

Horizons

American Institute of Aeronautics and Astronautics

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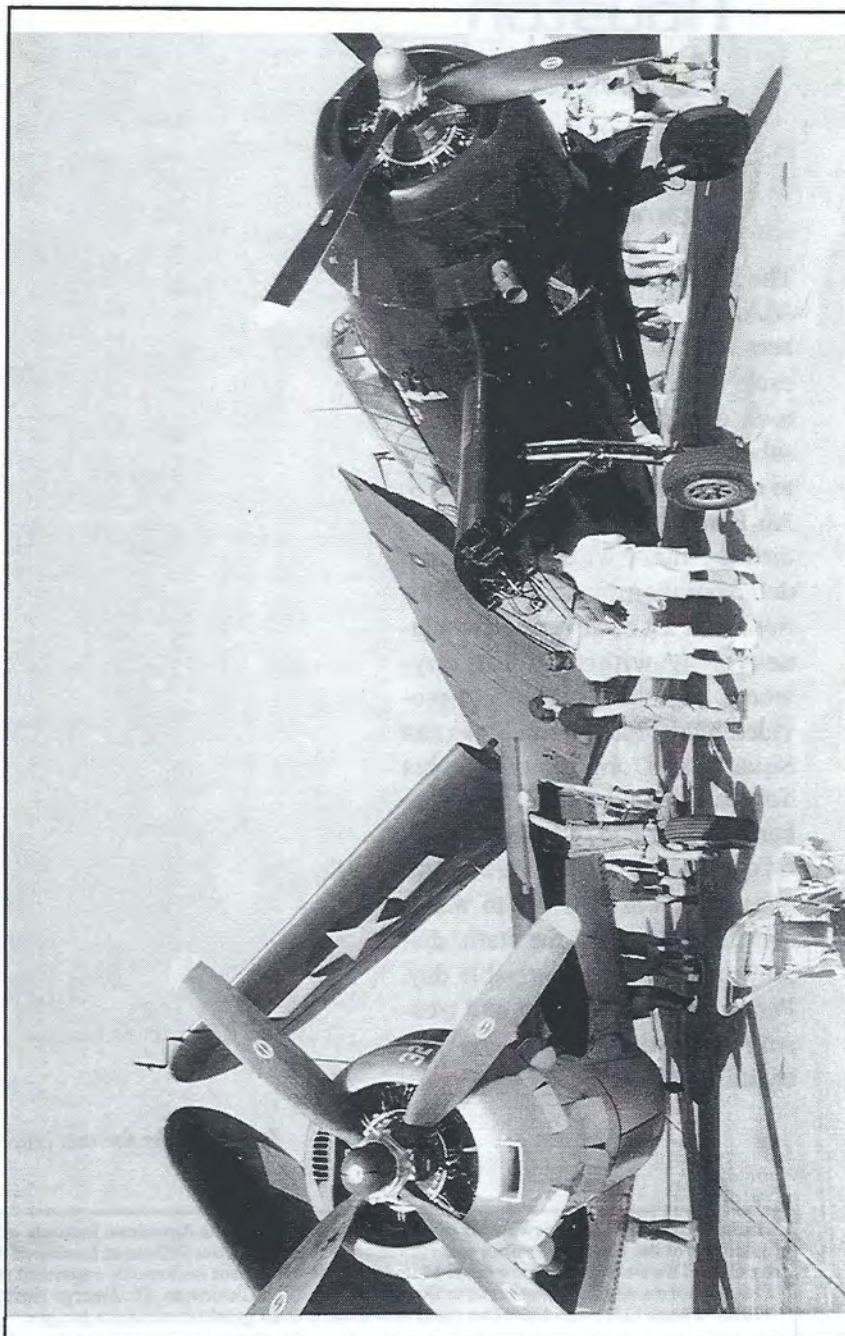
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Councilor

Merri Sanchez
Councilor



Inputs for the December's Horizons newsletter are due COB November 10th, 1997.

Wings Over Houston Airshow

- by Bill Geissler.
Lockheed Martin

The 200 tickets available from the AIAA Houston Section for members and their families for \$5.00 each were sold out. Those who took advantage of the Section's subsidized ticket price were treated to a spectacular show by the U.S. Air Force's Thunderbirds. In addition, there was an awesome demonstration by an AV-8B Harrier in the art of hovering and maneuvering without going anywhere. Aerobatics were also provided by the Red Baron Stearman Squadron, Don Johnson in his Toyota Special, and a French husband and wife in two CAP 10B's. Of course, the Tora-Tora-Tora reenactment was still fun to watch and along with all the static displays made for an enjoyable day. Perhaps, new chairman and treasury permitting, the Section will try this again next year.



