



San Diego Section Begins New Year

The San Diego Section wrapped up another year and kicked off the new year of activities with the awards banquet. This annual event is usually followed by a flurry of activities, such as submission of the Section Annual Report and the submission of nominations for the Section Awards (both due June 30th). In July the section is required to provide the updated Section Officers' Roster to the Region VI liaison, Stephen Brock.

Regional Leadership Conference

The 2011 Regional Leadership Conference will be August 11-12, 2011 in Portland, Oregon. It will be held in conjunction with the Guidance, Navigation and Control and associated conferences. The AIAA Board of Directors will meet in the morning on Thursday August 11, 2011. Afterwards, the Regional Leadership Conference will begin with a combined luncheon with the conference participants and the Board of Directors.

New section officers and officers that have not been to a Regional Leadership Conference in several years are welcome and encouraged to attend. There is no registration fee for the conference. The San Diego Section would also be interested in hearing from those that have not served on the local Council, but have an interest in doing so.

This year's conference will allow you to interact with other officers, compare and contrast how the sections operate, what types of activities they offer. It will also allow you to interact with the

AIAA Board of Directors, learn about the AIAA structure (Regions/Sections, Technical Committees, and Staff), and meet staff members.

AIAA provides travel assistance to sections that are sending officers, which can also be supplemented by the local Section.

The GNC Conference will be at the Oregon Convention Center, but all events associated with the Regional Leadership Conference will be at the Doubletree Hotel.

Anyone interested in attending this event is encouraged to contact Phil Smith, the Section Chair, or any of the Section Council Members.

Engineers as Educators Workshop Opportunities in San Diego

Do you like to work with students? Want to find some simple, low cost activities that you can do with a classroom, scout groups or after-school clubs? This free workshop is for you! It will be presented at the 47th AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit, which will be held in the San Diego Convention Center on August 2, 2011 at 7:00 to 10:00 p.m. Space is limited, so we do ask that you register in advance by contacting Sharon Freeburn (contact information is on the Section Leadership roster at the end of this newsletter).

Aerospace Summer Camp

Looking for something for your child to do over the summer? How about spending it at one of the San Diego Air and Space Museum's Aerosummer Camps?

The San Diego Air & Space Museum offers a variety of half-day, week-long summer programs. These classes teach air and space history and science through hands-on activities such as designing and building model airplanes, launching model rockets, and flying simulators.

The summer camps run Monday-Friday, late June to late August. The San Diego Air & Space Museum welcomes children with disabilities and other special needs; working with "Kids Included Together" they ensure that all children have access to their programs. Contact the museum directly if they need to make accommodations to allow your child's successful participation.

The Museum is also looking for students ages 14 and older who would be interested in volunteering as an Aerosummer Camp Teacher's Aid (TA). If your child likes to work with kids and help them with fun hands-on activities, becoming a TA could be right for them. For more information, please visit:

http://sandiegoairandspace.org/education/summer_camps.php. For more information contact Klynn@sdasm.org

Teacher Recognition

Lisa Bacon, AIAA Program Manager, Pre-College Programs, has suggested that if local sections are giving awards to science fair winners, why not give their teacher an Educator Associate membership as reward? The teacher will appreciate the thought and they can qualify to apply for a \$200 hands-on math and science grant tied to aerospace or engineering. For more information contact Lisa at 703-264-7527.

California Flight Museum

The California Flight Museum is a collection of living, breathing, howling Warbirds; and they maintain and fly these historic aircraft on a regular basis. The museum is located on historic Brown Field, about 10 miles south of San Diego at the east end of the 905 highway. The collection is housed in three large hangars directly in front of the Terminal/Restaurant/Old control tower complex. The collection grows on weekends or holidays when members fly their

personal Warbirds in for Museum events. Their aircraft are all two-place with dual controls and allow museum members to fly backseat on local flights or to the occasional Southern California air-show.

