American Institute of Aeronautics and Astronautics

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The AIAA Houston Section Newsletter is created and typed by members of the Houston Section. It is reproduced at the Houston offices of Lockheed Engineering and Management Services Company. Address all communications to Vice Chairman of Operations, Lou Livingston, NASA/JSC mail code ED13, 483-2741.



February 1987



EDITORIALS

Comments from the Chairman

Karen D. Godek

Note: This article appeared in the January 23, 1987 issue of the JSC Roundup.

The National office of the American Institute of Aeronautics and Astronautics has selected the Houston Section as the first place recipient of the 1986 AIAA Special Event Award for the invited lecture series on Fundamentals of Spacecraft Design held last year at the Johnson Space Center. This award, which will be accepted by

Robert Lewis of JSC who was man of the Houston Section at the time, will be presented by Dr. Allen Fuhs, AIAA President, during the AIAA annual meeting in Arlington, Virginia, on April 30, 1987.

This honor comes at a time when the Houston Section is encouraging interested professionals to join the organization. The AIAA is divided into six regions nationally, with 66 chapters or sections across the country. The Houston Section, with 1,000 members, competed with such chapters as the Los Angeles and Orange County sections, with a combined membership of over 4,000, to win the outstanding event award. The Houston Section also won second place in the Outstanding Section Award and placed third in the Membership Chairman Award for AIAA sections with 500 members and

The stated purpose of the AIAA is to advance the arts, sciences and technology of aeronautics and astronautics, and to nurture and promote the professionalism of those engaged in these pursuits. The invited lecture series conducted by the Houston

Section has served as a fine example of the kinds of services the AIAA routinely provides its members.

The yearly membership fee for the AIAA is \$56. Interested persons requiring membership applications should contact Jim Visentine, Code ES5, telephone 483-8923; Bob Lewis, Code EH, telephone 483-8232; or myself, Code EH2, telephone 483-8297.

Address Changes?

If AIAA does not have your correct mailing address, you won't be receiving your mail on time. This includes the Newsletter, which uses mailing labels prepared by Headquarters. Included in this issue is a form letter you can use if you don't want to compose your own. Just fill it out, fold, staple, stamp and mail.



Invited Lecture Series
Facilitators
(left to right)

Dick Gillen
Jim Visentine
Bob Lewis
Mallik Putcha
Tom Barry
Joe Gamble
Clay Shadeck
Dudley Nelson
Stephanie Vickery

(not pictured)
Dr. Alan Gates
Karen Godek



February 1987



SECTION ACTIVITIES

Young Cosmonauts Visit JSC

Jim Oberg Councillor

As part of their national tour last December, ten "young Cosmonauts" visited the Johnson Space Center where they were greeted and hosted by numerous AIAA members. The ten teenagers were accompanied by five Soviet adult staff workers and by civilian cosmonaut Vladimir Solovyov, veteran of the world's longest space mission (eight months in 1984) and recently returned from a duty tour aboard the new "Mir" space station.

The touring Soviets were greeted by JSC Deputy Director Paul J. Weitz, an AIAA senior member and a former astronaut, along with current astronauts Bill Fisher, Jerry Ross, Dave Walker, Bruce McCandless, Kathy Sullivan and Vance Brand. They were shown space station crew module mockups, the RMS trainer and cockpit mockups, and the Mission Control Center (where Solovyov, a former OMS/RCS flight controller at the Soviet Kaliningrad mission control center, met with American colleagues in the same specialty).

For lunch the group was hosted by the Houston Section of the AIAA, and a convenient meal was served at the main JSC cafeteria. After a quick visit to the gift shop, and a gracious exchange of gifts and good wishes, the Russians were off to the airport for another day, another city.

Solovyov was the first Soviet cosmonaut to visit the NASA center in Houston in almost a decade.

