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BIF-94123-73  
Cy 1 of 4  
Page 1 of 1

37

FROM: [redacted]

20 September 1973

SUBJECT: P-989 Launch Day Briefing Plan

BIF003W/2-085277-73

TO: [redacted] CSE, [redacted] FTFD

copy 2 P-114 5 1960 INVTY 25X1  
15 sheets  
RFQPK-3-005-0095

NOV 1974 INVTY

Mar 1977 Inv -  
Jul 78 Inv

APR 8 1987

1. Attached is a P-989 Launch Activity Briefing Plan and more detailed working papers outlining a pre-separation and post-deployment briefing.
2. The purpose of this plan is to establish a standard briefing format and set of viewgraphs or charts for P-989 launch activity briefings at SAMSO and the STC.
3. Heretofore, the massive influx of [redacted] Aerospace, and IMSC personnel into the MCC on launch day has created an impossible situation for the FTFD. Because of the mass confusion, attempts to brief visiting VIPs has proven disastrous with all parties vying for their ear at once - in short, we have come on like Max Sennet's "Keystone Cops". Preferably, we should exude or inspire confidence by orderly briefings and demonstrate the painstaking team efforts that make a P-989 launch possible and successful.
4. Request the preparation and briefing responsibilities for the two STC briefings be assigned to those agencies most capable of providing the required data and fielding questions about the subject matter. There is nothing magic about the chart layouts nor should they be taken as absolute. What is intended is that they convey the desired subject areas to be addressed.
5. As Special Projects and Contractor personnel are visitors or guests of the STC, it is requested that the FTFD orchestrate both the pre-separation briefing and post-deployment briefing.

*Donald E. Thursby*  
DONALD E. THURSBY  
LtCol, USAF

3 Atch  
Briefing Plan



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**BYEMAN**  
Control System Only

# ERA I: 1960-1975

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## SPACE SEGMENT EVOLUTION

25X1

| YEAR | GENERAL SEARCH I&W                            | DIRECTED SEARCH TI      | DIRECTED SEARCH/COMINT       | SPECIAL PURPOSE   |
|------|---|-------------------------|------------------------------|---|
| 1963 |   |                         |                              | VAN ALLEN BELT (2)<br>PUNDIT I<br>PUNDIT II<br>PUNDIT III |
| 1964 | NOAH'S ARK<br>STEP 13/PLYMOUTH ROCK           |                         |                              |   |
| 1965 | TRIPPOS I/FANION I                            | MAGNUM                  |                              | PUNDIT IV   |
| 1966 | SAMPAN I/SOUSEA I<br>TRIPPOS II - FANION II   |                         |                              |   |
| 1967 | SLEWTO - FANION III                           | FACADE                  |                              | SAVANT I  |
| 1968 | SAMPAN II/LAMPAN I<br>SOUSEA II/TRIPPOS III   | TIVOLI I<br>VAMPPAN     |                              |   |
| 1969 | SAMPAN III/LAMPAN II<br>TRIPPOS IV/SOUSEA III | TIVOLI II<br>TIVOLI III | WESTON<br>TOPHAT I<br>ARROYO | SAVANT II   |
| 1970 |   |                         |                              |   |
| 1971 |   |                         |                              |   |
| 1972 | URSALA I                                      | MABELI                  |                              |   |
| 1973 | URSALA II                                     |                         |                              |   |
| 1974 |   | RAQUEL I                |                              |   |
| 1975 |   |                         | TOPHAT II                    |   |

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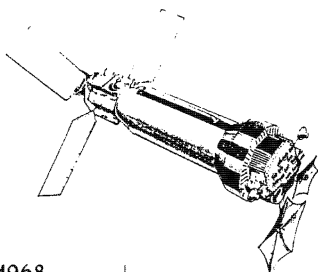
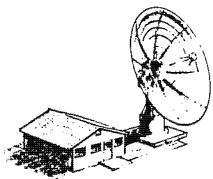
25X1



