Houston, Texas

June 1991

Chairman's Corner

John M. Trebes Chairman

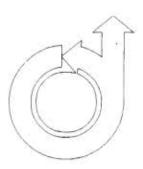
To the Best and the Brightest, the membership -- Thank you for giving me the opportunity of being your chairman during 1990-91.

To the old hands -- Thanks for your response and support at the lunch and learns, dinner meetings, and the 16th Annual Technical Symposium.

To the new hands, young and old -- Thanks for your response at our functions and for calling to volunteer your time and talent to our section.

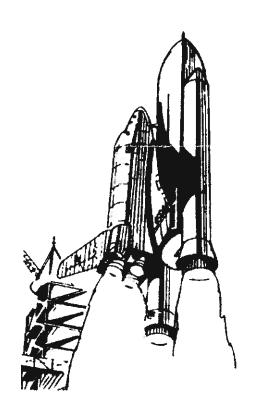
I will close this writing with some mentoring thoughts for the new hands in our aerospace community. My circle of contacts and friends has been increased and my visibility into and understanding of the workings of our aerospace community has been expanded and sharpened. It has been said that one's level of job satisfaction and quality of life is always improved by service. This has been true for me since my days as a student member of the Society of Automotive Engineers (SAE), Institute of Aeronautical Sciences (IAS), and the American Rocket Society (ARS).

A note of history -- the IAS and the ARS merged in the sixties to become the AIAA.



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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, telephone 333-3703.





Committee News

ISAC Lunch & Learn Set

Charles Blacknail International Space Activities Chairman

The International Space Activities Committee (ISAC) has scheduled a Lunch and Learn meeting for June 10, 1991, from 11:30 to 12:30 in the JSC Bldg. 3 cafeteria. Hideo Hasegawa, liaison director for NASDA, will discuss NASDA programs. The talk will include wholly Japanese programs as well as joint efforts with the U.S.

Ground Testing & Simulation TC

Sivaram Arepalli Ground Testing & Simulation Chairman

This technical committee has been very active during the last year arranging lunch and learn meetings. These meetings were given center-wide publicity and attracted audiences of varied background. The topics for these talks concentrated on various aspects including future planning of the ground testing facilities that are on site. These talks were arranged once every two or three months and we have been fortunate to tap good speakers, including:

Dr. Carl Scott, "Flow Diagnostics of Arc Jets," January 12, 1990.

Richard Bozeman, "Thermochemical Test Activities," March 7, 1990.

Dr. Donald Curry, "Aeroassist Flight Experiment: An Overview," May 17, 1990.

Donald Brown, Strategic Avionics Planning," August 15, 1990.

Dr. Steven Koontz, "Materials Degradation in Space Environment: Recent Results," February 20, 1991.

Many thanks to them and to all the participants.

We would like to continue this tradition of lunch and learn meetings. I would encourage AIAA and other technical society members to participate in the lunch and learn meetings and to suggest names of future speakers.

From Our Sister Sections

A Brief Review of our Sister Section Initiative in China

Jim McLane Sister Section Coordinator, China

Many of our newer members, and some veterans as well, may be curious about the origin, purpose and status of what has come to be known as our Sister Section Initiative in China. In the Spring of 1986 while I was on a tour of China with a technical delegtion of the People-to-People Citizen Ambassador Program, a casual discussion with a staff member of the Chinese Society of Astronautics (CSA) revealed that they were anxious to "strengthen our ties with AIAA."

At the national level AIAA already had formal ties with CSA since both represented their respective countries in the International Astronautical Federation (IAF). It seemed to me that what was missing was some sort of a tie at the local level—something that would expand the professional horizons of our Houton Section members by learning about people who share their technical interests, but who pursue their careers in a completely different cultural environment.

(continued on page 3)





Review of Sister Section in China (cont.)

Eventually this idea was shaped into a proposal for Houston to enter into a "Sister Section" relationship with an appropriate similar local unit of the CSA. The proposal gained the enthusiastic support of the 1986/87 Houston Section Chairperson, Karen Godek, and the Section Council authorized negotiations with the Chinese to determine interest. In April 1987 agreement in principle was reached at a meeting in Houston with a delegation headed by the Vice Secretary General of the CSA. This led to the designation of the Shanghai Astronautical Society (SAS), a local unit of the CAS, as our Sister Section.

The formal proclamation of Sister Section status was signed in September 1987 by Carl Huss and Liang Jin Cai, then chairmen respectively of the participating Sister Sections. It recognizes that the members of both organizations are scientists and engineers working in their respective countries to advance the arts, sciences and technology of astronautics and related fields. Further, that we share many technical interests, particularly those associated with the study of space sciences, the exploration of space, and its development to the benefit of mankind. It expresses the desire of our members to establish and recognize a special relationship for the purpose of fostering good will and understanding between members. Finally, the declaration of Sister Section status is stated, and pledges are made to extend to each other the hand of friendship, and to cooperate in all things as befits this special relationship.

