

# From the Editor's Desk...

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## COVID-19

Right now, we continue to observe the government response to a dangerous hazard — the COVID-19 virus. Every aspect of this matter is commented on by an array of self-proclaimed experts. This certainly is an interesting risk analysis and risk management problem. There has been much discussion in the International System Safety Society (ISSS) about model-based systems engineering (MBSE) for the last few years, and this tool would seem to be highly applicable to the COVID-19. An excellent recent article does just that [Ref. 1]. In this article the authors use the number of cases in local hospitals as the key feedback variable in a control system they use to model the COVID-19 situation. One of the scenarios in this study shows how restrictions could be eased while keeping caseloads within the capacity of the healthcare system. I welcome articles on this important subject from readers of *Journal of System Safety*.

The first technical paper in this issue, “Applying Safety Concepts and Principles in Vital Controller Design” by Dr. Fenggang Shi, provides an approach to using a set of safety concepts as guidance for both safety-critical controller design and its safety integrity assessment.

### References

1. Stewart G., K. Van Heusden and G. A. Dumont. “How Control Theory Can Help Us Control COVID-19,” *IEEE Spectrum*, June 2020.

The second technical paper, “Sex, Health and Australia’s Artarmon Triangle” by Dr. Denis Boulais, details a study that tested a hypothesis that telecommunications riggers who have worked on any of the three Artarmon Triangle towers in Sydney, Australia would have an increased frequency of female offspring by comparing their rates with those of telecommunications riggers who have not worked in the Triangle.

The third technical paper, “Lessons Learned in a Complex Software Safety Program” by Nathaniel Ozarin, describes some lessons learned through the experience of developing a complex and intrinsically hazardous software-controlled system.

The “TBD” column by Charlie Hoes discusses some implications of the pandemic on the ISSS and our Conference, while the System Safety in Healthcare column by Dev Raheja discusses the risk aspects of laparoscopic surgeries.

As usual, I welcome your comments, letters to the editor and article submissions.

Regards,  
Chuck

## In Memoriam: James Bussert

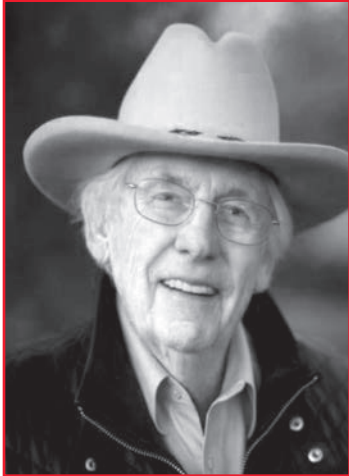


James Charles Bussert, born June 22, 1936, died on February 22, 2020. Jim was a unique individual and those who knew him are left with an abundance of stories by which to remember him.

Jim Bussert served in the United States Navy and retired as a Master Chief Sonarman. He worked for many years as the deputy Principal for Safety on a variety of anti-submarine warfare programs.

Jim was a prolific author, producing both articles for respected publications in the field of safety and as well as books; he also enjoyed drawing cartoons. Jim is perhaps best remembered in his field for his book *People's Liberation Army Navy Combat Systems Technology, 1949 – 2010* which examined Chinese naval combat systems technology. ●

# In Memoriam: David MacCollum



David Victor MacCollum of Phoenix, Arizona, passed from this life to join his wonderful wife, companion, champion and best friend, Nancy, on January 28, 2020. He was 96 years old.

David is survived by his three children, Sandy Dosh (Richard), Judy MacCollum and Bill MacCollum (Paquita Parks); his granddaughter, Brittney Underwood and her children, Heaven and Mehki,

and his niece Ashleen Law (Jim). Dave was preceded in death by his grandson, Angelo Toliver.

Dave was born in Portland, Oregon on June 10, 1923 to Victor and Jane White. At the age 17, after the attack on Pearl Harbor, Dave enlisted in the Navy and shipped out to the Marshall Islands in the U.S. Naval Construction Battalion, better known as the Navy Seabees. Dave was a proud World War II U.S. Navy veteran. After the war, he attended Oregon State College (now University) on the G.I. Bill, graduating in 1951 with a Bachelor of Science in Business and Technology – Business Administration. While in college, Dave worked at logging camps in Oregon which, at the time, was dangerous work with numerous monthly injuries and fatalities to the loggers. Such incidents had an impact on Dave and he was always trying to figure out how to change things so that the workplace would be safer. This is where Dave began his passion and, ultimately, his legacy for being a safety advocate for all workers.

In the early 1950s, as a member of the U.S. Corp of Engineers, he was instrumental in bringing rollover protection to tractors and other vehicles as standard equipment. He was successful in instituting back-up alarms for trucks and other industrial vehicles, powerline alarms to alert operators of boomed equipment when overhead power lines were present (to prevent electrocution) and many other safety features that have allowed construction workplaces and those who work in these environments to be much safer.

He moved his family from Tacoma, Washington to Sierra Vista, Arizona in 1963 and settled into the beloved home he designed and built in 1965. After living there for 50 years, Dave considered himself a Sierra Vista native. During this period, Dave was the safety director for the Army Electronic Proving Ground (USAPEG) at Fort Huachuca. With a strong desire to make a contribution in

construction safety, he left his Fort Huachuca job and went into business for himself as a Certified Safety Professional and professional engineer. His private business enabled him to ultimately become a well known and respected expert trial witness, testifying against heavy equipment companies that did not include safety features as standard equipment. During this time, Dave became a representative for Bernold Steel Company of Switzerland, which built tunnels throughout that country. Dave wanted to bring Swiss tunneling safety technology to the United States.

Dave also created the Hazard Information Foundation, Inc. (HiFi), established as a resource center for trial attorneys across the United States. HiFi provided information and opinions on many subjects related to unsafe practices.

Dave was a member of many safety organizations throughout his career, including president of the American Society of Safety Engineers (ASSE) (1975 – 1976), president of ASSE for the state of Arizona, fellow for ASSE, National Safety Council for Professional Engineers (NSPE), and board member for Sulphur Springs Valley Electrical Cooperative, along with many other organization memberships. He was a member of a U.S. President's safety committee in Washington, D.C., and continued helping those who were injured and the families of those who were killed in heavy equipment workplace disasters throughout his career. He became a fearless champion for all working men and women.

Dave authored several safety professional training books, and long after he retired, he became a blogger, wrote for professional journals and authored two fiction books based on safety practices. Dave was a frequent contributor to *Journal of System Safety*. His articles will be greatly missed by the members of the ISSS.

Married for 64 years to the “love of his life” Nancy, they were avid travelers, sometimes to destinations that had just opened to tourists from the United States, including China and Russia. Dave was a family man at heart and a fun Dad, known for all his teasing! As a family, there was always hiking, camping, spelunking, “rock picking” and memorable family vacations throughout the United States, Canada, Mexico and Europe. Dave was an accomplished parent and among his family's best memories are meals at home in the dining room, by the fireplace, with Dave surrounded by all who loved him in the house he so loved.

Donations may be made in David's memory at [www.assp.org/donate](http://www.assp.org/donate). Donors should add “David MacCollum Memorial” to the line that indicates if this gift is in memory of someone. Gifts noted as such will be credited to the support of the David V. MacCollum Visionary Scholarship Fund. ●