KSC OPERATIONS **APOLLO/SATURN TEST CATALOG**	PAGE 1 OF 2
1. TEST TITLE Service Arm Control Switch Sub-System Functional Test.	2. KSC TEST NO. V-26048-ML 3. STAGE, VEHICLE OR GSE GSE

4. TEST OBJECTIVES

To operate Service Arm Control Switches locally to prove system functionally ready for remote (LCC) operation.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

Operate the Service Arm Control Switches locally using Launcher Accessories Test Set #2 for control.

Status:

1. Prerequisites:

   A. Component checkout and pressure test V-26049-ML complete.
   B. Launcher Accessories Test Set #2 (75M09032) available.
   C. Portable D. C. Power Supply (75M51116) available.
   D. 750 PSI GN_2 available at Valve Panel #11.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
T. Poweleit T. Poweleit	Donald L. Scoville for W. C. Rainwater	21 Dec 66
7. ORGANIZATION	**9. ORGANIZATION**	**11. VEHICLE EFFECTIVITY**
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE

Service Arm Control Switch Sub-System Functional Test.

2. KSC TEST NO.

V-26048-ML

11. VEHICLE EFFECTIVITY

AS-502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
N/A	N/A	

15. TEST CONFIGURATION

N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☐ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS **APOLLO/SATURN TEST CATALOG**	PAGE 1 OF 2
1. TEST TITLE Service Arm Control Switch System Component Checkout and Pressure Test.	2. KSC TEST NO. V-26049-ML 3. STAGE, VEHICLE OR GSE GSE

4. TEST OBJECTIVES

To verify that the Service Arm Control Switch System is complete and the pneumatic systems leak free.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

Physically checkout system components and installation pressurize to verify completeness and pneumatic systems leak test.

Status:

1. Prerequisites:

   A. Electrical Checkout of Service Arm Control Switch (1-BLGSEV-1026) complete.
   B. 750 PSI GN_2 Available at Valve Panel #11.
   C. Launcher Accessories Test Set #2 (75M09032) available.
   D. Portable DC Power Supply (75M51116) available.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
T. Poweleit T. Poweleit	Donald A. Scoville for EH W. C. Rainwater	21 July 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

KSC FORM 23-191 (2/66)

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE

Service Arm Control Switch System Component Checkout and Pressure Test.

2. KSC TEST NO.

V-26049-ML

11. VEHICLE EFFECTIVITY

AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
N/A	N/A	

15. TEST CONFIGURATION

N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☐ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

Tail Service Mast 1-2, 3-2, and 3-4 System LCC Integration Test

2. KSC TEST NO.

V-26070-ML

3. STAGE, VEHICLE OR GSE

GSE - TSM

4. TEST OBJECTIVES

The purpose of this test is to hydraulically charge, pressurize and retract each individual Tail Service Mast from its Firing and Monitor Panel located in the Launch Control Center. This test qualifies each Tail Service Mast for support of vehicle processing.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

Each Tail Service Mast will be hydraulically charged, pneumatically pressurized and retracted individually from its respective Tail Service Mast Firing and Monitoring Panel in the Launch Control Center to verify the operation of the mast from the Launch Control Center.

Status:

1. Prerequisites:

   A. Tail Service Mast 1-2, 3-2, and 3-4 Aft Umbilical Carrier installation and checkout complete.
   B. 50 PSI GN_2 Purge and 3000 PSI GN_2 Supply from Valve Panel #11.
   C. Hydraulic Charging Unit installation and checkout complete.
   D. LCC Tail Service Mast Firing and Monitor Panel electrical system installation complete and checked out.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY J. J. Clark for W. J. Gonedridge	8. NASA-KSC APPROVAL Donald L. Teaville for EH W. C. Rainwater	10. APPROVAL DATE 21 Apr 66
7. ORGANIZATION BATC-M&PS-LSS	9. ORGANIZATION LVO-32	11. VEHICLE EFFECTIVITY AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)

1. TEST TITLE

Tail Service Mast 1-2, 3-2, and 3-4 System LCC Integration Test

2. KSC TEST NO.

V-26070-ML

11. VEHICLE EFFECTIVITY

AS- 502 Activation

12. WHERE TEST PERFORMED

ML #2

13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)

N/A

14. EST. TEST TIME

15. TEST CONFIGURATION

EXTENDED, UNMATED

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☒ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☒ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☒ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☒ TIMING	☒ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☒ LSS ELECTRICAL	☐	☐ FOOD SERVICE
☒ LSS PNEUMATIC AND HYD.	☐	☐
☒ QUALITY CONTROL	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

Tail Service Mast Sub-System Retract Time Test.

2. KSC TEST NO.

V-26071-ML

3. STAGE, VEHICLE OR GSE

GSE - TSM

4. TEST OBJECTIVES

The purpose of this test is to verify the Tail Service Mast retract time is within the specification tolerance for each Mast.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

Tail Service Mast retraction time data will be recorded and the retraction conducted from the Tail Service Mast Test Set located in the area of the Tail Service Mast at Mobile Launcher Level Zero (0) for each mast. The system will be hydraulically charged and pressurized to normal working pressure, the mast retracted, retraction time recorded and evaluated. A minimum of three (3) consecutive retractions within time specifications will be required for the completion of the test.

Status:

1. Prerequisites:

   A. 50 PSI GN_2 Purge and 3000 PSI GN_2 Supply from Valve Panel #11.
   B. Hydraulic Charging Unit installation and checkout complete.
   C. Tail Service Mast Test Set #7601 and Power Supply connected and checked out.
   D. Tail Service Mast Carrier installed.
   E. Esterline Angus Single Channel Recorder.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
J. P. Clark for W. J. Gonedridge	Donald L. Scoville for EH W. C. Rainwater	21 Nov 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

KSC FORM 23-191 (2/66)

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2
1. TEST TITLE Tail Service Mast Sub-System Retract Time Test.	2. KSC TEST NO. V-26071-ML 11. VEHICLE EFFECTIVITY AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
ML #2	N/A	

15. TEST CONFIGURATION

Extended, Unmated

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☒ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☒ LSS Electrical	☐	☐ FOOD SERVICE
☒ LSS Pneumatic and Hyd.	☐	☐
☒ Quality Control	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

Tail Service Mast Low Pressure Extension and Retraction Sub-System Functional Test.

2. KSC TEST NO.

V-26072-ML

3. STAGE, VEHICLE OR GSE

GSE - TSM

4. TEST OBJECTIVES

The purpose of this test is to extend and retract each Tail Service Mast at low pressure to verify mast motion and ensure no difficulties will be encountered at normal working pressures and high retraction speed.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

Tail Service Mast Low Pressure Extension and Retraction Tests will be conducted from the Tail Service Mast Test Set located in the area of the mast at Mobile Launcher Level Zero (0). The Tail Service Mast System will be pressurized below normal working pressure and the mast extended and retracted to verify the mast will extend and retract without any difficulty at low speed.

Status:

1. Prerequisites:

   A. 50 PSI GN_2 and 3000PSI GN_2 Supply from Valve Panel #11.
   B. Hydraulic Charging Unit installation and checkout complete.
   C. Tail Service Mast Test Set #7601 and Power Supply connected and checked out for test.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
J. V. Clark for W. J. Gonedridge	Donald R. Knowles for EK W. C. Rainwater	21 Dec 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)

1. TEST TITLE

Tail Service Mast Low Pressure Extension and Retraction Sub-System Functional Test.

