



Treasures for Teachers

Details [Here](#)

— ENGINEERS MAKE —
A WORLD OF DIFFERENCE



National Engineers Week

Details [Here](#)



General Atomics Tour

Details [Here](#)

RENDEZVOUS SCIENCE CENTER

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"Exposing the youth of today to the growing scientific innovations of tomorrow."

Details [Here](#)

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Project Lead the Way Update

Greg Marien

As some of you already know, I have been involved with Project Lead the Way (PLTW) at a local middle school. Northrop Grumman provided a grant to help get the curriculum started. First, the teachers attend the orientation classes at San Diego State University during the summer to learn the PLTW lessons. During the fall, the teachers initiate the new lessons. Northrop Grumman not only helped with funding, but four engineers, including myself, volunteered to attend the classes at least once a week. Finding the time has been the biggest challenge, but it has been worth the effort.

PLTW curriculum includes wind tunnel testing, computer aided drafting (CAD), programming robots, designing and firing off rockets, and many others. I have been most impressed with the enthusiasm and the ability of the students to pick up CAD. Seeing the students in action is evidence that we are on the right track to fill the coffers with new engineers and scientists.

More information on PLTW can be obtained from [here](#).

Treasures for Teachers

California Space Grant Foundation celebrated the Grand Opening of the NEW [Science & Technology Teacher Resource Center](#) (STTRC) on Thursday, October 18, 2007.

STTRC is an inspirational project of the [California Space Grant Foundation](#) (CSGF), a non-profit 501(c)3 that creates, facilitates, manages, and integrates K-12, college, university, and life long

learning opportunities built around real world space, land, and sea projects.



The center has wonderful FREE Treasures for Teachers. STTRC is a comfortable “teacher welcome center” that encourages and supports creative and collaborative thinking by teachers. Easily accessible from the 42 school districts in San Diego County, STTRC provides a place for the presentation of ideas, formulation of projects, development of curriculum, and collaborative science & technology educator learning. It also is a Meeting Place for teacher gatherings and FREE professional development workshops.



STTRC contains a Library and Resource Center of FREE science and technology curriculum materials created by government agencies, professional societies, and commercial companies (educational software, booklets, posters, and handouts). Teachers may conveniently review these resources at STTRC and determine which ones would enrich their students' learning experiences.



Rendezvous Science Center

[Rendezvous Science Center](#) is a hi-tech scientific teaching establishment offering individually tailored courses with computer access to the world-wide resources of science. The learning center uses video conferencing to link with multiple advanced scientific educational centers, including NASA & University of California Berkeley, for grades K-12. It also acts as a cutting edge teaching facility to provide teachers with the means to enhance, expand upon their scientific knowledge and gain additional teaching accreditation. Rendezvous Science Center underwrites and creates new science and math curriculums to stay current and competitive with today's advanced technologies. All curriculums are written to meet and exceed standards set for by California (amongst other states). This enables the facility to 'Expose the youth of today to the growing scientific innovations of tomorrow'.

Current projects under partnership in education with San Diego Unified School District:

- Custom designed science enrichment courses for YMCA
- Science lecture series at La Jolla High School
- Science Fair partnership with Muirlands Middle School
- After school science exploration program at La Jolla Elementary School
- University of San Diego Walk On Water engineering design competition
- Teacher in-services in collaboration with Lawrence Hall of Science from University of California Berkeley delivered to local educators
- UCSD undergraduate engineering student mentorship program
- Science community outreach in collaboration with San Diego Science Alliance
- Media and technology training for students and teachers in partnership with San Diego Super Computer Center

The ultimate goal for Rendezvous Science Center is to have similar learning centers throughout San Diego County, Southern California, and then to select cities throughout the United States where S.T.E.M. (Science – Technology – Engineering – Mathematics) education will be taught. We are proud to be a part of making history here in San Diego with this unique, fresh 'hands on/minds on' approach. This is particularly pertinent now given that the California's

STAR testing has been expanded to include science for elementary grades. Our center will prove to be an essential extra-curricular arm of the educational system to meet the California and National science based standards.

In order for the Center to reach all sectors of the community, we are seeking sponsorship both for individual students/teachers or the underwriting of curriculum. This is vital to the sustainability and growth of our invaluable current programs. We urge you to sponsor a science student and make their dream come true.

