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9062

January 13, 1964

To: [REDACTED]

From: [REDACTED]

Subject: STELLAR RESULTS FROM M-26 FLIGHT: Recommendations

Stellar photography from M-26 flight has been evaluated. Although up to eleven stars were recorded in a single stellar format, earth light film fog prevented identification of stars in 40% of the stellar format area and vignetting prevented star recording in an additional 10% of the stellar format area.

It is suspected that earth light fog in M-26 stellar photography came from light reflected from the forward rubber side curtain, which is part of the extended baffle assembly. Indications are that the subject side curtain was in the field of view of the stellar lens and was illuminated by earth light.

Recommendations Affecting J-3 and M-27

1. Request that extended baffle be installed so that side curtains are outside of the stellar lens field of view.
2. Request that forward rubber side curtain be cut down to 1/2 its present height.
3. Request that approximately 55 square inches of blackened fairing surface be added to the present black trapezoid on the forward side of the stellar door and extending 6 inches further forward than at present.
4. For systems other than M-27 and J-3, conduct photographic experiments to determine if side curtains can be effectively eliminated from the baffle designs. This appears feasible.

[REDACTED] Declassified and Released by the N R [REDACTED]

In Accordance with E. O. 12958

on NOV 26 1997

Note 1: See attachment #1, showing M-26 stellar photography and related M-26 baffle configuration suspected of contributing the stellar format fog in flight.

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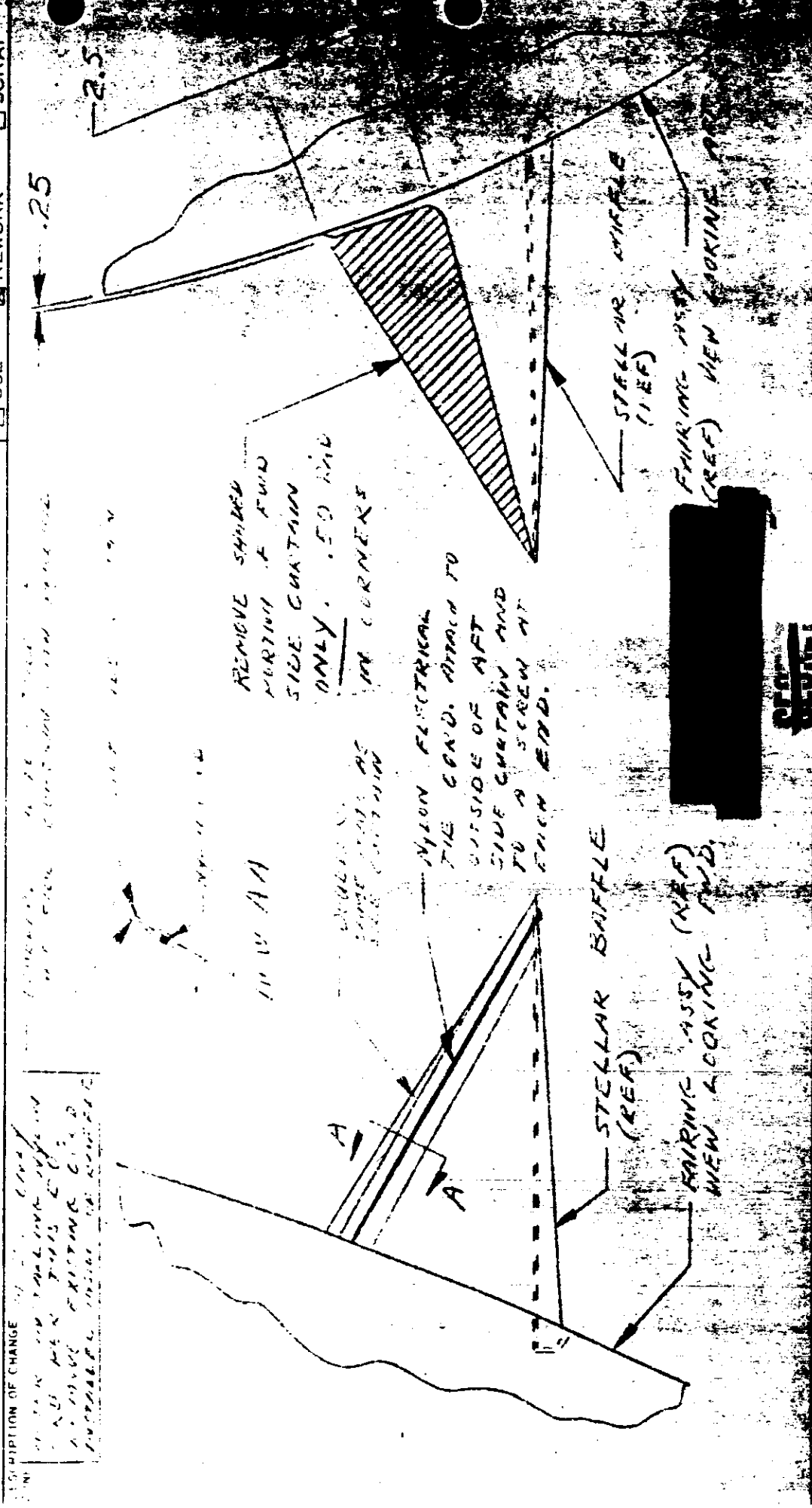
LOCKHEED MISSILES & SPACE COMPANY
A GROUP DIVISION OF LOCKHEED CORP. (NYSE: LCO)