The Museum does not sell rides. Members pay yearly dues and participate in maintaining the aircraft, hangars, library and wait for an open



backseat. This is a unique opportunity for anyone interested in aircraft and aviation history. You need not be a pilot nor a technical wizard to join them in their mission. Currently their members include two astronauts, airline pilots, a minister, physician, podiatrist, race car driver, talented mechanics, and a U.S. Navy F-4 Ace. The members have different backgrounds and different skills, but they share a love of airplanes and aviation. They are a friendly group that welcomes new faces. The aircraft are alive, and like all complex machines, require constant maintenance and attention. This is their mission and they enjoy it. They invite AIAA members to examine the most unique collection of flying aircraft in the West, and join in the work and excitement. For more information, please visit <http://californiaflightmuseum.org/>

Build your own Telescope

From nine o'clock in the morning until noon on nearly any Saturday, members of the San Diego Astronomy Association grind and test optics, and build telescopes in Peter DeBaan's four car garage turned optical shop. A nominal two dollar

fee is charged to attend, and all other supplies are provided at or below cost. To get started on your first telescope or to refigure or improve an existing one, contact Peter DeBaan at ATM@sdaa.org or Phone: 760-745-0925.



Miramar Event Seeks Volunteers

This could be a great opportunity for student branches or special activity groups within the local section to raise funds for their activities, such as Design Build Fly, student conferences, etc.

Approximately 2,500 volunteers are solicited to staff food and beverage booths and carts during the four days of Air Shows.

Community organizations participating in the volunteer program will receive a prorated percentage of all food, beverage and cart sales. In 2010, over \$100,000 was provided to individual Command Recreation Funds and civilian community organizations.

In order to participate in the 2011 Air Show Volunteer Program, download the 2011 Rules and Regulations document as well as the 2011 Volunteer Request Form from the Miramar Airshow website:

<http://www.miramarairshow.com/volunteers.html>

Complete the Volunteer Request Form, then fax to (858) 577-4122 or email it beginning July 1st, 2011 to Sonja Johnson, Volunteer Coordinator at sonja.johnson@usmc-mccs.org. Only written requests will be accepted. Applications will not be accepted prior to July 1st, 2011; and priority will be given to units who volunteer for all three days.

Written requests received by July 31, 2011 will be prioritized as follows:

- MCAS Miramar-based commands and subordinate units.
- Support groups which actively assist MCAS Miramar in staging the Air Show
- Active and Reserve commands and subordinate units within Southern California

- Civilian community organizations

Written requests submitted after July 31, but before August 31, 2011 will be handled on a first-come, first-served basis.

Volunteer positions can be staffed by any responsible individual representing the unit/organization, including active duty member, spouse, family member or designated representative (must be 21 to work beer booths).

Units must exercise their options no later than August 31, 2011.

All approved volunteer groups will be contacted approximately one month prior to the Air Show with Booth Number assignment. An Air Show Booth Volunteer Agreement must be signed by September 23, 2011.

Mandatory training for all booth supervisors and alternates will be held at 1300, 28 September 2011 at the MCAS Miramar Bob Hope Theater, Bldg. 2242.

A waiting list will be established on a first-come, first-served basis for units/organizations requesting additional booths or locations.

For additional information, contact Ms. Sonja Johnson, Volunteer Coordinator at sonja.johnson@usmc-mccs.org or call (858) 577-8649.



San Diego Section Awards Banquet

The San Diego Section ended another year with the annual awards banquet presenting many awards and scholarships.

To honor Col. Quentin J. Goss's achievements in aerospace, 60 years of membership with AIAA,

and outstanding support of the San Diego Section, the San Diego Section Council voted this year to designate the Greater San Diego Science Fair - Senior Category Award the Col. Quentin J. Goss Science Fair Award. This year's recipient was Jake Boring of Wangenheim Middle School for his entry, Best Adhesive To Attach Landing Gear to a Radio Control aircraft.

The Junior Division award went to Matthew Morris of Point Loma High School for his entry for Comparing Hydrodynamic Lift Against Lead Ballast In Sailboat Performance.

