

Growing up with Test Pilots



Dr. George Ka'iliwai describes one of the many special training aircraft used at Edwards AFB (see pg 4).

Horizons

March 2004

AIAA Houston Section ◆ **ONLINE** ◆ www.aiaa-houston.org

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Features

<i>Elections are Coming!</i>	3
<i>Jules Verne and ISS</i>	3
<i>Growing up with Test Pilots</i>	4
<i>Honors and Awards Update</i>	4
<i>Annual Technical Symposium: Deadline Approaching!</i>	5
<i>Career Planning and Development Workshop</i>	5

In Every Issue

<i>Chair's Corner</i>	3
<i>Calendar of Events</i>	5

Please submit stories and events to *Horizons* by

March 25

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Chair's Corner

Are you 'getting enough' out of your AIAA membership? For your membership fee you can simply receive *Aerospace America* and *Horizons* or you can use it as a key to open new opportunities.

Every month local members volunteer for activities ranging from organizing technical workshops to simply putting together the newsletter. Each of these activities pays back the volunteer many times over the effort each puts in. It's the closest thing to perpetual motion I've ever seen.

The best way to extract the value from your membership is to serve as an officer in your local section. I encourage you to apply for positions in for the upcoming election. If you're not involved with your local section, you're not getting your money's worth!

Michael L. Oelke
2003-04 Chairperson, AIAA Houston Section

Elections are coming!

by Michael Oelke, Chairperson

By now all of you should have received your election ballots from AIAA national. Please take time to read the biographies and cast your vote! Remember – the deadline for your ballot is March 17th,

On a local note, nominations are currently open for our election and ballots will be sent out next month. There are thirteen openings on the council next year, the six key officers and seven councilors. The current slate for our officers include:

Chairperson:	T. Sophia Bright
Chair – Elect:	Steve King
Vice Chair Operations:	Luke Mays
Vice Chair Technical:	(nominee needed)
Secretary:	(nominee needed)
Treasurer:	Padraig Moloney
Councilor:	Norman Chaffee
Councilor:	Douglas Yazell
Councilor:	Brent Anderson
Councilor:	(4 more nominees needed)

Councilors serve for two year terms and all other officers serve for one year. While we have several people already on the slate, we welcome you nominate yourself for any of the above positions.

Serving as a Houston Section AIAA officer is an excellent opportunity to meet leaders in the JSC community, hone your professional skills, and serve the aerospace community. If you are interested please contact AIAAchair@aiaa-houston.org (remove "AIAA" before sending) before March 17th.

Jules Verne and ISS

Upcoming AIAA Lunch and Learn



Date: March 24, 2004 (Wednesday)

Time: Noon - 1:00 pm

Place: NASA/JSC Bldg 16, Room 111/113

Topic: The mission of the first Automated Transfer Vehicle (ATV), named *Jules Verne* in honor of the 19th century French author, to the International Space Station (ISS), will mark the first rendezvous and docking for a European spacecraft. It will also represent the most demanding and complex of eight ATV missions planned from 2005 to 2014 to re-supply the ISS. It is up to *Jules Verne* to demonstrate that, under the responsibility of the ATV Control Center (ATV-CC) in Toulouse, it can automatically and safely handle any contingency plans for the safety of the ISS and its crew. This demonstration flight must prove all critical in-flight safety functions before proceeding with docking, including testing its safety critical abort functions.

Speaker: Brian Rishikof is a manager and technical lead at Odyssey Space Research, L.L.C. Brian has spent the last 5 years leading the team performing NASA's independent assessment of the ATV vehicle GN&C and Rendezvous, Proximity Operations and Capture design in support of ISS integration. He spent the first 9 years of his career at Boeing/McDonnell Douglas supporting various GN&C development projects, including the Space Shuttle, the IRIDIUM constellation of satellites and experimental programs such as Moon and Mars human mission architectures.

AIAA membership is not required. If you plan to attend, please leave contact information with Padraig Moloney at 281-483-5917 or secretary@aiaa-houston.org. Please contact Padraig in advance if you require JSC badging (3 days for citizens, 2.5 - 3 weeks for non-citizens)

Growing up with Test Pilots

By Nathan Weber, contributing author

The AIAA Houston section was honored to have Dr. George Ka'iliwai III, AIAA distinguished lecturer, as the February dinner meeting speaker. Dr Ka'iliwai shared his experiences growing up at Edwards Air Force base and it's inexorable draw that kept him coming back and ultimately led to his acceptance of the position of Commandant of the USAF Test Pilot School. He also recounted some of the exploits of his colleagues at Edwards, from roof stompings to painting of parking spaces.



