



**QUICK
CALENDAR**

- Practical Shock Analysis & Design Course (September 8-12, 2008/Newport, RI)
- 79th Symposium Shock and Vibration Symposium (October 26-30, 2008 / Orlando, FL)

SAVIAC Announces Guest Program Itineraries for 79th Symposium in Orlando, FL

Each year SAVIAC plans three days of tours and events in conjunction with the annual symposium that are specifically designed to entertain guests of symposium attendees. These tours focus on the culture of the region in which the symposium is being held. As such, the events this year will explore the exciting scenes of Orlando.

Guest Tour #1 - Tuesday, October 28, 2008 Kennedy Space Center



A SAVIAC guests' stay in Orlando is not complete without a trip to Kennedy Space Center. Located just 50 minutes from the Rosen Plaza Hotel is NASA's launch headquarters – the only place on

Earth where you can tour launch areas, meet an Astronaut, see rockets, and experience the new state of the art Shuttle Launch imulator Experience. At Kennedy Space Center Visitor Complex, guest's get the unique chance to tour NASA's launch and landing facilities.

Begin the day with a narrated drive to Kennedy Space Center where guests experience an up close look at the ingenuity that has gone into creating the most famous space program in the world. The tour begins with a short security clearance followed by a 2-hour guided tour of the Kennedy Space Center facility, including launch pads, assembly building and the Apollo/Saturn V Visitor's Center.

Following the tour, guests enjoy a lunch accompanied by a NASA Astronaut Corps member who mingles with the guests and answers any questions they may have. After lunch, guests are exposed to the fabulous 3-D IMAX attraction, after which the tour will conclude with time to explore the Visitor's Complex, Rocket Garden and Space Shuttle replicas.

Suggested Itinerary

- 8:30 AM Depart The Rosen Plaza Hotel
- 9:30 AM Arrive at KSC, security processing
- 9:45 AM Board NASA buses for the KSC tour
- 11:45 AM Guided tour ends
- 12:15 PM Buffet lunch with NASA Astronaut
- 1:30 PM IMAX movie (Space exploration and travel)
- 2:15 PM Time to explore facility, Rocket Garden, etc.
- 3:30 PM Depart Kennedy Space Center
- 4:30 PM Return to The Rosen Plaza Hotel

Guest Tour #2 - Wednesday, October 29, 2008 Wonders of Winter Park

Designed in 1882 as a winter resort for wealthy northerners, Winter Park is now referred to by locals as "Little Europe". The day begins with a private tour in the beautiful Morse Museum, where guests view the world's most comprehensive collection of the works of Louis Comfort Tiffany. Including Tiffany jewelry, pottery, paintings, art glass, leaded-glass windows, lamps, and the chapel interior he designed for the 1893 World's Columbian Exposition in Chicago.



Guests will then enjoy the perfect one-hour respite - the Scenic Boat Tour. Along this 12-mile passage of lakes and canals, guests see nature at its finest- Blue Herons, Ibises, towering cypress trees, and on occasion, an alligator. The boat captain points out private homes and mansions once inhabited by the likes of "Mr. Rogers" and the founder of Sinclair Oil.

Come ashore and take a stroll down Park Avenue. This tree-lined brick street is filled with one-of-a-kind posh boutiques and "hip" chains like Williams-Sonoma, Ann Taylor and Pottery Barn. There are also sidewalk cafés and fine dining restaurants throughout. Looking for something more leisurely? Take a seat in Central Park and watch the well-dressed shoppers saunter from place to place.

Suggested Itinerary:

- 9:00 AM Depart The Rosen Plaza Hotel
- 9:30 AM Arrive at Morse Museum
- 9:30 AM Private Museum Tour Begins
- 10:15 AM Private Museum Tour Ends
- 10:30 AM Depart Morse Museum
- 10:45 AM Arrive at Winter Park Chain of Lakes
- 11:00 AM Scenic Boat Tour begins
- 12:00 PM Scenic Boat Tour ends
- 12:30 PM Lunch
- 2:00 PM Shopping on Park Avenue, Winter Park
- 3:00 PM Depart Winter Park
- 3:30 PM Return The Rosen Plaza Hotel

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79th Shock and Vibration Symposium Organizations of Note



Symposium Featured Government Agency



Symposium Classified Session Host



Symposium Guest Program Sponsor

SAVIAC Announces Guest Program Itineraries for 79th Symposium in Orlando, FL (cont.)

