

HONEYWELL

RE 50

The First Ultra-Compact
Auxiliary Power Unit
for Light Aircraft

The RE50 is a new technology, auxiliary power unit designed for small business and general aviation aircraft. In order to introduce the benefits of auxiliary power units into this marketplace, a non-traditional approach was used to achieve the requirements of this marketplace. New technologies are being used such as oilless bearings and high speed generator technologies. In addition, technologies from other industries are being adapted to aerospace to make the RE50 concept a reality. The RE50 is anticipated to enter service in 2007.

Our speaker for the evening is Kevin Dittmar. Kevin has been employed with Honeywell Engines, Systems & Services for almost 18 years and is currently the engineering manager for the RE50 program. Prior to this assignment, he led new business development activities for APU projects.

Date: Thursday October 14, 2004
Time: 7:00 pm Meeting
Location: APS Building, Room 2 South
(NE Corner of the Arizona Center)
Cost: The Meeting is Free
(Cookies and Sodas will be provided by the section)
RSVP: Please RSVP (see below) by Oct 12th
so we may plan appropriately

Preceding the Meeting there will be a group meeting at 5:30 pm for **Dinner** at Copper Square Grill in the Arizona Center. You will be responsible for the cost of your own dinner. We will be able to validate Arizona Center parking tickets at the meeting.

Please RSVP To: Mark Jones

Phone: 480-759-2958

Email: jonesm1@asme.org

Before noon Tuesday October 12th

Leave a message with the number in your party, a phone number at which you can be reached and if you are also planning to meet for dinner preceding the meeting.





Chair's Message

Greetings Arizona Section of ASME!

As I sit down to write this message, I have to admit that I have missed my deadline for the newsletter. Pressures at work and demands at home have consumed my existence. I am sure this sounds familiar to many of you. As I talk to friends and colleagues, stress and ever di-

minishing personal time are common themes. In 2004 time is our most precious commodity and we need to spend it wisely - not waste it.

The Executive Committee and Operating Board of the Arizona Section ASME have worked hard to ensure a stress free experience at the monthly technical meetings. APS validates parking tickets at the Arizona Center, dinner is optional, the meeting is free, cookies and soda are provided and the speakers are prompt and professional. We

have provided a variety of speakers on interesting topics. I personally hope that you will find enough value in attending an ASME meeting this year- technical, informational or social- to spend your valuable time. I know I do!

And thanks to Dave Highfield, our newsletter editor, for his dedicated service and patience for my tardiness!

Terri Taylor

Chair, Arizona Section ASME


Local Activities, Events will be Part of ASME's 125th Anniversary Celebration

Throughout 2005, ASME will be celebrating 125 years of setting the standards of excellence for engineers throughout the world.

Plans are now in the works to organize events and activities that will help all members spread the word about the contributions engineers have made to humankind, as well as the work the Society has done on behalf of engineers.

In an online video talking about ASME's 125th anniversary, ASME President Harry Armen encourages ASME members to get involved in planning the celebration by thinking now about the kinds of activities that can be organized to occur throughout the year at the local level.

Currently, three dates in 2005 have been identified as occasions to celebrate: Founders Day on Feb. 16,



Brain Teaser

There is a pole in a lake. One-half of the pole is in the ground, another one-third of it is covered by water, and 8 feet sticks out of the water. How deep is the water, in fathoms?

Answer

$$L/2 + L/3 + 8 \text{ ft} = L$$

$$L * (1/2 - 1/3) = 8 \text{ feet}$$

$$L * 8 \text{ ft} / (1/6) = 48 \text{ ft}$$

$$\text{Water depth} = L/3 = (1/3) * (48 \text{ ft}) / \text{fathom} = 4/3 \text{ fathoms}$$

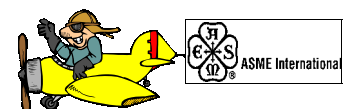
Boiler Code Day on March 12 and Heritage Day on April 7.

There will a number of opportunities for members at the section, division and regional level to plan activities or local events to mark each of those dates. Opportunities to stage events or activities will also exist at ASME meetings and conferences during 2005.

But anytime during 2005 will be a good time to hold an anniversary-celebration event. To get members thinking about and discussing what they can do to participate in the celebration, here are some ideas:

- Organize a guided tour that spotlights engineering achievements in the community.
- Hold an open house at your workplace, for students and the public, that will include special invited speakers and exhibits.
- Work with local engineering schools to help students focus on special activities.
- Organize one special event that will bring together local ASME members and their friends and family, industry, engineering students and faculty from local schools.

