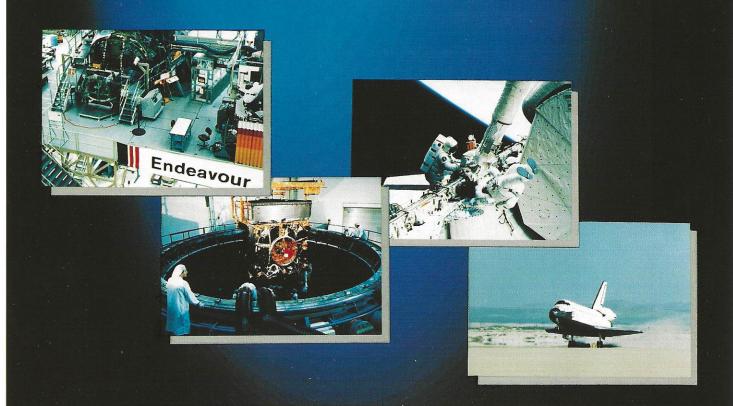


Safety, Reliability, Maintainability, and Quality Assurance Support



ATTITUDE
INNOVATION
INVOLVEMENT



1991 Recipient National Space Trophy

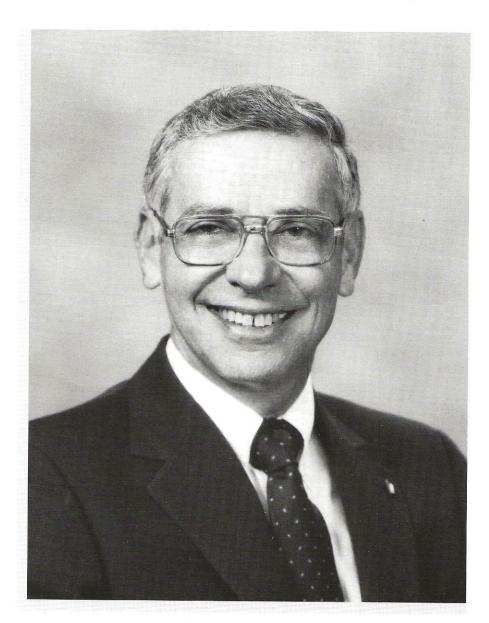
Aaron Cohen, Director of the Lyndon B. Johnson Space Center, has been selected to receive the 1991 Rotary National Award for Space Achievement for distinguished contributions to the United States Space Program.

For 28 years, Mr. Cohen's engineering management at the Lyndon B. Johnson Space Center (JSC) has helped make America a world leader in space exploration. Mr. Cohen was appointed Director of JSC on October 12, 1986. Under his leadership, the United States has increased its capabilities in space through safer and more efficient operation of the National Space Transportation System (Space Shuttle). He also manages major elements of the Space Station Program, including the development of substantial capabilities in the fields of space systems engineering, mission operations, life sciences research, lunar and planetary sciences and Earth observations.

As Director, he oversees the maintenance of a significant aircraft operations program and is responsible for selecting and training all flight crews for NASA's manned space flight programs. Mr. Cohen directs a diverse work force of over 3,600 NASA employees and 6,600 support contract personnel. He manages an annual budget of approximately \$2.3 billion.

Formerly, Mr. Cohen was the Director of Research and Engineering at Johnson Space Center. In this capacity, he was responsible for the direction and management of all engineering, space and life science, and research and development in support of the major manned space flight programs assigned to JSC.

Cohen first came to the Manned



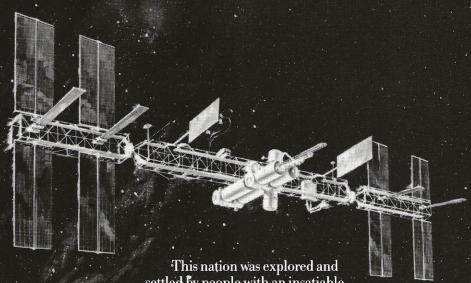
Aaron Cohen

Spacecraft Center (now the Johnson Space Center) in 1962 as part of the Apollo Spacecraft Program Office. He served as Manager of the Command and Service Module and Lunar Module; Chief of the Systems Integration Branch in the Systems Engineering Division; Assistant Chief, Systems Engineering Division; and Chief of the Command Service Module Project Engineering Division.