# ARV SUPPORT



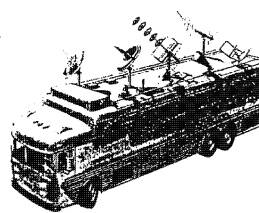
## ASTROPHYSICAL RESEARCH VEHICLE



THREE (3) ARV'S, EACH WITH THE FOLLOWING TRANSMITTER COMPLIMENT:

| TRANSMITTER | FREQUENCY RANGE (MHz) |
|-------------|-----------------------|
| • LB-1      | 40-100                |
| • LB-2      | 150-350               |
| • NL-7      | 150-450               |
| • NL-6*     | 120-400               |
| • LB-3      | 400-850               |
| • LB-4      | 1000-1500             |
| • NL-1      | 150-3000              |
| • NL-5      | 2500-3200             |
| • NL-2      | 3000-5000             |
| • NL-3      | 4000-6025             |
| • NL-4      | 7900-11,500           |

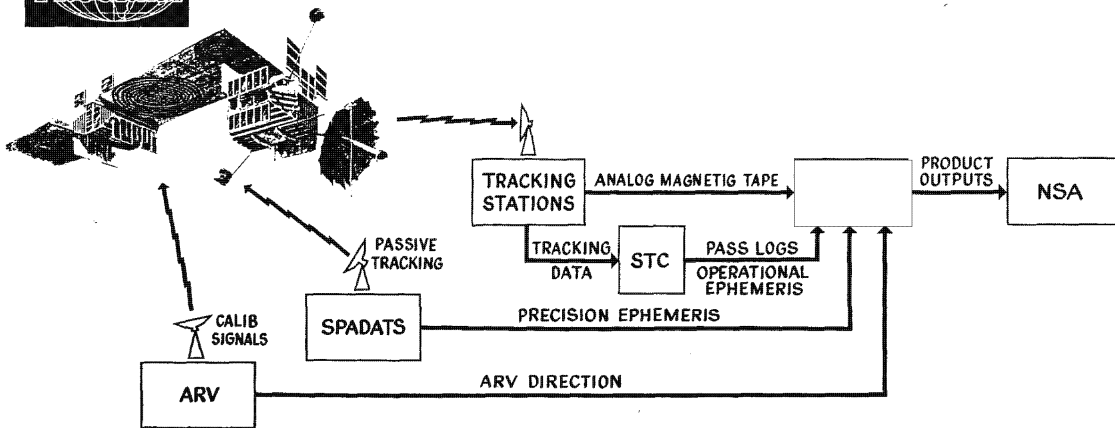
\* AVAILABLE IN ARV 'B' ONLY



| PROG  | VEH  | 1968     |           | 1969                              |         |         |          |                     |
|-------|------|----------|-----------|-----------------------------------|---------|---------|----------|---------------------|
|       |      | NOV      | DEC       | JAN                               | FEB     | MAR     | APR      | MAY                 |
| P-69  | 2733 | AS REQ'D |           | 1                                 | 2       | LOCAL   | ▼ LAUNCH | ▲ END OF CAL PERIOD |
| P-11  | 4411 | AS REQ'D |           | (NO. INDICATES NO. OF VAN PASSES) |         |         |          |                     |
| "     | 4420 | 4        | 4         | 4                                 | 4       | 4       | 20       | ▲                   |
| P-69  | 2734 | 16       | 16        | 16                                | 16      | 16      | AS REQ'D |                     |
| P-11  | 4413 | 4        | 4         | 4                                 | 4       | 4       | 4        | 4                   |
| "     | 4417 |          |           | 29                                | 28      | 3       | 3        | 3                   |
| P-69  | 2735 |          |           | 3                                 | 40      | 16      | 16       | 16                  |
| OTHER |      | 6 2 20   | 3 2 17    | 21 2 4                            | 4 2 18  | 15 2 29 |          |                     |
| "     |      | 3 2 17   | 11 2 25   | 29 2 12                           | 12 2 26 |         |          | 14 2 28             |
| "     |      |          | 1 1       |                                   |         |         |          |                     |
| "     |      |          | 5 7 11 13 |                                   |         |         |          |                     |



