Richard H. Petersen
Director,
Langley Research Center
Dr. Noel W. Hinners
NASA Associate Deputy Administrator (Institution)
PROGRAM

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

Master of Ceremonies . . . . . . Richard H. Petersen
Director

Presentation of Colors . . . . Langley Air Force Base
Honor Guard

The National Anthem . . . . Tactical Air Command Band
Remarks and Introduction . . . Richard H. Petersen

Address . . . . . . . . . . . . . . . . . . . . . . . Noel W. Hinners
NASA Associate Deputy Administrator (Institution)

Presentation of Awards . . . . . Noel W. Hinners
Richard H. Petersen

Citations read by . . . . . . . . . . . . Robert L. Swain
Acting Deputy Director

Langley Honor Awards

Special Achievement for Group Accomplishments
Outstanding Volunteer Service
Public Service
H.J.E. Reid

NASA Honor Awards

Public Service Group Achievement
Group Achievement
Exceptional Service Medal
Equal Opportunity Medal
Exceptional Engineering Achievement Medal
Exceptional Scientific Achievement Medal
Outstanding Leadership Medal

Closing Remarks . . . . . . . . . . . Richard H. Petersen

Refreshments
Langley Research Center Honor Awards

Special Achievement Awards for Group Accomplishments recognize groups and individuals for performance substantially beyond expectations on a specific assignment or job function. The service must be in the public interest and connected with, or related to, official employment.
Special Achievement Awards for Group Accomplishments

Advanced Color Display System Development Team

Accepted by
David C. E. Holmes

For efficient and reliable system development of the advanced color displays aboard the NASA Transport Systems Research Vehicle.

Boeing 757 Wing Noise Survey and Natural Laminar Flow Glove Flight Test Team

Accepted by
Richard D. Wagner

For outstanding execution, management, and technical direction of the Boeing 757 Wing Noise Survey and Glove Flight Test Program which demonstrated that substantial laminar flow can be obtained on a modern, commercial transport wing with wing-mounted engines.
Special Achievement Awards for Group Accomplishments

CAP-TSD Development Team

Accepted by
John T. Batina

For development and validation of a computational method for the transonic aeroelastic analysis of complete airplane configurations.

Compact Range Measurement Team

Accepted by
Melvin C. Gilreath

For outstanding efforts in improving the productivity and quality of research results obtained in the compact range through laboratory modifications and enhancements to the operations procedures.
Special Achievement Awards for Group Accomplishments

DNW Rotor Aeroacoustics Measurement Team

Accepted by
James C. Yu

For planning, conducting, and interpreting a complex rotor model aeroacoustics test in the DNW wind tunnel with subsequent major contributions to the basic understanding of rotor broadband and blade vortex interaction noise sources.

Earth Radiation Budget Experiment Data Validation and Archival Team

Accepted by
Bruce R. Barkstrom

For outstanding contributions to the validation and archival of the first Earth Radiation Budget Experiment (ERBE) satellite data.
Special Achievement Awards for Group Accomplishments

8-Foot High-Temperature Tunnel Nozzle Design Team

Accepted by
Aubrey M. Cary, Jr.

For highly innovative, critical synthesis, and application of design and analysis procedures resulting in nozzle designs which will produce extremely high-quality flow at Mach 4, 5, and 7.

F-106B Vortex Flap Design and Fabrication Team

Accepted by
Homer F. Rush, Jr.

For outstanding effort in the mechanical design, fabrication, and installation of the F-106B Vortex Flap System.
Special Achievement Awards for Group Accomplishments

Federal Employees Retirement System Implementation Team

Accepted by
Diane S. Wieting

For outstanding implementation of the new Federal Employees Retirement System (FERS).

LaRC Advanced Flight Simulation System Development and Implementation Team

Accepted by
Daniel J. Crawford

For design and implementation of an advanced real-time flight simulation subsystem which achieved international application and significantly improved flight simulation research capabilities at Langley Research Center.
Special Achievement Awards for Group Accomplishments

LaRC Crew Escape Studies Team

   Accepted by
   Joseph D. Pride, Jr.

For outstanding accomplishments in the quick response design, analysis, and testing associated with development of unique Shuttle Orbiter crew escape concepts.

