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Bricking Material

C/J

MANAGERS MEETING

4 October 1966

Declassified and Released by the N R O
in Accordance with E. O. 12958
on NOV 26 1997

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CORONA J

MISSION 1035

J-36 1628 - BOOSTER 492

1st RECOVERY ORBIT 81

2nd RECOVERY ORBIT 160

IMPACT AREA

A SRV

PREDICTED
ACTUAL

LATITUDE

24° 32.6'N
24° 27'N

LONGITUDE

166° 30.1'W
166° 31'W

B SRV

PREDICTED
ACTUAL

24° 05.3'N
23° 50'N

164° 17.6'W
164° 22'W

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J-36 CONFIGURATION IMPROVEMENTS

- O 1st PAN GEOMETRY SYSTEM
- O IMPROVED DUAL INTERMIX COMMAND SYSTEM
- O SI OPERATION FROM EITHER PAN INSTRUMENT
- O PRESSURE DIAPHRAGM AT P/L-AGENA INTERFACE
- O IMPROVED YAW PROGRAMMER
- O 1st F CLOCK
- O DUAL THRUST CONE PROGRAMMERS
- O EARLY A TO B TRANSFER

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J-36 PSR ANOMALIES

- O ANALOG 12 AND 15 STEPPER SWITCHES (IMPROVED INTERMIX)
FAILED TO RESPOND PROPERLY TO SELF STEPPING SEQUENCE

AGE MONITOR CIRCUITS HAD MONITOR RELAY AND DIODE
IN PARALLEL WITH STEPPER COIL

- O CLOCK VOLTAGE T/M MONITOR VARYING. CLOCK REPLACED
(ZENER DIODE VARIED AT TEMP.)

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J-36 FLIGHT PREP PROBLEMS

- O DURING FIRST CONFIDENCE RUN ANALOG 12 AND 15 RESPONDED
IMPROPERLY AS DURING PSR.
- AGE MODIFIED TO CORRECT PROBLEM PRIOR TO
SECOND LAUNCH ATTEMPT
- O BLACK THERMAL PAINT ON COMMAND BOXES FLAKING
PAINT REMOVED FROM BOXES - DOW 17 PROVIDES
ADEQUATE THERMAL SURFACE
- O SUPPLY SPOOLS FROM BATCH SUSPECTED OF DETERIORATING
AT ALTITUDE
SUPPLY SPOOLS REPLACED WITH OLD TYPE

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J-36 INFLIGHT PERFORMANCE

- PANORAMIC CAMERA PERFORMANCE NORMAL
- A STELLAR/INDEX OPERATION NORMAL
- B STELLAR/INDEX OPERATION NORMAL
- PMU PERFORMANCE NORMAL
- COMMAND SYSTEM OPERATION NORMAL
 - IMPROPER OPERATE SEQUENCES RESULT OF INFLIGHT TRAINING COMMANDING STATIONS ON NEW INTERMIX SET UP.
- EARLY A TO B TRANSFER KIK ZORRO 38 PERFORMED ON REV. 72. ALL EVENTS PROPER. SYSTEM OPERATION FROM KZ TO A RECOVERY NORMAL
- V/H PROGRAMMER FAILED ON REV. 156. FAILURE OCCURRED 1100 SEC OR 2700 SEC AFTER PROGRAMMER START. SAME AS J-31 FAILURE

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J-1 PROBLEMS

- O J-38 - TASC TEST PERFORMED WITH ONE DFD. SECOND UNIT NOT AVAILABLE FOR TEST. DFD STELLAR SHUTTER FAILED IN TASC. CALIBRATION OF DFD INCORRECT. REQUIRES RETURN TO BOSTON FOR RECALIBRATION
- O J-39 - A DFD STILL NOT AVAILABLE
- O J-40 - DFD NOT AVAILABLE
- O J-41 - ONE DFD NOT AVAILABLE
- CORONA MARKINGS ON FIRST 40 FRAMES OF MASTER INSTRUMENT OPERATE. DENSITY LEVEL LOW. A/P RECOMMENDS FLYING SYSTEM.
- O J-42 - CHAMBER TEST SCHEDULED FOR 1ST WEEK IN OCTOBER. TEST TO BE PERFORMED WITHOUT A OR B DFD. NOT AVAILABLE.
- O COMMAND BOX BLACK THERMAL PAINT FLAKING. PAINT REMOVED FROM ALL COMMAND BOXES. DOW 17 WILL PROVIDE ADEQUATE THERMAL CONTROL

