



1993 ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT



Seems like only yesterday.

We join the nation in congratulating
General Thomas Stafford and thanking him for his
contributions to America's space program.

BOEING

ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT

Thomas P. Stafford, Lieutenant General, USAF (ret.) is the recipient of the 1993 Rotary National Award for Space Achievement. General Stafford was chosen to be this year's honoree for his outstanding contributions to the U.S. space program as an astronaut, an administrator and an advisor over a span of three decades.

In 1990-91 under the direction of General Stafford, members of the Synthesis Group evaluated almost 1500 innovative ideas submitted by a wide cross-section of national space experts in support of the Space Exploration Initiative (SEI). General Stafford's effective leadership of this massive project resulted in a thorough but succinct report, *America at the Threshold*. The comprehensive report details architectural options for accomplishing the Moon/Mars goals of SEI, identifies the technology development priorities and includes a series of recommendations for achieving the goals. This valuable knowledge base provides continued direction for civilian space planners.

General Stafford began his career as an Air Force fighter/test pilot. He was selected in 1962 as one of the second group of U.S. astronauts. He was the pilot for Gemini 6 and commander for Gemini 9. In 1969, he commanded Apollo 10, the first manned lunar orbit mission



THOMAS P. STAFFORD

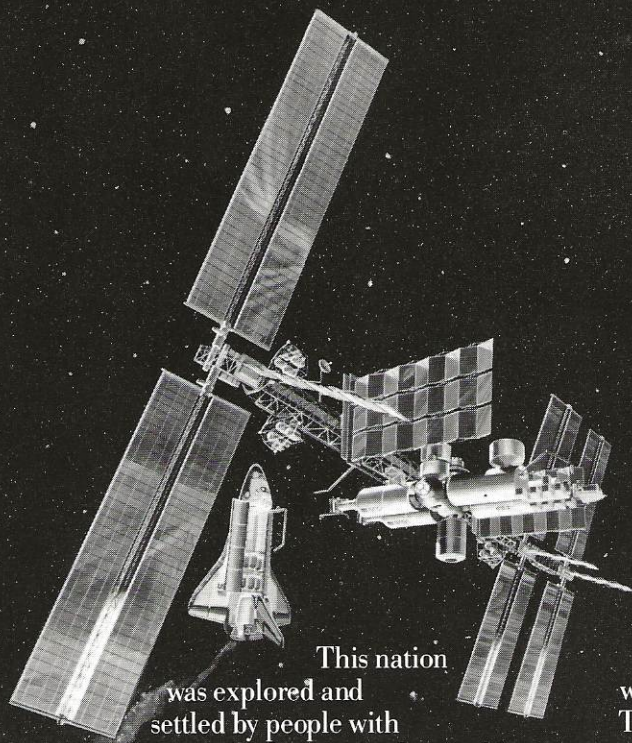
which served as a dress rehearsal for the actual manned lunar landing. He was named Chief of the Astronaut Office later that year. By 1975, General Stafford was in command of the Apollo-Soyuz Test Project. Since that experience, he has energetically pursued closer U.S./Russian cooperation and improved international collaboration on space exploration.

As Commander of the Air Force Test Center and USAF Deputy Chief of Staff for Research, Development and Acquisition, General Stafford added to his experience and broadened his perspective of the aviation test and space industry.

In 1992, General Stafford was asked by NASA Administrator Daniel Goldin to take on a new assignment of examining policy questions relating to space shuttle retrieval of commercial satellites.

The Rotary National Award for Space Achievement Foundation is proud to recognize the contributions of Lt. General Thomas P. Stafford and honor him as the recipient of the 1993 National Space Trophy.

There is no final frontier.



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

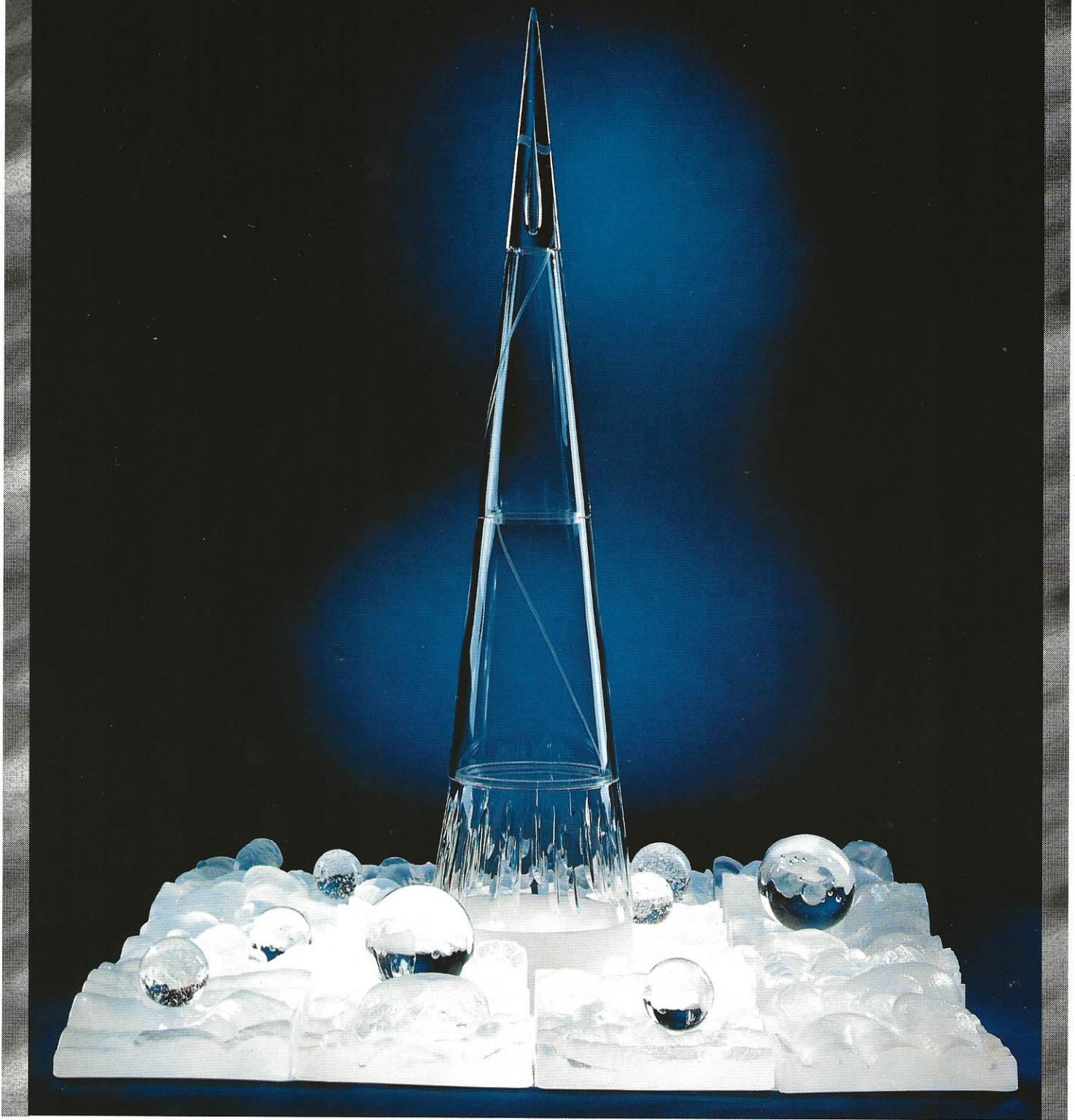
Now our frontier spirit is carrying us into permanent earth orbit with the Space Station.

IBM Federal Systems Company is providing the station's critical Data Management System. And we're excited about the many new directions the Space Station will take America.

It will provide a permanent outpost where we will learn to live and work productively in space. The Space Station will be a multi-purpose research laboratory dedicated to finding more ways to use space to benefit humanity. And finally, it will be an engineering testbed where we can learn to build, operate and maintain systems in space.

The Space Station is the natural extension of America's desire to explore and redefine space. IBM is proud to be part of the discovery of this future frontier.

IBM[®]
FEDERAL SYSTEMS COMPANY



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 will be permanently on display at the new Space Center Houston.

A detailed view of the Space Station Freedom in orbit above Earth's cloud-covered surface. The station's complex structure, including the central truss, multiple solar panel arrays, and various modules, is clearly visible against the bright background of the planet.

Space Station Freedom

*"For I dipped into the Future, far as human
eye could see, saw the vision of the world, and
all the wonder it would be."*

Alfred, Lord Tennyson, 1842

MCDONNELL DOUGLAS

ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT

The National Space Trophy

The Rotary National Award for Space Achievement Foundation's principal award, The National Space Trophy, is presented annually to a United States citizen who has made a preeminent contribution to the advancement of America's space program in a space-related field such as research, development, operations, management, program administration or legislation.

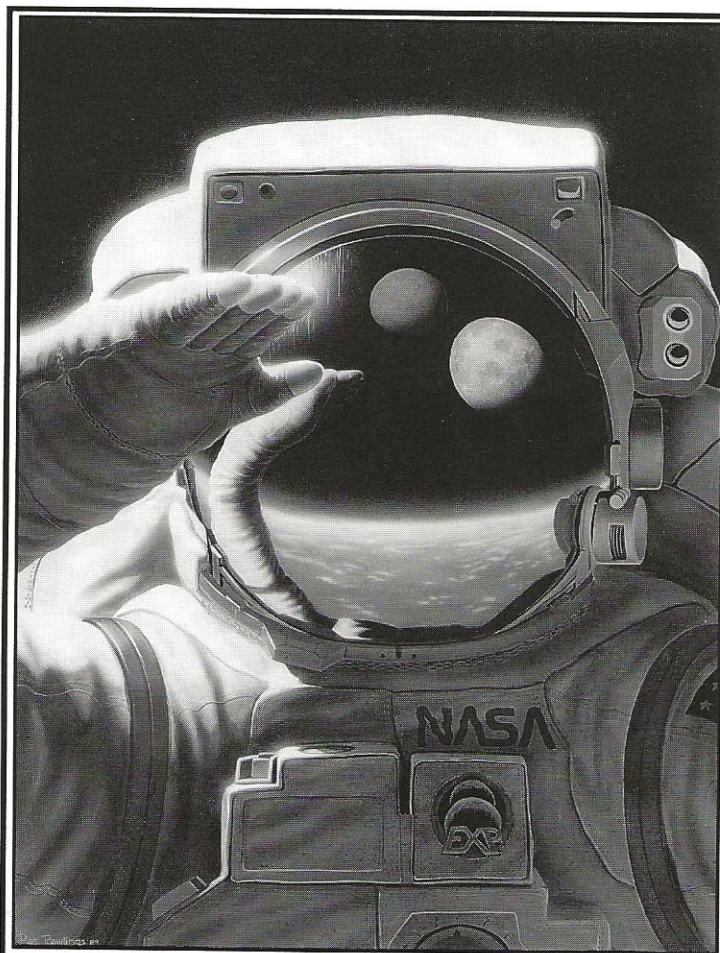
Nominations for the prestigious award are submitted by aerospace corporations, government agencies, professional organizations and individuals. A ballot of finalists is voted upon by the Foundation's National Board of Advisors. The confidential votes of the Board are tabulated by an independent accounting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

The 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 award's various categories may include operations, design/manufacturing/testing, flight control, academic, legal/medical, visual arts, literature, military service, public service and others.

Selections are based upon recommendations from the National Board of Advisors and others. The award includes a distinctive glass and granite trophy and certificate of recognition.



A Salute

EAGLE Aerospace salutes
the 1993
Rotary National Award
for Space Achievement
Award Recipient,

Tom Stafford

We appreciate
and share his vision
of space development.



A photograph of an astronaut in a white spacesuit with a large life-support backpack, walking across a rocky, reddish-brown landscape that resembles Mars. The terrain is hilly and desolate, with a bright orange sky in the background. Several black crosshair markers are overlaid on the image, indicating specific points of interest or navigation points.

It's time to take the next step.

Exploration has always opened avenues of commerce for humanity. In the future, these avenues will stretch from the highlands of the Moon, to the plains of Mars.

First, pathways are mapped. Then, outposts are established that are followed by a natural migration where settlements become the

building blocks of an expanding economy. Our international neighbors understand this well. Today, more than a dozen countries are investing in space exploration, fully aware of the future economic dividends.

America could lead the way again, if we act now.

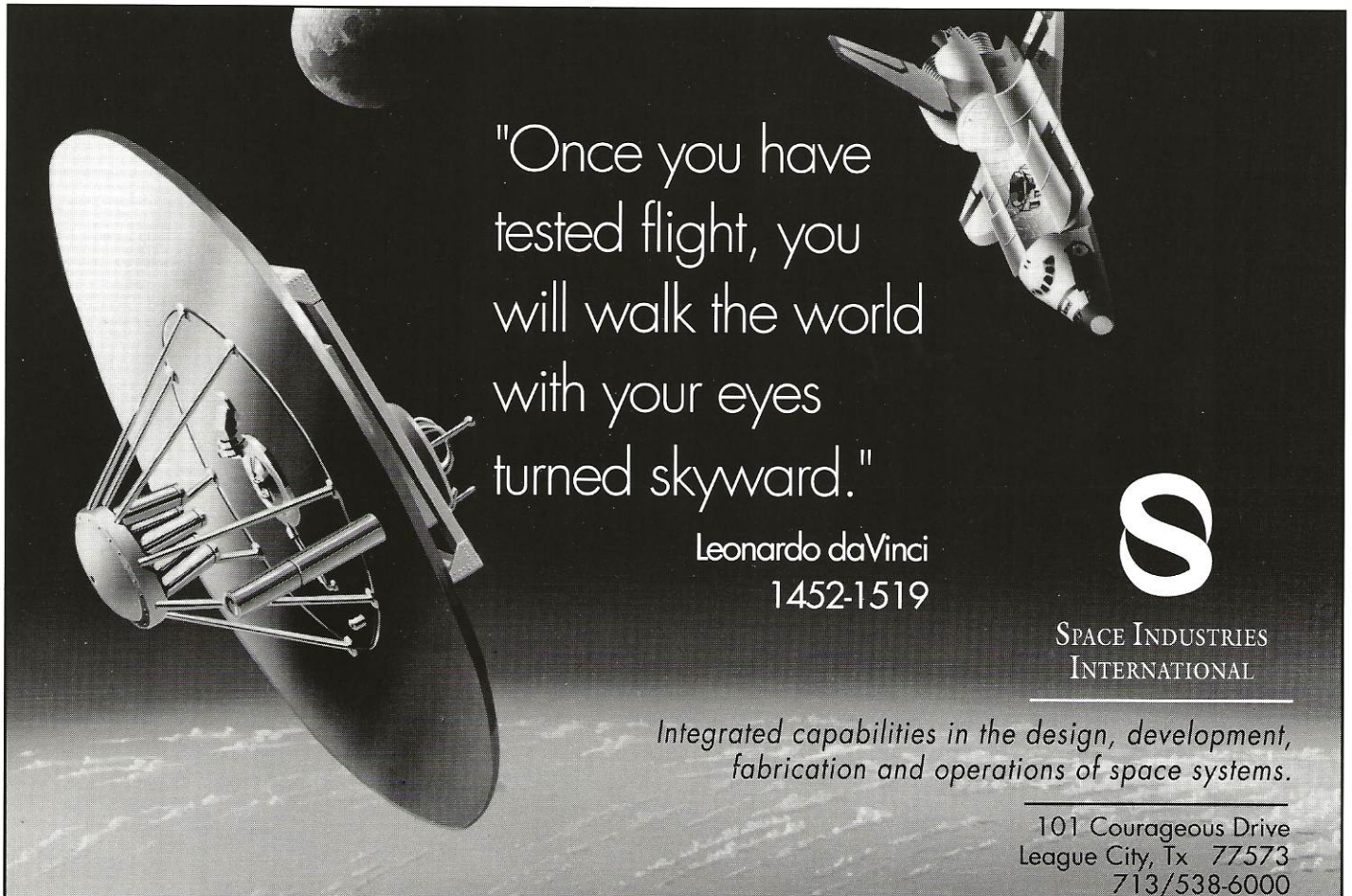
GENERAL DYNAMICS
Space Systems Division

R OTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT

Featured Speaker - Norman R. Augustine


The featured speaker for this year's awards banquet is Norman R. Augustine, Chairman and Chief Executive Officer of the Martin Marietta Corporation. His distinguished and diversified 35 year career encompasses experience as a researcher, program manager and chief engineer with Douglas Aircraft and Vice President with LTV. He has served as an assistant director in the office of the Secretary of Defense and then as Under Secretary of the Army. A well-respected authority in his field, Mr. Augustine has written over 40 publications on advanced technol-

ogy and engineering management, including *Augustine's Laws*, which has been translated into German, Italian, and Russian. In 1990 he was appointed as chairman of a 12 member panel of space experts which conducted a 4 month study of current and future space initiatives. The study resulted in far-reaching recommendations for the restructuring of NASA and the future direction of the civilian space program. Mr. Augustine is a former recipient of the National Space Trophy.



"Once you have tested flight, you will walk the world with your eyes turned skyward."

Leonardo daVinci
1452-1519


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you will be able

to see further.



Rockwell International

Painting by Design At Work/Quote by Thomas Carlyle

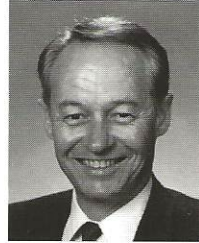
ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT

Stellar Awards

Peter G. Wilhelm

Program Management

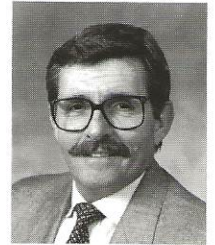
A 1993 Stellar Award for Program Management is being awarded to Peter Wilhelm, Director of the Naval Center for Space Technology at the Naval Research Laboratory. Since his initial appointment to the Naval Research Lab in 1959 through the present time, Mr. Wilhelm has been intimately involved with design, development and deployment of 80 scientific and defense satellites. He has pioneered many innovations in satellite engineering. His commitment to programs such as the Multiple Satellite Dispenser (MSD) and the Shuttle Launch Dispenser has saved millions of dollars in booster and launch vehicle costs. Other successes include the Titan Launch Dispenser, a recent development of Mr. Wilhelm, which provided northern latitude communications in support of Operation Desert Storm.



Charles Caughren

Manufacturing

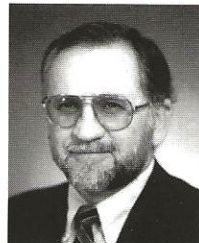
The Foundation is pleased to award Charles Caughren the 1993 Stellar Award for Manufacturing. Mr. Caughren epitomizes the dedication of an American workforce that has made the U.S. the world's leader in space. He joined Rockwell International's space production operations twenty years ago. Emphasis on quality and concern for improved procedures and efficiency has marked his work from early testing and manufacturing of the Apollo Command and Service Module to the Space Shuttle Orbiter. His career has been characterized by exceptional productivity and high reliability. As the Palmdale Site Director for Rockwell's Orbiter Final Assembly and Test Operations, he motivates his people to unprecedented accomplishment in a time of stringent cost constraints.



Dr. Roger Bilstein

History

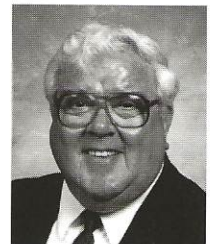
Dr. Roger Bilstein, professor of history at University of Houston Clear Lake has been chosen to receive a 1993 Stellar Award for History. As a teacher, writer and lecturer in the history of space exploration, Dr. Bilstein's work has been widely disseminated. Dr. Bilstein has written space history articles for national government agencies, major encyclopedias, research publications, aerospace periodicals, and business journals. Dr. Bilstein's major works include a *History of the Apollo/Saturn Launch Vehicle*, *Flight in America from the Wrights to the Astronauts*, *A History of NACA and NASA*, and a *History of Air and Space Industry*. As a guest lecturer, he has been invited to speak to the USSR Academy of Sciences in Moscow, the Royal Aeronautical Society and the Rolls Royce Memorial Trust in England. He has been named to the Charles Lindbergh Chair of Aerospace History at the Smithsonian Air and Space Museum and is writing a *History of the American Aerospace Industry*.

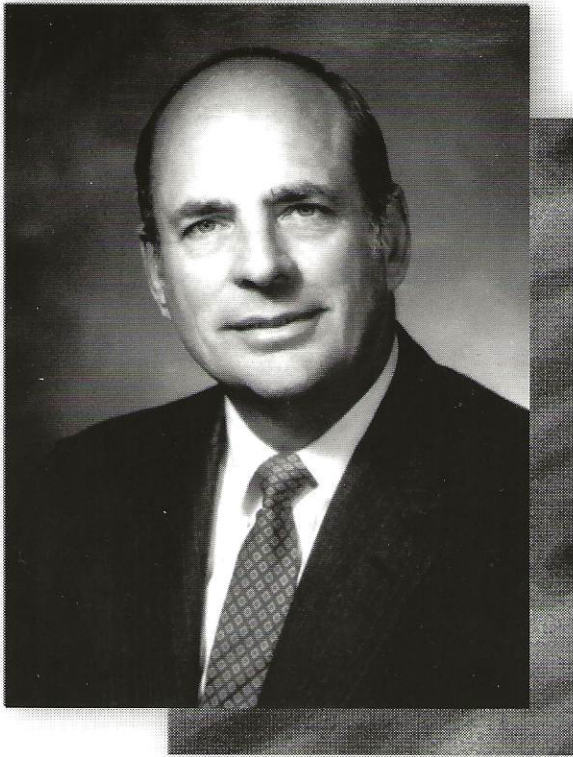


Otto Goetz

Propulsion

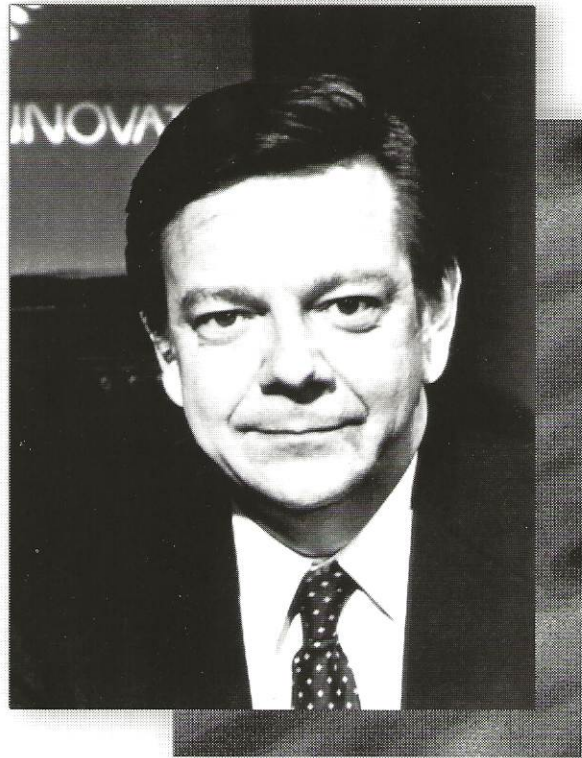
Otto Goetz is an international rocket engine expert with a career spanning 3 decades. His successful efforts on the development and testing of the propulsion systems on the Saturn launch vehicle during the Apollo program led to work on the Space Shuttle Main Engine (SSME). The testing methods he designed during the development phase of the SSME were critical to the success and safety of the Shuttle. His ability to solve the severe internal environmental problems associated with various rocket engine components were critical factors in certifying the Shuttle for flight. As Manager of the SSME Office he has continued providing outstanding technical leadership and has responsibility for managing the program schedule and budget as well. Mr. Goetz has dedicated his entire career to the development of safe and reliable liquid propulsion systems. The Foundation is proud to present Otto Goetz with a 1993 Stellar Award for Propulsion.



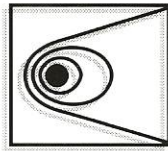


Norm Augustine

Jim Hartz



Seventh Annual Awards Banquet



Reception

Dinner

Welcome

Charles H. Hartman
Chairman, RNASA Foundation

Invocation

Dr. Carson Stephens
Clear Lake Church of Christ

National Anthem

Music by Buddy Kirk's Orchestra

Master of Ceremonies

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

PROGRAM

"There's Camelot!" Apollo 17 Revisited
Produced by Stephen Gauvain

Featured Speaker

Norman R. Augustine
CEO, Martin Marietta Corporation

Presentation of The Stellar Awards

Christopher C. Kraft - Fmr. Director, JSC

Presentation of The National Space Trophy

General Charles A. Horner
CINCPAC, U.S. Space Command

Closing

Charles H. Hartman

America's partner in exploring new worlds.

HUGHES



R ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT

Executive Forum

The Executive Forum on Space Exploration is sponsored by the Rotary National Award for Space Achievement Foundation each year in conjunction with its Space Awards Banquet.



Attended by invited members of the aerospace community, the Forum is held the afternoon of the awards banquet.

The Forum provides aerospace managers from throughout the U.S. with current assessments of the space program by senior executives who represent NASA, the Department of Defense and the aerospace industry. Panelists, selected from industry, the military and the administration, assess America's current space program from their vantage



point. They are also asked to project plans for the future. A central theme is established to provide focus for the panelists' presentations.

The Foundation is pleased to have Houston's premier space broadcast journalist, Stephen Gauvain of Houston's KTRK-TV serving as moderator for the fourth year of the Executive Forum. For 1993, several distinguished individuals from the U.S. Space Command, NASA, Congress and academic research institutions have been invited to present and discuss policy and program initiatives that will determine the future direction of our nation's space program.

This year, the theme of the Forum is:

"Given - the nation faces a decade of competing priorities in a climate of global and geopolitical change; how should the nation structure it's space program to provide the greatest total return within the limited space resources?"

Three speakers have been invited to develop specific positions. Guest panelists have been invited to respond. Open discussion from the audience follows the panelists' comments.

**GRUMMAN AND NASA:
TO THE MOON AND BACK
...AND BEYOND**

In an era of ever-increasing automation, harnessing the power of information is a crucial step in our climb to the stars. The members of the Information Systems Contract Team are proud of our role in supporting the computer and communications systems of Johnson Space Center.

We salute General Thomas Stafford.



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ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT

Master of Ceremonies

Jim Hartz's award winning broadcast journalism spans a career of 30 years. He is perhaps best known as the host of NBC's "Today Show" from 1974 to 1977.

He is host of "Asia Now," a weekly magazine broadcast produced by PBS and NHK in Tokyo and in his tenth year as host for the PBS science and high technology series, "Innovation." A long-time observer of the space program, Hartz covered the Apollo Moon missions for NBC. He wrote, produced and directed a documentary entitled "A Funny Thing Happened on the Way to the Moon." The NBC documentary featured early

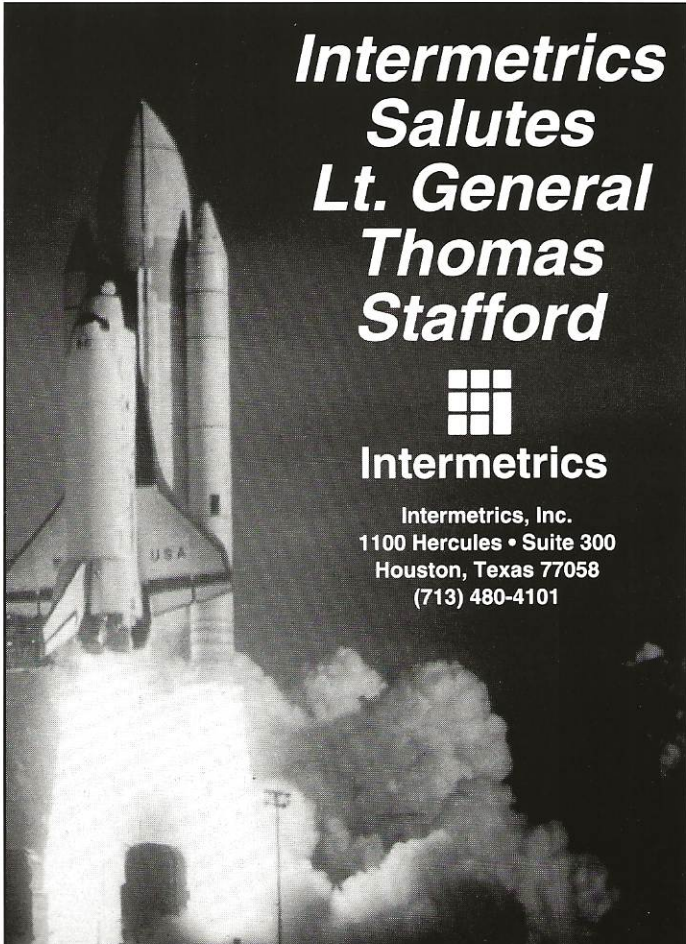
days of the U.S. space program and some of the hilarious happenings as America endeavored to send man to the moon. Hartz also has written articles for National Geographic and Reader's Digest, in which he became the first reporter to fly in the SR-71 spy plane, at Mach-III above 80,000 feet. As a military and aerospace reporter for NBC News, he was the first reporter to fly the U-2 spy plane and the F-15 Eagle. In 1986, prior to the "Challenger" shuttle disaster, he was a semifinalist for the "Journalist in Space" Project. The Foundation is extremely pleased to have Jim Hartz back in Houston to host the awards banquet.

About the Cover


The portrait of Tom Stafford was painted by internationally known space artist Alan Chinchar. Chinchar's art is displayed in the permanent art collections of NASA, the new Space Center in Madrid, Spain and the National Space Development Agency of Japan (NASDA).

He was commissioned by NASA to commemorate the launch of STS-26 "Return to Flight" and the logo and poster for the 20th Anniversary of Apollo 11's flight. Chinchar has painted murals for the 50th Anniversary of the NASA/Ames Research Center and the 1992 NASA Pavilion at the Paris Air Show. His 18-foot mural at the Johnson Space Center is a tribute to America's space program from Alan Shepard's flight to Space Station Freedom. Chinchar has traveled to Russia as part of the U.S.-Soviet space artist exchange.

He recently opened his studio/gallery facility on Ellington Field and markets original artwork, posters and limited edition lithos.



***Intermetrics
Salutes
Lt. General
Thomas
Stafford***



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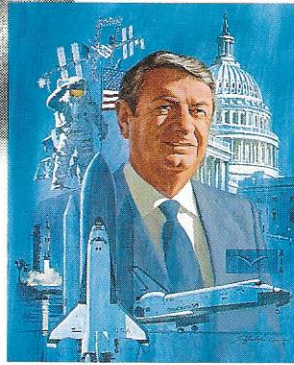
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1987 - Dr. Maxime A. Faget



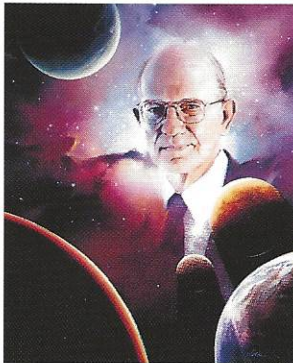
1988 - Don Fuqua



1989 - Adm. Richard H. Truly, USN(Ret.)



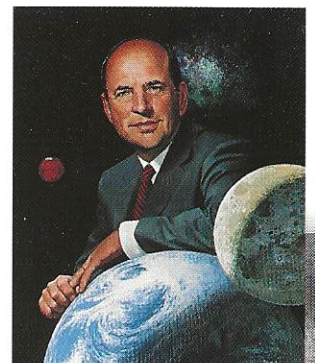
Former Recipients of The National Space Trophy



1990 - Dr. Lew Allen



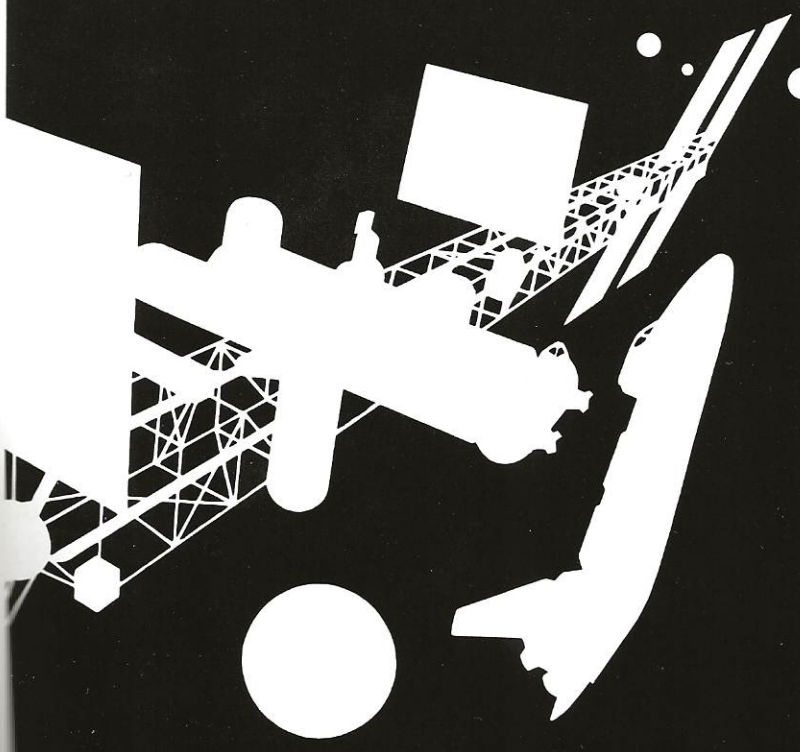
1991 - Aaron Cohen



1992 - Norman Augustine

Link To The Future

CAE—Link
Congratulates
Tom Stafford



OUR

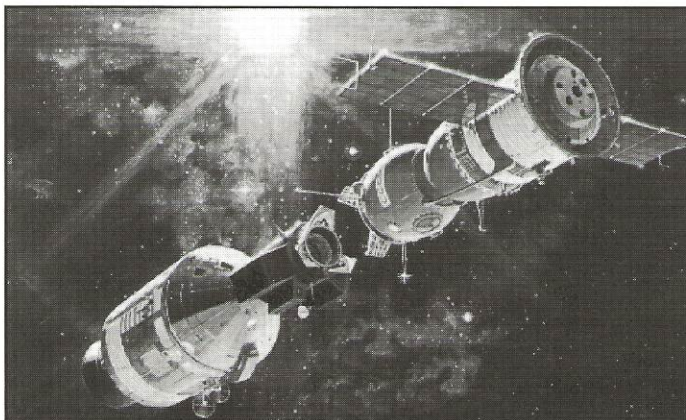
CONGRATULATIONS

TO

Lieutenant General Thomas Stafford

 **Hernandez
Engineering Inc.**

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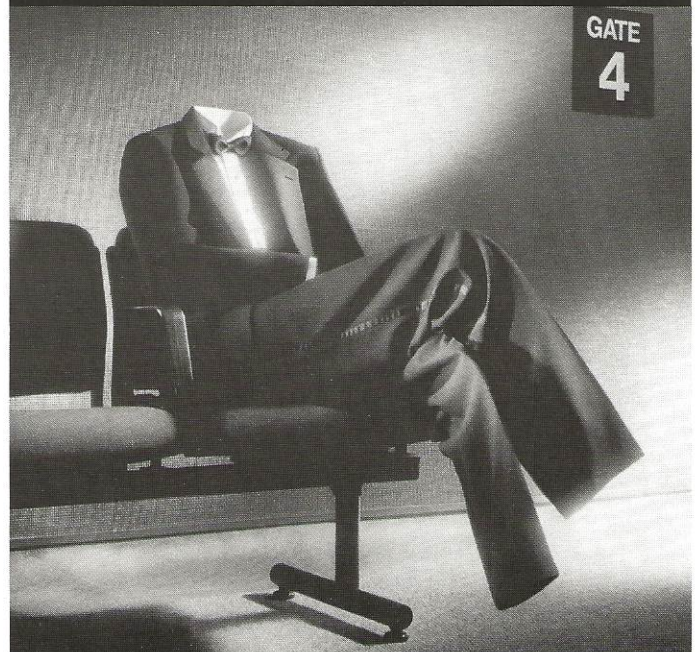
The Sisters and Administration
congratulate
Lieutenant General Thomas Stafford
for putting
"America at the Threshold"



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R ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT



Board of Directors

Members of the Foundation's Board - standing left to right: Clay W.G. Fulcher, Robert J. Wren, Billy Ray Smith, John T. Watson, Ronald K. Blilie, Jack R. Lister, Charles A. Jacobson, Charles S. Hardwick, Harold L. Neely, Michael D. Dennard, Owen G. Morris - Seated left to right: David Hamblin, Robert W. Mitchell, Charles H. Hartman (Chairman), Floyd B. Boze, Richard L. Griffin.

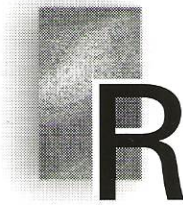
The inspiration to establish a national award for space achievement grew naturally from the Space Center Rotary Club of Houston. The club has always enjoyed a close association with the space program and counts many of America's space pioneers among its members.

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. An Executive Forum was also added in 1989 to give members of the industry insight into current space topics by key representatives of the U.S. space program. Last year the Foundation introduced a new lifetime achievement award, The Corona. The addition of the special award continues the Foundation's dedication to recognizing excellence in space.

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 Awards program.



ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT

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

President and CEO, Space Industries, Inc.

Dr. Lew Allen

Former Director, Jet Propulsion Laboratory

Arnold D. Aldrich

Assoc. Admin., Space Systems Development

Norman R. Augustine

Chairman and CEO, Martin-Marietta Corp.

Hon. George E. Brown, Jr.

U.S. House of Representatives

R. Adm. H.A. Brown

Commander, Naval Space Command

Mark E. Carreau

Houston Chronicle

Aaron Cohen

Director, Johnson Space Center

Dr. Dale L. Compton

Director, Ames Research Center

Robert L. Crippin

Director, Kennedy Space Center

Hon. Tom DeLay

U.S. House of Representatives

Clint Denny

Pres., Space Information Systems Loral

Edsel D. Dunford

President and CEO, TRW Electronics & Defense

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President, IBM-Federal Systems Company

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Maxime Faget

Chairman of the Board, Space Industries, Inc.

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Ed.-in-Chief, Aviation Week and Space Tech.

Dr. Lennard A. Fisk

Assoc. Adm., Space Science & Appl., NASA

Jon E. Forbes

President, CAE - Link Corporation

Kenneth Francis

Exec. V.P., McDonnell Douglas Aerospace

Don Fuqua

Pres., Aerospace Industries Association, Inc.

Senator Jake Garn

U. S. Senator

Stephen Gauvain

KTRK-TV

Col. Robert B. Giffen

Dept. of Astronautics, USAF Academy

Robert R. Gilruth

Former Director, Johnson Space Center

Dr. Glen A. Goerke

President, University of Houston Clear Lake

S. William Gouse

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Gerald D. Griffin

Director, Korn Ferry International

R. W. Hager

V.P., Gen. Mgr., Boeing-Missiles & Space Div.

Hon. Ralph M. Hall

U.S. House of Representatives

Paul F. Holloway

Director, Langley Research Center

Gen. Charles A. Horner

Commander, US Space Command

Lt. Gen. Bradley C. Hosmer

Superintendent, USAF Academy

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Exec. V. P. and COO, Rockwell International

Col. Michael W. Keaveney

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Dr. John M. Klineberg

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Former Director, Johnson Space Center

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T. Jack Lee

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Dr. Alan M. Lovelace

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Robert T. McCall

Aviation/Space Artist

Byron Dan Pinick

Pres., Defense & Space Gp, Boeing Corp.

V. Admiral William E. Ramsey USN (Ret.)

Director, Space Systems Div., CTA Inc.

General Bernard P. Randolph USAF (Ret.)

Lawrence J. Ross

Director, Lewis Research Center

Alan B. Shepard

Former Astronaut

Donald K. (Deke) Slayton

Pres., EER Systems Corp.-Space Services Div.

Thomas H. Smith

Executive Director, Society of Exper. Test Pilots

Lt. Gen. Thomas P. Stafford USAF (Ret.)

Vice Chairman, Stafford, Burke and Hecker, Inc.

Dr. Edward Stone

Director, Jet Propulsion Laboratory

James R. Thompson, Jr.

Exec. VP & CTO, Orbital Sciences Corp.

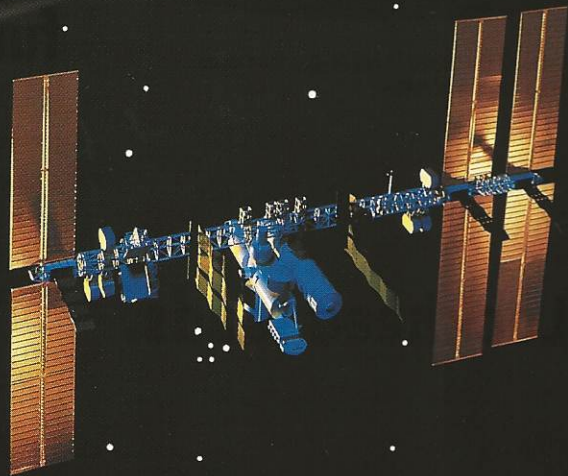
Vice Admiral Richard H. Truly USN (Ret.)

Al Verderosa

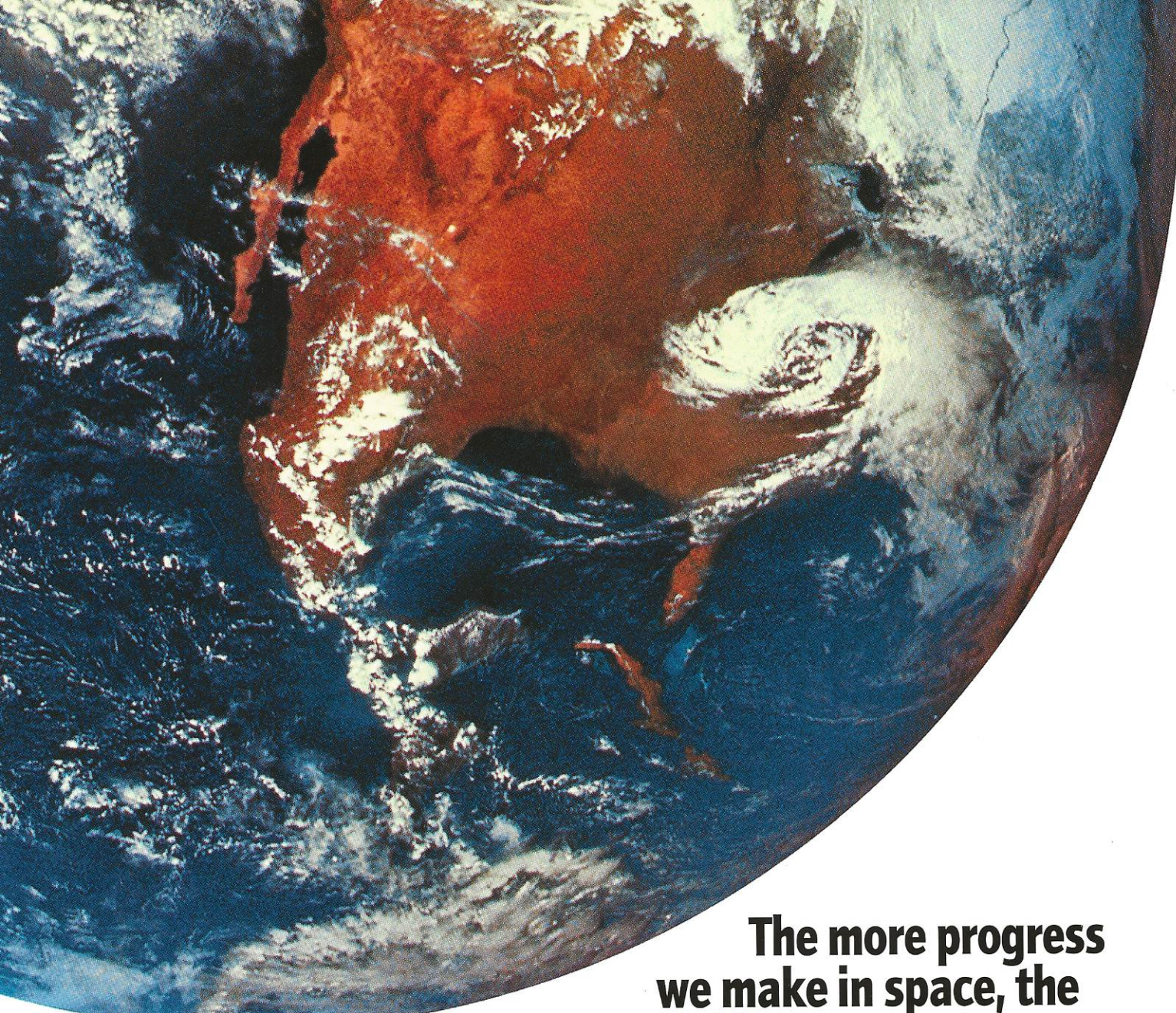
Pres., Sys. Gp. Grumman Space & Electronics

Loral salutes
Lt. Gen. Thomas P. Stafford
recipient of the 1993
National Space Trophy

for his outstanding contributions
and his continuing commitment
to space exploration.



LORAL
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A view of the United States as seen from space.
Photo courtesy of NASA.

The more progress we make in space, the further we'll go on Earth.

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America needs space to grow. Advances in science, medicine and technology will be enhanced, even markedly increased, through our efforts in space. Ensuring America's preeminence in space is a national priority and Lockheed is helping NASA lead this important effort.

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Congratulations Lt. Gen. Thomas P. Stafford, USAF (Ret.)
Winner, 1993 Rotary National Award for Space Achievement



Watch NOVA on PBS, Tuesdays at 8 p.m.