

The Informer

July 2008

Communications from the Desert Pacific

Reports and Activities from Individual Chapters and Region Council



Education through monthly meetings, seminars, company tours, technical reference books, and Interactive video training.

5171 Del Sol Circle, La Palma CA. 90623-2210

NONPROFIT ORG
U.S. POSTAGE
PAID
Huntington Beach, CA
PERMIT NO. 2244

Desert Pacific

Member Relations Manager Mr. Bruce MacKender Work (503) 631-7955

Publisher	Dale Bethke, LSME, CMfgE	562-803-1521
Editor	Ron Mac Iver, LSME, CMfgE, PE	714-527-7138
Shop Talk & Buzz	Jason Lembeck,	310-541-8679
Business Manager	Jack Allen	562-866-0997
Community Relations	Kris Baron	562-803-1521

Senior Chapters:

Chapters:	Chair's:	Contact:
027 Los Angeles, CA,	Dale Bethke	562-803-4521
044 San Diego, CA,	David Sulli	858-202-3191
067 Phoenix, AZ,	Trian M. Georgeon	408-288-4978
093 Albuquerque, NM,	Michael D. Mitchell	505-846-3097
153 South Bay, CA,	Jason A. Lemback	310-541-8679
173 Canoga Pk, CA	Frank Lizec	818-349-8468
233 Orange Coast, CA,	Gary Pangelina	805-388-2830
234 Westminster, CA,	William (Bill) .Somsak	714-893-5331
257 Phoenix, AZ	William G. North	480-921-3939

Student Chapters:

Chapters:	Sponsors:	Faculty Advisors:	Contacts:
S012 Cal Poly	Ch 27	Dan Waldorf	805-756-2908
S038 LA Trade Tech	Ch 27	Anthony J. Fleagle	323-660-6686
S043 AZ State Univ	Ch 67	Trian M. Georgeou	480-288-4978
S053 Cal State L. Beach	Ch 234 & 233	Parviz Yavari	562-985-4277
S086 Cal Poly scarab97@hotmail.com	Ch 27	Young Tung, CMfgT	
S130 LA Pierce Coll	Ch 173	Ronald Smetzer	818-719-6490
S139 Cal State-Chico	Ch 28	Leonard Fallscheer	530-898-5320
S158 ITT Tech-W Covina	Ch 27	Alan St John	626-960-8681
U184 University of AZ	Ch 257	Dr. Young-Jun Son	520-626-9530
S197 TVI Comm Coll, NM	Ch 93	Chris M. Sanchez	505-850-2053
S268 Central AZ Coll	Ch 67	Frank Westerman frank_westerman@python.cac,cc.az.us	
S289 San Diego Cty Coll	Ch 44	Douglas R. Welch	619-492-0669
S318 Cal State-LA	Ch 173	Neda S. Fabris	818-952-0217
S327 Cal State-Northridge	Ch 173	Tarek A. Shraibati	818-677-4547

Editor's Note



Thoughts for the Day

Kindness is the language the blind can see and the deaf can hear.
- Mark Twain

The secret of a good sermon is to have a good beginning and a good ending; and to have the two as close together as possible.
- George Burns

Santa Claus has the right idea. Visit people only once a year.
- Victor Borge

Only Irish coffee provides in a single glass all four essential food groups: alcohol, caffeine, sugar and fat.
- Alex Levine

I never drink water because of the disgusting things that fish do in it.
- W. C. Fields

Money can't buy you happiness .. But it does bring you a more pleasant form of misery.
- Spike Milligan

Be careful about reading health books. You may die of a misprint.
- Mark Twain



Our Web Page is @
<http://theinformerdesertpacific.com/>



Additional contributors to this edition:
William Somsak, Ileana Costea, and Michael C. Burstein



WESTEC Manufacturing Challenge and the William B. Johnson Award

By William Somsak FSME, CMfgE



William B. Johnson was a 'spark plug' engineer working on rocket motors at Rocketdyne. He wanted to help students and fellow engineers to become better educated through SME education programs and competitions. Bill Johnson Sr. worked for years to improve WESTEC and helped establish the WESTEC Manufacturing Challenge, which became a competitive program between colleges. SME local engineers would judge the projects and the local chapters would pool together a sizeable cash prize for the winner. Bill was one of those persons who would never quit.

