

The San Diego Flyer



Volume 4, Issue 2 January 2005

The newsletter of the AIAA San Diego Section

Editor- Katherine Miller

Steady Course

Kevin Burns, Acting Section Chair

The section has greatly missed the leadership provided by its Chairman Eric Heininger of Pyramid Space, Inc. Just after Thanksgiving, he announced that he had to resign from the section chair position. Eric explained that the programs at Dryden and Edwards AFB that he thought would continue had not materialized; and those that were left most likely would not need his services. Therefore, he had to shut down his Pyramid Space office in Sorrento Valley. Lockheed-Martin offered Eric an excellent position in Houston and he accepted it.

At the December Council meeting, it was decided that because Eric had done such a good job of getting things planned-out, that we would continue with everything as they were scheduled. Because most of the work for the Section meetings was already completed, I would fill both the positions of Acting Chairperson and Chairperson of Long-range Planning. I asked that each person on the council maintain a binder with the tasks and records associated with their position. This binder could act as both a guide and historical record of events and activities.

Treasurer Penny Ulander asked that all council members review their budgets in detail and be prepared to recommend any mid-year updates at the January meeting.

Eric Carlson has made arrangements for holding the January 19th dinner meeting in the Goodrich Cafeteria meeting hall and the "South of the Border Buffet" was selected. Admission will be \$10 for members and non-members and \$5 for students. Eric noted that all non-Goodrich attendees will need visitor badges and will need to notify Eric of their attendance at least two days in advance.

It was noted that there are a number of public policy matters surrounding aeronautics and space that were at the forefront of San Diego issues; not the least of which is the relocation of the San Diego Airport. All members were asked to consider serving in this important role on the Council which is currently unfilled. Lee Bolt, who had won national AIAA recognition for his work while serving on the Council in this role, said that he would offer his advice and assistance to anyone willing to accept the position, but for personal reasons would be unable to reassume the position at this time.

Another position that needs to be filled on the Council is the Young Professional Section chair. This position is very important to our Section's continued growth and vitality. Young professionals (loosely defined as members under the age of 35) are not only a great current resource, but comprise the future leadership of our Section. The primary task of this position is to excite, mobilize, and integrate the young professionals into the AIAA.

Quentin Goss stated that we would again be judging in the Science Fair on March 16th. Anyone interested in volunteering to be a judge is asked to contact either Quentin or myself.

The student representatives expressed interest in having a bus trip to JPL as did the professional membership. It was decided to plan a joint trip with coordinated planning between the Section and Chapters for some time in the spring.

It was noted that the January Council meeting was scheduled the same week as the annual Meeting Aerospace Sciences in Reno. Therefore, it was decided to hold the next Council meeting on January 5th. All Alaa members are invited and encouraged to participate in the Council meetings which are usually held the second Wednesday of the month at the Venice Pizza restaurant, 3333 El Cajon Boulevard, San Diego, at 5:30 in the evening.

On November 3rd, the section held its first movie night at AI-ES titled, <u>Historic Programs at Convair in San Diego</u>. Bill Chana was the moderator for the night. Five movies were shown including "Convair Big Stick", "Convair Lobber", "GD Canadair CL-84", "Supersonic Wedge", and "Sneaking Through the Sound Barrier". A Chinese buffet was served. Overall the evening was very successful, and I want to thank everyone for coming. A special thanks to Nagy Nosseir for bringing his graduate class from SDSU.

The Chinese Restaurant everyone was asking about from the movie night was the Mandarin Szechuan Chinese Restaurant at 3373 Rosecrans Street. It is behind the Sizzler Restaurant in the Loma Square Shopping Center near the corner of Midway and Rosecrans on Point Loma. The restaurant gave us some good price breaks, which is one of the reasons why we have not lost money on any of our meetings so far this year.

The month of December was dedicated to Pre-College Outreach. We passed out pamphlets and other information regarding how teachers can receive grants for aerospace related class projects, and how educators can call on our Council to provide assistance demonstrations or to provide lectures relating to aerospace activities at many schools throughout San Diego County. Our first classroom opportunity came on December 15th when we had the opportunity to go to a "6 to 6" program at Los Altos Elementary School, and present a Space and Rocket Program.

