINARY DATA BLOCK AND CAMERA NUMBER IS SMEARED AND UNREADABLE ON APPROXIMATELY 20 PERCENT OF THE FRAMES THROUGHOUT THE MISSION. THIS OBVIOUSLY NEGATES ANY AUTOMATIC READOUT OF THE INFORMATION. THE 1/10TH SECOND READOUT SHOULD RESOLVE THIS PROBLEM. ON SOME FRAMES A GOOD AND A SMEARED BINARY DATA BLOCK AND CAMERA NUMBER APPEAR.

F. THE SAME GROSS DATA BLOCK ERRORS ARE EXISTENT IN THE EARLIER MISSION, GT 64-106 WHICH WAS FLOWN ON MARCH 21 1964 BUT THEY ARE MUCH MORE DIFFICULT TO FIND DUE TO THE MANY SMEARED DATA BLOCKS (APPROXIMATELY 80 PERCENT).

G. THE PI SUITABILITY IS GOOD.

H. CLOUDS OBSCURE OR DEGRADE APPROXIMATELY 30 PERCENT OF THE MISSION.

T O P S E C R E T

/END OF MESSAGE/