



### **From the Flight Deck**

*Phil Rose, Incoming Section Chair*

Please allow me to introduce myself, I am Phil Rose and have the pleasure of acting as your Chair for the San Diego Section for this Council year.

You may recall at the end of the last Council year receiving a flyer to say that due to insufficient elected officers the San Diego AIAA section was about to become Inactive. I am pleased to report that the Section dodged the bullet and is alive and well, and we now have a full slate of officers. Nigel Barker of Goodrich has accepted the position of Vice Chair –Long Range Planning, and Dr. Anisur Rahman of NAVAIR has accepted the position of Vice Chair-Technical. Stephan Hollmann, Thane Coxon and Dr. Rich Anthony are also all new volunteer Council members. So with a good mix of the tried and true returning committee members and an infusion of new blood, your Council stands ready to provide you the membership with a quality program that is of value to you.

Of primary importance, your Council has a priority to make sure we have a full slate of officers for the ballot next year. Without that, the Section will again be in jeopardy of going inactive with long odds of ever returning. That is unthinkable.

AIAA and the San Diego Section have a long, colorful, rich history as part of the once major aerospace industry in this area. We all know that aerospace has gotten substantially smaller locally with the loss and changes of several of our major companies. This is compounded by the current dramatic industry downturn due, in part, to very sad world events. Despite this we still have a membership of approximately 440 people. While the breakdown of membership has changed over the years, we have very active student branches that are producing wonderfully talented graduates that are the future of our industry. This was very evident by those awarded Reuben H. Fleet Scholarships at the last annual Banquet. If nothing else, we owe them the support of an active and rewarding section. We also have a strong retiree membership that is rich in knowledge and experience. Somehow we need to find a way to marry these two groups together.

Your Council will be trying some new approaches this year to try to regain your interest. We plan to focus some meetings on the interests of such groups as the students or retirees, rather than making all meetings of a general interest for everybody. Let us know what your interests

and needs are and we will try to satisfy them. We recognize that these may not be strictly related to our daily aerospace jobs. We also plan to have a monthly electronic newsletter as well as our regular quarterly hard copy issues. The Council is dedicated to keeping the Section alive, but we desperately need your help. Together we can return our section to the level of activity and value of the recent past.

During this Council year we will all be celebrating the 100<sup>th</sup> anniversary of powered flight. Our industry has come a long way in the first one hundred years and now faces major changes and challenges as we move forward into the next exciting one hundred years. I wonder what we will look like then? Please help us to find out. We face a very challenging year and your Council is willing to continue to try and provide you with a program that is enjoyable and is of some value to you. If you have any ideas or suggestions on what you would like, please give me a call or drop me a line, or contact any of the Council members (see the back of this newsletter for information).

### **Vice Chair – Technical's Corner**

*Anisur Rahman*

Yes, I am your new VC-Technical. With your participation, I know this will be a good year for us. We are currently in the process of developing an interesting technical program for this council year. We would like to hear from you! Send us your suggestions on the kind of programs you would like to see and the topics on which you would like us to focus. As the plans and arrangements take more concrete form, I will update you through the newsletters.

There is another topic I would like to touch upon in this issue. AIAA is accepting nominations for technical committees (TC) until November 1, 2002. I encourage you all to participate in the TC's. TC's develop and administer the technical programs of AIAA. The products of TC's are technical conferences, technology assessment packages, handbooks, and technical position papers. There are 65 technical committees ranging from adaptive structures to weapon systems effectiveness. Have your voice heard. Join a TC. You may self-nominate yourself or be sponsored by your employer. For more information visit [www.aiaa.org](http://www.aiaa.org) and click on "Technical Committees" on the right hand side of your screen, or see the article below.

## Technical Committee Nominations

Bruce Wilson, Deputy Director, Technical, Region VI

Nominations for AIAA Technical Committees are now open. Nominations close November 1 and new members take office in May. Young professionals are especially encouraged to apply for TC membership. Self-nominations are accepted.