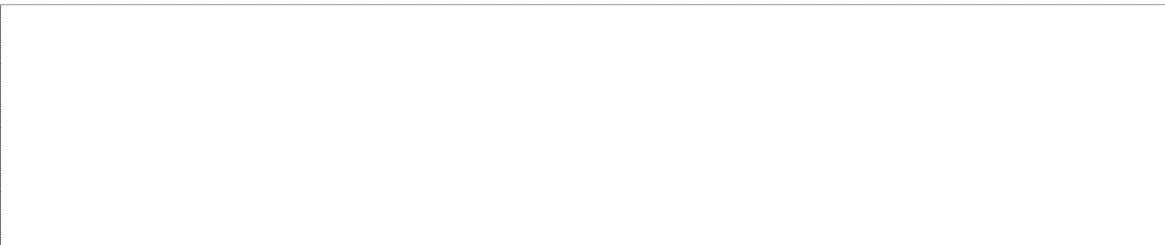
# VEHICLE 4420/4413 DATA HANDLING



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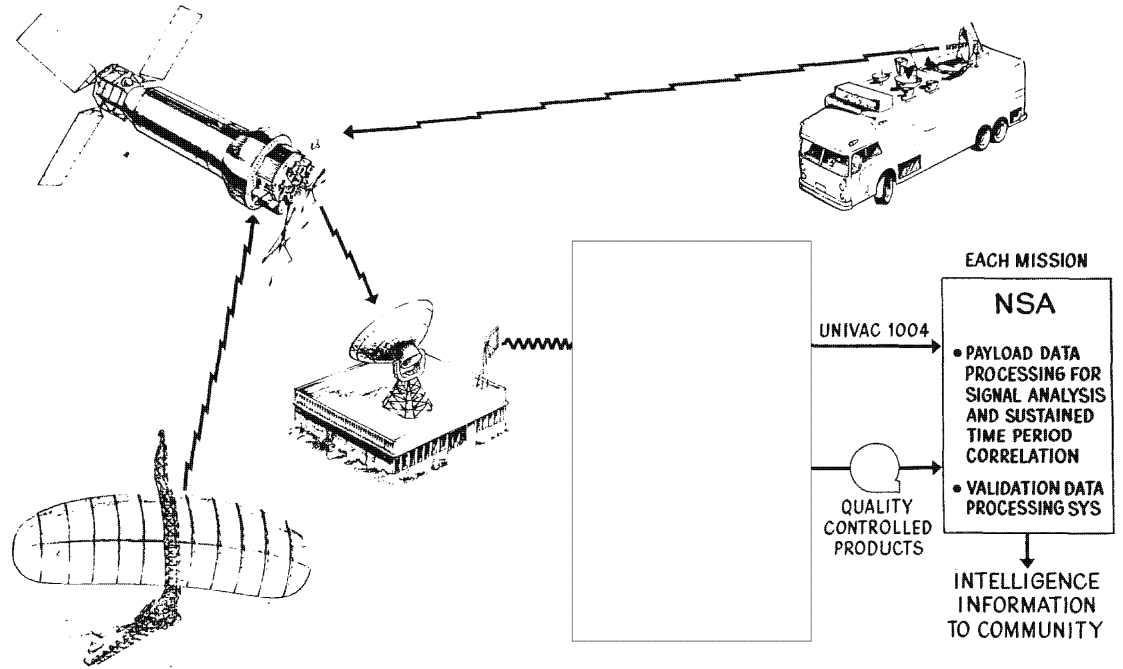
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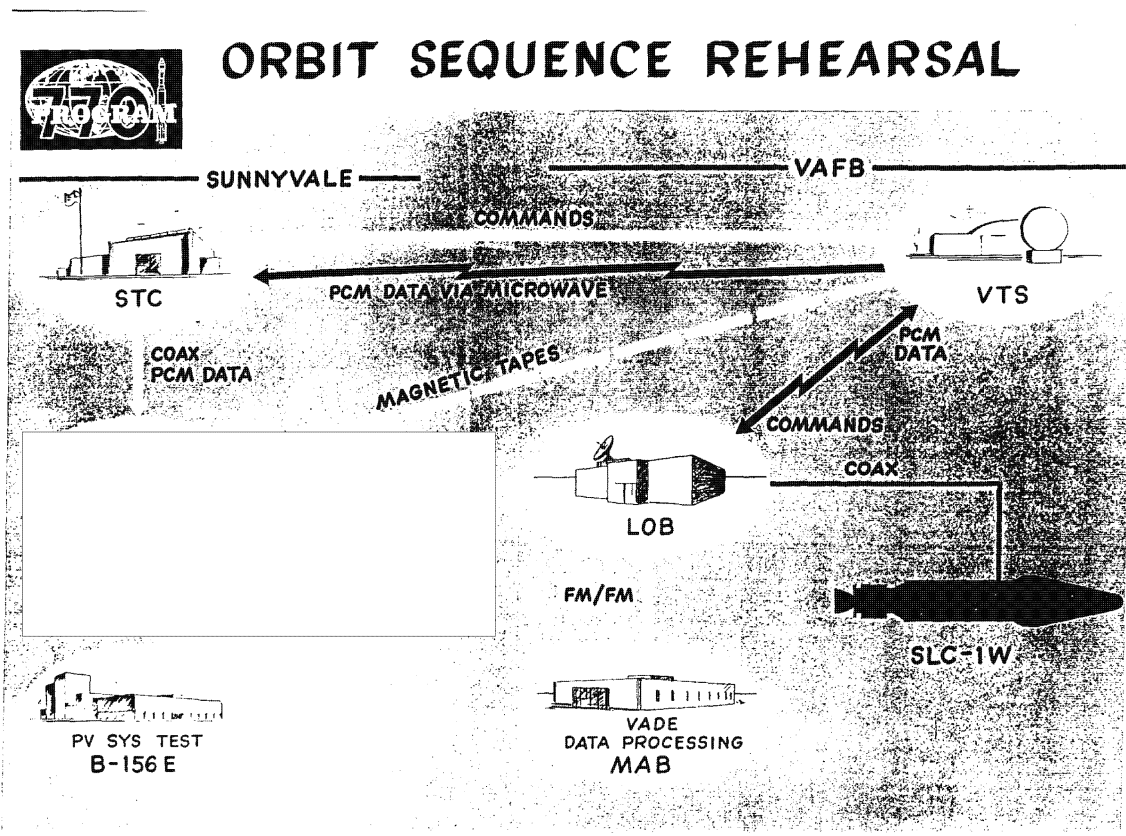
# DATA PROCESSING FUNCTIONS