2. KSC TEST NO.

V-26072-ML

11. VEHICLE EFFECTIVITY

AS- 502 Activation

12. WHERE TEST PERFORMED

ML #2

13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)

N/A

14. EST. TEST TIME

15. TEST CONFIGURATION

Extended, Unmated

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

[ ] GROUND POWER	[ ] LCC MEASURING (LVO)	[ ] ETR/KSC RADAR
[ ] S-IB OR S-IC STAGE PWR	[ ] LCC MEASURING (INS)	[ ] ETR COMMAND XMITTER
[ ] S-II STAGE POWER	[ ] GSE MEASURING (LVO)	[ ] LOCAL COMMAND (C.L.)
[ ] S-IVB STAGE POWER	[ ] GSE MEASURING (INS)	[ ] ALDS
[ ] IU POWER	[ ] LCC DATA DISPLAY	[ ] LCC TM STA. (MONITOR)
[ ] LEM POWER	[ ] CIF DATA DISPLAY	[ ] LCC TM RECORDING
[ ] SM POWER	[ ] DDAS	[ ] CIF TM STA. (MONITOR)
[ ] CM POWER	[ ] DDAS TAPE RECORDING	[ ] CIF TM RECORDING
[ ] BACK-UP BATTERIES	[ ] SERVICE STRUCTURE MEAS.	[ ] CIF COMPUTER
[X] TIMING	[ ] RCA-110A COMPUTERS	[ ] CIF DATA
[ ] COUNTDOWN CLOCK	[ ] ACE	[ ] TM RECORDS
[ ] ETR SEQUENCER	[ ] L/V W-G ECS	[ ] REAL-TIME CIF COMPUT.
[ ] ETR COUNTDOWN CLOCK	[ ] CM W-G ECS	[ ] POST-TEST CIF COMPUT.
[ ] ETR S.R.O.	[ ] FACILITY ECS (GAS)	[ ] KSC TRACKING
[ ] ETR R.S.O.	[ ] H.P. GAS	[ ] RFI MONITORING
[ ] ETR PAD SAFETY	[ ] CCF	[ ] RF READOUTS (ETR)
[ ] KSC PAD SAFETY	[ ] FACILITY TV (OTV)	[ ] RF READOUTS (KSC)
[ ] SECURITY POLICE	[X] FACILITY COMM. (OIS)	[ ] WEATHER FORECAST
[ ] FIRE FIGHTING	[ ] FILM CAMERAS	[ ] MCC-C
[ ] MEDICAL	[ ] SEARCH LIGHTS	[ ] MCC-H
[X] LSS Electrical	[ ]	[ ] FOOD SERVICE
[X] LSS Pneumatic and Hyd.	[ ]	[ ]
[X] Quality Control	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

Tail Service Component Functional and Pressure Test

2. KSC TEST NO.
V-26074-ML

3. STAGE, VEHICLE OR GSE
GSE - TSM

4. TEST OBJECTIVES

The purpose of this test is to verify Tail Service Mast components are functioning properly and the pneumatic portion of the system does not leak.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

Component Test for each Tail Service Mast will be conducted from the Tail Service Mast Test Set located in the area of each mast at Mobile Launcher Level Zero (0). The electrically operated components will be checked for operation. The system pneumatically pressurized and the electrically controlled pneumatically operated components tested for proper operation. In conjunction with pneumatic component testing pneumatic leak testing will be conducted.

Status:

1. Prerequisites:

   A. Tail Service Mast mechanical installation complete.
   B. Tail Service Mast electrical installation and checkout complete.
   C. Tail Service Mast Test Set #7601 and Power Supply connected and checked out for test.
   D. Pneumatic Checkout Panel Model #1.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
J. P. Clark for W. J. Gonedridge	Donald A. Scoville for ZH W. C. Rainwater	21 Dec 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS-502 Activation

KSC FORM 23-191 (2/66)

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
Tail Service Component Functional and Pressure Test.	V-26074-ML
	11. VEHICLE EFFECTIVITY
	AS-502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
ML #2	N/A	

15. TEST CONFIGURATION

Extended, Unmated

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

[ ] GROUND POWER	[ ] LCC MEASURING (LVO)	[ ] ETR/KSC RADAR
[ ] S-IB OR S-IC STAGE PWR	[ ] LCC MEASURING (INS)	[ ] ETR COMMAND XMITTER
[ ] S-II STAGE POWER	[ ] GSE MEASURING (LVO)	[ ] LOCAL COMMAND (C.L.)
[ ] S-IVB STAGE POWER	[ ] GSE MEASURING (INS)	[ ] ALDS
[ ] IU POWER	[ ] LCC DATA DISPLAY	[ ] LCC TM STA. (MONITOR)
[ ] LEM POWER	[ ] CIF DATA DISPLAY	[ ] LCC TM RECORDING
[ ] SM POWER	[ ] DDAS	[ ] CIF TM STA. (MONITOR)
[ ] CM POWER	[ ] DDAS TAPE RECORDING	[ ] CIF TM RECORDING
[ ] BACK-UP BATTERIES	[ ] SERVICE STRUCTURE MEAS.	[ ] CIF COMPUTER
[X] TIMING	[ ] RCA-110A COMPUTERS	[ ] CIF DATA
[ ] COUNTDOWN CLOCK	[ ] ACE	[ ] TM RECORDS
[ ] ETR SEQUENCER	[ ] L/V W-G ECS	[ ] REAL-TIME CIF COMPUT.
[ ] ETR COUNTDOWN CLOCK	[ ] CM W-G ECS	[ ] POST-TEST CIF COMPUT.
[ ] ETR S.R.O.	[ ] FACILITY ECS (GAS)	[ ] KSC TRACKING
[ ] ETR R.S.O.	[ ] H.P. GAS	[ ] RFI MONITORING
[ ] ETR PAD SAFETY	[ ] CCF	[ ] RF READOUTS (ETR)
[ ] KSC PAD SAFETY	[ ] FACILITY TV (OTV)	[ ] RF READOUTS (KSC)
[ ] SECURITY POLICE	[X] FACILITY COMM. (OIS)	[ ] WEATHER FORECAST
[ ] FIRE FIGHTING	[ ] FILM CAMERAS	[ ] MCC-C
[ ] MEDICAL	[ ] SEARCH LIGHTS	[ ] MCC-H
[X] LSS Electrical	[ ]	[ ] FOOD SERVICE
[X] LSS Pneumatic and Hyd.	[ ]	[ ]
[X] Quality Control	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

Platform System Integration Function Test - Pad A
(LUT Level and Engine Service)

2. KSC TEST NO.

V-26076-ML

3. STAGE, VEHICLE OR GSE

GSE

4. TEST OBJECTIVES

To perform an integrated functional test of the Pad ESP Sub-System, the LUT Sub-System, and the Platform Transporter Sub-System to prove compatibility of the Platform System with the LUT and Pad, and to assure the overall systems readiness for supporting processing and launch of a vehicle.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

A. Check ESP to ESP Transporter Support points and tiedown compatibility and fit.
B. Position Transporter with ESP under LUT Engine Chamber and check alignment.
C. Lifting equipment compatibility checkout.
D. Checkout (C/O) cable loading adjustments & Level Sensor System.
E. Fitcheck Roller Assembly to Engine Chamber.
F. ESP/LUT wire rope compatibility checkout.
G. Access ladder to LLP compatibility checkout.
H. C/O lifting operations (all-modes) and securing operations after lifting.
J. C/O lowering operations and securing operations after lowering.
K. C/O LLP lowering operations.
L. LLP to ESP Support points and tiedowns compatibility and fit.
M. Transporter North & South Winch System and Securing System operational checkout underload.
N. C/O LLP fitting and securing operations.
P. C/O ESP Transporter with ESP to storage area (north) and secure.
Q. Verify any emergency operating modes.