William Bill Johnson Sr. was a past chapter chairman and later elected to the position of SME International President. After his presidential term was at an end, he then worked with all the SME chapters in his region. He encouraged the younger engineers to see their dream mature to a successful conclusion. Bill Johnson would say to persons feeling overwhelmed, "Don't let the bastards get you down!"

When Mr. Johnson passed away, the local SME leaders wanted to honor him and created the William B. Johnson Leadership Award for the outstanding student selected by the WESTEC Manufacturing Challenge Competition Judges.

The 2008 Manufacturing Challenge was composed of six colleges in competition. The California State University at Northridge (CSUN) was one of the participants. CSUN student team members were J. Diaz, B. Dickerson, V. Essian, M. Gill, D. Halko, J. Paez, and H. Samli. The student team's instructor was Tarek Shrabati. Dustin Halko headed the team project named the "Infinitely Variable Transmission System" for an electric motor.

SME recognized Mr. Dustin Halko as an outstanding engineering student who not only headed the design team, but also developed a classic project management approach by identifying required parts to be manufactured, created a work-break-down structure, and assigned tasks to various students. As Bill Johnson did, he led a successful team effort and shared the winning spirit of the WESTEC presentation. We thank William B. Johnson Sr. for his life as an inspiration to others and for teaching engineering methods by using SME educational tools. The Manufacturing Challenge Competition Leadership hopes that Mr. Halko will continue to help his associates and engineering students to be the best that they can be.



↩ Chapter Activities ↩

Chapters 027, 153, 233 and 234 are holding joint meetings

One of our chapters will be hosting an event each month so always check your e-mail and web page. <http://theinformerdesertpacific.com/>

Chapters listed above have several events planned. Event dates and times will be listed on our website. Questions may also be answered by checking with officers listed on page 2, or sending an e-mail listing SME in the subject heading to: InformerSME@aol.com

See new Robinson Helicopter tour listed on page 7. A second one was planned by popular demand because of the great success of the first one.

Chapter 93 , Albuquerque, NM

<http://chapters.sme.org/093/homepage.htm>

Chapter 93 will be have their 10th Annual Scholarship Golf Tournament on July 11 at Isleta Eagle Golf Course. We are always looking for golfers, donations for gifts and scholarship. We have had 64 golfers for the last two years.

Our chapter gave its first scholarship from SME National Education Foundation. The scholarship was for \$2,000.00.

Let me know if you have any questions, please call or e-mail.

Chapter 93 Chair 2008

Michael D. Mitchell 505-846-3097 or e-mail mitch05@comcast.net

Chapter 173

**For more information on this Chapter E-mail:
sme173be@aesvcs.com**

See page 2 for people to contact in your Chapter

Employment Opportunities

The following positions are available at
United Drill Bushing Corp.
WE NEED GRINDERS



1. OD Grinders
3. Surface Grinders

2. ID Grinders
4. Driver

Day shifts only. All applicants must agree to a physical.
Kindly call Mrs. Olivia Clauson, Supervisor of Human Resources at
800-486-3466 ex 3065.
United Drill Bushing is located at 12200 Woodruff Ave
Downey, CA 90241
United is an EOP.

Position # 319 **Manufacturing Engineer**

Our client is a \$300m+ division of a Fortune 200 Company. They manufacture the latest innovations in plumbing supplies. For over 60 years they have been a leader in manufacturing a broad line of high quality plumbing products for construction and repair, and remodel markets. The position of Manufacturing Engineer is available at their Corona Ca. plant location. This is a leadership position. This person performs a variety of engineering assignments in developing and implementing production/processing methods and controls to meet quality standards in the most cost efficient manner. Will investigate and resolve work in process problems. Recommend and implement improvements and or modifications in sequence of operations, equipment utilization and related matters.

For a complete job description and requirements:

PLEASE CONTACT: Lisa Miller or Cheryl Abramson
Miller, Abramson & Co. Inc.
561-330-8500 x319
561-330-8110 fax
Email: lisam@macnet.net

For more Employment Opportunities go to the web..
<http://theinformerdesertpacific.com>

ROBINSON HELICOPTER MANUFACTURING PLANT TOUR



SME Chapter 153, The Aerospace Chapter sponsored the tour on Thursday, April 17, 2008 at 1:00 PM. The members that were able to take advantage of this chance are shown above.

