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Professionals Dedicated to the Safety of Systems Products and Services Tennessee Valley Chapter



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27th International System Safety Society 2nd Joint Weapon System Safety Conference - A Big Success

The 27th International System Safety Society Conference in conjunction with the Joint Weapon System Safety Conference hosted in Huntsville, AL had 436 attendees to include 13 international countries. Social activities included the Concert in the Park, Hot August nights at the new Westin Hotel, Awards dinner and tour the Space & Rocket Center, and a the tour of the Jack Daniel's

Distillery and dinner. The 27th ISSC had a total of 20 sponsors. Seventy-one Tennessee Valley Chapter members attended the ISSC 09 and contributed 11 papers, presented 9 tutorials, chaired 4 technical sessions, conducted two workshops and hosted 6 panel discussions.



ISSC 09 TVC Papers Presented

Gary Braman – "Safety: A Function of Leadership"

Tom Pfitzer & Nina Donath – "ART – APT Risk Management Tool for Performing Risk Assessment"

John Livingston – "Unintended Consequences: The Potential Flip Side of Design and Process Improvements"

John Livingston – "Developing System Safety Training That Compliments System Safety Professional Development"

Mike Pessoney & Josh McNeil – "Software Safety Assessment Report – How it Can Be Built and How It Can Be Reported"

Dave West & Kathleen Garcia – "Professional Certification and Qualification in the field of System Safety: Considerations for Government and Industry Practioners"

Ken Rose – "Army Weapon System Safety Review Process and Lean Six Sigma"

Jim Schiermeyer – "The Safety Architecture – What is so Difficult"

Steve Austin – "Strides in Ergonomics"

Jon Wetherholt – "Integrated Safety Analysis Tiers"

Greg Turgeon & Petra Price – "Feasibility Study for Software Safety Requirements Analysis Using Formal Methods"

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ISSC 09 TVC Session Chairs

Mike Pessoney – "Software 2" Jon Wetherholt – "Space Systems 2" Steve Hosner – "Operational Safety" Saralyn Dwyer – "Weapons Safety 1"

ISSC 09 TVC Tutorials Presented

John Rankin – "Identification of Common Cause Failure Potential in Electrical Power and Control Systems"

Melissa Emery – "Implementation of ANSI/ITAA/GEIA STD-0010"

John Livingston - "Meeting System Safety Challenges - Insights from a Career in System Safety" Bob Frazier – "Modeling Risk Utilizing Fault Tree Analysis"

Greg Turgeon – "Practical Application of DO-178B for Safety Critical Software Systems" John Rankin – "Sneak Circuit Analysis" Willie Fitzpatrick & Josh McNeil – "Software System Safety"

JWSSC Tutorials

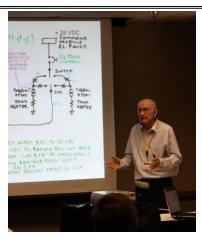
Pat Vittitow - "Explosives Hazard Classification"

Don Hanline & Howard Kuettner - "AMCOM Software System Safety"

ISSC 09 TVC Workshops Hosted

Dave West & Arch McKinley - "System of Systems (SoS) Safety"

Josh McNeil & Dr. Janet Gill – "Software Safety Integrity Levels"



ISSC 09 TVC Lead Panel Discussions

Saralyn Dwyer & John Frost – "Taking Our Discipline to the Next Level"

Herb Shivers – "Apollo Safety Perspective: Are the Lessons Learned Still Applicable?"

Dave West – "The Development and Publishing of ANSI/GEIS-STD-0010-0029"

Ron Price – "Armed UMS Roundtable" Ken Rose – "Joint Weapon Safety Reviews" Terrell Swindell - "DOD Software System Safety: A Focus on Standards, Regs, and Best Practices for Joint Services Systems Design

2010 International System Safety Society Conference

The 28th International System Safety ISSC) Conference will bring practitioners and foremost thought-leaders of the system safety discipline together for an exchange of ideas, knowledge and experiences in Minneapolis, Minnesota. The conference will be held in the beautiful Hyatt Regency Hotel in downtown Minneapolis. The conference theme, "Building Bridges to a Safer **Future,**" emphasizes that when system safety processes and procedures are implemented throughout the system life cycle; costs are minimized while risk of personnel injury or system loss/damage is reduced or eliminated. More to come.

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President's Corner

2009 was a busy year. Our chapter hosted the annual System Safety Conference. I have big plans for this year. First we have a welcome package to send out to all our new members. We can also use this as a promotion tool to attract new members. Our new members and affiliates for this year include:

Melissa Allen Brian Brown Charles Delano Myris Dowdy Carolyn Goodloe Randy Forsythe **Sherry Jennings** Glenanne Johnson

Edward Henry Kiessling III

Roy Wilson Malone Kenneth Parham Milton Powell **Ronald Price** Albert Pulley Floyd Shipe Irene Taylor Clifford Watson Torri West Aurelie Worrell

Zachary Zimmerman

Since this is the first newsletter that the TVC SSS has published, I wanted to document a few things.

First Our **Chapter Objectives**:

- Advance the management and technology of System Safety in all areas of human endeavor where a systematic approach and analytical evaluation directed toward hazard control can be applied.
- Improve the dissemination of information between individuals in this field and related fields.
- Improve public understanding of the discipline.
- Promote and improve System Safety as a profession.
- Promote within the Chapter's jurisdiction the activities and objectives of the System Safety Society.

Hosting the 27th International System Safety Society Conference in Huntsville met all of the above objectives. Several times during the conference, I came across a small group of people pondering the Conference Program and trying to decide which sessions to attend as there were so many interesting choices. Kudos to the many hours of hard work put in by the conference technical committee to make this happen.