The joint AIAA/Space Grant Education and Enterprise Institute "FIRST Robotics Competition" grant was presented by Phil Smith to the Madison High School Devil Duckies Team of San Diego.

Alex Fleet, grandson of Reuben H. Fleet, presented scholarships to deserving students. This scholarship program is named after its benefactor, the great aviation pioneer and founder of Consolidated Aircraft, Reuben H. Fleet. Since its beginning in 1983, the program has presented 127 students with scholarships; including the nine awarded this year. The Reuben H. Fleet Fund at the San Diego Foundation, along with support from the Fleet family, and local section donations, make the scholarships possible. This year the fund included an extra \$2000 given in honor of William F. Chana, who helped start the program and administer it throughout the years until his retirement from the AIAA council. The 2011 recipients of the Reuben H. Fleet Scholarship for this year were: James Hroza of San Diego State University (SDSU), Joohyun Hwang of SDSU, Cesar Octavio Martin of SDSU, Brandon W. Maryatt of University of California San Diego (UCSD), Alexander Ortiz of SDSU, and Octavio Ortiz of SDSU. Also awarded were two William F. Chana scholarships to Tim A. Wheeler of UCSD and Daniel A. Nelson of SDSU.

Another special scholarship was presented, the D.G. Faulkner Scholarship. The scholarship is named for Capt. Doc George Faulkner, U.S. Navy Veteran, Faculty at San Diego State University (SDSU), and AIAA council member, he served his country and community. Doris Faulkner, his wife, presented the scholarship

award to top performer, Alejandrina Nuño of SDSU.

Tom Leech gives Presentation

At the awards banquet, Tom Leech gave a special historical presentation on some of the section history. In the mid 1960s, while working for Convair, Tom Leech, started a newsletter for the AIAA San Diego section called *The AIAA Tabloid*. In 1967, Tom interviewed Donald Hall, chief engineer at Ryan Airlines and the designer of the Spirit of St. Louis. Last year, Tom donated the transcript to the National Air and Space Museum and the story was published in the July issue of *Air & Space Magazine*.

San Diego Student Chapter Awards

Jointly presenting the AIAA San Diego Student Chapter Awards were our student chapter chairs from SDSU and UCSD, Alejandrina Nuño and Jason Hale. The awards were:

Outstanding Contribution to the AIAA San Diego Student Chapter - Andrea Wong, UCSD.

Outstanding Contribution to the AIAA San Diego Student Chapter – Marcia Crawford, SDSU.

San Diego Section Awards

The San Diego Section wrapped-up the awards banquet with the Section awards presented by Phil Smith. Three Long-Term Service Awards were presented to:

Penny Ulander who first joined the council in 1996. Over the years she has shown selfless dedication by serving in multiple positions on the council in both elected and appointed positions.

Jim Peterson has served on the AIAA San Diego Section council since the 1970s and has been an AIAA member for 44 years. He is best known for his recent service as Membership Chair where he has won numerous national awards for the Section.

Warren Johnson is a retired employee of Goodrich Aerospace and served on the council as the liaison to the San Diego County Engineering Council (SDCEC) for as long as anyone can remember. The SDCEC plans the National Engineers Week activities and the San Diego MATHCOUNTS program.

Other local Section awards presented were:

Outstanding Contribution to AIAA Region VI to Alejandrina Nuño of SDSU for her work with the sponsorship of the Region VI Student Conference in San Diego this year.

Outstanding Contribution to the AIAA San Diego Section by an AIAA Member to Chris Root of the NAVAIR Fleet Readiness Center Southwest.

Outstanding Contribution to the Community went to SDSU student Cesar Martin for his work outside of school. Cesar helps promote aerospace science and engineering in the community, especially with young people. After several years of hard work and planning, he lead aerospace workshops with middle school students in a program called "Engineering in the Barrio." This program was designed to inspire them to pursue engineering degrees. He has also tutored middle school children in math and science and helped paint the aerospace department at SDSU.