ROBINSON HELICOPTER MANUFACTURING PLANT TOUR

SME Chapter 153, The Aerospace Chapter, invites all SME and IIE chapter members to an afternoon tour of Robinson's plant. You will observe production and assembly activities of a classical air frame and power plant manufacturing line which leads the world in the number of commercial helicopters shipped.

The tour will be on August 14, 2008 Please register with Jason Lembeck, Chair, Chapter 153 by email at marforce@aol.com



The Changing U.S. Industrial Base Can Be Challenging

This column addresses the dilemmas for many manufacturing industries which in the past 20 years have experienced shrinking sales as U.S. industrialization fades in the face of a proliferating service economy. No industry is more symptomatic of this change than our auto industry. Those auto companies that have persisted in using U.S.-based factories to produce gas guzzling monsters and high powered sports cars find they are out-of-sync with energy-conscious consumers. The Big Three reports on future earnings and Toyota's capture of the lead in global auto production from GM in 2008 are indicative of what may be lying ahead. Other U.S. manufacturing industries which have experienced business slowdowns rightly blame China, India, Brazil and other emerging countries where manufacturers have acquired the core competencies to give them a competitive edge in the global markets. This technology transfer has resulted in a 30-year slide in our manufacturing capacity and capabilities to the detriment of the U.S. industrial base. The exception has been the aerospace industry.

Despite the recent off-shoring of composite fuselages, wings, empennage, and machined aircraft parts by many commercial aircraft manufacturers the aerospace industry continues to offer opportunities for those U.S. companies who would accept its challenges. The FAA's Parts Manufacturer Approved certifications of foreign manufactured parts have grown substantially in the last 5 years, as have certifications of foreign-trained power and air-frame mechanics. This shift to lower-cost aircraft components and the recent spate of new Maintenance, Repair and Overhaul facilities in China, Singapore and other Southeast Asian countries are but a minor segment of this industry. The recognized worldwide demand for commercial, general aviation and business aircraft and other civil aviation sectors continues to generate opportunities for growth among U.S. corporations. A selection of these sectors are set forth in the chart below.

Among those selected, the military sectors have been spurred by the combat experiences in the Korean and Vietnam Wars and Middle East incursions which led to larger defense budgets. Successive generations of jet fighters and stealth bombers, troop carriers, satellite communications, inter-continental and tactical missiles, ground combat detection and communications, and unmanned aircraft have culminated in the world's most powerful air services. Unlike civil aviation which is subject to the scrutiny and certification regulations of the FAA, the DOD has developed its own unique paradigm of Military Specifications for its procurement and monitoring programs.

(Continued on page 9)

Shop Talk & Buzz ...

(Continued from p. 8)

In the paragraphs that follow you will be given a propitious introduction to strategic corporate growth by laying out the "aerospace playing field" where you can find sectors with the sustainability to be worthy prospects for this strategy. In the highly technical commercial aviation and defense industries you will have to acquire a thorough grasp of their operations and become conversant with those parts and components that are candidates for out-sourcing to low-cost foreign manufacturers. Also you will need to identify and quantify those parts and assemblies in their value chains, which mandate a close proximity to anticipated customers. Given the scope of aerospace in California it is reasonable to use this industry as an example for organizing the basic information you might need if your company is contemplating venturing into the totality and complexities of any of its sectors. As challenging as this may be, it could be an alternative to incurring the risks of surviving in the increasingly competitive global auto industry.

Qualifying and Quantifying Select Sectors in Aerospace.

The sectors, below, have been extracted from Aviation Week's Aerospace Source Book 2008. This selection is based, among others, on their sustainability, vendor reliability and past performance. Every known engineering discipline can be found in this group.

Military Aircraft, Commercial Aircraft
Freight Aircraft, Commercial Maintenance Repair & Overhaul
Rotary Wing Aircraft, Business and General Aviation Aircraft
Unmanned Air Vehicle, Gas Turbine Engines
Launch Vehicles, Spacecraft Vehicles
Missile Systems, Military and Commercial Avionics
Satellite Communications, Home Land Security Equipment.

(Continued on page 10)

Advertising Prices

The **SME Informer** for the **Desert Pacific** is published 4 times a year, once each quarter of the year. The advertising rates for 4 issues of the **Informer** for 2008 are as follows:

Full Page: \$350

Half Page: \$175

Quarter Page: \$100

Business Card size: \$75

(Job posting ads will pay the Business Card rate.)

Note: The advertisement (art work) can be sent to us via Internet, or by US mail. Your ad can be changed with each of the 4 publications in the year.

