



Ford Aerospace

MISSION CONTROL INTO THE TWENTY-FIRS CENTURY



MISSION CONTROL

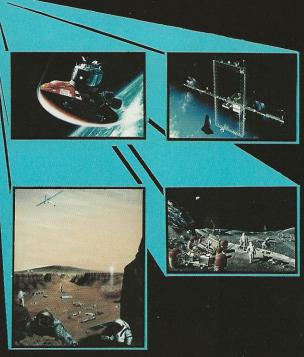


ORBITAL TRANSFER VEHICLE

SPACE STATION

MANNED MARS MISSION

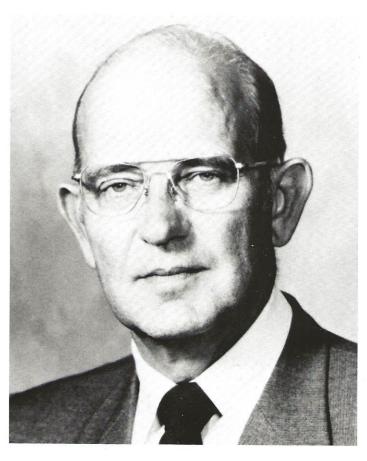
MANNED LUNAR STATION



1322 Space Park Dr. P.O. Box 58487

Houston, Texas 77258 Telephone: 713/488-1270

National Space Trophy Recipient - Dr. Lew Allen



Dr. Lew Allen, Director of the Jet Propulsion Laboratory, is the recipient of The 1990 Rotary National Award for Space Achievement. Dr. Allen was chosen to be this year's honoree because of his distinguished contributions to the continuation of America's exploration of the solar system. As Director of the Jet Propulsion Laboratory (JPL), Dr. Allen supervises NASA's main center for unmanned space exploration. Under his fine leadership, 1989 proved to be a banner year for unmanned space exploration. The spectacular flyby of Neptune by Voyager 2 and the successful launches of the Magellan and Galileo space probes rekindled the public's interest in our neighboring planets and their orbiting moons. The Jet Propulsion Laboratory in Pasadena, California, is chiefly responsible for these exciting missions that expand our knowledge and understanding of the universe.

Last August, Voyager 2 treated the entire world to breathtaking views of distant Neptune. The flight controllers at JPL tuned its trajectory so accurately that Voyager 2 reached Neptune only 21 miles from where scientists expected it to be. Closing in on the stormy planet, Voyager 2 discovered six previously unknown moons and at least four rings. Because of its brilliant design and careful manipulation from JPL, Voyager 2 is still sending data 2.8 billion miles back to Earth.

Voyager 2 has proven itself to be the most successful space probe ever launched. Designed and built at JPL, the space probe, and its sister, Voyager 1, have provided most of our knowledge about our Solar System. This prompted noted astronomer Carl Sagan to say, "Those scientists and engineers are role models in an America seeking excellence and international competitiveness. They should be on our stamps."

The space probes Magellan and Galileo were launched from Space Shuttles in a convenient cooperative effort of manned and unmanned space flights. Magellan will orbit Venus, the cloud-covered twin planet of Earth, and map its hidden surface with imaging radar. Galileo will orbit Jupiter and send a probe into that planet's atmosphere for the first direct sampling of the clouds covering the largest planet in our solar system.

Dr. Allen has been director of the Jet Propulsion Laboratory since 1982. Early in his tenure, Dr. Allen pledged to maintain a vigorous space science program while pursuing new avenues of research and development for other significant problems of national and global interest. In 1983, Dr. Allen established the Infrared Processing and Analysis Center (IRAS). The IRAS is operated by JPL and the California Institute of Technology to give astronomers access to its wealth of data.

Dr. Allen is providing the impetus and leadership for future programs. Planetary flight missions currently in development at JPL include the Mars Observer, scheduled for launch in 1992. It will be the first of a new class of spacecraft called Planetary Observers. Also under study at JPL is the Comet Rendezvous Asteroid Flyby (CRAF) project, the first of the Mariner Mark II missions.

Dr. Allen is a graduate of the United States Military Academy at West Point. He has a master of science degree and a doctorate in physics. In his varied career, Dr. Allen has held the rank of General and served as Air Force Chief of Staff. He was a member of the Joint Chiefs of Staff, serving as a principal military adviser to the Secretary of Defense, the National Security Council and the President. Dr. Allen has been honored with many prestigious awards including the American Achievement Award and Distinguished Service Medals from the National Intelligence Agency and the Air Force.

The Rotary National Award for Space Achievement Foundation is proud to name Dr. Lew Allen the recipient of The 1990 National Space Trophy.



Only an educated America can promise our country a future in space.

