



President's Message

*International System Safety Society President
Robert Schmedake*

Diversity

I've been wondering what to write for this issue's President's Message, and the *Journal of System Safety* editor has been reminding me to get this done. I finally settled on a topic that encompasses professional development, day-to-day work and the running of the Society. So, how does "diversity" do this?

In professional development, diverse experiences add to the value of the professional. This past fall, I had the opportunity to teach at Washington University in St. Louis, Missouri. I taught two classes: One was system safety engineering and the other was reliability engineering. I've taught the system safety course a number of times, and the material was familiar. My students included international students, engineers working in aerospace and medical equipment, and others. Not working specifically in the system safety field, the students probed topics and asked questions that brought a different perspective to the material. These perspectives force us to re-examine the topic and often cause us to reach new, or more developed, views of system safety.

The reliability course was less familiar to me. I agreed to teach it when the original instructor's health prevented him from doing so. The techniques are quite similar to system safety techniques, but we focus on different aspects of a system. I thought this would be a great opportunity to learn, as well as teach — and I wasn't wrong. Physics of failure, accelerated life testing, root-cause analysis and corrective actions are not topics I spend a lot of time with in my day-to-day job, but they are related. Learning about these topics and others helps me to be more effective in working with the development teams I support.

I've noticed that when I am analyzing a system, diversity within the group that reviews my analysis improves the quality of the final product. For example, when I worked on flight control systems, pilots, maintainers, software developers and system developers all brought important perspectives. The pilot would discuss what a pilot might do, or would never do. The maintainer

would discuss how the system would be worked on and what an unacceptable state for a powered system might look like. The software engineer would discuss how the condition could come about through loss of synchronization, interrupt effects, etc. And the system developer understood the interaction of different systems and how they were supposed to work, or might be expected to fail. We each brought a perspective to the work and, through our communication, we each learned more about the system's behavior than we would have alone.

Right now, we have a professional society that is working its way through a financial crisis. This past year, we turned a risky Conference into a financial success. We did this because we had a good team working the conference. We hired a lawyer to guide us through our contracting issues. We used the free services of a CPA to guide us through the accounting and business issues when checking our accounts payable and our receipts. Our conference chair brought years of management experience to the table, and our technical chair gave us a great program. The point is, we each have skills and perspectives that add to the whole. It is important that we do not focus on one skill set or perspective to the exclusion of others.

During the next six months, we will once again choose officers for the Society (the candidates for each office and instructions for voting begin on page 38 of this issue of *Journal of System Safety*). A diverse set of officers would include retirees and new engineers, along with individuals from different cultures and different business segments. It would include engineers and managers, as well as people who have served before and people who have never served. We need that diversity to avoid the limitations of myopic thinking. When you vote in the upcoming officer elections, be sure to consider diversity.

— *Robert Schmedake*
President