Poster Session at **February** Dinner Meeting

Marian Lewis Chairman, Life Sciences TC

The Life Sciences Technical Committee is arranging a poster session concurrently with the social hour at the regular dinner meeting February 26. The subject of the session is the NASA Space Bioreactor, which is a self-contained cell culture apparatus designed to operate in microgravity.

The Space Bioreactor will be capable of producing raw biomolecules for microgravity separation of desirable products and will be used to provide cells for the study of the physiological effects of microgravity at the cellular level. In addition, this device operates as an ecological life support system and as such is capable of waste removal and food production. A device such as the Space Bioreactor may become important as a component of future microgravity closed ecological life support systems.

25th
Anniversary
Section Pins
Available
\$4.00 each
contact Carl Huss
280-1553

TECHNICAL COMMITTEE NEWS

Management **Technical** Committee Formed

Chris Cummins Secretary, Management TC

The Houston Section has a new Technical Committee. The Houston Section Council accepted a proposal made by a group of interested Section members. Carlos Campos, in his presentation to the Council, indicated the committee would be presenting Lunch & Learn meetings covering project management issues and would be creating a series of project management case studies. In addition to these regular activities, the new Technical Committee has big plans for hosting a national conference on project management during Space Week '88. This conference will focus on how project managers can assist large aerospace projects in achieving their goals.

Initial officers for the committee are Carlos Campos (JSC/PE4), chairman; John Trebes (JSC/SP52), Lunch & Learn organizer; and Chris Cummins (JSC/KX3), secretary. If you are interested in joining the committee or getting on its distribution list, call-Carlos at 483-1136 or Chris at 483-0354.



February 1987



Mechanics & Control of Flight - Satellite Seminar

Walter J. Lueke Vice-Chairman, Technical

The new Chairman of this technical committee is planning a very excellent lunch and learn program for March. Utilizing the new satellite facilities at the Gilruth Center, the committee plans to host the live presentation on "Aeroelastic Interactions with Aircraft Flight Control" by Robert L. Swaim of Oklahoma State University, on March 3, 1987. A review of past research in the USA will be given, as well as

rch needed in the future for new rams such as the National scheduled for 11:00 am to 12:45 pm CST and will be free of charge. Please notify the Chairman of the Mechanics and Control of Flight Technical Committee, Mr. Jalal Mapar of LEMSCO at 333-6283 if you are interested in attending, so that adequate seating facilities may be arranged.

Space Systems Lunch and Learn

Al Louviere of Space Industries, Inc., spoke before an audience of 35 in the Building 3 cafeteria on December 9. He outlined Space Industries plans for an Industrial Space Facility and showed great enthusiasm about the recent cooperation agreement signed with Westinghouse. Al, a former NASA employee, discussed the differences between the Space Station and SII's plans and operations. The members of the Space Systems TC look forward to having Al and other members of SII return to speak as progress is made on the Industrial Space Facility.

Upcoming Space Systems TC Lunch & Learns include:

Late February - James Oberg, Rockwell International

Early March - Dieter Lammers, European Space Agency

April - Charlie Mallini, Advanced Programs Office

Life Sciences

Marian L. Lewis, Ph.D. Chairman, Life Sciences TC

A Life Sciences Technical Committee meeting is scheduled for 12:00 noon on February 27, 1987, in the Building 37 conference room at JSC. The speaker will be Mr. William H. Bowie, a Senior Research Scientist- Bioreactor Development, for the Space Bioreactor Project. Mr. Bowie will present "Aspects of Mass Culture of Cells in Microgravity - Vessel Design Considerations and Cell Growth."

The Life Sciences TC encompasses professional areas of interest including space habitation, astronaut health, human factors, commercialization and pharmaceuticals, and the basic science disciplines of cell and molecular biology, biochemistry and microbiology.

A very brief business meeting will be held to address submission of abstracts for the upcoming 12th Annual Technical Symposium. All interested persons are encouraged to attend this committee meeting.