Status:

1. Prerequisites:
   A. LUT positioned at Pad (LUT Level Platform in place).
   B. V-26077-GSE 39A and V-26080-GSE 39A complete.
   C. ESP on Transporter.
   D. Electric power available at Transporter Winches and Engine Service Platform distributor.
   E. ESP chocking system serviced.
   F. Hydraulic chocking system gage certified.
   G. Platform Transporter Brake System serviced with GN_2.
   H. Certification of Control Panel on Platform Transporter.
   I. Q. C. Support

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
T. Poweleit T. Poweleit	W. C. Rainwater W. C. Rainwater	21 July 66
7. ORGANIZATION	**9. ORGANIZATION**	**11. VEHICLE EFFECTIVITY**
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
Platform System Integration Function Test - Pad A (LUT Level and Engine Service)	V-26076-ML
	11. VEHICLE EFFECTIVITY AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
Pad 39A	N/A	

18. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS **APOLLO/SATURN TEST CATALOG**	PAGE 1 OF 2
1. TEST TITLE VAB Engine Service Platform (ESP) Sub-System Functional Test	2. KSC TEST NO. V-26078-GSE 39A 3. STAGE, VEHICLE OR GSE GSE

4. TEST OBJECTIVES

To prove thru functional test of the VAB ESP, compatibility of all handling and installation hardware with both the ESP and LUT, and to prove the functional acceptance of all platform systems.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

A. Cable Loading and Level Sensor Checkout.
B. C/O Lifting Operation.
C. Fit Check Roller Assembly (75M51234) with Engine Chamber in LUT.
D. Checkout upper limit switch operation.
E. C/O Post Raising Operations.
F. Checkout Lowering Operation.
G. Checkout auxiliary winch system under load.
H. Checkout securing operations after engine change.

Status:

1. Prerequisites:

A. V-26083-ML and V-26087-ML complete.
B. LUT Level Platform (LLP) installed.
C. Electric power available at Engine Service Platform Relay Distributor.
D. Platform Controller available and connected.
E. LUT positioned in VAB.
F. Q. C. Support

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
T. Poweleit T. Poweleit	W. C. Rainwater W. C. Rainwater	21 JULY 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS-502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
VAB Engine Service Platform (ESP) Sub-System Functional Test	V-26078-GSE 39A
	11. VEHICLE EFFECTIVITY
	AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
VAB	N/A	

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

1. TEST TITLE

LUT Level Platform (LLP) Sub-System Functional Test.

2. KSC TEST NO.

V-26079-ML

3. STAGE, VEHICLE OR GSE

GSE

4. TEST OBJECTIVES

To prove thru inspection and fitcheck the compatibility of LUT Level Platform attach and centering hardware with LUT LP and LUT. To prove compatibility of LUT LP with LUT and Winch System and the readiness of the LUT LP for final integrated validation.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

A. Check compatibility of winch cable fittings with LUT LP Lifting Lugs.
B. Checkout lifting operations.
C. Fitcheck LLP to Engine Chamber.
D. Fit check LLP/LUT Holddown Arm (HDA) attach hardware for compatibility.
E. Checkout lowering operations.
F. Checkout LLP and winch securing operations.

Status:

1. Prerequisites:

A. V-26084-ML and V-26087-ML complete.
B. Crossovers retracted.
C. Electric power available at Engine Service Platform Relay Distributor.
D. Q. C. and Safety Support.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
T. Poweleit T. Poweleit	W. C. Rainwater W. C. Rainwater	21 Jun 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
LUT Level Platform (LLP) Sub-System Functional Test.	V-26079-ML
	11. VEHICLE EFFECTIVITY
	AS-502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
N/A	N/A	

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS APOLLO/SATURN TEST CATALOG	PAGE 1 OF 2
1. TEST TITLE Pad Engine Service Platform (ESP) Sub-System Functional Test.	2. KSC TEST NO. V-26080 GSE 39A 3. STAGE, VEHICLE OR GSE GSE

4. TEST OBJECTIVES

To prove thru functional test of the PAD ESP, compatibility of all handling and installation hardware with both the ESP and LUT, and to prove the functional acceptance of all platform systems.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

A. Cable Loading and Level Sensor Checkout.
B. C/O Lifting Operation.
C. Fit Check Roller Assembly (75M51234) with Engine Chamber in LUT
D. Checkout upper limit switch operation.
E. C/O Post Raising Operations.
F. Checkout Lowering Operation.

Status:

1. Prerequisites:

A. 6-BLGSEV-3142 & V-26087-ML complete.
B. LUT Level Platform (LLP) installed.
C. Electric power available at Engine Service Platform Relay Distributor.
D. Platform Controller available and connected.
E. Q. C. and Safety Support.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
T. Poweleit T. Poweleit	W. C. Rainwater W. C. Rainwater EH	21 Dec 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS-502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
Pad Engine Service Platform (ESP) Sub-System Functional Test.	V-26080 GSE 39A
	11. VEHICLE EFFECTIVITY: AS-502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
Pad 39A	N/A	

15. TEST CONFIGURATION

N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
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☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

VAB (75M13810) Engine Servicing Platform (ESP) Checkout.

2. KSC TEST NO.
V-26083-ML

3. STAGE, VEHICLE OR GSE
GSE

4. TEST OBJECTIVES

To prove thru static checkout the ESP readiness for functional testing.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

A. Visual inspection and/or manual checkout at component level for Conformance with drawings.
B. C/O Hydraulic Chock System (75M51341).
C. Roller Assemblies (75M51234).
D. C/O Storage well covers.

Status:

1. Prerequisites:

A. Platform Electrical Checkout (1-BLGSEV-1027) complete.
B. Hydraulic Chocking System Serviced.
C. Hydraulic Chocking System gage calibration.
D. Q. C. Support

769

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

REPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
T. Poweleit T. Poweleit	Donald Kaulb for EH W. C. Rainwater	21 Dec 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

KSC FORM 23-191 (2/66)

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
VAB (75M13810) Engine Servicing Platform (ESP) Checkout.	V-26083-ML
	11. VEHICLE EFFECTIVITY
	AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
VAB	N/A	

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☐ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

LUT Level Platform (LLP) (75M51174) Checkout

2. KSC TEST NO.

V-26084-ML

3. STAGE, VEHICLE OR GSE

GSE

4. TEST OBJECTIVES

To prove thru static checkout of all LLP fixtures, devices, and the electrical system their readiness for functional testing fitcheck with the LUT.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

A. Visually inspect for conformance with drawings.
B. Checkout centering device.
C. C/O Gimbal Servicing Platforms.
D. C/O guard rails.
E. C/O Retractable Ladder Assemblies.
F. C/O Crossover Assemblies for installability.
G. C/O turnbuckle compatibility.
H. C/O Lighting System.