As Manager of the Space Shuttle Orbiter Project from 1972 to 1982, Cohen guided the design, development, production and test flights of the Space Shuttle Orbiter with various line organizations at JSC, other NASA centers and various contractors.

A veteran of the U.S. Army, Mr. Cohen received a bachelor of science degree in Mechanical Engineering from Texas A&M University and a master of science degree in Applied Mathematics from Stevens Institute of Technology. He has been honored with many prestigious awards including NASA's Exceptional Service Medal, Outstanding Leadership Medal, Distinguished Service Medal and Engineer of the Year Award. The Rotary National Award for Space Achievement Foundation is proud to name Mr. Aaron Cohen the recipient of The 1991 National Space Trophy.

There is no final frontier.



settled by people with an insatiable curiosity. It was raised to world leadership by people driven to redefine the limits of the possible.

Now our frontier spirit is carrying us into permanent earth orbit with the Space Station.

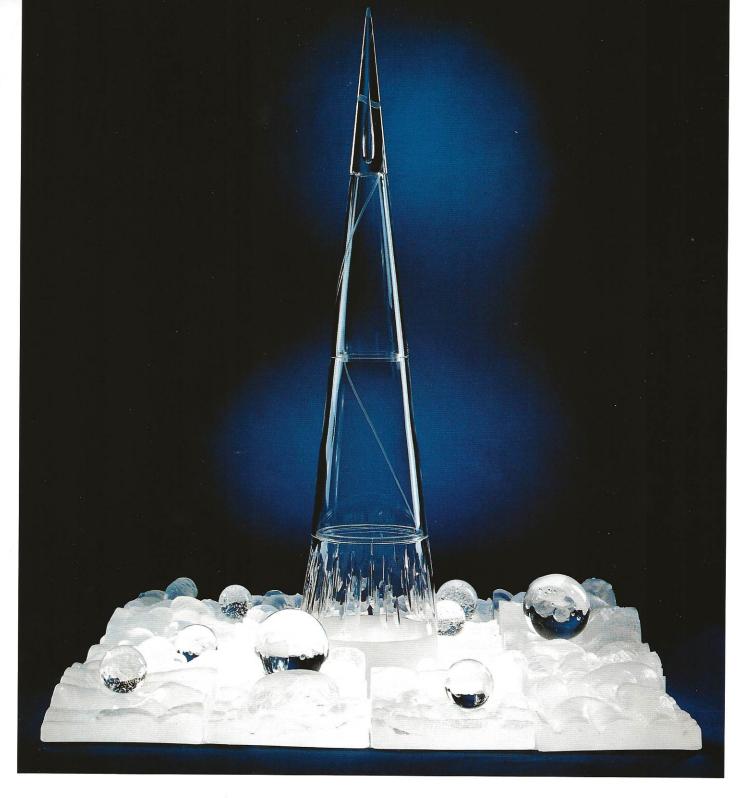
At IBM, we're proud to be providing the station's critical Data Management System. And we're excited about the many new directions the Space Station will take America.

The Space Station will allow us to create

and understand defect-free crystals, develop better pharmaceuticals and advance our understanding of aging. It will provide insights into the natural forces affecting our planet. And it will be the way station where we'll assemble and repair the space vehicles that will carry us to future frontiers.

Turning back from space exploration would be turning back on the benefits from the future frontier. And the future will surely be upon us, whether we are ready or not.





The National Space Trophy

The strikingly brilliant National Space Trophy is an inspiring symbol representing mankind's ultimate Manifest Destiny - the exploration of the universe. Made entirely of lead crystal, the clear conical column rises above an opaque, amorphous base with various size spheres in its midst. A white line spirals around the column and

terminates at the tip, where a bubble of air is captured and brilliantly lit from within.

The trophy depicts the aspiration of man to explore space, the power and vastness of space and the glory of man's achievements in space. The trophy stands seven feet tall on its

custom base and weighs over 500 pounds. It was designed by Steuben Glass of New York and is permanently displayed in the Visitors Center of the NASA Johnson Space Center in Houston. Recipients of the Rotary National Award for Space Achievement receive a crystal replica of The National Space Trophy.