With space providing inspiration, and education providing opportunity, our children will have what they need to make their mark on history. Write us and we'll send you our booklet, "Space Station Freedom: The Knowledge Engine." Send your letter to McDonnell Douglas, P.O. Box 99002, Arlington, VA 22215.

MCDONNELL DOUGLAS





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 Company of New York and is now on permanent display in the Visitors Center of the NASA Johnson Space Center in Houston. Each recipient of the Rotary National Award for Space Achievement receives a crystal replica of The National Space Trophy.

Stellar Award Recipients



Richard Brown Flight Control

The Foundation is awarding Richard Brown a 1990 Stellar Award for Flight Control. Every U.S. manned space program has felt the hand of Dick Brown's electrical engineering expertise. Brown was instrumental in pioneering the flight control concepts and

techniques used in all manned space missions from Mercury to Space Shuttle. His technical knowledge and analytical skills have been drawn upon in critical situations. During Apollo 13, Brown was responsible for developing the emergency electrical power system that helped to safely return the crew. As supervisor of electrical and environmental systems at the Johnson Space Center, Brown trains many flight controllers in operational electrical analysis techniques, thereby continuing the standard of excellence he has personally set.

Robert T. McCall Visual Arts

Robert McCall was selected to receive the Foundation's 1990 Stellar Award for Visual Arts. McCall has been called "the reigning space artist in the United States, perhaps the world" by Air & Space magazine. His career as a space artist began in the



early Mercury days. Since then, he has chronicled the U.S. space program through his elaborate, creative illustrations. His most famous work, a six-story mural titled "The Space Mural - A Cosmic View," has been viewed by millions of visitors at the National Air and Space Museum in Washington, D.C. Millions more have seen his work on commemorative postage stamps, NASA mission emblems, posters, and movies. McCall's space art can be viewed at the Johnson Space Center, the Dryden Flight Research Facility and the Horizons Pavilion at Disney's Epcot Center.



Craig P. Covault News Media

A 1990 Stellar Award for News Media is being awarded to Craig Covault, Senior Space Technology Editor of *Aviation Week & Space Technology*. Covault began his space writing career two decades ago, working under Reader's Digest grants at the

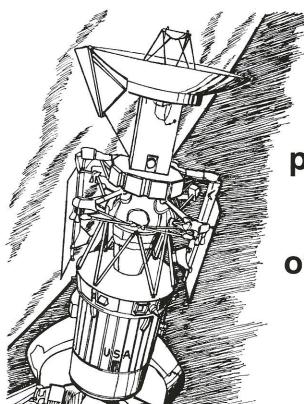
Kennedy and Johnson Space Centers. Since then he has written close to a thousand articles on space, covering virtually all U.S. and Soviet manned and unmanned space missions. Covault has chronicled the Space Shuttle program in detail. He has routinely participated in shuttle launch, reentry and payload simulations with astronauts. Covault's reporting from the White House on space policy helped set the national space leadership agenda. His articles have been credited by NASA managers with helping to form a plan which led to the first U.S. spacecraft flyby of a comet.

Marcia S. Smith Legislative Support

The Foundation is awarding Marcia Smith a 1990 Stellar Award for her extensive contributions in legislative support to America's space program. Ms. Smith is a Specialist in Aerospace Policy, and Section Head for Space and Defense Tech-



nologies at the Congressional Research Service (CRS), Library of Congress. At the CRS, Smith serves as a policy analyst for the members and committees of the U.S. Congress on matters concerning military and civilian space activities around the world. From 1985-1986, Smith served as Executive Director of the U.S. National Commission on Space created by Congress and appointed by the President. The Commission published *Pioneering the Space Frontier*, which set out long-term goals for the U.S. civilian space program. The first steps in implementing some of these goals, such as a permanent orbiting space station and lunar base, have now been taken.



"The great thing in this world is not so much where we are, but in what direction we are moving."

— Oliver Wendell Holmes

The nation's space program is moving forward . . . and gaining speed.
Martin Marietta is part of that forward momentum.

We salute Dr. Lew Allen, 1990 recipient of the **National Space Trophy**, and his accomplishments.

Because as we move forward, we progress together.

MARTIN MARIETTA



Rotary National Award for Space Achievement

The Rotary National Award for Space Achievement is presented annually to a U.S. citizen making a preeminent contribution to the advancement of the United States space program.

The award, The National Space Trophy, is presented for important accomplishments in a space-related field such as research, development, operations, management, program administration, or legislation. Nominations for this prestigious award are submitted by aerospace corporations, government agencies, professional organizations, and individuals.