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J-1 PROBLEMS

- O RECOVERY BEACONS RETURNED TO A/P AFTER MODIFICATION
- O RECOVERY PROGRAMMER MODS ON J-43 AND UP COMPLETE
- O EJECTION PROGRAMMERS J38/USE 727 AND UP RETURNED TO
GE FOR MODIFICATION. RETURN DATE SUBSEQUENT TO 9/23
RESULTED IN SYSTEM SCHEDULE SLIPS
- O SWING DOWN BALLAST TIE DOWN MECHANISM J-41 AND UP
INTERFERS WITH FOREBODY - REQUIRES REDESIGN BY A/P

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J-1 THINGS TO COME

- O J-37 SCHEDULED LAUNCH OCTOBER 12
MASTER CAMERA WILL FLY COLOR FILM
SLAVE WILL FLY STANDARD LOAD

- O J-38 SCHEDULED LAUNCH NOVEMBER
SECOND THORAD LAUNCH
SECOND PG SYSTEM
LAST INTERIM FACTORY-TO-LAUNCH SYSTEM
ACCELEROMETERS ADDED FOR ASCENT VIBRATION
BLOSSOM T/M ON ASCENT FOR SRV VIBRATION DATA
MISSION DURATION 13 DAYS

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FACTORY-TO-LAUNCH

- O TWO INTERIM PHASE III FACTORY-TO-LAUNCH VEHICLES SUCCESSFULLY LAUNCHED AND RECOVERED (J-32 and J-36)
- O THIRD (J-37) IN FLIGHT PREPS - SCHEDULED FOR MID-OCTOBER LAUNCH. FOUR IS J-38/THORAD SCHEDULED FOR NOVEMBER
- O FIRST FULLY IMPLEMENTED FACTORY-TO-LAUNCH WILL BE J-34 SCHEDULED FOR A DECEMBER LAUNCH

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~~TOP SECRET~~A/P DESIGN REVIEW SCHEDULE FOR J-3 SYSTEM

Title	Dates		Remarks
	Prelim.	Final	
J-3 SYSTEM			
Payload Vehicle System:		4-14-67	
Airframe Subsystem:		3-17-67	
Airframe	6-10-66	2-17-67	
Airframe		7-22-66	
Components & Box Mts General			
PMU	9-12-66	10-10-66	Rescheduled from 8-12 & 9-30.
TUNA	8-9-66	9-16-66	Pulled up from 8-12 to 9-30
Thermal Control	1-2-67		
Electrical Subsystems:			
Pyro		10-10-66	
Command	6-27-66	4-20-66	
Telemetry	5-25-66	7-25-66	
Power		7-20-66	
Power		5-5-66	
Slope Programmer	5-27-66	8-15-66	
S. L. P. Conditioner	7-29-66	9-19-66	

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A/P DESIGN REVIEW SCHEDULE FOR J-3 SYSTEM

Title	Dates		Remarks
	Prelim.	Final	
GHE Systems		10-14-66	Changed from 9-16-66
GSE S/S Electrical		10-14-66	
Systems Consoles		10-14-66	
CR Inst'mt Subsystems		4-14-67	To be scheduled and conducted by Associate Contractors at their facilities
DISIC Subsystems		4-14-67	
SRV Subsystems		4-14-67	

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STATUS OF INTERFACE DRAWINGS

