American Institute of Aeronautics and Astronautics

Houston Section 50th Anniversary Celebration

Johnson Space Center
Olin E. Teague Visitor Center
Champagne Reception at seven o'clock
with light hors d'oeuvres
Program at eight o'clock
Friday, May 21, 1982

Black tie Business suit optional

An event recognizing the Houston AIAA Honorary Fellows and Fellows,
and the Aerospace Pioneers of the Johnson Space Center
and the Houston Section — AIAA

Welcome and Introductions
Flights of the Space Shuttle Columbia
History of the Manned Spacecraft Center and Johnson Space Center
Photographic Journey to the Moon
1981-1982 Houston Section Individual Awards
Recognition of Honorary Fellows and Fellows

Tickets are $10.00 each and may be purchased through May 14 from the following:

Onsite JSC		Offsite
Bldg #
1	Arnold Aldrich 483-3931	IBM	Jack Heberlig 333-7493
4	Carolynn Conley 483-2201	Lockheed	Marvin White 333-6161
12	Tom Murtagh 483-3217	MDTSCO	Robert Stephens 488-5660 x207
13	Ernest Hillje 483-2783	RI	Lamar Bowles 333-2030 x102
45	Norman Chaffee 483-3995	TRW	Loren Wood 333-3133 x253

The Photographic Journey to the Moon multi-projector slide program will be shown many times
in the Olin E. Teague Building #2 Visitor Center Auditorium during the day of May 21. Please
take this opportunity to see the show if you are unable to attend the evening's program.
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The Houston Section NEWSLETTER is published periodically at the Houston Offices of IBM by the Houston Section AIAA. Address all communications to Carolynn Conley, Associate Editor, NASA-JSC, Mail Code CH4, Houston, Texas 77058

W. A. Stewart, Editor

EDITORIAL

Executive Comment - Either by the time you receive this NEWSLETTER, or within a few days, you will receive your AIAA Houston Section Ballot for the 1982-1983 program year. The elected officers and councilors will be installed during the June 15 meeting. The quality and personal commitment of the nominees together with Chairman-Elect Barnes will provide strong leadership for the continuing professional growth of the Houston Section.

Our member involvement is increasing significantly at the local level. At regional and national meetings, Houston is looked upon by all to report STS flight results. Much of the data initially reported at the April 20, 7th Annual Technical Mini-Symposium will soon find its way into the national cognizance. We plan to continue meeting this participating and reporting responsibility.

Also, we plan to pause and reflect upon the truly outstanding accomplishments of our membership. One of the primary responsibilities of a professional society is to regularly survey its technological aspect, identify those practitioners in its arts and sciences...
who have made notable and significant contributions, and honor in public ceremony those so identified. We will do just that on the evening of May 21, when we conclude the 50th Anniversary Celebration of AIAA.

This year the emphasis will be on the accomplishments of the Manned Spacecraft Center and the Johnson Space Center. A historical and entertaining event has been planned.

-Jack C. Heberlig
Chairman

MINI-SYMPOSIUM '82

Everything is now in place for April 20 at the Gilruth Center. The conference manual went to press April 5 after a lot of effort by a number of Houston Section supporters (members and nonmembers). All arrangements are complete for the technical sessions, plenary session, and banquet — also the product of your dedicated section management who worked hard to make this annual event a worthwhile and memorable occasion.

A few last minute reminders and comments are now offered:

- Remember to register between 8:00 a.m. and 9:00 a.m. Monday, April 20, and pick up your copy of the conference manual. Five hundred copies are being printed; however, if we run out, the desk will take names for those who registered and want a copy later.

- Be sure to call in your banquet reservations before the April 16, 12:00 noon deadline. (The flyer was attached to the last NEWSLETTER.)

- Any author/presenter who has not yet heard from a session chairman may be sure his or her paper was accepted, and should call me immediately. (C. Wolfers, 488-5660, X406). (This situation is very unlikely, but possible!)

You will be pleased to know that the plenary session starting at 4:00 p.m. will be moderated by Mini-Symposium General Chairman Max Faget. This session will be highly informative and of general interest to all local personnel engaged in manned spacecraft development. Having dug out of the technical "nitty gritty" during the day, and had your mind expanded in the plenary session, you will then be further broadened in outlook by hearing AIAA National President Joe Gavin's talk on the subject of "Planning Priorities and Politics" after dinner at 8:00 p.m. Sound Good? It will be!!!

At this point, I would like to add a personal note of thanks to the Government and private industry managements who have freely made available the time and personnel resources necessary to conduct this 7th Annual Houston Section event. It could not have otherwise been done.

Once the Mini-Symposium has taken place, the Vice Chairman-Technical, Houston Section has "done his thing," short of tidying up the records for a successor. I have enjoyed my term this past year, and wish to thank all the Section officials as well as the membership for their fine cooperation. It has been a rewarding experience for me, and I thank you for giving me this opportunity.

-C. V. Wolfers
VC-Technical
1981-82 Program Year
THE JOB SCENE

Each year the College Placement Council surveys 184 placement offices of 161 colleges and universities in July and December. The December data, published in January 1982, again indicate that engineering students have much greater opportunities for well paid jobs than any other college discipline.