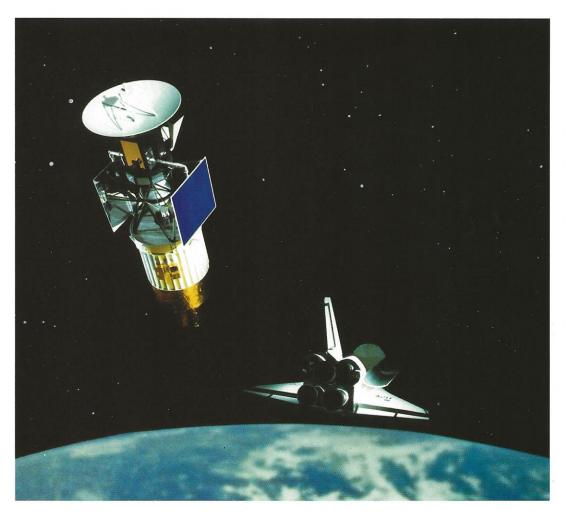
A ballot of finalists is voted upon by the Foundation's National Board of Advisors. The board is comprised of leading professionals from government and military agencies, universities, corporations, broadcast and print media, and other persons involved with the nation's space program. The confidential votes of the board are tabulated by an independent accounting firm to determine the annual recipient.

The Stellar Awards

The annual award program of the Rotary National Award for Space Achievement Foundation includes the presentation of four Stellar Awards. The Stellar Awards are presented to individuals who, throughout their professional careers, have contributed to the nation's space program. The recipients represent the thousands of Americans who are responsible for our nation's leadership in space exploration.

The various categories of space-related fields for which the Stellar Awards are presented may include Operations, Design/Manufacturing/Testing, Flight Control, Academic, Legal/Medical Professions, Visual Arts, Literature, Military Service, Public Service, and others.

Recipients are selected by the Board of Directors of the Foundation based upon recommendations from the National Board of Advisors and others. The award includes a distinctive glass and granite trophy and certificate of recognition.



The Magellan spacecraft is released by Atlantis to begin its long journey to Venus. After swinging around the Sun, the spacecraft will be placed in orbit around Venus for an extensive radarmapping mission. 70 to 90 percent of the surface of this mysterious planet, hidden beneath thick clouds, will be imaged. The amount of information returned by Magellan will exceed all previous space missions to Venus.

ETA Venus: August 1990.

South Shore Harbour is in the Space Business

ocated on the southern shore of Clear Lake, South Shore Harbour is a proud member of this area's space community.

As home and neighbor to some of the industry's leading citizens and corporations, South Shore Harbour extends its warmest congratulations to Dr. Lew Allen, the 1990 recipient of the The National Space Trophy.

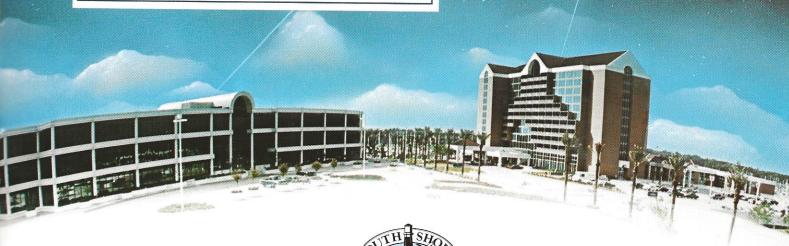
Space to Build

South Shore Harbour is making a long term commitment to the space program by developing a 110-acre commercial district for aerospace and associate high technology firms. **Gateway Park** will feature technical support facilities specifically designed to promote corporate growth and profits. New office and production facilities are on the drawing boards for 1990.

Space to Work

Marina One is a 110,000 square foot Class A facility with executive offices overlooking the lake and marina. One Harbour Square is the cornerstone of Gateway Park and home to a number of advanced technology companies. Designed for the ultimate in business support, South Shore Harbour includes a resort hotel and conference center, an elaborate fitness center with indoor/outdoor tennis courts, a championship golf course and residential options from waterfront apartments to custom estates. For more information call (713) 334-7501.

SPECIAL WELCOME
NASA/JSC Offices Relocating to One Harbour Square





SOUTH SHORE HARBOUR

P.O. Box 58367 • Houston, TX 77258

The Executive Forum

This is the second year for the Rotary National Award for Space Achievement Foundation to sponsor the Executive Forum on Space Exploration. The Foundation plans to make the forum an annual event because of 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 corporate perspective. An open discussion of various space-related issues follows.

