NASA and Langley Research Center

Honor Awards 1983
DR. DONALD P. HEARTH
DIRECTOR, LANGLEY RESEARCH CENTER
JOHN W. BOYD
ASSOCIATE ADMINISTRATOR FOR MANAGEMENT,
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
WASHINGTON, DC
PROGRAM

Prelude . . . . . . . . . . Musical Selections by the Tactical Air Command Band, Final Approach Langley Air Force Base

Under the direction of TSgt. Walter L. Street

Master of Ceremonies . . . . Dr. Donald P. Hearth
LaRC Director

The National Anthem . . . TSgt. Walter L. Street

Invocation . . . . . . . . . . Herbert A. Moyer
Minister
Tabernacle United Methodist Church of Poquoson

Remarks . . . . . . . . . . . . John W. Boyd
Associate Administrator for Management National Aeronautics and Space Administration, Washington, DC

Presentation of Awards . . . . . . . Director

Citations read by . . . . Richard H. Petersen
LaRC Deputy Director

Special Achievement Awards for Group Accomplishments Outstanding Volunteer Service Awards H. J. E. Reid Award NASA Honor Awards

Closing Remarks . . . . . . . . . . Director

Refreshments
Special Achievement Awards are granted for performance exceeding job requirements. The service must be in the public interest and connected with, or related to, official employment.
SPECIAL ACHIEVEMENT AWARDS
FOR GROUP ACCOMPLISHMENTS

AERIAL APPLICATIONS RESEARCH TEAM

Accepted by
Cynthia C. Croom

For development of technology which has resulted in new capabilities for the experimental and analytical prediction of the distribution of particles disbursed from aircraft, and for analysis of aircraft modifications which significantly improve distribution characteristics.

AIRLAB DEVELOPMENT TEAM

Accepted by
Dale G. Holden

For establishing AIRLAB as an operational laboratory for conducting fault-tolerant systems research.
SPECIAL ACHIEVEMENT AWARDS
FOR GROUP ACCOMPLISHMENTS

DIRECT-STRIKE LIGHTNING EXPERIMENT TEAM

Accepted by
Felix L. Pitts

For developing instrumentation and collecting data on direct-strike lightning phenomena.

ERBE DATA MANAGEMENT TEAM
and
RELEASE 2 PROGRAMMING TEAM

Accepted by
James F. Kibler

For design, development, implementation and testing of Release 2 of the ERBE Data Management System, leading to an operational data processing system for Earth Radiation Budget Experiment data.
SPECIAL ACHIEVEMENT AWARDS
FOR GROUP ACCOMPLISHMENTS

FAN NOISE FLIGHT TEST TEAM

Accepted by
John S. Preisser

For planning and implementing the flight tests that validated ground test methods for simulating inflight fan noise from turbofan engines.

LAMINAR-FLOW CONTROL SUPERCritical AIRFOIL RESEARCH TEAM

Accepted by
William D. Harvey

In recognition of the design of a Laminar-Flow Supercritical Airfoil and the successful experimental demonstration of attaining nearly full-chord laminar flow on a swept supercritical airfoil at transonic speeds.
SPECIAL ACHIEVEMENT AWARDS
FOR GROUP ACCOMPLISHMENTS

LDEF EXPERIMENT - VIBRATION QUALIFICATION
TEST TEAM

Accepted by
John F. Rogers

For outstanding dedication to and support of
the LDEF First Flight Experiments Vibration
Qualification Testing.

MULTICHANNEL OCEAN COLOR SCANNER (MOCS) TEAM

Accepted by
Gary W. Grew

For significant accomplishments in the development
and validation of an instrumentation system and
algorithm for remote measurement and real-time
display of suspended matter in the ocean over a
wide range of environmental conditions.
SPECIAL ACHIEVEMENT AWARDS
FOR GROUP ACCOMPLISHMENTS

NATURAL LAMINAR-FLOW RESEARCH TEAM

Accepted by
Dr. Bruce J. Holmes

For outstanding achievements in advancing the understanding of Natural Laminar-Flow aerodynamics and for stimulating widespread interest in its application to future designs by developing new airfoils and demonstrating the existence of NLF on several current airplanes of both conventional and advanced construction.

PATHFINDER I DESIGN AND FABRICATION TEAM

Accepted by
James F. Bradshaw

For dedicated and innovative efforts leading to the successful design and fabrication of the NTF Pathfinder I model.
PUSHBROOM MICROWAVE RADIOMETER (PBMR) INSTRUMENT DEVELOPMENT TEAM

Accepted by
Dr. Richard F. Harrington

In recognition of development and successful demonstration of an Advanced Microwave Radiometer System for Passive Remote-Sensing Applications.