Technical Committees organize conferences, create and update standards, publish design guides and journals, conduct professional development courses, and administer awards and scholarship programs. Membership usually requires a commitment to attend three committee meetings each year and to complete assignments between meetings.

Participation in AIAA technical committees is an excellent professional development activity. Active participants not only stay current with the state of the art in their discipline through TC activities but also learn leadership skills. Members build lasting relationships with peers who may also be customers, suppliers and competitors. Young Professionals may join a technical committee as an associate member - and they don't count against the TC's limitation of 35 members. Young Professionals can contribute to technical committees even without extensive background in the discipline - if they are willing to contribute to successful TC operations.

Find the nomination forms or nominate online at <http://www.aiaa.org/about/index.hfm?abo=5>. You can find a list of active technical committees and links to their websites there. A description of each TC's scope is at <http://www.aiaa.org/about/index.hfm?abo=530>. A list of each TC's members may be found in the August issue of Aerospace America. For more information on TCs, contact the AIAA Technical Activities liaison, Emily Springer at 703/264-7533.

## Membership News

Jim Peterson, Membership Chair

Section membership stands at 445 as of September 1st. We would like to welcome the following members to the San Diego Section:

### New Members

Terry Barefoot	Northrop Grumman
Nigel Barker	Goodrich Aerostructures
Paul Bremner	Vibro-Acoustic Sciences
John Dale	Northrop Grumman
David Egan	Prada America's Cup
Glenn Kissel	
Alan Klier	Photon Research Assoc
Hwa-Wan Kwan	Goodrich Aerostructures
Michael Larsen	Information Systems Labs
Mark Liggett	
Greg Loegering	Northrop Grumman
Larry Marple	Orincon Corp
Van McLawhorn	
Carl Mikeman	Northrop Grumman

Melissa Rice  
Joel Schindall

George Schnurer  
Peter Shea  
Mark Storer  
Paul Thoreson  
William Walker  
Gary Wonacott  
David Yznaga

Loral Space  
Communications  
Nessatek Inc  
Orincon Inc  
BAE Systems  
RT Logic  
Northrop Grumman  
San Diego Composites  
Northrop Grumman

### Transfers-in

James Li  
Richard Anthony  
Brad Bergman  
Thomas Clarkson  
Ken Cote  
Paul Holliday  
John Jordan  
Robert Miller  
Jose Panza  
Mika Robertson  
Eric Sjoberg  
Lawrence Vancura

ECE  
Northrop Grumman  
Intel  
Northrop Grumman  
Information Systems Labs  
General Atomics  
Northrop Grumman

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

## Membership Information Updating

If you have changed your mailing address, please call the **AIAA Headquarters Customer Service Center at 1-800-NEW-AIAA** and provide them with the current information. Remember, the mailing labels are printed using the information in the AIAA database. You may renew your membership via telephone at the same phone number, using a credit card. If you have become unemployed or retired, you may renew your membership at a lower rate.

**Email Addresses:** The San Diego Section is increasingly relying on email for communicating with our members. We presently have 341 good addresses in our address list. The balance of our 445 members either do not have email, or their former address has become obsolete. We are beginning to provide a monthly bulletin to notify you of upcoming events, so it is very important to keep the Membership Chair informed whenever you change your address. To list or change your E-mail address, contact Jim Peterson at [jdpete@pacbell.net](mailto:jdpete@pacbell.net).

## Recognize Your Peers

Keith Glassman, Honors & Awards Chair

Do you know someone who has made an outstanding accomplishment in engineering? Why not nominate them for an AIAA award? You will not only gain recognition for your colleague, but also for your company. The AIAA San Diego Section will present these awards at our annual awards banquet next May. This kind of recognition serves

to inspire and encourage other engineers who very often don't get the opportunity to appreciate the larger picture of what lies beyond their cubicle. More detailed information about AIAA National awards can be found at the AIAA National website at <http://www.aiaa.org>. AIAA is currently accepting nominations for the following awards:

**National Awards:**

Nomination deadline 1 February 2003.