This year's distinguished panel consists of Vice Adm. Richard Truly, USN(Ret), NASA Administrator, representing the space agency; Gen. John Piotrowski, Commander in Chief of NORAD/U.S. Space Command, representing military interests; Mark Albrecht, Executive Secretary of the Space Council, representing the Administration; Sam Iacobellis, President of Aerospace Operations of Rockwell International Corp., representing the aerospace industry; Dr. Lennard Fisk, NASA Associate Administrator for Space Sciences & Applications; and retired Vice Adm. William Ramsey with national security space perspectives. Stephen Gauvain of Houston's Channel 13 Eyewitness News serves as this year's moderator.

Congratulations to



Dr. Lew AllenDirector, Jet Propulsion Laboratory

A space pioneer Who always looks at the future With universal vision

> TRW Space & Technology Group

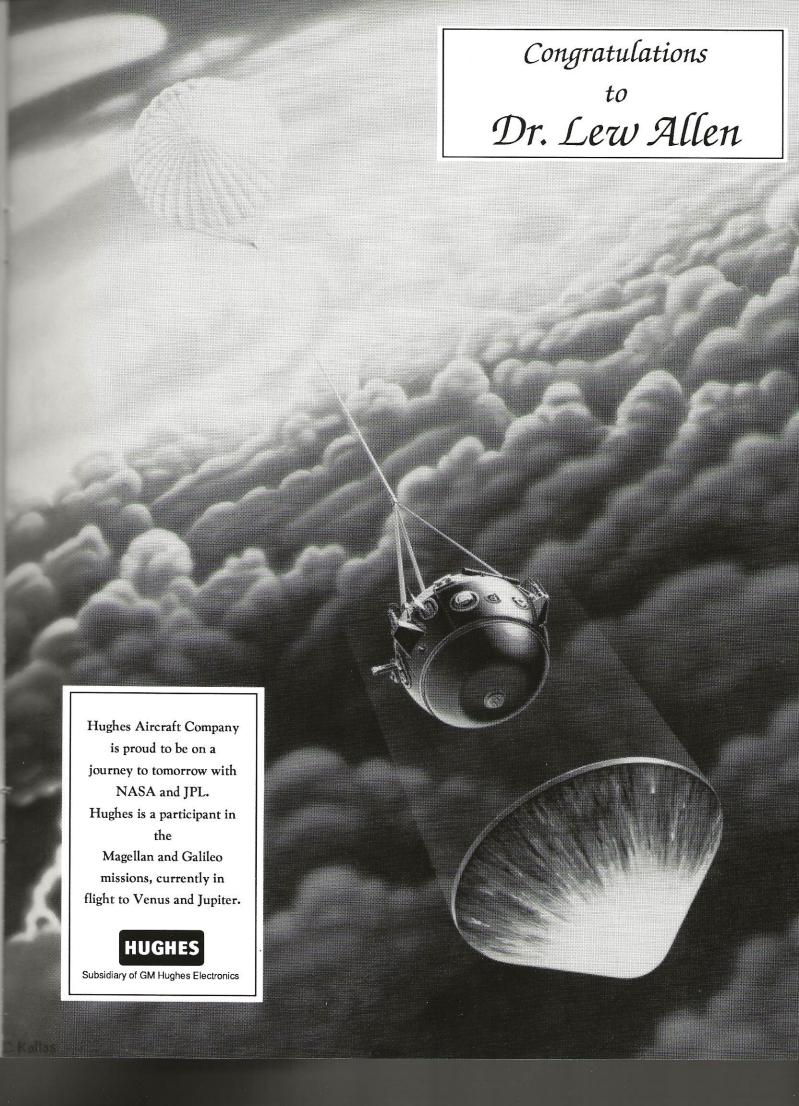
"FOR I DIPT INTO THE FUTURE, FAR AS HUMAN EYE COULD SEE, SAW THE VISION OF THE WORLD, AND ALL THE WONDER THAT WOULD BE."

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



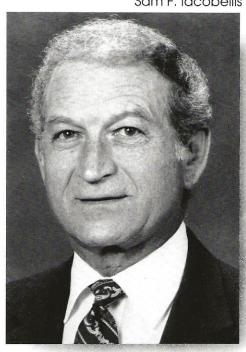






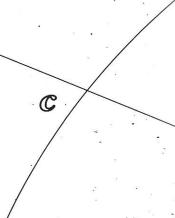
Fourth Annual Rotary National Awa

Sam F. Iacobellis



Jim Hartz









d For Space Achievement Banquet

RECEPTION

DINNER

WELCOME

Charles H. Hartman

Chairman, RNASA Foundation

INVOCATION

Carson Stephens

Minister

NATIONAL ANTHEM

MASTER OF CEREMONIES

Jim Hartz

Chairman of the Board, Hartz/

Meek International, Inc.

MUSICAL INTERLUDE

"A TRIP TO THE PLANETS"

Stephen Gauvain

FEATURED SPEAKER

Sam F. lacobellis

Executive Vice President/ Chief Operating Officer

Rockwell International Corp.

