

HORIZONS

NOVEMBER 1990

Chairman's Corner

John M. Trebes

Everyone's spirits were high at our September dinner meeting. During the social hour I heard and sensed a level of excitement and up-beatness I remembered from the 60's. Did we sense what was to come?

The McDonnell Douglas Space Systems Company was our guest host. Tom Parkinson, deputy to Bob Thompson, general manager and vice-president, set the pace for the evening with his upbeat and stimulating thought for the future in the space business. Thank you, Tom and McDonnell Douglas, for your support and participation.

Al Bean, our after dinner speaker, gave us insights into man-on-the-moon we had not seen or felt before. Photos taken on the moon were reviewed for us in a different light as Al shared his creative and mindful thoughts with us.

Al is dedicating this phase of his life to leaving a legacy of how it was as mankind made its first steps onto another planetary body. He began taking art lessons during his Navy test pilot days. Now, through his art, he recreates men on and around the moon. By pressing his actual moon boot and lunar hammer into a painting's wet surface, a texture to the scene is created such that the viewer is given a

rare and unusual way to "connect" to that era.

There was only optimism and praise for all of us in this space business in his closing remarks. Al, I thank you for those kind and thoughtful words. All of us at the dinner, I know, left there with a spring in our step and a smile on our face.

One hundred and twenty dinners were served and I counted twenty members and guests arriving after the dinner. We welcomed three new members who were in attendance.

My special thanks to Zafar Taqvi of LEMSCO, Shirley Brandt of Grumman and Charles Blacknall of McDonnell Douglas for putting this meeting together. Thanks to the Clear Lake Council of Technical Societies (CLCTS), Andy Lindberg, Chairman, we used a new wireless microphone system for the first time. This system is now available for all uses of the Gilruth Center.

Thanks to new member Audrey Schwartz of JSC's New Initiatives Office, your officers are now decked out in living colors (ribbons on our badges). Audrey handled that project ahead of schedule and under budget.

Upcoming events

November dinner meeting date changed!

Lou Livingston

It has just come to light that the dinner meeting schedule appearing in the September *Horizons* does not agree with the Gilruth Center's schedule. Unfortunately, the latter is the one that counts. As you have already

found, the October meeting was on Wednesday, October 17, not the 18th as listed in the schedule. Of more immediate concern, the upcoming meeting is November 7 (again, Wednesday

instead of Thursday), not November 15.

We apologize for the confusion and for any inconvenience the error may have caused.

Horizons is the monthly newsletter of the Houston Section of the American Institute of Aeronautics and Astronautics. It is created by members of the Houston Section and reproduced at the Houston offices of Lockheed Engineering and Sciences Company. Please address all communications to Vice-Chairman of Operations, Charles Blacknall, MDSSC/T7E, telephone 283-1073.

In this issue.....

Chairman's Corner	1
Upcoming Events	1
From our Sister Sections	2
Also Included	3
Technical Activities Schedule	6
The Endless Summer	7
China Delegation Questionnaire	8

From our sister sections

A second Houston Section delegation to China?

Jim McLane

Sister Section Coordinator, China

While in Beijing in August, I met with Mr. Zou Ze-Qing, Secretary General of the Chinese Society of Astronautics (CSA) and members of his staff. He extended a special invitation for a technical delegation from the Houston Section to visit China again in much the same manner as did our 1988 delegation. CSA would arrange and conduct the tour which would be tailored to the individual technical interests of the delegates (where technical interests diverge, concurrent visits to separate specialized activities will be arranged).

In addition to laboratory and facility visits, the technical program would feature academic exchange (seminars, lectures and technical discussions) with Chinese counterparts. Visits to major tourist attractions in each city would be included; howev-

er, technical aspects of the tour would be sufficiently emphasized to clearly qualify this trip as an educational expense for tax purposes (check with your tax advisor). An expanded non-technical program would be arranged in each city for accompanying spouses.

A minimum of 16 delegates would be required to make the project go; the maximum size is 30. The all-inclusive cost per person from Houston (double occupancy) for a trip of 14/16 days would probably be between \$3,500 and \$4,200. This is somewhat higher than the 1988 trip, but well below the current cost of other comparable technical tours. The exact cost can only be determined after the itinerary is decided upon.

Since a great deal of volunteer work is required to bring about an ac-

tivity of this sort, the first step is to determine whether there is sufficient interest to warrant going ahead with further planning. If you are interested, please complete and return the attached questionnaire [see page 8].

There are several itinerary possibilities, but all would include Beijing (with a plethora of technical activities), Xichang (the launch site in southern Sichuan Province), and Shanghai (home of our Sister Section, the Long March 3 assembly plant and other interesting space related activities). We might also be able to work in one of the following: Xi'an (Satellite Control Center, Institute of Radio Technology, microelectronics lab and factory, excavated clay warriors, etc), cruise through the gorges of the Yangtze river, or a day trip on the Li river at Guilin.

Members explore formation of German Sister Section

Chris Burmeister

AIAA German Sister Section Steering Group

I am a member of the Houston Chapter of the American Institute of Aeronautics and Astronautics (AIAA). Within that organization, I head a German Sister Section Steering Group, which is to work in cooperation with the AIAA International Space Activities Committee (ISAC) to find an aerospace organization within Germany whose members are interested in a professional and academic association with Houston AIAA.

The purpose of a sister section, according to the AIAA ISAC policy dated July 1989, is to "promote professional goodwill, understanding, and cooperation in appropriate matters across national boundaries to the mutual benefit of the participating organizations, and to the benefit of the aerospace professions in general". Cooperative projects include such items as 1) exchanging of local activity information, 2) maintaining technical journals from other countries, and 3) mutual exchange of visits of section members.

I am interested in establishing an association with a German city/section of a German aerospace organization

in part because of the upcoming work that people in Houston will be doing with the Germans on Space Station Freedom through the European Space Agency (ESA). My main concern right now is finding a contact. The JSC Library already has technical journals and bulletins originating from Germany and from German groups associated with ESA. By the start of next summer, I hope to achieve two things. First, I want to establish a consistent and long-term exchange of local activity information between a German section and Houston. Second, I will push for a mutual exchange of section members from both Germany and Houston. You heard it here first.

Germany has, I believe, enough aerospace industries where such an interest could be found. ISAC policy permits us to have only ONE sister section per country; thus, it becomes only a matter of finding one interested group, and then we can proceed from that point. I would appreciate any ideas on people who would be interested in this matter.

Also included

Past AIAA award recipients listed

John Trebes
Chairman

The following list of aerospace awards and past recipients was printed in the AIAA North Texas Section newsletter of August 1990. All of us in the Houston Section can be proud to see some of our own listed in the past recipients column.

I am having this reprinted here for several reasons. One is to give us a sense of the history of our profession. Another is to let our newer and younger members see what opportunities there are for awards in their future. A third is to prompt an outpouring of nominations from you.

Please send your outpourings to Carl Huss of McDonnell Douglas, our Honors & Awards Chairman, mail code MDSSC/A121, telephone 283-4197.

The Goddard Astronautics, Reed Aeronautics and International Cooperation Awards will be presented during the AIAA Annual Meeting, April 30-May 3, 1991 in Arlington, Virginia.

The Dryden Lectureship in Research and the von Karman Lectureship in Astronautics will be presented during the AIAA Aerospace Sciences Meeting, January 1992 in Reno, Nevada.

The Wright Brothers Lectureship in Aeronautics will be presented during the AIAA Aircraft Meeting, September 23-26, 1991 in Baltimore, Maryland.

Goddard Astronautics Award

For the most notable achievement in the entire field of astronautics, honoring Robert H. Goddard, rocket visionary, pioneer, bold experimentalist, and superb engineer whose early liquid rocket engine launches opened up the world of astronautics.

- | | |
|----------------------------|----------------------------|
| 1948: John Sheets | 1968: Donald C. Berkey |
| 1949: Calvin M. Bolster | Ernest C. Simpson |
| 1950: Lovell Lawrence, Jr. | James E. Worsham |
| 1951: Robert C. Truax | 1969: Perry W. Pratt |
| 1952: Richard W. Porter | Stanley G. Hooker |
| 1953: David A. Young | 1970: Gerhard Neumann |
| 1954: A. M. O. Smith | 1971: (not presented) |
| 1955: E. N. Hall | 1972: Howard E. Schumacher |
| 1956: Chandler C. Ross | Gary A. Plourde |
| 1957: Thomas F. Dixon | Brian Brimelow |
| 1958: Richard B. Canright | 1973: Edward S. Taylor |
| 1959: Samuel K. Hoffman | 1974: Paul D. Castenholz |
| 1960: Theodore von Karman | John L. Sloop |
| 1961: Wernher von Braun | Richard C. Mulready |
| 1962: Robert R. Gilruth | 1975: George Rosen |
| 1963-64: (not presented) | Gordon E. Holbrook |
| 1965: Frank Whittle | 1976: Edward W. Price |
| 1966: Hans J. P. von Ohain | 1977: James S. Martin |
| A. W. Blackman | 1978: Joseph V. Charyk |
| George D. Lewis | 1979: Maxime A. Faget |
| 1967: Robert O. Bullock | 1980: Robert J. Parks |
| Seymour Lieblein | 1981: Peter T. Burr |
| Irving A. Johnsen | Kenneth J. Frost |
| | 1982: John F. Yardley |
| | 1983: George E. Mueller |
| | 1984: Krafft Ehrlicke |
| | 1985: Frederic C. E. Oder |
| | 1986: George E. Solomon |
| | 1987: John McLucas |
| | 1988: Norman R. Augustine |
| | 1989: Alan M. Lovelace |
| | 1990: Richard H. Truly |

Reed Aeronautics Award

To honor the most notable achievement in the field of aeronautical science and engineering, in memory of Dr. S.A. Reed, aeronautical engineer, designer, and founding member of the former Institute of Aeronautical Sciences.

1934:	C. G. Rossby H. G. Willett	1964:	Abe Silverstein
1935:	Frank W. Caldwell	1965:	Arthur E. Raymond
1936:	Edward S. Taylor	1966:	Clarence L. Johnson
1937:	Eastman N. Jacobs	1967:	Adolph Busemann
1938:	Alfred V. DeForest	1968:	William H. Cook
1939:	George J. Mead	1969:	Rene H. Miller
1940:	Hugh L. Dryden	1970:	Richard T. Whitcomb
1941:	Theodore von Karman	1971:	Ira Grant Hedrick
1942:	Igor I. Sikorsky	1972:	Max M. Munk
1943:	Sanford A. Moss	1973:	I. Edward Garrick
1944:	Fred A. Weick	1974:	Willis M. Hawkins
1945:	Charles S. Draper	1975:	Antonio Ferri
1946:	Robert T. Jones	1976:	George A. Spangenberg
1947:	Galen B. Schubauer Harold K. Skramstad	1977:	William C. Dietz
1948:	George W. Brady	1978:	James T. Stewart
1949:	George S. Schairer	1979:	Paul B. MacCready, Jr.
1950:	Robert R. Gilruth	1980:	Donald Malvern
1951:	E. H. Heinemann	1981:	William R. Sears
1952:	John Stack	1982:	John L. McLucas
1953:	Ernest G. Stout	1983:	Robert H. Widmer
1954:	Clark B. Millikan	1984:	Frederick T. Rall, Jr.
1955:	H. Julian Allen	1985:	Thomas V. Jones
1956:	Clarence L. Johnson	1986:	Robert J. Patton
1957:	R. L. Bisplinghoff	1987:	R. Richard Heppe
1958:	Victor E. Carbonera	1988:	Brian H. Rowe
1959:	Karel J. Bossart	1989:	John Patierno (posthumously)
1960:	John W. Becker	1990:	Bernard L. Koff
1961:	Alfred J. Eggers, Jr.		
1962:	Walter C. Williams		
1963:	(not presented)		

1961: James A. Van Allen
 1962: A. Theodore Forrester
 1963: (not presented)
 1964: Henry M. Shuey
 1965: Wallace D. Hayes
 1966: Shao-Chi Lin
 1967: Edward W. Price
 1968: Hans W. Liepmann
 1969: Gerard P. Kuiper
 1970: Bernard Budiansky
 1971: Coleman D. Donaldson

1972: John Houbolt
 1973: Herbert Friedman
 1974: Herbert Hardrath
 1975: Antonio Ferri
 1976: Anatol Roshko
 1977: Abraham Hertzberg
 1978: Gerald A. Soffen
 1979: Dean R. Chapman
 1980: Jack L. Kerrebrock
 1981: Herbert Ribner
 1982: Laurence Young
 1983: Edward C. Stone, Jr.
 1984: Arthur E. Bryson, Jr.
 1985: Donald Coles
 1986: Irvine Glass
 1987: Kenneth W. Iliff
 1988: William H. Phillips
 1989: George F. Carrier
 1990: Seymour Bogdonoff
 1991: Vijaya Shankar

Dryden Lectureship in Research

Intended to emphasize the great importance of basic research to advancement in aeronautics and astronautics and to be a salute to research scientists and engineers, and named in honor of Dr. Hugh L. Dryden, renowned leader in aerospace research programs.

von Karman Lectureship in Astronautics

To honor an individual who has performed notably and distinguished himself technically in the field of astronautics, named for Theodore von Karman, world famous authority on aerospace sciences.

1962: Hugh L. Dryden
1963: (not presented)
1964: Arthur Kantrowitz
1965: Raymond L. Bisplinghoff
1966: Nicholas J. Hoff
1967: Lester Lees
1968: William R. Sears
1969: Courtland D. Perkins
1970: Erik Mollo-Christensen
1971: Irmgard Flugge-Lotz
1972: Eugene Love
1973: A. M. Lovelace
1974: Harrison Schurmeier
1975: I. E. Garrick
1976: (not presented)
1977: Joseph V. Charyk

1978: Robert A. Fuhrman
1979: Christopher C. Kraft, Jr.
1980: Daniel J. Fink
1981: Bruce Murray
1982: Willis Hawkins
1983: George Jeffs
1984: Robert Thompson
Aaron Cohen
1985: Eberhardt Rechtin
1986: Albert Wheelon
1987: Lew Allen, Jr.
1988: John Yardley
1989: Richard H. Battin
1990: Alvin Seiff
1991: John Casani

1937: B. Melvill Jones
1938: Hugh L. Dryden
1939: Clark B. Millikan
1940: Sverte Pettersen
1941: Richard V. Southwell
1942: Edmund T. Allen
1943: W. S. Farren
1944: John Stack
1945: H. Roxbee Cox
1946: Theodore von Karman
1947: Sydney S. Goldstein
1948: Abe Silverstein
1949: A. E. Russell
1950: William Bollay
1951: P. B. Walker
1952: William Littlewood
1953: Glenn L. Martin
1954: Bo K. O. Lundberg
1955: R. L. Bisplinghoff
1956: Arnold Hall
1957: H. Julian Allen
1958: Maurice Roy
1959: Alexander Flax
1960: A. W. Quick
1961: Robert Jastrow
1962: M. James Lighthill
1963: (not presented)
1964: George S. Schairer
1965: Gordon N. Patterson
1966: C. Stark Draper
1967: P. Poisson-Quinton
1968: Charles W. Harper
1969: Pierre Satre
1970: F. A. Cleveland
1971: Robert L. Lickley
1972: Franklin Kolk
1973: H. Schlichting
1974: A. M. O. Smith
1975: Henri Ziegler

1976: J. Leland Atwood
1977: Gero Madelung
1978: George B. Litchford
1979: Jack N. Nielsen
1980: Bernard Etkin
1981: Holt Ashley
1982: Jack Steiner
1983: Edward C. Polhamus
1984: Robert P. Harper, Jr.
George Cooper
1985: John Utterstrom
1986: Dwain A. Deets
Lewis E. Brown
1987: John M. Swihart
1988: Ben R. Rich
1989: Roy V. Harris
1990: Ivan Yates

1989: Gareth C. Chang
Shelby Tilford
1990: Robert F. Freitag

Wright Brothers Lectureship in Aeronautics

Commemorating the first powered flights made by Orville and Wilbur Wright at Kitty Hawk in 1903, and intended to emphasize significant advances in aeronautics by recognizing major leaders and contributors thereto.

International Cooperation Award

To recognize individual(s) who have made significant contributions to the initiation, organization, and/or management of American programs which include extensive international cooperation activities in either space or aeronautics or both.

Technical activities schedule, November

Bill Best

Clear Lake Council of Technical Societies

5—Monday

Clear Lake SigAda Meeting
 "Ada Awareness Issues In Government, Congress and Industry", Ralph Craft
 JSC Gilruth Center 6:30/7:00/7:30PM
 Information: Tom Sullivan 333-5040

5—Monday

NASA Area Macintosh Users (Group) "NAMU"
 Demo by CLARIS Gary Quinn
 RSOC Cafeteria 600 Gemini 7:00PM
 Information: Sharyn Best 488-6522

6—Tuesday

3rd NASA ADA User's Group Symposium
 FREE Admission
 JSC Gilruth Center 7:30AM-5:30PM
 Information: Tammy Pelnick 335-8530

7—Wednesday

IEEE, ISA, CLCTS Video Conference
 "Simulation: Engineering the Future"
 JSC Gilruth Center 10:00 to 2:00 PM
 (\$90 Members/\$100 Otherwise)
 Information: Andy Lindberg 483-1474

7—Wednesday

Armed Forces Communications and Electronics Assn
 Monthly Luncheon (Public is Welcome)
 Location: TBD
 Speaker: Ms Joyce R. Jarrett, Director NASA Quality
 Productivity Improvement Program
 Information: Mike Denard 280-1532

7—Wednesday

JSC Astronomy Seminar
 Report on 22 Division of Planetary Science,
 Dr. A. Jackson
 JSC Bldg 31 Rm 129 Noon to 1:00 PM
 Information: Al Jackson 333-7679

7—Wednesday

AIAA Dinner Meeting
 "The Apollo-Soyuz Project" Deke Slayton
 JSC Gilruth Center 5:30/6:30/7:30PM
 Information: Dr. Zafar Taqvi 333-6544

8—Thursday

IEEE Monthly Meeting
 "Radiation Concerns for SS Freedom and Beyond"
 JSC Gilruth Center 11:30/12:00 Noon
 Information: Dr. Zafar Taqvi 333-6544

13—Tuesday

Clear Lake Council of Tech. Societies Monthly Meeting
 Lockheed Plaza 3 1150 Gemini 11:45AM
 Information: Andy Lindberg 483-1474

14—Wednesday

JSC Astronomy Seminar
 "Mexico Solar Total Eclipse, July 1991", Paul Maley
 JSC Bldg 31 Rm 129 Noon to 1:00 PM
 Information: Al Jackson 333-7679

15—Thursday

Clear Lake SigAda Business Meeting
 Holiday Inn 1300 E. NASA Rd 1 11:45AM
 Information: Tom Sullivan 333-5040

16—Friday

LPI Seminar Series "The Lunar Atmosphere: New Findings, New Opportunities"
 Alan Stern, Univ for Atmos. & Space Physics, U of Col.
 LPI 3303 NASA RD1 Berkner Room 3:30PM
 Information: Steve Williams 486-2113

27—Tuesday

Bay Area PC Organization (BAPCO) Monthly Meeting
 Fractal Software: Creating Nature's Images
 Tim Wegner, Author
 League City Bank & Trust 303 E. Main 7:30PM
 Information: Don Wechsler 335-8517

28—Wednesday

Houston Space Business Roundtable Monthly Luncheon
 Speaker, Location TBD
 Information: Bill Nash 280-0460

28—Wednesday

JSC Astronomy Seminar
 "A Cluster of Black Holes as a Model of Active Galactic Nuclei", Dr. T. F. Stepinski, LPI
 JSC Bldg 31 Rm 129 Noon to 1:00 PM
 Information: Al Jackson 333-7679

29—Thursday

Society for Computer Simulation
 "Lockheed's Weapons Systems Simulation Center @ Rye Canyon", Roy Tiniakoff
 Lockheed Plaza 3, PIC Rm 1150 Gemini Ave
 Information: Robin Kirkham 333-7345

Please send additions, corrections and comments to:
 Bill Best /R12A-130, Rockwell Shuttle Operations Co., 600 Gemini Ave., Houston, TX 77058, telephone 283-0261.

Soviet space exhibit coming to Fort Worth

An item in the Houston Post of September 27, 1990, notes the scheduling of an exhibit of Soviet space artifacts at the Fort Worth Museum of Science and Natural History. The exhibit will be on display from June 29, 1991, to January 1, 1992. It will be the first U.S. exhibition of the Soviet space program.

The show features 50 items including a full-scale model of Sputnik, the world's first artificial satellite, and a model of the Mir space station.

A location for the exhibit has not yet been selected; it's too large to fit in the museum.

The Endless Summer

Andrew L. Klausman

Last spring it seemed NASA programs were at the height of success. Magellan was cruising to Venus while Galileo was returning to the home planet on its way to the outer solar system. Space Shuttle mission STS-31 had just returned from deploying the Hubble Space Telescope (HST). Even though HST suffered some early problems, it appeared that these were minor and would be corrected shortly. The next Shuttle mission was already on the launch pad ready to perform startling ultraviolet astronomy. However, somewhere along the way NASA's railroad to space got derailed.

The first problem was with the ultraviolet astronomy mission, STS-35. The payload, known as Astro-1 and the Broad Band X-Ray Telescope, was in the payload bay as Columbia's External tank was being loaded with cryogenic propellants. Engineers in the launch control center began noticing higher and higher concentrations of leaking hydrogen and the launch was called off.

A problem with Columbia, so NASA thought. Out came Atlantis on a secret Department of Defense mis-

sion in July. The External Tank loading began again and then was stopped because of another hydrogen leak. The Shuttle program was temporarily halted.

Columbia was returned to its launch pad with a never before performed "Shuttle swap". Two more launch attempts were made, with both showing a significant amount of hydrogen leakage before being cancelled.

The problems with the HST only got worse. While the minor problems at the beginning have all been corrected or are in the process of being corrected, a major problem with the primary mirror was discovered.

Engineers at (what was) Perkin-Elmer in Danbury, Connecticut, had precisely made a mirror with the wrong curvature. The problem was in a "null corrector", which is used to measure the shape of the mirror. The null corrector was wrong.

Even Magellan had problems. After a perfect insertion into Venus orbit, Magellan lost track of earth. Apparently inadvertent computer commands by the backup attitude control computer caused Magellan to become unable to find earth after one

of its radar mapping passes. The incident reoccurred later.

With all these problems, Congressional hearings were to be expected. NASA officials were grilled by various appropriations and science committees in both houses. The hearings became more intense as stories of design problems with Space Station Freedom emerged. Many of the problems also became the first news story on evening news programs. It was a dark time.

But, like all dark clouds, it eventually passes. Discovery has launched the Ulysses probe which will study our sun from latitudes never before explored. The HST has produced remarkable pictures, the likes of which have never been seen before. The pictures of Supernova 1987A and various star clusters have shown that without computer enhancement, HST's resolution is as good or better than expected. Its ability to gather dim light is greatly diminished until a repair/replacement Shuttle mission can be launched in 1993. Until then, computer algorithms will help to bring back some of the HST's capabilities. The death of the HST was slightly exaggerated.

To top it off, Magellan is back and producing extraordinary radar images of the Venusian surface. Beamed back to earth and reassembled into pictures, the radar data show a planet overwhelmed by tectonic activity. Faults stretch for miles and miles and run parallel with other faults. Past volcanic activity can be seen as lava flows appear throughout the images. Magellan has taught us already that Venus is even less hospitable than previously thought, if that is possible.

With the launch of STS-41 and the eventual repair of Columbia, NASA will have put most of the summer behind them. The commander of the upcoming flight, Dick Richards, told the media he believes this series of problems will only be remembered as a footnote in NASA history. Many people agree.



CHINA TECHNICAL DELEGATION QUESTIONNAIRE

Name: _____

Mail Code (or mailing address): _____

Telephone: (Work) _____ (Home) _____

Name of accompanying spouse: _____

Yes, I'm interested in joining the 1991 Houston Section Technical Delegation to China, if one is formed.

I:

- Am hot to trot!
- Will go if the details suit me
- Might go if things work out
- Probably won't go, but let me hear more

The itinerary should include:

(rate your interest on a scale of 1 [not much] to 10 [gotta have])

- Beijing
- Xichang
- Shanghai
- Xi'an
- Yangtze River (Chongqing to Wuhan)
- Guilin

My preferred timing for this visit is:

- Late April and early May, 1991
- September, 1991
- Other (specify) _____

PUT THIS FORM IN AN ENVELOPE and MAIL TO:

Charles Blacknall, MDSSC/T7E

or

Jim McLane
1702 Fairwind Rd.
Houston, TX 77062



AIAA HOUSTON HORIZONS

OUTSTANDING SECTION AWARD



1975-1976
1976-1977
1979-1980
1980-1981
1981-1982
1983-1984
1986-1987
1988-1989

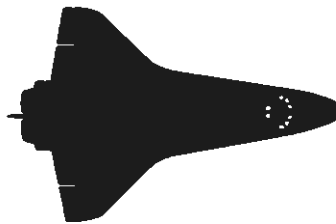


SECTION SPECIAL EVENT AWARD



1971-1972
1972-1973
1979-1980
1981-1982
1983-1984
1985-1986
1988-1989

AIAA HOUSTON
SECTION
P.O. BOX 57524
WEBSTER, TX 77598



Non-Profit Organization
U.S. POSTAGE PAID
Webster, Texas
Permit Number 1

300591872 B HO
Dr Larry J Friesen
League City TX 77573-4485

AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS

HOUSTON SECTION P.O. BOX 57524 WEBSTER, TEXAS 77598

Wednesday, November 7, 1990

THE APOLLO-SOYUS TEST PROJECT

DONALD K. "DEKE" SLAYTON

**PRESIDENT & VICE CHAIRMAN
SPACE SERVICES INCORPORATED
OF AMERICA**



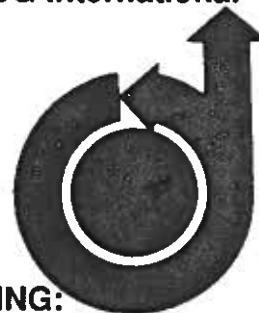
**AIAA HOUSTON SECTION MEETINGS
ARE HELD AT THE JOHNSON SPACE CENTER
ROBERT R. GILRUTH RECREATION CENTER**

PRESENTER:

Deke Slayton graduated from the U. of Minnesota in 1949 with a B.S. in Aeronautical Engineering following 4 years in the Air Force where he flew 63 combat missions during World War II. After graduation, he worked for Boeing Aircraft Co. for 2 years before being recalled to active duty in 1951. In 1955 he attended the USAF Test Pilot School at Edwards Air Force Base and was an experimental test pilot there until he was named as one of the Mercury astronauts. He became the first Chief, Astronaut Office in 1962 and in 1963 resigned his commission to assume the role of Director of Flight Crew Operations. In 1972 he was assigned as the Apollo Docking Module Pilot of the Apollo-Soyus Test Project mission. The event marked the successful testing of a universal docking system and signaled a major advance in efforts to pave the way for the exchange of mutual assistance in future international space explorations. From 1975 to his retirement in 1982 he served in various managerial roles on the Space Shuttle. In 1982 he was elected President of Space Services.

Guest Host

**James M. Vanderploeg
Director
KRUG International**



DINNER MEETING:

**SOCIAL: 5:30
DINNER: 6:30
PROGRAM: 7:30**

MENU: Spaghetti & Meat Balls

MEMBERS & SPOUSES	\$8.00
NONMEMBERS	\$9.00
STUDENTS/YOUNG MEMBERS	\$7.00

**FRANKIE
333-6064
LOCKHEED**

**SANDY
845-0735
COLLEGE STATION**

**CARROLL
283-6000
EAGLE**

**SARAH
282-3160
BENDIX**

**NOTE: THE DINNER RESERVATIONS DEADLINE IS FRIDAY, NOVEMBER 2, AT 12:00 NOON.
ANY CANCELLATIONS ARE REQUIRED PRIOR TO DEADLINE. NO-SHOWS WILL BE BILLED.
ALL ARE WELCOME.**

DINNER RESERVATIONS ARE NOT REQUIRED FOR ATTENDING THE PROGRAM ONLY.