AIAA Hosts Space and Rocket Program for YMCA After-school Daycare

The City of San Diego, in partnership with San Diego City Schools and organizations like the YMCA, has become the first major city in the nation to offer before and after school programs at every public elementary and middle school within its jurisdiction. The program now operates in 202 schools, serving over 25,000 students who receive academic support and enrichment activities every school day, one hour before school begins, and after school until 6:00 p.m. San Diego's "6 to 6" program has been the subject of national attention.

San Diego's "6 to 6" is designed to be an expansion of the regular school day, with a balance of academic and enrichment activities that promote enthusiasm for learning and build skills in the areas of reading, writing, speech, math, and science.

Working in conjunction with the Border View YMCA, Los Altos Elementary School, and the San Diego Fire Department, the San Diego Section of AIAA contributed to those enrichment activities with their pre-college outreach program designed to provide classroom "experts" on air and space related subjects; give demonstrations that illustrate scientific, technological, and mathematical principles in the aerospace field; and support science, math, and technology competitions.

Section volunteers also collect information and materials that could serve as classroom resources such as the NASA Educator curriculum materials that were used in this instance.

The program started out with a short talk on the principles of rocketry. Then the students assembled in the school yard under strict supervision, as they watched the launching of a model rocket. The rocket reached a height of approximately 300 feet, and then floated down with a built-in parachute recovery system. After reassembling in the classroom, the students, who ranged in age from 6 to 12 years old, learned how the lessons on rocketry applied to the Space Shuttle and America's space program. The students worked on building a model space shuttle as they watched educational videos on the solar system and discussed what it would be like to live in space. Educational materials and space program stickers were distributed to all the children to take home with them. Educational videos on the space program and a book on space exploration pioneers were donated to the daycare center for everyday use by the students.



This activity built upon the aeronautics program that was presented to the same students earlier in the year.

Membership News

Jim Peterson, Membership Chair

Section membership stands at 450 as of December 1st. We would like to welcome the following new AIAA professional members to the San Diego Section:

November

Eric Armstrong US Air Force
Thomas Bateman Northrop Grumman
Donald Bently BAE Systems

Donald Bently BAE Systems
Chad Berman US Navy

Heidi Budd Maxim Systems Geoffrey Butler BAE Systems

Lane Carlson UCSD

Tom Clay BAE Systems

Dany Fahmy UCSD Heidi Fuqua USC

James Gerard Northrop Grumman

David Gregg

Michael Grice NAVAIR Depot

North Island

Jason Hite SDSU

Keith Loss ATK Composites
William McNaul Alliant Techsystems

Josef Neumyer AIES Stefan Salameh UCSD

Kevin Scanlon Cal Poly Pomona

Peter Seyforth SDSU
Mark Shtayerman UCSD
Charles Stroben SDSU

Nevin Swearengin Northrop Grumman

Carl Tedesco SDSU
Andy Wilson SPAWAR
Hongzhou Xu Solar Turbines

December

Glenn Flaherty L-3 Communication

Brent Hampton

Randy Simpson SpaceDev

Larry Staples Northrop Grumman

If you have any questions about membership or about advancing your membership grade, please contact Jim Peterson at (858) 279-1940, or email to: jdpete@pacbell.net.

FIELD TRIPS

Doug Armstrong, Field Trips Chair

PALOMAR MOUNTAIN OBSERVATORY

The AIAA San Diego Section has set up a field trip to Palomar Mountain Observatory for the 29th of January, 2005. The bus will leave the



Mira Mesa park n ride at 1100 hours. We have a bus for 58 people but 60 can go if kids share some seats. The tours are 1 hour each so we are scheduled for 2 tours, one at 1 PM and another at 2 PM. People not on a tour can stay on the bus or play in the snow. **It will be cold**. The observatory is kept at nighttime temperature so wear appropriate clothing. We will have cold drinks and snacks on the bus.