- Aerospace Communications Award
- Aerospace Guidance, Navigation, and Control Award
- Aerospace Maintenance Award Aircraft Operations Award
- Command, Control, Communications, & Intelligence Award
- Daniel Guggenheim Medal Award for notable achievements in the advancement of aeronautics
- De Florez Award for Modeling and Simulation
- Durand Lectureship for Public Service
- Elmer A. Sperry Award for recognition of a distinguished engineering contribution that advanced the art of transportation whether by land, sea or air. AIAA, IEEE, SAE, ASME, SNAME and ASCE sponsor the award.
- Engineer of the Year Award
- Hap Arnold Award for Excellence in Aeronautical Program Management
- The Hap Arnold Award for Excellence in a Management of a Significant Aeronautical Program
- Mechanics and Control of Flight Award
- Multidisciplinary Design Optimization Award
- Robert J. Collier Trophy Award for the greatest achievement in aeronautics or astronautics in America
- Wright Brothers Lectureship in Aeronautics for significant advances in aeronautics

**Section Awards:**

Nomination deadline 1 April 2003.

- Outstanding Contribution to the AIAA San Diego Section
- Outstanding Contribution to the Community
- Outstanding Contribution to AIAA at the National Level
- Outstanding Contribution to AIAA – Region VI
- Outstanding Contribution to Aerospace Engineering
- Outstanding Contribution to Aerospace Management

Section Award nominations should include:

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

Please mail or e-mail the award nomination to:

Keith Glassman

Honors and Awards Chair, AIAA San Diego Section  
3198 East Fox Run Way  
San Diego, CA 92111-7721

Email: [GlassmanKF@navair.navy.mil](mailto:GlassmanKF@navair.navy.mil).

**National Engineers Week 2003**

*Warren Johnson, Professional Societies Liaison*

National Engineers Week (NEW) is always celebrated at the time of George Washington's birthday. Our nation's first president was a military engineer and land surveyor. The purpose of NEW is to increase awareness of engineering's contributions to our quality of life as it unites engineers and the public in a celebration of innovation and technology. This year, National Engineers Week, is being coordinated by the American Society of Heating, Refrigerating and Air-conditioning Engineers and will be held February 16-22, 2003. Planning is already underway for San Diego's NEW 2003 celebration, which will include tours, mall exhibits, outreach to local schools and a walk-on-water competition. The week's major event will be the Awards Banquet. This banquet will feature a keynote speaker and the presentation of awards for excellence to local engineers and projects. It will be held on Friday, February 21, 2003 at the Double Tree Hotel, Mission Valley.

Four standard NEW awards – Engineer of the Year, Outstanding Engineering Educator, Outstanding Engineering Project and Outstanding Service – as well as several society co-sponsored awards will be presented at the banquet. The San Diego Section of AIAA has plans to co-sponsor an award for Outstanding Aerospace Engineering Project. Any recent aerospace engineering project constructed or completed within San Diego County is eligible for nomination. Upon selection, a project representative is required to accept the award in person at the NEW banquet. Nominating an aerospace project for this award is very simple! Simply provide the project name, company or organization, address or project location, telephone number and a one-page (or less) write-up summarizing the significance of the project. This should include engineering achievements, special obstacles overcome and benefits to the public. Photographs and brochures describing the project can also be included with the one page write-up.

The National Engineers Week – San Diego Planning Committee is currently seeking nominations for the four standard NEW awards, as well as the co-sponsored society awards. All nominations must be in by December 31, 2002. All nominations must be mailed or FAX-ed to: Dr. Gerald C. Gerace, P. O. Box 87563, San Diego, CA 92138-7563, FAX: 858-826-6587. Phone: 858-826-5140, Email: [g.e.gerace@ieee.org](mailto:g.e.gerace@ieee.org). Requests for award nominating procedure information and any other questions should be directed to Dr. Gerace by phone or Email.

This is an excellent opportunity for AIAA members to reward our outstanding engineers and publicize the local aerospace industry's contribution to San Diego and the nation. Please take time to make a nomination.

