# dalaa Horizons

Houston, Texas

September 1994

### Chairman's Corner

George Nield Chairman

I AM PLEASED TO REPORT that your new section officers and council members have gotten off to an outstanding start in planning an exciting year of activities for the section. In June, Mike Begley (our new Vice Chairman-Operations) and I attended the AIAA Section Leadership Briefings in Fort Worth. We spent the day meeting with officers from other sections around the Region and staff members from AIAA Headquarters, and picked up some helpful tips.

Back in Houston, our first order of business was to find a set of capable and motivated committee chairmen and members to plan and conduct all of the many activities that we hope to provide for the membership during the year. A list of the leaders that have been identified so far is included on the wallet card elsewhere in this newsletter. We have a very talented team in place, but there are still several areas where additional volunteers could make a real difference. If you would be willing to devote a modest amount of time and energy in order to give something back to our profession, please let me know. We'd love to have you as part of our team!

We plan to have monthly Council meetings throughout the year. They will normally be held from 5:00-6:15 PM on the Thursday prior to the monthly dinner meeting, but check the AIAA Calendar for the latest schedule. We have been meeting in the Hess Room of the Center for Advanced Space Studies (CASS), 3600 Bay Area Blvd., which is at the corner of Bay Area and Middlebrook Drive. It's really a beautiful facility! If you haven't had a chance to see it, you ought to make it a point to see how the section operates, and we'd benefit from having your participation!

During the summer, the Council met in June, July and August, with a special planning meeting in June. We talked about what the section ought to be doing and where we ought to be putting our energy. Here are some of my ideas on some proposed areas of emphasis for the coming year:

- Membership Growth. As a result of the economic troubles in the aerospace community, our section membership has declined dramatically in the last few years. As of May 2, 1994, we were down to 982 members, the lowest we have been in some time. Even though the industry is still experiencing some tough times, there are still many, many aerospace professionals in this area who are not AIAA members. I'm convinced that if we have the right kind of programs and make the right kind of outreach to them, we can continue to expand our membership base.
- Section Newsletter. Lou Livingston has been doing a super job as Newsletter Editor, but one person can't do it all! I'd like to see us upgrade this publication with more photos, regular columns, and special features. Are there any potential authors or cartoonists out there?
- Educational Opportunities. We hope to offer several educational activities this year, such as a lecture series or short course.
- Special Events. There ought to be more to AIAA than a magazine and an occasional dinner meeting and we hope to prove it to you! We plan to sponsor several special events this year, such as field trips and facility tours. (see Chairman, page 2)

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 correspondence to the Vice-Chairman, Operations, Mike Begley, LESC/C87, or to the Editor, Lou Livingston, 1911 Pepper Hill, Houston, TX.

CHAIRMAN (from page 1)

• Community Outreach. There's a big wide world out there and we haven't been reaching it! We need to do more in terms of publicity and partnerships with schools and other organizations.

Do any of these areas hit home with you? I hope so. In any case, we need your feedback! We sent out a Membership Survey earlier this summer, and although we did get some excellent comments, only a small fraction of our total membership responded. I'd really like to know what you think. Give me a call at (713) 483-1364, or if you have access to email, send me a note. My Internet ID is

GNIELD@JSCPROFS.NASA.GOV I'm looking forward to hearing from you!

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## Member Surveys Help Chart Our Course

Michael Begley Vice Chairman, Operations

A SLOW BUT STEADY RESPONSE from the July membership survey continues to provide fresh ideas and fresh faces for our Section. The comprehensive survey is being used to identify the activities local members want the Section to pursue in the coming year. Ideas include:

- Many new dinner program topics
- Suggestions for facility and industry tours
- · Newsletter enhancements

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Establishment of a local AIAA computer bulletin board

All of these ideas are being actively pursued by the board members.

Many members expressed an interest in several of our 15 technical committees. This information will be used to improve the timeliness and distribution of our technical committee program announcements. Member interest may lead to the establishment of a new local Space Transportation technical committee.

Many members have volunteered to support the Section's diverse student activities, including a Texas A&M field trip, initiation of a Pasadena School District Science Fair, judging of the Houston Science Fairs, coordinating speakers for Engineer's Week, tutoring, and selecting our annual scholarship recipient. However, the Section still needs two or three chairpersons to serve as coordinators for our many volunteers. If this interests you, please call Michael Begley at 333-6996.

