



The discussion concerning possible future directions for the ISSS have continued since the 2015 Conference in San Diego, California. This discussion centers around the question of whether, in this time of dwindling membership and financial resources, the ISSS should continue to operate as it has during the past three or four decades, or try something new and bold for the future.

It is my opinion that now is a great time to strive for something new and bold. Since I joined the Society in the 1980s, it has always been my contention that this organization promotes the most important approach to ensuring the safety of systems and products, large and small. The founders and members of the Society have crafted a spectacularly successful approach for the identification and mitigation of potential hazards and risks early during the design and development process where appropriate and cost-effective solutions can be integrated into the overall design under consideration. As I have mentioned on numerous occasions, it is my observation that there is a tendency for industries and organizations to begin to implement system safety principles in standards, requirements and processes — only to eventually change direction back toward their old ways of depending upon compliance to detailed design-based standards. This is done, rather than trusting the analysis-based approach that we have proven effective on literally trillions of dollars of programs spanning from small and relatively simple systems, to the most complex and innovative projects in the world.

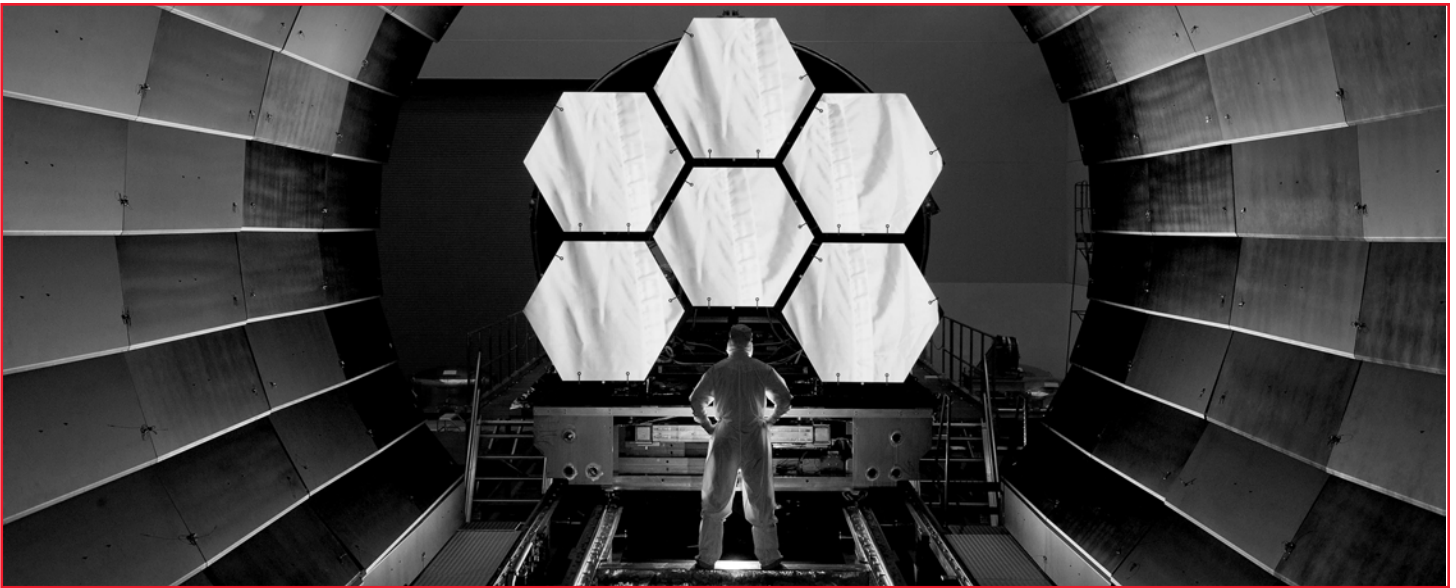
It is my opinion that the ISSS should embark upon a new goal to be the “source” of all things related to system safety. We should aim to become the place where other industries, governments and organizations turn to for help in implementing the design of safety into a system, based on the specific characteristics of that system or product of concern. We should be the trusted arbitrator of ensuring that new standards follow approaches to safety that we have pioneered and developed through more than 60 years of effort and hard-earned lessons learned.

Assuming there is a general consensus for change among our members, and among important organizations

outside of our traditional customer base of DoD/DoE/NASA/aerospace projects, there is a need to carefully consider what the “new” ISSS should be like. What will the new “look and feel” of an invigorated and enhanced Society be like?

A few of us have spent the greater part of the past year attempting to describe a new, more effective Society role in global safety. There seem to be a few elements that all need to be in place in order to make an effective transition from our traditional role of supporting government projects to a much wider and more diversified role of supporting industry in general. This article is my attempt to briefly describe these elements. The list is in no particular order; all of these pieces and parts are necessary for success:

- The ISSS needs a professional staff beyond the dedicated efforts of Cathy Carter to help us stay in business. We need additional full time, paid staff to help develop standards, create training materials, coordinate with other organizations and countries, and generally provide the solid assistance required to achieve our goals. This will require money beyond what we can make through membership dues and conference fees. We need to find a way to increase our balance sheet through things such as the creation and sales of technical materials, increased donations from companies and organizations that benefit from our presence and services, and possibly from grants and other sources.
- We need to create an ISSS System Safety Standard that is detailed and flexible enough to be used as the *source* of industry sector-specific standards. We should develop, maintain and *own* a high-level standard that can be used to judge whether “daughter” standards, such as MIL-STD-882, incorporate appropriate and achievable requirements. Examples of industries or sectors that would find this useful include the military, space agencies, transportation agencies, consumer products and construction



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equipment manufacturers, as well as all of the engineering disciplines.

- We need to ensure that there are adequate and affordable tools to perform required analyses and management activities. This includes a scalable hazard tracking system, guidelines and engineering manuals, and high-quality training at various levels of expertise. While these services and products need to be affordable, if they become known as “the” standard in the field, they will generate income to support most of the additional financial costs identified in the first bullet point.
- We need to assist engineering departments in universities and colleges with integrating system safety principles into their normal curriculum, not as an “extra” thing to be learned, but as an integral and expected aspect of all engineering activities.
- We need to develop one or more highly regarded institute(s) of system safety where individuals who need various levels of expertise can find courses and instructional materials as needed.

All of this sounds rather daunting for an all-volunteer organization, which it is. However, I don’t believe it has to *stay* all volunteers. I think there is an opportunity to

expand our horizons and include much more content — much of it for universal value — if we decide to do it. It is a bit like the *Field of Dreams* mantra — if you build it, they will come. To receive more donations and support from a wide variety of industries, we first need to explain the value we can provide, as well as how much money and time will be required. Without plans, and without goals, we will get nowhere. However, I see a great interest from many sectors of the economy if we can accomplish the changes detailed here. As long as we are happy with what we have, we can continue as we are and hope membership and government support doesn’t continue to dwindle because we are not providing enough value to our “customers.” If, on the other hand, we decide to make some changes and set higher goals that are more appropriate for our profession, I’m confident we can achieve whatever we set out to do.

I am convinced that we have a moral and ethical responsibility to ensure that the knowledge we have gained in our profession is used to incorporate safety into all projects, processes and products. There is interest, but so far we have not been willing, or able, to step up to the challenge. I think that is about to change. I think this because I have first-hand knowledge of a number of initiatives that are requesting and/or demanding our support. I also see a lot of hesitation and false starts in many industrial sectors by people who like the ideas, but don’t know how to implement them effectively. We can help. ●