



From the Flight Deck

Phil Rose, Section Chair

It is surprising that we are already at that stage of the Council year when we look forward to our Gala night of the year, which is our Annual Awards Banquet. The Banquet will take place on Tuesday May 20, at the Admiral Baker Club House in Mission Gorge. We hope that we have a good turn out to celebrate and honor our very best, ranging from High School students and teachers, our future engineers from local universities to our members at large. Despite the challenging times that our industry is going through, there is still a large nucleus of talent and great work being done in our local aerospace and related companies. So we hope you will come and honor the recipients of a wide range of awards and take the opportunity for meeting friends and sharing stories.

As part of our celebrations, we will be installing the newly elected officers for the next Council. I am pleased to announce that we will have a full slate of very talented officers to launch the next Council year. The New Chair will also be announcing many of his Council members, so we will be off to a strong running start.

This last year we have experimented a little to try and bring programs to specific elements of our membership. The program in February directed towards the need of our retirees was very well received and I would anticipate expansion of that program next year.

Also in February, we had a very successful joint meeting with the Aerospace Museum to kick off this centennial year of celebration for the first powered flight. The speaker was Kenneth Szalai, who is an AIAA distinguished speaker, and he lived up to his reputation. The program was well attended and was one of the best programs I have experienced in some time. Those that did not make it missed a wonderful opportunity to hear some of the inner thinking surrounding many of the NASA flight development programs with excellent visuals.

On a sadder note, The Fleet family, who are very special friends to the AIAA San Diego Section, lost Phyllis Fleet on February 10. She was an aviator pioneer and died at the age of 93 after a very active and eventful career. Our condolences go to the Fleet family.

In March, AIAA celebrated in grand style the recognition of North Island as an historic sight. This is only given to a limited number of locations and we are of course,

delighted that North Island was recognized as a birthplace of Naval aviation. It was a very well organized celebration with the typical flair and circumstance one associates with our wonderful military.

Field trips remain a popular activity, and the trips we managed to make happen were very well received. Unfortunately, with the downturn in our industry and other events that have forced increased security, several planned trips could not take place. However we remain enthusiastic and hope that as things settle down again, we will be able to continue an active field trip program.

Our Student branches continue to be very strong and there was increased support and activities between them and our members. I expect that to continue. The Design, Build and Fly competition is an excellent program and UCSD had two entries and SDSU had one in this year's competition. All have worked very hard and we wish them every success. As I write this they are literally in competition, so we look forward with confidence at being able to share good results with you at the Awards Banquet. We also look forward to working more closely with the students and assist in helping to raise funds to support the program. The Council also actively supports the activity to bring the competition to the West Coast on a rotation basis. Many of the competitors are from the West Coast, so it seems only fair that the competition comes in our direction on a regular basis.

One area that has not been as successful was our March program directed towards our younger members. We are still struggling to find what would be of value and interest to this segment of the membership and welcome any ideas or comments from you.

In April, we had a successful full day Technical Symposium held at SDSU, and I thank the students for all of their support. The presentations covered a wide range of topics and kept the audience in their chairs through out the entire day.

We have continued to have a monthly electronic newsletter, in addition to this hard copy newsletter, that we hope you find useful. It is a good mechanism for you to keep in touch with local activities. We welcome input on how we can continue to improve it to meet your needs.

So it has been quite a busy year so far that many of you have missed out on. We hope to see more of you at the Awards Banquet and at our future activities.

Membership News

Jim Peterson, Membership Chair

Section membership stood at 427 as of April 1st. We would like to welcome the following members to the San Diego Section:

New Members

Neil Butler	Maxim Systems Inc.
John Dority	Confidential Idea Development
Anthony Ewing	Tristan Technologies
Robert Levin	SpeedSmith
Allison Nation	NAVAIR Depot North Island
Tv Riley	
David Sanford	Allied Aerospace Industries
David Shepard	Sky WindPower Corp
Peter Suttie	Hamilton Standard
Dallas Wilfong	BCI
Jerry Woods	Solar Turbines Inc

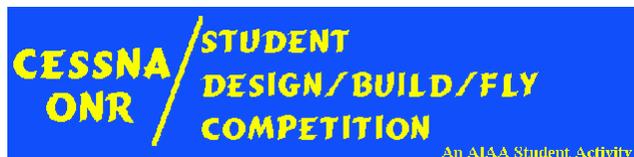
Transfers-in

Michelle Delagandelle	
Jeffrey Matson	
Michael Mattis	Maxim Systems Inc.
Patrick Stewart	Allied Aerospace Industries

Membership Information: If you have changed your mailing address or have a new E-mail 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 on-line at www.aiaa.org or via telephone at the above phone number, using a credit card. If you have become unemployed or retired, you may renew your membership at a lower rate.

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.

Email Addresses: The San Diego Section is increasingly relying on email for communicating with our members. We are providing 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.