If you did not receive your survey, or would like another copy, call Michael Begley at the above number. Your input and involvement are necessary for the Houston Section to provide the programs and services that you want.

### Committee News

## Education & Career Enhancement Committee Plans Busy Year

Dr. Jayant Ramakrishnan Education/Career Enhancement Chairman

THE GOALS of the Education and Career Enhancement Committee are:

- 1. To promote the education of AIAA members via AIAA short courses and study material.
- 2. To provide relevant lectures to the members on career enhancement.

The following AIAA members have kindly consented to serve on the committee. The last three will serve as points of contact for checking out material.

John Sunkel, JSC

Nazareth Bedrossian, Draper Labs

Bill Best, Rockwell — 282-6970

Jeff Tave, Lockheed — 333-7007

Steve Zobal, McDonnell Douglas — 283-1023

The Houston Section has a collection of video cassettes, lecture notes with audio cassettes and course materials that have been catalogued and are available for checkout. The procedure for checkout will be as follows:

- 1. Identify the item that you wish to check out and contact one of the representatives listed above.
- 2. The representative will check out the requested item from the AIAA Library and provide it to you. Rentals are \$1 per week per item.
- After use, return the item to the representative and fill out an evaluation/feedback form on the item.

We are also in the process of contacting AIAA National to obtain material from their library. We will keep you posted on any new material through *Horizons*.

We have scheduled an interesting and informative seminar on financial management for Thursday, October 20, 1994 at 6:45 PM. It will be held at the Center for Advanced Space Studies Lecture Hall, 3600 Bay Area Blvd. More details will be provided in the next issue of *Horizons*. Charles Schwab and

Co. will conduct the seminar. Topics to be discussed will include retirement planning and computerized investing. Any suggestions for future programs can be sent to me via e-mail at

JAYANT@DYNACS.JSC.NASA.GOV

We encourage you to participate and derive full benefit from the activities of this committee.

#### Audio Tapes

- 1-Hour Tapes
- 1. Decision Theory
- 2. Dynamic Programming
- 3. Fundamentals of Precise Attitude Determination of Satellites
- 4. Linear Systems Analysis: Classical Versus Modern Techniques
- 5. Problems in Orbit Transfer
- 6. Vectors
- 7. Investment Programs
- 8. Boundary Layers
- 9. Low Speed Wing Theory
- 2-Hour Tapes
- 1. Flight Computer Design
- 2. Linear Quadratic Design Techniques
- 3. Manual Control
- 4. An Introduction to Navigation Systems
- 5. Nuclear Propulsion
- Probability, Random Processes and Estimation Theory, with Aerospace Applications
- 7. Introduction to Stability Theory
- 12-Hour Tapes
- 1. Aeroelasticity

### Management Tapes

- 1. Effective Team Building
- 2. Assertiveness Training for Managers
- 3. How to be an Effective Middle Manager
- 4. Effective Team Building
- 5. Creative Problem Solving
- 6. How to be a No-Limit Person

#### Video Tapes

- 1. Thunder in the Gulf
- 2. The Secret Vigil—SR-71 Blackbird
- 3. Blueprint for Space
- 4. Tour of the Planets (Aviation Week-Flight Kit)

#### Membership Activities

#### J. Clayton Shadeck Membership Chairman

AFTER MANY YEARS of faithful service, Jim Visentine has decided to take a break. Although I will need lots of help from him, especially at the start, Jim will soon be able to enjoy a well deserved "retirement" from his duties as Chairman of the Membership Committee. Please join me in thanking him for his long, effective tenure.

In membership this year, there are three primary goals and one secondary goal (if time and resources permit). The three main goals are:

- 1. Run a successful membership drive. This is defined as a drive which puts us solidly over 1,000 members in the Houston Section. We have fallen below this, and therefore into a completely different section category, for the first time in many years.
- 2. Work with National AIAA to ensure an accurate Section roster, particularly with respect to a member's affiliation. With a good list, we can approach key contacts in each organization to enlist them to mobilize members in that organization to support the membership drive, conferences, dinner meetings, technical committees, etc.
- A special initiative to encourage AIAA membership of employees of the many smaller companies in the area.

The secondary objective is to provide a detailed addendum to the roster which provides technical interests for each member (beyond that provided with the membership application/renewal). This will help us to find support for our technical activities.

At the moment, I am a chairman without a committee. If anyone would like to help, please contact me at 280-2701. I promise to keep the workload light.