<u>Dwg. No.</u>	<u>Title</u>	<u>Interfacing Between</u>	<u>Status</u>	
			<u>Signed Off</u>	<u>Ready for Sign Off</u>
T33-101	Interface - N/C Sta 0.0 to 86.0	AP/Bos & NY		Now
T33-102	Interface - N/C Sta 86.0 Aft	AP & Bos		Now
T33-104	Interface - SRV Cover & Take-up Cassette Rollers	AP & Phil		Now
T33-105	Interface - SRV	AP & Phil		Now
T33-106	Interface - Supply Cassette, DISIC	AP & NY	X	
T33-107	Interface - Instrument Mount, DISIC	AP & NY	X	
T33-108	Interface - Stellar Baffle, DISIC	AP & NY		Now
T33-109	Interface - Exit Housing & Tuna, DISIC	AP & NY	X	
T33-112	Interface - Exit, T.U. & I.R. Rollers (Main)	AP & Bos		Oct. 25
1324217	Interface - Payload/Vehicle (Mech)	Agena D & AP	X	
T33-100	Interface - Payload Complete	-		July '67
T33-113	Interface - Main Door Boot	AP & Bos		Now
T33-114	Interface - Main Instr. Elec. Connectors Location	AP & Bos		Now

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ASSOCIATE INTERFACES

<u>Title</u>	<u>Number</u>	<u>ECD</u>	<u>Remarks</u>
Work Statement A/P J-3	[REDACTED]		Released
Work Statement J-40/J-50	[REDACTED]		Released
Work Statement - Ops & Anal. plus P/L Integration	[REDACTED]	5/20/66	Released
J3 [REDACTED] Sys. Perf. /Design Req.	[REDACTED]	4/19/66	Released
Req. Spec. J3 Configuration J Program	RO-J3-001		Released
Elect. Interface Spec. J3 CR System	T3-5-019	5/10/66	Released
Tracking, T/M, Command Pwr. & Pyro Interface Spec. A/P P/L & Prog.	T3-5-023	5/9/66	Released
[REDACTED] Agena Orbital Vehicle			
Elect. Interface Spec. J-3 SRV System	T3-5-020	4/28/66	Released
Elect. Interface Spec. J-2 J-3 DISIC System	T3-5-021	3/17/66	Released
DCS, DISIC Subsystem	T3-5-009	3/17/66	Released
System Environmental Spec.	T3-6-002		Released

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SYSTEM SPECIFICATION

<u>Title</u>	<u>Number</u>	<u>ECD</u>	<u>Remarks</u>
J-3 System Specification (DCS)	T3-5-028		Released
System ATS	T3-6-063	10-24-66	In work (Slipped 1 month)
System QTS	T3-6-063	10-24-66	In work (Slipped 1 month)
Agna Compatibility Spec.		March '67	
System Thermal Spec.			SV to provide
VAFB Launch Spec.		March '67	
Mating Req. Spec.		January '67	

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<u>Title</u>	<u>Number</u>	<u>ECD</u>	<u>Remarks</u>
Power Subsystem	T3-6-033	7/8/66	Released
Telemetry Subsystem	T3-6-029	7/15/66	Released
Pyro Subsystem	T3-6-041	6/30/66	Released
Command Subsystem	T3-6-042	7/15/66	Released
Exposure Control	T3-6-054	7/8/66	Released
FMC Subsystem	T3-6-030	5/20/66	Released
Digital T/R Subsystem	T3-6-069	7/5/66	Released
Digital T/R Multiplexer	T3-6-051	7/1/66	Released
SLP Subsystem	T3-6-055	6/30/66	Released
PMU Subsystem	T3-6-066	8/22/66	Released

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AGE SPECIFICATION

<u>Title</u>	<u>Number</u>	<u>ECD</u>	<u>Remarks</u>
Payload Simulator	LMSC-815808	10/1/66	Released
System Console	T3-6-067	7/15/66	Released
System Thermal Altitude Console	T3-6-096	8/15/66	Released
Pyro Load Test Console		10/1/66	Rescheduled from 9/1
Pyro Resistor & Continuity Console	T3-6-098	10/1/66	Rescheduled from 9/1
Launch Support AGE (Blockhouse Console)		10/1/66	Reqm'ts to SV
Digital T/R Data Processor	T3-6-071	8/15/66	Released
Frangible Sheath	T3-6-053		Released

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J-3 PROCUREMENT PROBLEMS

REQUIRED EST. DELIVERY

O	PMU	NOV.	FEB.
	PRESSURE VESSEL		
O	EXPOSURE CONTROL	NOV.	JAN.
	SWITCHES		
O	AFT T/M BOX	NOV.	JAN.
	COMMUTATOR		
O	SLOPE (V/H) PROGRAMMER	SEPT.	NOV.
	SWITCHES		
O	SLP CONDITIONER	OCT.	JAN.
	RESISTORS		
		OCT.	NOV.

