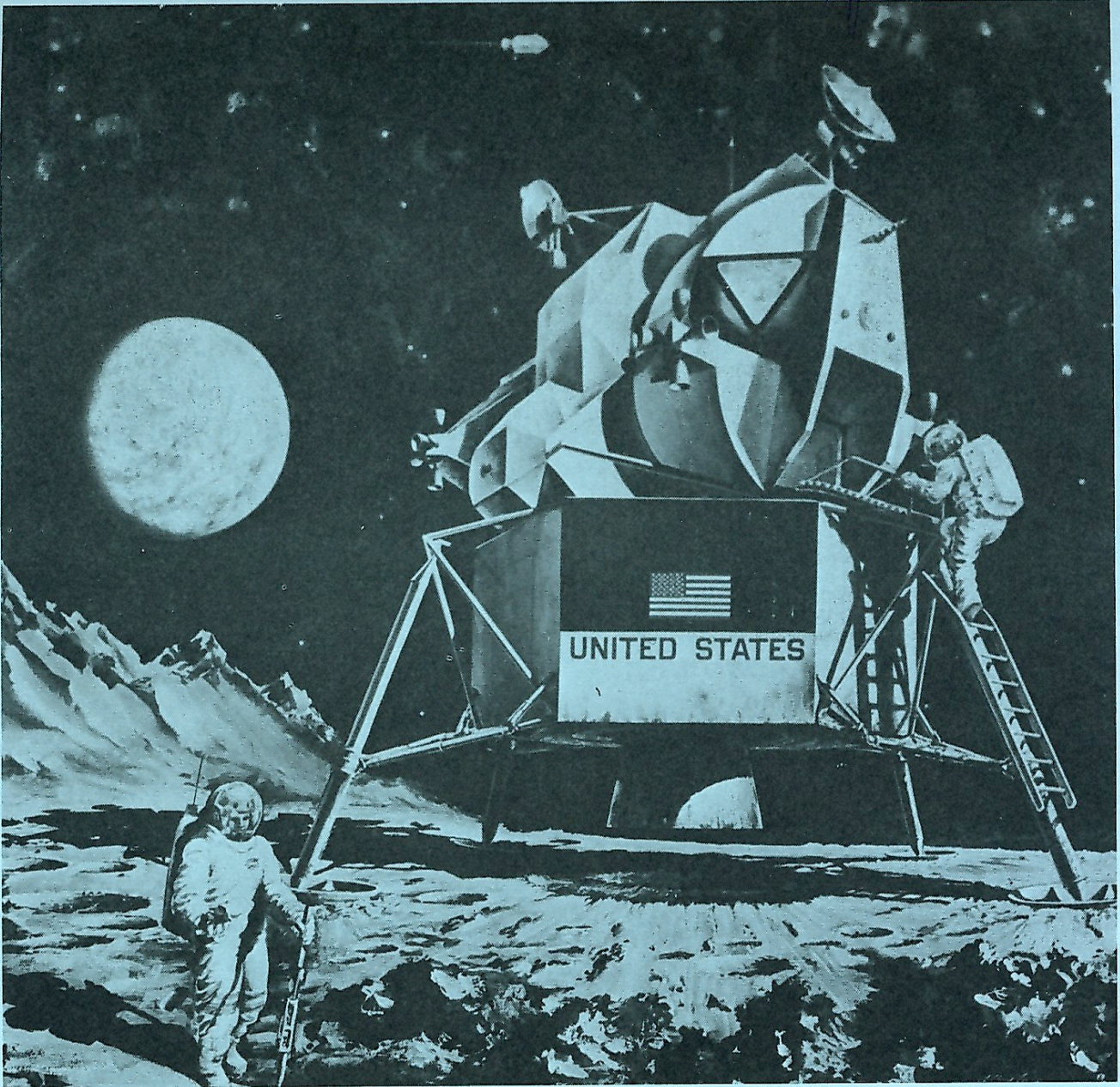
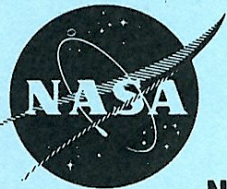


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# **SPACE SCIENCE EDUCATION PROJECT CONFERENCE**



**Conducted by the  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
at OKLAHOMA STATE UNIVERSITY  
Stillwater, Oklahoma  
September 29 - October 2, 1969**



# SPACE SCIENCE EDUCATION PROJECT



# SPACE SCIENCE EDUCATION PROJECT

**A CONFERENCE FOR NASA HEADQUARTERS AND  
CENTER EDUCATION OFFICERS AND SPACE  
SCIENCE EDUCATION PROJECT  
PERSONNEL**

Conducted by the

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

IN COOPERATION

WITH

OKLAHOMA STATE UNIVERSITY  
STILLWATER, OKLAHOMA

A conference to review NASA's present and future programs; formulate new lecture content; become cognizant of the NASA curriculum supplements and their use.

# SPACE SCIENCE EDUCATION PROJECT

## PURPOSE

To review NASA's present and future programs; formulate lecture content; become cognizant of the NASA curriculum supplements and their use.

## AGENDA

MONDAY, SEPTEMBER 29, 1969

1:00 - 4:00 p. m.