This space is available for your Technical Committee meeting announcements

contact: Lou Livingston, 483-6603





WHO'S WHO IN THE HOUSTON SECTION

Fellows and Associate Fellows Named

Twelve members of the Houston Section were recently selected by the National Membership AIAA Committee for Associate Fellow grade in the Institute. Nominees for Associate Fellow must be persons who have demonstrated a successful practice in the arts, sciences or technology of aeronautics or astronautics for a minimum of twelve years. In addition, the number of Associate Fellows selected each year is limited to one for every 150 voting members in the Institute. Those selected in 1986 were:

Rod Bown
Charles Dalton
John Fabian
Jake Klinar
Richard Kohrs
Lou Livingston
Frank Morgan
Steve Nagel
Malik Putcha
Emyre Robinson
John Schuessler
Nancy Wood

The Houston Section is also very fortunate to have had one of its members upgraded to be a Fellow of the Institute. Fellows are "persons of distinction in aeronautics or astronautics who have made notable and valuable contributions to the arts, sciences or technology thereof." This very select honor has been bestowed upon Mr. Vance Brand.

National Technical Committees

In addition to those Houston Section members who serve on National Operations Committees (see January Newsletter), a number from this Section also serve on various National Technical Committees. Thanks to these folks, Houston is represented quite well across a diverse range of technical disciplines.

MEMBER

Robert C. Angier Al J. Birsinger Greg C. Blackburn

John Louis Blake Rodney Bown Leland A. Carlson

Arthur M. Dula Glenn Lee Ellis Walter E. Haisler, Jr. J. C. Hundley John W. Kiefer Kenneth D. Korkan Stanley H. Lowy Paul Maley Humboldt C. Mandell, Jr. Darryl W. May Thomas V. McElmurry Bethene E. McNealy Stan J. Miley Gerald L. Morrison Henry C. Otten Richard C. Parish Robert W. Payne George P. Peterson Bass Redd Kyle Rone Frank Samonski, Jr. Carl D. Scott John W. Sifford Donald K. Slayton Donald E. Smith

Edwin W. Smythe

TECHNICAL COMMITTEE

Software Systems Communications Systems Command, Control, Communications and Intelligence Computer Systems Computer Systems Applied Aerodynamics, Fluid Dynamics Legal Aspects of Aero. & Astro. Space Transportation Space Transportation Space Systems Astrodynamics Aeroacoustics Aircraft Design Space Siences and Astronomy **Economics** Aeroacoustics Flight Testing Flight Simulation Flight Testing Aeroacoustics Flight Simulation Thermophysics Sensor Systems Thermophysics Space Transportation Software Systems Life Sciences & Systems System Effectiveness & Safety

Astrodynamics
Space Transportation
Flight Simulation
Space Sciences & Astronomy,
Space Transportation





National....(cont'd)

John W. Sunkel Ralph J. Taeuber Richard E. Thomas

Srinivas R. Vadali James T. Visentine Donald T. Ward Richard J. Williams Larry C. Witte J. N. Yelverton David C. Zwingman Guidance, Navigation & Control
Liquid Propulsion
Command, Control,
Communications and
Intelligence
Astrodynamics
Terrestrial Energy Systems
General Aviation Systems
Space Processing
Support Systems
Computer Systems
Digital Avionics

OPPORTUNITIES FOR INVOLVEMENT

Prizes for Top Recruiters

Jim Visentine Membership Chairman

In commemoration of our 25th anniversary, the Houston Section extends to you an invitation to help our Institute grow. As you are probably aware, professional socities such as ours tend to grow and gain members primarily because of one-on-one contact. When you believe you have something of value, you naturally want to share it with your friends.

Toward these ends, your executive council has designed a membership drive -- which coincides, incidentally, with the AIAA's national membership drive -- in which YOU play a pivotal art. And to make it more interesting

I fun, we've built a contest into it.

brings in the most new members between now and April 30, 1987, will be recognized as the Top Recruiter and will win a \$100 gift certificate redeemable at Macy's department store. The second and third best recruiters will receive free the Hilton's fabulous Sunday brunch for two.