The cost for this trip is:

Members & Spouses\$15.00Non members\$20.00Students\$10.00

I expect this trip to be oversubscribed so sign up early. For the last field trip, 20% of the people signed up did not show up. Others who wanted to go could not. Send an e-mail to me: Drdougarm@aol.com to get priority on the list. However, your name will not be put on the list until I receive your check made out to AIAA San Diego and mailed to me at:

Doug Armstrong 16474 Espola Rd. Poway, CA 92064-1413

UCSD Undertakings and Adventures

Brad Elliott, UCSD Student Section Secretary

The AIAA Student Chapter at the University of California San Diego was extremely busy during this past fall quarter. The Design Build Fly Team has been our main focus as the initial design and concept ideas were being put down on paper. Competition was not the only thing that interested us, though.

Many of us went to the Miramar Air Show where we saw the most awesome sights. We were allowed to indulge our fantasies as we got up close and personal with all kinds of military and private aircraft. We also took a tour of the General Atomics Predator facilities, which are located near the university and has been a continuous supporter of our club.

A few of us took a trip on September 29 to see the historical launch of SpaceShipOne as it successfully completed its first sub-orbital flight in the Ansari X-Prize Competition. inspiring to see Scaled Composites perform this miracle on such a small scale while being publicly compared to countries and companies with huge bank roles and facilities. This accomplishment truly made space an attainable goal for average people, who previously only had dreams about space. Jim Benson, founder of SpaceDev, also came to UCSD and spoke to our club about his company and their development SpaceShipOne's rocket engine. He elaborated on the subject of how small enterprising companies should following Scaled be Composites' lead by forging ahead in space development with an "elegantly simple" style.

Our club definitely had an interesting quarter, filled with work and play. We are on track with the DBF competition and are excited about opportunities ahead of us in the aerospace and aeronautic fields in San Diego.

Note from the Editor

Katherine Miller, Newsletters and E-Bulletins

The council has just found out that Eric Heininger has returned to San Diego, and will be resuming his position as Section Chair. We want to welcome him back, and thank Kevin Burns for all of his wonderful work while Eric was away.

Special Events Calendar

<u>2005</u>

Jan 19 Dinner Meeting

29 Field Trip Palomar Observatory

Feb 20-26 National Engineers Week

25 NEW Awards Banquet

April 16 Technical Symposium

23-24 DBF Competition

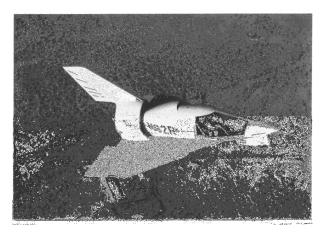
May 19 Awards Banquet



The San Diego Section invites you to a Dinner Meeting featuring:

The Rohr Triphibian Airplane-A High Technology R&D Project Presented by AIAA Distinguished Lecturer Bill Chana

Wednesday, January 19, 2005



In 1973, Rohr Chairman Burt Raynes resolved to move Rohr into the light airplane market offering an undeniably superior product by summoning Walt Mooney as designer and project manager to come up with a quantum leap in light aircraft technology. It would have better performance, greater safety, accessibility and comfort, greater economy, and lower production cost than any competitor. Mooney selected the best people Rohr had, including key players Bill Chana, Bob Fronius, Mike Voydisch, and Don Westergren, and built three airframes — two flying prototypes and a static tester — plus 1/10- and 1/2-scale models for feasibility tests. By

the time the project ended (for reasons having nothing to do with the merits of the airplane), one prototype had been flown.

In 1973-1975, Chana was the Deputy Program Manager on the Rohr Industries program to develop a general aviation triphibian airplane, i.e., an airplane that could land on land, water, and snow. An advanced concept prototype was designed, built, and flight-tested. The aircraft had a ducted fan propulsion system, a delta wing, all-composite structure, and a combination landing gear and water skis. Hydrodynamic tests were conducted with small and large-scale models.

There were many lessons learned in this development program; lessons that are worthwhile transferring to AIAA young member engineers and managers. 35mm slides cover the construction, propulsion installation, taxi tests, and flight tests while a video covers the taxi tests and the hydrodynamic tests.