Status:

1. Prerequisites:

A. 110 volt power to platform.
B. Q. C. and Safety Support.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

REPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
T. Powelcit	Donald A. Scoville for W. C. Rainwater	21 Dec 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
LUT Level Platform (LLP) (75M51174) Checkout.	V-26084-ML
	11. VEHICLE EFFECTIVITY
	AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
N/A	N/A	

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

Platform Winch (75M13068) Checkout.

2. KSC TEST NO.

V-26087-ML

3. STAGE, VEHICLE OR GSE

GSE

4. TEST OBJECTIVES

To verify physical compatibility of winch system components and to operate winches prior to assure readiness for functional testing with platforms.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

A. Visual Inspection for Conformance with Drawings.
B. Fitcheck of sheaves, sheave supports and wire rope assemblies (75M51361).
C. Checkout winch cover compatibility and for ease of removal of molded housing (75M51359-8).
D. Operate all five winches under no load.

Status:

1. Prerequisites:

A. Valid load test of cables.
B. Winches lubricated per Mfg. Spec.
C. Platform Controller Winches and Distributors electrical checkout (1-BLGSEV-1028) complete.
D. Q. C. Support.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
T. Poweleit T. Poweleit	W. C. Rainwater W. C. Rainwater	21 July 66
7. ORGANIZATION	**9. ORGANIZATION**	**11. VEHICLE EFFECTIVITY**
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)

F OF 2

1. TEST TITLE

Platform Winch (75M13068) Checkout.

2. KSC TE

V-2608

11. VEHICLE EFFEC TY

AS - 502 Activation

12. WHERE TEST PERFORMED: N/A

13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE): N/A

14. EST. TEST TIME:

15. TEST CONFIGURATION: N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

14

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

Industrial Water System LCC Integration

2. KSC TEST NO.
V-26115-ML

3. STAGE, VEHICLE OR GSE
GSE

4. TEST OBJECTIVES

The purpose of this test is to verify that the performance and operational readiness of the Industrial Water System is acceptable for Vehicle Test and Launch.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

This test is concerned with the integrated operation of the Four Vehicle Launch Support Water Sub-Systems (denoted as V3, V4, V5, and V71 through V79) operated in the automatic mode under simulated launch conditions.

Parameters to be verified are the proper sequenced opening of the various sub-system valves; minimum main line pressure and flow rates; minimum booster pump P-1 discharge pressure and flow; and combined LUT and flame trench water coverage.

Status:

1. Prerequisites:

   A. Test V-26116-ML is complete.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
R. H. Miller	Donald R. Scaulle for W. C. Rainwater	21 July 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
Industrial Water System LCC Integration.	V-26115-ML
	11. VEHICLE EFFECTIVITY
	AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
Pad 39B	N/A	16 hours

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

[X] GROUND POWER	[ ] LCC MEASURING (LVO)	[ ] ETR/KSC RADAR
[ ] S-IB OR S-IC STAGE PWR	*[X] LCC MEASURING (INS)	[ ] ETR COMMAND XMITTER
[ ] S-II STAGE POWER	[ ] GSE MEASURING (LVO)	[ ] LOCAL COMMAND (C.L.)
[ ] S-IVB STAGE POWER	[ ] GSE MEASURING (INS)	[ ] ALDS
[ ] IU POWER	[ ] LCC DATA DISPLAY	[ ] LCC TM STA. (MONITOR)
[ ] LEM POWER	[ ] CIF DATA DISPLAY	[ ] LCC TM RECORDING
[ ] SM POWER	[ ] DDAS	[ ] CIF TM STA. (MONITOR)
[ ] CM POWER	[ ] DDAS TAPE RECORDING	[ ] CIF TM RECORDING
[ ] BACK-UP BATTERIES	[ ] SERVICE STRUCTURE MEAS.	[ ] CIF COMPUTER
[ ] TIMING	[ ] RCA-110A COMPUTERS	[ ] CIF DATA
[ ] COUNTDOWN CLOCK	[ ] ACE	[ ] TM RECORDS
[ ] ETR SEQUENCER	[ ] L/V W-G ECS	[ ] REAL-TIME CIF COMPUT.
[ ] ETR COUNTDOWN CLOCK	[ ] CM W-G ECS	[ ] POST-TEST CIF COMPUT.
[ ] ETR S.R.O.	[ ] FACILITY ECS (GAS)	[ ] KSC TRACKING
[ ] ETR R.S.O.	[X] H.P. GAS	[ ] RFI MONITORING
[ ] ETR PAD SAFETY	[ ] CCF	[ ] RF READOUTS (ETR)
[X] KSC PAD SAFETY	[X] FACILITY TV (OTV)	[ ] RF READOUTS (KSC)
[X] SECURITY POLICE	[X] FACILITY COMM. (OIS)	[ ] WEATHER FORECAST
[ ] FIRE FIGHTING	[ ] FILM CAMERAS	[ ] MCC-C
[ ] MEDICAL	[ ] SEARCH LIGHTS	[ ] MCC-H
[X] Bendix Pump Station	[ ]	[ ] FOOD SERVICE
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

OTHERS: * Measurements - 3K04, 33K01, 35K01, 35K02, 4K01 DEE #3.

Bendix Power Section - Sub-Station "C" Circuit Breaker 1504

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

Industrial Water System, LUT Sub-System Functional

2. KSC TEST NO.

V-26116-ML

3. STAGE, VEHICLE OR GSE

GSE

4. TEST OBJECTIVES

The purpose of this test is to verify that all LUT Water Sub-Systems are functionally operational and ready to support an Industrial Water System Functional Test.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

This test is concerned with the Manual Checkout and Wet Test of the Launch Support and Emergency Flush Industrial Water Systems on the LUT. The Launch Support Water Systems include Valve V5 supplying the zero level deck flush nozzles and engine chamber perforated pipes, and V7 supplying the Swing Arm Valves V71 through V79 and their associated quench nozzles. The Emergency Flush Water Systems include Valves V61 through V64 supplying the fogging nozzles on LUT Levels 30, 120, 160, and 200 and the S-IC engine deluge valve supplying the engine chamber deluge nozzles.

All of the LUT solenoid actuated valves will be checked for proper operation, proper time of actuation, and proper open and closed position feedback signals on the LCC Industrial Water Console.