### **Spring 2002 Technical Symposium**

*Penelope Ulander, Flyers Chair and Past Vice Chair - Technical*

On the 20th of April, the San Diego Section presented the Spring 2002 Technical Symposium at Scripps Cottage, SDSU. After the call for presentations went out, we received a number of abstracts from professional members, students and retirees. The response, while not overwhelming, was certainly adequate to proceed with the Symposium, the first for the San Diego Section in a few years. The topics briefed represented all aspects of aerospace and aeronautics and even included a brief on the fluid dynamics of large fires!

We were able to present eleven briefs throughout the day, and based on feedback, most people thoroughly enjoyed the variety of topics and speakers. Bill Ketchum, a retiree of General Dynamics and a consultant for Advanced Space Launch Systems, narrated a colorful slide presentation on the History of Rockets and space flight based on his 35 years in the space program. Chad Berman, graduating student from SDSU, briefed a study he had completed on the static thrust of an airboat propeller using computational fluid dynamics software. Mr. Thomas Palmer, Ret., discussed some of the analysis that has been performed on experimental measurements taken in large, controlled fires, despite the lack of successful modeling.

Greg Marien, SDSU, and Maziar Sefidan, UCSD, both briefed their AIAA Design, Build, Fly Projects that were submitted into competition one week later. Both school teams demonstrated their advanced theoretical and practical capabilities that went into designing and building a remotely powered vehicle that could complete a predetermined aerial course with and without payload (24 softballs). A hearty congratulations to UCSD, who came in first in the National competition against 30 US schools. Both the second UCSD and the SDSU designs came in among the top ten overall!!!

Mr. Jia Yu, Chief Acoustic Engineer at Goodrich Aerostructures Group, discussed the history of aircraft and engine noise reduction, through the second-generation turbfans, and how industry is aggressively addressing current and future noise regulation requirements. Mr. Ed Mullin, NAVAIR Depot, North Island reported the positive results of the evaluation and operational testing of an ultra thin corrosion preventative compound on the S-3B aircraft. Mr. Robert Brown presented a concept for a low cost family of commercial tri-jet air transports using innovative simplicity in the design. Mr. Dan Hearn, LTV Retired, discussed a few of the planes on which he was the design engineer, project engineer, test pilot, or all of the above! His focus was on the Luscombe, Model 8F, from the late 40's to the present.

Mr. Ed Duffy, NAVAIR Depot North Island, briefed the benefits ASTM F519 testing has had in regards to reduction in aircraft component maintenance costs. ASTM F519, "Mechanical Hydrogen Embrittlement Evaluation of Plating Processes and Service Environments" provides a method to verify adequate embrittlement relief of electroplated steel aircraft parts, saving unnecessary bake times and improving parts reliability. Last, but by no means least, Mr. Dick Martin, AIAA fellow, talked about the integration of the Russian RD-180 booster engine and the Atlas III and V series commercial launch vehicles, to provide a competitive solution in today's tough global market.

The San Diego Section would like to thank all the speakers who volunteered their time and enthusiasm for a wonderfully informative day. And to all those who came to listen and learn, thank you for making it such a special day. If anyone would like additional information on any of the topics briefly described above, please send an email to [penny@cox.net](mailto:penny@cox.net).

### **AIAA Field Trip to Plaster Blaster**

*Eric Heininger, Field Trips Chair*

AIAA members attended the first Plaster Blaster event held by the San Diego Tripoli and Dart organizations. The amateur, solid fuel rocket event took place in the desert near El Centro in gorgeous 90-degree weather. The three-day event was well-organized and included activities for all levels of rocket enthusiasts. Rockets were launched at five-minute intervals from 8:00am to 6:00pm, non-stop. Night launches with strobe-lighted rockets began at 7:00 pm and continued way too late for the youngsters. Some of the advanced rockets used hybrid rocket technology consisting of nitrous oxide and ABS plastic type fuels. These rockets reached 17,000 ft altitude and sounded like something out of a star wars movie.



Onboard cameras, telemetry, accelerometers, apogee sensors and other unexpected gadgets made this a very interesting event for even the professional rocket scientist. We've all seen a big one go off, but watching rockets go off all daylong is something entirely different. With a turnout of over 500 participants, be looking for this event next year!