#### Public Policy Committee

Shirley Brandt Chairman, Public Policy Committee

THE PUBLIC POLICY Committee is in the process of planning the agenda for the 1994-95 year. In addition to the traditional tasks of educating the public about the space program and organizing letter-writing campaigns, as needed, to the Congress, the committee is looking for new ideas.

The committee is looking for suggestions for programs which interest our Section membership. If you would like to submit ideas to be worked by the Public Policy Committee, or if you would like to participate on the committee, please contact Shirley Brandt at 486-3941. We hope to hear from you.

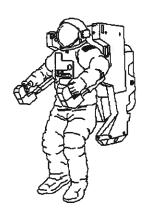
#### **Guidance & Control TC**

## Dr. Jayant Ramakrishnan Education/Career Enhancement Chairman

THE FOLLOWING AIAA members have kindly consented to serve on this committee:

David Zimmerman, UH — 743-4520 David Frost, Rockwell — 282-6813 Larry Friesen — 334-5268

The committee will be meeting in the next few weeks to schedule interesting Lunch & Learn seminars and short courses. AIAA members who are interested in presenting or attending these seminars may contact one of the committee members.



## Who's Who

#### Shadeck Named Top Manager

George Nield Chairman

Dr. J. Clayton Shadeck, currently serving as Houston Section Membership Chairman, has been named Manager of the Year by the Martin Marietta Corporation. Dr. Shadeck, who is the Director of Houston Operations, Martin Marietta Services Group, was one of a select group of 61 of the corporation's 96,000 employees who were awarded a Jefferson Cup. This award is given to employees who have performed particularly significant and creative work on behalf of the corporation's customers. He was then selected out of that group as the corporation's top manager. Dr. Shadeck manages the company's science and engineering support contract for the Johnson Space Center's Life Sciences Directorate. He is credited with helping the company win the nine-year, \$480 million contract, which is the largest contract in the history of the Services Group. Congratulations, Clay!

## Dudley Nelson—In Memoriam Shirley Brandt

To our shock and sorrow, the Houston Section has lost an extremely dedicated member. Dr. Dudley Nelson, a long-standing member of AIAA, our colleague, and good friend, passed away suddenly on July 20. Dudley served as Vice Chairman, Technical during this past year. He organized a very successful Technical Symposium this spring, with 90 papers presented in 15 sessions to 250 attendees.

Dr. Nelson had been employed since 1987 by Lockheed Engineering and Sciences Company as Manager of the Structural Analysis and Test Department. Prior to joining Lockheed, he had worked for McDonnell Douglas Astronautics Company in the position of Manager of the Structures and Thermal Branch. Dudley was very dedicated to his work.

Despite the amount of time and energy that he consumed on his job, Dudley always seemed to find additional energy and time to volunteer his services to the local AIAA section. He was committed to quality in whatever he undertook, and he was always willing to help. We could always rely on Dudley.

Dudley has left a big void. He will be deeply missed by all those who knew him.



At the presentation of the Manager of the Year Award are, left to right, Norm Augustine, Chairman and Chief Executive Officer of Martin Marietta; Eileen Shadeck; Clay Shadeck; and Tom Young, Martin Marietta President and Chief Operating Officer.

### AIAA Spirit of Apollo Scholarship

Dr. George Nield Chairman

THE HOUSTON SECTION funds a student scholarship program that provides one-year \$1,000 scholarships for applicants enrolled in accredited colleges or universities. Applicants must have a scholastic plan that provides entry into some field of engineering or science pertinent to AIAA technical activities and must meet other pre-defined eligibility requirements.

This year, 14 scholarship applications were received. After reviewing the applications, the scholarship committee decided that three of the students were unusually well qualified and were very much deserving of our support. As a result, the committee recommended to the Council, and the Council agreed, that this year the Section would award three \$1,000 scholarships. The scholarship winners were David Oehl, Alfonso Lopez and Kimberly Renzi.

David Oehl, from Fort Worth, Texas, holds a B.S. in mechanical engineering from Baylor University, where he was on the varsity tennis team. He is currently pursuing an M.S. in aerospace engineering at Texas A&M and has a grade point average of 4.0. He has received numerous academic honors and has been involved in several community service activities. His career goals include working in research and development, completing a doctoral degree in aerospace engineering, and entering the teaching profession.