STELLAR AWARD RECIPIENTS

THOMAS M. BALL - MILITARY SERVICE

The Rotary National Award for Space Achievement Foundation has selected Chief Master Sergeant Thomas Ball to receive a 1991 Stellar Award for his career long commitment to America's military space program. As Commandant of the Air Force Space Command



NCO Professional Military Education Center in Colorado, Chief Ball is well-known for his outstanding work in establishing the Space Operations Enlisted Career Field. Throughout his distinguished thirty-three year Air Force career, Chief Ball inspired thousands of enlisted personnel, teaching them the skills necessary to meet the challenges of the 21st Century. Chief Ball's own management skills have been drawn upon by the U. S. on numerous occasions, including a 1983 assignment to the office of Joint Chiefs of Staff, where he played a significant role in the formation of the U.S. Space Command. The Foundation wishes to acknowledge Chief Ball's tireless promotion of the Air Force's space program and lasting contributions which have helped make our nation more secure.

DALE L. FAHNESTOCK - OPERATIONS SUPPORT The Director of Mission Operations and Data Systems Directorate, (MO & DSD) at the Goddard Space Flight Center, Dale L. Fahnestock has been selected by the Foundation to receive a 1991 Stellar Award. As Director, he is

responsible for the activities of an



internationally recognized research and development organization comprised of the TDRS Network, the network of ground tracking and data acquisition stations, the worldwide NASA communication system and numerous satellite control and data processing centers which provide support for the Space Shuttle, Spacelab and the Hubble Space Telescope. As NASA's senior representative, he leads the Space Network Interoperability Program (SNIP), which promotes interoperability between the data relay satellites of NASA and those planned by the European and Japanese Space Agencies. The Foundation congratulates Mr. Fahnestock on an outstanding thirty-two year career in aerospace operations.

DR. SAM LEE POOL -SPACE LIFE SCIENCES

Since joining NASA in 1968, Dr. Sam
Lee Pool's career has been dedicated to
research in aerospace medicine. As a
medical officer in the Biomedical
Research Division at the Johnson Space
Center, Dr. Pool has gained recognition
for his achievements in developing and
applying space research and technology



applying space research and technology to medical problems on Earth. He was instrumental in identifying the medical problems associated with weightlessness in space. In 1977, he was appointed Chief of the Medical Sciences Division. Dr. Pool has participated in a variety of medical research programs which helped define man's capabilities to work safely and productively in space. He was also responsible for developing and implementing the Space Shuttle medical support plan for all Shuttle missions. The Foundation congratulates Dr. Pool for his outstanding research in the space life sciences, which has contributed greatly toward manned space exploration.

DR. JOHN C. MATHER -ASTRONOMY

Dr. John C. Mather has been selected to receive the Foundation's Stellar award for astronomy. Throughout his twenty-three year career, Dr. Mather has worked to expand mankind's knowledge of this universe. In 1974, he organized the first proposal for the



Cosmic Background Explorer (COBE) satellite. Guiding the projects development, he served as study scientist in 1976 and as project scientist in 1982. Dr. Mather's years of research were rewarded as the COBE, launched in 1989, met all its objectives of measuring the diffuse infrared and microwave background radiation of the universe. As the Principal Investigator for the Far Infrared Absolute Spectrophotometer (FRIAS) on the COBE, he has reported the most precise measurements ever made of the Big Band residual radiation. The Foundation congratulates Dr. Mather for leading our nation's effort to discover the cosmic makeup of our universe.

"Create ships and sails capable of navigating the celestial atmosphere, then you will find men to man them, men not afraid of the vast emptiness of space"

–Johannes Kepler 1617



Congratulations to Aaron Cohen a creator of celestial ships and sails

MCDONNELL DOUGLAS

The National Space Trophy

The Rotary National Award for Space Achievement is presented annually to a United States' citizen who has made a preeminent contribution to the advancement of America's space program.

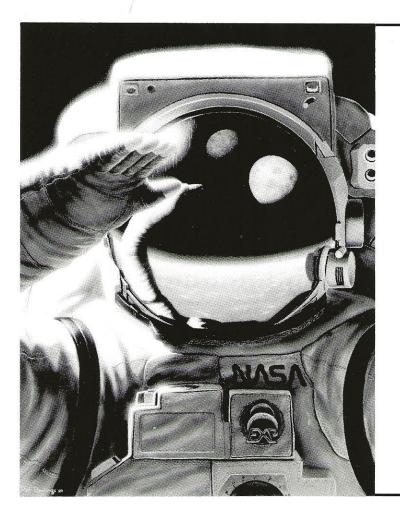
The principal award, The National Space Trophy, is bestowed for important accomplishments in a space-related field such as research, development, operation, management, program administration or legislation.