Operation Pacific Fury

- by Ed Jablonski.
Boeing

Operation Pacific Fury in Galveston, 18,19 October

This event, sponsored in part by the AIAA Houston Section, is happening as we go to press. This WWII commemoration and re-enactment includes the participation of the Lone Star Flight Museum in Galveston (now part of the Texas Aviation Hall of Fame), with whom AIAA Houston has worked successfully in the past, and is looking forward to continuing to support in the future. Stay tuned next month for an after-action dispatch on this unique event.



Photographs for this issue of Horizons provided by Bill Best

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 Martin. Opinions expressed herein, other than by elected Section officers, are those of the authors and do not necessarily represent the position of AIAA or of the Houston Section. Please address all correspondence to the Houston Section Chairman, Dr. George Nield, at NASA JSC, Mail Code YA, Houston, Texas 77058. Phone (281) 483-1364; Fax (281) 483-2968; e-mail gniel@ems.nasa.jsc.gov.

Chairman's Corner

- by George Nield, Chairman

Section Policies to Be Developed

Dear AIAA Houston Section Member,

We need your help. The officers, councilors, and committee chairs for your Section are trying to plan a year full of exciting and interesting activities just for you. Unfortunately, we aren't exactly sure what kinds of things you'd like to see. We'd really like to have some feedback from you, the membership.

There are some things that we try to do each year because they seem to be appropriate for a technical society, like put on monthly dinner meetings and publish a newsletter. But that does not mean we are bound by tradition. In fact, we are looking at a number of different new ideas this year for activities that we can sponsor, and benefits that we can offer for our members. For those of you who took advantage of the \$5 Airshow tickets, did you like that? Are there similar events that we should be getting involved in or helping to sponsor or organize? Would you like to see more social events, or technical programs, or both?

All you NASA or corporate managers out there: Are there workshops or mini-conferences that you can think of, that would be helpful for your work group, that

you have always wanted to see or participate in, but that you somehow never got around to organizing? Perhaps the local AIAA Section can help you out. We've got experience putting on events ranging from a Micro-Nanotechnology Conference, to a Space Logistics Symposium, to an Operability Workshop.

If it's social events you're after, we have kicked around the idea of a Fun Run, field trips to a science museum or planetarium, a volleyball game with hot dogs and hamburgers, even an evening cruise. If any of these ideas sound good to you, or if you have some other suggestions for what we ought to be doing together, please let me know. Just give me a call at (281) 483-1364, or send an e-mail note to gnyield@ems.jsc.nasa.gov.

I'm looking forward to hearing from you. Thanks for your support!

Dr. George C. Nield
AIAA Houston Section Chairman

At the October 9, 1997 Council meeting, it was agreed that a series of Section policies would be developed to assist in improving year-to-year communications and the application of lessons learned. The first such policy was approved unanimously and is listed below:

Development of Section Policies

Policy: The AIAA Houston Section Council shall develop and maintain policies on an as-required basis. Policies will be approved by a majority vote of the Council and maintained by the Secretary. Although the Council may agree to deviate from a given policy on a case-by-case basis, frequent deviations from the policy would be an indication of the need to update or repeal the policy.

Rationale: Developing and maintaining Section policies should allow the Section to benefit from earlier "Lessons Learned" and guide future officers and Committee Chairs in conducting successful Section activities.

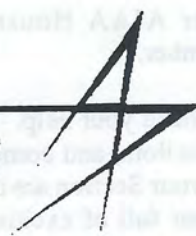
Approval Date: October 9, 1997



Employment Opportunities

The AIAA Houston Section is now beginning to make aerospace-related employment opportunities available. If you are looking for employees, and you would like for the AIAA Houston Section to help your company make employment information available, please contact Charles Halliman (of Information Uncover) at (713) 991-1654.

LOCKHEED MARTIN



Lockheed Martin Space Mission Systems & Services,
a Division of Lockheed Martin Corporation,
located in the Clear Lake area,
has immediate openings for:

SOFTWARE ENGINEERS (minimum 2+ yrs. experience),

SYSTEMS ENGINEERS (minimum 3+ yrs. experience),

HARDWARE ENGINEERS,

ENGINEERING SYSTEMS ANALYSTS and

PROGRAMMERS (minimum 1+ yr. experience).

