

*Data Bank
ALSEP papers*

#12

*7th meeting
April 5-8, 1967*

CB/A. Shepard, Jr.
H. Schmitt
EB2/B. Hood
EC/R. Johnston
EC2/E. LaFevers
J. Slight
EE/R. Sawyer
EE2/W. Zrubek
EE4/A. Olsen
EP/J. Thibodaux, Jr.
EP4/T. Graves
EP5/J. Grayson
ES/J. Kotanchik
ES12/R. Harris
FC/J. Hodge
PA/W. Lee
PD/E. Hamblett
PE5/J. Turner
TA/W. Hess
R. Piland
R. Vale
P. Penrod
TA3/E. Smith
H. Starnes
TD/J. Small
P. Maloney
J. Redd
J. Langford
TD2/R. Moke
A. Carraway
J. Sanders
C. McClenny
R. McComb
E. Weeks
J. Zill
V. Ettredge
TD3/D. Wiseman
R. Irwin
G. Kenney
P. Gerke
H. Greider
T. Herrington
J. Lowery
W. Dunaway
TF2/W. Stephenson
TG/J. Modisette
TG2/C. Warren
R. Manka
W. Womack
→ TH2/J. Dragg —
TH3/W. LeCroix
TH4/T. Foss
D. Evans
ZS5/W. Remini

TH3 body. 31

Addressees:

Mr. P. Bailey, Rice University
Mr. J. Burns, The Bendix Corporation
Mr. G. Burton, The Bendix Corporation
Mr. R. Carpenter, Atomic Energy Commission Headquarters
Mr. J. Carroll, Graduate Research Center of the Southwest
Mr. J. Clayton, The Bendix Corporation
Mr. H. Cross, Ames Research Center
Mr. H. Culver, Goddard Space Flight Center
Mr. M. Donnelly, The Bendix Corporation
Mr. J. Driscoll, Grumman Aircraft Engineering Corporation
Mr. P. Dyal, Ames Research Center
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Mr. J. Freeman, Rice University
Mr. M. Goldman, Martin-Marietta Corporation
Dr. P. Hickson, Bellcomm, Inc.
Mr. N. Hinners, Bellcomm, Inc.
Dr. F. Johnson, Graduate Research Center of the Southwest
Mr. W. Johnson, The Bendix Corporation
Dr. R. Kovach, Stanford University
Dr. M. Langseth, Columbia University
Dr. G. Latham, Columbia University
Mr. J. Leonard, Sandia Corporation
Mr. L. Lewis, The Bendix Corporation
Mr. R. Morgan, Marshall Laboratories
Mr. J. Musslewhite, Rice University
Dr. B. O'Brien, Rice University
Mr. L. Paine, The Bendix Corporation
Mr. A. Robinson, The Bendix Corporation
Mr. R. Schmidt, The Bendix Corporation
Mr. W. Schnider, Jet Propulsion Laboratory
Mr. A. Schorcken, The Bendix Corporation
Dr. E. Shoemaker, U. S. Geological Survey
Mr. W. Smith, Rice University
Dr. C. Snyder, Jet Propulsion Laboratory
Dr. C. Sonett, Ames Research Center
Mr. O. Stafford, NASA Rep., The Bendix Corporation
Mr. R. Swain, Teledyne, Inc.
Mr. E. Van Valkenburg, The Bendix Corporation
Mr. G. Walker, Jet Propulsion Laboratory
Dr. J. Watkins, Massachusetts Institute of Technology
Mr. T. Widmer, General Electric Company
NASA Hqs, Dr. L. Reiffel, MA
NASA Hqs, Dr. J. Turnock, MA
NASA Hqs, Mr. A. Schwarzkopf, MAP
NASA Hqs, Capt. W. O'Bryant, SL
NASA Hqs, Mr. E. Davin, SL
NASA Hqs, Mr. R. Green, SL
NASA, KSC, Major General J. Shinkle, DA
NASA, KSC, Mr. R. Lyon, DJ
NASA, KSC, Mr. W. Durrett, KA
NASA, KSC, Mr. C. Vaughn, HS
NASA, KSC, Mr. J. Williams, KA
NASA, KSC, Mr. H. Rudolph, KB-1
NASA, KSC, Mr. J. Viehman, BA4



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
MANNED SPACECRAFT CENTER


HOUSTON, TEXAS 77058 Manned Spacecraft Center

IN REPLY REFER TO: TD/5-10/L035

APR 25 1967

TO : See list attached
FROM : Manager, Lunar Surface Project Office
SUBJECT: Minutes of the Seventh Apollo Lunar Surface Experiments
Program Interface meeting

Enclosed are the minutes of the Seventh Apollo Lunar Surface Experiments Program Interface meeting held at NASA-Kennedy Space Center, Cape Kennedy, Florida, April 5-6, 1967.