PRESENTATION OF THE STELLAR AWARDS

Christopher C. Kraft

Former Director, NASA Johnson Space Center

PRESENTATION OF THE ROTARY NATIONAL AWARD

FOR SPACE ACHIEVEMENT

Vice Admiral Richard H. Truly, USN(Ret)

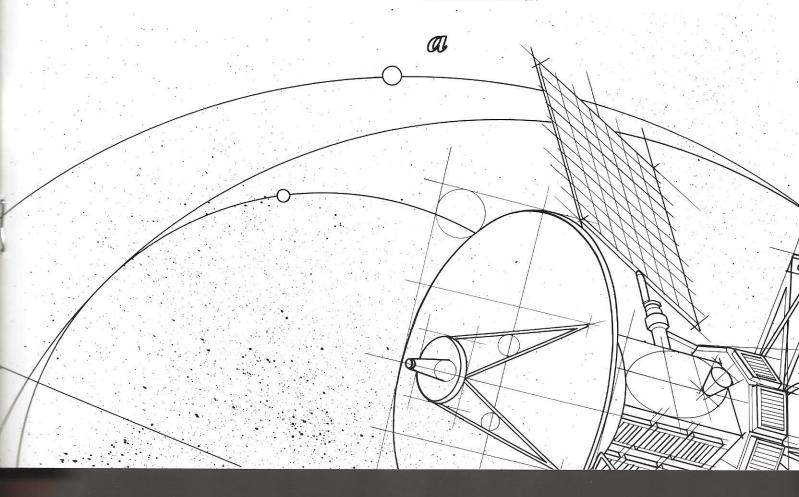
Administrator, NASA Headquarters

MUSIC BY

Bob Price's Starlighters Orchestra

CLOSING

Charles H. Hartman



National Board of Advisors

The Rotary National Award for Space Achievement Foundation gratefully acknowledges the leadership and participation of its National Board of Advisors. This distinguished group is comprised of leading professionals representing every facet of American space exploration. Each individual is a leading authority in his or her particular field of expertise. Together they constitute a major force in keeping America preeminent in space.

Joseph P. Allen

Executive V.P., Space Industries, Inc.

Lew Allen

Director, Jet Propulsion Laboratory

Honorable Mike Andrews

U.S. House of Representatives

Norman R. Augustine

Executive V.P., Martin-Marietta Corporation

Mark E. Carreau

Houston Chronicle

Aaron Cohen

Director, NASA Johnson Space Center

Edsel D. Dunford

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

Gerald W. Ebker

President, IBM Federal Systems Division

Maxime Faget

Chief Executive Officer, Space Industries, Inc.

Donald E. Fink

Editor-in-Chief, Aviation Week and Space Technology

Dr. Lennard A. Fisk

Assoc. Adm., Space Sciences & Applications, NASA

Jon E. Forbes

President, CAE-Link Corporation

Don Fuqua

Pres. & Gen. Mgr., Aerospace Industries Association, Inc.

Senator Jake Garn

U.S. Senate

Stephen Gauvain

KTRK - Channel 13 News

Robert R. Gilruth

Former Director, NASA Johnson Space Center

Gerald D. Griffin

Managing Dir., Houston Office-Korn/Ferry International

R. W. Hager

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

Lt. Gen. Charles R. Hamm

Superintendent, USAF Academy

Sam F. lacobellis

Ex. V.P., Chief Operating Officer, Rockwell International Corp.

Christopher C. Kraft

Former Director, NASA Johnson Space Center

T. Jack Lee

Director, NASA Marshall Space Flight Center

William B. Lenoir

Associate Adm. for Space Station, NASA Headquarters

Alan M. Lovelace

V.P., General Dynamics Corporation

Robert T. McCall

Aviation/Space Artist

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

Director, NASA Kennedy Space Center

Hans M. Mark

Chancellor, The University of Texas System

Mark K. Miller

President, Boeing Aerospace Co.

John O'Brien

Chairman of Board & President, Grumman Corporation

General John L. Piotrowski

Commander in Chief, NORAD/U.S. Space Command

General Bernard P. Randolph

Commander, Air Force Systems Command

Donald B. Rassier

President, Ford Aerospace & Communications Corporation

Harrison H. Schmitt

Former U.S. Senator and Former Astronaut

Alan B. Shepard

Former Astronaut

Donald K. (Deke) Slayton

President, Space Services, Inc. of America

Former Astronaut

Thomas H. Smith

Executive Director

Society of Experimental Test Pilots

Thomas M. Stauffer

Chancellor, University of Houston-Clear Lake

James R. Thompson, Jr.