Can you think of any better way to spend a lazy spring afternoon than dining at the Hilton and watching the sailboats, with their beautiful colors, glide effortlessly over the waters of Clear Lake?

I thought not! If you wish to participate in this important membership drive, use the new applications you recently received from AIAA and get started now. To obtain additional applications, you need only give me a call at 483-8923, or contact Nancy McKew of the AIAA Membership Committee in New York at (212) 408-9795. There is no limit to the number of applications you may request, so please give either of us a call at your earliest convenience.

Busy Recruiters

Jim Visentine Membership Chairman

The Houston Section recognizes the following members for their participation in the "Recruit a Member" campaign. Between October 1 and November 15, 1986, they successfully brought in one or more new members. AIAA applauds their efforts and encourages you to join them in helping the Institute reach its goal of 47,000 members by 1990.

Richard A. Hermling
Stanley H. Lowy
Walter J. Lueke
James C. McLane III
Emyre B. Robinson
James C. Snowden
Stephanie A. Vickery

The next time you see these persons at our monthly meetings or special programs, please tell them "Thanks!" for a job well done.

AIAA Scholarship Established -Donations Requested

Bret Wingert Young Member Chairman

The Scholarship Committee put its final touches on the Houston Section scholarship program and the first applications are due to the committee in March. The first \$250 scholarship will be awarded this spring. The initial endowment is small and the committee





hopes to increase it through successful section programs. However, the committee calculated at the last meeting that if each member in the section donated \$5 to the scholarship fund the endowment would more than double! Therefore, the scholarship committee is soliciting donations from the general membership.

This scholarship will be awarded to a student in science or engineering attending a school in our region, and based on his or her academic performance and contributions to his or her field. It is a renewable scholarship based on continued academic performance.

Considering today's reduced federal, state and local aid, won't you consider making a contribution? Send it to:

AIAA-Houston Scholarship P.O. Box 57524 Webster, TX 77598

Note: This may be tax-deductible for you.

Technical Symposium Just Around the Corner

Walter J. Lueke Vice-Chairman, Technical NASA/JSC ES361 483-5939

The AIAA Houston Section will hold its 12th Annual Technical Symposium on May 14, 1987, at the University of Houston - Clear Lake. The theme for this year is "Space Frontiers - New Beginnings". A call for abstracts on papers covering work on the Space Shuttle, Space Station and other space activities by the JSC community will

be appearing shortly. Remember, you do not have to be an AIAA member to participate!

The papers should be written so as to be presented in 10 to 15 minutes with a viewgraph or slide format. New topics this year will include Management, Ethics and Space Engineering, International Space Activities, and Space Commercialization, along with traditional topics covering the technical aspects of space flight. Now is a good time to start your 250 words or less abstract.

THE MEMBERS SPEAK OUT

Dear Lou:

I've been reading articles about international cooperation on the Space Station Program. It seems that the arrangements with Canada and Japan are fairly palatable to those two countries. The Europeans, however, are not happy with what they term a "minor" part in the program. They would like to be "partners". However, their 15% funding and the U.S.' 80% seem to say that they are asking for too much. It seems the old saying "You get what you pay for" applies here. If they want to be partners, why don't they put up some more money?

It would be nice if the President's initiative on international cooperation could be carried out. But we do not need them and they do need us, at least in the near term. Where do the Europeans and others get the audacity to demand more than they deserve? This seems like a typical relationship between the U.S. and other countries (e.g., the United Nations). I say if they continue to insist on an equal share that we get on with it by ourselves and let them link up later as best they can!

Sincerely, Ernie Hillje

Ernie, quit beating around the bush and say what you the k... Official comment is unavailable, so some personal views will have to do. At first glance, the negotiating posture of some of our international partners may appear a bit pushy. It seems to me, however, that it's just that: a negotiating posture.

