From the Editor's Desk...

JSS Technical Editor C. G. Muniak Ph.D

Prediction and Prevention

One of the luncheon speakers at the 2016 International System Safety Conference was Paul W. Hanley, Deputy Assistant Secretary of the Navy (Safety). Mr. Hanley covered a number of topics, but one of his remarks struck me as particularly memorable: "We should want to get out of the explanation business and into the prediction and prevention business." This is a key goal of system safety and we need all the tools we can get to help with the business

of "prediction and prevention." The first technical paper in this issue of Journal of System Safety, "A Novel Near-Miss Event Model with a Quantitative Assessment Methodology" by David R. Sadler, provides some help in this area.

Our second technical paper, "System Safety in Organizational Safety Decision Making" by Dr. Malcolm Jones, describes an organizational structure that helps to ensure and demonstrate that high standards of safety are clearly in place. This approach uses several integrated layers of scrutiny at an organizational level, ranging from the accumulation of arguments and evidence at the lower levels to final executive decision making.

In his TBD column this month. Charles Hoes continues the discussion of new directions for the ISSS. Charlie proposes "that the ISSS should embark upon a new goal to be the 'source' of all things related to system safety, becoming the place that other industries, governments and organizations turn to for help in implementing the goal of designing safety into the system based upon the specific characteristics of the system or product of concern."

David MacCollum, in his Design-Based Safety column, discusses the potential value of court records of depositions, exhibits and courtroom testimony from liability cases in developing employer awareness of inherent unsafe equipment design.

> In the System Safety in Healthcare column, "Using System Engineering Principles to Decrease Preventable Deaths," Dev Raheja and Dr. Maria C. Escano discuss certain aspects of human error involvement in medical mistakes. They go on to suggest that the application of systems engineering methods may be useful in mitigating these issues.

Rex Gordon recounts some serious difficulties encountered by the Society during the late 1960s in this issue's Notes on History column, "Unsung Heroes of System Safety." He reminds us that, while the Society now faces some present-day issues, this is not the first time we've had to

work through such weighty problems.

I welcome your comments and article submissions. Please email me at cmuniak@stevens.edu.

Regards Chuck

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Have an Opinion?

Sound off on issues regarding your profession, industry, standards and regulations or other system safety topics. Send your 700- to 1,000-word articles to Chuck Muniak, Technical Editor, at journal@system-safety.org.

In Memoriam

Dr. German A. Smirnov



On July 14, 2015, the International System Safety Society lost one of its oldest members — Dr. German A. Smirnov.

Dr. Smirnov was born in Kaliningrad, Russia — a small town near Moscow, now well known as a center of the Russian space industry. In 1960, he earned a master's degree in mechanical

engineering from Moscow State Technical University, and received the position of designer at the All-Russia Research Institute of Automatics (VNIIA) in Moscow. He obtained a Ph.D. at VNIIA in 1972, and a Doctor of Science degree at VNIIA in 1987. In 1997, he became the Chief Designer, and later the First Deputy Director of VNIIA. Since 2002, he was a professor at the Peter the Great Military Academy of the Strategic Missile Forces. During his career, Dr. Smirnov mentored many gifted followers, many of whom are continuing to work on his ideas to this day.

Dr. Smirnov was one of the greatest authorities in the area of design and safety of complex, high-consequence systems. For his great contributions, he was decorated by the Orders of Lenin, Alexander Nevskiy, Honor and for the Merit to the Fatherland, along with

multiple medals and prizes of the U.S.S.R. and Russian Federation.

In the 1990s, Dr. Smirnov played a significant role in cooperation with experts from the U.S., U.K. and France on overseeing the safety of storage and transportation of the U.S.S.R.'s nuclear heritage and emergency response activities.

From 1997 to 2013, Dr. Smirnov participated in the International System Safety Society Conferences (ISSC) with 24 presentations devoted to different aspects of complex, high-consequence system safety, emergency response and risk management. In 2007, he served as a session chair at the 25th ISSS Conference, located in Baltimore, Maryland, and conducted tutorials in 2007 and in 2012. He was named a Senior Member of the Society.

It was a great honor to have someone of Dr. Smirnov's stature supporting the ISSC, and his death is a sad loss to the world of high-consequence safety. Dr. Smirnov became well known at the ISSC because of his contributions, support of the ISSS and for his propensity to engage with the international delegates, including members from the U.S. and U.K. It was customary for German and his Russian Federation associates to host evening party events, which exhibited typical Russian customs and warm friendship. These parties included toasts to enhanced relationships, sealed with traditional vodka. In addition to these activities, he continually welcomed enhanced collaboration between countries working in the field of high consequence safety.

Dr. German A. Smirnov will be remembered as a talented, magnificent professional, a good friend and a modest, intelligent and kind person.

Mark Your Calendar

54th Annual SAFE Symposium

October 31 - November 2, 2016 Davton, Ohio **Dayton Convention Center** www.safeassociation.com/

69th Annual International Air Safety Summit (IASS)

November 14-16, 2016 Dubai, United Arab Emirates flightsafety.org/aviation-safetyseminars

De Lange Conference X -**Humans, Machines and the Future of Work,**

December 5-6, 2016 Houston, Texas Rice University delange.rice.edu/

Safety-Critical Systems Symposium 2017

February 7-9, 2017 Bristol, U.K. **Bristol Royal Marriott Hotel** http://scsc.org.uk/e438

3rd Annual Singapore Aviation Safety Seminar (SASS) 2017

March 28-30, 2017 Singapore Aviation Academy http://flightsafety.org/