Please contact Ben Foroozan, Director of the center at bforoozan@rendezvouscenter.com to discuss underwriting opportunities.

Field Trip: General Atomics

Doug Armstrong

The field trip to [General Atomics](#)' D III D Fusion Facility in San Diego was the best one yet. Due to some unfortunate events that week, with the fire raging in San Diego, we were going to cancel, but we still pushed forward to maybe give the evacuees something to do instead of hang out at the stadium.

We received a briefing and question and answer session for 30 minutes during which excellent refreshments were served.



The tour of the facility was amazing since there are only three of them in the country and this is the largest one. It gets its name from the fact that the original one was shaped like a D doublet and this one is the third generation of the technology.

It consists of a vacuum chamber where Hydrogen ions are accelerated and contained by a magnetic field. The device's ability to make varied plasma shapes and its measurement system are the best in the world. Neutral deuterium beams using 120 megawatts of power create the heat, which raises the internal temperature to 230,000,000 degrees Kelvin, hotter than the sun. It is used by researchers to understand the stability, confinement and other properties of plasma. Someday it may become the ultimate way to generate electrical power.

San Diego AIAA Awards Banquet

The plans have been made and winners chosen. Our end of the season awards banquet is set for May 22 at the Admiral Baker Club. We will be honoring our long-term members, our award winners, Reuben H. Fleet scholarship winners and more. The enclosed flyer contains reservation information. Hope to see you there.

National Engineers Week Awards Banquet Wrap Up

On February 22, 2008, AIAA San Diego participated in the [National Engineer's Week](#) (NEW) Awards Banquet. AIAA took the lead this year and chaired the planning committee. With over 200 people in attendance, and a great showing of AIAA members, and many other San Diego Engineering societies, we had a wonderful event.





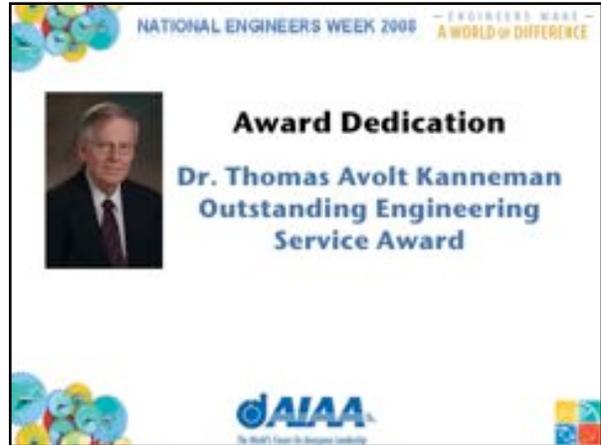
The evening started with a social in the Shiley Science and Technology Atrium. Dinner and awards ceremony followed in the Joan Kroc Institute for Peace and Justice. Both San Diego City and County presented us with proclamations, proclaiming the week as National Engineers Week in San Diego.



Awards were presented for Outstanding Engineer Award, Outstanding Engineering Educator Award and Outstanding Engineering Project Award.



For the final award, we had an award dedication in the name of Dr. Thomas Avolt Kanneman, a cornerstone to the National Engineer's Week Banquet here in San Diego (below).



Tom passed away this last year and he will surely be missed. The award was presented to Tom's wife and daughter (below). The Outstanding Engineering Service Award was also appropriately renamed the "Dr. Thomas Avolt Kanneman Outstanding Engineering Service Award."



The evening concluded with an excellent speaker from the Smithsonian Institution, Dr. Tom Crouch. His topic entertained the crowd with the history of inventing flight, from balloons to wings. AIAA San Diego will continue to play an active roll in the NEW planning committee.

Details on the NEW can we found [here](#).