Of the 8,324 offers made to those students participating, 29 percent were in business, 3 percent in humanities and social sciences, 8 percent in the sciences, and 60 percent in engineering. NOTE: Engineering students who comprise less than 10 percent of the student population received 60 percent of the offers!

COMMITTEE REPORTS

Public Policy Committee - A Congressional Space Caucus has been organized by Congressmen Newt Gingrich and Dan Akaka. This caucus will provide legislative support on space issues, serve as a clearinghouse on space information, and assist its members in promoting their common goal of revitalizing America's space program.

Congressional aides assigned to this caucus in Washington have made several documents available to the AIAA-HOUSTON Section Public Policy Committee. These documents include: (1) Congressman Gingrich's statements before the Subcommittee on Space Science Applications regarding substantial increases in NASA's FY83 budget; (2) A bill recently introduced by bipartisan members of the Space Caucus which establishes a national space policy; and, (3) a proposal submitted by Dr. Klaus Heiss to privately fund a fifth Orbiter.

If you wish to obtain copies of this material, contact me at extension 6376, or Kelly Cyr at extension 2931, and we will gladly forward them to you.

-Jim Visentime
Chairman, Public Policy Committee
AIAA-Houston Section
PUBLIC AFFAIRS COMMITTEE REPORT

A recommendation has been made to the AIAA Executive Council to merge the Public Affairs and the Public Policy Committees. These two committees have many overlapping responsibilities and at the AIAA National level they are, in fact, combined under Public Policy. A formal proposal and organizational structure will be presented after the new officers take over in May.

The Speakers Group has had several offers from the membership to fill the role of chairman. The PAC chairman will consult with these people and announce the results in the next newsletter. This group has been very active making presentations to schools, civic groups and business groups. We have a long list of speakers on space and space-related subjects. A brochure will be produced shortly for advertising purposes. Anyone interested in sharing their expertise with others in this manner should call Ernie Hillje at 483-2783.

The Tour Group, under the direction of the new Chairman Tom Murtagh, had gotten off to a running start. On March 13, 1982 the Wichita State University Student Chapter was shown around the NASA-JSC site. On April 2, 1982, the Student Chapter from the University of Texas at Austin; and on April 9, 1982 the newly-formed Student Chapter at Lamar University, were toured. This is a fun-type activity with young, interested people to talk with. Anyone who would like to occasionally assist Tom (and see the sights at JSC at the same time) can reach him at 483-3217. You will find it was well worth the time spent.

The Public Awareness Group has continued with support of Spaceweek at both the National and Local levels. At the National level there will be events in 31 cities across the country. By mid-July there should be in excess of 50 cities involved. At the local level Joe Bufkin (483-5437) has been organizing a multitude of events for the July 16-24 time period that represents Spaceweek and he assures that there will be something to interest every one. May local organizations have been supporting this endeavor through the Clear Lake Council of Technical Societies. This group was also active in supporting the Science Fair.

STS-4 HELP NEEDED

The NASA Public Affairs Office is composed of a great bunch of people under Hal Stall who bend over backwards to help AIAA-Houston Section in its many public affairs activities, tours, special events, etc. When we can, we like to return the favor.

On previous shuttle flights AIAA members have volunteered their services to help PAO carry out their huge job in making flight information available to the public. Our members run errands, escort the press to on-site locations, proof-read air-to-ground transcripts, etc.

PAO will need help in late June for STS-4. Typically, they need folks for all three shifts (8-4; 4-12; 12-8). Can you, or will you help out during STS-4? If you would like to help, or want more information, or might be able to help, please call Norm Chaffee at 483-3995. We will appreciate your service!
**DR. JAMES H. DUKE SPEAKS**

"Advances in Emergency Medicine" was the subject of the dinner address delivered by Dr. James H. Duke, Jr., Professor, Department of Surgery, University of Texas Medical School. Dr. Duke spoke following the AIAA dinner on March 23.

The development of the facilities for the treatment of trauma within the Medical Center was traced by Dr. Duke. The use of helicopter transport was indicated as essential in the sequence of treatment activity. Facilities at a Center permit availability to physicians of means for stabilization of vital activity in a way difficult to achieve under the conditions of "field" operation. Congestion in areas of high incidence of emergency needs have served to emphasize the time element involved in other means of patient transport.

However, equipment made available at the scene of an emergency by the helicopter as a transport device has served to permit much more satisfactory stabilization of accident victims. The effect of repeated trips and satisfaction of the needs at the scene has resulted in the creation of a list of items for such transport. This has proved its usefulness in actual emergency use.

The quicker assistance is made available at the scene of an accident, the greater the possibility of victim recovery. The personnel utilized on the teams can do almost anything needed.

A personal note was interjected in a dinner conversation: Dr. Duke is fascinated by mathematics; he enjoys problem solving.

**SCIENCE FAIR**

The 1982 Science and Engineering Fair of Houston culminated on March 20, 1982 with an awards ceremony. Normally the Houston Section-AIAA gives a special award to a Senior Division and a Junior Division exhibitor having an aeronautics or aerospace-related theme. This year the 9th grade was broken out separately: therefore we will give three awards. The recipients are Brade Riddle of Spring, Susan Choi of Houston, and Annie Carter of Houston for 9th, junior and senior divisions, respectively. They will receive certificates (or plaques) and a tour of the Johnson Space Center.