**Positions require a degree in: Aeronautical Engineering, Aerospace Engineering,
Computer Science, Computer Engineering, Physics, Math,
or Electrical Engineering.**

Qualified applicants are asked to submit resumes and cover letter,
in strictest confidence, to:

**Lockheed Martin Space Mission Systems & Services
P.O. Box 58487
Houston, TX 77058**

Responses may be sent via fax to (713) 335-5030.

Employment Opportunities



Barrios Technology, a woman-owned small business located in the Clear Lake area, providing Space Operations, Information Technology, and training services to NASA, DoD, and commercial businesses, has immediate openings for:

SYSTEMS/OPERATIONS/TRAINING ENGINEERS (Exp.: 0-8 yrs. technical environment; Degree: BS EE, ME, AE, Engineering, Science, Math, Physics, MS Instructional Technology Media);

WORKSTATION ENGINEER (Exp.: 5+ yrs. Macintosh, PCs, Windows 95; Degree: BS Math, EE, Computer Science);

NETWORK ADMINISTRATOR (Exp.: 5+ yrs. Novell 3.12/4.0 Network Administration; NT 3.5.1/4.0 experience a plus; Degree: BS Math, EE Computer Science);

ORACLE PROGRAMMERS/DEVELOPERS (Exp.: 1+ yrs. PL/SQL; SQL *Loader; Oracle Webserver; Oracle Developer 2000; Oracle 6 or 7).

For consideration, fax your resume to:

**Dept. SMS,
(281) 280-1901**

or EMAIL to:

cheri.stewart@barrios.com.

For more information about Barrios Technology, Inc., Go to the Barrios HOMEPAGE at www.barrios.com.

Council Meeting Minutes

The AIAA Houston Section Council met on at 5:00 p.m. on Thursday, October 9, 1997, at the Center for Advanced Space Studies.

Attendance: The following Council members were present at the meeting:

George Nield, Chairman
 Russ Filler, Chairman-Elect
 Bill Hartwell, Vice Chairman - Operations
 Edward Jablonski, Vice Chairman - Technical
 Steve King, Treasurer
 Bill Best, Councilor
 Bill Geissler, Councilor
 Karin Loftin, Councilor
 Dan Selters, Program Chair

Minutes: The minutes of the September Council meeting were distributed and approved with minor modifications.

Treasurer's Report: Steve King gave with Treasurer's Report, which showed a total accounts balance of \$62,973.76, including the scholarship and Micro-Nanotechnology Conference accounts.

Programs Status: Dan Selters gave a status of the planning for the October dinner meeting, as well as a report on invitations for potential future speakers.

Publications Status: Bill Best led a discussion on potential articles for the November issue of Horizons. It was suggested that a report on the Council meetings be included as a regular feature in the newsletter. A request was also made for additional volunteers to help with the mail-out sessions. Members receive a \$2.00 discounts on upcoming dinner meetings for helping to fold and apply mailing labels to the newsletters. This is a painless but very important way in which members can help out our society.

Status of Operations Committees: Bill Hartwell reported on the status of Operations Committees. The Young Member Committee is planning a get-together at the Gilruth Center to play volleyball, grill hamburgers, and talk about how to get involved in AIAA activities.

Status of Technical Committees: Edward Jablonski reported on the status of Technical Committees, including upcoming Lunch and Learn activities.

Old Business:

- Bill Geissler reported on the Wings Over Houston event. Once the word got out, tickets went very quickly. We had obtained 200 discount tickets for members and their families, and all were sold.

- Edward Jablonski reported on planning for Operation Pacific Fury. A limited number of free tickets are still available for this event as a benefit for AIAA members and their families.

See COUNCIL...continued on page 7...

COUNCIL...continued from page 6...

- Edward Jablonski also reported on preparations for the Reusable Launch Vehicle Workshop on October 28-29. Several volunteers will be needed to help out with registration and to serve as facilitators during the workshop sessions.

New Business:

- The Chairman proposed that the Section submit an Incentive Fund Rebate Request for purchase of a portable desk-top membership display. The proposal will be submitted to the Region IV Advisory Council for their meeting on October 17.

- A set of position descriptions for the various Houston Section officers and committee chairs has been prepared and is now available from the Houston Section web page. The purpose is to help incoming Section leaders have a better understanding of their responsibilities and improve our retention of corporate knowledge.

