



The International System Safety Society

Tennessee Valley Chapter
ALABAMA - MISSISSIPPI - TENNESSEE

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

October 2015 Newsletter

Tennessee Valley Chapter Officers

President: Christopher Trumble, 256-847-3247

Vice President: Steve Hosner, 256-655-6323

Treasurer: Ronnie Sams, 256-842-1005

Secretary: Jason Rupert, 256-313-8650

Immediate Past President: Ken Rose, 256-645-1621,

Special Events Coordinator: Open

Webmaster: Don Swallow, 256-842-8641

President's Corner

APT Research hosted the September meeting and I was pleased to see that it was well attended. As usual the facilities and support provided by the people at APT Research was excellent. We had an opportunity to see the ISSS Chapter of the year award and I was proud to present, on behalf of the ISSS TVC members, certificates of appreciation to the 2014-15 Planning Committee members to recognize their Chapter management efforts. If your business employs members of the ISSS TVC and would like to display the Chapter of the year award at your facility, please contact Steve Hosner and get placed on a list. We will attempt to have it available for all businesses who request it to have it for a period of time.



During the September meeting I presented the "President's Platform" outlining the Mission, Vision and Objectives for the 2015-16 year. The President's Platform was distributed to the attending members. Some notable areas discussed were the mentorship opportunities, participation in local technology events, and awards for deserving members.

The ISSS TVC is interested in initiating a mentorship program. University and college students will have the opportunity to participate with willing members of our chapter. We all have had people during the early part of our careers made a significant, positive impact on shaping our professional development and here's your opportunity to encourage a student and help the engineering community improve and grow. If a member is interested in mentoring university/college students, please contact Steve Hosner and request to be put on a list. If you are or know a student who would value the opportunity to participate in a mentorship program, send a letter explaining your educational and career goals to Steve Hosner. These letters will be reviewed and assessed as to how we may be able to best assist you in your aspirations.



Tennessee Valley Wins the Chapter of the Year

(Front Row: Rod Simmons, ISSS President; Gerry Einarsson, Acting ISSS Director of Chapter Services; Melissa Emery; Ken Rose; Saralyn Dwyer; Danielle DeBraccio; Dave West.
Back row: Tom Pfitzer; Pam Kniess; Don Swallow; Doug Taylor; Gary Braman.

There are three local technology events we have historically participated in and we will continue this tradition as it is a great opportunity to introduce the concept of System Safety to students in an educational and fun environment. The three events are; the North Alabama Regional Science & Engineering Fair (2-4 April 2016), the NASA Rover Challenge (7-9 April 2016), and the Future Cities Competition (16 January 2016). This is a great opportunity to give back to the local community, future potential scientists, engineers, designers and program managers. I am requesting members volunteer to assist with these events, please contact Steve Hosner to sign up and make these events successful.

There are a variety of awards available to our membership to include; Engineer of the Year, Professional Development, Educator of the Year, President's Achievement, and Fellow Member Award. Many of our members are deserving of recognition and this year I am looking forward to seeing worthy members receive awards. The membership is encouraged to submit nominations.

The Chapter is looking for a volunteer to step up and fill the open role of Special Events Coordinator.

ISSS TVC September 2015 Newsletter (con't)

A TVC dinner meeting is currently scheduled for 19 October 2015 starting at 1730 hours (5:30 PM) at Grille 29 restaurant, 445 Providence Main Street, Suite 101 Huntsville, AL 35806 (PH: 256-489-9470). We are very pleased to announce Al Reis from Reis Engineering has graciously agreed to provide us with an informative and entertaining presentation entitled, "Engineering the Saturn V". He will give us insight as to how we engineered the Saturn V and launched astronauts to explore the moon. And more, he tells why this phenomenal feat happened, the extra-ordinary men involved (believers in human space exploration) that enabled the moon exploration missions to take place and the world events that caused it. The cost is \$25.00 per attendee for members, please confirm with Steve Hosner that you are attending, how many you will be bringing and what entrée selection (sirloin, chicken or salmon) you prefer for your party by 9 October 2015. We need this for planning purposes. Please help us continue this annual tradition.

There is a lunch and learn meeting scheduled for 21 October 2015 at APT Research. We are very fortunate that Barry Hendrix has agreed to provide a presentation to the membership. Also, at this meeting we are planning on taking a group photo with the Chapter of the Year award. Please attend the meeting as we would like to get a great photo with as many of our members and the award together as possible.

Tentatively our November meeting will be held Wednesday 18 November 2015 at University of Alabama Huntsville (UAH). The University of Alabama in Huntsville (UAH) is part of a team selected to conduct research as part of the new FAA Unmanned Aerial System (UAS) Center of Excellence. Mr. Dave Arterburn is the director of UAH's Rotorcraft Systems Engineering and Simulation Center, which will lead the UAH research efforts from the Center of Excellence. He plans on providing us with information regarding this research.