Associate Administrator, NASA Headquarters

Dr. John W. Townsend, Jr.

Director, NASA Goddard Space Flight Center

Vice Admiral Richard H. Truly, USN (Ret)

Administrator, NASA Headquarters

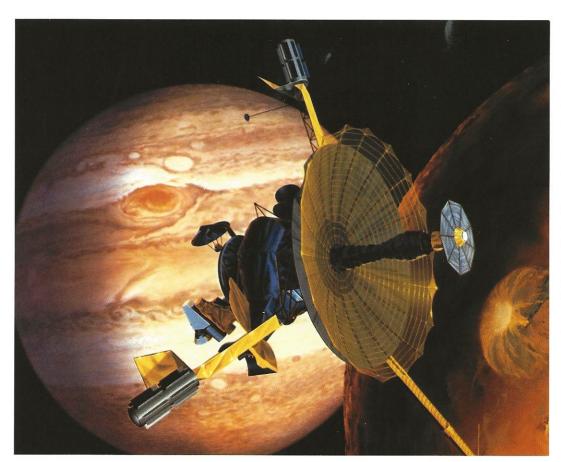
John F. Yardley

President, McDonnell Douglas Astronautics Co.



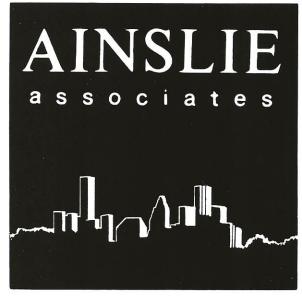
At Rockwell International, we're helping NASA and the Space Center Rotary Club reach a little higher.





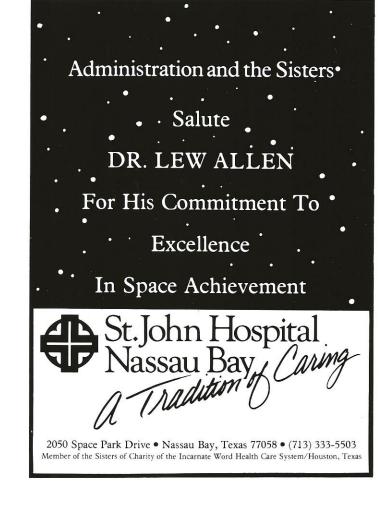
In this artist's concept, the Galileo orbiter is passing lo, one of Jupiter's moons, shown here with an erupting sulfur volcano. Galileo will send an instrumented probe to descend through Jupiter's clouds. With the combination of a gravity assist from lo and a later rocket thrust, Galileo will then go into orbit around Jupiter. The huge stormy planet with its Great Red Spot is shown in the background.

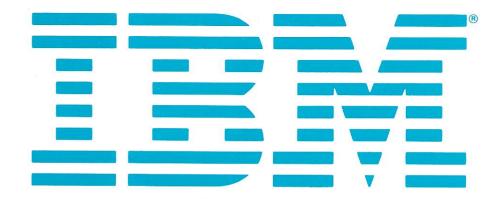
ETA Jupiter: December 1995.



ARCHITECTS

1350 NASA Road One, Suite 118 Houston, Texas (713) 333 - 1841





We work hard to earn these stripes.

In recent years, IBM has been the recipient of prestigious awards from the National Aeronautics and Space Administration (NASA).

In October 1987, after developing onboard software for the Space Shuttle, IBM was the only computer company ever to receive the NASA Excellence Award for Quality and Productivity. And in the fall of 1988, IBM was recognized with the NASA Public Service Group Achievement Award for our further efforts in returning the Space Shuttle to safe flight.

We are honored to have received these awards and are proud of all the dedicated people at IBM who helped make it possible. Still, a reputation for quality isn't something you can rest on. That's why we keep working hard to earn our stripes.

Vice Admiral Richard H. Truly, USN(Ret)



Vice Admiral Richard H. Truly was selected to receive the Rotary National Award for Space Achievement in 1989. During his 20-year NASA career as astronaut and administrator, Admiral Truly made exemplary contributions to the operational achievements of the Space Shuttle Program and to the recovery activities following the loss of Challenger. His efforts helped to re-

turn the U.S. to space and regain its preeminence in space exploration. Several weeks after receiving The National Space Trophy, Admiral Truly was assigned by President Bush to the highest NASA post - Administrator of NASA Headquarters in Washington, D.C.