Nominations for the prestigious award are submitted by aerospace corporations, government agencies, professional organizations and individuals. A ballot of finalists is voted upon by the Foundation's National Board of Advisors. The confidential votes of the Board are tabulated by an independent accounting firm to determine the annual recipient.

The Stellar Awards

In 1989, the Rotary National Award for Space Achievement added the presentation of four Stellar Awards to individuals who have made career-long contributions to the Space - Program. The recipients represent the thousands of Americans who are responsible for our nation's leadership in space exploration.

Recipients are selected by the Board of Directors of the Foundation based upon recommendations from the National Board of Advisors and others. The awards recognize achievement in a variety of areas. Each award winner receives an originally designed glass and granite trophy and certificate of recognition.



VISION

EAGLE Aerospace salutes
the 1991
Rotary National Award
for Space Achievement
Award recipient,
AARON COHEN.
We appreciate
and share in his
vision of
space development.



GE Salutes Aaron Cohen for Outstanding Contributions to Space Exploration



GE Government Services, Inc.

NASA's Partner in Engineering Solutions for Tomorrow

1

5th Annual Rotary National Award for Space Achievement Banquet

M C M

Reception

Dinner

Gen. Thomas Stafford

Welcome

Charles H. Hartman

Chairman, RNASA Foundation

Invocation

Dr. Bill Rittenhouse

Pastor, Nassau Bay Baptist Church

National Anthem

Music by Buddy Kirk's Orchestra

Master of Ceremonies

Jim Hartz

Chairman of the Board, Hartz/Meek International, Inc.

Featured Speaker

Lt. General Thomas Stafford

Former Astronaut/Vice-Chairman, Stafford, Burke and Hecker, Inc.

Presentation of the Stellar Awards

Christopher C. Kraft

Former Director, NASA - Johnson Space Center

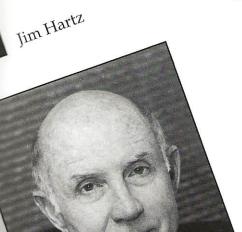
Presentation of The National Space Trophy

Vice Admiral Richard H. Truly, USN (Ret.)

Administrator, NASA Headquarters

Closing

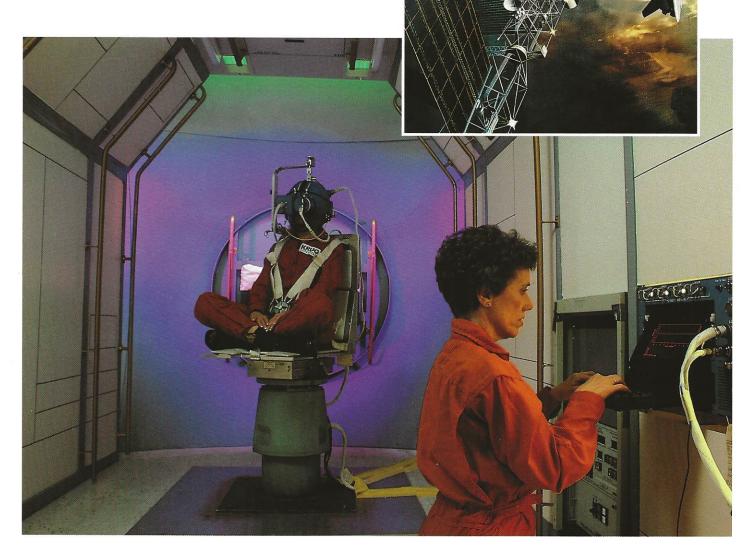
Charles H. Hartman



X (







CONGRATULATIONS AARON COHEN!

EXECUTIVE FORUM

This is the third year for the Rotary National Award for Space Achievement Foundation to sponsor the Executive Forum on Space Exploration. The forum has become an annual event due to the interest and attendance shown by the aerospace community. The forum provides aerospace managers with current assessments of the space program by senior executives from NASA, the military and the aerospace industry. Panelists begin by presenting the state of the space program from their field perspective. An open discussion of various space-related issues follows.

This year's distinguished panel consists of Dr. Mark Albrecht, Executive Secretary, National Space Council; Lieutenant General Thomas S. Moorman, Commander, Air Force Space Command; Lieutenant General Thomas Stafford, former astronaut, Chairman of the Synthesis Group and Vice-Chairman, Stafford Burke, and Hecker, Inc.; and Ms. Stephanie Lee-Miller, Director, Office of Commercial Space Transportation, U. S. Department of Transportation. Stephen Gauvain of Houston's Channel 13 Eyewitness News serves as this year's moderator.

