



Tennessee Valley Chapter Executive Officers

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President's Corner

This is a catch up newsletter to let you know what has been going on in the TVC if you have not been able to attend a meeting.

There is still time to **nominate your SSS peers and advisors for ISSS annual awards** at the national and chapter level. Please take the time to recognize those that aid you in your professional quest. Nomination forms and Awards criteria are available at the SSS website.

In the very near future, the Tennessee Valley Chapter of the SSS will be **nominating officers** for the coming year. Offices available include President-Elect, Secretary, Treasurer, Special Events Coordinator, and Webmaster. Details on each position will be forwarded soon.

Secretary's Meeting Minutes

8 Aug 2011 meeting at the 29th ISSC, MGM Grand Hotel, Las Vegas, Nevada. The meeting was attended by 20 members and 16 guests. Don Swallom announced the 2012 ISSC will be in Atlanta on 6-10 Aug 12. Barry Hendrix is heading it up. It will be held at the new Loews Hotel, rate of \$141. There is also a conference in Brisbane, Australia, tentatively scheduled for 23-25 May 12. Don noted some of the conference highlights.

21 Sep 11 meeting. Dr. Jeff Kulick presented "Proposed MS/PhD in Software Safety and Security" to 18 members and 7 guests at Sikorsky. Presentation outlined UAH's plans for developing a safety curriculum in the UAH College of Engineering. The first course in the program was offered in the Spring of 2011 with the focus on Software Safety Engineering. The students presented a set of DO-178B like artifacts for a model train system and implemented the safety system on a model train setup that had a variety of sensors including optical, magnetic, and contact. The long term goal for the safety curriculum is to develop a degree program that spans several departments in the colleges of science and engineering.

The TVC SSS met on 19 October 2011 at APT Research on 4950 Research Drive with 15 members and 5 guests. Mr. Jonathan Henshey introduced himself and brought forth the first order of business. Mr. Gary Braman has made a request to the chapter to purchase study guides for the ASP/CSP study



Tennessee Valley Chapter

<http://www.iss-tvc.org/>

March
2012

group. In order for the chapter to approve the purchase, it must be added to the budget. Need to determine if the purchase will be a license or copies made to individually give to participants in the study group. Questions were asked if there is a web server package and the impact to the budget. The purchase is a software package and it is a non-identifying item of approximately \$250 to \$600. The budget will increase to \$7350. A motion was made and a vote was taken without opposition, therefore motion passed unanimously. Two questions were brought forth to pose to Mr. Braman and they are: Expiration date of the software and if copies are going to be passed around to others. Mr. Henshey turned meeting over to Mr. Greg Turgeon. Mr. Turgeon introduced the presenter, Ms. Marge Jones. Ms. Jones works for Safety Analytical Technologies, Inc. Ms. Jones spoke to the group on changes to ARP 4754A, "Guidelines For Development of Civil Aircraft and Systems."

16 November 2011 Meeting. Mr. Dave West announced that he is serving as the Technical Program Chair for the 2012 International System Safety Society (ISSS) Conference in Atlanta, GA. Mr. West is asking for volunteers to help the program team. There are a lot of opportunities, such as Technical Papers Coordinator (Mr. John Livingston served in this capacity last time), Tutorial, Panel & Workshop, etc. Mr. West will put together a Technical Program Plan. Ms. Myris Dowdy requested Mr. West to send the program plan once it is done and she will send it to the members. Mr. David Flowers introduced himself. He has worked as an operator for the last 12 years and is also a Mechanical Engineer. Mr. Flowers is currently an operator at the Browns Ferry Nuclear Plant Tennessee Valley Authority (TVA). He presented "The Reality of Nuclear Safety" to 15 members and six guests at QinetiQ North America (NA). During the presentation, Mr. Flowers asked the audience if anyone knew when the first reactor accident was. The answer is 1961 in Idaho. Information was given about the accidents at 3 Mile Island, Chernobyl, and Fukushima, Japan. At 3 Mile Island, unit 2 did have a meltdown but the media did not tell the public as it did not explode like the other two facilities. Presentation outlined lessons learned from each facility are as follows: 3 Mile Island – Technicians were not trained; Chernobyl – Safety culture; Fukushima – Electrical components not in water tight compartments. Differences between boiling water, pressurized water, and graphite reactors were given. After a very good question and answer (Q&A) session, Mr. Flowers ended the presentation. He stated that if anyone had any more questions, he could be contacted at dfflowers@tva.gov.