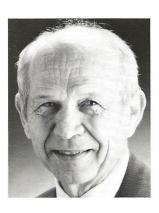
— 1988 Recipient — The Honorable Don Fugua

Former congressman Don Fuqua was presented The National Space Trophy in 1988 for his tireless and enduring legislative work on behalf of America's space program. Mr. Fuqua has been involved in legislative activity for the U.S. space program since the 1960's. During his 12 terms in Congress, Mr. Fuqua served on the Committee on Science and Astronautics, later re-



named the Science and Technology Committee; the subcommittee overseeing the U.S. space program; and was Chairman of the Subcommittee on Space Science and Applications from 1971-1981. Since January 1987, Mr. Fuqua has been President and General Manager of the Aerospace Industries Association of America, Inc. (AIA) where he continues to serve as a leading spokesman for the U.S. aerospace industry.

1987 Recipient –Dr. Maxime A. Faget



Dr. Maxime A. Faget was the first recipient of the Rotary National Award for Space Achievement. His 20 year career with NACA/NASA included his position as Director of Engineering and Development for the Johnson Space Center from 1961 - 1981. Dr. Faget's innovative engineering played a major role in research, design and development of the Mercury, Gemini and Apollo

capsules, as well as the reuseable Space Transportation System. Dr. Faget is now Chief Executive Officer of Space Industries, Inc., a Houston aerospace company he founded. Space Industries has developed an international docking system and the Industrial Space Facility, an orbiting workplace that can be deployed by shuttles and commercially operated.

University of Houston

Clear Lake

For 15 years the University of Houston-Clear Lake has dedicated itself to meeting the educational, economic and cultural needs of the community that makes the space program fly.

Now UH-Clear Lake joins this community in saluting the people whose dedication and leadership have helped make the space program a continued success...

Congratulations.

Where Innovation Meets Tradition

Houston, Texas • (713)488-7170



Congratulations to Dr. Lew Allen



GE Government Services

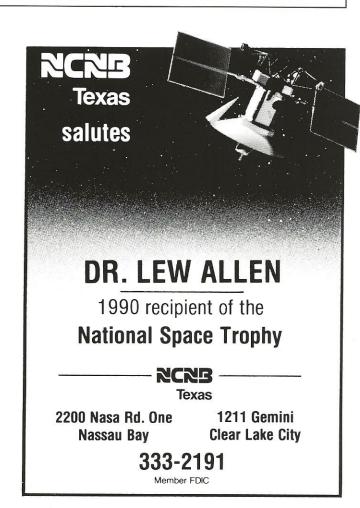
GE Government Services provides a full range of premier engineering, science, technical, and operations support services to fuel the success of the nation's space and aeronautics programs.

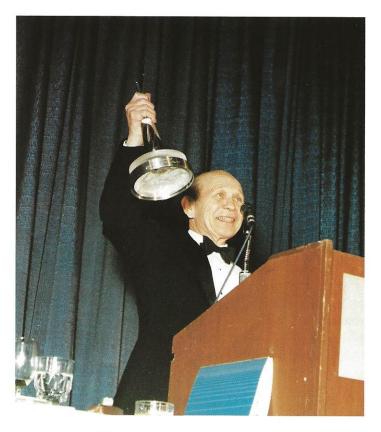
Our sincere congratulations

to

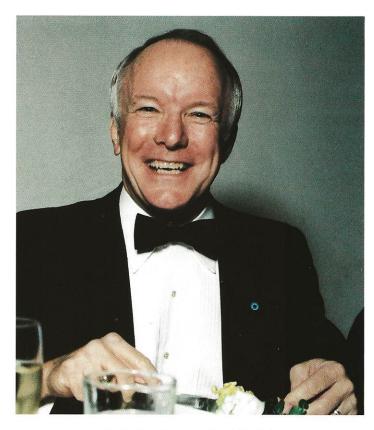
Dr. Lew Allen







1987 - Structural Integrity Test



1989 - Name that twin!