- Another suggestion for improving year-to-year communications and the application of lessons learned was to develop and maintain a set of Section Policies. Each policy write-up will contain a description of the policy, rationale, and the date of approval. The first such policy, explaining how such policies will be developed, was unanimously approved by the Council.

- In an effort to help the Section in planning its activities for the rest of the year, the Chairman requested that each Section officer and Operations Committee chair propose two goals for the year. Technical Committee Chairs are to report on what two Lunch-and-Learn or other activities are planned, along with a tentative date for the event.

The meeting was adjourned at 6:15 p.m. The next Council meeting is scheduled for November 6, 1997, at the Center for Advanced Space Studies.



AIAA Day at the Boeing Space Park Drive Building

Several members of Houston AIAA, Lisa Gall, Dr. Bonnie Cooper, and Edward Jablonski, hosted a display and information booth throughout lunchtime last October 7th. The lobby display offered information and literature on the upcoming events and many other benefits of being a member of this society of aerospace professionals. Many of the passersby were completely unaware of these opportunities, and the event was successful in offering memberships to several of the building residents.



Employment Opportunities



Located in Seabrook, Maryland
has immediate openings for:

Instrument Electro-Optics Senior Level Engineer: To work with NASA and contractor engineers in the acceptance of instrument payload flight hardware for the Geo-stationary Operational Environmental Satellite (GOES).

This position requires at least a BS degree in a related engineering or science discipline and six or more years relevant experience to effectively perform the job. An advanced degree in science or engineering is highly desirable. The successful candidate will have relevant system engineering experience related to radiometric calibration for imaging or sounding instruments, familiarity with Infrared and Visible detector technology applications, spaceflight hardware integration and test experience, and problem resolution skills. Excellent technical, organizational, and planning skills are required.

This is a resident position at ITT located in Ft. Wayne, Indiana. Periodic travel will be required to and from the spacecraft contractor facility, GSFC and launch site. The Job Code is 97-004a.hou.

Applicant must have unrestricted authorization to work in the United States.

Spacecraft Attitude Control Systems (ACS) Engineer: To work with NASA and contractor engineers on the Polar Operational Environmental Satellite (POES) Project. Candidate must have a thorough knowledge of the operation and inter-relationships of ACS components such as reaction wheels, torquer coils, Earth sensors, Sun sensors, and inertial measurement units. Applicant must have experience in reviewing and evaluating activities related to the ACS subsystem, advising the customer of inadequacies, making recommendations for subsystem improvements, and performing special analyses and/or test and flight data evaluations. This position requires a BS or higher degree in engineering and at least ten years of experience in spacecraft attitude control subsystem design, development, integration, and test.

This is a resident position at Seabrook, Maryland. The Job Code is 97-011.hou.

Applicant must have unrestricted authorization to work in the United States.

If you are interested in these positions, please submit your resume to Richard Long by FAX (301-464-7413) or e-mail using our Web site at "careers.mda-esd.com" and include the above Job Code number in your response.

McDonnell Douglas Aerospace - Engineering Services Division is an equal opportunity employer - M/F/H/V.

Employment Opportunities

OCEANEERING

SPACE SYSTEMS

Oceaneering Space Systems has multiple (>30) contracts to address Technical Challenges in 5 different product areas. This broad business base offers varied design opportunities for engineers, while providing a stable work environment.

Oceaneering Space Systems (OSS), a division of Oceaneering International, Inc., located in the Clear Lake area, specializes in developing robust high technology solutions to our customer's challenges in harsh environments. We design and manufacture tools and equipment for astronauts and robots, advanced life support systems, advanced thermal protection systems for rockets, advanced refrigerators and freezers for use in space, and state-of-the-art NDE (Non-Destructive Stress Engineering) systems. OSS has immediate openings for:

MECHANICAL DESIGN ENGINEERS (Refrigeration Systems experience)

SOFTWARE ENGINEERS ((Habitability experience)

ELECTRICAL ENGINEERS (Hands-On Design and/or Instrumentation experience)

MECHANICAL ENGINEERS (Testing, Design, Hardware Integration experience)

QUALITY ENGINEERS (1 to 3 years Quality Assurance experience)

SENIOR ENGINEERS (Heat Transfer/Thermodynamics experience)

NDE ELECTRICAL DESIGN ENGINEERS (M.S. in E.E. or Physics)