Greg Page, Contest Director

The 2003 Cessna/ONR Student Design/Build/Fly competition was held at the Ridgely Airpark in Ridgely Maryland over the weekend of 25-27 April. Thirty-three teams from the United States, Canada, Italy and Turkey attended the fly-off portion of the contest. Of the 33 teams

attending the fly-off competition, 19 made at least one successful scoring flight attempt, with many teams completing the maximum allowed 5 flights during the two days of competition.

The contest was moved from its traditional east coast home, Webster Field, due to the increased security at military installations resulting from the Iraq war. Mr. Tracy Coleman volunteered the use of Ridgely Airpark so that the contest could continue its 7-year history without interruption. The facilities at Ridgely provided an excellent contest site with ample setup and flying area. The managers, sponsors, and teams of the DBF competition would like to express their thanks to Mr. Coleman for his generosity.

The competition spanned two days of flying, with the flight queue filled with aircraft waiting for their turn to make a competition flight. A number of the flights on Saturday had to dodge the raindrops, while Sunday provided near perfect flying weather.

The design objective for this years competition was to create an airplane that could be rapidly assembled from a 2 x 4 x 1 foot shipping container and then complete two of the three specified simulated UAV missions: Missile EW Decoy; Sensor Deployment; or Communications Repeater. Each mission was assigned it's own Degree of Difficulty multiplier factor.

The total score for each team is comprised of their flight performance on their best two flights, their score on a written report documenting their aircraft design and selection, and a "Rated Aircraft Cost" representing the complexity and manufacturing costs of their design. The final results showed a close battle between teams from the San Diego State University and California Polytechnic State University at San Luis Obispo. One of the Italian teams from Università degli studi "La Sapienza" di Roma placed a close third. The highest score obtained on the written report portion of the competition was from Utah State University with 96.5 of a possible 100 points awarded. The final positions and scores for all of the competing teams are listed in the table below.

More details on the 2003 competition objectives and rules can be found at the contest web site at <http://www.aae.uiuc.edu/aiaadbff>.

Position	School
1	San Diego State University
2	Calif Poly State Univ SLO
3	La Sapienza
4	Univ of Southern California
5	Oklahoma State University
6	Oklahoma State University
7	USNA
8	Mississippi State University
9	USNA

- 10 Middle East Technical University
- 11 Univ of California San Diego
- 12 Istanbul Technical University
- 13 University of Illinois UC
- 14 Washington State University
- 15 Utah State University
- 16 Univ of Texas Austin
- 17 Univ of California San Diego
- 18 University of Colorado
- 19 La Sapienza
- 20 Georgia Tech
- 21 University of Maryland
- 22 Ohio Northern University
- 23 Case Western Reserve
- 24 Virginia Polytechnic University
- 25 W. Virginia University
- 26 University at Buffalo
- 27 Queen's University
- 28 Wichita State University
- 29 Univ California LA
- 30 Calif Poly State Univ Pomona
- 31 Western Michigan University
- 32 University of Arizona
- 33 Univ of Texas Arlington

The success of the competition required the efforts of many individuals. A special thanks goes to the judges who assisted in the operation, technical inspections and scoring of the flight competition; and to the many judges who evaluated and scored the teams written proposal reports. Thanks also go to the Applied Aerodynamics, Aircraft Design, Design Engineering, and Flight Test Technical committees of the AIAA who organized and manage the competition, and the AIAA Foundation for their administrative support. Special thanks are due to the competitions corporate supporters, the Cessna Aircraft Company and the Office of Naval Research.

Overall the 2003 Cessna/ONR Student Design/Build/Fly competition marked another very successful event, allowing the participating students to mix a highly enlightening educational experience with a good dose of fun. Congratulations to all the teams who participated for your great enthusiasm and achievement.

UCSD 2003 Design/Build/Fly Competitors

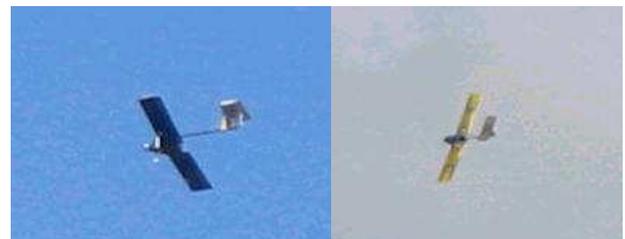
Mann Chau, UCSD AIAA Council Representative

Between April 25th and 27th, UCSD fielded two of thirty-three entries from engineering schools across the United States in the 2003 D/B/F competition, accepting the challenge of designing, building, and eventually flying remote controlled aircrafts that would demonstrate the flight capabilities of an electric powered, radio controlled aircraft to best meet the specified mission profiles. In 2003, the goal was to design an aircraft that can be assembled quickly, carries a 6"x6"x12" payload box and

can mount a simulated antenna, while remaining affordable to manufacture. UCSD's Aerodrone F8273 and Furious Flier achieved 11th and 17th places respectively.