John W. Small

Enclosure

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ALSEP papers*

MINUTES

SEVENTH INTERFACE MEETING ON APOLLO LUNAR SURFACE EXPERIMENTS PROGRAM

April 5 - 6, 1967

The Seventh Interface Meeting on Apollo Lunar Surface Experiments Program was held at NASA - KSC, Cape Kennedy, Florida on April 5-6, 1967. The purpose for holding the meeting at KSC was to acquaint all elements of the Apollo Lunar Surface Experiments Package (ALSEP) program with KSC operations and to begin orienting toward that goal.

The meeting opened with Mr. John Small presenting the recently selected ALSEP Flight system experiment complements. It was pointed out that Flight System IV is not as yet approved for flight.

Mr. Lewis (Bendix) presented in detail the results of engineering model tests. Mr. Schorken (Bendix) presented the prototype test plans and schedules. Mr. Clayton (Bendix) presented the current ALSEP status. Copies of the above presentation material and Mr. Clayton's speech are enclosed.

ALSEP integration into KSC preparation and checkout was presented by Mr. H. Rudolph (KSC). Presentation material is enclosed.

Detail presentations of all experiment and RTG (Prototype, Qual, and Flight) Hardware schedule status were made by Bendix, each PI., and General Electric. The Solar Wind Spectrometer hardware was reported as being approximately 1 month late for qual and flight. The prototype is already delivered. The Cold Cathode gauges were reported to be on or ahead of schedule. The Lunar Surface Magnetometer hardware was reported as being late but could not reflect expected dates due to a recently uncovered problem in the experiment. (Poor accuracy of Engineering data.) The ASE was reported as late supporting Array "A" as backup but could support its first flight (Flight System IV) as

presented by Mr. Small. The SIDE/CCGE was reported as late to support the prototype, qualification and flight units. The total SIDE Program was reported as 6 months behind schedule. The CPLEE and HFE were reported as on schedule to support the flight assignments presented earlier. The PSE was reported as late for Prototype and Qual and on schedule for the First Flight unit. Considerable effort is being applied to bring deliveries on schedule. However, most of the time savings are made by sacrificing design verification testing or other short cuts in the development program. For example, the DVT unit is expected to be completed after delivery of the First Flight unit. Therefore the PI's confidence that the First Flight unit will meet the required performance specifications is very low. An instrument will definitely be ready for Flight I, but the long period components may be degraded or the short period only back-up mode may be required. Dr. Latham recommended the following plan to resolve this problem:

- a. Continue the present program at Teledyne through delivery of EM-2 and Prototype.
- b. Divert the first qualification model (Q-1) for DVT at Teledyne.
- c. Produce a new qualification model at the end of this testing period based on the test results.
- d. Continue with fabrication of additional qualification and flight units as presently planned.

This proposal is currently under evaluation by MSC and Bendix.

The RTG was reported as on schedule but the fuel cask is late.

Detail schedule charts and other presentation material are enclosed.

A bus tour of the KSC Facilities was provided on April 6, 1967, which included the following major points of interest:

- a. Vehicle Assembly Building (Saturn V)
- b. Launch Control Center (Saturn V)
- c. Launch Complex 39
- d. Mobile Launchers
- e. Launch Site
- f. Crawler Transporter

The following action items were established:

- K70405-01B Bendix to provide draft of Prototype Test Plans to each PI and AEC for review and comment by May 1, 1967.
- Clayton to each PI.
- K70405-02B Bendix to provide Proto I Vibration Test Procedures to each PI and AEC by May 1, 1967.
- Clayton to each PI.
- K70405-03M MSC to investigate the possibility of operating the PSE on the Lunar Surface prior to astronaut departure and work requirements into mission operations plan by May 15, 1967.
- Weeks to Latham.
- K70405-04B Bendix to implement weekly conference call with Dr. Kovach, MSC, Bendix and MIT.
- McDowell to Weeks, Kovach and Watkins.
- K70405-05B Bendix to provide assessment of impact for the Active Seismic Detection System Qualitization level change requested at CDR by May 1, 1967.
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McDowell to Weeks.

K70405-06B Bendix to provide answer to CDR chit requesting additional 300 feet of cable for thumper by May 1, 1967.

McDowell to Weeks.

K70405-07M MSC to investigate desirability of adding D to A conversion capability to the ASE experiment test set by May 1, 1967.

Weeks to Kovach and Bendix.

K70405-08L Dr. Langseth to submit views on Lunar Surface Drill to MSC by May 1, 1967.

Dr. Langseth to J. Small.