When: Wednesday, January 19, 2005

6:00 PM Social

6:30 PM South of the Border Buffet

7:15 PM Speaker

Location (see reverse side for directions):

Goodrich Aerostructures Group

850 Lagoon Drive

Chula Vista, CA 91910

Cost: Members/non-members - \$10.00, Students - \$5.00

For reservations, please contact one of the following people with your name and those of any guests no later than Monday January 17.

Jake Yujia.yu@goodrich.com(619) 691-4087Nigel Barkernigel.barker@goodrich.com(619) 691-2568Eric Carlsoneric.Carlson@goodrich.com(619) 691-6594

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Directions from I-5 South to Goodrich Aerostructures Group 850 Lagoon Dr. Chula Vista, CA 91910-2098

From I-5 South get off at the E Street exit in Chula Vista. At the end of the exit ramp, do not turn onto E Street, go straight to Bay Blvd. Continue one block past E Street on Bay Blvd. and turn right onto Lagoon Dr. Goodrich Aerostructures is on the left on Lagoon Dr. and cannot be missed.

Go to the guard shack where passes will be available, this is why it's important to RSVP by Monday January 17. They will know pertinent information about the meeting. Visitor parking is just past the guard shack. Walk from there south a few yards to the main lobby. Somebody will meet you there to escort you to the meeting.

AIAA Technical Symposium

You are invited to make a 25-minute oral presentation in the symposium on any technical subject of potential interest to the San Diego aerospace community. This can also be a repeat of a presentation that you have made at any national meeting.

CALL FOR PRESENTATIONS

The symposium will be held on Saturday, 16 April 2005 at the AI-ES Training and Conference Center between the hours of 8:00 a.m. and 4:00 p.m.

If you wish to make a presentation, please submit a one page abstract of your proposed talk by 15 March 2005 to:

Greg Marien 9525 Mission Gorge Road #26 Santee, CA 92071

Phone: (619) 248-6246

Email: gregmarien@yahoo.com

You may also send in your abstract electronically by attaching it to an email and sending it to the above email address.



Call for Petitions for 2005 – 2006 Elected Officers

In accordance with the San Diego Section Bylaws, all members are hereby advised that Petitions for Council Elected Officers are invited. Elected Officers are as follows:

Section Chair
Vice Chair, Long Range Planning
Vice Chair, Technical
Secretary
Treasurer

Petitions to run for each office must be submitted to the Secretary by February 1, 2005.

Address: Eric Carlson

Secretary, AIAA San Diego Section

377 Minot Avenue

Chula Vista, CA 91910

E-mail: eric.carlson@goodrich.com

The Council includes members appointed by the elected Chair. Appointed Council positions are as follows: Program Arrangements, Young Professionals, Field Trips, Pre-College Outreach, Public Policy, History & Bylaws, Flyers, Newsletter & E-Bulletins, Membership, Honors & Awards, Internet Webmaster, and Student Activities.

Members are encouraged to notify the Secretary of their interest in assisting with any of these positions. The Secretary will notify the elected Chair, who will make appointments in early May.

CALL FOR NOMINATIONS – AIAA SECTION AWARDS 2005

The San Diego Section of the American Institute of Aeronautics and Astronautics (AIAA) seeks candidates for the following awards:

<u>Outstanding Achievement by an Aerospace Organization</u> - Local companies that have advanced the state of the art of aerospace engineering or have utilized significant technical and/or managerial innovations in a way that has resulted in exceptional accomplishments.

<u>Outstanding Contribution to Aerospace Engineering</u> - Candidates who have made significant technical contributions such as the technical direction of engineering projects, developing new products, obtaining patents, pioneering new technologies, conducting fundamental research, etc.

<u>Outstanding Contribution to Aerospace Management</u> - Candidates who have made significant contributions to the leadership and management of aerospace companies, organizations or projects.

<u>Outstanding Contribution to the AIAA San Diego Section</u> - AIAA members who have made significant contributions to the San Diego Section through such activities as service to the membership, service on or to the Section council, supporting section activities, etc.

<u>Outstanding Contribution to the Community</u> - AIAA members who have played a significant role in community activities outside of AIAA. This may include participation in other societies, community service organizations, charities, schools, etc.