Qualified applicants are asked to submit resumes and cover letter,
in strictest confidence, to:

**Oceaneering Space Systems
Personnel Department
16665 Space Center Blvd.
Houston, Texas 77058**

Responses may be sent via fax to 281-228-5549
or via E-mail to arothers@oss.oceaneering.com

EOE-M/F

Program Notes

From the Program Chair:

We hope everyone enjoyed Dr. Thagard's discussion of his adventures on the Russian Mir space station. It's still early in the term year so we expect even better presentations yet to come. We've extended invitations to Scott Adams, Tom Clancy, and Dan Golden so we've certainly taken a big step towards our goal of delivering stellar programs to the members.

Everyone is invited to enjoy next month's unique presentation by Dr. Bobby Alford, Executive Vice President and Dean of Baylor College of Medicine. Dr. Alford has served as Consultant to the Surgeon Generals of the United States Army and the United States Navy and served on the NASA Space and Earth Sciences Advisory Committee and The Task Force on the Scientific Uses of the Space Station.

Further, he participated in the select White House "Blue Ribbon" Advisory Committee for the Redesign of the Space Station.

Since life science studies are one of the biggest users of the Space Station, i.e. one of our biggest customers, this should be a informative glimpse and refreshing perspective on a side of space exploration we don't hear much about in our day to day work. We will probably gain more insight into

what scientist have learned from years of life science studies in space and perhaps, what breakthroughs we hope to achieve in future studies on ISS.

We still have several months ahead of us to bring even more exciting programs to Houston so I hope you'll all take an active role in your AIAA section and let us know how to serve you best. Among our nearly thousand strong membership, I know many of you travel and communicate with professionals all over the country so we'd love to hear your creative suggestions, feedback and perspective. I can be reached at: dan.selters@lmco.com. Thanks, hope you enjoy the program,

-dan.

A message for Young Engineers:

I think we can all remember our first days in the aerospace industry. For me, I was thankful to have any position at all as talks of layoffs and downsizing filled the air. I certainly would've given anything to have that extra advantage of industry experience and wisdom.

That's one of the reasons that drew me to the AIAA. In a dynamic field like aerospace, it's vital to

have industry connections and stay ahead of the wave of technology growth.

Yet, it's also nice to get away from all that and socialize with peers with common interests. That's why the Houston Section is developing a young engineer's forum. We hope to serve the large population of recent college graduates with both fun activities and perhaps challenging projects. Many engineers have commented that student projects were the best experience of their education. The Houston Section is one of the largest in the world and is very capable of promoting such challenging endeavors.

If you'd like to find out more the new young members group, please call Allison Westover at awestove2@ems.jsc.nasa.gov.

Volunteers:

Ever wonder how to get involved with the Houston Section of AIAA? It's easy just call any of the councilors listed in the October Horizons or on the website. Executive council meetings are open to anyone who would like to

See **PROGRAM**...continued on page 11...

PROGRAM...continued from page 10...

Notice Those Bar-Code Labels

- by Bill Best,
United Space Alliance

participate or you could even write us a letter and we'd be glad to address it to the council for you.

New Perspectives:

As Program chair, I would like to find ways to increase member turnout at our monthly meetings. We have well over 800 members and potentially many more that work outside the Clear Lake area. Do you have any advertising ideas for how to reach this audience? There are many trade papers and company newsletters around the Houston area. If you know of any industry publications that we may be missing please let me know: dan.selters@lmco.com

that's it!
Dan H. Selters
Lockheed Martin Space Mission
Systems and Services
2400 NASA Road One, MC C87
Houston, Texas 77058
281-333-7312
(dan.selters@lmco.com)

As you may have noticed the label on your "Horizons" copy is bar-coded. The bar-code is part of the automation process at the U.S. Post Office. If the labels are bar-coded your section saves about 1/3 on mailing costs (about \$30 on a typical mailout).

However the program which prints the mailing labels and adds the bar-codes checks a US Post Office approved data base to verify the address is legitimate and sorts them in 'walking order' (i.e. in the order they are delivered by your carrier). Some labels are not bar-coded because they do not match the data base (the program detects errors but does not correct them). The most usual reason for a missing bar-code is lack of or an incorrect street number (digit missing or transposed digits). Many of our section member use a NASA address. This is not a problem usually, one because I pull those out and input them directly into the NASA mail system and two, because the PO knows where NASA is with or without a street address. The street address should

be the line above the city, state, ZIP line.