Alfonso Lopez was born and raised in Mexico. He came to the United States six years ago not being able to speak a word of English, and after mastering the language, received a number of academic honors. He is currently enrolled at Texas A&M University and is majoring in electrical engineering. He has a grade point average of 3.46. He hopes to become an electrical engineer and look for new things that will help society.

Kimberly Renzi, from Spring, Texas, just completed her sophomore year at Texas A&M, where she has a grade point average of 3.85 and is pursuing

a degree in mechanical engineering. She is involved in the Engineering Scholars Program, the Society of Women Engineers and the American Society of Mechanical Engineers. She plans to pursue a career in astronautics and hopes to find a way to combine her engineering education with her love for helping other people.

To this year's scholarship winners, we say "Congratulations!" To those who were not selected, we wish you the best as you continue your education and begin your careers!

### Also Noted

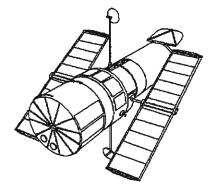
### **New Space Transport Policy**

Kenneth J. Cox

A National Space Transportation Policy dated August 5, 1994, has been released by the White House. The following paragraph is of particular interest:

"It is envisioned that the private sector could have a significant role in managing the development and operation of a new reusable space transportation system. In anticipation of this role, NASA shall actively involve the private sector in planning and evaluating its launch technology activities."

A National Space Transportation Round Table has been scheduled for September 14 in Washington, D.C. to derive a pragmatic approach to substantial commercial involvement in the development, ownership, and operation of reusable launch systems.



## Pasadena ISD Science Fair Initiative Zafar Tagvi

Realizing the importance of Science Fair contests at the high school level and the fact that currently the local Pasadena Independent School District (PISD) high school students have no opportunity to participate in and learn the scientific/engineering challenges presented by the Science Fair, the Houston Section, in cooperation with the IEEE Galveston Bay Section and the Clear Lake Council of Technical Societies, has proposed to sponsor and help organize Science Fair contests for the high school students at both the school and district levels. This will enable the PISD winners to participate in the city-wide contest and thus become eligible for hundreds of awards and scholarships provided by various agencies and universities. To both the winners and non-winners it will open new doors of opportunity to learn. The proposal has been accepted by the PISD and we are in the process of finalizing the project schedule and supporting personnel. This is going to be a unique and rewarding prospect for our organization.

#### Why Participate in the Science Fair?

- Learn methodology of research and experiment Magazine search
  - Journal writing

Experimental methodology

Validation procedures

Data taking and evaluation processes

- · Learn technical presentation techniques
- · Learn technical writing and graphics
- · Recognition at school, district and city level
- Trophies and cash awards from Science Fair as well as dozens of private agencies
- · Exposure to new subjects and exciting ideas
- · Motivation to continue with advanced studies
- · Receive credit for the work
- Constructive involvement of parents with their children
- · Sense of accomplishment to all participants

Our Involvement in the Science & Engineering Fair of Houston

As an organization, we will be supporting Ninth Grade and Senior Division (grades 10-12) participants in the Science Fair at the school and district levels. There are four high schools in the PISD. This being a first effort, we will provide both mentors and judges for the events. We seek dedicated mentors from our organization in twelve areas (see below). These mentors will be available by phone to advise the student participants on technical aspects of their projects. School level competition will take place in January 1995, with district level judging in late January or early February. We will need judges at the four schools in all twelve areas as well as at the district competition. We expect that each mentor will spend two to four hours for the entire project and each judging will take from one to two hours. Our participation will be very rewarding both from interaction with the young intellectuals and from helping them to establish their future technical interests. With our support, many of these youngsters may receive Science Fair scholarships or fellowships that could improve their lives.

#### Project Categories:

#### Engineering and Physical Sciences

Chemistry

Computers

Earth/Space Sciences

Engineering

Mathematics

**Physics** 

#### Life Sciences

Behavior/Social Sciences

Biochemistry

Botany

Environmental Science

Medicine/Health

Zoology

(see PISD, page 8)