Status:

1. Prerequisites:

Test V-26122-ML complete.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
R H Miller ~~R. H. Miller~~	Donald C Scoville for FF W. C. Rainwater	22 July 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
Industrial Water System, LUT Sub-System Functional	V-26116-ML
	11. VEHICLE EFFECTIVITY
	AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
Pad 39B	N/A	16 Hour

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

[X] GROUND POWER	[ ] LCC MEASURING (LVO)	[ ] ETR/KSC RADAR
[ ] S-IB OR S-IC STAGE PWR	* [X] LCC MEASURING (INS)	[ ] ETR COMMAND XMITTER
[ ] S-II STAGE POWER	[ ] GSE MEASURING (LVO)	[ ] LOCAL COMMAND (C.L.)
[ ] S-IVB STAGE POWER	[ ] GSE MEASURING (INS)	[ ] ALDS
[ ] IU POWER	[ ] LCC DATA DISPLAY	[ ] LCC TM STA. (MONITOR)
[ ] LEM POWER	[ ] CIF DATA DISPLAY	[ ] LCC TM RECORDING
[ ] SM POWER	[ ] DDAS	[ ] CIF TM STA. (MONITOR)
[ ] CM POWER	[ ] DDAS TAPE RECORDING	[ ] CIF TM RECORDING
[ ] BACK-UP BATTERIES	[ ] SERVICE STRUCTURE MEAS.	[ ] CIF COMPUTER
[ ] TIMING	[ ] RCA-110A COMPUTERS	[ ] CIF DATA
[ ] COUNTDOWN CLOCK	[ ] ACE	[ ] TM RECORDS
[ ] ETR SEQUENCER	[ ] L/V W-G ECS	[ ] REAL-TIME CIF COMPUT.
[ ] ETR COUNTDOWN CLOCK	[ ] CM W-G ECS	[ ] POST-TEST CIF COMPUT.
[ ] ETR S.R.O.	[ ] FACILITY ECS (GAS)	[ ] KSC TRACKING
[ ] ETR R.S.O.	[X] H.P. GAS	[ ] RFI MONITORING
[ ] ETR PAD SAFETY	[ ] CCF	[ ] RF READOUTS (ETR)
[X] KSC PAD SAFETY	[X] FACILITY TV (OTV)	[ ] RF READOUTS (KSC)
[X] SECURITY POLICE	[X] FACILITY COMM. (OIS)	[ ] WEATHER FORECAST
[ ] FIRE FIGHTING	[ ] FILM CAMERAS	[ ] MCC-C
[ ] MEDICAL	[ ] SEARCH LIGHTS	[ ] MCC-H
[X] Bendix Pump Station	[ ]	[ ] FOOD SERVICE
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

OTHERS: *Measurements - 3K04, 33K01, 35K02, 4K01

Bendix Power - Sub-Station "C" Circuit Breakers 1504 DEE #3.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

Industrial Water System LUT Valve Checkout

2. KSC TEST NO.

V-26118-ML

3. STAGE, VEHICLE OR GSE

GSE

4. TEST OBJECTIVES

The purpose of this test is to verify that the LUT Water Valves are functionally operational.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

This test is concerned with the dry check of all LUT Industrial Water Valves. The Nine Swing Arm Quench Valves (V-71 through V-79) will be actuated by triggering the individual electro-pneumatic solenoid valves with valve position light feedbacks being checked.

NOTE: The GN_2 lines running between each swing arm and its No. 1 Console will be pressurized and leak checked prior to the actuation of the Associated Swing Arm Quench Valve.

The solenoid valves on fogging Valves V-61 through V-64 located on Levels 30, 120, 160, and 200 and the S-IC engine deluge valve located on Level "B" will be checked for proper actuation. The engine deluge and fogging water valves will not be actuated as the triggering mechanisms are electro-hydraulic receiving water pressure from the LUT supply header which will be dry during this test. Valve position light feedback will, therefore, be checked by manually operating the valve position limit switches.

Status:

Water System LUT/PAD electrical Interface connections are made.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

PREPARED BY R. H. Miller	8. NASA-KSC APPROVAL W. C. Rainwater	10. APPROVAL DATE 21 Dec 66
7. ORGANIZATION BATC-M&PS-LSS	9. ORGANIZATION LVO-32	11. VEHICLE EFFECTIVITY AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2
1. TEST TITLE Industrial Water System LUT Valve Checkout	2. KSC TEST NO. V-26118-ML 11. VEHICLE EFFECTIVITY AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
Pad 39 B	N/A	8 Hour

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

[X] GROUND POWER	[ ] LCC MEASURING (LVO)	[ ] ETR/KSC RADAR
[ ] S-IB OR S-IC STAGE PWR	[ ] LCC MEASURING (INS)	[ ] ETR COMMAND XMITTER
[ ] S-II STAGE POWER	[ ] GSE MEASURING (LVO)	[ ] LOCAL COMMAND (C.L.)
[ ] S-IVB STAGE POWER	[ ] GSE MEASURING (INS)	[ ] ALDS
[ ] IU POWER	[ ] LCC DATA DISPLAY	[ ] LCC TM STA. (MONITOR)
[ ] LEM POWER	[ ] CIF DATA DISPLAY	[ ] LCC TM RECORDING
[ ] SM POWER	[ ] DDAS	[ ] CIF TM STA. (MONITOR)
[ ] CM POWER	[ ] DDAS TAPE RECORDING	[ ] CIF TM RECORDING
[ ] BACK-UP BATTERIES	[ ] SERVICE STRUCTURE MEAS.	[ ] CIF COMPUTER
[ ] TIMING	[ ] RCA-110A COMPUTERS	[ ] CIF DATA
[ ] COUNTDOWN CLOCK	[ ] ACE	[ ] TM RECORDS
[ ] ETR SEQUENCER	[ ] L/V W-G ECS	[ ] REAL-TIME CIF COMPUT.
[ ] ETR COUNTDOWN CLOCK	[ ] CM W-G ECS	[ ] POST-TEST CIF COMPUT.
[ ] ETR S.R.O.	[ ] FACILITY ECS (GAS)	[ ] KSC TRACKING
[ ] ETR R.S.O.	[X] H.P. GAS	[ ] RFI MONITORING
[ ] ETR PAD SAFETY	[ ] CCF	[ ] RF READOUTS (ETR)
[ ] KSC PAD SAFETY	[ ] FACILITY TV (OTV)	[ ] RF READOUTS (KSC)
[ ] SECURITY POLICE	[X] FACILITY COMM. (OIS)	[ ] WEATHER FORECAST
[ ] FIRE FIGHTING	[ ] FILM CAMERAS	[ ] MCC-C
[ ] MEDICAL	[ ] SEARCH LIGHTS	[ ] MCC-H
[ ]	[ ]	[ ] FOOD SERVICE
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

OTHERS: DEE #3

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

1. TEST TITLE

Industrial Water System LUT Line Fill and Pressure Checks

2. KSC TEST NO.

V-26122-ML

3. STAGE, VEHICLE OR GSE

GSE

4. TEST OBJECTIVES

The purpose of this test is to fill the LUT Water Lines and to check them for leaks.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

This test is concerned with the filling, pressurizing and leak checking of all Industrial Water Lines on a LUT parked at Pad "B" from the Pad Interface connections to the top Swing Arm Cooling Valve. The test includes the LUT section of water system lines V5 - supplying the LUT deck flush nozzles and the perforated pipes in the LUT engine chamber, and V7 - supplying the S-IC engine deluge nozzles, the tower fogging nozzles, and the swing arm cooling nozzles. Both lines will be filled and checked individually by means of the manual valve that bypasses the system automatic gate valve. The V5 System will be pressurized by normal line pressure while the V7 System will be pressurized by means of line pressure and booster pump P-1.