### CONFERENCE REGISTRATION

Student Union Building

4:00 - 5:30 p. m.

### General Session

Presiding, Dr. Kenneth E. Wiggins  
Associate Director  
Research Foundation  
Oklahoma State University

### WELCOME

Dr. Robert B. Kamm, President  
Oklahoma State University

### NEW DIRECTIONS IN NASA'S EDUCATIONAL PROGRAMS

James V. Bernardo  
Director of Educational Programs  
Office of Public Affairs

TUESDAY, SEPTEMBER 30, 1969

8:30 - 10:00 a. m.

### NASA SPACE SCIENCE EDUCATION PROJECT

Personnel Briefings  
Dr. Kenneth E. Wiggins

### CENTER EDUCATIONAL PROGRAMS OFFICERS

Briefings  
James V. Bernardo

10:00 - 10:15 a. m.

Coffee Break

10:15 - 11:45 a. m.

### NSSEP PERSONNEL BRIEFINGS

Dr. Kenneth E. Wiggins

11:45 - 1:00 p. m.

### CEPO's BRIEFING

Lunch

# SPACE SCIENCE EDUCATION PROJECT

1:00 - 5:00 p. m.

## GENERAL SESSION

Presiding, James V. Bernardo  
Director of Educational Programs  
Office of Public Affairs

1:00 - 3:00 p. m.

## NASA - THE NEXT DECADES

David Williamson, Jr.  
Deputy Assistant Administrator  
Office of Program Plans and Analysis

3:00 - 3:15 p. m.

Coffee Break

3:15 - 5:00 p. m.

Brian Duff, Public Affairs Officer  
Manned Spacecraft Center  
Apollo Astronaut

6:00 - 7:00 p. m.

Social Hour

7:00 - 9:00 p. m.

Dinner

WEDNESDAY, OCTOBER 1

8:30 - 12:00 Noon

## GENERAL SESSION

Presiding, Everett E. Collin  
Teacher Services Officer  
Educational Programs Division  
Office of Public Affairs

8:30 - 9:00 a. m.

## THE NEW LECTURE-DEMONSTRATION

Everett E. Collin

9:00 - 10:15 a. m.

NSSEP MEETING - Work on new Presentation

Everett E. Collin  
Dr. Kenneth E. Wiggins

## CEPO's MEETING

10:15 - 10:30 a. m.

Coffee Break

10:30 - 12:00 Noon

NSSEP MEETING - Work on new Presentation

## CEPO's MEETING

12:00 - 1:00 p. m.

Lunch

1:00 - 4:00 p. m.

NSSEP MEETING - Work on new Presentation

## CEPO's MEETING

4:00 - 5:30 p. m.

Campus Tour

# SPACE SCIENCE EDUCATION PROJECT

THURSDAY, OCTOBER 2, 1969

8:30 - 10:00 a. m.

GENERAL SESSION

Presiding, Dr. Kenneth E. Wiggins

8:30 - 10:00 a. m.

THE PROPOSED NEW LECTURE

Dr. Kenneth E. Wiggins

10:00 - 10:15 a. m.

Coffee Break

10:15 - 12:00 Noon

GENERAL SESSION

Presiding, Dr. Frederick B. Tuttle  
Deputy Director of Educational Programs  
Office of Public Affairs

10:15 - 12:00 Noon

NASA'S CURRICULUM  
SUPPLEMENT PROGRAM

James V. Bernardo  
Director of Educational Programs  
Office of Public Affairs

Myrl Ahrendt  
Instructional Resources Officer  
Educational Programs Division  
Office of Public Affairs

12:00 - 1:00 p. m.

Lunch

1:00 - 2:00 p. m.

NASA'S CURRICULUM  
SUPPLEMENT PROGRAM

2:00 p. m.

NSSEP PERSONNEL ADJOURN

2:15 p. m.

CEPO's MEETING CONTINUED

## CENTER EDUCATIONAL PROGRAMS OFFICERS

Mr. Garth A. Hull  
Educational Services Officer  
Public Affairs Office - DI  
NASA Ames Research Center  
Moffett Field, California 94035

Mr. Hiram R. Haggett  
Educational Programs Officer  
Code DPE - Room 102  
NASA Electronics Research Center  
575 Technology Square  
Cambridge, Massachusetts 02139

Mr. Raymond R. Corey  
Ass't Educational Programs Officer

Mr. Elva Bailey  
Educational Programs Officer  
Public Affairs Office (202.3)  
NASA Goddard Space Flight Center  
Greenbelt, Maryland 20771

Mr. Richard N. Crone  
Ass't Educational Programs Officer

Mr. William D. Nixon, Chief  
Educational Programs Branch - PA-EPB  
John F. Kennedy Space Center, NASA  
Kennedy Space Center, Florida 32899

Mr. S. Walter Hixon, Jr., Head  
Educational Programs and Services  
NASA Langley Research Center  
Langley Station  
Hampton, Virginia 23365

Mr. Malcolm P. Clark  
Training Officer

Mr. Joshua R. Foyles, Sr.  
Training Officer

## SPACE SCIENCE SPECIALISTS

Rodney Hisken  
William Horvath

Minot H. Parker  
Dennis McLaughlin  
Louis De la Vina

John R. Bannister  
Lloyd H. Aaronson  
Edward Robinson

Robert E. Wilson  
James C. Lewis

Frederick M. Bell  
William Cole

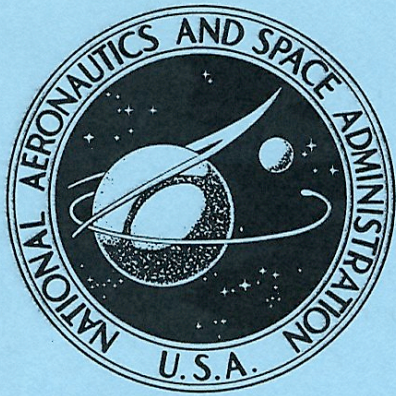


## CONFERENCE MISCELLANEA

Please wear conference badge at all times during the conference. It will serve as your identification.

The registration and travel desks will be open on Monday, September 29, from 1:00-4:00 P.M.

Participants will pay for coffee, socials, and dinner at time of registration.



# OSU Professional Development History

Space Science Education Project Conference  
NASA/OSU  
Stillwater, OK  
August 24 - September 4, 1970

## Objectives:

1. To become familiar with current trends in education.
2. To develop an understanding of and prepare presentation outlines for the NASA Curriculum resource guides and related materials.
3. To present the latest information about space exploration programs, present and future.
4. To review the assembly lecture-demonstration.

## Key Presenters:

Everett E. Collin, Deputy Director of Educational Programs, Office of Public Affairs, NASA

Dr. Robert Kamm, President, Oklahoma State University

Dr. Kenneth E. Wiggins, Associate Director, Education and Research Foundation, Oklahoma State University

Dr. Dan Selackovic, Professor of Higher Education, Oklahoma State University

"Curriculum Changes in the Seventies"

Frank Kizer, State Board of Education, Richmond, VA (State Supervisor of Education)

Otis Lawrence, Director of Curriculum, Oklahoma City Public Schools (County Supervisor of Education)

Dr. Thomas Johnson, Associate Professor of Science Education, Oklahoma State University, (Teacher-educator at the pre-service and in-service level)

Dr. Russell Dobson, Associate Professor of Elementary Education, Oklahoma State University, "Understanding the Problems of the Economically Deprived Schools"

Astronaut Robert A. Parker

Dr. Frederick B. Tuttle, Director of Educational Programs, Office of Public Affairs, NASA

Dr. DeMarquis D. Wyatt, Assistant Administrator for Planning, NASA

## Curriculum Resource Guides - Presenters:

Biology - Dr. Kenneth Jackman  
University of California

Chemistry - Dr. Richard Lawrence  
Ball State University

Space Science - George Pope  
Space Science Specialist, NASA

Physics - Ronald Oines  
Oklahoma State University

Elementary Education - Jerry Miller  
Oklahoma State University

Mathematics - Myrl Ahrendt  
Oklahoma State University

Industrial Arts - Harold E. Mehrens  
Airline Pilots Association

National Space Science Education Project  
Workshop-Conference June 5-8, 1973  
NASA Headquarters Educational Programs  
Division, Goddard Space Flight Center

Objective:; To provide the latest NASA program information and related classroom activities for the conduct of summer workshops, courses and seminars for teachers and students.

Key Presenters:

Dr. W. B. Rich, Associate Director Educational Programs, NASA

Dr. F. B. Tuttle, Director of Educational Programs, NASA

Elva Bailey, Educational Programs Officer, Goddard Space Flight Center

Donald P. Hearsh, Deputy Director, Goddard Space Flight Center

Edward Mason, Chief, Office of Public Affairs, Goddard Space Flight Center

Dr. Kenneth E. Wiggins, Associate Director, Education and Research Foundation, OSU

ERTS PROGRAM:

Dr. Stanley Freden, Assistant Chief, Laboratory for Meteorology and Earth Sciences

Dr. Nicholas Short, Earth Survey Sciences Office

Dr. Harold Mathews, Earth Survey Sciences Office

Dr. Paul Lowman, Planetology Branch, Laboratory for Space Physics

Dr. Vincent Salomonson, Earth Survey Sciences Office

Dr. William Finch, Earth Survey Sciences Office  
Planetary Programs - Albert T. Christensen,  
Director User Affairs, Office of Space Science

SKYLAB:

James E. Powers, Jr., Manager, Skylab Education Program

Everett E. Collin, Deputy Director, SEP

Robert S. Tiemann, Chief Vocational and Technical Guidance

THE SPACE SHUTTLE:

Dr. Myron S. Malkin, Director, Space Shuttle Programs

LeRoy E. Day, Deputy Director, SSP

Richard J. Allen, Director, Program Budget and Control

APPLICATIONS TECHNOLOGY PROGRAM-  
EDUCATIONAL TELEVISION EXPERIMENT

Howard Galloway, ATS-F Project

Y. Sundarajan, ATS-F/Indian Space Research Organization

The OSO-7 - YEAR OF DISCOVERY

Dr. Stephen Maran - Advanced Systems and Ground Observations Branch, Laboratory for Solar Physics.

Aerospace Education Services Project  
Annual Training Conference  
December 9 - 14, 1979  
Oklahoma State University  
Stillwater, Oklahoma

Objectives:

1. Updating the AESP Presentation
2. Preparing for the Upcoming Year

Key Presenters:

Dr. Lawrence Boger, President  
Oklahoma State University  
Dr. Donald Robinson, Dean, College of  
Education, OSU  
Dr. Kenneth E. Wiggins, Project Director,  
NASA/AESP  
Dr. Curtis M. Graves, Director,  
NASA Community and Educational Services  
Mr. Bill Nixon, Assistant Director  
Community and Education Services Branch  
Dr. Steven Marks, OSU  
Dr. Nelson Ehrlich, OSU  
Mr. Dennis Smith, Metric Education, U. S.  
Metric Board  
Mr. Cal Pitts, AESP Ames Research Center,  
NASA Aeronautics Program Update

AUDIO VISUAL and the AESP

Dr. William P. Brose, Audio Visual Specialist,  
Community and Education Services, NASA HQ  
Mr. Richard Coup, OSU

MISSION SPECIALIST TRAINING

Dr. Jeffrey A. Hoffman, Astronaut

SPACE SHUTTLE PAYLOADS

Mr. Carl Peterson, Manager  
Shuttle Transportation System, Utilization  
Planning Office, NASA Johnson Space Center

Mr. Greg Vogt, AESP Specialist

PLANETARY PROGRAMS

Dr. Arthur L. Lane, Project Scientist  
Jupiter-Voyager Project, JPL

SELECTED SPECIALIST ACTIVITIES

Dr. Steven Marks, OSU  
Dr. Lawrence Wolken, Texas A&M University

NASA APPLICATIONS PROGRAM

Dr. William P. Raney, Assistant Associate Ad-  
ministrator, Office of Space and Terrestrial  
Applications

Aerospace Education Services Project  
Annual Training Conference  
December 13 - 19, 1980  
Kennedy Space Center, Florida

Key Presenters:

Mr. Curtis Graves, Chief  
Mr. William Nixon, Assistant Chief  
Mr. Larry Bilbrough, Education Programs  
Officer: Community and Educational Services

Dr. Kenneth Wiggins, Project Director  
Dr. Steven Marks  
Dr. Nelson Ehrlich

Mr. Richard Smith, Director, KSC  
Mr. Gene McCoy: NASA Future Programs  
Dr. Paul Gardner: AESP Involvement in National  
Conferences and Conventions

Kennedy Space Center Tour:

Orbital Thermal Protection System  
Other thermal protection: External tank,  
Pad 39 water deluge, "Beanie"  
Safety and Rescue on complex 39  
Crew emergency egress  
SCAPE suits  
Mate/Demate Device  
Orbiter's Arrival  
ET's barge trip and deployment  
SRB sections' arrival into VAB  
STS launch and recovery  
SLF and microwave landing  
SRB nozzle plugs and parachute  
Payloads  
Environment - lightning, noise, biomass  
Data transmission - laser lab  
Student shuttle experiments

Aerospace Education Services Project  
Annual Training Conference  
Wallops Flight Center and NASA Headquarters  
December 14 - 18, 1981

Key Presenters:

Larry Bilbrough, Education Programs Officer  
Dr. Kenneth Wiggins, Project Director  
Joyce Milliner, Public Affairs Officer  
Curtis M. Graves, Deputy Director, Academic  
Affairs Division  
William Nixon, Chief, Education Services  
Branch  
Gregory Vogt, Publications Specialist  
Janet Wolfe, Chief, Education Services Division,  
National Air and Space Museum  
William Clark, The Center for Aerospace Educa  
tion, Drew University  
Jesco Von Puttkamer, Advanced Programs  
Office, NASA Headquarters

Aerospace Education Services Project  
Annual Training Conference  
George C. Marshall Space Flight Center  
Huntsville, Alabama  
December 12 - 17, 1982

Key Presenters:

Dr. Kenneth Wiggins, Project Director  
Dr. W. R. Lucas, Director, MSFC  
Mr. Curtis Graves, Education Chief  
Mr. William Nixon, Assistant Chief

Mr. Kingsbury - Overview of Research and  
Technology  
Mr. Marshall - Probing the Future  
Mr. Powell - Space Station Efforts  
Mr. von Tiesenhausen - Space Robotics and  
Machine Intelligence  
Mr. Laue - Tethered Satellite System  
Mr. Graves - Math-Science Crisis in Schools  
Mr. Nixon - Introduction of NASA Aerospace  
Laserdisc Project  
Mr. Clark - Computer Interaction with Laserdisc  
Player

Tour of Facility:

Neutral Buoyancy Simulator  
Power Factor Controller  
External Tank  
Interactive Graphics/Design System  
Six-Degrees-of-Freedom Simulator  
Orbiter Servicer  
Single Crystal Turbine Blade Development  
Thermal Protective Coatings  
Polymer Development  
Simulation Training  
Firefighting Module and Oil Spill Cleanup  
Space Astronomy and Astrophysics  
Solar Terrestrial Research  
Atmospheric Science Research  
Materials Processing in Space  
Space Telescope  
Spacelab 1  
Omnimax presentation: "Hail Columbia"  
Major Shuttle Components - New Developments  
United States Space Camp  
NASA Lunar Sample Education Project

NASA Aerospace Education Services Project  
National Training Conference  
Goddard Space Flight Center  
Greenbelt, Maryland  
January 3 - 6, 1984

Key Presenters:

Elva Bailey, Educational Programs Officer GSFC  
John J. Quann, Deputy Director, GSFC  
Janet K. Wolfe, Deputy Chief, Office of Public  
Affairs, GSFC  
Dr. Curtis Graves, Deputy Director Academic  
Affairs, Public Affairs Division, NASA  
Headquarters  
William D. Nixon, Chief, Educational Services  
Branch, PAO, NASA HQ  
Dr. Kenneth E. Wiggins, AESP Project Director  
Oklahoma State University  
Larry B. Bilbrough, Technical Monitor, AESP  
NASA Headquarters

Dr. Stephen P. Maran, Senior Staff Scientist,  
NASA's First Mission to a Comet  
Ronald K. Browning, Project Manager  
Tracking & Data Relay Satellite System  
Patrick A. Templeton, Associate Administrator,  
NASA's External Public Relations Prog.  
Frank S. Johnson, Director, Public Affairs Div.  
Education's Role in Public Affairs  
Dr. Vincent V. Salomonson, Chief Earth Survey  
Applications Division, Landsat 4: A New  
Era in Land Remote Sensing  
James Barrowman, Project Director GAS prog.  
NASA's Getaway Special Program  
Frank J. Cepollina, Project Manager  
Solar Maximum Repair Mission  
E. Lee Tilton, Space Station Task Force  
Overview of Space Station Activities  
Dr. Albert Boggess, Associate Director of Space  
Sciences for Space Telescope  
The Edwin P. Hubble Space Telescope  
Dr. Carl E. Fichtel, Senior Staff Scientist,  
Laboratory for High Energy Astrophysics  
Gamma Ray Astrophysics and the  
Gamma Ray  
Fred S. Flatow, METSAT Projects  
COSPAS/SARSAT (Search and Rescue  
Satellite Aided Tracking) Project

Annual AESP Training Conference  
December 9 - 14, 1984  
New Orleans, Louisiana

Key Presenters:

William D. Nixon, Chief  
Elementary and Secondary Programs Branch

Larry Bilbrough, Educational Programs Officer

Kenneth E. Wiggins, Director, AESP

Phillip K. Murphy, Assistant Project Director  
Status and Future of Science Education

Gregory I. Crosby, GSFC,  
Misconceptions about Science Principles

James G. Marlins, NASA HQ  
College Aerospace Science Program

Ransom S. Ritter, NASA HQ  
Urban City Enrichment Program

Norman O. Poff, NASA HQ  
Aeronautics

Tour of Michoud Assembly Facility

Alan Ladwig - Teacher in Space Program

Benito Casados, Video Vision Associates  
Laser discs

Craig Freidrich,

Nelson Ehrlich

Dale Bremmer  
Computers

Tour - NASA National Space Technology Lab  
Mr. Mack Herring, NSRL Public Affairs Officer

Mr. Roy Estess, NSTL Deputy Director

Ms. Rebecca McCaleb, NSTL Research Chemist

Mr. Sidney Whitley, Chief, Sensor and Data  
Systems Group, ERL

Mr. Dave Martin, NSTL Resident Engineer

Aerospace Education Services Project  
Annual Conference December 15 - 19, 1985

Hosted by:

Jet Propulsion Laboratory

United States Air Force Public Affairs Division

Vandenberg Air Force Base

Dryden Flight Research Facility

Ames Research Center

Key Presenters:

Philipp Neuhauser, Manager, Audio Visual and  
Education Office, JPL

John Casani, Manager, Project Galileo

Richard Laeser, Manager, Voyager Project

Ronald Draper, Manager, Comet Rendezvous  
Asteroid Flyby

Stephen Edberg, Coordinator for Amateur Obser-  
vations, International Halley Watch

Warren James, Member Technical Staff,  
Venus Radar Mapper, Overview

Tour Vandenberg Air Force Base

Tour Dryden Flight Research Center

Mark Littman, Space Telescope Science Center

William Nixon, Robert Mayfield, Dr. Doris  
Grigsby - Teacher in Space summary

Dr. Albert Hibbs, Manager,  
Space Science and Applications



NASA Aerospace Education Project  
25th Anniversary Annual Conference  
September 4 - 10, 1986  
NASA Langley Research Center  
Hampton, Virginia

Key Presenters:

Mary L. Sandy, Head, Office of Public Services,  
Langley Research Center

Jerry South, Jr., Chief Scientist, Office of the  
Director, LaRC

Dr. Kenneth E. Wiggins, Project Director, OSU  
Larry Bilbrougy, Elementary and Secondary  
Programs Branch, NASA HQ

William Nixon, Chief, Elementary and Second-  
ary Programs Branch, NASA HQ

Dr. Robert W. Brown, NASA HQ

William D. Mace, Director, Electronics Director  
ate, LaRC

William C. Chalmers, Langley Visitor Center

Dale Holden, Head, AIRLAB Operations Section

Pamela Bacon, Teacher in Space Coordinator,  
NASA HQ

James M. Patton, Jr., Head, Aircraft Operations  
Branch, LaRC

Bruce D. Fisher, Flight Applications Branch

Thomas L. Vranas, Fabrication Division, LaRC

Walter E. Bruce, Jr., Head, National Transonic  
Facility, LaRC

Paul Stough and Gaudy Bezos, Flight Applica  
tions Branch, LaRC

John Tanner, assistant Head, Impact Dynamics  
Branch, LaRC

Dr. Edwin L. Fasanella, Impact Dynamics Br.

Frank Owens, Deputy Director, Education  
Affairs Division, NASA HQ

Dr. Samuel Massenberg, University Affairs  
Office, LaRC

William E. Howell, Office of Director for Flight  
Systems, Advanced Transport Operating  
System, LaRC

Dr. Douglas L. Dwoyer, Head, Computational  
Methods Branch, LaRC

Eugene Hicks, Analysis and Simulation Branch

Jacob A. Houck, Analysis and Simulation Br.

George Steinmetz, Crew/Vehicle interface Res.

Donald Soloway, Automation Technology Br.  
Leonard David, Director of Research, National  
Commission on Space Staff

Frank Quinto, Subsonic Aerodynamics Branch

Homer G. Morgan, Chief, Acoustics Division

Dr. Martin M. Mikulas, Jr., Head, Structural  
Concepts Branch, LaRC

Brantley Hanks, Assistant Head, Structural  
Dynamics Branch

Dr. James D. Lawrence, Jr., Chief, Atmospheric  
Sciences Division

Dr. Joel S. Levine, Theoretical Studies Branch

Terry Putnam, Acting, Assistant Director, High  
Performance Aircraft, NASA HQ

Dr. Sidney C. Dixon, Chief, Loads and  
Aeroelasticity Division, LaRC

William Corlett, Head, Unitary Wind Tunnel,  
Operations Office, LaRC

Scott R. Thomas, High-Speed Aerodynamics  
Division, LaRC

Dr. Frank B. McDonald, Chief Scientist, NASA  
HQ

John R. Facey, Program Manager, Propulsion,  
Power, and Energy Division, NASA HQ

Tours:

Langley Visitor Center

AIRLAB Building

Composite Model Development Section

National Transonic Facility

Research Aircraft Center

Aircraft Landing and Dynamics Facility

Visual Display Simulator

DMS Simulator

TRSV Simulator

Automation Technology

4 x 7 Meter Subsonic Tunnel

Acoustics Facility

Large Space Structures

Large Space Antenna

Unitary Wind Tunnel

Scramjet

NASA Aerospace Education Services Project  
Annual Conference - Oklahoma State University  
May 31 - June 5, 1987  
Stillwater, Oklahoma

Key Presenters:

NASA Headquarters:

Dr. Robert W. Brown  
Larry Bilbrough  
William D. Nixon

OSU Staff:

Dr. Kenneth E. Wiggins, Project Director  
Dr. Nelson J. Ehrlich, Associate Proj. Dir.  
Mary L. Chaplin, Administrative Assoc.  
Malcolm V. Phelps, AESP  
Gregory L. Vogt, AESP

Dr. Donald Robinson, Dean of the College of  
Education, OSU

Marla Barnes, Information Officer, OSU

Dr. Terrance T. Finn, Deputy Director, Policy  
Division, Office of Space Station, NASA  
HQ

Jim Kinser, Producer/Director, OSU Educational  
Television

Shannon Keating, Teleconference Coordinator,  
OSU Educational Television

Topics:

Aerospace Software  
Aerospace Education software preview  
Computer operations  
BASIC programming: language and techniques  
Computer information service demonstration  
Hubble Space Telescope Interactive Computer  
Network  
Spacelink presentation  
Utilizing the computer for personal productivity:  
Appleworks  
Development of instructional and utility software  
in Applesoft BASIC  
Demonstration of new LaserDisc hardware and  
software; laserdisc instructional material  
development utilizing Eventmaker,  
Lessonmaker and LaserWrite  
Planning and presenting a teleconference

NASA Aerospace Education Services Project  
Annual Training Conference Sept. 7 - 14, 1988  
Johnson Space Center Houston, Texas

Key Presenters:

James D. Poindexter, CEPO, JSC  
Mr. P. J. Weitz, Deputy Director, NASA-JSC  
Dr. Eddie Anderson, NASA HQ  
Larry Bilbrough, NASA HQ  
Dr. Kenneth Wiggins, Director, AESP/OSU  
Dr. Story Musgrave, NASA Astronaut  
Lu Fain, WETF, JSC  
Harold Stall, Visitor Center Project, JSC  
Jay Honeycutt, Deputy Dir. STS Program, JSC  
Milt Heflin, Flight Director, Mission Control  
Jim McBarron, Chief, Shuttle Support Branch  
Carl Martin, Aerospace Engineer, Avionics  
Dick Arndt, Electromagnetic Systems Branch  
Mike Fox, Flight Physiology and Vacuum Cham.  
Dr. Doug Blanchard, Curator Lunar Samples  
Jim Poindexter, Orbiter Mockups  
John Trebes, Space Station Mockup  
Don Wade, Structures and Mechanics  
Dr. Richard Jennings, Chief, Flight Medicine  
Cris Kinsler, Lockheed, Shuttle Earth Views  
Dr. Buck Sharpton, Lunar and Planetary Institute  
Steve Feaster, Shuttle Training Aircraft  
Alan Ladwig, Program Support and Special Proj.  
Dick Underwood, Space Photography  
Gene Winkler, Shuttle Waste System  
Dr. C. Bourland, Shuttle Food System

Aerospace Education Services Project  
Annual Training Conference  
September 6 - 12, 1989  
Jet Propulsion Laboratory/Dryden Research Ctr.  
Edwards, California

Key Presenters:

Phil Neuhauser, Public Education Office, JPL  
Dr. Nelson Ehrlich, Oklahoma State University  
Larry Bilbrough, NASA Educational Affairs Div.  
Dr. Eddie Anderson, Chief, Elementary and  
Secondary Programs, NASA HQ  
Theodore Clark, Galileo Earth Crossing  
Randii Wessen, Voyager Project update  
Dave Curkendall, Hypercube project  
Kay Cloud, Hypercube project  
Ray Bambery, Image Processing Applications  
Kevin Hussey, Image Processing App. & Dev.  
ffDoug Stetson, Mariner Mark II  
Sam Dallas, Magellan Project  
Michael Garcia, Mission Design, Gravity Assist  
Trajectories, Galileo  
Dr. Gil Yanow, JPL Teacher Resource Center  
Mark Hess, Space Station Freedom  
Dr. James G. Marlins, Seeds Project  
Ahmad Nurridin, NASA HQ, Publications  
Pamela M. Bacon, Teacher-In-Space, NEWEST,  
NEWMAST  
Larry Bilbrough, Use of Government Vehicles  
Ted Carmack, Telecommunications and Data  
Acquisition, Mission Support, and Deep  
Space Operations  
Ayers - Welcome/History of Dryden  
Trippensee - X-29  
Gatlin - F/A-18  
Stewart - F-15 HiDEC  
Brown - Integrated Test Facility  
Roger Smith - Test pilot  
Baron - 990  
Barnett - Shuttle Operations

Tour of main hangar

Tour of Rockwell Palmdale

Annual Conference for the NASA/OSU  
Aerospace Education Services Program  
Sept. 4 - 11, 1990 Lewis Research Center  
Cleveland, Ohio

Key Presenters:

Lawrence J. Ross, Director, Lewis Research Ctr.  
Dr. Kenneth E. Wiggins, Director, AESP  
Larry Bilbrough, AESP Program Mgr., NASA  
Dr. Eddie Anderson, Chief, El. & Sec. Branch  
Dr. Lynn Bondurant, Jr., Chief, Office of Educat  
ional Programs, LRC  
Frederick P. Povinelli, Lewis Overview  
Dave Vincent, Icing Research Tunnel  
Tom Glasgow, Microgravity Materials Science  
Dr. Dennis Flood, Energy Conversion Lab  
John Greissing, Power Systems Facility  
Ray Sotos, Zero Gravity Facility  
John Dicus, Propulsion Systems Lab  
Bill Anderson, LASER Van  
Joe Shane, Aeronautics  
Robert Pearce, Flight Research and Technology  
Dr. Jim Jenkins, Human Factors  
Dr. Raymond Rose, Flight Safety  
Barbara Morgan, Teacher in Space Designee  
Dr. Joe Shaw, High Speed Civil Transport  
Charles Morris, National Aerospace Plane  
Dr. Terrence Finn, Exploration  
Earl Vanlandingham, Space Technology  
Dr. Edward Weiler, Hubble Space Telescope  
Steve Riddlebaugh, Technology Utilization  
Rick Custer, Rocketdyne Presentation  
Bill Rieke, T-34 Student Project  
Richard Hoagland, The Monuments of Mars

Aerospace Education Services Program  
Annual Training Conference  
John F. Kennedy Space Center, Florida  
May 28 - June 5, 1991

Key Presenters:

Lt. General Forrest McCartney, Director JSC  
Larry Bilbrough, Mgr. AESP  
Dr. Eddie Anderson, Chief, El. & Sec. Branch  
Dr. Robert Brown, Director, Ed. Affairs, NASA  
Frank Owens, Deputy Dir., Ed. Affairs, NASA  
Dr. Nelson Ehrlich, AESP/OSU  
Karen Widenhofer, Laser Laboratory Project  
Mr. Charles Hoppesch, Materials Processing  
Ms. Kathy Mease, Shuttle Payloads Processing  
Ms. Michelle Wickham, USA Today  
Ms. Janice Maguire, mission 21, Launching  
Technology Across the Curriculum  
Dr. Richard Devon, National Space Grant College and Fellowship Program: Impact on Elementary and Secondary Programs  
Mr. Jack Walston, Shuttle Landing Facility  
Mr. Dick Young, Press Site Briefing  
Mr. Jay Honeycutt, NASA and the space Transportation System  
Mr. Bruce Rutledge, Parachute Facility  
Dr. Ron Brio, Hangar L Bionetics Presentation

Center tours:

Exploration Station, Space Port, USA  
Launch Complex 39, Orbiter Processing Facility  
Vehicular Assembly Building  
Operations and Check Out Facility  
MultiPurpose Facility, Shuttle Landing Facility  
Crawler Transporter

Aerospace Education Services Program  
Annual Training Conference  
Marshall Space Flight Center  
Huntsville, Alabama May 26 - June 3, 1992

Key Presenters:

Jeff Ehmen, Education Specialist  
Jack Lee, Center Director, MSFC  
Kenneth E. Wiggins, Director, AESP  
Frank Owens, Director Education Division  
Eddie Anderson, Chief, El & Sec Branch  
Malcolm Phelps, Chief, Tech & Eval Branch  
Larry Bilbrough, Education Services Specialist  
Jim Pruitt, Center Education Officer, MSFC  
Ransom Ritter, Education Specialist  
Dan Carter, Protein Crystal Growth  
Vugantas Kulpa, Neutral Bouyancy Simulator  
David Florio, Director, National Education Initiatives, National Academy of Sciences  
Doris Grigsby, Assoc. Director, AESP, OSU  
John Sims, Spacelab  
Axel Roth, Space Station Freedom  
Sharon Denver, Boeing  
Charlie Cooper, Space Station Environmental and Life Support System  
Pat Armstrong and Virginia Witherspoon, Optics Educational Activities  
Tom Rieckhoff, Shuttle Launch Photo Analysis  
Rick Collin, Educational Technology and Video Conferences  
Greg Vogt, microgravity  
Bill Snoddy, Future Projects  
John Chapman, Advanced Solid Rocket Motor  
Nelson Ehrlich, Equipment Training  
Sandra Williams, Alabama Space and Rocket Ctr

Center Tours:

Space Science Lab, Materials Processing Lab  
Productivity Enhancement Facility  
Neutral Bouyancy Facility  
Space Station Freedom Assembly Facility  
Space Station Engineering Mock-up  
Space Station Environmental and Life Support System, Discovery Lab  
Payload Operations Control Center  
Propulsion Laboratory Test Area  
Payload Crew Training Complex  
Telerobotics Demonstration

NASA/AESP AIMS CONFERENCE

January 4 - 10, 1993

Oklahoma State University

Stillwater, Oklahoma

Facilitators: Dave Youngs and Frank Lawlor

Lou Marshall, Rain Forest Presentation

Aerospace Education Services Program

Professional Development Conference

September 7 - 16, 1993

Ames Research Center

Moffett Field, California

Key Presenters:

Garth Hull, Center Educational Programs Officer

Michael Malaire, Chief, External Affairs Office

Dale L. Compton, Director, Ames Research Ctr.

Kenneth E. Wiggins, Director, NASA/AESP

Larry Bilbrough, NASA HQ

Eddie Anderson, Chief, El. & Sec. Branch

Frank Owens, Director, Education Division

Kent Cullers, High Resolution

Microwave Survey

Merritt Smith, Basic Computational Fluid

Dynamics

Patricia A. Elson, Numerical Aerodynamic

Simulation User Interface

Christine N. Gong, Workstation Applications

Office

Jerry V. Kirk, Wind Tunnels

Janet Beegle, Wind Tunnel Tour

Robert D. Tolle, Using Computer/Space Technology in the Classroom

Robert J. Twiggs, Weber State University

Eddie Anderson, AESP's Role in the Strategic Plan

Sue Darnell, Reform Implementation for Science, Mathematics and Technology Education

Minot Parker, Earth Observation using Landsat Images

James McMurtry, NASA Communications Seminar

Tom Gates, How do Planets Stay in Orbit?

Les Gold, The Solar System

Marc Seigel, Internet Overview

Edna DeVore, GEMS

Owen B. Toon, Ozone Research

Richard Young, Galileo Mission

Frank Martin, Hubble mission Overview

Larry Mendoza, HST Slide Show

Robert Mah, Information Science and Robotics

Ed Chevers, Terrain Simulation

Sandra Aylsworth and Karina Dundurs,

Pagemaker

Tom Laster and Linsey Levine, MathFinder and Science Helper CD-ROMS

Michael Jay, Apple Computer-Curriculum Applications

Greg Vogt, Introduction to Aldus Freehand

Susan Zapalac, Biological Science at Ames

Tad Savage and Debra Reiss-Buvenheim, SLS-2(STS-58) Briefing

D.A. Harper, Kuiper Airborne Observatory

Carlton M. Gillespie, Jr., Tour Kuiper Airborne Observatory

David Morrison, Earth's Greatest Hits

Anthony M. Cook, Vertical Motion Simulator

Maynard Bates, Crop Growth Facility

Curt Lomas, Space Suit Technology

Malcolm Cohen, Bed Rest Facility

G. Jeffrey Taylor, Lunar Sample Educational Materials

Marilyn Lindstrom, Meteorite Sample/Educational Materials

Nelson Ehrlich, Equipment Update

John Ulrich, Aerospace Education Resource Center

Rick Collin, Videoconferences/NASA Select

Doris Frigsby, Educational Reform and Professional Development

Lary Bilbrough, Conference Summary/Charge for Upcoming Year