FLIGHT CONTROL COMPUTER SIB
SYSTEM SCHEMATICS FOR
PRODUCTION #2 through #5

GATTIS /P-ASTR-NFE
NOTES:

1. UNLESS OTHERWISE SPECIFIED:
   - ALL TRANSISTORS ARE 39C560A
   - ALL DIODES ARE 1N4148
   - ALL RESISTORS ARE 1/8W, 5%
   - ALL CAPACITORS ARE 10% 10V@DC
   - PARTIAL REFERENCE DESIGNATIONS ARE SHOWN: FOR COMPLETE DESIGNATION
     PREFIX WITH UNIT NUMBER AND ASSEMBLY DESIGNATION IN ACCORDANCE WITH
     MSFC-STD-349.

2. REFERENCE DRAWINGS:
   - PRINTED WIRING ASSEMBLY
   - PRINTED WIRING SUBASSEMBLY
   - PRINTED WIRING BOARD
   - PRINTED WIRING MASTER

3. TI IN BOARD 1:
   - 34723
   - 34720
   - 34732
   - 347E7
   - 347Z9
   - 347S0

4. BOARD 1:
   - T1 IN BOARD 1:
   - T2 IN BOARD 1:
   - T3 IN BOARD 1:

5. BOARD 2:
   - T4 IN BOARD 2:
   - T5 IN BOARD 2:
   - T6 IN BOARD 2:

6. T7 IN BOARD 2:
   - T8 IN BOARD 2:
   - T9 IN BOARD 2:

7. OUTPUT:
   - 12-32V DC
NOTES:

1. UNLESS OTHERWISE SPECIFIED:
   - ALL RESISTORS ARE ±1%, 1/4W
   - ALL CAPACITORS ARE ±10%, Z0VDC

2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN FOR COMPLETE DESIGNATION PREFIX THE UNIT NUMBER AND ASSEMBLY DESIGNATION IN ACCORDANCE WITH MIL-STD-343.

3. REFERENCE DRAWINGS:
   - PRINTED WIRING ASSEMBLY J50M34750
   - PRINTED WIRING SUBASSEMBLY J50M34751
   - PRINTED WIRING BOARD J50M34752
   - PRINTED WIRING MASTER FIGURES J50M34753

4. LI IS A SATURABLE REACTOR (J50M32555)

5. TI IS A TRANSFORMER (J50M32631-5)

6. RESISTANCES MUST BE MATCHED WITHIN 0.1 PERCENT

7. VS IS A TRANSISTOR (J50M32553-1)

ELECTRICAL SCHEMATIC - 12MA SERVO AMPLIFIER,
COMPUTER FLIGHT CONTROL, MOD 1B
NOTES:
1. UNLESS OTHERWISE SPECIFIED:
   ALL DIODES ARE 5645
   ALL RESISTORS ARE ± 1%, 1 W/NO
   ALL CAP. ARE ± 1%, 500 VDC
2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN FOR COMPLETE DESIGNATION
   PREFIX. WITH UNIT NUMBER AND ASSEMBLY
   DESIGNATION. IN ACCORDANCE WITH
   3. REFERENCE DRAWINGS:
      PRINTED WIRING ASSEMBLY F50M3EGEO
      PRINTED WIRING SUBASSEMBLY CSOMSEfSl
      PRINTED WIRING BOARD C50M3Z&3E
      PRINTED WIRING MASTER FSOMSSfeSS
4. T1 IS A TRANSFORMER (50M32C30-1)
NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE 1/8W, ±1%.
2. REFERENCE DRAWINGS:
   PRINTED WIRING ASSEMBLY D5OM3Z675
   PRINTED WIRING SUBASSY C5OM3Z676
   PRINTED WIRING BOARD C5OM3Z677
   PRINTED WIRING MASTER F5OM3Z678

50M3Z679-1 SHOWN R-ASTR-NFE
NOTES:
1. UNLESS OTHERWISE SPECIFIED:
   ALL DIODES ARE 1N939A
   ALL RESISTORS ARE 1/8W
2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN FOR COMPLETE DESIGNATION
   PREFIX WITH UNIT NUMBER AND ASSEMBLY
   DESIGNATIONS IN ACCORDANCE WITH
   HEL-672-2400
3. REFERENCE DRAWINGS:
   PRINTED WIRING ASSEMBLY FSOM32G44
   PRINTED WIRING SUBASSEMBLY FS0M32649
   PRINTED WIRING BOARD FSOM32G42
   PRINTED WIRING MASTER FSOM32G43
**NOTES:**

1. **UNLESS OTHERWISE SPECIFIED:**
   - All transistors are 2N2222A.
   - All diodes are IN4513.
   - All resistors are ±1%.
2. Partial reference designations are shown. For complete designation prefix with unit number and assembly designation(s) in accordance with MSFC-STD-349.
3. Reference drawings:
   - Printed wiring assembly FSM32445
   - Printed wiring subassembly 50M32649
   - Printed wiring board 50M32646
   - Printed wiring master FSM32648
4. LB is a saturable reactor.
5. T1 is a transformer.

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**ELECTRICAL SCHEMATIC**

**SPATIAL RELAY**

**TELEMETERING AMPLIFIER**

**COMPUTER FLIGHT CONTROL**

**MOD 01B**

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**LIST OF MATERIAL**

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<tr>
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<th>DESCRIPTION</th>
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<tr>
<td>C1</td>
<td>CAPACITOR</td>
<td>5.8µF 600V</td>
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</tr>
<tr>
<td>R1</td>
<td>RESISTOR</td>
<td>1000Ω</td>
<td></td>
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<tr>
<td>Q1</td>
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<tr>
<td>D1</td>
<td>DIODE</td>
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NOTES:

1. UNLESS OTHERWISE SPECIFIED:
   ALL DIODES ARE S1645
   ALL RESISTORS ARE 1/4%, 1/8W

2. PARTIAL REFERENCE DESIGNATIONS ARE
   SHOWN: FOR COMPLETE DESIGNATION
   PREFIX WITH UNIT NUMBER AND
   ASSEMBLY DESIGNATION(S) IN ACCORDANCE
   WITH MSGC-STD-349.

3. REFERENCE DRAWINGS:
   PRINTED WIRING ASSEMBLY F50M32655
   PRINTED WIRING SUBASSEMBLY D50M32656
   PRINTED WIRING BOARD D50M32657
   PRINTED WIRING MASTER F50M32658

SEE ENGINEERING RECORDS

R-ASTR-HFE

ELECTRICAL SCHEMATIC
SI POWER DISTRIBUTION,
COMPUTER, FLIGHT CONTROL,
MOD O1B

GEORGE C. MARSHALL
SPACE FLIGHT CENTER
NATIONAL AERONAUTICS
AND SPACE ADMINISTRATION
Huntsville, Alabama
DEC 15, 1964

SHEET C

50M32659