**UC San Diego's Design/Build/Fly Team
with Aerodrone F8273 (left) and Furious Flier (right)**



UCSD's Design/Build/Fly team is much indebted to General Atomics Aeronautical Systems, Jacob School of Engineering, UCSD Associated Students, and the San Diego Professional Chapter of AIAA for their contributions and making the team's participation possible.

Section Annual Awards Banquet

The San Diego Section Annual Awards Banquet and Installation of Officers was held Tuesday, May 20 at the Admiral Baker Golf Course Clubhouse. This year's event was noteworthy for the change in venue and format. The Admiral Baker Golf Course is a beautiful location in Mission Gorge, and the Clubhouse dining room opened onto a patio with a view of the course.

The awards portion of the banquet was done a little differently than in past years. Instead of having a featured guest speaker, Long-Term Membership Award, National Award, and Section Award recipients were invited to speak for 5-10 minutes each about their experience as AIAA members and/or the contributions for which they were being recognized. The result was a series of fascinating and motivating stories that captivated the audience as well as or better than most guest speakers.

The Section awarded two monetary awards to San Diego Science Fair participants in the Junior division. Both awardees had their winning projects on display at the banquet, and answered questions before and after dinner. The Section also awarded five Reuben H. Fleet Scholarships to local university students.

Of special note was a presentation by the SDSU 2003 Design/Build/Fly competition winning team on their 1st place winning entry, "Spirit of Monty". The presentation covered the design, building, flight testing of their remotely piloted vehicle, and participation at the event.

The following awards were presented:

Science Fair Awards, Junior Division

David M. Marcus
Anthony Neuberger

Reuben H. Fleet Scholarships

Andrew J. Bechtel	San Diego State University
Joey D. Brown	San Diego State University
Matthew D. Gregory	San Diego State University
Christopher J. Roberts	San Diego State University
Toru Yamasaki	San Diego State University

Long-Term Membership Awards

Philip M. Rose	25 Years
Myron J. Mandell	25 Years
Andrew Tuzinkiewicz	25 Years
Philip J. Hengen	40 Years
David B. Howes	40 Years
William H. Lowe	50 Years
Eugene F. Wyszpolski	60 Years

National Awards

Allen Plotkin, PhD	Sustained Service Award
Christopher Root	Special Service Citation

Section Awards

Matthew D. Gregory	Outstanding Contribution to the AIAA San Diego Section
Bonnie Johnston	Outstanding Educator Associate
Hwa Wan Kwan, PhD	Outstanding Contribution to Aerospace Engineering
Thomas J. Cassidy, Jr.	Outstanding Contribution to Aerospace Management
Michael Aten	Outstanding Commemoration of the Century of Flight
Ben Barackman	Outstanding Commemoration of the Century of Flight
Scott Hazel	Outstanding Commemoration of the Century of Flight



Phil Rose, Section Chair, and Quentin Goss, PreCollege Outreach Chair, with Science Fair Awardees David Marcus and Anthony Neuberger



Reuben H. Fleet Scholarship Winners



Bill Lowe – 50-Year Membership Award Recipient



**Wright Brothers 1902 Glider Replica Under Construction
Michael Aten, Ben Barackman, Scott Hazel
Partners/Contributors**





SDSU's D/B/F 1st Place Winner – Spirit of Monty

But I've Hardly Begun

Phil Hengen, 40-Year Long-Term Member Award Recipient



Ladies and gentlemen, esteemed colleagues: So I am now a long-term member of AIAA? It seems to me that I am only at the beginning of a most exciting career.

What industry has more triumph and tragedy; is more driven by hope and at times more reviled as foolish expenditure of funds than ours?

What industry has more to do with the long-range destiny of our Earth-born but not Earth-bound species?

I joined AIAA's predecessor, the American Rocket Society in 1962 while still in college. My career seems to have consisted of just a few interesting projects, not 40 years. I am not an astronaut, or even a pilot. I have, however, enjoyed an exciting ride so far!

Beginnings

I was a junior high school student in the Sputnik/Vanguard space race days of the late 50's. I found a few bright kids with similar interests and we started an amateur rocket club in Wichita, Kansas. We were fortunate that a couple of Boeing engineers heard about us and took us under their wings before we actually built anything dangerous. Under their tutelage we successfully launched several aluminum rockets fueled by zinc dust and sulfur.

College

A few years later I was pursuing a degree in aeronautical engineering at Wichita State University. Education was a lot cheaper in those days but I was a lot poorer. During my sophomore year I had the good fortune to be hired as a part time draftsman at the Beech Aircraft Company. I have never since felt so rich as when they began paying me \$1.40/hour to incorporate drawing changes.