ALSEP FLIGHT UNITS

1

PSE
LSM
SWS
SIDE/CCGE

2

PSE
LSM
SWS
SIDE/CCGE

3

PSE
HFE
CCGE
CPLEE

4

PSE
ASE
SIDE/CCGE
CPLEE

ATTENDEES

NAME	ORGANIZATION	MAIL CODE
John H. Langford	NASA - MSC	TD
Paul J. Hickson	Bellcomm, Inc.	MAP
Alex Schwarzkopf	NASA - Hqs.	MAP-1
Richard J. Green	NASA - Hqs.	SL
Edward M. Davin	NASA - Hqs.	SL
A. Pitrolo	GE - MSD	VFSTC Phica PA
Ed Ray	GE - MSD	VFSTC Phica PA
James A. Leonard	Sandia Corporation	Division 9331
Robert E. Berry	Sandia Corporation	Division 9312
Kenneth G. Hagen	GE - MSD	VFSTC Phica, PA
J. H. Grayson	NASA - MSC	EP5
Ken Dowling	Bendix - Cocoa Beach	1325 N. Atl. Ave.
H. V. Cross	NASA - Ames	
Palmer Dyal	NASA - ARC	
Herman L. Miller	Bendix Aerospace	Ann Arbor, Mich.
A. D. Robinson	Bendix Aerospace	Ann Arbor, Mich.
G. T. Burton	Bendix Research	South Field, Mich.
John T. Musslewhite	Rice University	Houston, Texas
Foster H. Abney	Rice University	Houston, Texas
Wayne Andrew Smith	Rice University	Houston, Texas
Paul H. Bailey	Rice University	Houston, Texas
Dave Norr's	Marshall Labs	Los Angeles, Cal.
Ernest L. Weeks	NASA - MSC	TD2
James M. Sanders	NASA - MSC	TD2
Harry Culver	NASA - GSFC	Code 553
Clifford Fleming	NASA - GSFC	Code 554.5
Travis O. Ives, Jr.	NASA - GSFC	Code 552
John Quill	NASA - GSFC	Code 552
R. M. Avery	NASA - KSC	KB-61
J. F. Valek	NASA - KSC	DJ-2
O. K. Stafford	NASA - MSC/Bendix	Ann Arbor, Mich.
J. C. Driscoll	GAEC	PLT#5, Bethpage, N.Y.
D. A. Panshoukian	GAEC	Mail Stop #300, KSC
Dale Parker	NASA - KSC - AAPO	DF
Roy L. Cox	NASA - MSC - Downey	PC2(RASPO)
P. R. Maloney	NASA - MSC	TD
J. W. Freeman	Rice University	Houston, Texas
M. G. Langseth	Columbia University	Palisades, N. Y.
Gary V. Latham	Columbia University	Palisades, N. Y.
Richard A. Schmidt	Bendix Aerospace	Ann Arbor, Mich.
J. R. Lyon	NASA - KSC	DJ-2
A. N. Wiley	NASA - KSC	KE-1
W. R. Durrett	NASA - KSC	KA
Gary J. Walker	JPL	L. A. Calif.
Douglas R. Clay	JPL	L. A., Calif.
Mario J. Falbo	NASA - MSC	EP43

Bob Gordon	NASA - MSC	AP3
E. S. Van Valkenburg	Bendix Aerospace	Ann Arbor
N. W. Hinners	Bellcomm, Inc.	Wash. (NASA/MAS)
Gerold P. Kenney	NASA - MSC	TD3
A. K. Stephenson	NASA - MSC	TF2
M. Jay Harnage, Jr.	NASA - MSC	TF3
C. M. Vaughn	NASA - KSC	HS
William C. Remini	AEC - MSC	ZS5
R. A. Moke	NASA - MSC	TD2
Jack Small	NASA - MSC	TD
James Redd	NASA - MSC	RMD
Joe Clayton	Bendix Aerospace	Ann Arbor, Mich.
Joel Watkins	MIT	Boston, Mass.
Bruce McAllister	Stanford University	Stanford, Calif.
Mike Donnelly	Bendix Aerospace	Houston, Texas
Jim Burns	Bendix Aerospace	Ann Arbor, Mich.
R. Swain	Teledyne, Inc.	Pasadena, Calif.
W. LeCroix	NASA - MSC	TH4
Hans W. Rudolph, Jr.	NASA - KSC	KB1
John J. Turner	NASA - MSC	PE5
Otto C. Lindsey	NASA - MSC	FC
Jack Flatt	NASA - MSC	FC
B. L. Sharpe	NASA - MSC	FC
James R. Bates	NASA - MSC	FC
Philip J. Bayer	NASA - Hqs.	MAO
Derek Perkins	Bendix Aerospace	Ann Arbor, Mich.
Arthur Collins	Bendix Aerospace	Ann Arbor, Mich.
Ron Glowacki	Bendix Aerospace	Ann Arbor, Mich.
William E. Johnson	Bendix Aerospace	Ann Arbor, Mich.
R. W. Shay	Bendix Aerospace	Ann Arbor, Mich.
J. R. McDowell	Bendix Aerospace	Ann Arbor, Mich.
J. L. Gedge	Bendix Aerospace	Ann Arbor, Mich.
J. C. Corwin	Southwest Center for Adv. Studies	Dallas, Texas
T. J. Graves	NASA - MSC	EP4
C. C. Stewart	Bendix Aerospace	Ann Arbor, Mich.
Clarence Ahlstrom	Bendix Aerospace	Ann Arbor, Mich.
L. Lewis	Bendix Aerospace	Ann Arbor, Mich.
A. Schorken	Bendix Aerospace	Ann Arbor, Mich.
L. Vanhem	LGO	
S. Thanos	LGO	
W. McDonald	LGO	
E. LaFevers	NASA - MSC	EC6
W. Zrubek	NASA - MSC	EE2
B. Hood	NASA - MSC	EB2