QUALITY

PROPERTY OF THE ENGINEERING ORDER
IS THE DRAWING NUMBER AND REVISION LETTER

PIRE RELEASE NO. **1742**

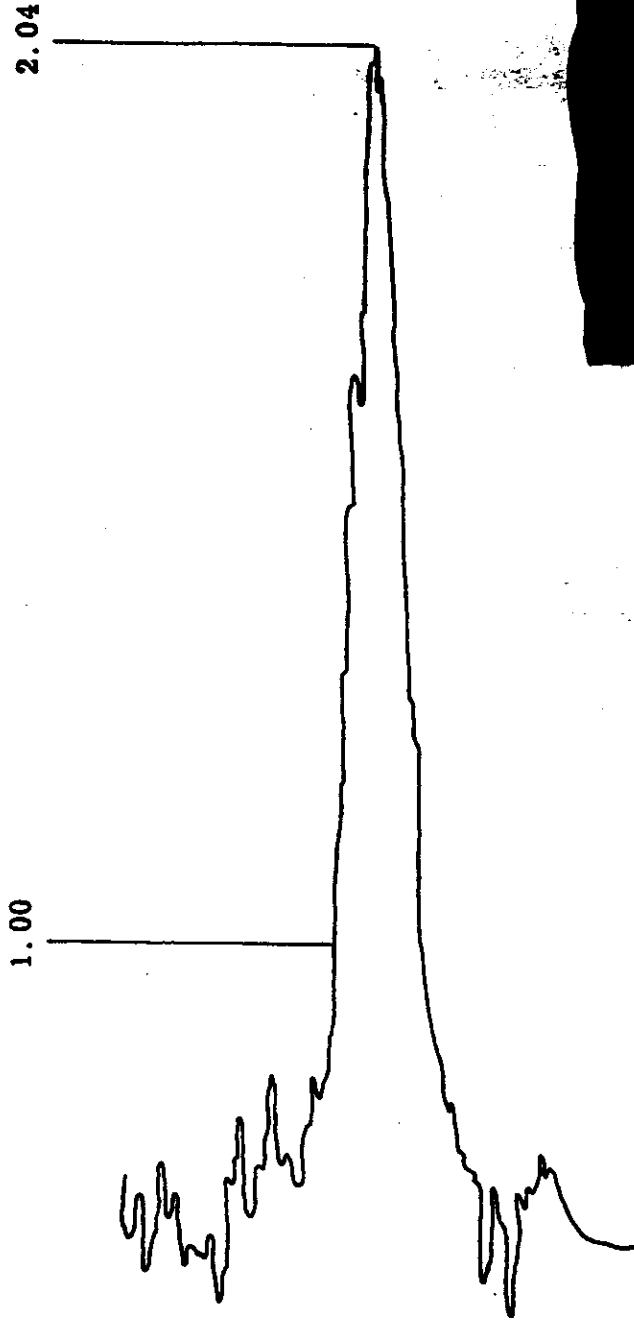
ECO PCD TI NO.	DATED	DWG TITLE	DWG NO.	REVISION
MO-EWA RWA-JOB NO.				
PRODUCTION ENGR	DATE	DESIGN CHANGE CONTROL	MODEL	RECOMMENDED DISPOSITION OF PARTS/MATL
			J	<input type="checkbox"/> USE <input checked="" type="checkbox"/> REWORK <input type="checkbox"/> SCRAP
			M	
				CHANGE EFFECTIVITY
				DCN <input type="checkbox"/> EEO <input checked="" type="checkbox"/>



