AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS HOUSTON SECTION

NEWSLETTER

June 1982

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W. A. Stewart, Editor

o <u>E</u>DITORIAL

That Particular 3.26% - On March 31, the 873 Houston Section membership represented 3.26% of the national 26,725 AIAA total. The 113 papers given on April 20 to the 450 attendees at the Houston 7th Annual Technical Mini-Symposium speak for our local organizers and participants.

Space Shuttle Flight Results papers given at national meetings add to this impressive list.

Not bad at all!

Here are the latest membership statistics for the large sections:

3373 - Los Angeles 2059 - National Capitol 1573 - San Francisco 1294 - Pacific Northwest 951 - New England	918 - Orange County 904 - Dayton-Cincinnati 873 - Houston 735 - St. Louis	638 - San Diego 631 - Hampton Roads 586 - North Texas
JOI - New England	697 - Long Island	

Our AIAA professional section output continues to rise. The May 21, 1982, 50th Anniversary celebration booklet summarizes the strong professional contributions by our section members to date. The Space Shuttle provides golden opportunities for the future.

On June 15 at the Gilruth Center, we will recognize the section team of the past year, install and meet our new officers and councilors for 1982-1983 and hold a special event for our under age 31 young professionals. The future looks bright.

-Jack C. Heberlig

Mini-Symposium '82 Success Story - A lot of kind remarks have been heard regarding the success of our recent symposium. We hope the membership at large was pleased with this event; and your comments, both pro and con, are solicited to help the new incoming section officers plan for the 8th Mini-Symposium in '83. Those so motivated may send written notes and comments to me at MDTSCO-Houston, Mail Code CI, and I will pass them along to the new team.

Every one supporting us in putting together this year's synposium did a super job, and all deserve a round of thanks from the membership. As with any major undertaking, there were a number of unsung heroes, a few of which I would like to recognize publicly:

- Chester Vaughan (JSC)-Whose responsiveness and aggressive help in session organization, general arrangements, and conference manual handling was invaluable.
- Lou Ramon (Scott Science & Technology) and Russ Filler (RI) Who within a day of the symposium picked up the chairman's duties on the Space Systems session for ailing TC chairman, Hugh Davis.
- Chiang Lin (MDTSCO) Who within 30 minutes of "opening curtain," accepted and carried out the chairman's task for the session on Energy, Thermal, Structures, and Propulsion, replacing ailing TC chairman, Tom Moser.

Lockheed Engineering and Management Company - Whose last minute cooperation in printing 200 of the 500 Conference Manuals when mechanical failures plagues MDTSCO's high speed Xerox facility saved a lot of gray hair. (Mine!)

Thanks to all of you for making this year's event everything we had hoped it would be. It is easy to be <u>high</u> on an organization of people like we have here in the Houston Section.

o <u>CALL</u> FOR PAPERS

Fourth Annual Conference on Computer Developments - The University of Houston at Clear Lake City has announced a call for papers for the fall computer conference to be held on Friday, November 5, 1982.

The purpose of the conference will be to gather together members of the local industrial, commercial, and academic community in order to share information on recent developments in computer hardware and software and their applications. Research and tutorial papers are requested on, but not limited to, the following topics: Data Base Design, Computer Networks, Office Automation, Computer Standards, Computer Architecture,

Real Time Applications, Estimation and or Evaluation of Software Systems, Computers and the Aerospace Industry, Techniques for Software Management, Advance Language Development, Computer Science Education, and Distributed Processing.

Send Titles and Abstracts to Rod Bown (Program Chairman), Box 6, UH/CLC, 2700 Bay Area Boulevard, Houston, Texas 77058. For information, call (713) 488-9284. Abstracts are due on August 13, 1982. Author's notification of acceptance on August 20, 1982. Papers are due on October 8, 1982.

The Galveston Bay and Clear Lake sections of the IEEE and ACM are acting as co-hosts and supporter of the UH/CLC conference.

O BRAZOS VALLEY SCIENCE FAIR

The 1982 Brazos Valley Regional Science and Engineering Fair was held April 7 and 8. The Houston Section AIAA gives a special award for the outstanding aeronautic and space-related exhibit without regard to divisions. The officers of the Texas A&M student chapter of AIAA act as judges.

The winner was ninth grader Lisa Carlson of Bryan, daughter of former Houston Section Chairman, Dr. Leland A. Carlson. The award was a Shuttle model with engraved plate, plus honorary membership in the TAMU Student Chapter AIAA and participation in the JSC Awards Day Ceremony for Houston Science Fair winners.

O STUDENT PAPER COMPETITION

The thirtieth annual AIAA Southwestern Student Paper Contest was held April 2 and 3 in Arlington, Texas. Students compete for prizes of \$150, 1st place; \$100, 2nd place; and \$75, 3rd place in overall written paper, plus oral presentation and \$75, 1st place; \$50, 2nd place; and \$35, 3rd place for orals only.