In narrowing my research for this article, I also determined that the sectors listed above are among the industries listed below that I found in the California Manufacturing Register, which lists roughly 30,000 companies and 2 million employees. The largest in the country.

<u>Category</u>	<u>No. of Mfrs</u>	<u>No. of Employees</u>
Petroleum	145	12,671
Rubber/Plastics	2,250	73,189
Fabricated Metal	2,690	118,944
Electric/Electronic	3,247	295,626
Machinery	3,637	189,495
Transportation*	1,093	133,150
Aircraft Parts/Equipment	212	19,615
Aviation Controls	1,807	183,568
Search & Guidance	153	38,941

*OEM aircraft companies along with truck, railroad, and marine industries.

Keeping an Eye on the Big Picture.

If you have made it a business practice to broaden your perspective of the economic landscape you will grasp the significance of the paragraphs below. In this context, you are aware of the weakening economy led by the troubled financial institutions, the bursting of the real estate bubble, the weakened dollar, and the rising costs of production. Owing to the cyclical nature of this decline, it is expected to have little effect on aerospace. Moreover, you know while Boeing and Airbus are having problems with the delivery schedules of the 787 and A380 they remain committed to their established operations. Boeing's delivery date for its 787 has recently reported a 9 month program delay, but also reported 115 deliveries of its 737s and 777s in the first quarter. AirBus which has its problems with its program following its symbolic deliveries of three A380s, but the company continues to make deliveries of its popular line of airliners. The recent cyclical contraction in air travel caused by the slowing global economy is not expected to change the procurement programs of international airlines. Meanwhile, military airframe manufacturers are benefiting from a market driven by the need to replace the aging fighters with Super-Hornet F-18s, F-22s, F-35s, unmanned air vehicles, and the newest generation of helicopters. Contracts for most aircraft are expected to sustain their manufacturers into 2020.. Globally-oriented U.S. manufacturers of commercial helicopters, unmanned aircraft, business and general aviation aircraft, very small jets, commercial avionics and air traffic control systems are expected to benefit from their respective expansions well into 2015. Like all projected timetables these can be taken over by unforeseen events and should be periodically reviewed.

(Continued on p. 11)

Shop Talk & Buzz.....

(Continued from p. 10)

The outlooks for civil and military aviation suggest they are feasible targets for any business growth strategies you might have in place. Consult the www.aviationweek.com or the Federal Depository of Federal Codes found at main public libraries, the California Manufacturing Register, and pertinent websites of industry periodicals for more information. You might also find the March 2004 and 2008 issues of the *Manufacturing Engineering* useful..

Matching Company Capabilities with the Requirements of the Industry.

In most sectors you will recognize manufacturing technologies used by your company. If interior and support technologies such as electrical, electronic, IT systems, automation, or robotics are among your strengths, you will have the technical know-how and the assets to consider theoretical transitions into avionics, electrical and aircraft controls, and flight control systems.

Based on 30 years of strategic planning experiences, I know that any success beyond this hypothetical transition will depend on a motivated management which possesses the will and skills to formulate a feasible strategy and realistic pro forma statement, together with the business acumen to realize the mandated need for a strong balance sheet.

FOOTNOTES:

(1) The Aerospace Industries Association reports - "While overall manufacturing employment has declined, our civil defense and space sectors are strong with a record backlog of orders fueled by major export growth." "Employment reached 651,700 compared with 645,600 last year." A record after the low in 2004.



SME Online Courses

World-Class Six Sigma Online Training & Certification Partnership

This new Six Sigma curriculum called "Generation III" is for individuals and businesses of any size. Generation III combines advanced internet technologies and a very strict curriculum with a focus on value creation. Discounts only available here...SME Members get special pricing on integrated offerings for training, assessment, certifications (Six Sigma Black/Green/White Belts), and one-year free membership in the Six Sigma Global Registry (SSGR).

Tooling University

Through our "strategic learning partnership" with Tooling University, SME offers over 185 classes designed specifically for a shop-floor audience. Easy-to-understand instructional materials are developed in conjunction with industry experts.

If you have questions about these programs or would like us to send you information, please e-mail training@sme.org.