"FOR I DIPT INTO THE FUTURE, FAR AS HUMAN EYE COULD SEE, SAW THE VISION OF THE WORLD, AND ALL THE WONDER THAT WOULD BE."

TENNYSON

Congratulations to all of you who have the vision to see the challenges of space, the desire to meet them and the knowledge to conquer them.

Friendswood Development Company, Developer of Clear Lake City



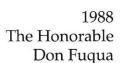
FORMER RECIPIENTS



1987 Dr. Maxime A. Faget

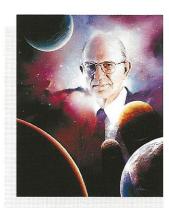


1989 Vice Admiral Richard H. Truly, USN(Ret.)

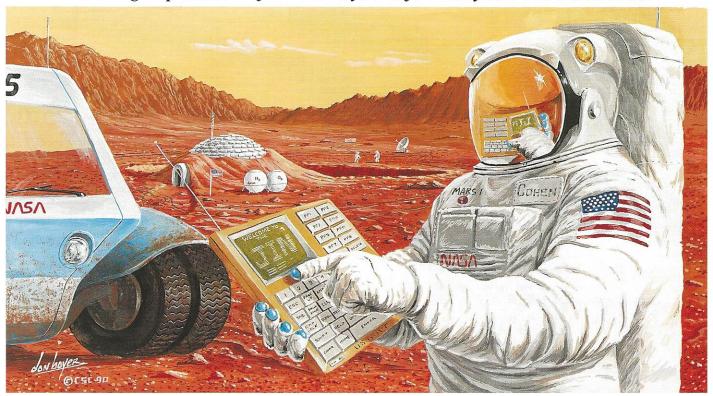




1990 Dr. Lew Allen

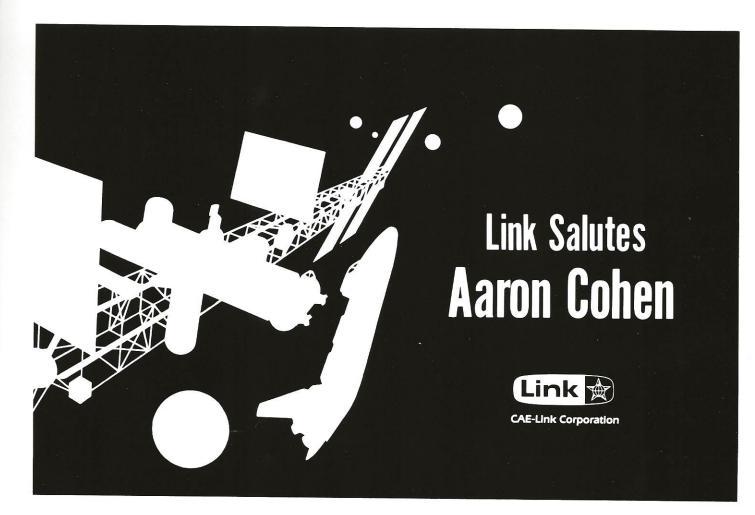


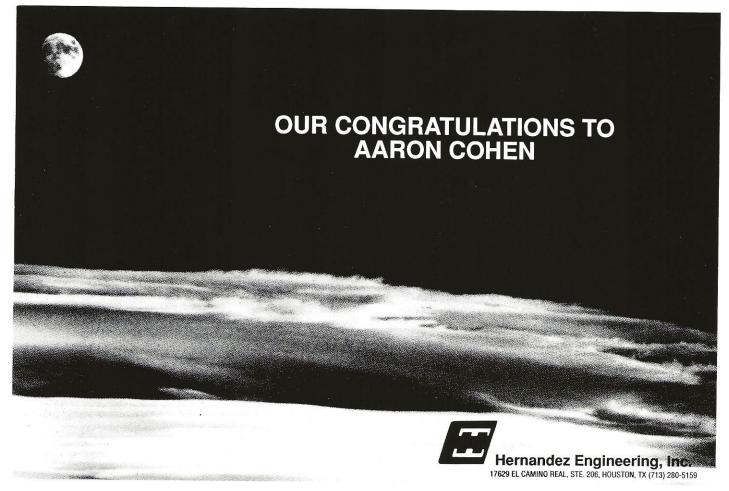
Providing Dependable Information Systems for Today and Our Tomorrows.