Outstanding Corporate Contribution to the Community was presented to RADM Patrick McGrath; Vice Commander of Naval Air Forces, Commander of the Naval Air Forces Reserve, and Deputy Commander of Navy Region Southwest. This was awarded for his work with the Centennial of Naval Aviation Task Force and the Parade of Flight at Naval Air Station North Island's Open House.

Outstanding Contribution to Aerospace Education was presented to Professor Allen Plotkin of SDSU's Department of Aerospace Engineering and Engineering Mechanics. Dr. Plotkin was recognized for 43 years of service to aerospace education as a professor, for his determined support for the Aerospace Engineering program at SDSU for 25 years, and for his role in educating students both in the classroom and around the world through his well known textbook on low speed aerodynamics.

Outstanding Contribution to Aerospace Management was presented to Don Cattell of General Atomics Aeronautical Systems, where he is the Director of Army Programs in the Aircraft Systems Group. Don Cattell is a renowned expert in Unmanned Aircraft Systems

(UAS), with a widely-respected track record for early delivery of key life-saving assets to the military customer. With a UAS career tracing back to the mid-1990s, he brought a wealth of subject matter expertise to his current position, where his efforts increased the company's success exponentially. More importantly, he supported boots on the ground with frontline Unmanned Aircraft Systems.

Outstanding Contribution to Aerospace Engineering was presented to the Naval Aviation Fleet Readiness Center – Southwest's F/A-18 Advanced Structural Design Team and the Advanced Analysis Team of Derrick Pettit, Tracy Hunt, and Mostafa Haririan. This team supports Special Rework / Crash Damage Repair and Center Barrel Replacement Plus to maintain the safety and integrity of the Navy aircraft fleet.

Outstanding Achievement by an Aerospace Organization was presented to Northrop Grumman Aerospace Systems Sector's Advanced Programs and Technology Division. Accepting the award was Doug Fronius for the MQ-8C Fire-X, the Navy's medium range Vertical Unmanned Aircraft System. Northrop Grumman Advanced Programs and Technology Division of Aerospace Systems Sector teamed with Bell Helicopter Textron and completed the rapid transfer of mission systems from the MQ-8B Fire Scout into a standard Bell 407 airframe to create the MQ-8C Fire-X with greatly increased mission capability. This seamless transfer of the avionics, software, communications links, and Ground Control Stations to the new airframe was accomplished in less than 11 months and has resulted in the US Navy releasing the news that they plan to go forward with the MQ-8C Fire-X as an Engineering Change Proposal to the MQ-8B.

The Lifetime Achievement Award was presented to Bernard J. Wier of General Dynamics Convair. Mr. Wier has over 40 years of successful experience in the aerospace industry. Most recently he was the Vice President and Program Director of the Space Launch Vehicle Division of General Dynamics with oversight of the Atlas family of launch vehicles. Mr. Wier has also been the Production Program Director for the Tomahawk Cruise Missile Program, responsible for starting up the production line and producing

the first 1000 cruise missiles after nearly 30 years in the space launch vehicle business.

Coming to San Diego

There are a number of activities that are coming to San Diego in the next few months. Some of these are outlined in the following articles.

AIAA Propulsion Conference

AIAA, ASME, SAE, ASEE, and their industry partners will be coming to San Diego, California, for the 47th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit (JPC), from 31 July to 3 August 2011. The design of our next generation flight and space systems will be dependent more than ever on technologies providing high performance, increasingly efficient, reliable and affordable propulsion systems. Our ability to design, test, and fly new aircraft and spacecraft propulsion technologies will have far-reaching impacts on the revolutionary roles these complex systems play in our everyday lives. This will be the center of topics presented at this event.

Additionally the 9th International Energy Conversion Engineering Conference (IECEC) will be held in conjunction with the JPC at the San Diego Convention Center. The IECEC provides a forum to present and discuss engineering aspects of energy conversion technology, advanced energy and power systems, devices for terrestrial energy systems and aerospace applications, and the policies, programs, and environmental impacts associated with the development and utilization of this technology.