December 2015 we are planning a Christmas get together at Airport road, Huntsville. Map and time specifics will be distributed once we know there is enough member interest. If you are interested please let Chris Trumble (Christopher.c.trumble.civ@mail.mil) know how many will be attending for planning purposes. It is envisioned this event will be a couple of hours, starting around 1730 hours (5:30 pm). It will be informal with finger foods and no charge to attend. You are asked to bring a food item or beverage for people attending to share.

We are in need of a location for our December, January and March lunch meeting and presenters/topics.

We already have a location and date for the February meeting. It will be 1130-1230 hours, 17 February 2016 at Quantitech in Huntsville. It is our goal to have the monthly meets scheduled with speakers, dates and locations well in advance so everyone can plan to attend. If you have a suitable venue please contact Steve Hosner. We are always looking for topics and presenters for our chapter meetings. If you have topic ideas or a paper to present, contact Steve Hosner, hosnersr_pe@knology.net.

ISSS TVC September 2015 Newsletter (con't)

I believe it is important to be knowledgeable in a wide variety of topics, especially if you are working in system safety. Here are some interesting facts about 3D printing:

- In 1984, Chuck Hull, invented a process called “stereolithography” which used UV lasers to solidify photopolymer that created 3D parts layer by layer.
- Ford is currently using 3D printing to make large selections of its car parts for testing. Ford reportedly saves up to \$493,000 a month with this production method.
- NASA researches are currently planning to bring 3D printing technology to space. The plan is to send robots ahead of astronauts to construct buildings and infrastructure on lunar surfaces.
- The first annual 2015 Advanced Manufacturing Launch Expo, showcasing 3D printing, CNC milling, design, education, incorporation of lasers/optics and/or electronics will be held Wednesday, October 21 2015, 9:00 AM - Fri, October 23 2015, 5:00 PM [CST] at 5 Tranquility Base, Huntsville, AL, United States

Implementing the TVC SSS President's Policy

Items 1 and 2 of the President's policy includes supporting the membership by providing access to timely and effective information to assist them in their profession. In particular, the policy's goal is to find and make available document examples and templates the membership would find useful. Several such documents have been found and will be posted as soon as there has been a short review of them by the chapter membership. The short review will consist of a peer review of the document by the vice-president and two other chapter members. The preparation for the peer review should consist of one to two hours of document review and an hour participating in the peer review. The point of the peer review is to raise issues (e.g. paragraph 3.2 is confusing, paragraph 3.5 does not seem appropriate based on the paragraph title), not fix them. Once the peer review is complete and the issues are resolved, the documents will be posted to the Chapter website. Below is a partial list of documents currently available for peer review and several that can be available in short order. If you would like to help this project or simply receive the full list, contact Steve Hosner at steven.hosner@systemsafetyengineeringllc.com .

ISSS TVC September 2015 Newsletter (con't)

Document Title	Source	Review Status
FHA and Preliminary System Safety Assessment Report for the Advanced Surface Movement, Guidance And Control System (A-SMGCS)	European Commission, DG TREN	Ready For Review
EXPLOSIVES SAFETY MANAGEMENT PROGRAM DEVELOPMENT GUIDE	DAU's Acquisition Community Connection	Ready For Review
SAFETY EVALUATION REPORT TEMPLATE FOR EARLY SITE PERMIT APPLICATIONS	US Nuclear Regulatory Commission	Ready For Review
Programmatic Environment, Safety and Occupational Health Evaluation	DAU's Acquisition Community Connection	Ready For Review
UAV System Safety Assessment Template	Israeli Civil Aviation Authority	Ready For Review
Aircraft Functional Hazard Assessment Task Example	TBD	Not Ready For Review
Aircraft Functional Hazard Assessment One-Time Data Item Description Example	TBD	Not Ready For Review
Aircraft Functional Hazard Assessment Statement of Work Language Example	TBD	Not Ready For Review

Future Cities

The TVC SSS will again support the Future Cities competition this coming January. In the competition's own words: "Future City starts with a question—how can we make the world a better place? To answer it, 6th, 7th, and 8th grade students imagine, research, design, and build cities of the future that showcase their solution to a citywide sustainability issue." We support this competition by providing a small cash prize to the team that has best taken safety into consideration in their city. This year, we will provide the participants with guidance on what we are looking for to demonstrate the safety planned for their cities. There is draft guidance for a Future City Safety Plan and a Future City Safety Assessment Report. Assistance is needed to finalize the guidance so we can provide it to the organization that runs the competition. Expected review time for both documents is one hour. Anyone who would like to help educate middle

ISSS TVC September 2015 Newsletter (con't)

schoolers on safety can do so by reviewing these two-page guidance documents and suggesting improvements. Contact Steve Hosner at Steven.hosner@systemsafetyengineeringllc.com.

To the chapter's membership, thanks for all that you do!