DIGITAL TAPE RECORDER SYSTEM

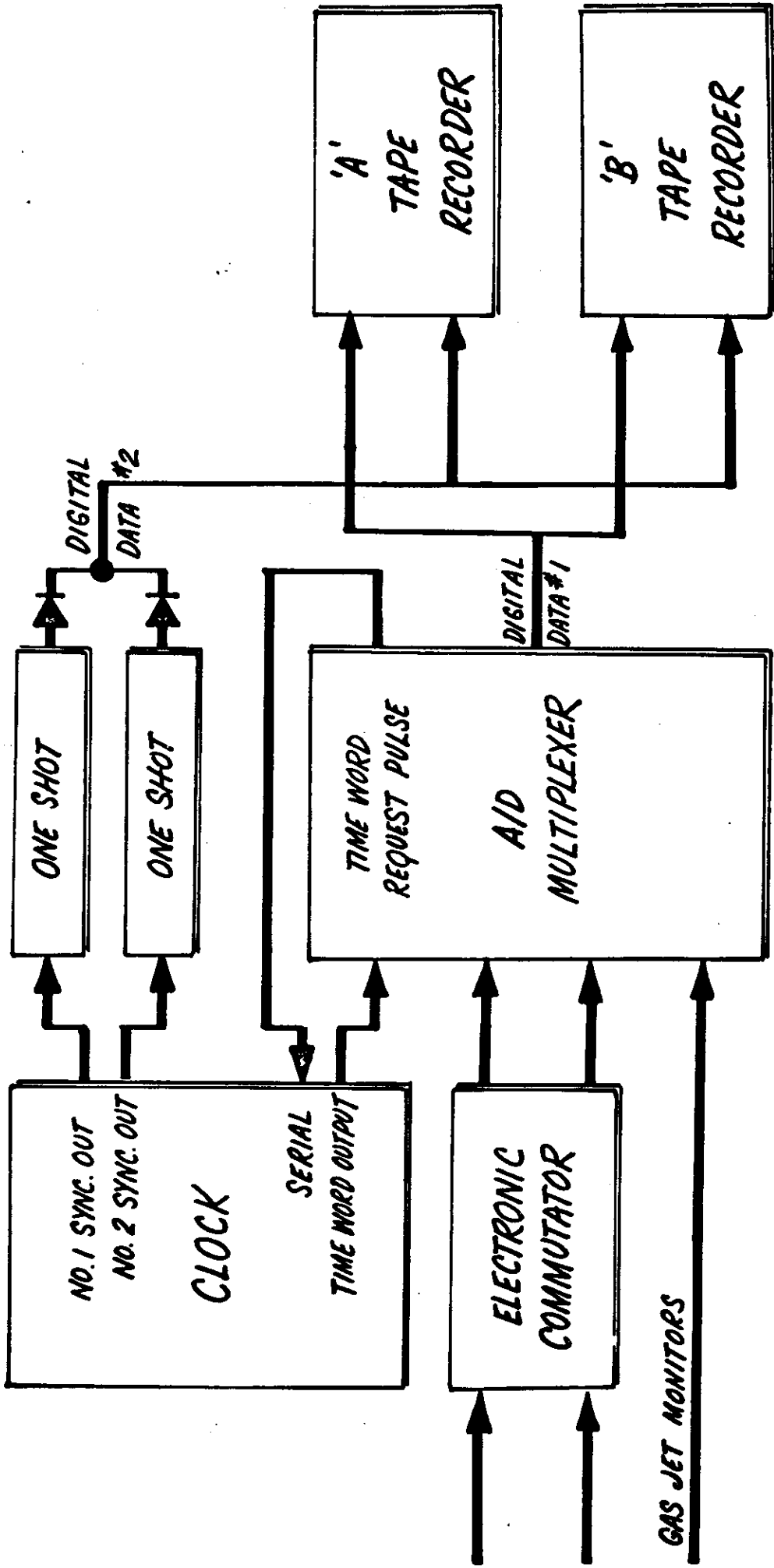
- MAJOR COMPONENTS
 - TWO DIGITAL TAPE RECORDERS
 - ONE A/D MULTIPLEXER
 - ONE ELECTRONIC COMMUTATOR