In each subsequent issue of the TVC SSS newsletter we will have a "Getting to know you" Section and feature a member of the Society.

We are having the Archived SSS Conference set updated and will have these on sale soon.

National System Safety Society Award

Two of our TVC members achieved National Recognition this year.

Ms. Patricia Vittitow received the President's Achievement Award.



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Ms. Saralyn Dwyer was awarded the National Professional Development Award.



President-Elect's Corner

On October 21 at APT, John Rankin will present a synopsis of his tutorial "Identification of Common Cause Failure Potential in Electrical Power and Control Systems that was presented at ISSC 2009. APT will provide pizza.

Secretary's Meeting Minutes

The TVC held its September meeting on the 16th. It was hosted at QinetiQ by Steve Hosner. Eleven people were in attendance. QinetiQ furnished the drinks and meeting facilities, the TVC furnished Pizza. This was a planning meeting to discuss member preferences for programs and places for 2009/2010. The VP reported on his meeting with the HATS organization at which STEDTRAN grants were awarded to 25 deserving K-12 school programs. Types of programs were discussed with preferences stated for:

1. Out-of-town speakers like Marge Jones and Steve Mattern. (It was noted that Steve will be in

town near the time of our Oct meeting and may agree to present a lunch program)

- 2. War stories are preferred to lectures. People want to hear interesting things the speaker has done.
- 3. Panel discussions with short presentations of conflicting views followed by group discussion was brought up but faintly praised.
- Topics of interest was mentioned (like Legal Consequences of Safety or: How to make big bucks testifying as a safety expert for lawyers at trial)
- 5. Addressing adherence to DIDs was faintly mentioned.
- Safety merit badge programs and training sessions free to members were mentioned.

Meeting Hosts Were solicited:

- 1. APT hosts 4 meetings a year and provides pizza and drinks for the meetings.
- 2. Steve Hosner volunteered to contact QinetiQ for 2 meetings (And later emailed the dates QinetiQ would host.)
- 3. VP will contact SAIC and Bastion to fill in other dates for the year.

Announcement of 2010 NASA /Army System and Software Engineering Forum was made by Josh McNeil. Volunteers for session chairs from the SSS were solicited. Jim Schiermeyer volunteered to put together a session on system safety and Steve Hosner volunteered to chair a session. Although attendance was light, discussion was lively and the food was good. Hopefully the result will be a well organized year for the TVC with meeting subjects and places appealing to most.

Treasurers Corner

Phil Eder's Detailed budget will be discussed at the 21 Oct 09 monthly TVC SSS meeting.

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Special Projects Chairs Corner

THINK OUTSIDE OF THE BOX

One of the goals of the System Safety Society is education. One of the ways we educate is through interaction with other professional societies, conferences and professional papers. This interaction improves the education and experience of those now working in the system safety field.

We are also working toward local colleges offering safety curriculum. A lot of our work force is getting older and we need to generate interest in the safety field at an early age. The Tennessee Valley Chapter of the System Safety Society has created a position called the 'Special Events Coordinator'. The coordinator has a committee of 2 society members who assist him. The idea behind this position is for the society to work with children at an early age, 6th grade thru college to teach the fundamentals of system safety - what system safety is, how it works, and what it can do for these young people should they choose to be a system safety engineer, mechanical engineer, electrical engineer or any safety related position. Some of the programs we sponsor to generate interest in our young people are the Science Fair Competition, the Future Cities Competition and the Moonbuggy Race. This year the Moonbuggy race had two teams from Germany, two from India, Two from Puerto Rico and several from Canada. The German Space Education Institute from Leipzig was the winner of the System Safety Award at the high school level. There was a tie at the college level and an award was presented to Middle Tennessee State University Team I from Murfreesboro, TN and Delhi College of Engineering Team 2 from India.

The requirements for the "System Safety Award" are published on the SSS TVC and the NASA Great Moonbuggy Race website, which is hyperlinked from the TVC chapter web site. All submissions are reviewed for early construction, design and operational issues. Many of the teams are maintaining a hazard tracking system by stating previous year's issues of their team and other teams and how mitigations for those issues (ha-

zards) were incorporated. The submissions were voted on by the Chapter's Special Events Coordinator and a 2 member panel.

By thinking outside of the box, you reach younger people and influence them by showing them what is available and the rewards in that profession.

These students are our future and if we show them the fundamentals of the safety profession and help them learn, they may become interested just because we are interested in them.

Jim Blanteno Special Events Coordination



Forum/Training Corner

NASA/Army Systems and Software
Engineering Forum will be held May 11-12 2009
in Huntsville, AL. The sessions are free to all.
Software Engineering, Engineering Management,
Systems Modeling and Simulation, Systems
Engineering Methods, Processes and Tools, Six
Sigma and Complex Electronics are just some of
the topics that will be briefed. Question and
answer panels are also being scheduled. More info
will be provided in the next Newsletter.

PPT's DO-178B Training Course provides you with an opportunity to learn about key aspects of the avionics industry's highest software develop-

ment standard and how it increasingly applies to military projects.

Visit http://pptsinc.com/training.html or contact Courtney Wilborn (p: 256.319.0417 email: courtney.wilborn@pptsinc.com) for more information.

APT is offering System Safety Engineering
Training 16-20 Nov 09 for which you can receive
3.0 CEUs and Software System Safety
Engineering 8-10 Dec 09. Course descriptions can
be obtained at APT's web site

www.apt-research.com
Registration Info 256-327-3396

The TVC is soliciting bids for upgrade to our website. Any member company that is interested may contact Pam Kniess by 23 October 2009.