The "Career Exhibit" set up by the Public Affairs Committee was a huge success as always. Many students and visitors were attracted to our booth by the combination of a 1/50th scale Space Shuttle stack model and the "Voyager Encounter Jupiter" posters as a backdrop.

This, in addition to many brochures and an eager team of professionals from AIAA that answered the many questions, made for a highly successful and visible event for our section. Many thanks to Bill Hicks (JSC-EX4 coop student), Bob Kawalski (JSC-EP coop student), John Moore (Moore Engineering Co.), Lou Livingston (JSC-EB), Bob Herman (Hamilton Standard), Fred Becker (MDTSCO) and Ernie Hillje (JSC-EX43) for their time and efforts.
PUZZLE SMARIES

Gosh, I guess the puzzles are too easy 'cause I've really received a bunch of correct answers to the March and April puzzles.

The winner of the March Puzzle (splitting a six digit number, squaring the two halves, and then adding the results to recreate the original number) was Mr. Mark McDaniel of Lockheed. Congratulations Mark! You get the free AIAA dinner.

The correct answer to the March puzzle was 494209 (e.g. 494209 = 494^2 + 209^2). Others who got the right answer were:

Max Faget - Eagle Eng.  Pete Fogerson - Lockheed
Thomas Jones - Ford  Kent Joosten - NASA/FM5
Ron Heser - Boeing  Marlowe Cassetti - NASA/FA
Don Kessler - NASA/SN3  Tom Henderson - NASA/FE4
Phil Muhm - MDTSCO  Mike Downey - NASA/EP5
Bill Best - Rockwell  Charlie Hayes - NASA/CC5
Dennis Keller - Singer Link  David Mercier - Singer Link
James Thompson - MDTSCO  Glenn Miller - Eagle Eng.
Gary McFadyen - NSI  Thomas Jones - Ford
Tom Mikus - Shell  Michael Martin - Lockheed
Jose Spencer - CSC  K. D. Wohllaib - Boeing
I. R. Roper - IBM  Greg Desobry - MDTSCO

The winner of the April Puzzle was Bill Best from Rockwell. He gets the free AIAA dinner for being first to figure out that the length of the wire wrapped helically around a 4 inch cylinder was 41 inches. Congratulations Bill!

So far I have also received correct answers of 41 inches from the following folks:

Charles Campbell - Lockheed  James Thompson - MDTSCO
I. R. Roper - IBM  Michael Martin - Lockheed
Larry Friese - MDTSCO  Glenn Miller - Eagle Eng.
Bob Stokeld - Boeing  Jose Spencer - CSC
David Mercier - Singer Link  Fred Martin - NASA/ES3
Tom Maloney - IBM  W. H. Geissler - MDTSCO
John Granahan - Ham Std.  T. J. Cash - Mark Products
Tom Mikus - Shell  Carl Watkins - NASA/EF2
P. Schoonmaker - MDTSCO  S. M. DiPietro - MDTSCO
Carlos Alvarez - Ford  Bruce McCandless - NASA/CB

I know I will get more answers on the April puzzle and I will acknowledge them next month. Keep those answers coming!

MAY CRANUM CRUNCHER

Here's your challenge for this issue!

"A store sells pencils in two sizes of packages, one size containing 12 pencils, and the other size containing 25 pencils. This obliging store also sells partial packages so that a customer may buy any desired whole number of pencils."
If the number of pencils desired were 36 or 37 for instance, a partial package would not be required (e.g., $12 + 12 + 12 = 36$; $12 + 25 = 37$), but for 38 pencils a partial package would be required. However, there is some number: "N," which is the largest value for which a partial package is required -- that is, any larger number could always be satisfied with whole packages. What is the value of "N?"

Send your answers to Norman Chaffee, NASA-JSC, mail code EP, Houston, TX 77058; or you can bring your written answers to building 45, room 410 at NASA-JSC. No answers are accepted by phone, please.

The first correct respondent gets a free meal at an upcoming AIAA function.

**NOMINATIONS FOR AIAA FELLOWS AND ASSOCIATE FELLOWS**

Forms for use in nominating AIAA members for election to Fellow or Associate Fellow may be obtained from Honors and Awards Committee Chairman Frank T. Whiting, Jr. MDTSCo-B4, 488-5660 x222. Nomination and reference forms are due at AIAA Headquarters at the following times:

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<th>Nomination Forms</th>
<th>Reference Forms</th>
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<td>Fellow</td>
<td>June 1</td>
<td>June 30</td>
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<tr>
<td>Associate Fellow</td>
<td>June 15</td>
<td>July 15</td>
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UPCOMING AIAA HOUSTON SECTION MEETINGS

DATE

April 20  Planning Priorities and Politics  Joseph G. Gavin, Jr.  AIAA President  Dinner Speaker

May 21  50th Anniversary Celebration MSC-JSC Emphasis  Bldg. 2 Auditorium