Dr. George Ka'iliwai describes Desert Wings, the local newspaper at Edwards AFB

The Air Force Test Pilot School (TPS) trains not only fighter pilots, but navigators, engineers, and even a civilian pilot. The 48-week course also includes attendees from other countries. A variety of aircraft are used in the training, from large multi-engine aircraft to single engine propeller driven aircraft to high performance fighters. The NF-16D VISTA is the TPS crown jewel. It is highly modified to be a test bed aircraft for flight controls. VISTA stands for variable stability in flight simulator test aircraft.

Dr. Ka'iliwai gave the attendees an idea of the mission of the test pilot school, and from his long history at Edwards, some of the sacrifices made by the early test pilots and the improvements in safety as a result. Future direction of the program includes short courses to reach a broader audience and UAV programs.

For more information on the USAF Test Pilot School:
<http://www.edwards.af.mil/tps/>

Edwards Air Force Base
<http://www.edwards.af.mil/>

Honors and Awards Update

by Rakesh Bhargava, Honors and Awards Chairman

One of the activities of the Honors & Awards Committee is to nominate Houston area member for various local and national awards. In addition, the Committee also identifies and nominates members for membership upgrades (such as, Senior member, Associate Fellow, Fellow and Honorary Fellow). We are pleased to share the following achievements made by our members during this fiscal year:

Last fall, Larry Bell and Bonnie Dunbar received 2003 CLCTS Technical Educator of the Year Award and 2003 CLCTS Technical Administrator of the Year Award, respectively.

Earlier this year, Brewster Shaw was awarded the 2003 AIAA Von Braun Award.

More recently, Merri Sanchez, Zafar Taqvi, and Bill Atwell have been awarded 2004 AIAA Sustained Service Award.

The following seven Houston area AIAA members have been upgraded to the Associate Fellow grade:

Malcom J. Andrews
Shirley Brandt
Franklin R. Chang-Diaz
Claude A. Graves
Karolos M. Grigoriadis
Forrest E. Lumpkin
Norman N. Parker

Honors & Awards Committee, AIAA Houston Section, would like to extend congratulations to all awardees for their well-deserved recognition!

The deadline is fast approaching for Associate Fellow and Fellow upgrades. If you would like to nominate yourself or someone else, please contact Rakesh Bhargava (AIAAbhargava@uei-houston.com (remove the "AIAA" before sending)).



Annual Technical Symposium: Deadline Approaching!

By Michael Oelke, Chairperson

The deadline is fast approaching for you to submit your abstract for presentation at our Annual Technical Symposium. A few key dates to keep in mind:

Speaker registration and abstract deadline
Monday, March 15, 2004

Reservation deadline for lunch and reception
Wednesday, April 7, 2004

Annual Technical Symposium
Friday, April 16, 2004

Our Vice Chair Technical, Douglas Yazell, and his committee have been hard at work developing an outstanding program. Thanks to the generous support of NASA/JSC we are able to offer this outstanding event with free registration. However, attendees who wish to enjoy lunch while at the symposium must make meal reservations and pay for the meals when they arrive.

This symposium presents an opportunity to earn continuing education credit for a professional engineer certification, polish your presentation skills, or simply to showcase some of your work. The three concurrent tracks will be for:

International Space Station

Service vehicles, space operations, and other topics

Space Shuttle

Return to flight, upgrades, and other topics

Aerospace Technology

Nanotechnology, life sciences, and other topics



Career Planning and Development Workshop

By Brad Files, Young Professional Chair



Ever feel like you could use a little guidance on your career? On March 27th, the Young Professional's Committee will host a Career Planning and Development (CPAD) Workshop at the Gilruth Center. This workshop is the next in a series of AIAA professional activities following last year's highly successful Mid-level Professional's Workshop. CPAD is being organized to maximize the benefit for young professionals in the Houston area. The highlight will be when Glynn Lunney, Apollo-era flight director, provides the keynote lunch address, based on his career experiences. The workshop will begin with a panel of experts who have chosen different career paths and can provide advice regarding their choices. Throughout the day will be speakers on topics such as How to Handle Performance Appraisals, Working with Difficult People, Debt Reduction, Business Etiquette, and more. Details can be found at <http://www.jsc.nasa.gov/aiaa/>. For more information, please contact Brad Files at (281) 483-5967 or AIAABradley.s.files@nasa.gov (remove the "AIAA" before sending).

Calendar

March 2004

- 5 - 6 Mars Settlement Design Competition (2nd)
- 25 Dinner Meeting with Dr. John Lienhard
- 25 - 27 Science & Engineering Fair of Houston

April 2004

- 1 - 3 FIRST Robotics "Lone Star Regional" Competition (Reliant Park)
- 2 - 3 Region IV Student Paper Conference
- 16 Annual Technical Symposium (ATS)
- 16 Dinner Meeting (in conjunction with ATS)

May 2004

- 6 Space Day
- 20 Dinner Meeting (TBD)

June 2004

- 17 Awards Banquet



Houston Section

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