PISD (from page 7) Tentative Schedule:					
Mid-August:	Approval to hold Science Fair for PISD high schools				
August:	Inform PISD high schools  Teachers advise students about the opportunity to participate in the Science Fair				
September:	Instruction package distributed to schools and students				
•	Brief students and parents at each school about topics, effort, mentors, etc.				
	Mentors requested by students and assigned; individual project effort starts				
Mid-October:	Briefing, monitoring at each school, if needed				
Mid-November:	Briefing, monitoring at each school, if needed				
December:	Details of projects and participants to Houston				
January:	Judging at each school; participation certificates to all entrants, ribbons to first two in each category				
February:	Judging at district level; ribbons to first two in each category				
March:	City-wide judging				
D E					
Registration Form	for Mentors and Judges				
Name		<del></del>			
Employer					
Address					
Telephone	Fax	E-mail			
Subjects for MENTO	ORING (note preferences 1, 2, 3	3, etc.)			
,					
Chemistry		Behavior/Social Sciences			
Computers	an aca	Biochemistry/Microbiology Botany			
Earth/Space Sci	ences	Environmental Science			
Engineering Mathematics		Medicine/Health			
Physics		Zoology			
Subjects for IUDGIN	NG (note preferences 1, 2, 3, etc	c.)			
, -	1	Behavior/Social Sciences			
Chemistry Computers		Benavior/social sciences Biochemistry/Microbiology			
	ences	Botany			
Earth/Space Sciences Botany Engineering Environmental Science					
Engineering Mathematics		Medicine/Health			
Physics		Zoology			

## From Our Sister Section in China

#### Jim McLane

#### Sister Section Coordinator, China

THE INTERNATIONAL SPACE ACTIVITIES COMMIT-TEE wishes to determine the depth of interest in organizing a third Houston Section Technical Delegation to visit China similar to those of 1988 and 1992. As before, our host would be the Chinese Astronautical Society.

The 14/15 day itinerary near the end of April 1995 would most certainly include Beijing and Shanghai, the location of our Sister Section, the Shanghai Astronautical Society. Other centers of aerospace activity to be visited might include Xi'an and the northwest rocket launch site near Lanzhou. In addition to visits to aerospace laboratories, institutes and facilities tailored to the technical interests of the participants, visits to the principal tourist attractions would be included. A separate program for accompanying non-technical spouses would be included.

Hotel accommodations would generally be 4-star, and the estimated price of \$3,300-3,700 per person, double occupancy, would be virtually all inclusive from Houston. A minimum of 16 participants will be required to make the project feasible—the number will be limited to 25 maximum.

Delegates will meet and talk with many key figures in the Chinese space program. Additionally, arrangements would be made for those delegates who wish to do so to make short technical presentations in appropriate Chinese settings. This is a superb way for aerospace professionals at every level to see and learn about the real China, through interaction with Chinese counterparts.

To express your interest and be put on the list to be notified of future developments, please get in touch with

Jim McLane, Sister Section Coordinator, China Telephone: (713) 488-0312

Internet: FWGD81A@PRODIGY.COM

## Cranium Cruncher

#### Lou Livingston **Editor**

By POPULAR DEMAND, the Cranium Cruncher is returning to Horizons. As before, names of those correctly solving the Cruncher go into a hat; a random drawing picks the winner of a free dinner at an upcoming Houston Section meeting. Here's an easy one to start.

A layer cake is 8" square with three 1" layers. There is a thin layer of icing on top, on all four sides, and between the layers. How can the cake be cut into seven portions so that each portion has the same amount of cake and of icing?

Send your solution to Mike Begley at LESC/C87 before September 30, 1994. Because of irregularities in the Horizons schedule, the answer and the winner will appear in the November issue.

To make things a little more interesting, and to save your hard-working Horizons staff the trouble of digging up a lot of puzzles, send in your own favorites (with solutions, please; I'm not always as clever as I hope everyone thinks I am) and try to stump your fellow members. You will, of course, get full credit for your submissions when used.

### **Events**

### Dinner Program Plans

#### **Mac Parks** Program Chairman

We have three stimulating programs already scheduled for the Section year, with more to come as we proceed with arrangements. You will find with this newsletter the announcement for our September meeting, featuring some exciting insights into the Hubble Space Telescope servicing mission and subsequent observations with the telescope. For airplane lovers, in October we will feature the curator of the Lone Star Flight Museum to talk about his specialty. For November, we've scheduled a program on low-

(see Dinner, page 10)

#### Dinner (from page 9)

hopper, we're working on topics like media coverage of the space program, global navigation, and aerospace education.

We're open for suggestions for program ideas, so if you have one, give Mac Parks a call at 483-9259, or send an e-mail message to

PARKS\_MAC@LOCK.JSC.NASA.GOV Volunteers are always needed to help arrange and coordinate programs.