**Guest Tour #3 - Thursday, October 30, 2008
Art Among Southern Gardens**

Enjoy a private guided tour amongst a true southern garden with America's largest Camellia collection outside of California and the largest formal rose garden in Florida. The Gardens feature three miles of paved scenic walkways that take guests through fifty acres of southern styled gardens as well as the Leuhome museum, which dates from the 1880's and is on the Register of Historic Places. Guests enjoy access to the gardens, including a Vegetable and Herb garden and Butterfly garden.

Suggested Itinerary*:

8:30 AM	Depart The Rosen Plaza Hotel	
9:00 AM	Arrive at Gardens	
9:30 AM	Garden and Museum tour begins	*Set-up as 1/2 day in order to match
11:30 AM	Gardens and Museum tour ends	symposium agenda.
12:00 AM	Depart Gardens	
12:30 PM	Return to The Rosen Plaza Hotel	

Prices and Registration

Thanks to the generosity and continued sponsorship of **General Dynamics Electric Boat**, we are able to offer these opportunities to our guests at a fraction of the actual cost.

Day 1 - Kennedy Space Center, including lunch	\$60
Day 2 - Wonders of Winter Park, including lunch	\$45
Day 3 - Art Among Southern Gardens, 1/2 Day	\$30

Any guest wishing to participate in all three days of activities will receive a discounted package price of \$125.

The registration form for the Guest Program can be found on page three of this newsletter. Registration forms can also be found on the SAVIAC website.

Calendar Ads On Sale Now!

The SAVIAC Annual Calendar is an excellent way to make sure that your organization receives **year-round** exposure to members of the Shock & Vibration Community. Our calendar is distributed to hundreds of government and commercial agencies in the world of Shock & Vibration technology.

The price of an advertisement in next year's calendar will be **\$850**. For that price, your company will receive one full page 10" x 8" ad for the month of your choice, as well as the company logo displayed **on each page throughout the entire year of 2009**. Please also feel free to include the dates of conferences and/or short courses that your organization is involved in, or would like to see included in the calendar.

The 2009 calendar will be first distributed at the 79th Shock & Vibration Symposium, held this year from October 26th - 30th at The Rosen Plaza in Orlando, FL, then will be available to both organizations and individuals by request afterwards. If your company would like to reserve a certain number of calendars for self-distribution please make a note on your order form.



Remember, there are only 12 months in the year so these spaces fill up quickly! **There are only FIVE spaces available for purchase!** Note: Companies participating as *Corporate Supporters* for the 79th Shock and Vibration Symposium will receive preference for month selection. To reserve a space in the SAVIAC 2009 Calendar, please send an email to: ashley.shumaker@saviac.org.

79th Shock and Vibration Symposium
October 26—30, 2008
Rosen Plaza ■ Orlando, FL.

GUEST PROGRAM REGISTRATION FORM



Tuesday, October 28, 2008
Kennedy Space Center

Guest Program Day #1
\$60— lunch provided



Wednesday, October 29, 2008
Wonders at Winter Park

Guest Program Day #2
\$45— lunch provided



Thursday, October 30, 2008
Art Among Southern Gardens

Guest Program Day #3
\$30— 1/2 day; no lunch

Guest Program Attendee Name: _____

Guest of (Symposium Attendee Name): _____

Event Selection

- \$60 Tuesday Kennedy Space Center
 - \$45 Wednesday Wonders at Winter Park
 - \$30 Thursday Art Among Southern Gardens
- or
- \$125 Three Day Package Price

Payment Method

- Cash Check
- Credit Card VISA AMEX MC

Card Number _____

Card Expiration _____ Billing Zip Code _____

Cardholder Name & Email _____



79th Shock & Vibration Symposium
Orlando, FL.
October 26 - 30, 2008

SINGLE REGISTRATION FORM

I. Registration Type (Choose one)

- \$745 Standard Registration Fee (\$845 after October 3, 2008)
- \$545 Exhibiting Registration Fee (\$645 after October 3, 2008)
- \$0 Complimentary Registration (Tutorial Instructors, Corporate Supporters, Option B Exhibitors ONLY)