Langley Research Center's 70th Anniversary Celebration Team

   Accepted by
   Mary L. Sandy

For leadership and significant contributions in support of Langley Research Center's 70th Anniversary Celebration.
Special Achievement Awards for Group Accomplishments

LaRC Super*Zip Performance Investigation Team

Accepted by
Laurence J. Bement

For developing and conducting the unique Super*Zip separation joint failure investigation and margin demonstration test programs.

Manned Mars Mission Accommodation Task Force

Accepted by
E. Brian Pritchard

For timely establishment of Space Station Requirements for accommodation of the Manned Mars Mission and demonstrating the versatility of the Space Station design.
Special Achievement Awards for
Group Accomplishments

Mission-Oriented Terminal Area Simulation Facility
Development Team

Accepted by
Jacob A. Houck

For outstanding contributions in development of
Langley Research Center's Mission-Oriented Terminal
Area Simulation Facility.

National Transonic Facility Submarine Test Team

Accepted by
Stuart G. Flechner

For design, fabrication, and testing of a U.S. Navy sub-
marine model in the National Transonic Facility to
provide time-critical data for the design of a new class
of submarine.
Special Achievement Awards for Group Accomplishments

1986 LaRC Systems Safety, Quality, & Reliability Audit Committee

Accepted by
Irving Abel

For excellent accomplishment in reviewing and reporting on Langley Research Center's safety, reliability, and quality assurance program.

SAGE II Data Processing Team

Accepted by
William P. Chu

For outstanding achievement in developing the SAGE II data retrieval scheme and generating the SAGE II data products for archival.
Special Achievement Awards for Group Accomplishments

Security Services Branch Team

Accepted by
O. J. Cole, Jr.

For highly effective support of classified research programs, projects, and tests.

Shuttle Orbiter Ascent Separation Study Team

Accepted by
George M. Ware

For demonstrating the feasibility of aerodynamically separating the Shuttle Orbiter from the external tank as the solid rocket boosters fire during ascent.
Special Achievement Awards for Group Accomplishments

Solid Rocket Motor Nondestructive Evaluation Team

Accepted by
Eric I. Madaras

For advancing nondestructive evaluation technology applied to the Shuttle solid rocket motors for improving their reliability for space missions.

Space Station Systems Engineering Analysis Team

Accepted by
Leonard J. DeRyder, Jr.

For sustained high-level performance and multidisciplinary engineering analyses which supported an Agency-wide redefinition of the Space Station Configuration and Assembly Sequence.
Special Achievement Awards for Group Accomplishments

Supersonic Twin-Jet Resonance Research Team

Accepted by
James C. Manning

For exceptional effort in the scientific discovery of supersonic twin-jet resonance effect, and development of applied technology for aircraft fatigue loads analysis and reduction.

TIMER Concept Development and Experiments Team

Accepted by
Leonard Credeur

For development of the TIMER air traffic control concept and experiments which have been instrumental in resolving critical issues for the next generation air traffic control system.
Special Achievement Awards for Group Accomplishments

Transonic Dynamic Tunnel Data Acquisition System Design, Implementation, and Management Team

Accepted by
Charles S. Bryant

For excellence in design, implementation, and management of the new Data Acquisition System for the Langley Transonic Dynamic Tunnel.

Unsteady Flow Characteristics of Laminar Separation on Airfoils Team

Accepted by
John P. Stack

For invention, development, and application of a unique sensor and data reduction technique for detailed measurements of steady and unsteady flow characteristics of laminar separation bubbles and reattachment.
Outstanding Volunteer Service Awards

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 talents to such voluntary efforts, deserve recognition and appreciation for their exemplary community service.
Outstanding Volunteer Service Awards

Robert M. Baucom
For outstanding contributions in enhancing the quality of life for handicapped persons.

David D. Shuster
For outstanding volunteer service in organizing anti-drug programs, coaching Odyssey of the Mind school teams, and significant contributions as a member of the Community Service Board.