Both of these events have an extremely low registration fee for students; \$30.00 in advance and \$40.00 onsite for undergraduate students, and \$70.00 in advance and \$80.00 onsite for graduate students. Retiree members are \$50.00 in advance and \$60.00 onsite.

AIAA is assisting members who are searching for employment by providing a bulletin board at the technical meeting. This bulletin board is solely for "open position" and "available for employment" postings. Employers are encouraged to have personnel who are attending an AIAA technical conferences bring "open

position" job postings. Individual unemployed members may post "available for employment" notices.

Also at the conference will be a number of AIAA administrative activities, such as program and technical committee meetings, conference organizing events, and other activities that support the programs of the AIAA. Members of the AIAA are highly encouraged to attend, and not required to register for the conference to participate. As the list of committee meetings become available, it will be sent to the membership for their participation. Two events that are expected to be at the JPC are the meetings of the History Technical Committee and the planning committee of the AIAA conference for the Centennial of Naval Aviation.

ASM to be Held in San Diego

The 54th AIAA Aerospace Sciences Meeting including the New Horizons Forum and Aerospace Exposition will be held January 4 to 7, 2016. This is almost five years out in the planning, but it is the biggest event of the AIAA and will be a great opportunity for all the members in San Diego. It is scheduled to be held in the Manchester Grand Hyatt, and the local section should be preparing on how we can participate and assist the planning committee.

San Diego Section Seeking Council Members for Vacancies

There is plenty of room for new Council Members. The council meets on the second Wednesday of the month at the Venice Pizza House (3333 El Cajon Blvd, San Diego, CA 92104; just off the 8 freeway). The meetings start at 5:30 with pizza and wine (\$5.00 donation by members and students free). The meeting is usually over in about an hour and a half. The council does all the planning for the Section events. There are members who have long held committee positions and are looking for those who might be interested in easing into them over the next year, and others that are vacant altogether. All members are invited to attend anytime

Position	Name/Company	Work Phone/Fax	Email Address
Section Chair	Phil Smith, Space Grant Educ. and Enterprise Inst.	(619) 225-2912	Chair@aiaa-sd.org
Secretary	Vacant		
Treasurer	Penny Ulander (interim)		penelope.ulander@navy.mil
Vice Chair – Long Range Planning	Brian Quan		brian.r.quan@gmail.com
Vice Chair – Technical	Hans Dall		hans.dall@ngc.com
Program Arrangements	Kevin Burns	(619) 225-2568	kburns8@csc.com
Field Trips	Vacant		
Flyers	Vacant		
Newsletters & E-Bulletins	Vacant		Editor@aiaa-sd.org
Webmaster	Ian Yates	(619) 320-8836	Webmaster@aiaa-sd.org
History & Bylaws	Chris Root, NAVAIR North Island	(619) 545-0626	Chris.root@navy.mil
RAC VI Delegate	Greg Marien, Northrop Grumman	(619) 248-6246	greg.marien@aiaa-sd.org
Public Policy	Jenny Rhymer		jrhymer@ucsd.edu
Membership	Vacant		
Honors & Awards, and Career Enhancement	Keith Glassman, NAVAIR North Island	(619) 545-3736	Keith.Glassman@navy.mil
Student Activities	Vacant		
Professional Society Liaison	Vacant		
Scholarship Coordinator	Greg Marien	(619) 248-6246	greg.marien@aiaa-sd.org
Pre-College Outreach	Chris Root, NAVAIR North Island	(619) 545-0626	chris.root@navy.mil
Educator Associate	Sharon Freeburn	(619) 234-8291	sfreeburn@csgf.org
Young Professionals	Vacant		
SDSU Faculty Advisor	Allen Plotkin, SDSU	(619) 594-7019	aplotkin@sciences.sdsu.edu
SDSU Student Chair			sdsu.aiaa@gmail.com
UCSD Faculty Advisor	Dr. Keiko Nomura	(858) 534-5520	knomura@ucsd.edu
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Rocket Project	Steve Harrington, Flometrics	(760) 476-2770	sharring@flometrics.com