If your copy of "Horizons" arrived with no bar-code please check your address and let us or AIAA Headquarters know what the correct address is (1-800-NEW-AIAA). This will save your section money as any newsletter label sans bar-code must be mailed first class.

By the way JSC is located at 2101 NASA Rd 1.



Horizons

UNIVERSITY of HOUSTON

Cullen College of Engineering

Houston, TX 77204-4814 Fax: 713/743-4214
713/743-4200

GRADUATE DEGREE PROGRAMS IN INDUSTRIAL ENGINEERING AND AEROSPACE ENGINEERING

COURSES OFFERED AT UH-CLEAR LAKE

SPRING 1998

CLASSES BEGIN TUESDAY, JANUARY 20, 1998

Course in Industrial Engineering

INDE 6361/11404

4:00 - 7:00 PM

Mngt. & Organization of Production
Wednesday

Dr. John Hunsucker

Course in Mechanical Engineering

MECE 6334/11227

5:30 - 7:00 PM

(Rooms to be assigned)

Convection Heat Transfer
Tuesday/Thursday

Dr. Keith Hollingsworth

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

ELEE 6373/02508
11:30 AM - 1:00 PMAdvanced Computer Architecture
Tuesday/Thursday

Dr. Pauline Markenscoff

ELEE 6397/11234
12:00 - 1:30 PMParallel Architectures
Monday/Wednesday

Dr. Martin Herbordt

INDE 6334/11214
4:00 - 5:30 PMStat. Decision Analysis & Design
Tuesday/Thursday

Dr. Benjamin Ostrofsky

INDE 6369/11223
5:30 - 7:00 PMKnowledge-Based Systems
Tuesday/Thursday

Dr. Miriam Heller

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

Prospective students must submit the following to the department of their intended major by the deadline: graduate application and fee, official transcripts from each institution attended, official test scores, and letters of reference. Applicants should contact the department of their interest.

REGISTRATION/ENROLLMENT BY VOICE INFORMATION PROCESSING SERVICE
November 10 - December 13

FEE PAYMENT DUE BY MAIL
January 20, 1998

Call Cullen College of Engineering at 743-4200 or NASA/JSC Training Office at 483-3075 for admission and registration information.

We Are Presenting A Financial Education Seminar

TITLE: **Inspiration and Enrollment--
Powerful Keys to Leadership**

SPEAKER: **Bill Hartwell
Russian Integration Group
International Space Station Program
Boeing**

LOCATION: **2450 NASA Road One
Room 32C (2ND Floor)
Lockheed Martin Building**

DATE: **December 2, 1997**
TIME: **7:00 - 8:00 PM**

Many of us in our daily lives can confuse the two concepts: management and leadership. While every organization benefits from effective forms of both management and leadership, they clearly are separate roles. This seminar is desio help youetween the two roles.

Leadership is based on inspiration and vision -- that is, "showing the way." In this discussion, Bill Hartwell will share six specific steps to inspiring others with your vision, and enrolling them to take action. People in leadership positions will get significant value from this discussion. However, anyone interested in living life powerfully should attend.

Come hear Bill Hartwell anmore about leadership. Bill is committed to life-long education -- especially education associated with leadership roles.

TO MAKE A RESERVATION, PLEASE CONTACT;
Charles Halliman (At Information Uncover)
(Tel) 991-165 or (Email) 72155.1324@compuserve.com
MAKE RESERVATIONS BY 12:00 P.M., MONDAY, DECEMBER 1, 1997
OPEN TO AIAA MEMBERS AND NON-MEMBERS

AIAA Calendar

The AIAA Houston Section Calendar provides information on all Houston Section events and other activities of interest. The listing includes Council meetings, which are open to all interested members, Horizons deadlines, committee meetings, Lunch & Learns, and similar events. Also included are local aerospace-related events. Please send pertinent details to Dr. George Nield at NASA JSC, Mail Code YA, Houston, Texas 77058; phone (281) 483-1364 fax (281) 483-2968; or e-mail gnield@ems.nasa.jsc.gov.