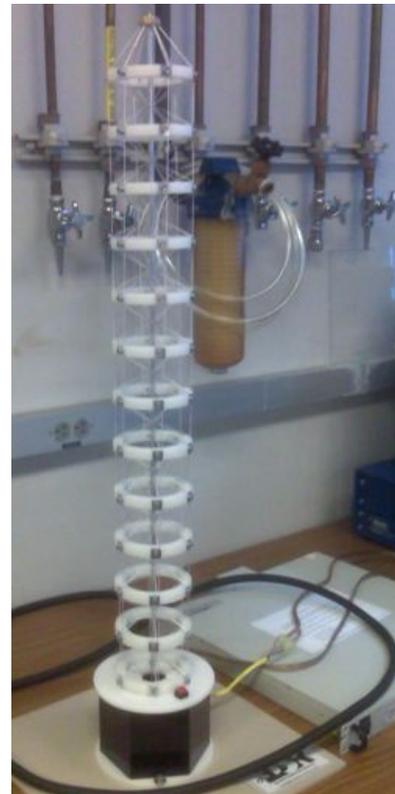
Young Professionals Mix it Up

A group of young professionals from the AIAA and AFCEA (Armed Forces Communication and Electronics Association) held a successful mixer event on March 6th. The two groups joined up at Dave and Busters in Mission Valley for a social mixer that brought people out from all over San Diego with more than 40 people in attendance. Both societies were well represented and enjoyed lively discussions about their different careers. The group talked over appetizers and drinks with a showing that was twice the size from last year's joint mixer.

There were some familiar faces as well as some new ones. Student members showed up to learn more about the industry from young professionals not too far removed from their college years.

After appetizers, the group continued on to enjoy the games and festivities that the venue offers; from arcade hits to skee-ball, fun was had by all. Even after the event had come to a close many stayed to enjoy themselves and learn more about their colleague's careers.

The AIAA will continue to have these mixers. The next step would be to engage more young professionals from other societies to keep the group growing.



Happenings at UCSD

A team of UCSD AIAA students was accepted for the NASA-Microgravity University-Reduced Gravity Student Flight Program. This program allows 50 student teams to propose, design, fabricate, fly and evaluate a reduced gravity project. UCSD's project deals with tensegrity, which is tension and compression in a structure. UCSD's design is made with rods and high tensile strings. We plan to deploy something like a mini space habitat using one of these structures and see the effects in microgravity (right).

Membership News

Section professional membership stands at 398 as of March 1st, 2008. In addition, the Section has 31 Educator Associate Members and 96 Student Members.

We would like to welcome the following new AIAA professional members to the San Diego Section over the last seven months:

September 2007

Gregory Austin	Chrysler Tech
William Ballhaus	BAE Systems
Raymond Madachy	USC
Nathan Oldfield	Northrop Grumman
Keith Rowley	Goodrich Aerostructures
Bernard Schwartze	Maxim Systems
Matt Smiley	SpaceDev
David Strobel	Space Micro Inc
Vince Vella	Maxim Systems
Clive Winkler	Cubic Defense Applications
Roy Yelton	SpaceDev

October 2007

Philemon Chan	L-3 Communications
Gerard Fleck	ieSolutions
Adam King	
Justin Langolis	US Navy
Barry Lilore	
Bruce Pittman	CSGF
Carl Sloan	Vanguard Composites

November 2007

Mann Chau	UCSD
Chad Foerster	Honeywell Aerospace
Clint Guy	Maxim Systems
John Kohut	Raytheon
Gert Lundgren	LAPCAD Engineering Inc
Michael Mattis	Maxim Systems
Mark Sirangelo	SpaceDev

December 2007

Jeannie Borden	Booz Allen Hamilton
Abraham Meganathan	ESI NA Inc
Michael Ruith	GA Aeronautical Systems

January 2008

Jose Alonso-Miralles	Goodrich Corp
Phillip Harvey	Lockheed Martin
Tetsup Hiraiwa	UCSD
Gustaaf Jacobs	SDSU
Ben Tupper	Birt Engineering
Julia Whitmire	Goodrich Corp

February 2008

Bruce Cordell	Fullerton College
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March 2008

Dario Baldelli	Northrop Grumman Corp
Robert Kolozs	San Diego Composites
Ivan Pulido Banda	Honeywell Aerospace de Mexico
Roberto Sabatini	SPAWAR
Madison Schepps	Northrop Grumman

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

Contact Information

Position	Name/Company	Work Phone/Fax	Email Address
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Vice Chair – Technical	Joel Perez, Pratt & Whitney Composites	(760) 285-2018	ViceChair.Tech@aiaa-sd.org
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Reuben H. Fleet Scholarship	Bill Chana, Convair, Retired	(858) 488-7183	
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AIAA San Diego Has A New Address
 Any mail sent to the old address will be forwarded

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