25X1



25X1

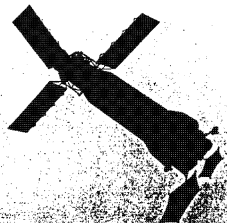






# THE TOTAL SYSTEM

## FLIGHT EQUIPMENT



- DESIGN/DEVELOPMENT
- TEST
- OPERATIONS

PRE-LAUNCH TEST  
SUPPORT - DESIGN  
FEEDBACK

REQUIREMENTS  
& DIRECTION

SAFSP | SAFSS

SIGINT REQ

INTELLIGENCE  
COMMUNITY

COLLECTION  
REQ

INTELL  
DATA

NSA

- PROCESSING
- REPORTING

25X1

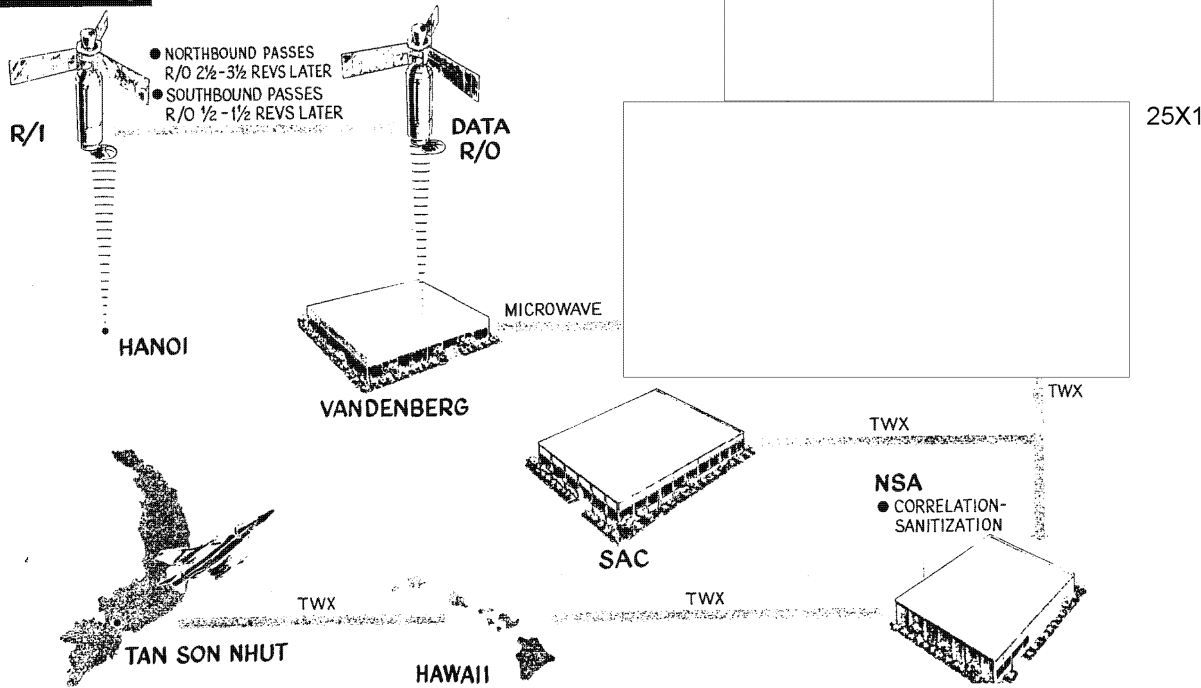
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# DATA ACQUISITION TO DELIVERY



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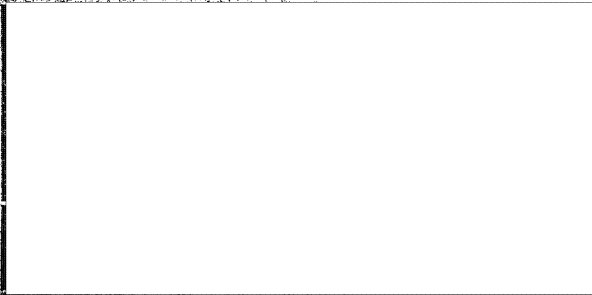
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# LAUNCH OPERATIONS CONFIGURATION

25X1

MICROWAVE FROM VTS



CSE LINE

HOT LINE

**STC**  
**MCC NO 3**  
**SAD & LMSC TECHNICAL**  
**SUPPORT TEAM**

**VEHICLE**  
**T/M**  
**AUGIE**

25X1

DIRECT  
LINE

SECURE PHONE

HOT  
LINE

**LOB**      **LAUNCH**  
**CONTROL**

**MCC NO 4**  
**POD**

**PAYLOAD**      **VEHICLE**  
**T/M**              **T/M**  
**AUGIE**            **AUGIE**

14

REF003/2-022517-69



# PROGRAM P-69 SIGINT ACCOMPLISHMENTS

25X1

## 1961 TO 1968

- 1961** ▶ ON-ORBIT CAPABILITY PROVEN TO INTERCEPT AND GEOPOSITION U.S. RADAR ENVIRONMENT

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- 1962** ▶ ON-ORBIT CAPABILITY PROVEN TO INTERCEPT AND GEOPOSITION VALID FOREIGN RADAR ENVIRONMENT  
 ▶ SIGINT DATA DIGITIZED, RECORDED, READ OUT AND GEOPOSITIONED  
 ▶ FLIGHT DURATION 4½ DAYS