Status:

1. Prerequisites:

Test V-26118-ML complete.
Pad/LUT Interface connections are made.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
R. H. Miller	W. C. Rainwater	21 Dec 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS- 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE
Industrial Water System LUT Line Fill and Pressure Checks

2. KSC TEST NO.
V-26122-ML

11. VEHICLE EFFECTIVITY
AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
Pad 39B	N/A	8 hour

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

[X] GROUND POWER	[ ] LCC MEASURING (LVO)	[ ] ETR/KSC RADAR
[ ] S-IB OR S-IC STAGE PWR	*[X] LCC MEASURING (INS)	[ ] ETR COMMAND XMITTER
[ ] S-II STAGE POWER	[ ] GSE MEASURING (LVO)	[ ] LOCAL COMMAND (C.L.)
[ ] S-IVB STAGE POWER	[ ] GSE MEASURING (INS)	[ ] ALDS
[ ] IU POWER	[ ] LCC DATA DISPLAY	[ ] LCC TM STA. (MONITOR)
[ ] LEM POWER	[ ] CIF DATA DISPLAY	[ ] LCC TM RECORDING
[ ] SM POWER	[ ] DDAS	[ ] CIF TM STA. (MONITOR)
[ ] CM POWER	[ ] DDAS TAPE RECORDING	[ ] CIF TM RECORDING
[ ] BACK-UP BATTERIES	[ ] SERVICE STRUCTURE MEAS.	[ ] CIF COMPUTER
[ ] TIMING	[ ] RCA-110A COMPUTERS	[ ] CIF DATA
[ ] COUNTDOWN CLOCK	[ ] ACE	[ ] TM RECORDS
[ ] ETR SEQUENCER	[ ] L/V W-G ECS	[ ] REAL-TIME CIF COMPUT.
[ ] ETR COUNTDOWN CLOCK	[ ] CM W-G ECS	[ ] POST-TEST CIF COMPUT.
[ ] ETR S.R.O.	[ ] FACILITY ECS (GAS)	[ ] KSC TRACKING
[ ] ETR R.S.O.	[X] H.P. GAS	[ ] RFI MONITORING
[ ] ETR PAD SAFETY	[ ] CCF	[ ] RF READOUTS (ETR)
[X] KSC PAD SAFETY	[X] FACILITY TV (OTV)	[ ] RF READOUTS (KSC)
[X] SECURITY POLICE	[X] FACILITY COMM. (OIS)	[ ] WEATHER FORECAST
[ ] FIRE FIGHTING	[ ] FILM CAMERAS	[ ] MCC-C
[ ] MEDICAL	[ ] SEARCH LIGHTS	[ ] MCC-H
[X] Bendix Structures Work Area #2	[X] Bendix Pump Station	[ ] FOOD SERVICE
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

OTHERS: *Measurements 3K04, 33K01, 4K01 DEE #3

Bendix Power Sub-Station "C" Circuit Breaker #1504

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

VAB Environmental Control System Functional Check-out.

2. KSC TEST NO.
V-26160-GSE VAB

3. STAGE, VEHICLE OR GSE
ECS (TEST) GSE

4. TEST OBJECTIVES

Assure readiness of VAB ECS to provide air in quantities and at conditions required for vehicle processing.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

This procedure proves the capability of the ECS Sub-Systems to operate as an integrated system. The system performance will be measured at ML Interface.

Equipment Status:

Nozzle Dampers installed at ML Interface
0-500 AMP Clip on Ammeter
0-150 in H_2O Gage
Heated Thermocouple Anemometer
Sling Psychrometer.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
Julian B. Rauch Julian B. Rauch	Donald A. Sowell for W. C. Rainwater	21 July 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS-[illegible] Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
VAB Environmental Control System Functional Checkout.	V-26160-GSE VAB
	11. VEHICLE EFFECTIVITY: AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
VAB Tower F	N/A	8 Hours

15. TEST CONFIGURATION

N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☒ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☒ VAB Facility HVAC	☐	☐ FOOD SERVICE
☒ 40° CHS Tower F	☐	☐
☒ 180° SSF Tower F	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

LC 39 Vertical Assembly Building Service and Maintenance Manual
Environmental Control System TM4-150-39

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

VAB Environmental Control System Components Sub-System Checkout.

2. KSC TEST NO.

V-26161-GSE VAB

3. STAGE, VEHICLE OR GSE

ECS (TEST) GSE

4. TEST OBJECTIVES

Assure readiness of VAB ECS Components to function as an integral part of VAB ECS.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

This test will include the operation of the Chiller and 5 Blowers. The Blowers will be checked for current draw, air flow, and static pressure. The Chiller will be checked for proper pressures and temperatures.

Prerequisites:

Nozzle Dampers installed at ML Interface.

Equipment:

0-500 AMP Clip On Ammeter
0-150 in H_2O Gage.
Heated Thermcouple Anemometer
Refrigeration Test Gages.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
J. B. Rauch J. B. Rauch	Donald L. Scoville for CP W. C. Rainwater	21 JULY 66
7. ORGANIZATION	9. ORGANIZATION	11. VEHICLE EFFECTIVITY
BATC-M&PS-LSS	LVO-32	AS-502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
VAB Environmental Control System Component Sub-System Checkout.	V-26161-GSE VAB
	11. VEHICLE EFFECTIVITY: AS-502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
VAB Tower F	N/A	8 Hours

15. TEST CONFIGURATION

N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

[ ] GROUND POWER	[ ] LCC MEASURING (LVO)	[ ] ETR/KSC RADAR
[ ] S-IB OR S-IC STAGE PWR	[ ] LCC MEASURING (INS)	[ ] ETR COMMAND XMITTER
[ ] S-II STAGE POWER	[ ] GSE MEASURING (LVO)	[ ] LOCAL COMMAND (C.L.)
[ ] S-IVB STAGE POWER	[ ] GSE MEASURING (INS)	[ ] ALDS
[ ] IU POWER	[ ] LCC DATA DISPLAY	[ ] LCC TM STA. (MONITOR)
[ ] LEM POWER	[ ] CIF DATA DISPLAY	[ ] LCC TM RECORDING
[ ] SM POWER	[ ] DDAS	[ ] CIF TM STA. (MONITOR)
[ ] CM POWER	[ ] DDAS TAPE RECORDING	[ ] CIF TM RECORDING
[ ] BACK-UP BATTERIES	[ ] SERVICE STRUCTURE MEAS.	[ ] CIF COMPUTER
[ ] TIMING	[ ] RCA-110A COMPUTERS	[ ] CIF DATA
[ ] COUNTDOWN CLOCK	[ ] ACE	[ ] TM RECORDS
[ ] ETR SEQUENCER	[ ] L/V W-G ECS	[ ] REAL-TIME CIF COMPUT.
[ ] ETR COUNTDOWN CLOCK	[ ] CM W-G ECS	[ ] POST-TEST CIF COMPUT.
[ ] ETR S.R.O.	[X] FACILITY ECS (GAS)	[ ] KSC TRACKING
[ ] ETR R.S.O.	[ ] H.P. GAS	[ ] RFI MONITORING
[ ] ETR PAD SAFETY	[ ] CCF	[ ] RF READOUTS (ETR)
[ ] KSC PAD SAFETY	[ ] FACILITY TV (OTV)	[ ] RF READOUTS (KSC)
[ ] SECURITY POLICE	[X] FACILITY COMM. (OIS)	[ ] WEATHER FORECAST
[ ] FIRE FIGHTING	[ ] FILM CAMERAS	[ ] MCC-C
[ ] MEDICAL	[ ] SEARCH LIGHTS	[ ] MCC-H
[X] VAB Facility HVAC	[ ]	[ ] FOOD SERVICE
[X] TBC/LVO-226	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

OTHERS:

185A

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

LC 39 Vertical Assembly Building Service and Maintenance Manual
Environmental Control System TM4-150-39

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

VAB Environmental Control System Control Air Sub-System Checkout.