21 Dec 11 Luncheon Meeting at Phuket's Restaurant. Mr. Gary Braman, ISSC National President, presented recent SSS events and planning for the coming year to 14 members and one guest. The Minnesota Conference report is complete and the Las Vegas Report is in work. The Operations Manual is being updated and responsibilities of new directors will be included. There are Directors of Mentoring, Research and Development. The Strategic Plan for the EC will be reviewed at the Feb meeting. New regional VPs were just approved – Onn Eng Ling for Singapore/Pacific; Paul Kryska for North America and Gabriele Schedl for Europe. The EC has an option for 2 more Regional VPs. The EC needs quarterly officer meetings to discuss action items instead of waiting until the weekend before the conference. Action Items will now be assigned to an office, not a person and then whoever is in the office is responsible for the open action item. Mr. Braman visited Cathy Carter in Nov 11 to discuss administration of the society, record keeping and how we can get access. Mr. Braman is investigating the cost of renting office space. ASAI has a condominium. The US Army Officers run out of a condominium. In the early May 2012 timeframe, Mr. Braman is pursuing a budget to look for a building or office space for Society Headquarters. The next five conference sites have been selected – Atlanta, GA in 2012; Boston, MA in 2013; St. Louis, MO in 2014, San Diego, CA in 2015 and Orlando FL in 2016. There is also a conference in Australia in May 2012. I-Planet has signed a multi-year contract for conference support. Part of the Strategic Plan is to pursue more corporate sponsorship involve-



ment. The EC will send out letters and a copy of the society strategic plan thanking the sponsors and hopefully re-engage them on sponsoring. A Job Target 2 year contract is being reviewed by our lawyers now where the society would get 70% of the resume cost. Mr. Braman is planning on re-engaging the A. P. T. Intern Program. A new logo was voted in. A membership card will be issued with membership renewals in Jul 2012. A complete review of the Operations Manual is in process and disciplinary action will be expanded. Mr. Braman is still pursuing a System Safety Engineering Degree from the University of Maryland, competencies and System Safety Certification for System Safety Engineers. The SSS hopes to piggy back off of NASA's setup. They are also working with BCSP for certification. The Society is working on an MOA with other agencies like NCOSSSE. Mr. Braman intends to encourage more EC involvement in voting. There are 35 voting members. The chapters are now required to keep financial transactions receipts and bank statements like the Society operates so that if IRS investigates, everything will be in order and no fines can be levied.

ISSC Conference

The 30th International System Safety Conference to be held in Atlanta, Georgia at the Loews Atlanta Hotel on August 6-10, 2012 has opened the call for paper submissions. The theme this year is "Think Outside the Box". Information is included in the attachment and below.

The conference is accepting four types of papers:

Technical Papers - Compositions of generally between six and ten pages written by one or more authors, dealing with a subject related to System Safety. Technical Papers are published in the conference proceedings and presented to conference attendees.

Panels/Roundtables - Discussion-oriented forums in which either a series of related presentations are delivered by a small number of experts (panelists), or a general topic is discussed somewhat informally by any or all participants. Discussions are led by a facilitator.

Tutorials - Educational presentations delivered by one or more instructors and intended to give practical information.

Workshops - Conference forums conducted in an interactive setting and intended to give participants problem-solving experience.

For more information or to submit a presentation visit: <http://issc2012.system-safety.org/>

Key submission dates are:

April 2 - Paper Abstract

April 9 - Panel, Roundtable, Tutorial & Workshop Proposals

May 15 - Draft Paper

June 30 - Final Paper

July 6 - Draft Presentation

July 27 - Final Presentation



Disciplines of Interest are:

Aviation	Public Safety
Ground Transportation	Resilience Engineering
Hazard/Risk Management	Robotics/Unmanned Systems
Human Factors	Software Engineering
Medical Device Safety	Space Systems
Nanotechnology	Systems Architecture
Nuclear Power	Systems Integration
Patient Safety	System of Systems
Probabilistic Risk Assessment	Weapons Safety
Process Safety	Workplace Safety

Special Events Corner

2012 Annual Moonbuggy Race is scheduled for 13-14 Apr. Teams from several area high schools, as well UAHuntville, Alabama A & M University, and J.S. Drake Technical College will compete with nearly 100 other returning and rookie teams from around the world in the 19th-annual NASA Great Moonbuggy Race, April 13-14, at the U.S. Space & Rocket Center in Huntsville.

The competition will bring more than 500 high school, college and university students from 20 states and several other nations who will race their specially crafted lunar rovers or "moonbuggies" over a half-mile course that includes craters, rocks, lava, ridges, inclines and soil, similar to the moon's surface.

The NASA Great Moonbuggy Race is one of many educational projects and initiatives the agency conducts each year to attract and engage America's next generation of scientists, engineers and explorers.