---

- 1963** ▶ VALID DIGITAL INTERCEPTS OF BMEWS TO LINE OF SIGHT (RADIO HORIZON)  
 ▶ PROVED PAYLOAD WIDE PULSE MEASUREMENT CAPABILITY  
 ▶ FIRST DIGITAL INTERCEPT OF SOVIET CODED [REDACTED]

---

- 1964** ▶ FIRST USE OF PHASE INTERFEROMETER MEASUREMENTS TO IMPROVE DF  
 ▶ FIRST USE OF SPACEBORNE 6MHz WIDEBAND VIDEO RECORDING FOR TECHNICAL INTELLIGENCE (TI)  
 ▶ DIGITAL INTERCEPT COVERAGE COMPLETED FROM 59MHz TO 12,000 MHz

---

- 1965** ▶ LONGEST FLIGHT TO DATE - 50 DAYS OF WIDEBAND VIDEO DATA  
 ▶ WIDEBAND VIDEO COVERAGE COMPLETED FROM 130 MHz TO 8,200 MHz

---

- 1966** ▶ FIRST FLIGHT OF SEVEN MONTHS DURATION WITH PAYLOAD FULLY OPERATIONAL  
 ▶ FIRST COMBINED WIDEBAND ANALOG AND DIGITAL PAYLOAD  
 ▶ FIRST ALL PHASE INTERFEROMETER DF SYSTEM  
 ▶ COMPLETE EOB COVERAGE OF DENSE S-BAND REGION

---

- 1967** ▶ SIX MONTH FLIGHT DURATIONS WITH OPERATIONAL PAYLOADS  
 ▶ FIRST 6 MHz WIDEBAND PREDETECTION CAPABILITY FLOWN FOR INTRAPULSE MODULATION  
 ▶ DEFINITIVE INTERCEPTS OF SOVIET ABM RADAR HEN HOUSE [REDACTED]

---

- 1968** ▶ EIGHT MONTH FLIGHT DURATION WITH FULLY OPERATIONAL PAYLOADS  
 ▶ CONTINUED HIGH QUALITY EOB AND TI COVERAGE  
 ▶ DEFINITIVE INTERCEPTS OF SOVIET ABM RADAR [REDACTED]  
 ▶ QUICK REACTION CAPABILITY DEVELOPED FOR TACTICAL USE OF VIET NAM INTERCEPTS

25X1

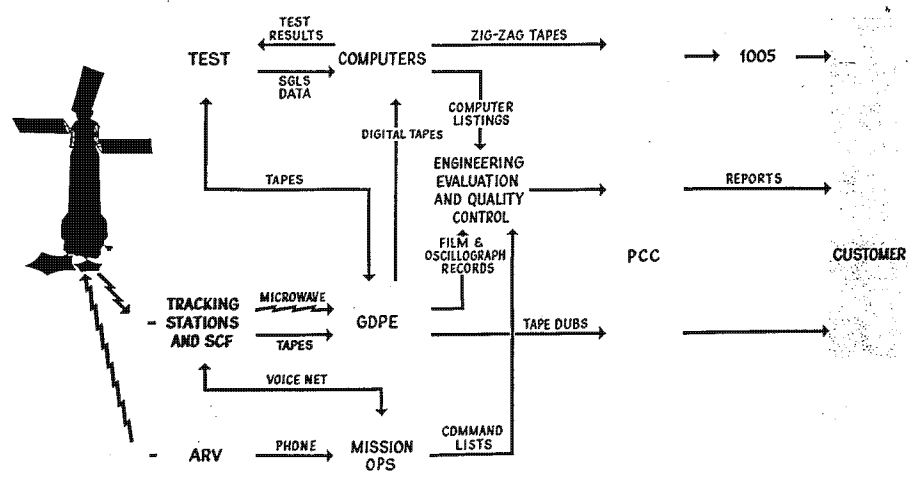
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**P-69 PROGRAM DATA FLOW**