A list containing more ideas for celebrating ASME's 125th anniversary can be found on the Web at www.asme.org/anniversary. The Armen video can also be accessed on the site. Once on the page, click on the "Getting Involved" header at the top of the page. Then click on the line that reads "invited to participate ... "



September Meeting Kicked off Another Spectacular Year

The September meeting kicked off another spectacular year for the Arizona Section of ASME. Beginning the evening was an optional dinner at Mi Amigos, which offered a wonderful meal amongst friends and a chance to meet the night's speaker, Clark Mitchell. Clark is the program manager for the Ca-



nard Rotor/Wing (CRW) X-50A Dragonfly, which is a proof-of-concept vehicle designed to show that an aircraft rotor can be stopped and restarted in flight while the aircraft maintains lift. The idea behind this concept is for the aircraft to lift off and land as a helicopter,



but fly as a conventional fixed wing jet. This is an idea with an amazing amount of history; for instance, the HV-2A, built in the 1930's was the first to start a rotor in flight and land like a helicopter. Other important research was the development of reaction drive rotor aircraft, such as the XH-17 of the 1950's. The CRW uses a reaction drive system because it allows for the conversion from a helicopter to a jet airplane to occur with a single turbofan engine. Although, this conversion has yet to occur, the CRW appears to be on course to fulfill its purpose and steer future aircraft in an amazing new direction. Clark spoke of this cutting edge technology eloquently, and gave the ASME members present a unique view of this groundbreaking aircraft.

Engineers Without Borders-USA National Conference

The Fall 2004 Engineers Without Borders-USA National Conference was held Sept 22-25 at the CH2MHill World Headquarters and Conference Center in Englewood, Colo. Organized and hosted by EWB-USA and CH2MHill and sponsored by a variety of organizations including ASCE, ASME, WFEO, UNIDO, UNESCO, Water for People, and EWB-International,

the conference focused on creating strong and long lasting partnerships and collaboration between engineering students and professionals.

ASME is currently building teams for upcoming projects as an ongoing, legacy project of the 2005 EWeek activities.

For more information visit <http://www.asme.org/students/ewb.html> or contact: Diedre Hackley at hackleyd@asme.org.

ASU ASME FE Exam Reimbursement Program

Thanks to the support of the Arizona Section of ASME (AZ ASME) and the ASU Mechanical and Aerospace Engineering Department (ASU MAE), the ASU Student Section of ASME (ASU ASME) will be able to continue the Fundamentals of Engineering Exam Reimbursement Program this year. For over 3 years, ASU ASME has helped many students on their paths to success. By finding the resources from the AZ ASME and ASU MAE, ASU ASME has reduced the cost for students to take the Fundamentals of Engineering Exam to only \$53.00 (normally \$155.00). The program allows students a chance to increase their value for employers by obtaining their certification for being an Engineering In-Training.

Requiring the students to share one third of the cost ensures that the individual students will make an extra effort to do well on the exam. By absorbing some of the costs of the exam, both AZ ASME and the ASU MAE Department show their commitment to help students transition from student engineer to professional engineer.

Thanks again,

David A. Breeze
ASU ASME Chair
asme@asu.edu





Your Section Executive Committee and Operating Board for '04 -'05

2004-2005 Executive Committee

Chair - Terri Taylor
602-822-3977(B), 623-566-0121(H)
taylorth@asme.org

Vice-Chair - Joe Howard
602-231-5618 (B), 480-783-9185 (H)
joe.howard@honeywell.com

Treasurer - Markland (Mark) Jones
480-759-2958(H)
jonesm1@asme.org

Secretary -David Highfield
480-893-8860(B), 480-704-2339(H)
highfieldd@asme.org

Past Chair - Eric Smith
602-938-1098(B, H), 602-390-3665 (M)
smithe7@ASME.org

Director 02-05 - Travis (Spike) Meador
480-831-1416(B, H)
meadort@asme.org

Director 03-06 - Boris Bolf
623-393-5678(B), 623-478-1508(H)
bbolf@apsc.com

Director 04-07 - Dick Johnson
602-957-8376(H)
stonewall5@cox.net

If we can help you, please feel free to contact us. We look forward to serving the AZ Section members.