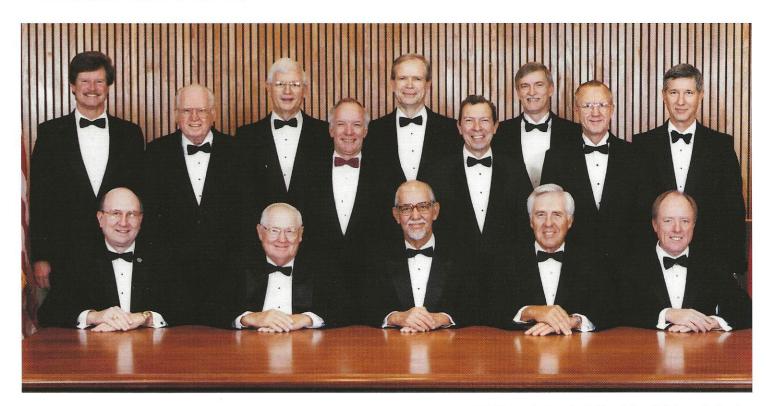


CSC

Congratulations to Aaron Cohen for his contributions, leadership, and vision in shaping our nation's space program.







Members of the Foundation - standing left to right: Robert J. Wren, Harold L. Neely, Jack R. Lister, Richard L. Griffin, John T. Watson, Robert W. Mitchell, John J. Francis, Ronald K. Blilie, Clay W.G. Fulcher. Seated left to right: Billy Ray Smith, Floyd B. Boze, Charles H. Hartman (Chairman), Charles A. Jacobson, Edwin R. Harris. Not Shown: Charles S. Hardwick, H. Don Kirk, Owen G. Morris, David Hamblin, and Alfred A. Boyd.

The inspiration to establish a national award for space achievement grew naturally from the Space Center Rotary Club of Houston. The club enjoys a close association with the space program and counts many of America's space pioneers among its members.

In 1985, the club organized a special committee to create an award commemorating the greatest individual contributions to America's space program. The committee established the Rotary National Award for Space Achievement Foundation a non-profit organization founded for the purpose of recognizing outstanding individual achievement in space while creating greater public awareness of the benefits of space exploration.

The premier award ceremony was held in March 1987 with the first presentation of the National Space Trophy. Since then, the annual event has grown in recognition and attendance. In 1989, the Foundation added four Stellar Awards to honor individuals who have made career-long contributions to the space program.

The Foundation appreciates the tremendous interest and assistance it has received from the aerospace industry, NASA and the Department of Defense. This support assures the continued growth and success of The National Space Award.

About the Cover

Each year a distinguished artist is commissioned by the Rotary National Award for Space Achievement Foundation to illustrate the individual accomplishments for which the National Space Trophy is being presented.

This 1991 cover portrait was painted by Pat Rawlings, a well-known local artist whose work has appeared in *Time*, *Omni*, *Aviation Week & Space Technology*, and the *New York Times*. His painting *Houston in Orbit* greets visitors to the Houston Chamber of Commerce and his portrait of Maxime Faget, first recipient of the National Space Trophy, is on display at the Johnson Space Center's Visitors Center.

"The space program represents all that we can say about challenge and response, about the quest for knowledge and the penalties of failure, about meeting the burning human need to discover."

—Aaron Cohen



...where science gets down to business

NATIONAL BOARD **OF ADVISORS**

The Rotary National Award for Space Achievement Foundation gratefully acknowledges the leadership and participation of its National Board of Advisors.

Joseph P. Allen

Executive V.P., Space Industries, Inc.

Dr. Lew Allen

Director, Jet Propulsion Laboratory

Honorable Mike Andrews

U.S. House of Representatives

Norman R. Augustine Executive V. P., Martin-Marietta Corp.

Mark E. Carreau

Houston Chronicle

Aaron Cohen

Director, NASA Johnson Space Center

Edsel D. Dunford

V.P. & Gen. Mgr., TRW Electronics & Defense

Gerald W. Ebker

President, IBM

Maxime Faget

President, Space Industries, Inc.