STOP

MICRO - DENSITOMETER TRACE - Star A

M-26 S/I #D 34



Pass 55
Frame 286

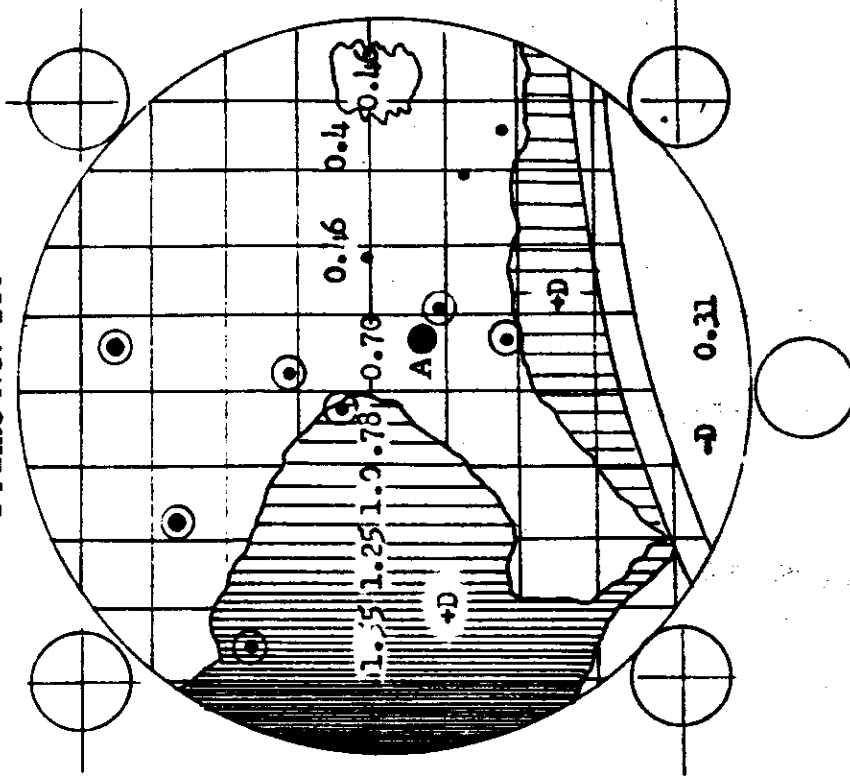


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STELLAR FORMAT

M-26 S/I #D 34

Frame No. 286



1st Frame Pass D-55

Dec. 25, 1963

60° N.