## AIAA Calendar

THE AIAA CALENDAR is intended to encompass all Houston Section events and significant dates. This includes Executive Council meetings, which are open to interested members, and *Horizons* deadlines. It will also include committee meetings, Lunch & Learns and similar events if *Horizons* hears about them in time for inclusion. Please send pertinent details to Mike Begley, LESC/C87, or to Lou Livingston, 1911 Pepper Hill, Houston, TX 77058.

### September

#### <u>8 - Thursday</u>

Horizons inputs for October due COB.

#### 15 - Thursday

Executive Council meeting.

5:00 PM, Center for Advanced Space Studies.

#### 29 - Thursday

Monthly dinner meeting.

"Results from the Hubble Space Telescope," Tom Akers and Dr. David Leckrone.

Gilruth Center, 5:30/6:30/7:30.

#### October

#### 5 - Wednesday

IEEE videoconference.

"ISO 9000: A Critical Review of 1994 Revisions." Gilruth Center.

#### 11 - Tuesday

Horizons inputs for November due COB.

#### 11 - Tuesday

**Executive Council meeting.** 

5:00 PM, Center for Advanced Space Studies.

#### 18 - Tuesday

Monthly dinner meeting.

"Lone Star Space Museum.".

Gilruth Center, 5:30/6:30/7:30.

#### 19 - Wednesday

IEEE videoconference.

"Maximizing Productivity: Information Integration for User Productivity."

#### 20 - Thursday

Education/Career Enhancement Comm. seminar. "Computerized Investing," Charles Schwab & Co. Center for Advanced Space Studies Lecture Hall, 3600 Bay Area Blvd., 6:45 PM.

#### November

#### 7 - Monday

Horizons inputs for December due COB.

#### 9 - Wednesday

IEEE videoconference.

"Mechatronics."

#### 10 - Thursday

**Executive Council meeting.** 

5:00 PM, Center for Advanced Space Studies.

#### 15 - Tuesday

Monthly dinner meeting.

"Low-Cost Space Transportation," J. R. French. Gilruth Center, 5:30/6:30/7:30.

#### 30-Dec.2 - Wednesday-Friday

JSC/IEEE/AIAA workshop.

"Virtual Reality."

Gilruth Center.

#### December

#### 1 - Thursday

Executive Council meeting.

5:00 PM, Center for Advanced Space Studies.

#### December (cont.)

8 - Thursday

Monthly dinner meeting.
Director's Reception.
Gilruth Center, 5:30/6:30/7:30.

<u> 19 - Monday</u>

Horizons inputs for January due COB.

#### January

19 - Thursday

Executive Council meeting. 5:00 PM, Center for Advanced Space Studies.

23 - Monday

Horizons inputs for February due COB.

26 - Thursday

Monthly dinner meeting.

Program TBD.

Gilruth Center, 5:30/6:30/7:30.

#### **February**

16 - Thursday

**Executive Council meeting.** 

5:00 PM, Center for Advanced Space Studies.

21 - Tuesday

Horizons inputs for March due COB.

23 - Thursday

Monthly dinner meeting.

Program TBD.

Gilruth Center, 5:30/6:30/7:30.

<u>TBD</u>

Space Logistics Symposium.

#### March

<u> 16 - Thursday</u>

**Executive Council meeting.** 

5:00 PM, Center for Advanced Space Studies.

23 - Thursday

Monthly dinner meeting.

Program TBD.

Gilruth Center, 5:30/6:30/7:30.

27 - Monday

Horizons inputs for April due COB.

<u>TBD</u>

Student Paper Competition.

April

3-6 - Monday-Thursday

Life Sciences & Space Medicine Symposium.

<u> 20 - Thursday</u>

**Executive Council meeting.** 

5:00 PM, Center for Advanced Space Studies.

24 - Monday

Honzons inputs for May due COB.

27 - Thursday

Monthly dinner meeting.

Program TBD.

Gilruth Center, 5:30/6:30/7:30.

May

18 - Thursday

**Executive Council meeting.** 

5:00 PM, Center for Advanced Space Studies.

22 - Monday

Horizons inputs for June due COB.

25 - Thursday

Monthly dinner meeting.

Program TBD.

Gilruth Center, 5:30/6:30/7:30.

TBD

Annual Technical Symposium.