First Engineering Job

After graduation I went to work for General Electric's Large Aircraft Engine Group in Evendale, Ohio. I was on the new engineer rotation program for eighteen months, and then found a home working on America's SST engine,

in the exhaust systems group. Unfortunately congress cancelled support for the SST, the economy went into recession and I, along with about half the employees at GE Evendale, was laid off. Nevertheless, the SST program provided a great learning platform for young aerospace engineers.

After completing my Masters degree I worked briefly outside of aerospace helping the State of Arizona launch its vehicular emissions test plan. One year later I got a call to go to work for Allied Signal (now Honeywell) in Phoenix designing aircraft gas turbines again. I couldn't resist. Of course, Honeywell was willing to pay me almost twice what the State of Arizona was paying me.

Tragedy

One of my assignments was quite brief. I went to work for Aerojet Liquid Propulsion Division on January 2, 1986. The company was developing a growth version of the Space Shuttle Main Engine and I was hired to supervise the turbomachinery stress analysis group. Enthusiastically, I began work at 6:00 AM every day. The morning of January 28, what began as slight murmur in the background gradually escalated until I was forced to put aside my work and discover the reason for all the conversation. Space Shuttle Challenger had exploded during launch.

The world mourned. The company mourned. I mourned. All shuttle programs were on hold for the next 18 months while the accident was investigated. Thousands of space scientists and engineers had their careers redirected. Many careers ended.

It's always harder than we expected...

Being in the national limelight is often unavoidable in our business. I worked on design of the power plant for the V22 Osprey tilt-rotorcraft from 1992 through 1996. I soon found that the V22 was a seemingly endless source of unimagined problems that required much more attention than anyone at Boeing, Bell or Allison had anticipated. The loss of life on this program has been tragic; the battles in congress over killing it have polarized our lawmakers. The military need for this vehicle remains.

Triumph

We feel frustration when our projects are cancelled. We feel responsible for the risks taken by the pioneers who take flight in our material contrivances. When deaths occur, we feel pain and deep inside, some guilt.

Eventually, we find that we are living with a familiar restlessness. We felt it after the Apollo program ended. We felt it when the American SST was canceled. We felt it after Challenger exploded. We felt it after Columbia was lost. Yet, everything thousands of aerospace scientists and engineers have done in the past 100 years is just preparation for realizing our new dreams of flight. The next project: that is where our hope lies, that is what we live for. That is what we love.

2003-2004 Section Council			
Position	Name/Company	Work Phone	Email Address
Chair	Nigel Barker, Goodrich Aerostructures	(619) 691-2568	Nigel.barker@goodrich.com
Vice Chair - Planning	Eric Heininger, Pyramid Space, Inc.	(858) 554-1140	Eheininger@Heininger.com
Vice Chair - Technical	Dr. Anisur Rahman, NAVAIRSYSCOM	(619) 545-2277	Rahmana@navair.navy.mil
Secretary (Interim)	Lee Bolt, Aerospace Consultant	(619) 281-0216	leebolt@worldnet.att.net
Treasurer	Larry Sullivan, Goodrich Aerostructures		
Program Arrangements	VACANT		
Field Trips	VACANT		
Newsletter	VACANT		
Flyers	VACANT		
Electronic Newsletter	VACANT		
Internet Webmaster	To Be Announced		
Public Policy	VACANT		
History & Bylaws	Bill Chana, W. F. Chana Associates, Inc.	(858) 488-7183	
Region VI Delegate	Phil Rose, Goodrich Aerostructures	(619) 691-2592	pmrose2@speedband.com
Membership	Jim Peterson, General Dynamics (ret.)	(858) 279-1940	Jdpete@pacbell.net
Honors & Awards	Keith Glassman, Naval Aviation Depot, NI	(619) 545-3736	GlassmanKF@navair.navy.mil
Professional Society Liaison	Warren Johnson, BFG Aerospace (ret.)	(858) 278-1317	Wmjohanson2@earthlink.net
Young Professionals	VACANT		
Evolution of Flight	Chris Root, Naval Aviation Depot, NI	(619) 545-0626	RootCB@navair.navy.mil
Pre-College Outreach	Quentin Goss, USAF (ret.)	(858) 451-6213	Qigoss@worldnet.att.net
Education & Student Activities	VACANT		
SDSU Faculty Advisor	George Faulkner, SDSU	(858) 270-6604	DGfJR@aol.com
SDSU Student Chair	To Be Announced	(619) 508-6557	mgregory@rohan.sdsu.edu
UCSD Faculty Advisor	To Be Announced		
UCSD Student Rep.	To Be Announced		machau@teng9.ucsd.edu
AIAA SAN DIEGO SECTION	P.O. Box 881464, San Diego CA 92168		

Note: Volunteers for vacant positions are being sought. Please contact the Chair if interested.

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