2004-2005 Operating Board

MARKETING & PUBLIC RELATIONS
(Chair: David Highfield, Dir: Terri Taylor)

Newsletter Editor - David Highfield
480-893-8860(B), 480-704-2339(H)
highfieldd@asme.org

Webmaster - Dag Reppen
480-785-2972 (H)
dreppen@cox.net

Government Relations - Dick Johnson
602-957-8376(H)
stonewall5@cox.net

INDUSTRY RELATIONS TEAM
(Chair: Eric Smith, Dir: Dick Johnson)

Industry Relations - Eric Smith
602-938-1098(B, H), 602-390-3665 (M)
smithe7@ASME.org

Technical Activities - Doug Culy
480-390-1900 (B), 480-838-2233 (H)
culyd@asme.org

EDUCATION TEAM
(Chair: Ron A. Newcomb, Dir: Boris Bolf)

K-12 Education - Milt Buffington
480-802-4057(B,H)
Buff186@aol.com

Prof. Development - Boris Bolf
623-393-5678(B), 623-478-1508(H)
bbolf@apsc.com

University Industry Advisory -
Ron A. Newcomb
480-592-2651(B), 480-330-6607(H)
Ron.newcomb@honeywell.com

HISTORY & HERITAGE TEAM
(Chair: Webb Etheridge, Dir: Eric Smith)

History & Heritage - Webb Etheridge
928-3693532 (B), 480-596-8259 (H)
wetheridge@cybertrails.com

Honors & Awards -Den Kudrna
480-891-6733(B), 480-380-7267(H)
dennis.l.kudrna@boeing.com

2004-2005 Additional Contacts

SOUTHERN ARIZONA SECTION

Contact - Karl Hemmila
502- 733-5864(H)
Hemmila@cox.net

GAS TURBINE TECH. CHAPTER

Chair-Will Steenken
602-231-2216 (B)
will.steenken@honeywell.com

Vice-Chair-Greg Holbrook
602-231-1914 (B), 480-922-3617 (H)
greg.holbrook@honeywell.com

Webmaster - Khosr Molla Hosseini
602-231-5684 (B)
khosr.molla.hosseini@honeywell.com

Newsletters are Available on the Arizona Section ASME Web Page



www.asme.org/sections/AZ

REGION XII

VP - Bob Luna
505-821-9110(H)
Lunar@asme.org

ASME STUDENT SECTIONS

Arizona State University
Advisor - Pedro D. Peralta, Ph.D.
480-965-2849(B), 480-965-1384(F)pperalta@asu.edu

Student Section Chair - David A. Breeze
480-592-2547(B), 480-577-8890(M)
asme@asu.edu

Northern Arizona University
Advisor - Earl Peter N. Duque, Ph.D.
928-523-5842(B), 928-523-2300(F)
earl.duque@nau.edu

Student Section Chair - Carl Helquist
cah47@dana.ucc.nau.edu

University of Arizona
Advisor - Wayne Chen, Ph.D.
520-621-6114(B), 520-621-8191(F)
wchen@ame.arizona.edu

Student Section Chair - Tiffany Miller
tiffanym@email.arizona.edu

The American Society of Mechanical Engineers
Arizona Section
10801 N. 37th Drive
Phoenix, AZ 85029-4011



ASME International

The following has been quoted from the Constitution of the American Society of Mechanical Engineers. Revised to October, 1991.

C5.1.2 The provisions of the Constitution, By-Laws and Policies and Procedures established by the Board of Governors of the Society shall govern the procedure of all components of the Society but no action or obligation of such components shall be considered an action or obligation of the society as a whole. This provision shall be imprinted on any publication issued by such components.

Page	Article
October Meeting	1
Chair's Message	2
ASME Anniversary	2
Brain Teaser	2
September Meeting	3
FE Exam	3
Engineers Without Boarders	3
Executive Committee and Board	4
Arizona ASME Web Address	4
Calendar of Events	4

October, 2004

2004-2005 Calendar of Events

Sep 7	Board Meeting -APS Building
Sep 9	Canard Rotor Wing – APS Building
Oct 1-2	MTS - Salt Lake City, UT
Oct 12	Board Meeting -APS Building
Oct 14	Gas Turbine - APS Building
Nov 9	Board Meeting -APS Building
Nov 11	Mars - APS Building
Dec 7	Board Meeting -APS Building
Dec 9	Holiday Party - TBD
Jan 11	Board Meeting - APS Building
Jan 13	Extreme Sports –TBD
Feb 8	Board Meeting -APS Building
Feb 10	Honors & Awards Banquet –TBD
Feb 12	Career Panel –ASU
Feb 20-26	Engineer's Week
Mar 8	Board Meeting -APS Building
Mar 10	TBD - TBD
Mar 16	Industry Breakfast - TBD
Apr 12	Board Meeting -APS Building
Apr 14	TBD – TBD
May 10	Board Meeting -APS Building
May 12	Steak Fry -Pera Club