Texas A&M students won 1st, 2nd, and 3rd place in undergraduate overall, 1st and 3rd undergraduate oral, 1st place in graduate overall, and 2nd in graduate oral. Miss Anne Daugherty, undergraduate division, and Scott Groves, Masters division, will also receive all expense paid trip to Reno in January 1983, to compete in National Competition at the AIAA 21st Aerospace Sciences Meeting. The other winners were Pat Sparks, Sahmim Rahman and Rush Robinett.

o <u>COMMITTEE</u> REPORTS

Continuing Education - The following course will be offered during the second 6-week summer session at UH/CLC:

ASTR 5931 - The Three Body Problem Instructor - Victor Bond

-John Sunkel

Technical Committee Expansion/Restructuring - As recently noted by one of our National AIAA officer candidates, increasing the size of the membership is not in itself a worthy objective; whereas efforts to increase the quality and services offered by the institute should be the real thrust, the result of which will be an increase in the membership. In other words, being big is not a particular virtue, unless you get that way by reason of excellence and benefits to members.

In that regard, the national drive to promote local section technical committees is a major effort to make AIAA membership more interesting and beneficial to its technical constituency. Your local section is a leader in this program, with six active local TC's now in their third year of service. We need to strengthen what we have, and expand further to provide more and better targeted committees to serve the technical mix in this area.

To take informed action, we need to hear from our section membership as to whether the current committee structure serves your needs; and if not, what should we modify or add to attract your participation at the committee level. For example, if we create a Propulsion Systems TC would those of you in the JSC Propulsion and Power Division at JSC support it? If we should breakdown our Information Systems Committee into three separate TC's on (1) Communications Systems, (2) Computer Systems, and (3) Software Systems; would more of you feel better served and be inclined to participate then under the broad Information Systems umbrella?

Please drop a note to me now with your opinions and ideas, or send them as soon as possible, after the elections, to the new Vice Chairman-Technical. We are particularly interested in the opinions of you young (under 30) members, for you represent the future of this AIAA-Houston Section.

-C. V. Wolfers VC-Technical 1981-82

<u>Public Affairs Committee</u> - The Public Affairs Committee has continued its role of informing and educating the public on aerospace and aeronautics issues.

Recent activities include sending speakers to local schools and civic groups, setting up tours for university students, supporting the Spaceweek activities at both the national and local levels, working with the Clear Lake Council of Technical Societies and implementing a "Career Booth" at the Houston Science and Engineering Fair.

Recent developments include planned support of the 33rd International Science and Engineering Fair to be held in Houston this year (May 10-15, 1982; Astrohall). Also, Robert Cohen (JSC-WT3) and Rich Gertsch (Magcobar minerals) have agreed to work together on the Speaker's Group and plan to keep it an active arm of the Public Affairs Committee. Bob can be reached at 483-6161, and Rich at 750-2905, for anyone interested in helping or anyone who would like to be on our speaker's list.

-Ernie Hillje

AIAA HOUSTON SECTION--NEW MEMBERS

Robert Dyas Neil Scott Science & Tech., Inc.

Charles L. Otti

David L. Rhode TAMU

Nediyedath Vidyasagaran GE Co./MATSCO

John Lash Singer

Rajagounde Muthu Nallasamy UHCC

William R. Hammock, Jr. NASA/JSC

Promode R. Bandyopadhy UHCC

Charles A. Borne, III McDonnell Douglas

Carla Jean Branson IBM/FSD

PERSISTENT PUZZLERS

I'm getting lots of response from you on the puzzles these days---especially from you student members at A&M. Keep those answers comin', cause I love it! Please don't call me with your answer, though, or my secretary is going to revolt---drop your answers in the mail.

There must be a lot of smokers or ex-smokers out there because the May puzzle about the partial cigarette packs didn't stump anyone. The winner was JOSE SPENCER from CSC. JOSE receives a free AIAA dinner for being first. Congratulations JOSE! I received other correct answers of 263 cigarettes from the following:

Arvil Hebert MDTSCO James Ewell MDTSCO Mike Rasmussen MDTSCO Carolyn Blacknall NASA/CH6 Tom York Boeing Bob Stokeld Boeing Ron Heser Boeing Tom Maloney IBM Davis Peticolas Lockheed Carl Huss NASA/FA

Henry Schneider MDTSCO David Mercier Singer/Link James Thompson MDTSCO Gregory Ryan NASA/EB S. Mann NASA/FR Phil Muhm MDTSCO Marian Edson Kentron Dave Schultz NASA/LF

Texas A&M Eagle Engineering Glenn Miller

Ralph Hite MDTSCO Raymond Wiltgen Texas A&M

Good work to all of you!

