

~~SECRET/DORIAN~~

D ~~SECRET~~ SPECIAL HANDLING
MOL RENDEZVOUS ORBITING VEHICLE EVOLUTION
(BLOCK III)

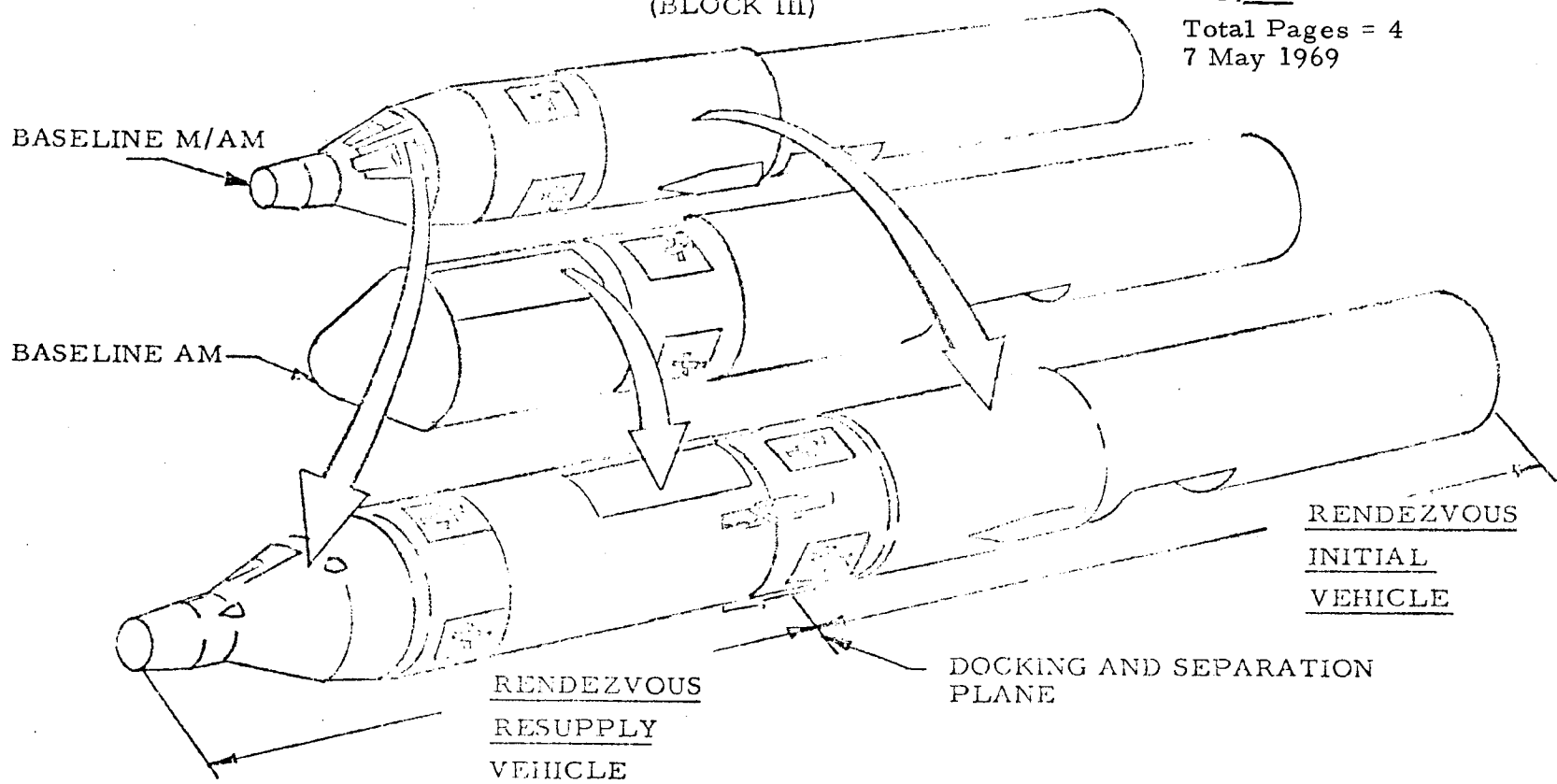
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7 May 1969