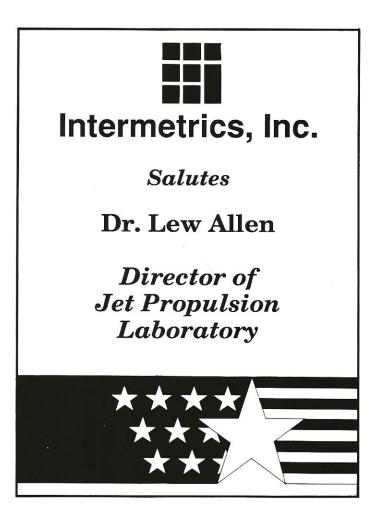
Aerospace Division

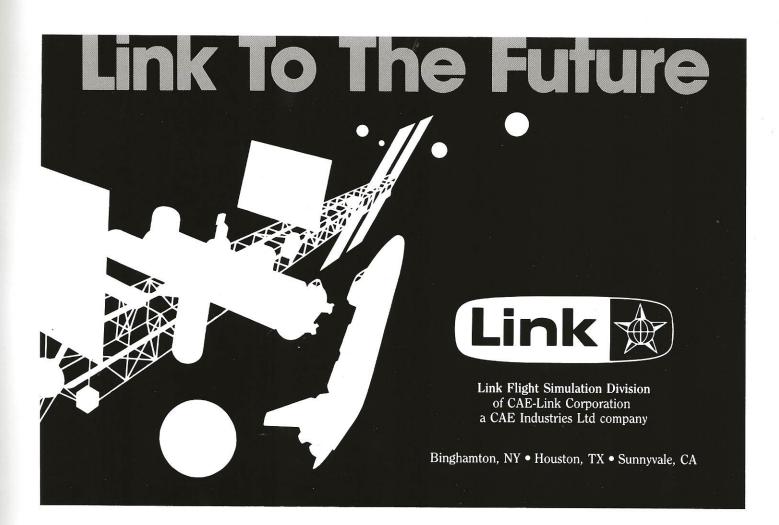
Capabilities include:

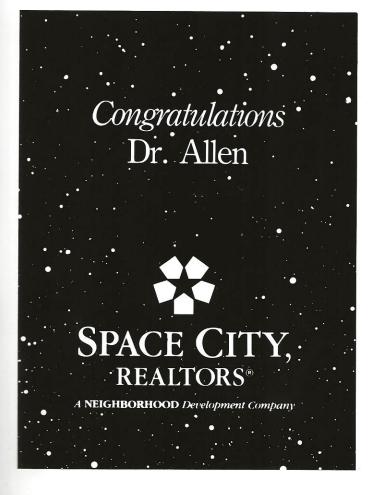
- High sensitivity seal testing support equipment
- Non-linear finite element structural and thermal analysis

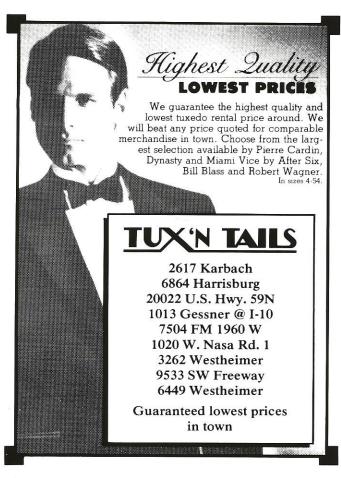


580 Westlake Park Blvd. Houston TX 77079 713/939-5400









The Rotary National Award for Space Achievement Foundation



Members of the Foundation - standing left to right: Charles S. Hardwick, H. Don Kirk, Robert W. Mitchell, Robert J. Wren, Charles A. Jacobson, Jack R. Lister, Harold L. Neely, Owen G. Morris, Ronald K. Blilie, John J. Francis, Floyd B. Boze. Seated left to right: Edwin R. Harris, David Hamblin, John T. Watson, Charles H. Hartman (Chairman), Billy Ray Smith, 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 befitting the greatest individual contributions to America's space program. After months of research and planning, the committee established the Rotary National Award for Space Achievement Foundation. The Foundation is 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. At the banquet, The National Space Trophy was presented for the first time. 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.

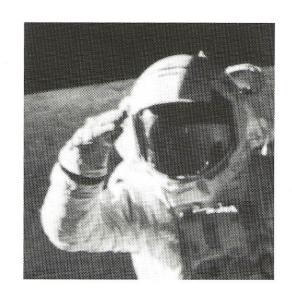
The Foundation appreciates the tremendous interest and assistance it has received from the the aerospace industry, NASA and the Department of Defense. This support assures the continued growth and success of this event.

About the Cover

The cover is a portrait of the 1990 recipient of The National Space Trophy, Dr. Lew Allen. Each year a distinguished artist is selected by the Rotary National Award for Space Achievement Foundation to illustrate the accomplishments for which The National Space Trophy recipient is being honored.

This year, the portrait of Dr. Allen was painted by Alan

Chinchar. Mr. Chinchar is a long-time resident of Houston. Perhaps his most familiar artwork is the 18-foot mural at the Johnson Space Center depicting America's space program from Alan Shepard's flight to Space Station Freedom. His renderings of Space Station Freedom are widely distributed by NASA and have appeared in publications such as *Aviation Week & Space Technology*.



We join our industry and the nation in saluting Dr. Lew Allen, recipient of the Rotary National Award for Space Achievement.

Innovation

"Because of what you have done, the heavens have become a part of man's world."

-The President of the U.S. to the Apollo crew.
July 20, 1969



 Lockheed to the contractor community of Clear Lake, our employees, and NASA. July 20, 1989