"Get It Off Your Chest Column"

Commercial-off-the-shelf (COTS) parts are now directed to be used in fulfilling military hi-rel programs by our government. This policy has me in a tail spin. Before Clinton became president and began to degrade our military quality, our military programs exhibited great reliability as compared to today. The electronic designs used the highest quality parts they were radiation hardened which would withstand a heavy nuclear blast without shorting out. Parts like this were used on the Peacekeeper Missile (MX) program (the most reliable program ever) and the F-117. A pilot flying a jet could be in a dog fight and be caught in a radiation blast. He would probably have less than two hours to live and to get the plane down and say good-bye to his wife while another pilot could get into his plane and continue the battle protecting this country. Today, the electronic controls of the fighter may not be as rugged and could possibly fail at the time of a radiation blast and he goes down with the plane.

In a commercial situation at home, Mr. John Q. Public with his new SUV would have the same problem. If a small suit-case bomb is exploded within 40 miles of your home and you want to get out of Dodge with your family and mother, you will have to walk because that electronic ignition system on your new ride has been destroyed by the nuclear radiation.

Commercial parts are just what it says "commercial". It is cheaper. I do not mind using COTS for TV's, MP3 players but not in the military. The people pushing COTS have been trying to brainwash the military suppliers as to how wonderful they are and how much money is saved. How many hundreds of our soldiers died when their commercial GPS failed in Iraq due to the 130 degree heat that fried the equipment. If you have any comments or disagree with me please write the Interface editor. He will send me your comments and we will publish them and I may comment on them also. My vote on COTS is fiction. What is your vote? (Other Value or Fiction topics are 'No-lead Solder' and 'Built-in Connector Failure Mechanism in our Military Specs'. Wait to see my comments on these topics!)

Doc Kasmos, PE



United
California Corporation

Dale Bethke
PRESIDENT

DRILL BUSHINGS - JIG FIXTURE - TOOLING COMPONENTS
AIRCRAFT AND AUTOMOTIVE TOOLING

12200 Woodruff Avenue • Downey, California 90241-5608
(562) 803-1521 (800) 421-3466 (562) 803-6898 FAX
CA/Nat. Wide (800) 486-3466 CA/Nat. Wide (800) 486-3465 FAX

**The Manufacturing MSEM Department believes in manufacturing !!!
and in SME and WESTEC!!!**

Two manufacturing “supermen” at CSUN:

Professor -Tarek Shraibati and Student - Dustin Halko.

By Ileana Costea, Professor of Engineering
Manufacturing Systems Engineering and Management Department
College of Engineering and Computer Science
California State University, Northridge, CA 91330-8332

**WESTEC the most important annual manufacturing event
for the MSEM Department**

The MSEM Department chose the SME WESTEC to be the most important event in which to participate annually. This is based on the faculty recognizing the fact that the Manufacturing Challenge Competition offers a unique opportunity which challenges the students to get a real life look at the actual manufacturing process. Since its inception the Manufacturing Systems Engineering and Management Department (founded in 2001) at California State University, Northridge has had a strong active involvement in WESTEC: students and faculty participated as volunteers, and faculty made presentations and organized technical sessions and conference tracks (Professors Bonita Campbell, Ileana Costea, and Ahmad Sarfaraz). The department also contributed to the SME Manufacturing Challenge competitions for years by sending its senior design teams (supervised by professor Tarek Shraibati) and various faculty as jurors (Ileana Costea, and Tarek Shraibati). However, this year is the department’s success year: the CSUN team won 2nd prize in the Manufacturing Challenge Competition and the team’s senior design leader, Dustin Halko, received the William B. Johnson Leadership award.



CSUN MSEM senior students,
(l-r) Brian Dickenson
and Dustin Halko
holding the
William B. Johnson Award
WESTEC 2008, Los Angeles, CA

The winning team consists of the students currently taking the MSE488 Senior Design course (Instructor: Tarek Shraibati): Jairo Diaz, Brian Edward Dickenson, Varooj Essaian, Malvinder Singh Gill, Dustin Daniel Halko, Jose Rafael Rosales Paez, and Hatice Esra Sanli. Dustin is an older re-entry student, whose passion is manufacturing. He spent some years in the military, and has worked for a company that makes custom engines for motorcycles. This year’s CSUN team’s project was an “Infinitely Variable Transmission System” for an electric motor.