June

<u> 15 - Thursday</u>

**Executive Council meeting.** 

5:00 PM, Center for Advanced Space Studies.

22 - Thursday

Monthly dinner meeting.

Honors and Awards Banquet.

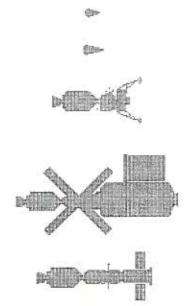
Gilruth Center, 5:30/6:30/7:30.



## OUTSTANDING SECTION AWARD



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



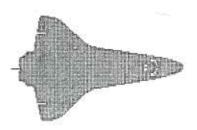
## SECTION SPECIAL EVENT AWARD



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

1971-1972

AIAA Houston Section P.O.Box 57524 Webster, TX 77598



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



## Joint Dinner Meeting

sponsored by the

American Astronautical Society, IEEE-Galveston Bay Section, The American Institute of Aeronautics and Astronautics, **ISA-Clear Lake Section** 

present

## EXPLORING THE UNIVERSE WITH THE HUBBLE SPACE TELESCOPE

### featuring

### LT. COL. TOM AKERS

ASTRONAUT AND STS-61 EVA CREWMAN

Speaking about the brilliantly-executed First Servicing Mission

and

### DR. DAVID LECKRONE

SENIOR SCIENTIST FOR THE HUBBLE SPACE TELESCOPE

presenting some of the amazing recent astronomical observations made with the restored capability of the HST

### THURSDAY, SEPTEMBER 29, 1994 at the JSC GILRUTH RECREATION CENTER

		For Reservations:			
	51	Barbara Nepveaux	483-0194	IEEE, ISA	
		Kent Frohme	333-6012	AAS	
E-20 Coch Po	Cash Bar	<b>Emyre Robinson</b>	280-9119	AAS	
5:30	Filet Mignon Dinner	Ardell Broussard	283-1040	AIAA	
6:15 Filet Mignon Dinn 7:00 Program	•	Mary Ann Bivona	483-1350	AIAA	
	rrogram	Sarah Leggio	282-3160	AIAA	
Dinner - \$12.00		Fran Jamison	333-6277	AIAA	
AIAA Students and Non-employeed AIAA members - \$6.00					

Reservations necessary by COB Friday, Sept. 23

(Cancellations required by the same time or dinner will be billed)

#### UNIVERSITY of HOUSTON

Cullen College of Engineering

Houston, TX 77204-4814

Fax: 713/743-4214 713/743-4200

Office of the Dean

GRADUATE DEGREE PROGRAMS IN INDUSTRIAL ENGINEERING AND AEROSPACE ENGINEERING

COURSES OFFERED AT UH-CLEAR LAKE FALL 1994

Classes begin Thursday, August 25, 1994

Required Courses in Industrial Engineering

INDE 6332/06547

**Engineering Project Management** 

Monday

Instr. J. Hunsucker Room 2407 Bayou Bldg.

INDE 6365/06548

Engineering Economy II

Instr. J. Hunsucker

4:00-7:00 PM

4:00-7:00 PM

Wednesday

Room 2407 Bayou Bldg.

Courses in Aerospace Engineering

MECE 7397/06553

Composite Materials

Instr. S. S. Wang

4:00-7:00 PM

Tuesday

Room 1324 Bayou Bldg.

MECE 7397/06554

High Speed Aerodynamics

Instr. C. Li

4:00-7:00 PM

Thursday

Room 1324 Bayou Bldg.

## ADDITIONAL GRADUATE COURSES OFFERED VIA INSTRUCTIONAL TELEVISION RECEIVED AT BUILDING 45 AT NASA/JSC

CIVE 6361/06637 5:30-7:00 PM Ground Water Hydrology

Instr. T. Cleveland

Monday/Wednesday

Instr. J.-A. Lee

ELEE 6397/06551 12:00-1:30 Computer Design & Architecture Monday/Wednesday

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ELEE 7373/06552

Adv. Topics in Computer Architecture

Instr. P. Markenscoff

11:30-1:00

Tuesday/Thursday

ENGI 6362//06555

Methods of Applied Mathematics

Instr. L. Wheeler

4:00-5:30 PM

Monday/Wednesday

Instr. D. Deal

INDE 6368/06568 4:00-5:30 PM Advanced Statistics Seminar

Topics in Industrial Automation

Instr. J. Chen

INDE 6380/06550 5:30-7:00 PM

Tuesday/Thursday

Tuesday/Thursday

(Room assignments to be posted in Building 45/Room 146 at NASA/JSC)

ADVISING:

Thursday, August 4, 1994

10:30 AM to 2:00 PM

NASA/JSC Lobby - Building 45

Applications for admission for FAII 1994 will be accepted at this time. Call Cullen College of Engineering at 743-4200 or NASA/JSC Training Office at 483-3075 for registration and admission information.