2. KSC TEST NO.
V-26162-GSE VAB

3. STAGE, VEHICLE OR GSE
ECS (TEST) GSE

4. TEST OBJECTIVES

Assure readiness of VAB ECS Control Air Sub-System to function as an integral part of VAB ECS.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

This test will include the checking of the Control Air System for leaks. It will include operation of Thermostatic Controllers Pneumatic Valves and Dampers.

Equipment Status:

Leak TEK Solution

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY J. B. Rauch J. B. Rauch	8. NASA-KSC APPROVAL Donald Scull for EH W. C. Rainwater	10. APPROVAL DATE 21 Dec 66
7. ORGANIZATION BATC-M&PS-LSS	9. ORGANIZATION LVO-32	11. VEHICLE EFFECTIVITY AS- 502 Activation

KSC FORM 23-191 (2/66)

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
VAB Environmental Control System Control Air Sub-System Checkout.	V-26162-GSE VAB
	11. VEHICLE EFFECTIVITY
	AS- 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
VAB Tower F	N/A	8 Hours

15. TEST CONFIGURATION

N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

[ ] GROUND POWER	[ ] LCC MEASURING (LVO)	[ ] ETR/KSC RADAR
[ ] S-IB OR S-IC STAGE PWR	[ ] LCC MEASURING (INS)	[ ] ETR COMMAND XMITTER
[ ] S-II STAGE POWER	[ ] GSE MEASURING (LVO)	[ ] LOCAL COMMAND (C.L.)
[ ] S-IVB STAGE POWER	[ ] GSE MEASURING (INS)	[ ] ALDS
[ ] IU POWER	[ ] LCC DATA DISPLAY	[ ] LCC TM STA. (MONITOR)
[ ] LEM POWER	[ ] CIF DATA DISPLAY	[ ] LCC TM RECORDING
[ ] SM POWER	[ ] DDAS	[ ] CIF TM STA. (MONITOR)
[ ] CM POWER	[ ] DDAS TAPE RECORDING	[ ] CIF TM RECORDING
[ ] BACK-UP BATTERIES	[ ] SERVICE STRUCTURE MEAS.	[ ] CIF COMPUTER
[ ] TIMING	[ ] RCA-110A COMPUTERS	[ ] CIF DATA
[ ] COUNTDOWN CLOCK	[ ] ACE	[ ] TM RECORDS
[ ] ETR SEQUENCER	[ ] L/V W-G ECS	[ ] REAL-TIME CIF COMPUT.
[ ] ETR COUNTDOWN CLOCK	[ ] CM W-G ECS	[ ] POST-TEST CIF COMPUT.
[ ] ETR S.R.O.	[X] FACILITY ECS (GAS)	[ ] KSC TRACKING
[ ] ETR R.S.O.	[ ] H.P. GAS	[ ] RFI MONITORING
[ ] ETR PAD SAFETY	[ ] CCF	[ ] RF READOUTS (ETR)
[ ] KSC PAD SAFETY	[ ] FACILITY TV (OTV)	[ ] RF READOUTS (KSC)
[ ] SECURITY POLICE	[X] FACILITY COMM. (OIS)	[ ] WEATHER FORECAST
[ ] FIRE FIGHTING	[ ] FILM CAMERAS	[ ] MCC-C
[ ] MEDICAL	[ ] SEARCH LIGHTS	[ ] MCC-H
[X] VAB Facility HVAC	[ ]	[ ] FOOD SERVICE
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

LC 39 Vertical Assembly Building, Service and Maintenance Manual Environmental Control System TM4-150-39.

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

VAB Environmental Control System Hot/Cold Water Sub-System Checkout.

2. KSC TEST NO.

V-26163-GSE VAB

3. STAGE, VEHICLE OR GSE

ECS (TEST) GSE

4. TEST OBJECTIVES

To assure readiness of VAB ECS Hot/Cold Water Sub-System to function as an integral part of VAB ECS.

5. TEST DESCRIPTION/EQUIPMENT STATUS

Test Description:

The Hot and Cold Water Sub-System will be operated to verify proper flows and pressures to Hot and Cold Water Coils. A visual leak check will be performed.

160

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY Julian B. Rauch Julian B. Rauch	8. NASA-KSC APPROVAL Donald L. Lovelle for EH W. C. Rainwater	10. APPROVAL DATE 21 July 66
7. ORGANIZATION BATC-M&PS-LSS	9. ORGANIZATION LVO-32	11. VEHICLE EFFECTIVITY AS 502 Activation

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE

VAB Environmental Control System Hot/Cold Water Sub-System Checkout.

2. KSC TEST NO.
V-26163-GSE VAB

11. VEHICLE EFFECTIVITY
AS 502 Activation

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
VAB Tower F	N/A	8 Hours

15. TEST CONFIGURATION

N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☒ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☒ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☒ VAB Facility HVAC	☐	☐ FOOD SERVICE
☒ 40° CHS Tower F	☐	☐
☒ 180° SSF Tower F	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

LC 39 Vertical Assembly Building, Service and Maintenance Manual
Environmental Control System TM 4-150-39

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

LCC MEASURING STATION GENERAL PERFORMANCE AND EQUIPMENT CERTIFICATION TESTS

2. KSC TEST NO.
V-27000-GSE LCC

3. STAGE, VEHICLE OR GSE
LCCMS (TEST)

4. TEST OBJECTIVES

TO CERTIFY EQUIPMENT AND STATION REFERENCE STANDARDS, PERFORM PREVENTATIVE MAINTENANCE ON STATION EQUIPMENT, AND VERIFY PATCH BOARD CONNECTIONS.

5. TEST DESCRIPTION/EQUIPMENT STATUS

THIS PROCEDURE CONTAINS EQUIPMENT ORIENTED TESTS WHICH ARE TO BE USED SELECTIVELY, AS REQUIRED, TO CERTIFY EQUIPMENT AND STATION REFERENCE STANDARDS, PERFORM PREVENTATIVE MAINTENANCE, AND VERIFY CONNECTIONS AND WIRING IN THE STATION DISTRIBUTION NETWORK.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
P. B. Gutsinick 5/20/66	for/ 6/6/66 Rowry M Rogers	5/20/66
7. ORGANIZATION	**9. ORGANIZATION**	**11. VEHICLE EFFECTIVITY**
Boeing Measuring Systems-GSE	LVO-122	AS- 502 through AS510

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE
LCC MEASURING STATION GENERAL PERFORMANCE AND EQUIPMENT CERTIFICATION TESTS

2. KSC TEST NO.
V-27000-GSE LCC

11. VEHICLE EFFECTIVITY
AS - 502 through 510

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
LCC FIRING ROOM	N/A	16 HOURS

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☒ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☐ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

NONE

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

LCC MEASURING STATION RECORDER CHANNEL IDENTIFICATION

2. KSC TEST NO.

V-27001-GSE LCC

3. STAGE, VEHICLE OR GSE

LCCMS (TEST)

4. TEST OBJECTIVES

TO PROVIDE A FUNCTIONAL CHECK OF THE SIGNAL PATH FROM THE APPROPRIATE D/A CONVERTER IN THE LCC DDAS RECEIVING STATION TO THE CORRESPONDING RECORDER CHANNEL IN THE LCC MEASURING STATION.