William R. Wiley, Jr.
For dedicated and unselfish giving of time, talents, and energy to the youth of the Peninsula area.
Public Service Awards

An award given to non-NASA citizens and organizations to show appreciation for contributions made to Langley Research Center in the accomplishment of its missions, functions, services, or operations as a public service.
Public Service Awards

George R. Hayes
Langley Air Force Base
For dedication to duty resulting in an extremely cooperative relationship between Langley Air Force Base and NASA Langley Research Center.

Refuse-Fired Steam Generating Facility Team

City of Hampton
Accepted by
Clifton W. Loveland III
For dedicated service in the operation of the Refuse-Fired Steam Generating Facility (RECOUP) resulting in performance exceeding all design criteria.
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

Peter A. Gnoffo
John R. Micol
Charles G. Miller III

The Outstanding Paper

entitled
Laminar Heat-Transfer Distributions on Biconics at Incidence in Hypersonic-Hypervelocity Flows
The National Aeronautics and Space Administration bestows singular honor in recognition of achievements by the following groups and individuals:
NASA Honor Awards
Public Service Group
Achievement Award

NASA/American Helicopter Society Rotorcraft Noise Reduction Program Team

Accepted by
John F. Zugschwert

For outstanding accomplishment in originating and implementing an innovative, cooperative government-industry program which has significantly expanded technology for designing and building rotorcraft to meet noise reduction goals.
NASA Honor Awards
Group Achievement Awards

Biomass Burn/Biospheric-Environmental Impact Measurement Team

Accepted by
Joel S. Levine

For obtaining a unique set of measurements leading to improved characterization of the impact of forest fires on the biosphere, the soil, and the environment.

F-14 Variable Sweep Transition Flight Experiment Team

Accepted by
Dennis W. Bartlett

For outstanding execution, management, and technical direction of the NASA F-14 Variable Sweep Transition Flight Experiment which established a boundary-layer transition data base for swept wings at transonic speeds.
NASA Honor Awards
Group Achievement Awards

Hypersonic Computational Fluid Dynamics Team

Accepted by
Ajay Kumar

For developing and demonstrating computational fluid dynamics analysis tools making possible the design of hypersonic airbreathing vehicles, in particular, the National Aero-Space Plane.

New Efficient Narrow Bandwidth Titanium-Doped Sapphire Laser Team

Accepted by
Clayton H. Bair

For significant accomplishments in rapidly advancing the technology of titanium-doped sapphire laser materials and line narrowing techniques for efficient solid-state DIAL applications.
NASA Honor Awards
Group Achievement Awards

Shuttle Alternate Solid Rocket Booster Field Joint Design and Development Team

Accepted by
Kenneth D. Hedgepeth

For development of an alternate conceptual design of the Solid Rocket Booster Field Joint for the Space Shuttle.

16-Foot Transonic Tunnel Fan Blade Repair Team

Accepted by
Benjamin S. Owens

For exceptional contributions in the development of innovative repair concepts, unique fabrication procedures, and reinstalling the 16-Foot Transonic Tunnel fan blades with minimal interruption of critical aeronautical research.
NASA Honor Awards
Group Achievement Awards

Solid Rocket Booster External Tank Attachment
Ring Redesign and Analysis Team

   Accepted by
   David H. Butler

For timely understanding of the structural behavior of
the Space Shuttle Solid Rocket Booster External Tank
Attachment Ring and its successful redesign and
analysis.

Space Shuttle Orbiter Main Gear Tire Test Team

   Accepted by
   Willis H. Ward, Jr.

For developing Space Shuttle Orbiter tire friction and
wear models which will improve the safety of Shuttle
landing operations.
NASA Honor Awards
Group Achievement Awards

Transport Systems Research Vehicle Display
Systems Engineering and Development Team

Accepted by
James R. Hall

For successful development and engineering of the advanced color display system for the NASA Transport Systems Research Vehicle.
Exceptional Service Medal

Robert F. Berry, Jr.