Asked why he believes the MSEM team might have won the competition this year, Professor Tarek Shraibati said: “The MSE senior design class used a classic project management approach to get the work done. They identified the parts that had to be made, created a work break-down structure, and assigned out tasks to group members based on their capabilities.” The project was an assembly of 40 parts of which 20 were created by the team in the CSUN Manufacturing lab on CNC machines, a Haas TMI, a Fadal 3020 (brought by Professor Costea as a donation by Fadal Inc. in 2000), and a Gildemeister CNC lathe (donated by Nokia two years ago). At the question: Why the need for so many pieces of equipment to create the part which helped in winning the competition? Professor Shraibati answered: “Because there were so many parts needed to be fabricated, the nature of the design required lots of very tight tolerancing, and each machine is more appropriate to making certain parts. This gave the students the opportunity to learn from doing and they finally became more proficient at using a CNC machine.”

The project presented at the Manufacturing Challenge Competition is a natural for the MSEM department. It represents advanced work for a potential prototype for a robot drive system. Robots are the “soul” of the manufacturing endeavors at CSUN, and robots (large and small) make Tarek Shraibati the MSEM faculty “superman.”



Robots, robots everywhere for the CSUN MSEM Department, with the faculty superman Tarek Shraibati.

Big robots: FIRST ROBOTICS Competition

Tarek Shraibati is on the Los Angeles Regional Organizing Committee for the First Robotics Challenge annual competition. He has been involved with the First Robotics Competition since 2000. Throughout the years the MSEM Department sponsored Louisville (an all girl high school) and Granada High School. This year both High Schools won various awards at the regional level, “Industrial Safety,” and “Sportsmanship,” and advanced to the “playoffs,” stage following the “seating rounds,” in Las Vegas, San Diego, and Los Angeles.

Small robots: VEX Competition

Between May 1-3, 2008, the VEX Robotics competition took place at CSUN. It was organized by Tarek Shraibati and had the participation of 91 high and middle school teams from 9 countries. It is the first ever world-wide VEX competition. The competition started in Korea, and its sponsors include NASA, The Future Foundation, Autodesk, Inc., and CSUN. (*Continued on Page 15*)

During the days of the competition, CSUN was in lights of the TV News for this event, which was presented by *ABC, Eyewitness News, Los Angeles, MESA 4 NEWS, KTLA Prime News, and FOX 11 News* (You can see the clips at <http://www.ecs.csun.edu/ecsdean/vex.html>).

Several events were hosted at CSUN for local schools: the Off-season competition or the FRC (big robot) and the FYC (smaller robot) for which the same Tarek Shraibati is the LA regional affiliate and has run this program since 2006.

Teaching robotics to High School students: MSE101 Introduction to Engineering This course is part of the CSUN ACCESS Program which encourages young people to go into engineering schools. CSUN started the program two years ago. This year there are 11 high schools who participate in the program and it is estimated that 100 high school students will take the course. The HS students will take the same CSUN on-line lecture part, and the lab course will be taken at CSUN by CSUN students while HS teachers and adjunct faculty will be hired to facilitate the lab work at the home schools.



When nine Pierce College students entered a manufacturing trade show contest Monday, they didn't just come up with a better mousetrap.

They submitted a simpler mechanical gumball machine.

"It's something that kids will enjoy," said Ryan Smetzer, 20, of Thousand Oaks, demonstrating the gumball marvel made of billet aluminum and topped with a Jack in the Box antenna ball with antlers.

"I think it could be the new design for the 21st century."

The 22nd Westec Manufacturing Challenge by the Society of Manufacturing Engineers drew 11 college teams of would-be engineers and machinists from throughout the region.

Held at the Los Angeles Convention Center during the nation's largest manufacturing trade show, which runs through Thursday, the contest gave students a chance to strut their mechanical stuff.

A better Baja sand racer. A sleek electrical turbine. A bicycle-driven ambulance. A bike-driven emergency generator from off-the-shelf parts. A transmission made for robots. A radio-controlled boat that can electrocute fish.

There was even a one-man tank with Caterpillar treads.

All were proudly on display as stern-faced judges scrutinized for the best designs.

At the end of the day, California State University, Chico, won the grand prize for its Baja sand racer.

Pierce College placed third in the two-year college category. California State University, Northridge, placed second in the four-year college category.

IN MEMORY OF Raymond Moore

Raymond Moore passed away suddenly and peacefully at his home in Green Valley, Arizona on Sunday, June 1, 2008. He was vice-chairman of SME's first Electronics chapter #234 in 2000 and Chapter Chairman in 2001. He worked diligently with training industry professionals in ISO 9000 and with SME Student Chapter #51 at California State College at Long Beach.