Demanding more than one expects to get, or will settle for, has to be the world's oldest bargaining ploy. It is, of course, up to us to shape our counteroffers with this in mind. When we don't, it's our fault, not theirs. In the final analysis, isn't this what you're really saying?

Need I add that my comments in this column are MY comments? They don't represent an AIAA position, nor a Houston Section position, nor a NASA position. If I include an official response, it will be explicitly noted as such.

Surely someone besides me has something to say about this. Send it (yes, the mail code changed again) to

Lou Livingston JSC/ED13



February 1987



Let's Get it Right Lou

Dear Lou:

Referring to my letter and your response in the January 1987 AIAA Houston Section Newsletter:

- 1) I did not mention the Soviets in my letter; why did you?
- 2) Are you saying the PRC is NOT a Communist country? I agree with C.P. Houston's recent political cartoon in the Houston Chronicle (attached).
- 3) You were correct in that "...this isn't germane to your central point..."

Ernie Hillje

- 1) Rightly or wrongly, I inferred the USSR from your first sentence, which mentioned "communist countries" (plural).
- 2) I said the PRC was, in my view, Chinese first and communist second. It is, of course, still communist.

o comment.

Lou Livingston JSC/ED13

Don't Miss Out!

Make your reservations now for the February 26th Dinner meeting with Dr. William Ward from MIT

THE CRANIUM CRUNCHER

Renee Lance

The answer to January's puzzle, which was to find the number of volumes in a set of encyclopedi... was 20. The following people correctly answered the puzzle.

George Wells, MDAC
John Armsparger, Ford M4B
Dave Leestma, CB
Jim McCory
Mary Cerimele, ED2
Carl Scott, ED3
E. W. Smythe, IBM
Scott Murray, EH3
Jack Johnson, EE
Tames Orr, IBM
in Templin, ED22
er Hasbrook, DH4

Henry Schneider, MDAC T315
Mark Jernigan, FS7
Dave Kaplan, DH62
Charlie Randall, GHG
Mike Tompkins, BX-D
Robert Castle, DF2
Carl Kovich, Alpha Bldg Corp
Steve Gotch, MDAC
John Masetta, Texas A&M
Roscoe Lee, TRW
Norm Hecht, Texas A&M

The winner of the free AIAA dinner is E. W. Smythe. He was chosen randomly from all the correct respondents. Congratulations to him and thank you to all the others who took the time to work the puzzle.

The February Puzzle:

A rectangular floor is composed of square tiles of the same size, 81 along one side, 63 along the other. If a straight line is drawn diagonally across the floor from corner to corner how many tiles will it cross?

Many thanks to Zaki Husain of Daniel Industries for sending in this puzzle. If you have a favorite please send it to me care of Ed Monteiro and I will try to use it. Send your answers to Ed Monteiro, MDAC/T502, 16055 Space Center Blvd., Houston, TX 77062.





UPCOMING EVENTS

Section's Monthly Dinner Meetings

Zafar Taqvi Programs Chairman

The following outstanding programs have been finalized for the Section's monthly meetings for the rest of this year. Please schedule your activities to avoid any personal conflicts. Further details on the programs and the speakers will be provided in the monthly meeting flyers.

DATE	PROGRAM	SPEAKER
Feb. 26, 1987 Thursday evening	In Celebration of the Pioneers and Votagers	Dr. William Ward, MIT AIAA Distinguished Speaker
Mar. 26, 1987 Thursday evening	Space Shuttle Status Report	Arnold Aldrich Director, NSTS
Apr. 23, 1987 Thursday evening	Space Telescope	B. R. Bulkin, LMSC Space Telescope Prog. Mgr.
June 4, 1987 Thursday evening	Honors and Awards Program	Slides, etc. (no speaker)