Additional information about amateur rocketry in San Diego County may be found at the following websites: plasterblaster.com; tripolisandiego.org; dartrocketry.com.

### **Responsive Space Conference**

*Jim Wertz, Conference General Chairman*

On behalf of the LA Section of the AIAA, it is my pleasure to invite your participation in the first conference and workshop on Responsive Space to be held in Redondo Beach, CA, on April 13, 2003. The conference is co-sponsored by the AIAA LA Section and the AIAA Space Systems Technical Committee, and will address the fundamental problem of breaking the barriers to low cost, responsive space missions.

A Call for Papers, additional material, and a registration form will be posted shortly on the conference website at ResponsiveSpace.com. If you would like to receive further updates on conference details, please send a note to [ResponsiveSpace@smad.com](mailto:ResponsiveSpace@smad.com). We look forward to an exciting conference on one of the most important topics in the space arena. I hope that you will be able to join us.

### **The Aerospace Career Handbook**

The Aerospace Career Handbook is now available. The handbook was prepared as a service of AIAA's Young Professional Committee. It has been written specifically for college students who are contemplating a career in the aerospace industry. It is available for downloading on the AIAA website at:

Membership Benefits:

<http://www.aiaa.org/membership/index.hfm?mem=1>

Young Professional Programs:

<http://www.aiaa.org/membership/index.hfm?mem=13>

Career Resources:

<http://www.aiaa.org/members/index.hfm?memo=6>

Student Membership Benefits:

<http://www.aiaa.org/membership/index.hfm?mem=30>

and "On the Radar Screen" on the AIAA homepage.

Please contact Elizabeth Carter at [elizabethc@aiaa.org](mailto:elizabethc@aiaa.org) to request a printed version of this useful brochure.

### **Evolution of Flight - Wright Flyer Tour**

AIAA is working with the Los Angeles Section to tour a full-scale replica of the 1903 Wright Flyer. The launch of the AIAA 1903 Wright Flyer Centennial Tour and Exposition took place on 26 September 2002 at the FAA building in Hawthorne, CA. The Flyer is now on a national tour and is expected to reach 2 million individuals before its return to the FAA Building in December 2003. Stops through the end of the year include:

October 5-6, 2002  
Nellis Air Force Base Air Show  
Las Vegas, NV

October 14-19, 2002  
World Space Congress  
George R. Brown Exposition Center  
Houston, TX

October 29, 2002 - February 25, 2003  
The New England Air Museum  
Bradley International Airport  
Windsor Locks, CT

Visit <http://www.flight100.org/activities/tour.html> for more information on the tour and future tour stops.

### **Section Events Calendar 2002-2003**

#### 2002

- |     |       |  |
|-----|-------|--|
| Oct | 18-20 | MCAS Miramar Air Show<br>Student Design/Build/Fly Displays       |
| Nov | 6     | SDSU Student Chapter Joint Meeting<br>2002 D/B/F TLAR Competitor |

#### 2003

- |     |     |  |
|-----|-----|--|
| Jan | TBD | Evolution of Flight Celebration Event        |
| Feb | 21  | National Engineers Week Banquet              |
| Mar | TBD | NAS North Island Historic Site<br>Dedication |
| Apr | TBD | Greater San Diego Science Fair               |
|     | 23  | Student Design/Build/Fly Competition         |
| May | TBD | Section Awards Banquet                       |

Additional information will be added to this calendar in future newsletters as it becomes available. Information will also be made available in the monthly electronic newsletter and through the Section web site, which is accessible through the National web site at <http://www.aiaa.org>.