5. TEST DESCRIPTION/EQUIPMENT STATUS

THIS TEST WILL UTILIZE A DIGITAL SIGNAL SIMULATOR, LOCATED IN THE LCC DDAS RECEIVING STATION, TO PROVIDE A SIGNAL ON EACH MEASUREMENT CHANNEL INDIVIDUALLY THROUGH THE ASSIGNED D/A CONVERTER AT THE RECEIVING STATION. THE D/A OUTPUT IS RECORDED ON THE ASSIGNED RECORDER IN THE LCC MEASURING STATION.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY V. B. Guralnick 5/20/66	8. NASA-KSC APPROVAL 5/20/66	10. APPROVAL DATE 5/20/66
7. ORGANIZATION Boeing Measuring Systems-GSE	9. ORGANIZATION LVO-122	11. VEHICLE EFFECTIVITY AS- 501 thru AS 510

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TITLE
LCC MEASURING STATION RECORDER CHANNEL IDENTIFICATION

2. KSC TEST NO.
V-27001-GSE LCC

11. VEHICLE EFFECTIVITY
AS- 501 thru AS-510

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
LCC FIRING ROOM	N/A	8 HOURS

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☒ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☐ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

NONE

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

VMGSE CHECKOUT PROCEDURE

2G108

2. KSC TEST NO.

V-27009-GSE VAB

3. STAGE, VEHICLE OR GSE

GSE

4. TEST OBJECTIVES

THE PURPOSE OF THIS TEST IS TO VERIFY THE OPERATIONAL READINESS OF THE VMGSE.

5. TEST DESCRIPTION/EQUIPMENT STATUS

THE FUNCTIONAL CAPABILITY OF THE VMGSE TO PROCESS AND DISPLAY DDAS DATA IS CHECKED USING A SIMULATED DDAS SIGNAL. ABILITY OF THE VMGSE TO GENERATE RACS COMMANDS AND DISPLAY RACS STATUS IS ALSO CHECKED.

THIS TEST WILL BE CONDUCTED IN THE VAB AT AMBIENT CONDITIONS PRIOR TO PROCESSING OF EACH VEHICLE.

TEST EQUIPMENT REQUIRED IS THE VMGSE PTER.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
R. C. Voss	R. C. Foole	5-27-66
7. ORGANIZATION	**9. ORGANIZATION**	**11. VEHICLE EFFECTIVITY**
BOEING MEASURING SYSTEMS-GSE	LVO-121	AS- 502

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE	2. KSC TEST NO.
VMGSE CHECKOUT PROCEDURE	V-27009-GSE VAB
	11. VEHICLE EFFECTIVITY: AS- 502

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
VAB 3E15, 15E21, 22E19, 27E15	N/A	8 HRS

15. TEST CONFIGURATION

N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☒ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☐ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION

KSC OPERATIONS
APOLLO/SATURN TEST CATALOG

1. TEST TITLE

SIC MODULE TEST SET FUNCTIONAL AND CALIBRATION TEST

2G111

2. KSC TEST NO.

V-27010-GSE VA

3. STAGE, VEHICLE OR GSE

GSE

4. TEST OBJECTIVES

THE PURPOSE OF THIS TEST IS TO VERIFY THE SATISFACTORY OPERATION OF THE MODULE TEST SET.

5. TEST DESCRIPTION/EQUIPMENT STATUS

THE OPERATION OF THE MODULE TEST SET WILL BE VERIFIED BY THE USE OF EXTERNAL TEST EQUIPMENT, CHECKING CONTINUITY, VOLTAGES, SHUNT RESISTANCE, AND TEST EQUIPMENT SWITCHING. ALL CABLES AND CONNECTORS ARE TO BE TESTED FOR CONTINUITY AND PROPER PIN FUNCTIONS.

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

6. PREPARED BY	8. NASA-KSC APPROVAL	10. APPROVAL DATE
R. C. Voss	Jack D Conaway	5-27-66
ORGANIZATION	ORGANIZATION	11. VEHICLE EFFECTIVITY
BOEING MEASURING SYSTEMS-GSE	LVO-121	AS- 502

APOLLO/SATURN TEST CATALOG (Continuation Sheet)	PAGE 2 OF 2

1. TEST TITLE
SIC MODULE TEST SET FUNCTIONAL AND CALIBRATION TEST
2G118

2. KSC TEST NO.
V-27010-GSE VAB

11. VEHICLE EFFECTIVITY
AS- 502

12. WHERE TEST PERFORMED	13. COMPUTER/ACE PROG. IDENT. (IF APPLICABLE)	14. EST. TEST TIME
VAB 3E17	N/A	8 HRS

15. TEST CONFIGURATION
N/A

16. SUPPORT REQUIREMENTS CHECKLIST *(Check appropriate boxes and add any additional)*

☐ GROUND POWER	☐ LCC MEASURING (LVO)	☐ ETR/KSC RADAR
☐ S-IB OR S-IC STAGE PWR	☐ LCC MEASURING (INS)	☐ ETR COMMAND XMITTER
☐ S-II STAGE POWER	☐ GSE MEASURING (LVO)	☐ LOCAL COMMAND (C.L.)
☐ S-IVB STAGE POWER	☐ GSE MEASURING (INS)	☐ ALDS
☐ IU POWER	☐ LCC DATA DISPLAY	☐ LCC TM STA. (MONITOR)
☐ LEM POWER	☐ CIF DATA DISPLAY	☐ LCC TM RECORDING
☐ SM POWER	☐ DDAS	☐ CIF TM STA. (MONITOR)
☐ CM POWER	☐ DDAS TAPE RECORDING	☐ CIF TM RECORDING
☐ BACK-UP BATTERIES	☐ SERVICE STRUCTURE MEAS.	☐ CIF COMPUTER
☐ TIMING	☐ RCA-110A COMPUTERS	☐ CIF DATA
☐ COUNTDOWN CLOCK	☐ ACE	☐ TM RECORDS
☐ ETR SEQUENCER	☐ L/V W-G ECS	☐ REAL-TIME CIF COMPUT.
☐ ETR COUNTDOWN CLOCK	☐ CM W-G ECS	☐ POST-TEST CIF COMPUT.
☐ ETR S.R.O.	☐ FACILITY ECS (GAS)	☐ KSC TRACKING
☐ ETR R.S.O.	☐ H.P. GAS	☐ RFI MONITORING
☐ ETR PAD SAFETY	☐ CCF	☐ RF READOUTS (ETR)
☐ KSC PAD SAFETY	☐ FACILITY TV (OTV)	☐ RF READOUTS (KSC)
☐ SECURITY POLICE	☐ FACILITY COMM. (OIS)	☐ WEATHER FORECAST
☐ FIRE FIGHTING	☐ FILM CAMERAS	☐ MCC-C
☐ MEDICAL	☐ SEARCH LIGHTS	☐ MCC-H
☐	☐	☐ FOOD SERVICE
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

OTHERS:

(CONTINUE ON KSC FORM 23-192 IF REQUIRED)

17. OTHER APPLICABLE REFERENCE DOCUMENTATION