Subtotal (I): _____

II. Sessions Attending (Choose all that apply)

- Unclassified (Unlimited) Unclassified (Limited) Classified

III. Attendee Information

Name: _____ Organization: _____

Address: _____

City: _____ State: _____ Zip: _____ Country: _____

Email: _____ Phone: _____ Fax: _____

IV. Tutorials (\$250 each for Registered Attendees; \$350 each if not attending symposium)

Sunday, October 26, 2008

8:00am - 11:00am

- The Measurement of Dynamic Pressure in Air Blast, Ordnance, Underwater Explosions, and Other Challenging Environments Prof. Patrick Walter
- Vibration and Shock Test Fixture Design Mr. Wayne Tustin
- Shock Policy Mr. Kurt Hartsough & Mr. Dominic Urzillo
- Analysis of Composite Materials with NEiNastran Mr. Barton McPheeters

12:00pm - 3:00pm

- Practical Nonlinear Impact Analysis Mr. Tony Abbey
- Introduction to Hazard-Based Reliability Analysis Dr. George Lloyd
- Energy Methods for the Characterization and Simulation of Shock and Vibration Mr. Tim Edwards & Mr. David Smallwood
- MIL-S-901D Shock Qualification Testing Mr. Kurt Hartsough & Mr. Dominic Urzillo

4:00pm - 7:00pm

- Basis of Elementary Shock Isolation System Design Dr. Christopher Merrill
- Multi-Actuator Testing and Control Mr. Russ Ayres
- Review of Structural Dynamics Dr. Joshua Gordis
- Applied Mathematical Methods of MIL-S-901D Mr. Dominic Urzillo

Monday, October 27, 2008

8:00am - 11:00am

- Beyond the Shock Response Spectrum Mr. David Smallwood
- Naval Shock Analysis & Design Prof. Rudy Scavuzzo
- Composite Mechanics Dr. Tom Moyer
- DDAM Using NEiNastran Mr. Barton McPheeters

12:00pm - 3:00pm

- Overview of Underwater Shock and DDAM Prof. Young Shin
- A Primer on Explosion Effects in Air, Water, & Soil Dr. Bob Welch
- MIL-S-901D Shock Qualification Testing Extensions Mr. Kurt Hartsough & Mr. Dominic Urzillo
- Practical DDAM Analysis Mr. Tony Abbey

4:00pm - 7:00pm

- UNDEX Analysis of Floating Structures Mr. Fred Costanzo & Dr. Raymond Daddazio
- The Measurement and Utilization of Valid Shock and Vibration Data Prof. Patrick Walter
- The MIL-S-901D Subsidiary Component Shock Testing and Alternate Test Vehicles Mr. Kurt Hartsough & Mr. Dominic Urzillo
- Nonlinear FEM Analysis with NEiNastran Mr. David Weinberg

Subtotal (IV): _____

V. Social Event - Wednesday, October 29, 2008

- Yes, I will attend.
- Yes I will attend with _____ guests. (\$10 per guest)
- No, I will not attend.

Subtotal (V): _____

VI. Payment Information

- CHECK (Payable to HI-TEST/SAVIAC) Check Number: _____ Check Type: Personal Organization
- VISA MC AM EX Card Number: _____ Expiration Date: _____
- Card Holder's Signature: _____ Billing Zip Code: _____
- Card Holder's Email Address: _____

Total Due (I + IV + V)

\$

PLEASE FAX COMPLETED FORM TO ASHLEY SHUMAKER AT (434) 581-3037 OR BY EMAIL TO ASHLEY.SHUMAKER@SAVIAC.ORG

PRACTICAL SHOCK ANALYSIS AND DESIGN COURSE2008 Schedule and Locations

September 8 - 12, 2008 (Newport, RI)

About the Course

At the first Shock and Vibration Symposium in 1947, mechanical shock was defined as "a sudden and violent change in the state of motion of the component parts or particles of a body or medium resulting from the sudden application of a relatively large external force, such as a blow or impact." Since then the specific words used have changed somewhat but the meaning remains the same. Most analysts treat shock as a transient vibration. No matter how it is described or what source produced it, the effects of mechanical shock on structures and equipment create major design problems for a wide variety of systems.

This course will provide a comprehensive treatment of practical shock design and analysis with special emphasis on applications related to the design of ship structures and equipment for shock loads produced by underwater explosions.

Participants in this course will have an opportunity to increase their knowledge and understanding of the analytical and experimental tools that are available for shock design and qualification particularly with respect to requirements that are imposed for shipboard equipment. The lectures will provide a basic review of vibration and shock theory and will present the analytical and experimental methodology in the context of particular design applications. Analytical lectures will emphasize the physical significance of the results. Examples and case histories will be used as illustrations of design approaches; workshop problems that involve class participation will be used to advantage throughout the course. Class members will be encouraged to propose real design problems. The instructors will provide guidance for solutions or the problems may be used as class exercises.

Although this course is aimed primarily at shock design applications on ships, the analysis and design techniques presented are equally applicable to problems related to design for seismic loads or blast induced ground shock. Thus, engineers in these related areas may find the course to be useful. For all who participate, the course will provide a comprehensive coverage of shock design practice and a solid basis for further exploration of shock technology.

Instructors

Dr. Rudolph J. Scavuzzo, Mr. Henry Pusey, Mr. G. D.Hill, Mr. Jeffery Morris

Course Topics

Review of Basic Vibration Theory	Introduction to Mechanical Shock	Shock Measurement
Underwater Shock Phenomena	Multi-Degree-of-Freedom Systems	Navy Shock Qualification Process
Shock Qualifications by Test	Shock Qualification by DDAM	Shock Qualification by Extension
2-Dimensional Normal Mode Theory	Practical Design Considerations	Special Design and Analysis Tools
3-Dimensional Normal Mode Theory	Optimum Foundation Design	Use of Finite Element Analysis-DDAM
General Problem Solving Workshop		Review and Wrap-up Sessions

Course Registration

The Registration Fee is \$1500 per student. The registration is transferable to any person in the same organization. The fee includes a comprehensive set of course notes, a text book entitled Naval Shock Analysis and Design by Rudolph J. Scavuzzo and Henry C. Pusey, a Certificate of completion worth 3 CEUs, as well as a Continental Breakfast, Lunch and coffee breaks daily. A Registration Form may be printed out from the SAVIAC Web Site or may be requested from Sallie or Henry Pusey. As SAVIAC Technical Services Manager, Henry Pusey will arrange for the scheduling, management and presentation of all courses. All completed registration forms should be faxed or mailed to Sallie Pusey at the address given below.

For registration information contact:

Sallie Pusey, Course Registrar
1877 Rosser Lane
Winchester, VA 22601

Tel: (540) 678-8677
Fax: (540) 678-8799
email: saviac@comcast.net

NOTE: Registrants will be provided details about the course location and hotel(s) as soon as the course is firmly scheduled.

Conferences / Courses



79th Shock and Vibration Symposium

**October 26-30, 2008
Orlando, FL
Rosen Plaza Hotel**

www.saviac.org

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#### Explosion Effects and Structural Design for Blast

- San Antonio, TX
- December 9 and 10, 2008

Engineers, architects, first responders, builders and others will benefit from learning about explosion effects, protective design methods, and retrofit techniques. Most new government buildings now require some level of blast resistant design and many facilities require retrofitting to meet anti terrorism bomb protection criteria; this training will address those requirements.

Each participant will receive a certificate indicating 15 Professional Development Hours (PDH) that can be used to meet continuing education requirements for professional engineers. The course will focus on the fundamentals of explosion effects, determining blast loads on structures, computing structural response to blast loads, and the design and retrofit of structures to resist blast effects. The emphasis will be on terrorist threats from vehicle bombs, but the fundamental concepts can be applied to other explosive scenarios. Currently available software and publications for blast effects and design guidance will be demonstrated and discussed.

Much of the design guidance and software are restricted distribution to government agencies and their contractors, however specific information on how qualified users may obtain the software will be provided. Several computer programs for blast effects and blast design have recently been developed by the government for general release and those programs will be discussed along with instructions on how to obtain the software. All of the software and references discussed in this course are available free of charge to qualified users.

Participant will gain an understanding of how to compute explosion effects like overpressure and impulse; how to calculate the resulting

blast loading on a structure; how to compute structural response to blast loading; and practical methods for designing and retrofitting structures to resist blast effects. Participants will be provided a complete set of class notes.

Participants may check in beginning at 7:30 am on Dec 9 and the course will run 8am to 5pm each day. Lunch and coffee at breaks will be provided for participants each day.

For more information about the instructors, the course, and accommodations visit <http://www.blastdesigntraining.com/> where secure on-line registration is available. Questions should be directed to Dr. Sam Kiger at 573-882-3285, or Dr. Stan Woodson at 601-636-4429.

For room reservations call Drury Inn reservations at 1-800-325-0720 and mention Explosion Effects Training for the course room rate. A block of rooms will be held until Nov 9. The hotel web site is; <http://www.druryhotels.com/properties/sanantonioairport.cfm>

## Press Releases

#### Endevco and Brüel & Kjær announce termination of reseller relationship

Endevco Corporation, a Meggitt group company and the leader in sensing solutions for demanding vibration, shock and pressure applications, has announced the termination of its non-exclusive reseller relationship with Denmark-based Brüel & Kjær, effective December 31, 2008.

“Our current global strategic objectives include an aggressive expansion of our sales channels around the world to provide our customers with the highest levels of service in all regions,” said David Kertes, Endevco Director of Sales and Marketing. “The relationship with Brüel & Kjær has been very productive over the years. However, our sales channel strategy must respond to the globalization and natural evolution of business goals and market opportunities.”

This development will provide Endevco customers with an important new degree of flexibility in now being able to work directly with any of its local direct sales personnel, resellers and representatives in Europe and Asia. Brüel & Kjær will continue to be an Endevco customer for their own internal uses.

“Endevco and Brüel & Kjær have had a successful cooperation for almost 10 years, and we expect to continue using Endevco products in our solutions,” said Peter Henning, Marketing Manager, Brüel & Kjær Sound & Vibration Measurement A/S.

For further information, contact:

|                   |                |
|-------------------|----------------|
| ENDEVCO           | KCOMM          |
| Gary Oria         | Dave Holscher  |
| Marketing Manager | Vice President |
| 949-276-0486      | 949-295-5515   |

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ANSI/ASA S2.9-2008 NOW AVAILABLE!

AMERICAN NATIONAL STANDARD Parameters for Specifying Damping Properties of Materials and System Damp- ing

This standard presents the required nomenclature to improve communications among the many technological fields concerned with material damping that are used for resilient mountings so there will be a clear understanding by both the user and the manufacturer. Since the intention of this standard is to encourage better communication between the manufacturer and the user, the material set forth should be regarded as a nomenclature for specifying damping properties of the resilient materials. It is intended to outline in standardized form, what information should be presented to enable the experienced designer to apply them for selecting the resilient material for machine mountings correctly. The standard also defines terminology in a further effort to ease the problem of communication between user and manufacturer.

This standard is a revision of ANSI S2.9-1976.

To purchase an electronic copy of this ANSI Standard or other National or International Standards on Acoustics, Mechanical Vibration and Shock, Bioacoustics, or Noise please visit the Acoustical Society of America's Home Page at <http://asa.aip.org> and click the "ASA Store" button.

You can purchase hard copies of Standards by contacting our office at:

Acoustical Society of America
Standards Secretariat
35 Pinelawn Road, Suite 114E
Melville, NY 11747-3177
Phone (631) 390-0215
Fax (631) 390-0217

ANSI/ASA S2.9-2008
Price: \$110.00 per copy

Got News or Conference Announcements?

Please submit your information to
ashley.shumaker@saviac.org
with a subject heading of
"Current Awareness News"

SAVIAC / HI-Test Laboratories, Inc.
PO Box 165
1104 Arvon Road
Arvon, VA 23004

**A LOOK INSIDE THE AUGUST 2008
CURRENT AWARENESS**



**79th Symposium - Guest Program Itinerary
Announcement**

2009 Calendar Ads for Sale

**79th Symposium—Registration Form & Clearance
Form**

Course Announcements

- SAVIAC's Practical Shock Analysis & Design

Other Conference, Course, and Job Announcements

The Current Awareness newsletter is published by the Shock and Vibration Information Analysis Center, which is operated by HI-Test Laboratories, Inc., under contract to the U.S. Army Engineer Research and Development Center.

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