Donald Fink

Editor-in-Chief, Av. Week and Space Technology

Dr. Lennard A. Fisk

Assoc. Adm., Space Sciences & Appl., NASA Hq.

Jon E. Forbes

President, CAE-Link Corporation

Dr. Ken Francis

Exec. V.P., McDonnell Douglas Space System Co.

Don Fuqua

Pres. & Gen. Mgr., AIA

Senator Jake Garn

U.S. Senator

Stephen Gauvain

KTRK-TV, Channel 13 News

Col. Robert B. Giffen

Dept. of Astronautics, USAF Academy

Robert R. Gilruth

Former Director, NASA Johnson Space Center

Dr. S. W. Gouse

Senior V.P. & General Manager MITRE Corp.

Gerald D. Griffin

Korn Ferry International

R. W. Hager

V.P. & Gen. Mgr., Boeing-Huntsville Division

Lt. Gen. Charles R. Hamm

Superintendent, USAF Academy

Sam Iacobellis

Pres., Aerospace Operations, Rockwell Int.

Christopher C. Kraft

Former Director, NASA Johnson Space Center

General Donald J. Kutyna

Commander in Chief, U.S. Space Command

T. Jack Lee

Director, Marshall Space Flight Center

William B. Lenoir

Assoc. Adm., Space Station, NASA Hg.

Alan M. Lovelace

V.P., General Dynamics Corp.

Robert T. McCall

Aviation/Space Artist

Lt. Gen. Forrest S. McCartney (Ret.)

Director, Kennedy Space Center

Hans M. Mark

Chancellor, The University of Texas System

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Vice Admiral William E. Ramsey (Ret.)

Executive, CTA Incorporated

Donald B. Rassier Executive, Ford Motor Company

Alan B. Shepard

Former Astronaut

Donald K. (Deke) Slayton

President, Space Services Inc., Former Astronaut

Thomas H. Smith

Executive Director, Soc. of Exp. Test Pilots

Dr. Thomas M. Stauffer

Chancellor, University of Houston-Clear Lake

James R. Thompson, Jr.

Associate Administrator, NASA Headquarters

Vice Admiral Richard H. Truly, USN (Ret.)

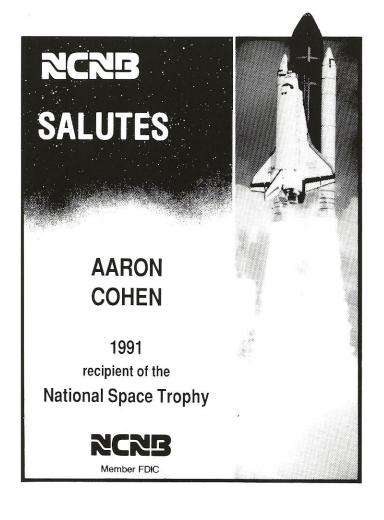
Administrator, NASA Headquarters

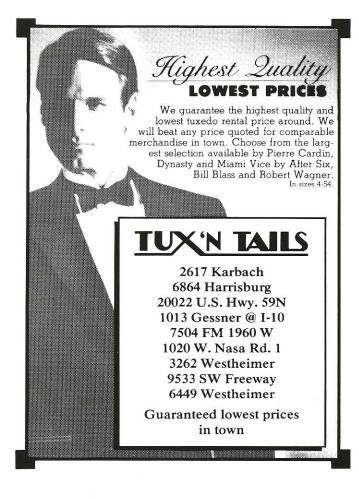
John F. Yardley

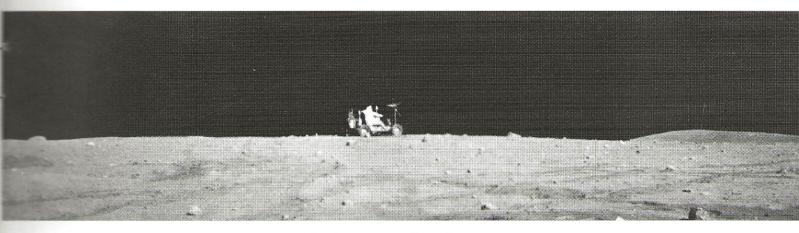
President, McDonnell Douglas Astronautics Co.

General Ronald W. Yates

Commander, Air Force Systems Command







We join our industry and the nation in congratulating Dr. Aaron Cohen for exploring new horizons in space.



Lockheed salutes Aaron Cohen for a life dedicated to the nation's conquest of space.