25X1



**2733 OPERATIONS SUMMARY**

25X1

AS OF OCT 24, 1968

|                    | SETTER    | MGD     | DSU 1 & 2          |
|--------------------|-----------|---------|--------------------|
| DAYS IN OPERATION  | 264       | 264     | 264                |
| READOUTS           | 892       | 347     | 30(NO.1)/684(NO.2) |
| TOTAL READOUT TIME | 85,799    | 13,716  | 5559/211655        |
| BURSTS READ IN     | 2,009     | 2,005   | 37/1101            |
| BURSTS. READ OUT   | 2,001     | 2,001   | 35/1091            |
| TOTAL INTERCEPTS   | 2,413,100 | 643,556 | 63,097/2,127,203   |
| CALIBRATIONS (ARV) | 54        | 45      | N/A                |

REF ID: A66517-59

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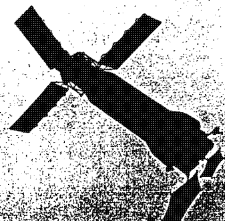
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- OPERATIONS

REQUIREMENTS  
& DIRECTION

SAFSP | SAFSS

SIGINT REQ

INTELLIGENCE  
COMMUNITY

COLLECTION  
REQ

INTELL  
DATA

PRE-LAUNCH TEST  
SUPPORT DESIGN  
FEEDBACK

NSA

- PROCESSING
- REPORTING

25X1

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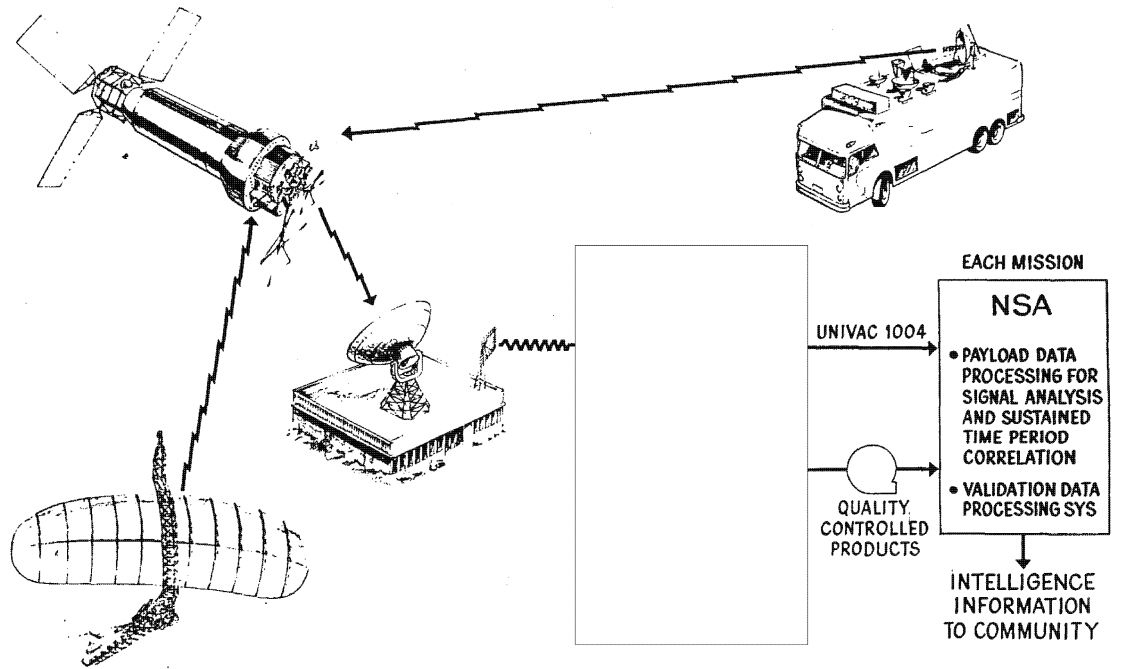
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# DATA PROCESSING FUNCTIONS