November 1997

- November 6 - Council Meeting, 5:00 p.m., Center for Advanced Space Studies.
- November 13 - Dinner Meeting. "Status Report on the Space Biomedical Research Institute," featuring Dr. Bobby Alford
- November 10 - Horizons Deadline. Please send newsletter articles or activity information to Bill Best, Publications Chair, at the following e-mail address:
william.d.best@usahq.unitedspacealliance.com

December 1997

- December 4 - Council Meeting, 5:00 p.m., Center for Advanced Space Studies.
- December 11 - Dinner Meeting.
- December 16 - Region IV RAC Telecon.
- December 15 - Horizons Deadline. Please send newsletter articles or activity information to Bill Best, Publications Chair, at the following e-mail address:
william.d.best@usahq.unitedspacealliance.com



Space Anniversaries

Courtesy of Ron Baalke
Jet Propulsion Lab

November 1997

- * Nov. 03 - 40th Anniversary (1957), Sputnik 2 Launch (Carried Laika the Dog)
- * Nov. 07 - 30th Anniversary (1967), Surveyor 6 Launch (Moon Lander)
- * Nov. 08 - 15th Anniversary (1982), Wethersfield Meteorite Fall (Hit House)
- * Nov. 09 - 30th Anniversary (1967), Apollo 4 Launch (1st Saturn V Launch)
- * Nov. 10 - 25th Anniversary (1972), Anik 1 Launch, 1st Canadian Communications Satellite
- * Nov. 11 - 15th Anniversary (1982), STS-5 Launch (Columbia)
- * Nov. 23 - 20th Anniversary (1977), Meteosat-1 Launch (1st ESA Launch)



Cranium Cruncher

I thought I'd bamboozle a bunch of you last month with my "Turkeys in the Road" puzzle, but I've received 10 correct answers so far, and I'm still getting a few. I was pleased that the following folks figured out how many turkeys were in each crate at the end of the day:

Al Brandli
Dan Selters
Frank Baiamonte
Steve Johnson
Chris Stewart
Michelle Davis
Bob Maraia
Monica Visinsky
Mark Phillips
Bill Miller

My random process, whereby I select a winner from the correct responses received by press time, has decided that Chris Stewart is the October winner. Congratulations Chris. You win a free meal at any upcoming AIAA monthly event through the next 12 months. Bon appetit! And keep those answers coming.

For those of you who didn't get around to tackling the October puzzle, the number of turkeys in the crates was: Crate #1 - 45 turkeys; Crate #2 - 36 turkeys; Crate #3 - 42 turkeys; Crate #4 - 35 tur-

keys; Crate #5 - 43 turkeys; and Crate #6 - 32 turkeys.

Now here's one that blends verbal skills with a little math and logic. I call it "Building Blocks". Let's see how you do on this one!

BUILDING BLOCKS

The figure below shows a triangular stacking of 36 toy blocks, 33 of which bear a single letter, and 3 of which bear the symbol #. By selecting the blocks one at a time you can spell out six words, clues to which are provided below. Now the trick is that you must select only blocks that are not supporting other blocks - so you'll have to take the "A" first, and then you must decide whether the "T" or the "N" should come next. You proceed in that manner to spell out the six words, and when you have successfully done that, only the three blocks with the # symbol will remain. The clues to the six words and the number of letters in each are as follows (not in the order in which you'll form them):

1. Location (5 letters)
2. 3-D image (8 letters)
3. Insect (3 letters)
4. Measuring Tool (7 letters)
5. Every (4 letters)
6. E.g., whale (6 letters)

A
NT
EAN
CVUA
HEMET
EMLXLG
AMAHOR#
STNOAM##

Your job is to tell me the six words and the order in which they were formed to keep the blocks from falling.

Don't let those blocks tumble! Send me your answers via paper mail to:

Norman Chaffee
NASA - JSC
Mail Code AP2
Houston, TX 77058

or reach me by e-mail at norman.h.chaffee1@jsc.nasa.gov

I'll publish a list of successful responders (along with whatever additional response I receive for the Turkey puzzle from last month) next time, and will select a November winner, by my random and se-