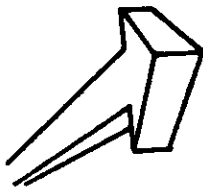
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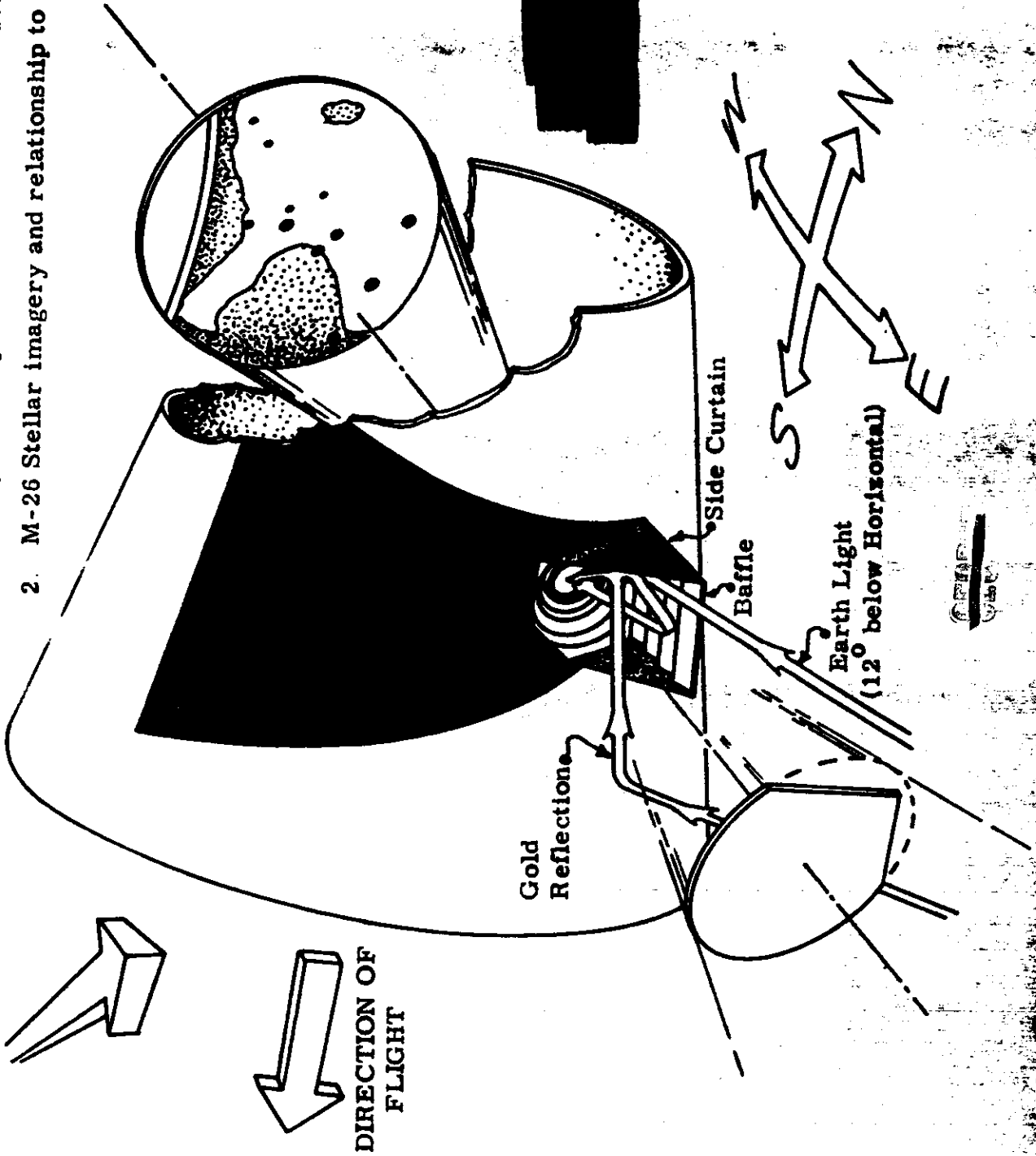
M-26 STELLAR FLIGHT RESULTS
S/I #D34

1. Stellar baffle installation M-27 and J-3 (Corrected prior to flight). Suspected installation on M-26.
2. M-26 Stellar imagery and relationship to flight hardware.

DIRECT
SUNLIGHT



DIRECTION OF
FLIGHT



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Note 2: See Attachment #2, showing recommended modification to M-27 and J-3 flight baffle hardware.

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