RRV FUNCTIONS

- ⊙ CREW TRANSPORT VEHICLE
- ACTS PROPULSION
- PRIME POWER SYSTEM
- LIFE SUPPORT EXPENDABLES
- DATA RETURN SYSTEM
- SUBSYSTEM SPARES/REPLACEMENTS

RIV FUNCTIONS

- LIFE SUPPORT SYSTEM
- ATTITUDE CONTROL REFERENCE/ELECTRONICS
- COMMUNICATIONS AND DATA HANDLING
- ENVIRONMENTAL CONTROL
- HRO SYSTEM

D ~~SECRET~~ SPECIAL HANDLING

HANDLE VIA BYEMAN
CONTROL SYSTEM ONLY

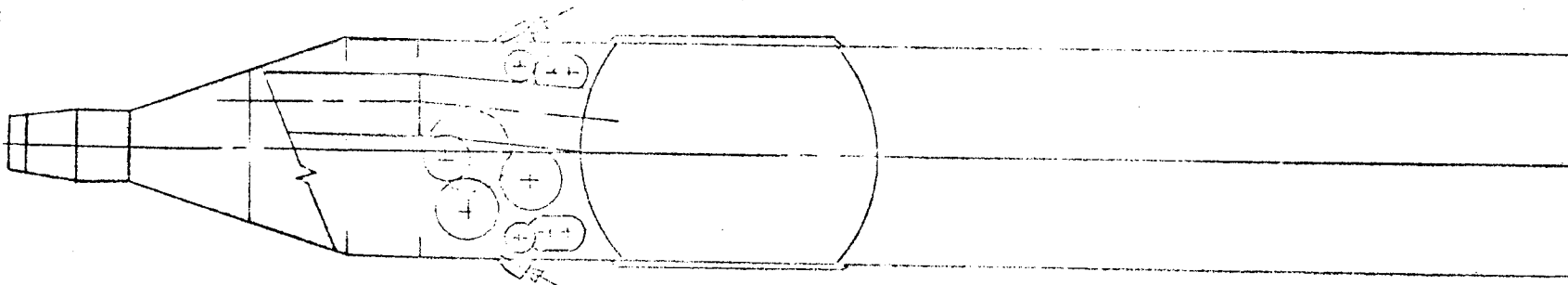
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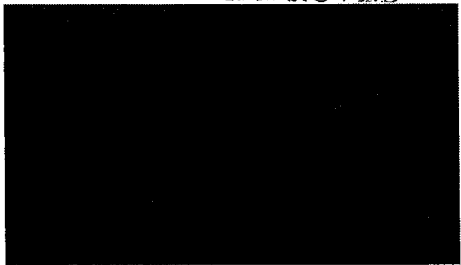
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POSSIBLE BLOCK II MOL OPERATING OPTIONS AND CHARACTERISTICS

- ✓ ADDITIONAL EXPENDABLE
- ✓ PAYLOAD IMPROVEMENTS



<u>MISSION</u>	<u>DURATION</u>	<u>PERIGEE ALTITUDE</u>	<u>OPTICAL RESOLUTION</u>	
			BASELINE	IMPROVED
• NOMINAL	45 DAYS	80 MILES		
• LOW FLIGHT	30 DAYS	70 MILES		
• EXTENDED DURATION	60 DAYS	90 MILES		




HANDLE VIA BYEMAN
CONTROL SYSTEM ONLY

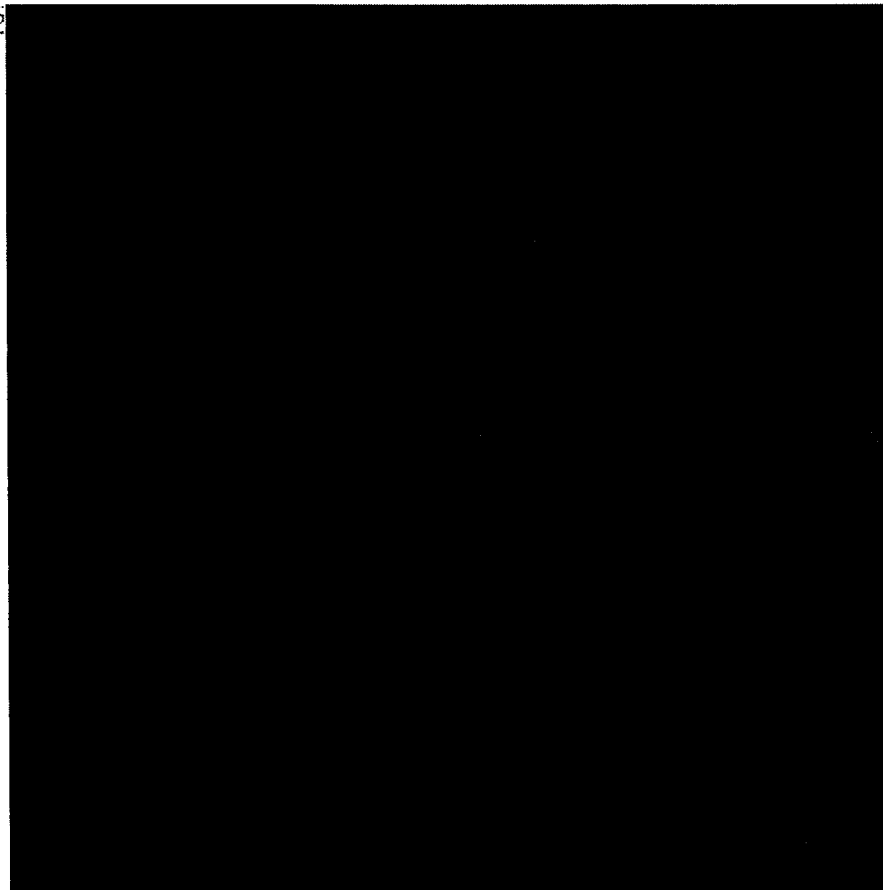
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IMPROVED DORIAN PAYLOAD

REPRESENTATIVE PERFORMANCE
(3404 FILM/2:1 TARG. CONTRAST)

REPRESENTATIVE IMPROVEMENTS

- ⊙ REDUCED OBSTRUCTION
- ⊙ REDUCED VIGNETTING
- ⊙ IMPROVED LENS DESIGN
- ⊙ IMPROVED OQF
- ⊙ IMPROVED SHUTTER EFFICIENCY
- ⊙ 2 X CENTRAL FIELD RELAY
(F. L. = 



HANDLE VIA BYEMAN
CONTROL SYSTEM ONLY

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IMPROVEMENT POTENTIAL
BLOCK II MOL

BASELINE
✓ 30 DAYS
✓ 80 N. MI.
[REDACTED]

✓ 70 N. MI.
✓ REDUCED
DURATION
[REDACTED]

T-IHM
IMPROVEMENTS
✓ 680 #(CORE)
✓ 2000 #(SRM)
● \$4 M

P/L IMPR.
✓ 30 DAYS
✓ 80 N. MI.
[REDACTED]
● \$50 M

EDMOL/LOW-FLY
/ DAYS: 45/30
/ N. MI.: 80/70
[REDACTED]
● \$90M (EDMOL)
● \$100M (EDMOL +
LOW-FLY)

"GOAL"
P/L + EDMOL/LOW-FLY
✓ DAYS: 45/30
✓ N. MI. 80/70
[REDACTED]
● \$140 M/\$150 M

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