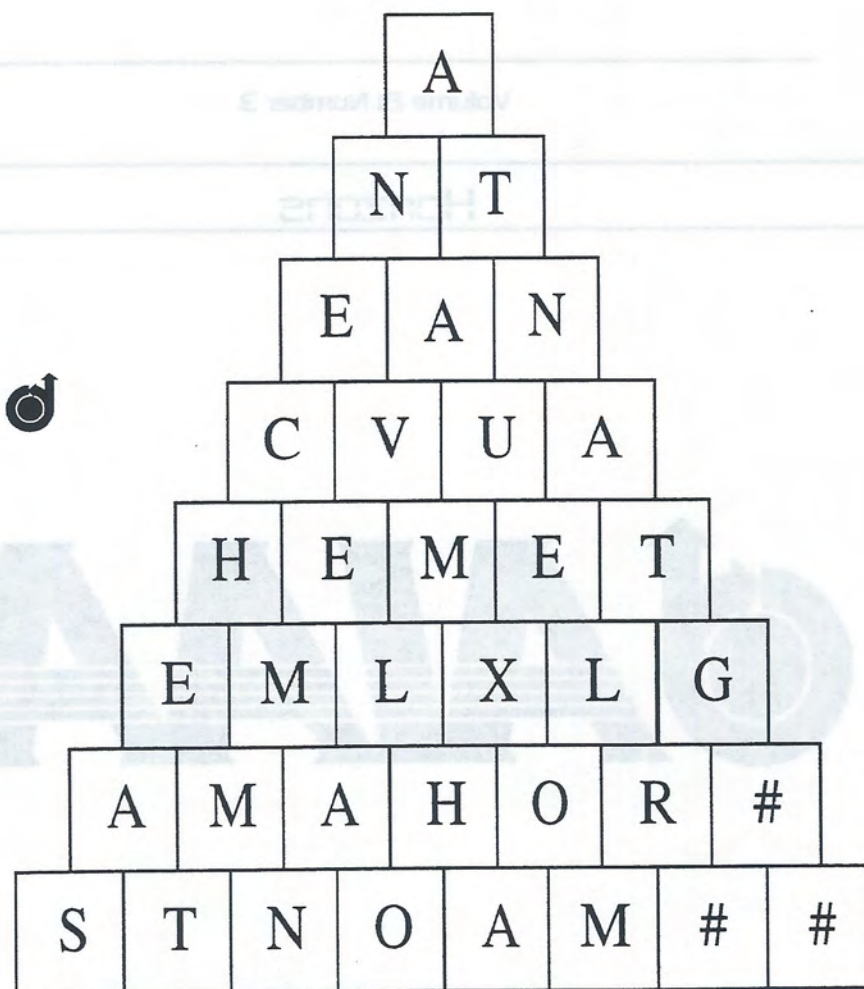
See *CRANIUM...* continued on page 17...

CRANIUM...continued from page 16...

cret process, from the pool of correct answers to "Building Blocks". The winner will receive a gift certificate for one free meal at an upcoming AIAA monthly meeting.

Good luck. Let me hear from you.

Norm Chaffee





Houston Section
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Webster, TX 77598

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Volume 21 Number 3

Horizons

November, 1997





GEORGE NIELD
CHAIRMAN 1997-98

American Institute of Aeronautics and Astronautics

HOUSTON SECTION P.O. BOX 57524 WEBSTER, TEXAS 77598

JOINT MEETING WITH THE NMA

Thursday, November 13, 1997

FORMATION OF THE NSBRI

BOBBY R. ALFORD, M.D.
Chairman of the Board / CEO
National Space Biomedical
Research Institute (NSBRI)



PRESENTER

As Chairman of the Board and CEO of the newly established and NASA funded NSBRI, he leads a consortium of institutions that includes Baylor College of Medicine as the lead institution and, in addition, includes MIT, Harvard Medical School, John Hopkins University, Morehouse School of Medicine, Rice University, and Texas A&M University.

In addition to his position with the NSBRI, Dr. Alford is Executive Vice President and Dean of Medicine at Baylor College of Medicine. Dr. Alford has served as a member of the Advisory Council of the Lunar and Planetary Institute and on the NASA Headquarters National Advisory Council. Other NASA participation has included the select White House "Blue Ribbon" Advisory Committee for the Redesign of the Space Station and the Aerospace Medicine Advisory Committee (Chairman).

DINNER MEETING

5:30 Social
6:15 Dinner
7:00 Presentation

Entree: RIB-EYE STEAK

MEMBERS	\$ 7.00
NONMEMBERS	\$12.00
STUDENTS	\$ 5.00

ROBERT R. GILRUTH RECREATION CENTER
JOHNSON SPACE CENTER

MIROS GARZA
483-0934
USA

JANET STEWART
333-6724
LOCKHEED MARTIN

NICK JOHNSON
483-5313
NASA

CALL ONE OF THE ABOVE FOR RESERVATIONS.

NOTE: RESERVATION DEADLINE IS FRIDAY NOVEMBER 7 AT 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.