Ray was born on March 8, 1943, to Ray and Dorothy Mae (Beck) Moore in Lancaster, PA. His family moved to Southern California where Ray spent his childhood. As a young boy he had quite the "inquiring mind", always trying to figure out how things worked, which got him into more than a few compromising situations. He graduated from Woodrow Wilson High School, Long Beach, in 1961. This is also the time when he met his future wife, Elizabeth, and began the next phase of his life as husband and father.

Ray entered the U.S. Air Force in 1962, serving in photo mapping units and airborne navigation systems. Following his discharge from the military, he enrolled in San Jose State University, graduating with a degree in Industrial Engineering. He spent most of his career in military products manufacturing.

More recently, Ray explored a second career in residential real estate sales, both in California and Arizona. He enjoyed several hobbies, including model railroading, gardening, and instrumental and choral music. Ray is survived by his wife of 42 years, Elizabeth Sharon Moore, daughters Diane (Phillip), Davis and Linda (Bradley) Moore-Cate, sister Gladys (George) Miller, grandsons Nathan and Colin Davis, nephew Jerry Miller, nieces Laura (Mike) Lewin and Leslie Miller. Ray was a gentle giant of a man, loving husband, caring father and friend. He celebrated life, brought laughter and his own sense of humor to every occasion. May his memory and presence remain in our lives and continue in our hearts.

JACK C. ALLEN
Manufacturing Consultant
6321 Dashwood Street
Lakewood, CA 90713

Problem Solving . . .

in Mechanical / Electronic / PCB Assembly /
Hybrid Microelectronic Manufacturing
and Document Systems

Phone: (562) 866-0997
E-mail: jcallenf@earthlink.net

NATIONAL AND LOCAL RECONNECTION OF THE LA CASA/SME CHAPTER

By Michael C. Burstein, Ph.D., C.E.I. (mcb.tipe@hotmail.com), Chair of the
CASA/SME Extended Advisory Board and Member Consultant to Chapters
027,153, 233, and 234

New to the LA area as of last August and just off a turn as Chair of the Technical Community Network (TCN) of the SME, I was invited by Kris Baron, then the Member Consultant for all the LA area SME chapters, and Bruce MacKender, SME Member Relations Manager for the West Coast, to present on the subject of the TCN as a resource to the chapters at the Joint Installation Banquet for the four LA area chapters earlier this year. There, I was amazed to find that each of three (i.e., CASA/SME, electronic assembly, manufacturing management) of our four LA area chapters already corresponded in focus to a technical group within a technical community of the TCN and the fourth (i.e., aerospace and defense) of these chapters already corresponded in focus to a now-designated SME vertical. As a former member at the national level of the One SME Member Engagement Initiative Committee, I had come to share a vision of SME members each of whom would belong to a local technical interest group with ties both to a local chapter and to a technical group at the national level. Here in LA was a potential test bed where the original chapter had the prescience to divide into local technical interest groups each of which operated as a chapter; and, as I discovered at that banquet, each of you wondered “where in the world your buddies throughout the region and the country had gone” after the SME reorganization several years ago. Oddly enough, we folks on the Steering Committees to the new Technical communities and the new advisors to the various technical groups of the technical communities wondered exactly the same thing.

Also, I was (and am) the Chair of the Product/Process Design and Management Technical Community (PPDMTC) of the TCN. In the transition from the technical associations to the Technical Community Network, I (a long-time active in CASA/SME) was asked to facilitate the movement of members from the former CASA/SME Advisory Board to the core of the new Steering Committee for the new PPDMTC. As a result, I am considered by some to have been the last Chair of the CASA/SME Advisory Board and the first Chair of the PPDMTC Steering Committee. These former CASA/SME Advisors also were appointed to the new Board of Advisors for the new Computer and Automated Systems Technical Group (a holding place for former CASA/SME members) in the new Automated Manufacturing and Assembly Technical Community.

Well, the Steering Committee to the PPDMTC has been so occupied with infrastructure development for the TCN over the last four years that the Computer and Automated Systems Tech Group has languished.

(Continued on page 18)

Meanwhile, the former CASA/SME Advisory Board and I have been “itching” to get back into our favorite “sandbox” which is CASA/SME. Seeing the opportunity to help the LA chapters reconnect with their pals throughout the country and the opportunity to get CASA/SME back up and running, I (no doubt in a hallucinatory moment) volunteered a few months ago to chair the Computer and Automated Systems Tech Group and to be Member Consultant for the LA area chapters (at least long enough to make the connections and let the members “party on”).