**SDSU TLAR 2002 Design/Build/Fly Entry**

**RSVP to the Nov. 6 SDSU Event by Nov. 4!**

Position	Name/Company	Work Phone	Email Address
Chair	Phil Rose, Goodrich Aerostructures	(619) 691-2592	<a href="mailto:Phil.rose@goodrich.com">Phil.rose@goodrich.com</a>
Vice Chair - Planning	Nigel Barker, Goodrich Aerostructures	(619) 691-2568	<a href="mailto:Nigel.barker@goodrich.com">Nigel.barker@goodrich.com</a>
Vice Chair - Technical	Dr. Anisur Rahman, NAVAIRSYSCOM	(619) 545-2277	<a href="mailto:Rahmana@navair.navy.mil">Rahmana@navair.navy.mil</a>
Secretary	Lee Bolt, Aerospace Consultant	(619) 281-0216	<a href="mailto:leebolt@worldnet.att.net">leebolt@worldnet.att.net</a>
Treasurer	Colin Etheridge, Solar Turbines	(619) 544-5136	<a href="mailto:Etheridge.Colin.J@solarturbines.com">Etheridge.Colin.J@solarturbines.com</a>
Program Arrangements	VACANT		
Field Trips	Eric Heininger, Pyramid Space, Inc.	(858) 554-1140	<a href="mailto:Eheininger@Heininger.com">Eheininger@Heininger.com</a>
Newsletter	Mike Lazar, Northrop Grumman Corp.	(858) 618-4208	<a href="mailto:mlazar@ryanero.com">mlazar@ryanero.com</a>
Flyers	Penelope Ulander, Naval Aviation Depot, NI	(619) 545-3935	<a href="mailto:Ulanderpj@navair.navy.mil">Ulanderpj@navair.navy.mil</a>
Electronic Newsletter	Stephan Hollmann, Hollmann Enterprises	(858) 558-6667	<a href="mailto:SFHollmann@sbcglobal.net">SFHollmann@sbcglobal.net</a>
Internet Webmaster	John Ogden, Weldmac Engineering	(619) 440-2300	<a href="mailto:engineering@weldmac.com">engineering@weldmac.com</a>
Public Policy	VACANT		
History & Bylaws	Bill Chana, W. F. Chana Associates, Inc.	(858) 488-7183	
Region VI Delegate	Chuck Heightland, THG Engineering	(760) 728-9249	<a href="mailto:heightlandc@thg-engr.com">heightlandc@thg-engr.com</a>
Membership	Jim Peterson, General Dynamics (ret.)	(858) 279-1940	<a href="mailto:Jdpete@pacbell.net">Jdpete@pacbell.net</a>
Honors & Awards	Keith Glassman, Naval Aviation Depot, NI	(619) 545-3736	<a href="mailto:GlassmanKF@navair.navy.mil">GlassmanKF@navair.navy.mil</a>
Professional Society Liaison	Warren Johnson, BFG Aerospace (ret.)	(858) 278-1317	<a href="mailto:Wmjohanson2@earthlink.net">Wmjohanson2@earthlink.net</a>
Young Professionals & EOF	Chris Root, Naval Aviation Depot, NI	(619) 545-0626	<a href="mailto:RootCB@navair.navy.mil">RootCB@navair.navy.mil</a>
Pre-College Outreach	Quentin Goss, USAF (ret.)	(858) 451-6213	<a href="mailto:Qigoss@worldnet.att.net">Qigoss@worldnet.att.net</a>
Education & Student Activities	VACANT		
SDSU Faculty Advisor	George Faulkner, SDSU	(858) 270-6604	<a href="mailto:DGfJR@aol.com">DGfJR@aol.com</a>
SDSU Student Chair	Matthew Gregory, Dept. of Aero. Eng.	(619) 508-6557	<a href="mailto:mgregory@rohan.sdsu.edu">mgregory@rohan.sdsu.edu</a>
UCSD Faculty Advisor	R. de Callafon, UCSD MAE Dept.		<a href="mailto:decallafon@mae.ucsd.edu">decallafon@mae.ucsd.edu</a>
UCSD Student Chair	TBD		
Member at Large	Thane Coxon, NAVAIRSYSCOM	(619) 504-5259	<a href="mailto:Coxontc@navair.navy.mil">Coxontc@navair.navy.mil</a>
Member at Large	Byron Lowry, Lockheed Martin Systems Int.	(619) 435-4327	<a href="mailto:byron.lowry@lmco.com">byron.lowry@lmco.com</a>
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