At first, we agreed to initiate a number of mutual activities aimed at informing each side about the other. Exchange of publications has been one of the primary activities. We have regularly forwarded copies of our Houston Section Newsletter, *Horizons*, and the JSC *Space News Roundup* to the SAS. They do not publish a comparable newsletter, but have from time to time sent write-ups of special events and occurrences which are passed on to you through *Horizons*. They've also sent their quarterly Journal of the CSA which is available to the membership through our International Space Activities Committee library of foreign publications.

In 1988 both sides made a major effort to investigate the possibility of a joint real-time technical symposium conducted through satellite communications. This turned out to be not feasible at that time, primarily because of cost. As a substitute, we agreed to exchange video tapes of technical paper presentations made in Shanghai and Houston. The SAS organized and video-taped a special symposium for that purpose at the Science Hall in Shanghai on April 17, 1989. It was received just in time to show at a special

add-on session at our annual symposium on May 18. We reciprocated by taping ten of the best presentations from our May symposium, and sending the tape to China with special messages from the Section leadership. Plans for a similar taping of a few papers from our 1990 symposium for the same purpose somehow failed in the implementation, but we are hoping to reinitiate this exchange in 1991.

Since the basic idea behind the Sister Section initiative was to make it possible for members who have little or no opportunity for foreign travel to get to know something of their counterparts on the other side of world, a very low priority was assigned to the proposed exchange of visits between the two organizations. Nevertheless, at the urging of the CSA who made all arrangements, a technical delegation from the Houston Section visited our Sister Section and many facilities of the Chinese space program in 1988. The SAS responded by sending a delegation to visit Houston in November of the same year. We've been invited to come again, and consideration is being given to organizing a group to visit in early May, 1992.

When the Sister Section initiative was first begun, many of us felt uncomfortable because of uncertainty surrounding restrictions on contacts and information exchange with foreign nationals, particularly those from "communist" countries. To clarify this situation we promoted and co-sponsored with NASA/JSC an April 1989 "Seminar on Exchange of Technical Information Between Nations". This left us with some simple, easy to understand guidelines which permit us to interface comfortably in a wide range of worthwhile activities.

We grow professionally when we learn as much as we can about foreign space programs, and about our professional counterparts who spend their lives working in them. Sister Section activities have opened the doors to this information, and made it available to any of our members who want to participate.

(The Houston Section currently has formal Sister Section relationships in China and India, and hopes to soon have another in Germany. Suggestions with respect to these programs are welcomed, as are offers to assist in this activity.)





The Members Speak Out

Lou Livingston Editor

[Opinions expressed in this column are those of the correspondents and the columnist. They do not necessarily represent the position of the AIAA or of the Houston Section.]

By now you have all received your ballots for the next year's AIAA Houston Section officers. I was upset to see that there was only one person named for each position.

An organization as large and important as the AIAA Houston Section cannot afford to let the selection of officers be controlled by a nominating committee of only three people.

Several other qualified AIAA members requested their names be put on this year's ballot and were not given the chance. You, as members, were not given the chance to read the statements of these people and vote. The qualifications of the new officers is not the question, only the fact that we were not given the opportunity to vote for other qualified people who had requested to be put on the ballot. The decision was made for you.

A few years ago, when I was an AIAA officer, the nominating committee made it a point to find at least two qualified people for each position and nine councillors from which six were to be selected. This year the nominating committee of three people decided not to bother you with choices.

There is little that can be done for this election. However, I respectfully suggest that we amend the bylaws to say there must be a minimum of two candidates for each of the main officer positions. If this is not done, we run the risk of giving the organization over to a handful of people.

Carolyn Blacknall

If the officers of the section are to be finally decided by a three-person committee, then the membership should be given a choice of candidates to be elected to serve on that committee.

A whole year without a single letter, and now we have two at the same time. Since the subject is important and my opinion isn't, I requested comments from the Nominating Committee, which follow.

The 1990-91 Nominating Committee welcomes the comments of Mrs. Blacknall. It is hoped that this will generate some interest in the general membership regarding our election process.

The Nominating Committee is formed each year by the Section to identify a slate of candidates for the annual elections. The effort is traditionally headed up by the Chairman-Elect, and this individual recruits members for the committee. Guidelines for the nomination process are listed in the section bylaws. The committee followed the guidelines in assembling the nomination list. During this process, six of the identified nominees withdrew their candidacy due to job uncertainties and possible lack of time to devote to AIAA as an officer or councillor. These names were deleted at the last moment as requested by the candidates.

The committee's job was to identify individuals who could contribute to the welfare of the Section and were qualified to serve in the available positions. In the opinion of the committee, this job was accomplished, and no qualified candidates were rejected.