RESOURCE PLANNING SYSTEM TEAM

Accepted by
Jean R. Migneault

For designing and implementing an effective automated resource planning system with unusual consideration for efficiency of user interface.
SPECIAL ACHIEVEMENT AWARDS
FOR GROUP ACCOMPLISHMENTS

SAGE II AZIMUTH SHAFT REPAIR TEAM

Accepted by
Kenneth D. Hedgepeth

For dedicated efforts in defining the failure mechanism of the Stratospheric Aerosol and Gas Experiment II (SAGE II) azimuth clip and providing analysis, design, and testing on new configurations to preclude future failures.

SILTS PROJECT DESIGN, TEST, AND INTEGRATION TEAM

Accepted by
O. Vernon Marshall, Jr.

In recognition of the high level of professional and innovative performance exhibited by the SILTS Project Team in executing the many tasks necessary to design, certify, and deliver the experiment hardware ready to be flown on the Space Shuttle orbiter vehicle.
SPECIAL ACHIEVEMENT AWARDS
FOR GROUP ACCOMPLISHMENTS

SHUTTLE ENTRY AIR DATA SYSTEM DEVELOPMENT TEAM

Accepted by
Paul M. Siemers III

In recognition of outstanding achievements in the design, development, calibration, and certification for flight of an advanced concept in air data systems for the Space Shuttle orbiter.

SPACE SHUTTLE ENVIRONMENTAL EFFECTS MEASUREMENT TEAM

Accepted by
Richard J. Bendura

For superior performance in implementing an extensive field program to measure the launch vehicle effluents and sonic boom effects of the Space Shuttle.
SPECIAL ACHIEVEMENT AWARDS
FOR GROUP ACCOMPLISHMENTS

SPACE STRUCTURES ASSEMBLY RESEARCH TEAM

Accepted by
Walter L. Heard, Jr.

For developing and demonstrating the Mobile Work Station concept to facilitate efficient astronaut assembly of truss structures on-orbit.

SUPERPLASTIC FORMING/WELD-BRAZING DEVELOPMENT TEAM

Accepted by
Thomas T. Bales

For development of the superplastic forming/weld-brazing process which demonstrated improved structural efficiency and simplified fabrication of titanium components for high-speed aircraft applications.
SPECIAL ACHIEVEMENT AWARDS
FOR GROUP ACCOMPLISHMENTS

VISUAL INFORMATION SPECIALISTS' TEAM

Accepted by
Charles W. Watson, Jr.

In recognition of timely and accurate preparation of artwork in support of documenting and disseminating the Center's research output.

WIDE-BODY AIRCRAFT NOISE PROPAGATION TEST TEAM

Accepted by
William L. Willshire, Jr.

For conducting a flight experiment on air-to-ground noise propagation and interpreting results which have led to significantly improved accuracy when incorporated in the internationally accepted procedure for predicting lateral attenuation of aircraft noise.
A number of our employees are engaged in numerous voluntary efforts in the local communities, serving with community organizations and providing leadership to various projects aimed at improving the quality of life for all. These Federal employees who devote their off-duty time and their talents to such voluntary efforts deserve recognition and appreciation for their exemplary community service.
OUTSTANDING VOLUNTEER SERVICE AWARDS

Joe C. Gowdey

For outstanding volunteer service to the Virginia Middle Peninsula as President of the Gloucester-Mathews Humane Society.

Janet M. McKenzie

In recognition of outstanding volunteer leadership and contributions to the Girls Club of Hampton, Southeastern Consortium for Minorities in Engineering, and Peninsula United Way.

Dr. Ralph J. Muraca

For dedicated and sustained efforts on behalf of the children and parents who receive help from the Downtown Hampton Day Care Center.
H. J. E. REID AWARD

This award recognizes the outstanding scientific or engineering paper written by a Langley Research Center employee or group of employees.
H. J. E. REID AWARD

to

Dr. Stephen K. Park
Langley Research Center

and

Dr. Robert A. Schowengerdt
University of Arizona

THE OUTSTANDING PAPER

entitled

"Image Sampling, Reconstruction, and the Effect of Sample-Scene Phasing"
The National Aeronautics and Space Administration bestows singular honor in recognition of achievements by the following groups and individuals.
AEROSPACE VEHICLE INTERACTIVE DESIGN TEAM

Accepted by
Alan W. Wilhite

In recognition of group achievement in pioneering the development of interactive computer-based conceptual design systems for launch and orbital-transfer vehicles.

FAN NOISE FLIGHT EFFECTS RESEARCH TEAM

Accepted by
David Chestnut

In recognition of group achievement for developing and validating improved ground testing methods which simulate the inflight generation and control of fan noise from turbofan engines.
LAMINAR-FLOW CONTROL (LFC)
AIRFOIL MODEL SYSTEMS DEVELOPMENT TEAM

Accepted by
Joseph D. Pride, Jr.

In recognition of outstanding team effort in the mechanical design, fabrication, and installation of the LFC Airfoil Model System.

LANGLEY 8-FOOT TRANSONIC PRESSURE TUNNEL
FLOW QUALITY IMPROVEMENTS TEAM

Accepted by
Percy J. Bobbitt

For the conception, design, and implementation of modifications to the Langley 8-Foot Transonic Pressure Tunnel resulting in flow quality at high speeds unique in the Free World.
LIGHT AIRCRAFT CRASH TEST TEAM

Accepted by
Dr. Robert G. Thomson

For outstanding achievement in conducting 32 full-scale general aviation aircraft crash tests resulting in valuable design data and structural concepts which promise improved survivability in crashes.

SUPersonic low-Disturbance WIND TUNNEL RESEARCH TEAM

Accepted by
Ivan E. Beckwith

For the invention and development of a Supersonic Pilot Low-Disturbance Tunnel which duplicates, for the first time, supersonic flight transition Reynolds numbers in a ground facility.
EXCEPTIONAL SERVICE MEDAL

Malcolm P. Clark

For establishing and conducting superior training and educational programs which are pivotal to the continuing development and growth of Langley's human resources.
EXCEPTIONAL SERVICE MEDAL

James W. Delauder

In recognition of the outstanding effort and contribution made to sustain the operational status of unique research facilities of the Langley Research Center.
In recognition of outstanding achievements in initiating, advocating, and establishing NASA research programs and facilities to provide the fault-tolerant systems technology which will be required by future aircraft and spacecraft flight programs.
EXCEPTIONAL SERVICE MEDAL

William P. Henderson

In recognition of exceptional contributions to propulsion integration technology and outstanding coordination of Langley Research Center's research efforts related to military technology.
EXCEPTIONAL SERVICE MEDAL

Vivian B. Merritt

In recognition of outstanding contributions to the retention of Hispanic employees and to informal resolution of potential discrimination complaints.
EXCEPTIONAL SERVICE MEDAL

Dr. Martin M. Mikulas, Jr.

In recognition of outstanding service in development of advanced concepts for aerospace structures.
EXCEPTIONAL SERVICE MEDAL

M. Leroy Spearman

For outstanding contributions to the advancement of the Nation's capability in aeronautics and space.
In recognition of outstanding achievements in the promotion and public awareness of NASA's aeronautical research program. Because of his leadership, the general public and NASA's aeronautical constituencies have become better informed of NASA's aeronautics research and the importance of that research to the Nation.
EXCEPTIONAL ENGINEERING ACHIEVEMENT MEDAL

Dr. Edmund J. Conway

In recognition of outstanding achievements in the development and application of Gallium Arsenide solar cell technology which have shown Gallium Arsenide solar cells to be a practical, highly efficient, high power-to-weight energy system for future spacecraft.
In recognition of exceptional achievements in developing and improving finite-element analysis methods and personal outstanding technical support that contributed significantly to the accurate and efficient solution of many structural analysis problems of key NASA aeronautical and space programs.
EXCEPTIONAL SCIENTIFIC ACHIEVEMENT MEDAL

Dr. Richard W. Barnwell

For exceptional scientific contributions to aerodynamics through the development and use of methodology for analysis of hypervelocity and transonic flows and for analysis of wind tunnel wall effects.
Dr. Wolf Elber

For pioneering discoveries in fracture mechanics and unique analytical solutions to the behavior of engineering materials that have enhanced the performance and safety of aerospace structures.
EXCEPTIONAL SCIENTIFIC ACHIEVEMENT MEDAL

Dr. Joel S. Levine

In recognition of outstanding contributions to our understanding of planetary atmospheres and the evolution of the Earth's atmosphere through the development of theoretical photochemical models.
EXCEPTIONAL SCIENTIFIC ACHIEVEMENT MEDAL

Dr. Gino Moretti
G.M.A.F., Incorporated

For both fundamental and practical theoretical developments which have vastly improved the capability to analyse and understand flows about high-speed aircraft, including the Space Shuttle.
OUTSTANDING LEADERSHIP MEDAL

John E. Knemeyer

For outstanding achievements and demonstrated excellence in research facilities engineering and engineering management, contributing to the high productivity of Center research facilities and the success of key NASA programs.
OUTSTANDING LEADERSHIP MEDAL

Dr. Gerald D. Walberg

In recognition of outstanding leadership in achieving significant advances in entry technology which have directly contributed to the success of the Nation's planetary probe and manned space missions.
EQUAL EMPLOYMENT OPPORTUNITY AWARDS

Malcolm P. Clark
Robert C. Goetz
Evelyn D. Harris

Granted for significant achievements in furthering Equal Employment Opportunity at the Langley Research Center.