January 14th 2012 was the annual Alabama Regional Future City Competition sponsored by the National Engineers Week. The competition is a nationwide event for 6th, 7th and 8th grade students, to foster an interest in science, engineering and mathematics. The five month competition requires students to design and build models of future urban centers and encourages students to learn about engineering in a challenging and interesting way. This competition has grown to 38 regions across the nation and is on course to become an international program within the next decade.



The System Safety Society

Organized 1962
Incorporated 1973

Professionals Dedicated to the Safety of Systems Products and Services

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March
2012

FUTURE CITY COMPETITION



REGIONAL ALABAMA

JANUARY 14, 2012
UAHuntsville Shelby Center



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March
2012

Participants form teams that consist of three students, a teacher and an engineer mentor. The student team utilizes SimCity 4000, a complex simulation software application that helps the team design their futuristic city. The teams are given a limited city budget, land specifications, city pollution and crime requirements, the ability to tax and spend, and citizens move in or out of the city depending on their level of satisfaction. Their future cities must address issues such as pollution, crime, safety, traffic, unemployment, power consumption, taxes, commercial and residential zoning, water systems, airports and other societal dilemmas. Each team must prepare an abstract of the city, an essay on an engineering topic, build a scaled down dimensional model, and give a formal presentation before a panel of judges. Each component of the competition is judged by engineers whom have volunteered from several local companies.

2012 is the 20th year anniversary for the future city competition, is the 8th year the competition has hosted an Alabama Regional competition and is the 5th consecutive year that the Tennessee Valley Chapter of the System Safety Society (TVC SSS) has sponsored a special award for best use of symbiotic “system” safety. In keeping with previous year’s tradition, the competition was fierce and the students really worked hard to understand and deal with the issues they faced.

James Blanteno and Phil Eder once again served as judges for the special award provided by the TVC SSS. After discussing system safety with each of the student teams, three teams were selected as finalists for the award. The three finalists consisted of a team from the Academy for Science & Foreign Language, Whitesburg Middle School, and Cornerstone School. The Academy for Science & Foreign Language is a school from Huntsville Alabama and their team name was “Fiume Citta”, which means river city. Whitesburg Middle School is also from Huntsville Alabama and their team name was “Olympia” named after the Greek city known for holding the first Olympic Games. Cornerstone School from Birmingham Alabama named their city “Graden”, however there was no purpose given for their cities name.

In the end, Cornerstone School was chosen as the 2012 recipient of the TVC SSS award for best usage of Symbiotic Safety, as demonstrated by their system design, model buildup and overall discussion points.

Team: Teacher: Sherri Whitehead

Student: Alexis Daniel

Student: Jordan Smith

Student: Marcus Scott



Figure 1: Episcopal Day School – Solaris Figure



2: Episcopal Day School – Contiville



Tennessee Valley Chapter

<http://www.iss-tvc.org/>

March
2012



Figure 3: Horizon Elementary – Hydrocity Figure



4: Cornerstone School – Ocean Bay City



Figure 5: Eastwood Middle School - T-Town



Figure 6: Tuscaloosa Magnet Middle – Elizabeth



Tennessee Valley Chapter

<http://www.iss-tvc.org/>

March
2012

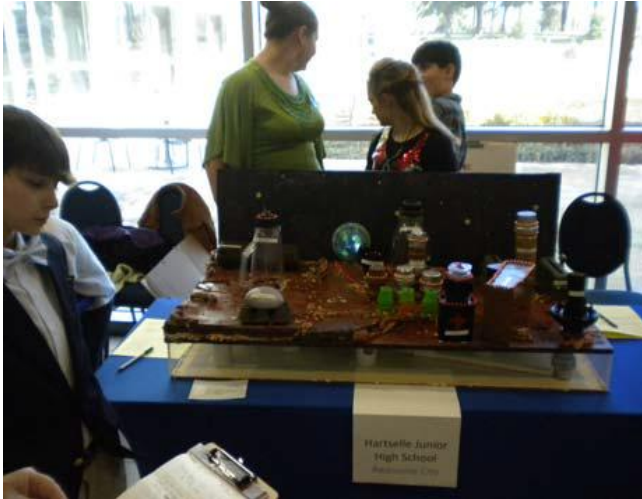


Figure 7: Hartselle Junior High School - Awesome City



Figure 8: Madison County – Nishati



Figure 9: Madison County – Tesla Figure



10: Alabama School of Fine Arts – Echo



Figure 11: Whitesburg Middle School – Olympia



Figure 7: Hartselle Junior High School - Heaven



Tennessee Valley Chapter

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March
2012



Overall Winner:
Academy for Science & Foreign Language - Fiuma Citta'



TVC SSS Winner for Best Use of Symbiotic Safety
Cornerstone School – Graden



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March
2012



The recipients received a check for \$150 and a wood plaque.