Wayne Peterson

I've received some additional answers to the March puzzle and the April puzzle, as follows:

Texas A&M

March Puzzle (Answer: 494209)

John Sookma - Texas A&M

April Puzzle (Answer: 41 inches)

Mike Lounge NASA/CB Ed Yarish Texas A&M Norman Gwinn Texas A&M Kent Joosten NASA/FM5 Robert L. Erwin Texas A&M Philip Yates Texas A&M Marlowe Cassetti NASA/FA Jim Legg Singer/Link

Gary McFadyen NSI

New Procedure - Many of you have pointed out that the vagaries of the U.S. mail service and the JSC on-site mail service penalize many members in their attempt to get a correct answer to me first to win the dinner prize. Dave Mercier from Singer/Link has suggested I throw all correct answers received by a cut-off date into the hat and pull out the winner. Good idea! So that's what I'm going to do until a better suggestion comes along.

JUNE CRANIUM CRUNCHER

OK YOU GUYS! The easy puzzles are over! This one will send you back to the books!

"A straight piece of timber 8 inches square and 10 feet long is placed on, and at right angles to, a horizontal log, so as to make a seesaw.

The cross-sectional shape of the log is such that as the timber rocks back and forth it remains perfectly balanced. That is, at all angles up to the angle where slipping would occur, it is in a state of neutral equilibrium (center of gravity of the timber always vertically exactly above the point of contact with the log).

What is the equation of the curve for the surface of the log and what common name is given to this type of curve?

You may assume smooth surfaces, rigid bodies, uniform density, and a reasonably high coefficient of friction (e.g., the seesaw works through a sizable angle without slipping on the log.)

Consider the problem two-dimensional so that you are dealing with a point of contact rather than a line of contact between the timber and the log.

As a frame of reference, the highest point on the log is the origin; the x-axis is horizontal; the axis of the timber is in the XY plane; and vertically up is the positive Y axis."

Send your answers to Norman Chaffee, NASA-JSC, mail code EP, Houston, Texas 77058. All correct answers received by Friday, June 11 will be eligible for the prize--one free AIAA dinner at an upcoming meeting. The winner will be selected randomly from all correct answers received by June 11.



AMERICAN
INSTITUTE OF
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ASTRONAUTICS
HOUSTON SECTION

newsletter

UPCOMING AIAA HOUSTON SECTION MEETINGS

DATE

May 21

50th Anniversary Celebration

Bldg. 2 Auditorium

MSC-JSC Emphasis

June 15

1981-1982 Recognition and Awards

Introduction of New

Officers and Councilors.

Under Age 30 Night

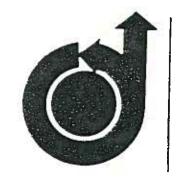


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AIAA HOUSTON SECTION 1981-1982 DINNER MEETINGS HELD AT JOHNSON SPACE CENTER ROBERT R. GILRUTH RECREATION CENTER

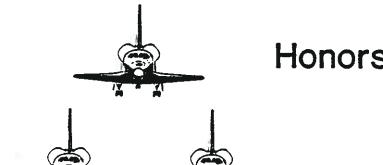
Social: 6:00 Dinner: 7:00 Program: 8:00

TUESDAY-JUNE 15, 1982



AMERICAN
INSTITUTE OF
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ASTRONAUTICS

HOUSTON SECTION
P. O. BOX 57524
WEBSTER TEXAS 77598



Houston Section Honors and Awards Night

JACK C. HEBERLIG 1981-1982 CHAIRMAN MASTER OF CEREMONIES

INSTALLATION OF OFFICERS

UNDER AGE 31 SPECIAL NIGHT - PRIZES

WE WOULD LIKE THE YOUNG PROFESSIONALS TO MEET OUR EXECUTIVE COMMITTEE AND BECOME ACTIVE IN A TECHNICAL OR OPERATIONS COMMITTEE NEXT SEASON

FOR DINNER RESERVATIONS, CALL:

HAZEL JOANNE PATTY NANCY SYLVIA ENTREE - BAKED CHICKEN 333-2030 333-6161 488-5660 483-3995 845-7541 **MEMBERS & SPOUSES** \$7.50 (Lockheed) EXT. 211 **EXT.211** (NASA) (College Station) **NON-MEMBERS** \$8.50 (Rockwell) (MDTSCO) STUDENT DISCOUNT \$2.00

RESERVATIONS DEADLINE IS FRIDAY-JUNE 11 at 12:00 NOON

DINNER CANCELLATIONS ARE REQUIRED

ALL ARE WELCOME

THERE IS NO CHARGE FOR ATTENDING THE PROGRAM ONLY



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