Colorful Program Slated for February 26th Meeting

AIAA Distinguished Lecturer, Dr. William Ward of MIT's Lincoln Laboratory will speak on "In Celebration of the Pioneers and Voyagers: To Jupiter, Saturn, Uranus, and Beyond" at the February dinner meeting of the Houston Section of the American Institute of Aeronautics and Astronautics. The dramatic pictures of Jupiter, Saturn, Uranus, their rings, and their satellites transmitted to Earth by the spacecraft Pioneer 10, 11 (1973-1979), and Voyager 1, 2 (1979-1986) are the culmination of one of the major scientific and engineering enterprises of our time. As we look forward to Voyager 2's encounter with Neptune in August of 1989, it is rewarding to look behind these pictures to see how they came to be; to learn what makes the spacecraft tick. We find that these missions embody far more than science or technology or both. Every area of human activity stands in intimate relationship to them.

During this presentation, Dr. Ward will build these Pioneer and Voyager spacecraft, launch them on their trajectories, sample the scientific data that they gather, and marvel at the unimagined wonders that they reveal. This evening will have something for everyone - don't miss it!

AMERICAN INSTITUTE OF A Houston Section P.O. L

AUTICS AND ASTRONAUTICS 524 Webster, TX 77598

AD HOC COMMITTEES

January 1987

1986 - 1987 AIAA Houston Section

OFFICERS	AFFILIATION AND MAIL CODE	WORK PHONE	SENIOR ADVISORS	AFFILIATION AND MAIL CODE	WORK PHON
Chairman			Sharon B. Castle	NASA/DH65	483-5505
Karen D. Godek	NASA/EH2	483-8297	Norman H. Chaffee	NASA/PB	483-6125
Raion D. Godek	11/10/702112		(11/86 Norm is currently at KSC)		
Chairman-Elect			Jack C. Heberlig	IBM/4270A	282-7157
Carl R. Huss	MDAC/T511	280-1553	Robert E. Lewis	NASA/EH	483-8232
INCOMENT MARK			James C. McLane, Jr.	Engineering Consultant	488-0312
ice-Chairman, Operations				1702 Fairwind, Houston 77062	
Louis E. Livingston	NASA/ED13	483-6603	William H. Simmons	NASA/Retired	649-2558
1480				7511 Glen Heath, Houston 77061	422 2430
ice-Chariman, Technical			Robert R. Stephens	MDAC/T708	280-1560
Walter J. Lueke	NASA/ES361	483-5939	(1/87 Robert will not be available unti		
cross to the analysis govern	10.407.1097	200 1000 1 2000 1	Charlie Wolfers	MDAC/T605	280-1524
ecretary			Loren E. Wood	TRW	333-3133
Debra L. Nienhaus	LEMSCO/B12	333-6730			
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reasurer Scott Satterwhite	IBM/6606A	282-7756	STAFF / REPRESENTATIVES		
returned to resident		390 1070/31 00 101			
PACE BASINGS			Joseph Algranti - RAC IV	NASA/CC-UH	483-7226
COUNCILLORS			E.A. (Doc) Kiessling - ECH	15402 Wandering Trail	749-1721
Sport Allians		555 90 93	C	Friendswood, TX 77546	(482-3665)
le O. Fairchild	NASA/ED22	483-6630	Bill Best - CLCTS	Rockwell/RS12	282-3597
chard A. Hermling	NASA/PB8	483-0445	Jim O. Hudson - Historian	Rockwell/TC12	483-3349
nest R. Hillje	Rockwell/ZC01	282-5337			
bert E. Lewis	NASA/EH	483-8232			
dward J. Monteiro	MDAC/T5A	280-1629	DEGICAL NA ADMIGORNA COLARATTEE		
mes Oberg	Rockwell/DM53	483-5954	REGION IV ADVISORY COMMITTEE		
n Rhorer	IBM/1204A	282-7936	Desirts Diseases Verses March		
ephanie A. Vickery	LEMSCO/B12	333-6407	Deputy Director - Young Members	IBM/6606A	000 7750
ichard L. West	MDAC/T608	280-1620	Bret Wingert	IDIWOOOA	282-7756
87 Dick will not be available un					
ancy Wood	The Space Foundation	332-0779			
	P.O. Box 58501		AD HOC COMMITTEES		