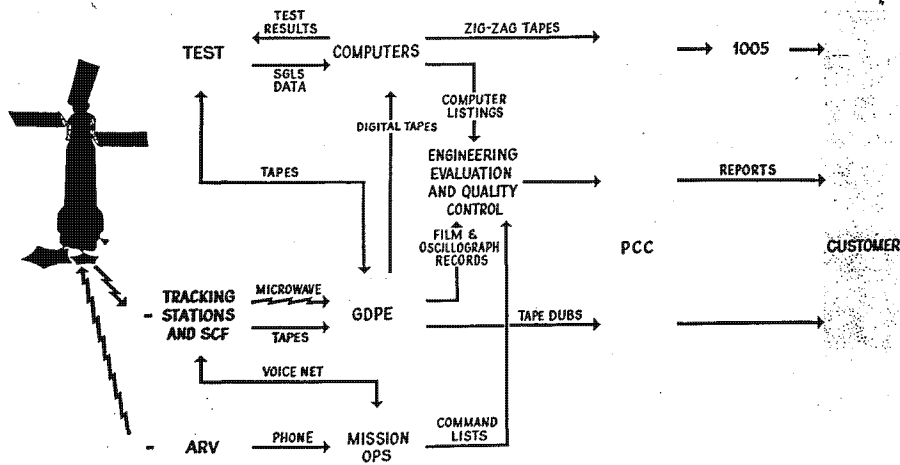
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**P-69 PROGRAM DATA FLOW**

25X1



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# ERA I: 1960-1975

~~SECRET~~ [ ] WORKING MATERIAL [ ]

## SPACE SEGMENT EVOLUTION

25X1  
25X1

| <u>YEAR</u> | <u>GENERAL SEARCH I&amp;W</u>              | <u>DIRECTED SEARCH TI</u> | <u>DIRECTED SEARCH/COMINT</u> | <u>SPECIAL PURPOSE</u>                                    |
|-------------|--|---------------------------|-------------------------------|---|
| 1963        |  |                           |                               | VAN ALLEN BELT (2)<br>PUNDIT I<br>PUNDIT II<br>PUNDIT III |
| 1964        | NOAH'S ARK                                 |                           |                               |   |
| 1965        | STEP 13/PLYMOUTH ROCK<br>TRIPOS I/FANION I | MAGNUM                    |                               | PUNDIT IV   |
| 1966        | SAMPAN I/SOUSEA I<br>TRIPOS II - FANION II |                           |                               |   |
| 1967        | SLEWTO - FANION III                        | FACADE                    |                               | SAVANT I  |
| 1968        | SAMPAN II/LAMPAN I<br>SOUSEA II/TRIPOS III | TIVOLI I<br>VAMPPAN       |                               |   |
| 1969        | SAMPAN III/LAMPAN II                       | TIVOLI II                 | WESTON                        | SAVANT II   |
| 1970        | TRIPOS IV/SOUSEA III                       | TIVOLI III                | TOPHAT I<br>ARROYO            |   |
| 1971        |  |                           |                               |   |
| 1972        | URSALA I                                   | MABELI                    |                               |   |
| 1973        | URSALA II                                  |                           |                               |   |
| 1974        |  | RAQUEL I                  | TOPHAT II                     |   |
| 1975        |  |                           |                               |   |

~~SECRET~~ [ ] WORKING MATERIAL [ ]

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