<u>Outstanding Contribution to AIAA Region VI</u> - AIAA members who have made significant contributions to the Region VI organization in such areas as conference organization and leadership, technical committee participation, public policy activities, etc.

<u>Outstanding Contribution to AIAA at the National Level</u> - AIAA members who have made significant contributions to the National organization in such areas as conference organization and leadership, technical committee participation, public policy activities, etc.

<u>Outstanding Educator Associate</u> - Educator Associates who have made significant contributions to the future of aerospace engineering by enhancing the education of young people in areas relevant to engineering. This award is part of the AIAA Educator Associates Program.

Nominations should include:

- 1. Nominee's name, affiliation, address and phone number.
- 2. Award Category (from the list above, or write-in categories are acceptable).
- 3. Nominator's name, affiliation, address and phone number.
- 4. A short paragraph justifying the nomination.

Point of contact for questions and to send award nominations:

Mr. Keith Glassman Honors and Awards Chair, AIAA San Diego Section 3198 East Fox Run Way, San Diego, CA 92111-7721 (619) 545-3736 (W) (858) 565-6526 (H) e-mail: Keith.Glassman@navy.mil

Awards will be handed out at the Annual Awards Banquet to be held May 19, 2005. Nominations must be received by March 25, 2005 for consideration.



Position	Name/Company	Work	Email Address
		Phone/Fax	
Section Chair	Kevin Burns, Advanced Information Engineering Services	(619) 543-1700	Kevin.burns@AI-Engsvcs
Secretary	Eric Carlson, Goodrich Aerostructures	(619) 691-6594	Eric.Carlson@goodrich.com
Treasurer	Penelope Ulander, NAVAIR North Island	(619) 545-3935	penelope.ulander@navy.mil
Vice Chair – Long Range Planning	Kevin Burns, Advanced Information Engineering Services	(619) 543-1700	Kevin.burns@AI-Engsvcs
Vice Chair – Technical	Greg Marien, Northrop Grumman	(858) 618-5207	gregmarien@yahoo.com greg.marien@NgC.com
Program Arrangements	Jia (Jake) Yu, Goodrich Aerostructures	(619) 691-4087	jia.yu@goodrich.com
Field Trips	Doug Armstrong, USAF – Retired	(858)451-5637	Drdougarm@aol.com
Flyers	Nigel Barker, Goodrich Aerostructures	(619) 691-2568	Nigel.barker@ goodrich.com
Newsletters & E-Bulletins	Katherine Miller, SDSU	(619) 925-3378	k_dmiller@cox.net
Webmaster	Joey Neumyer	(858)274-3942	sdaiaa@yahoo.com tahoebrbr@yahoo.com
History & Bylaws	Bill Chana , General Dynamics - Retired	(858)488-7183	None
RAC VI Delegate	Nigel Barker, Goodrich Aerostructures	(619) 691-2568	Nigel.barker@ goodrich.com
Public Policy	VACANT		
Membership	Jim Peterson, General Dynamics – Retired	(858)279-1940	Jdpete@pacbell.net
Honors & Awards, and Career Enhancement	Keith Glassman, NAVAIR North Island	(619) 545-3736	Keith.Glassman@navy.mil
Student Activities	Andrew Bechtel, NAVAIR, NAS North Island	(619) 545-3797	Andrew.Bechtel@navy.mil
Professional Society Liaison	Warren Johnson, BFGoodrich Aerospace – Retired	(858)278-1317	wmjohnson2@earthlink.net
Pre-College Outreach	Quentin Goss, USAF – Retired	(858)451-6213	qjgoss@att.net
Young Professionals	VACANT		
Member at Large	Lee Bolt, Aerospace Consultant	(619) 281-0216	leebolt@worldnet.att.net
SDSU Faculty Advisor	George Faulkner, SDSU	(858)270-7354	DGFJR@aol.com
SDSU Student Chair	Nils Sedano, SDSU	(619) 961-5568	aiaa@rohan.sdsu.edu nilssedano@hotmail.com
UCSD Faculty Advisor	Dr. Kieko Nomura, UCSD,		knomura@ucsd.edu
UCSD Student Chair	Matthew Napoli, UCSD	(909)702-6678	mnapoli@ucsd.edu



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