Mrs. Blacknall's comments are well taken, and as the Houston Section continues each year to seek out qualified individuals who have the time and desire to make a contribution to the Section through elected office, it is hoped that economic conditions and supportive management will enable these individuals to serve in this capacity. The Houston Section is always in need of willing volunteers to serve in the organization and execution of the Section's programs, and any individual who is interested in serving the Section in any capacity in future should contact the incoming Chairman, Dr. Zafar Taqvi, at 333-6544, mail code LESC/C80, as soon as possible.

It seems clear that this subject deserves extensive discussion by a broad cross-section of the membership. Think about it this summer, and drop a note either directly to me (Lou Livingston, 16546 Ivy Grove, Houston, TX 77058) or to the incoming Vice-Chairman, Operations. To make the September issue of *Horizons*, I need to get it by August 26, 1991.





Technical Activities Calendar

Bill Best CLCTS Representative

June

3 - Monday

NASA Area Macintosh Users (Group) "NAMU". "System 7.0", Apple Computer. RSOC Cafeteria, 600 Gemini, 7:00 PM. Information: Sharyn Best, 488-6522.

5 - Wednesday

JSC Astronomy Seminar. Open discussion. JSC Bldg. 31, Rm. 129, noon to 1:00 PM. Information: Al Jackson, 333-7679.

6 - Thursday

IEEE Annual Awards Banquet. Guest speaker: John Martin, IEEE Regional Director. JSC Gilruth Center, 11:30/12:00 noon; reservations by noon, June 3. Students \$5, members \$6, others \$7. Information: Marcia Taylor, 483-0195.

7 - Friday

CLCTS Annual Awards Banquet.

Speaker: Dr. Carolyn Sumner, Houston Museum of Natural

Science.

JSC Gilruth Center, 6:00 PM.

Information: Marcia Taylor, 483-0195.

12 - Wednesday

JSC Astronomy Seminar.

"Planetary Magnetism," Dr. Norm Ness, Bartol Inst. (vid-

JSC Bldg. 31, Rm. 129, noon to 1:00 PM. Information: Al Jackson, 333-7679.

13 - Thursday

AIAA Honors and Awards Banquet. JSC Gilruth Center, 5:30/6:30/7:30 PM. Information: (see flyer).

Texas Society of Professional Engineers.
Installation of officers and barbeque.
King's Inn, 1301 NASA Rd. 1, 6:30 PM.
Reservations required.
Information: 338-2966 (Stevens Engineering) or
485-2404.

19 - Wednesday

Houston Space Business Roundtable monthly luncheon. "Space Center Houston - Update," Vance Abblot, Manned Space Flight Educational Foundation, Inc. Four Seasons Hotel, 1300 Lamar, 11:30/12:00 noon. Information: Beth Land, 480-2817.

JSC Astronomy Seminar.

"Testing General Relativity in Space," Dr. Rudolf Decker (video).

JSC Bldg. 31, Rm. 129, noon to 1:00 PM. Information: Al Jackson, 333-7679.

25 - Tuesday

Bay Area PC Organization (BAPCO) monthly meeting. Ashton-Tate's dBase IV.
League City Bank & Trust, 303 E. Main, 7:30 PM.
Information: Steve Metcalf, 554-2300.

26 - Wednesday

JSC Astronomy Seminar. Open discussion. JSC Bldg. 31, Rm. 129, noon to 1:00 PM. Information: Al Jackson, 333-7679.

July

1 - Monday

NASA Area Macintosh Users (Group) "NAMU". Demo by Claris (?). RSOC Cafeteria, 600 Gemini, 7:00 PM. Information: Sharyn Best, 488-6522.

August

21 - Wednesday

Houston Space Business Roundtable monthly luncheon. "Lunar Power Systems," Dr. Dave Criswell, Director, Institute of Space Systems Operations, University of Houston. Four Seasons Hotel, 1300 Lamar, 11:30/12:00 noon. Information: Beth Land, 480-2817.

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

And a special note of thanks to the mail team who staple and fold *Horizons*. It's appreciated.



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OUTSTANDING SECTION AWARD



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





SECTION SPECIAL EVENT AWARD



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

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JOHN M. TREBES - CHAIRMAN 1990-91

AIAA HOUSTON SECTION

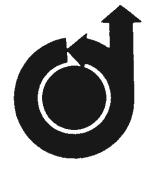
ANNUAL HONORS AND AWARDS BANQUET

THURSDAY, JUNE 13, 1990

ROBERT R. GILRUTH CENTER

NASA, JOHNSON SPACE CENTER





SOCIAL:

5:30

DINNER: PROGRAM:

6:30 7:30

MENU:

Baked Chicken

MEMBERS & SPOUSES

NONMEMBERS

STUDENTS YOUNG MEMBERS

\$8.00 \$9.00

40.00

\$7.00

FRANKIE 333-6064 SANDY 845-0735 ARDELL 283-4214 CARROLL 283-6000 SARAH 282-3160

LOCKHEED

COLLEGE STATION

McDONNELL DOUGLAS

EAGLE

BENDIX

NOTE: THE DINNER RESERVATIONS DEADLINE IS MONDAY, JUNE 10, 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.

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