(Logan Haycraft, JR., who held a councillor position, is permanently in Huntsville, AL 205-544-1780)

Houston, TX 77258

AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS

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

January 1987

1986 - 1987 AIAA Houston Section

OPERATIONS COMMITTEE CHAIRME	N	Series Series	TECHNICAL COMMITTEE CHAIRMEN		
Program and Events		300-2650	Communications Systems		
Zafar Taqvi	LEMSCO/B12	333-6544	Ray A. Baker	LEMSCO-NASA/C22	483-0078
Membership		1880 1830	Computer and Software Systems		
James T. Visentine	NASA/ES5	483-8923	Edward J. Monteiro	MDAC/T5A	280-1629
Young Members		100	Energy Systems		
Bret Wingert	IBM/6606A	282-8944	Dr. Frank Baiamonte	NASA/EP5	483-9046
Student Affairs			Ground and Test Simulation		
Richard P. Bennett	MDAC/T3B	280-1500 x 3112	Charles A. Ritriui	Rockwell/ZC01	282-5238
Educational/Professional Development	and the same of th	385,1850	Materials, Structures, and Dynamics		
John W. Sunkel	NASA/PB6	483-5013	Don Probe	LEMSCO/B12	333-6276
Public Affairs		1.671330	Space Systems		
Quin D. Shepperd II	MDAC/T6A	280-1500 x 3080	William Bryan	IBM/6606B	282-7767
Communications/Publicity		480.0629	Mechanics and Control of Flight		
TBD			Jalal Mapar	LEMSCO/B12	333-6283
Louis E. Lawgares		893-8903	4.	The First Coult No Asset Front	
Honors and Awards Richard L. West	MD 40 7000		Life Science Space Processing	_ VX 1 (0.00 to 0.00 t	
(1/87 Dick will not be available until Ma	MDAC/T608	280-1620	Dr. Marian L. Lewis	Technology Inc./SD5	483-7229
(1707 Dick will flot be available dritti Mis	ici-April time trame.)	985 - 52E3	Management		
Newsletter			Carlos S. Campos	NASA/PE-411	482-1136
William A. Stewart	Box 57913	476-1630	enames, righted or agreement to be seen		402-1100
(editor)	Webster, TX 77598		International Space Activities		
OTTESTES			Kyle O. Fairchild	NASA/ED22	483-6630
The state of the s				Committee of the Commit	

(FOLD, STAPLE AND MAIL)

February 11, 1987

Ms. Ellen Marzullo Director, Membership Programs AIAA Headquarters 1633 Broadway New York, NY 10019

Dear Ms. Marzullo:

Please be advised that my mailing address and/or telephone number have changed and are different from that which appears on my subscription to Aerospace America and in the 1986-1987 AIAA membership roster.

To continue uninterrupted service, please correct this information as follows:

New work telephone number: ()	
New work address:	
New home telephone number: ()	
New home address:	

Sincerely yours,

AIAA Houston Section Membership No.: Renewal Date:

AIAA February Schedule

- TUESDAY

 COMPUTER AND SOFTWARE SYSTEMS TC LUNCH AND LEARN
 PROGRAM-TBD
 FRANCO'S 1101 NASA RD 1 11:45-1:00PM
 INFORMATION: ED MONTEIRO 280-1629
- 18 WEDNESDAY
 EXECUTIVE COUNCIL MEETING
 JSC BLDG 16 RM 151 4:30 PM
 SECRETARY: DEBRA NIENHAUS 333-6730
- 26 THURSDAY
 SPACE SYSTEMS TC LUNCH AND LEARN
 JIM OBERG "TETHERED SATELLITE SYSTEMS"
 RSOC BUILDING 600 GEMINI MIC ROOM (USE LOBBY) 11:30-12:30PM
 INFORMATION: ANDRE SLVESTER 483-1537
- 26 THURSDAY
 HOUSTON SECTION DINNER MEETING
 DR. WILLIAM WARD MIT AIAA DISTINGUISHED SPEAKER
 "IN CELEBRATION OF THE PIONEER AND VOYAGER SPACECRAFT"
 NASA JSC GILRUTH CENTER 5:30/7:30 PM SOCIAL/PROGRAM
 INFORMATION AND RESERVATIONS: SEE FLYER
- 27 FRIDAY
 LIFE SCIENCES AND SPACE PROCESSES TC LUNCH AND LEARN
 WILLIAM BOWIE, KRUG INTERNATIONAL, LIFE SCIENCES DIVISION
 "MASS CULTURE OF CELLS IN MICRO GRAVITY"
 JSC BLDG 37 CONFERENCE ROOM 12 NOON
 INFORMATION: MARION LEWIS 483-7229

Other Technical Activities in February

- 2 MONDAY SPACEWEEK: SPACE MANAGEMENT COUNCIL HOLIDAY INN 1300 NASA RD 1 DIPLOMAT ROOM 11:30-1:00 PM INFORMATION: DENNIS STONE 483-0407
- 4 WEDNESDAY
 JSC ASTRONOMY BROWN BAG SEMINAR
 REPORT ON THE FALL AMERICAN GEOPHYSICAL UNION MEETING
 DR.'S JIM ZIMBELMAN(LPI), BUCK SHARPTON(LPI) & CHUCK WOOD(NASA)
 JSC BLDG 31 RM 193 12:00 TO 1:00 PM
 INFORMATION: AL JACKSON 280-2296
- 11 WEDNESDAY
 JSC ASTRONOMY BROWN BAG SEMINAR
 SPACE FLIGHT 1955 STYLE-VIDEOTAPE
 DR WERNER VON BRAUN
 JSC BLDG 31 RM 193 12:00 TO 1:00 PM
 INFORMATION: AL JACKSON 280-2296
- 18 WEDNESDAY
 JSC ASTRONOMY BROWN BAG SEMINAR
 BETWEEN A STAR AND A HARD PLACE: EDUCATION AT OREGON SATE
 UNIVERSITY-DR. JULIUS DASCH (NRC)
 JSC BLDG 31 RM 193 12:00 TO 1:00 PM
 INFORMATION: AL JACKSON 280-2296
- 24 TUESDAY IEEE HOUSTON SECTION PRO-AM DAY INFORMATION: RAY BAKER 483-0078
- 25 WEDNESDAY
 JSC ASTRONOMY BROWN BAG SEMINAR
 PLANETARY STABILITY IN STELLER PLANETARY SYSTEMS
 W. D. KELLY (LOCKHEED)
 JSC BLDG 31 RM 193 12:00 TO 1:00 PM
 INFORMATION: AL JACKSON 280-2296
- 26 THURSDAY
 IEEE VIDEO CONFERENCE
 "OPTICAL DISC STORAGE TECHNOLOGY"
 JSC GILRUTH CENTER
 INFORMATION: RAY BAKER 483-0078

Calendar courtesy of Bill Best, Clear Lake Council of Technical Socities Representative

AIAA News

OUTSTANDING SECTION AWARD



1975-1976 1976-1977 1979-1980 1980-1981 1981-1982

1983-1984

SECTION SPECIAL EVENT

AWARD



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

AMERICAN INSTITUTE OF **AERONAUTICS** AND **ASTRONAUTICS**

HOUSTON SECTION

In this exciting issue.....

The debate continues over Foreign Relations Free satellite symposium offered Scholarship fund established Technical Committees are really on the move Fellows and Associate Fellows announced Plus.... all the usual great features

HOUSTON SECTION



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