For outstanding achievements in nondestructive testing technology and the development of specifications and standards as applied to aerospace systems criteria.
Exceptional Service Medal

Charles F. Bradshaw

For design and development of the highly reliable Spin Recovery Parachute System for Light Aircraft, enabling safe exploration of out-of-control flight conditions.
Exceptional Service Medal

Jarrell R. Elliott

For exceptional service in the conduct and leadership of Langley's program in applied aircraft control theory resulting in significant advances in the development of the state of the art in aircraft controls technology.
Exceptional Service Medal

Vernon T. Helms III
(deceased)

For exceptional service in advancing hypersonic aero-thermodynamic testing techniques and their subsequent application to the technology development for advanced space transportation systems.
Exceptional Service Medal

Charlie M. Jackson, Jr.

For significant contributions in the area of aircraft aerodynamics research which have led to increased understanding of the physical phenomena of high-speed flow and advanced the state of the art in design of civil and military aircraft.
Exceptional Service Medal

Virginia H. Jones
For exceptional dedication and service in developing and nurturing superior Langley Research Center health care programs.
Exceptional Service Medal

Frederick A. Kern

For outstanding leadership in NASA's metrology/calibration programs.
Exceptional Service Medal

Frank S. Kirkham

For outstanding leadership and contributions in the field of advanced fighter aircraft design.
Exceptional Service Medal

Samuel E. Massenberg

For exceptional service and leadership in the administration of Langley's university programs, assuring effective application of university talent to the Center's diverse research programs.
Exceptional Service Medal

Harold N. Murrow

For outstanding contributions to the measurement and understanding of atmospheric characteristics; particularly turbulence and wind shear.
Exceptional Service Medal

Cecil E. Nichols, Jr.

For exceptional service in development of a seeding system for use with the laser Doppler velocimeter measurements in research wind tunnels.
Exceptional Service Medal

Joseph R. Struhar

For outstanding achievement in the development of automated financial management systems and creative leadership demonstrated in the management of a diversified financial activity.
Equal Opportunity Medal

Gilbert A. Haynes

For outstanding national contribution of extending to underrepresented minorities the opportunities of a challenging career in science and engineering.
Exceptional Engineering Achievement Medal

Griffin Y. Anderson

For exceptional engineering achievements in the development of airframe-integrated scramjet engine technology.
Exceptional Engineering Achievement Medal

Douglas L. Dwoyer
For outstanding leadership in development of computational methods for hypersonic flows, encouragement and training of younger researchers in numerical methods, and application of numerical analysis to understanding of the physics of complex fluid flows.
NASA Honor Awards

Exceptional Engineering Achievement Medal

Jack J. Hatfield

For outstanding leadership and technical contributions toward advancing technology for practical application of electronic display systems and crew station interfaces for aeronautical and space vehicles.
Exceptional Engineering Achievement Medal

Martin M. Mikulas, Jr.
For exceptional engineering achievements in the design and construction of large space structures.
Exceptional Engineering Achievement Medal

Jaroslaw Sobieski

For originating and developing mathematical concepts for the multidisciplinary optimization of aerospace vehicles, including the concepts of multilevel decomposition and optimal sensitivity analysis.
Exceptional Engineering Achievement Medal

Michael J. Walsh

For demonstrated excellence in the area of viscous drag reduction leading to the development of "riblet technology."
Exceptional Scientific Achievement Medal

M. C. Bailey

For contributions in theoretical electromagnetics for the advancement of large space antenna system technology for future space applications.
Exceptional Scientific Achievement Medal

Graeme A. Bird

For achievements in rarefied-gas dynamics and development of the direct simulation Monte Carlo technique, which has provided the first realistic method for analyzing rarefied flow effects over entry vehicles.
Exceptional Scientific Achievement Medal

John H. Cantrell, Jr.
For accomplishment in solid-state physics and non-destructive materials analysis through a fundamental contribution using nonlinearity as the deterministic basis of material properties.
NASA Honor Awards

Exceptional Scientific Achievement Medal

Mohammed Yousuff Hussaini

For pioneering studies of boundary-layer transition physics and development of highly accurate computational methods for conducting such studies.
Outstanding Leadership Medal

Charles P. Blankenship
For outstanding leadership and continued technical and managerial contributions to the Agency’s structures technology programs.
Outstanding Leadership Medal

Joseph S. Heyman

For outstanding and effective leadership in creating, nurturing, and sustaining a world-class program in nondestructive evaluation research and its practical application for NASA and the aerospace industry.