## **Houston Section**

### Officers 1994-1995

Rev. 8/20/94

COUNCILLORS:

<u>Address</u> Name

**Phone** Fax E-Mail
Friendswood ISD Dick Bennett

482-2950

Shirley Brandt 486-3941

Dave Criswell UHÇL

486-5019 Carl Huss

16522 Clearcrest, Houston 77059

488-6310 Paul Judas

**GB Tech** 333-3705

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480-2086

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483-4241 Mary White

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488-7370

Steve Zobal MDC-1/211

283-1023 283-1855 zobal@pst.mdc.com

SPECIAL COMMITTEES:

International Space Activities

China: Jim McLane 1702 Fairwind, Houston 77062 488-0312 FWDG81@prodigy.com

Scholarship

Leon Swartz IBM/4206

282-8136

OFFICERS:

Chairman

George Nield JSC/TM2

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Chairman-Elect

LESC/B14 Don Probe 333-6278 333-8038

Vice-Chairman, Operations

LESC/C87 Michael Begley

333-6996 333-8037

Vice-Chairman, Technical

Kamlesh Lulla JSC/SN4

483-2911 483-5159 lulla@snmail.jsc.nasa.gov

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Treasurer Franklin Chang-Diaz JSC/CB

244-8923

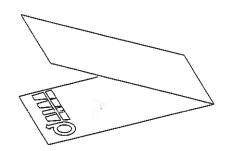
## 1994-95

Wallet Reference Card

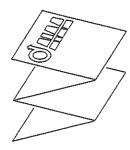
The attached wallet card contains names, addresses, and phone and fax numbers for Houston Section officers. councillors and committee chairmen. Please save for future reference.

#### Assembly Instructions:

- 1. Cut along line. (Neatness counts.)
- 2. Fold in half with the AIAA logo on the inside.



3. Fold in quarters, putting the logo and officers (Chairman, etc.) on the outside.



4. Keep for reference.

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<u>Address</u>
<u>Name</u>
<u>Phone</u> <u>Fax</u> <u>E-Mail</u>
Career Enhancement/Professional Development
Jayant Ramakrishnan Dynacs
   333-4419
Communications & Publicity
Mike Begley (acting) LESC/C87
   333-6996
Honors & Awards
                     16522 Clearcrest, Houston 77059
 Carl Huss
   488-6310
Membership
                     Martin Marietta
Clay Shadeck
   280-2701
Programs & Events
Mac Parks
                     LESC/C71
   483-9259
Public Policy
 Shirley Brandt
   486-3941
Newsletter
 Editor: Lou Livingston 1911 Pepper Hill Way, Houston 77058
   480-2086
                     LESC/C87
 Printing: Jeff Tave
   333-7007
 Mailing: Bill Best
                      RSOC/R12A
   282-6970
                     LESC/C87
 Flyers: Bill Geissler
                      333-6908
   333-6863
Student Activities/Pre-College
 (vacant)
Student Paper Competition
 (vacant)
Young Members
 (vacant)
TECHNICAL COMMITTEES:
Automation & Robotics
 (vacant)
Communications & Tracking
 (vacant)
Computer & Software Systems
 (vacant)
Fluid Dynamics
                      P. O. Box 726, Sugarland 77487-0726
 Rakesh Bhargava
   983-9371
Ground Test & Simulation
 (vacant)
Guidance, Navigation & Flight Control
 Jayant Ramakrishnan Dynacs
   333-4419
History/Heritage
David Portree
                      Hernandez/JM12
    483-6707
Human Support
 (vacant)
In-Space Imaging & Observations
 (vacant)
Life Science & Space Processing
 (vacant)
 Management
 (vacant)
 Materials, Structures & Dynamics
                       LESC/B30
 Gillian Parker
   333-6239
 Space Operations
 (vacant)
 Space Systems
 (vacant)
 Thermal Physics
 (vacant)
```

OPERATIONS COMMITTEES: