SAVIAC
Shock and Vibration Information Analysis Center
Current Awareness
May 2006

On Conferences and Technical Information - A Journey Over Five Decades

By Henry Pusey

Foreword: Henry Pusey was a key member of the staff of the Shock and Vibration Information Center (SVIC) from 1958 to 1973 and Director of SVIC from 1973 to 1983. When SVIC was disestablished in 1986, Henry and his wife Sallie, with the support of an unofficial TAG, organized and conducted the 58th through the 61st symposia. Simultaneously, Henry conducted a study which produced undeniable evidence that SAVIAC should be established to replace SVIC. This article was written in part to chronicle these events and in part to emphasize the importance of the exchange of technical information and to show that conferences and symposia are effective mechanisms for accomplishing this goal. (This article appears curtesy of Sound and Vibration (February 2006), editor Jack Mowry).

How I Got Hooked

In 1952, with a B.S. in Physics, I was employed at a U.S. Army shock and vibration laboratory in Virginia. My boss was chief of the packaging development branch at the engineering research and development laboratories. He decided that I knew more about shock and vibration than anyone else in the branch. Unbelievable? Yes! He appointed me as one of the four Army members of the Interservice Technical Group (ITG) that provided technical advice to the Centralizing Activity for Shock and Vibration (CAS&V) headed by Dr. Elias Klein. Gad! What a boost to the ego! After only three months out of college, I was assigned this important job. The truth is that it didn't take very long to find out how little I really knew about the subject. I did not share this secret with my boss. I attended the 19th Shock & Vibration Symposium in September 1952 at Wright-Patterson Air Force Base. The theme was "Aerial Delivery and Impact Upon Landing." While pursuing some very interesting research, development, test, and evaluation work over the next five years at Fort Belvoir, I diligently fulfilled my ITG responsibilities. Dr. Klein and the other members of the group were mostly seasoned experts in shock and vibration. Although I 'helped' organize the programs for the symposia and even presented a couple of papers based on my work, my participation was mostly a wonderful learning experience. Once each year at his request, I traveled with Dr. Klein for up to two weeks. We visited Army, Navy and Air Force labs and test centers, DOD contractors, and universities to exchange technical information on shock and vibration with those working in the field. The idea was to discover recent advances in the technology and emerging critical problems that were yet to be solved. This information was used to plan effective symposia and to respond to queries from the technical community. By 1957 I was privileged to know most of the pioneers in shock and vibration technology and had acquired an extensive 'breadth' of knowledge in the field. I also had decided that Dr. Klein had a really neat job. In 1957 I had been promoted to a level above which I could expect no further advancement, so I accepted a job in industry with a significant pay increase. Seven months later in 1958, Dr. Klein called and asked if I would apply for a position at the CAS&V. He was retiring and his replacement was a nuclear physicist who would take the job only if he could hire someone who knew something about shock and vibration. That was me? I applied and was offered the job again at an increase in pay. It was hard to believe that I would soon have the job that I had coveted. I accepted with delight and went on board in time to attend the 26th Symposium in May 1958. I never looked back.

Shock and Vibration Symposia

These were government-sponsored conferences organized by the CAS&V located at the Naval Research Laboratory (NRL). My new boss was Dr. W. W. Mutch, and I was assigned administrative and technical responsibility for planning, organizing, and conducting the symposia. The Centralizing Activity's mission was to "collect, correlate and disseminate technical information relating to shock and vibration." This was accomplished through about 60 technical visits each year by the technical staff and ITG members, the presentation and publication of symposia papers, and responses to technical queries from our users. The job was both enjoyable and rewarding. Technical personnel at organizations we visited often said that they gained more than they gave during the visits. The symposia were and still are a valuable information resource. The average attendance during my tenure was over 500. After NASA (the National Aeronautics and Space Administration) was formed, we had an additional sponsor providing four members to what became the Interagency Technical Group. The Defense Atomic Support Agency (DASA, which is now the Defense Threat Reduction Agency, or DTRA) became a sponsor with one representative; at that point, the ITG had 17 members. Each symposium had a host. This responsibility was assumed in turn by the Army, Navy, Air Force, NASA and DASA. The host provided local support and a secure facility to hold classified sessions. This arrangement worked quite well, the symposia received rave reviews, and I honed my skills at negotiating hotel contracts and in conference organization and management. The symposia were DOD conferences managed by the Navy in house at NRL. Doing this job from within the government has some advantages over a contract operation. The doors at both government and contractor facilities were open to us allowing full cooperation and a free exchange of information. This made the organization of a high quality, effective, technical program somewhat easier. The mechanics of running a meeting and working with a hotel are essentially the same for any conference manager. But for the symposia, it was a definite plus to have a local agency host to provide local support. This included people to help with registration and covering the cost of the classified meeting facility, including the cost of bus transportation when required. This eased the burden on our budget. However, we were fully funded to perform our mission, at least until 1964 when we became an IAC. Happily, the symposia participants paid no registration fees during those golden years. As government employees, on the other hand, we had to abide by all the rules. We could do nothing that could be perceived as conflict of interest. We traveled under the limits of allowable per diem, which was $9 per day, including meals, when I began my career. We were not allowed to have exhibitors at the symposia. The vendors solved this problem using hospitality suites. Although we could not officially recognize these, we were glad they were there. They were an asset to the symposia. In general the good things were better than the bad. The work was rewarding. At times I was able to provide solutions to problems that researchers needed quickly. My satisfaction must have been similar to that of a minister who had just saved a soul.

The IAC Adventure

In 1964, DOD issued an instruction on establishing and operating an Information Analysis Center (IAC). Since our activity was already performing IAC functions, we became one. The name was changed to the Shock and Vibration Information Center (SVIC). SVIC was the only in-house DOD IAC managed by the Navy. The Army had a few located at the Waterways Experiment Station. The rest were managed by contractors to the Defense Technical Information Center (DTIC). The latter knew how much funding they had each year. SVIC funds depended on the source in the chain of command between us and DOD. At first this was the Office of Naval Research and things were fine. When the Naval Material Command (NAVMAT) was created, our source was moved to a technology transfer office in that agency, and the SVIC situation became much more tenuous. Our funds were decreased and it soon became (cont. next page)

clear that the ultimate mission of our Point of Contact (POC) at NAVMAT was to eliminate SVIC. He thought he had his chance when DOD issued a directive that half of the budget of an IAC should come from the users. SVIC was told that NAVMAT would match user funds in the next fiscal year. Our POC thought that we couldn't survive this. Boy, was he wrong! I got on the phone to our principal users and received funding commitments from other agencies and contractors totaling more than twice our most recent budget. Of course our POC to match this money. SVIC had a record-breaking budget for that year and we were able to do some very good things. Later other actions were taken to eliminate us - but none succeeded. SVIC prevailed and NAVMAT was eliminated as a failed Navy experiment long before SVIC was disestablished.

Transition

I retired from civil service in 1983 believing that SVIC and the symposia would go on forever. I hung out my shingle as an independent consultant and did some very interesting things that are not part of this story. Three years later, in 1986, I found that my conference management days were not over. SVIC was disestablished much to the consternation of many members of its advisory group. They thought it was a big mistake that had to be corrected. DOD does not reverse its decision on such matters without strong justification; so two actions were taken almost simultaneously. My wife Sallie and I were paid to organize and conduct the 58th Shock and Vibration Symposium in Huntsville, Alabama. I was paid to conduct a study to determine whether there was indeed a real need for SVIC and the symposia. The 58th Symposium was held with about 400 attending. I conducted the study culminating in a workshop in Dayton, Ohio. The conclusion was that there was an overwhelming need for a Shock and Vibration Information Analysis Center (SAVIAC), and action was initiated to get a contract in place to manage SAVIAC. Before the SAVIAC contract was finally awarded, Sallie and I, using various contract mechanisms, organized and conducted the 59th, 60th and 61st Symposia so that the chain of annual conferences would be unbroken. The 62nd Symposium was held on schedule by the SAVIAC contractor.

The MFPT Story

In 1967, the Mechanical Failures Prevention Group (MFPG) was organized under the sponsorship of ONR (Office of Naval research). This was the first time that the focus was on failure prevention as the central issue and as a multidisciplinary technology in its own right. Twelve meetings were held over the first two years. Meeting attendance grew, and it became clear that failure prevention technology was critical to our national interest and should receive continuing attention. The National Bureau of Standards (NBS) assumed the lead role and sponsored successful meetings for nearly 30 years. The governing body was the MFPG council, with members from government, industry, and academia. After the 43rd meeting in the late 1980s NBS (now the National Institute of Standards and Technology, NIST) decided to terminate its sponsorship. MFPG council chairman Henry Hegner approached the Vibration Institute and asked if we could find a way to continue the meetings. It was agreed that Sallie and I would organize and conduct the meetings for the institute on a cost-recovery basis. Beginning in April 1990, MFPG meetings 44 through 48 were successfully held with no money lost, but not much gained. At this point, all parties involved agreed that if this series of conferences were to continue and grow, it would have to be on a more permanent and structured arrangement. At a special meeting of the council, the MFPG became the Society for Machinery Failure Prevention Technology (MFPT). New bylaws were approved, and the Vibration Institute was formally asked to accept the MFPT Society as a national division of the institute. In March 1995, the board of directors of the institute approved the request, and the rest is history. The former council was restructured as the MFPT Society's board of directors. Over the last 10 years, the MFPT conferences have been rated highly by those who attended. The papers presented and published are of high technical quality. Some of the papers contain cutting-edge technology, while others offer technical information that an engineer can take home and immediately apply to his problems. Advancements in critical technologies such as prognostics can be tracked through our proceedings. The participants have been kind enough to compliment us on our efficiency in conducting the meetings. Therefore, I can proudly claim that our MFPT conferences are of high quality and very well received. This being true, it is reasonable to expect that meeting attendance would increase. Why has this not happened? There are no simple answers. There are many excellent conferences competing for registrants. Travel and training funds are often limited. Even enlightened managers usually limit their engineers to one or two meetings per year. We need to find a way to convince engineers and scientists to place the MFPT conferences high on their priority lists. To do this, we have to convince their managers in the public and private sector that the acquisition and application of failure prevention technology will enhance their bottom line, whatever it is. To the extent that we can accomplish this goal, we may attract more corporate sponsors of the society. The MFPT Society needs all the help it can get.

Thoughts About Conferences

There are people and organizations that do nothing but organize and manage meetings. They handle all the details - the mechanics of running a conference. They have nothing to do with the content or purpose of the meeting, nor do they care. I would not like that kind of job. For technical conferences organized by professional societies or their equivalent, I think it is in the best interest of the community they serve that the responsible society handle all aspects of managing their meeting. This is the way I have done it throughout my career. The personal interactions with the people in the community served can be rewarding, especially from a technical viewpoint. I have personally met and discussed technology issues with more people than I can estimate. I learned something from all of them and I expect that some learned from me. This is by far the most interesting and satisfying part of the job. I, and the conferences that we organize, are like a pipeline through which information flows in both directions. Except for a few technical areas that I know well, I have no in-depth expertise in the technologies that I deal with. I don't know all the answers but I usually know where the answers are. Hopefully that makes our forums and me effective mechanisms for information exchange. In my opinion, the society staff should also handle all administrative details for the meeting. This includes hotel meeting arrangements, all the details from the call for papers through publishing the proceedings, and advance and on-site registration. I will not bore you with details, since they are mostly straightforward. I will offer some insight on a conference manager's biggest problem - deadlines. Engineers and scientists are generally wonderful people, but at least 90% are procrastinators. I know that these folks are very busy, but some of the delays are difficult to understand. For the MFPT meetings, usually less than half of the abstracts of proposed papers have arrived prior to the deadline. After that, program committee members and I have to go after those who have promised abstracts but not delivered and twist arms to get others to fill empty slots. Finally, we have most of the preliminary program to post on the web. The authors then have two months to prepare and deliver their manuscripts for publication. There is no way this will happen. By the time of our firm deadline, only a small percentage of the manuscripts have arrived. I think that some authors see the delivery date as the time to start writing their paper. Then there are those who have paper release problems. Hello! The solution to all of these problems is to write your paper a little earlier. It makes us very sad to have to leave papers out of the proceedings because they arrived too late. Speaking for Sallie and me, we are leaving the MFPT management with some sadness, but at our age, we know it is the right decision. We have made many friends and we will miss seeing you from the driver's seat. We say farewell but not goodbye, since you will likely be seeing us for a while longer at our favorite meetings. May God bless you all.

(L to R): Henry Pusey, Mayor Meyera Oberndorf, Sallie Pusey, Ron Eshleman

Henry Pusey continues to serve as an invaluable member of the SAVIAC community. In addition to serving as the lead technical advisor for SAVIAC, Mr. Pusey and his wife, Sallie, assist in planning and operation of SAVIAC symposia and meetings. The Puseys recently retired from operating the MFPT society after its 60th meeting was held in Virginia Beach in April 2006. In honor of their conference commitment to the Virginia Beach area, the mayor of Virginia Beach made a proclamation that April 4th shall be known henceforth as "Henry and Sallie Pusey Day". The SAVIAC community congratulates the Puseys on their success with MFPT, and look forward to their continued participation in SAVIAC operations.

NAVSEA

WARFARE CENTERS
Carderock Division

POSITION: Senior Research Scientist/Technical Consultant, ST-871-00

LOCATION: Naval Sea Systems Command, Naval Surface Warfare Center, Carderock Division, West Bethesda, MD

The Carderock Division is the Navy's center for excellence for Ships and Ship Systems. The Division is the full-spectrum research and development, test and evaluation, engineering, and fleet support organization for the Navy's ships, submarines, military watercraft, and unmanned vehicles with insight into new concepts and technologies for the Navy's fleet of the 21st century.

A Senior Scientist/Technical Consultant vacancy for Ship Survivability, Modeling and Simulation, and Computational Mechanics currently exists in the Survivability, Structures, and Materials Department. This position requires extensive knowledge and experience in physical sciences (physics and engineering), structural dynamics, numerical analyses, and weapons effects (shock, blast, fragmentation, ballistics, etc.) as they relate to advanced computational tool and assessment methodology R&D. The selectee must have achieved an internationally recognized level of excellence in the field. Scientific contributions must include solving significant Navy problems. Announcement number NE6-0871-00-4G342062-FL

Salary will be set by the Assistant Secretary of the Navy (Manpower & Reserve Affairs) within the range of $129,024 - $152,000. This position will be advertised through the Department of the Navy's on-line application system at www.donhr.navy.mil . For more details and to access the announcement, click on "Jobs, Jobs, Jobs" twice, click on "Search for Jobs", answer the questions and enter the announcement number.

The announcement will open 4/10/06.
Applications must be received or postmarked by 05/26/06

Explosion Effects and Structural Design for Blast

Two Offerings of a 2-Day Training Course

June 14 and 15, 2006; Chicago O'Hare Airport, and October 3 and 4, 2006; San Diego, CA

Instructor: Dr. Sam Kiger, PE

Engineers have an opportunity to improve their skills in understanding explosion effects and designing facilities that are safer to occupants by understanding and minimizing the effects of explosions on structures. Architects, first responders, and others will benefit by understanding explosion effects and protective design methods. All new government buildings now require some level of blast resistant design and this training will address those requirements. You can find more information and register at www.blastdesigntraining.com

DATE: June 14 and 15, 2006

At Comfort Suites O'Hare Airport. For reservations call 1-800-521-2121 (mention the course for a reduced rate of $99). The room rate includes breakfast and airport shuttle. A block of rooms will be held for the course until 05/11/2006. Register at http://blastdesigntraining.com

DATE: October 3 and 4, 2006

At Quality Inn & Suites Harborview Hotel, San Diego, CA. For reservations call 1-800-521-2121 (course rate is $109). Register at: http://blastdesigntraining.com

This 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 discussed and demonstrated. Much of the design guidance and software is restricted distribution to government agencies and contractors; however there are a few recently released computer software packages that are generally available. Information on how to use and obtain the software will be covered in the course. All of the computer codes discussed in the course are available free of charge to qualified users. The participant will gain an understanding of how to compute blast loads 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 with a complete set of class notes. A general background in structural analysis and structural design will be assumed. Primary topics include: Explosion Effects, Loads on Structures, Behavior of Structural Elements, Structural Dynamics, Response Calculations and Retrofit Techniques. For more information visit http://blastdesigntraining.com or contact Dr. Sam Kiger at Ph; 573-882-3285 or email; kigers@missouri.edu

INDUSTRY NEWS

ANSI Appoints IEST to Administer US TAG to ISO/TC 142

The Institute of Environmental Sciences and Technology (IEST) announces that the American National Standards Institute (ANSI) has appointed IEST the Administrator of the ANSI-accredited US Technical Advisory Group (US TAG) to the International Organization for Standardization Technical Committee 142 (ISO/TC 142), Cleaning equipment for air and other gases. ANSI is the official national standards body of the United States.

Philip Winters, current IEST Education Vice President and member of the IEST Executive Board, was appointed Chair of the US TAG to ISO/TC 142. Winters is the Director of Product Development at Filtration Group, Inc. He has over 20 years' experience in product development and testing. After a long period of inactivity, ISO/TC 142 was reactivated recently, and met in Milan, Italy, to reorganize its activities. The Secretariat of ISO/TC 142 is held by UNI, the national standards organization of Italy. The TC determined that two working groups will develop standards, and six task groups will analyze specific areas of filtration and recommend a course of action.

PCB Piezotronics Launches Newly Redesigned Homepage

PCB Piezotronics (PCB®), a PCB Group Company, today launches a series of recent upgrades to its homepage at www.pcb.com, developed to help customers find the best sensor and instrumentation products for their application. The PCB homepage offers a new look that includes varying images of typical applications, and a new, intuitive user search capability. This new interface allows the user to search by model number, product type and measurement type, from a data base of more than 2,500 sensors, signal conditioners, cables and accessories, with up-to-the-minute, fully downloadable, specifications and drawings. Founded in 1967, PCB Piezotronics is a global leader in the design and manufacture of force, torque, load, pressure, acoustic and vibration sensors, as well as the pioneer of ICP® technology. Core competencies include piezoelectric, piezoresistive, TEDS, strain gage and capacitive sensor products. With 24-hour customer service support; direct sales offices throughout Europe and Asia and an established global distribution network, PCB® attributes its continued growth to an unwavering commitment to total customer satisfaction. For additional information contact PCB directly at 716-684-0001, or visit the web site at www.pcb.com.

Larson Davis Announces New Time History Data Logging Option for SoundTrack LxT™

Larson Davis, a PCB Group company, has announced the enhancement of the Soundtrack LxT™ to include a comprehensive time history data logging option. The new Soundtrack LxT™ sound level meter from Larson Davis offers an innovative approach to sound measurement for compliance and worker noise exposure monitoring. Available in Type 1 or Type 2 versions, the SoundTrack™ provides an easy way to manage route or task-based workplace noise surveys. With operator route prompts and digital voice annotation, surveys are done quickly and easily by operators at all skill levels. Optional integrated real-time 1/1 and 1/3. Octave filter performs frequency band analysis instantly with no tedious 'step-through' required. For more information, contact Larson Davis at www.LarsonDavis.com or 888-258-3131.

Top Five Design, Test and Evaluation Product Reliability Publications of IEST

These documents provide valuable information for design, test, and evaluation/product reliability professionals. If you do not have these in your reference library, be sure to order them now. "History and Rationale of MIL-STD-810F", "IEST-RP-DTE013.1: Vibration and Shock Test Fixturing", "IEST-RP-PR001.1: Management and Technical Guidelines for the ESS Process" , "IEST-RP-DTE12.1: Handbook for Dynamic Data Acquisition Analysis " and "IEST-RP-DTE032.1: Pyroshock Testing Techniques" To learn more about these documents and to see our catalog of others, go to www.iest.org. Publications can be ordered online or by phone. Contact (847) 255-1561 or publications@iest.org for more details.

A2LA Accredited Condenser Microphone Calibrations

PCB® Piezotronics has been approved by A2LA for Type 1 microphone calibrations. PCB recognized the growing requirement among manufacturers and made the investment to be compliant and receive the ISO 17025 accreditation by A2LA. All Type 1 (377 Series) prepolarized and externally polarized microphones, or comparable microphone and preamplifier combinations (when calibrated together as a system) will have a calibration sheet that is ISO 17025 Accredited by A2LA. PCB has a complete line of modern prepolarized (0V) and traditional externally polarized (200V) microphones to go along with the value oriented array electret microphones, to service just about any sound pressure level, NVH or holography application. .For additional information, contact the Vibration Division of PCB Piezotronics, Inc., toll-free, at 888-684-0013; E-mail: vibration@pcb.com; or fax at 716-685-3886.

FREE

Summer Shock & Vibration Seminar

SAVIAC invites you to attend a FREE seminar on Shock & Vibration on June 28, 2006 at the Hyatt Regency Monterey in Monterey, CA in conjunction with the 77th Shock & Vibration Symposium Program Committee (PC) Meeting. SAVIAC and the featured experts in their disciplines have organized this seminar to introduce you to the SAVIAC community, while providing a valuable educational experience. The seminar is free, but you must register to attend and assure your space and note packet. The agenda will be available shortly. SAVIAC has contracted with the hotel for a room block. You may contact the hotel directly at (831) 372-1234 or visit them on the web at Hyatt Regency Monterey.

Conference & Short Course Announcements

IEST
Wednesday, May 10
Phoenix, AZ
IEST will host an Informational Seminar regarding its new venture which is the 52nd Annual Technical meeting and Exposition of IEST. Philip Winters will lead the seminar. Online registration and the advance program are now available at: www.iest.org/ estech/ estech.htm

IEST
Basic Overview of Accelerated Life Testing
Wednesday, July 19 @ 11:00 a.m. CDS
Online Education Class
This live one-hour course provides an overview of issues and considerations associated with accelerated life testing.
These include short-term test strategies, such as step-stress testing and stress screening, and long-term testing, such as life, durability, and fatigue tests; and the strengths and weaknesses of selected test-time compression models. Important issues that will be reviewed include the purpose of the test, the information needs of the customer, and the optimum level of assembly for testing.Intended for engineers and management personnel responsible for planning, executing, or reviewing accelerated or exaggerated environmental test and evaluation activities. It will be especially useful for the newcomer to environmental reliability testing or those that are involved with such tests only infrequently.The instructor, Henry (Hank) Caruso, is a Senior Principal Engineer at L-3 Communications, Titan Group, Aviation & Marine Services Division, in Lexington Park, Maryland, has 35 +years in the professional discipline of environmental engineering and simulation, Engineer of the Year award in 1990. A question-and-answer session will follow this cutting-edge presentation.Online registration is available at www.iest.org/education/online.htm or by calling IEST at (847) 255-1561.

ERI
Optimizing Electronics Vibration - HALT, HASS, ALT and ESS
June 13-15, 2006.
Minneapolis (Plymouth), MN.
The course will be taught by John Starr, a professional engineer with 35 years of continuous and varied structural design experience in Nuclear, Chemical, and Defense industries. Managers and engineers involved in design, development, testing, evaluation, ESS or production of electronic hardware, both commercial and military, will benefit. A basic understanding of vibration response is assumed. No finite element experience or physics of failure or mechanical engineering expertise is required. To register, visit http://www.equipment-reliability.com/regist_form.htm . Course details can be found at http://www.equipment-reliability.com/course4.htm . Instructor Starr welcomes questions about the course.

ERI
Random Vibration and Shock Testing Training
August 22-24, 2006
Santa Barbara, CA
Taught by Wayne Tustin, internationally recognized vibration and shock educator and also president of Equipment Reliability Institute (ERI). Many people conducting vibration and shock tests, ESS, HALT and HASS lack formal training in this specialized area of mechanical engineering. They do what they have shown, but often they don't understand WHY certain steps are necessary. Nothing comparable is offered by university engineering departments.This course is needed by engineers and technicians who conduct developmental and production vibration and shock tests. Also by designers of products that must survive tests AND rigorous service conditions. Also by metrologists who measure vibration and shock on automobiles, aircraft, etc. Also by sales/applications engineers involved in the sales of equipment used in test (shakers, shock test machines, etc.) and measurement (transducers, data acquisition etc.) Course details can be found at http://www.equipment-reliability.com/sb1.htm. To register, visit http://www.equipment-reliability.com/regist_form.htm or call (805) 564-1260.

TTI
Climatic Test Techniques (Course 230)
June 12-13, 2006
Las Vegas, NV
An introduction to climatic testing with an overview of field test measurement and analysis. Test methods and conditions of commercial and military test specifications and standards are discussed.This course is intended for: Environmental Engineering Specialists (as mandated by MIL-STD-810), environmental test laboratory engineers and technicians, specification writers, equipment designers, and quality and reliability specialists. Presented as a series of highly-interactive lecture/discussion sessions. Problems for individual and group solution are interspersed throughout the course to act as train-ing aids and to evaluate class progress. Special-interest discussions are encouraged outside of the regular course sessions. One TTI instructor normally presents the entire course, rather than using many speakers. Participants follow a controlled, systematic flow of material, and receive an effective, comprehensive program.Contact TTI at 866-884-4338 (866-TTi-4edu).For schedules, general information and registration forms, see TTi's web site. http://www.ttiedu.com.

SUBMIT YOUR NEWS TO "CURRENT AWARENESS" NEWSLETTER

SAVIAC WELCOMES NEWS FROM THE "S&V" COMMUNITY. SEND US YOUR INDUSTRY NEWS, SHORT COURSE AND CONFERENCE ANNOUNCEMENTS AND WE'LL ADVERTISE IT IN OUR NEWSLETTER. DATED ANNOUNCEMENTS MUST BE RECEIVED IN A TIMELY MANNER, AT LEAST A MONTH OR TWO IN ADVANCE.
EMAIL YOUR NEWS TO DARNISE.JOHNSON@SAVIAC.ORG

77th Shock and Vibration Symposium Call For Papers

October 29 - November 3, 2006
Hyatt Regency Monterey
Monterey, CA

Planning for the 77th Shock and Vibration Symposium is underway, with the selection of the Naval Undersea Warfare Center (Keyport) and Idaho National Labs as the Government Featured Organizations and ABAQUS and Spectral Dynamics, Inc, as the Commercial Featured Organizations, and the Hyatt Regency Monterey as the location.

The Shock & Vibration Symposium is the oldest continuously held meeting dealing specifically with the structural dynamic behavior of air, sea, space, and ground vehicles and structures. The Symposium was established as a mechanism for the exchange of information among Government activities, private industry, and academia on current work and new developments. Presentations on work in progress are encouraged. Separate sessions are held for presentation of classified or limited-distribution material.

Presentations in the following subject areas are welcomed:

901D Case Studies
Active Vibration Control
Ballistic Shock
Biodynamics
Blast Design
Combined Environments
Computational Structural Dynamics
COTS
Crash Dynamics
Damage Identification
Damping
Data Analysis
Dynamic Analysis Methods
Dynamic Measurement
Dynamic Scale Modeling
Dynamic Testing
Environmental Databases
Finite Element Analysis
Fluid-Structure Interaction
Ground Shock
Seismic Shock
Impact/Penetration Mechanics
Instrumentation
Isolation Systems
Large Structures
Live Fire Testing
Machinery Diagnostics
Machinery Vibration
Material Dynamic Properties
Modal Analysis and Testing
Product Announcement/Facility Description
Pyrotechnic Shock
Shock Characterization
Shock Hardening
Shock Qualification by Extension
Shock Test/Equipment Failure Modes
Simulation Methods
Specifications and Standards
System Identification
Test Criteria
Test Tailoring
Underwater Shock Testing
Vibroacoustics

Two categories of presentations will be accepted: full papers, suitable for publication in the Symposium Proceedings; and short discussion topics, consisting of viewgraphs with no written paper. Full papers will have a 15 minute technical presentation time plus 5 minutes for questions, while short discussion topics will have a 10 minute presentation time with no question period.

Presentations will be accepted on the basis of their abstracts, which must be submitted by June 3, 2005. You are encouraged to submit online at www.saviac.org, click on 76th S&V Symposium Abstract Submittal. The Program Committee will review the abstracts during the June Program Committee meeting and authors will be notified of acceptance by July 14, 2006. The full paper presentations must meet the following standards: They must be previously unpublished and unpresented, must be appropriate to community interests and must not be overtly commercial, except for papers in the Product/Facility session. Standards for short discussion topics are similar except that they may include previously presented or published material.

The Proceedings will be published on CD-ROM
The paper due-date is October 6, 2006
Questions should be directed to Drew Perkins, 804.282.5570 or drew.perkins@saviac.org

SPECIAL SESSION ANNOUNCEMENT

Papers are being solicited for a special 1/2 day session entitled " Electronics' Survivability & Component Fragility under High-g Effects " planned to be held at the 77th Symposium. The session will focus on the technical needs of the shock and vibrations community engaged in the research, development, acquisition, and fielding of electronics and structures that are required to survive and subsequently function under high-g loadings. High-g is a relative term which must be quantified with respect to the application. For example, some specific high-g environments of interest that have been identified are: a loading of 16,000 g encountered by a guided projectile during the launch cycle in an artillery gun, moderate launch acceleration loadings encountered by missile airframes, and transient acceleration amplitudes ranging from hundreds to thousands of g's encountered by electronic components (LRUs) resulting from ballistic shock engagements. In addition, the ascertaining and understanding of equipment fragility levels is a key technical issue in determining component survivability for such environments. The overall objective is to ensure the survivability and functionality of electronics, components, and structures to what is considered or recognized to be "high-g" conditions. Targeted DoD programs/activities/products include but are not limited to: smart munitions, guided projectiles and penetrators, shipboard electronic equipment subjected to UNDEX, high velocity missiles and interceptors, and critical components (LRUs) in combat ground vehicles, as well as related weapon and or civilian systems. Attendance in this session would be of interest to engineers, researchers, and managers representing government, industry, and academia.

Paper selection will be made during the June meeting of the planning committee. Papers cover the analytical, numerical, and experimental which straddle the spectrum of the field of "high -g" effects. Please submit your abstract per guidance provided in the Current Awareness (see “call for papers” above).

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-NSWCCD - Job Vacancy Announcement
-Course Annc - Explosion Effects and Structural Design for Blast
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