- DIGITAL TAPE RECORDER
 - TWO DATA CHANNELS
 - 10,000 BITS PER SECOND PER CHANNEL
 - FOUR HOUR RECORDING TIME

- A/D MULTIPLEXER
 - SIXTEEN INPUT CHANNELS
 - INPUT SAMPLED AT 55.5 PER SECOND
 - OUTPUT DATA 10,000 BITS PER SECOND

- ELECTRONIC COMMUTATOR
 - TWO CHANNEL SIXTY POINT COMMUTATOR
 - SAMPLES AT 55.5 PER SECOND

TAPE RECORDER SUBSYSTEM



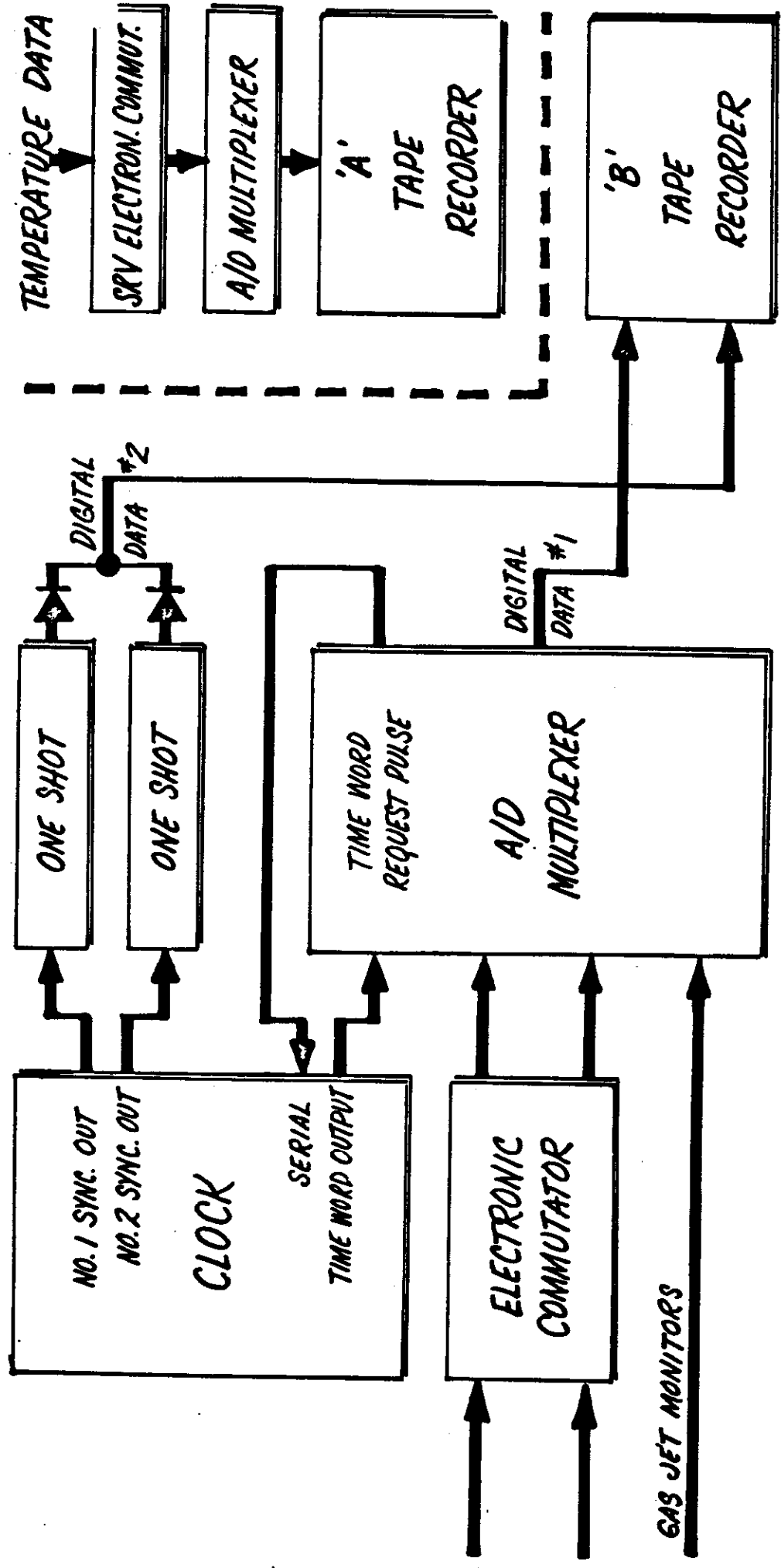
TAPE RECORDER CHECKOUT ON PAD

- EXISTING CAMERA OPERATE COMMAND WILL PERFORM
DUAL FUNCTION AND OPERATE TAPE RECORDERS AND
CAMERAS ON PAD

- "A" AND "B" SRV R.F. CHECKOUT COMMAND WILL EFFECT
TAPE RECORDER PLAYBACK

- TM MONITOR OF TAPE RECORDER OCCURRING
DURING PLAYBACK VERIFIES OPERATION

TAPE RECORDER SUBSYSTEM WITH SRV MONITOR



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TAPE RECORDER FLIGHT OPERATION

- TAPE RECORDER OPERATES WITH INSTRUMENT OPERATE
- A TO B SWITCHOVER COMMAND TRANSFERS DATA LINE TO TAPE RECORDER IN "B" SRV
- TWO CHANNELS OF DIGITAL DATA RECORDED
 - CHANNEL 1
 - GAS JET MONITORS, COMMUTATOR OUTPUT, SERIAL TIME WORD FROM DRCG
 - CHANNEL 2
 - DIGITAL CODING TO DISTINGUISH EITHER CAMERA C.F. SIGNALS AND TIME OF OCCURRENCE

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DIGITAL DATA PROCESSING

- GROUND PLAYBACK INTO DATA PROCESSOR FOR INDEXING AND TIME CORRELATION
- DATA WILL BE IBM FORMATED FOR PRESENTATION TO TAPE STORAGE SYSTEM
- SEVEN TRACK, 556 BITS PER INCH TAPE RECORDER STANDARD EQUIPMENT TO BE USED IN DATA HANDLING
- COMPUTER PROGRAMMED TO PRESENT DATA IN FORM DESIRED

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J1 AND J3 FLIGHT SCHEDULE

16 Sept 1966

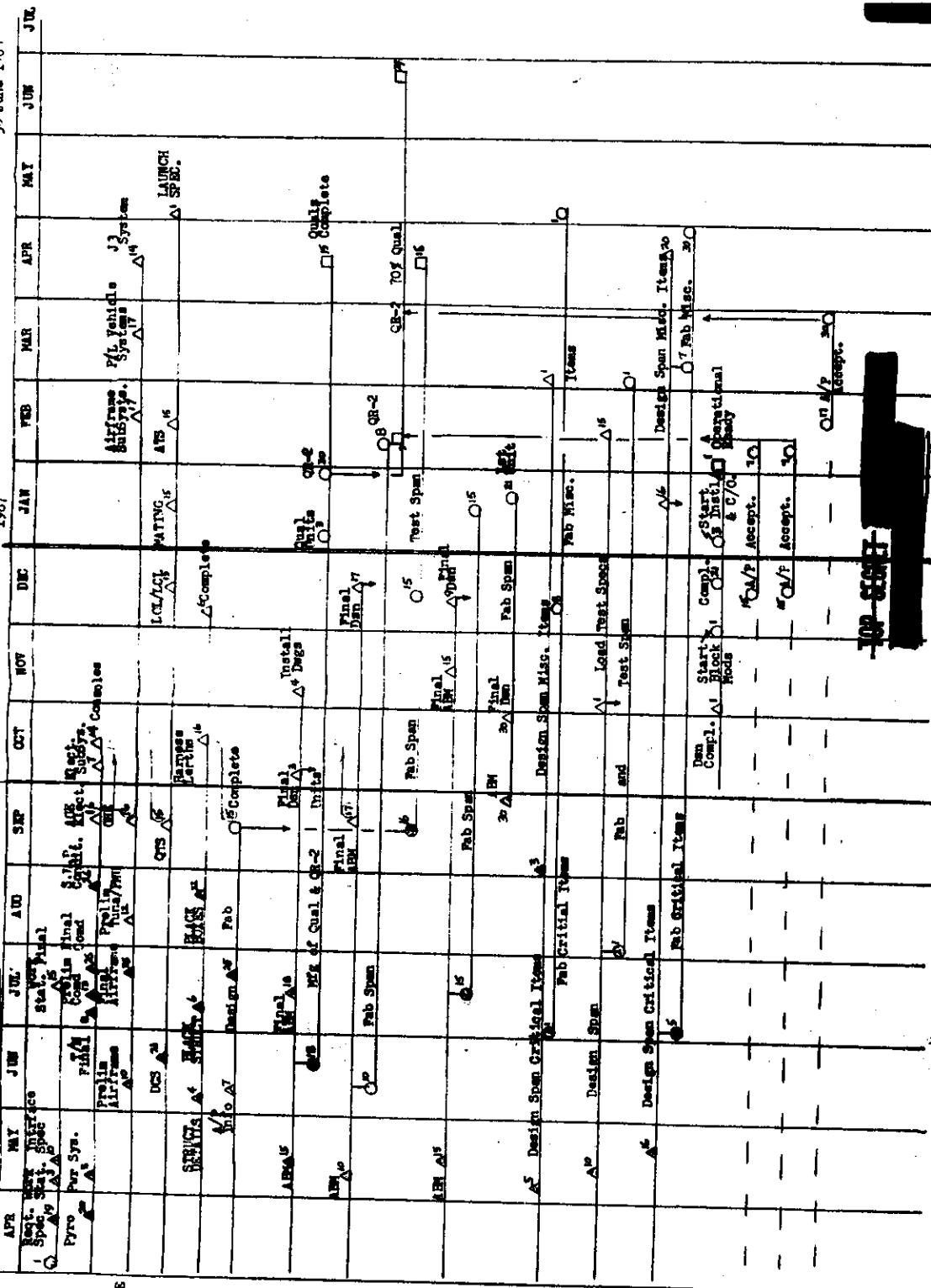
P/W	1966												1966											
	J	F	M	A	M	J	J	A	S	O	H	D	J	F	M	A	M	J	J	A	S	O	H	D
B/U																								
VEHICLE																								
P/L	J-47 PO	CR-4	J-48	CR-5	J-49	CR-6	J-50	CR-7	CR-8	J-51	CR-9	CR-10	CR-11	CR-12	CR-13	CR-14	CR-15	CR-16	CR-17	CR-18	CR-19	CR-20	CR-21	
B/U																								
VEHICLE	1505	1617	1648	1650	1650	1651																		

- NOTES:
1. SCHEDULE to be on all J3 conversions.
 2. Vehicle 1531 will launch 11/66 as the first Thorad, and J-32 is tied to it as a result of AUM (Measure the ascent environment of the Thorad booster.)
 3. J-35 PO-2 starts Phase III conversion factory to RWI, 11/66.
 4. Vehicles 150 thru 165 will have the O.A.C. (5 rockets) capability.
 5. Fly forward or fly rearward which conversion vehicle capability is 1654 and up.
 6. 1541 will be a normal J-1.
 7. J-40 has been re-identified as a standard J-1 system and J-42 re-identified as a PO system.
 8. J-43 and J-44 have been re-identified as standard J1 systems.

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- OO AHEAD
- DESIGN REVIEWS - ELECTRICAL
- MECHANICAL/SE
- SYSTEM SOFTWARE
- NOISE-OP
- SV TOOLING & MFG - WHITE
- ENGINEERING -
- ELECTRICAL
- MECHANICAL - BLACK
- STRUCT. TEST VEHICLE
- AOB ELECTRICAL
- J CONSOLE HOUS
- TOOLING
- CRND. HANDLING EQUIPT.
- TEST EQUIPMENT
- W/P BLACK MODIFICATION
- HALE INSTRUMENTS
- DISTO
- SET'S

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