So I contacted many former members of the CASA/SME Advisory Board at the national level and recent officers of CASA/SME Chapters/local special interest groups around the country to serve on a new Extended Advisory Board to the technical group/holding place for former CASA/SME members. To a man (or woman), they were passionate about re-energizing CASA/SME. By this time, the tech group had somehow been renamed the Manufacturing Integration Technical Group. As Chair of this technical group by whatever name, I was a member of the Steering Committee to the Automated Manufacturing and Assembly Technical Community. During my first attendance at a conference call of this steering committee, I was asked about the “Manufacturing Integration” name for our technical group. When I answered that it was a holding place for the former members of CASA/SME, I was asked why the name had been changed from the widely-recognized “Computer and Automated Systems” label. Since I had no answer to that question, the AMATC members voted to restore the original name; then, the SME staff members at the call told us of a requirement for a survey of the tech group members for their approval of the name restoration. So I held a conference call later with the Extended Advisory Board to our tech group to determine the content of such a survey. That group felt strongly to use the survey not only to gain input on the name restoration issue but also to staff new committees one for each of the famous CASA/SME initiatives (i.e., The Wheel, The Blue Books, The Lead Awards, The Technical Forums, The Tech Trends Documents, Autofact). With the help of the SME, we went ahead with a survey of 2000 or so current members of the tech group and/or former CASA/SME members. Not only did they vote (89.8%) in favor of restoring the name but we got anywhere from 20 to 35 volunteers for each committee. At the SME Annual Meeting last week, we had a face-to-face meeting of the Extended Advisory Board. They insisted on a return of the CASA/SME name to our technical group and full-speed ahead on the committees. These advisors include the current SME President and Vice-president, other current and past members of the SME Board, members of the Member Council and members of the Manufacturing Enterprise Council.

We would really appreciate your help in re-engaging you with your current/former CASA/SME pals from the LA CASA/SME Chapter and nationally as well. Meanwhile, my appreciation to your officers for keeping the chapter going, and thanks for your CASA/SME spirit in working on such efforts locally as the student robotics competitions, the various engineering councils, and in staying in touch with allied engineering societies (e.g., ASME, IEEE, and the IIE). Shall we further encourage such efforts with CASA/SME Chapter liaison committees to such activities? Please let us know your re-connection suggestions! I look forward to meeting you in person soon.

We Provide Customized Training at No Direct Cost to Your Company

UCR Extension has state funds available to help improve your work force. We can train at your worksite, and classes can start any time to meet your schedule or needs.

Training currently includes:

- Supervision and Teambuilding
- Computer Skills
- Project Management
- Vocational English as a Second Language
- Production Skills
- Lean Manufacturing
- Leadership
- Continuous Process Improvement (CPI)

UCR | EXTENSION

For more information, contact
Susan Almeida at 951.827.1623
or salmeida@ucx.ucr.edu

**Precision
Metal
Products**



"Are You Getting The Real Deal?"

We've made quite a stir in the industry, and accomplished what many set out to do, but few have achieved. Which is, consistently wringing the excess cost out of ISO 9001:2000 certified custom precision metal products - while maintaining the highest levels of quality, service, and technical support. Now you have the chance to slash your costs by 30-40% on most any metal components the microelectronics and packing industry needs, things like heat sinks, semiconductor packages, seal rings, and lead frames. Call us, at 858.558.6666, or visit our website www.torreyhillstech.com ... NOW!

Torrey Hills Technologies, LLC
A Company of G Tech Systems Group, Inc



United California Corporation



MINI-CATALOG VOLUME 10

Ph: 562-803-1521 Fax: 562-803-6898
Ph: 800-421-3466 Fax: 800-486-3465
Email: united@ucc-udb.com
Web: www.ucc-udb.com

Mr. Dale Bethke
President & CEO

Ms. Bille Huckins
Vice-President

*In
New
800 Pg
Catalog
UniSerts
Fasteners
Hoist Rings
Drill Bushings
UniGrip Clamps
Handles - Knobs
Modular Fixturing
Quick Release Pins
Drill Riveter Tooling
Air Tool Attachments
Spring Loaded Devices
Jig & Fixture Hardware
Total Taper Lock Tooling*

United Drill Bushing Corporation/United Screw Products Company