



Vol. 47, No. 6 • November-December 2011

Outside the Lines

"The ISSS at Half a Century"

Download printable PDF of this page



by Ira J. Rimson and Ludwig Benner, Jr.



Page: [1](#) | [2](#) | [3](#) | [4](#)

Where does the International System Safety Society stand today, and what is its future? As the ISSS approaches its 50th anniversary, we think it appropriate and useful to explore the Society's future service to its members and their professional needs. If members support this initiative, we'll try to prepare a system safety analysis (SSA) of the Society in next year's columns. We'll need your inputs, including your expectations of the Society and how well its activities fulfill your professional needs. We'll use your feedback to address questions like:

- Are the Society's activities valuable enough to keep old members and attract new ones?
- What risks might jeopardize its membership maintenance and growth?
- What can it do to reduce those risks and improve its value to its members?

Our goal is to stimulate constructive critiques of the Society's current "system state," with the objective of improving its value to its members, to potential members, and to their clients.

QUO VADIS, ISSS?

In the early 1960s, managers, scientists and engineers implemented a new approach to dealing with safety risks that could threaten the success of the U.S. Air Force's ICBM and NASA's major aerospace programs, which were more complex than any systems designed previously. In 1963, Roger Lockwood and others who shared a common investment in the potential for the new system safety process founded a new organization to support their long-range visions for more widespread system safety application. They called their new organization the Aerospace System Safety Society.

We know how far system safety and its professional practices have come in the Society's first 50 years. But what about the future? Can the ISSS meet the safety demands of all the systems whose complexities continue to multiply throughout our technological world? Will continuing the Society's current activities fulfill the future professional needs of its membership? How can the Society support the needs of the profession and its members' goal of hazard and risk reduction?

[next page »](#)

- President's Message
- From the Executive Vice President
- From the Editor's Desk
- Outside the Lines
- In the Spotlight:
 - The Use of Safety Cases in Certification and Regulation
 - Safety Implications of Software in Safety-Critical Devices
- System Safety in Healthcare
 - Swiss Cheese Model for Investigating the Causes of Adverse Events
- Announcements
- Gains from Losses:
 - Facts, Fiction and Public Perception
- Book Review:
 - Murder by Electrocutation, by David MacCollum
- Unintended Consequences:
 - TWA Flight 800 Accident
- Opinion (MacCollum)
- Upcoming Conferences/Calls for Papers
- Chapter News
- Mark Your Calendar
- About this Journal
- Advertising in eJSS
- Contact Us
- Puzzle

30 Years of System Safety Leadership

ALD

SAFETY SERVICE FOR MISSION & PRODUCT ASSURANCE

SAFETY SOFTWARE FOR HIGHLY INTEGRATED SYSTEMS

SAFETY TRAINING FOR PROFESSIONALS

ALD Software

RAM Commander
Ultimate Tool for Safety Assessment

FavoWeb
World Standard in FRACAS

D-LCC
Dynamic Cost Control

Contact Us Today for Free Web DEMO or Evaluation:
USA Office: 5721 W Slauson Ave., Suite 140, Culver City, CA 90230
Tel: 1-310-338-0990
Fax: 1-310-338-0999
www.aldservice.com



Journal of
System
Safety

eEdition

A publication of the System Safety Society

Home
Subscriptions & Memberships
Contact
About eJSS
System Safety Society

Vol. 47, No. 6 • November-December 2011

"The ISSS at Half a Century"

Outside the Lines

The Professionals' Choice

Integrated Software for
Safety, Reliability
Availability, Maintainability

Fault/Event Tree Analysis
Prediction
FMECA/FMEA
Reliability Block Diagrams
Markov Analysis
FRACAS
Hazop
Availability Simulation
RCM
Life Cycle Costing
Network Availability
Weibull
Attack Tree/Threat Analysis

Contact us today for a free trial CD and discover how isograph can help you.

Call
949 798 6114
or e-mail
sales@isograph.com

by Ira J. Rimson and Ludwig Benner, Jr.

Page: [1](#) | [2](#) | [3](#) | [4](#)

To our knowledge, the ISSS has never subjected itself to an analysis similar to those its members apply to the hazards and risks of others. What if we were to view the Society itself as a "system," and subject it to analysis? Could this analysis disclose hazards and risks that might adversely affect the Society's future? With the cooperation of the Society's management and membership, we propose to subject it to a system safety analysis.

First, we will attempt to define the Society as a system by using information posted on its Website. After that, we'll add data from inputs we get from both management and the members. After defining the "ISSS system," we'll try to identify and define both internal and external hazards and their resultant risks, using system safety hazard analysis tools and members' evaluations of current operations. In analyzing the Society's hazards and risks, we hope to be able to suggest actions that it could take to subdue those risks and increase its value in fulfilling member needs.

ISSS System's Objectives

At the outset, the Society's objectives must be robustly defined to be used as metrics against which to measure its accomplishments. We have begun by collecting information from the Society's Website¹, where its objectives are reported, or can be inferred:

- Advancing the state of the art of system safety
- Contributing to a meaningful managerial and technological understanding of system safety
- Disseminating newly developed system safety knowledge to all interested groups and parties
- Improving the public understanding of the system safety process and discipline
- Promoting system safety to all levels of management, engineering and other professional groups
- Fostering communication within the system safety profession, and with other scientific, legal, public and professional groups
- Encouraging research into the development and application of new safety management, scientific or engineering techniques
- Encouraging system safety professional development and education

« [previous page](#) [next page](#) »

¹ <http://www.system-safety.org/about/>

President's Message

From the Executive Vice President

From the Editor's Desk

Outside the Lines

In the Spotlight:

The Use of Safety Cases in Certification and Regulation

Safety Implications of Software in Safety-Critical Devices

System Safety in Healthcare

Swiss Cheese Model for Investigating the Causes of Adverse Events

Announcements

Gains from Losses:

Facts, Fiction and Public Perception

Book Review:

Murder by Electrocutation, by David MacCollum

Unintended Consequences:

TWA Flight 800 Accident

Opinion (MacCollum)

Upcoming Conferences/Calls for Papers

Chapter News

Mark Your Calendar

About this Journal

Advertising in eJSS


Contact Us

Puzzle

Journal of System Safety
eEdition

A publication of the System Safety Society

Home
Subscriptions & Memberships
Contact
About eJSS
System Safety Society

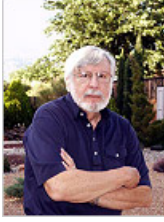



President's Message
From the Executive Vice President
From the Editor's Desk
Outside the Lines
In the Spotlight:
The Use of Safety Cases in Certification and Regulation
Safety Implications of Software in Safety-Critical Devices
System Safety in Healthcare
Swiss Cheese Model for Investigating the Causes of Adverse Events
Announcements
Gains from Losses:
Facts, Fiction and Public Perception
Book Review:
Murder by Electrocutation, by David MacCollum
Unintended Consequences:
TWA Flight 800 Accident
Opinion (MacCollum)
Upcoming Conferences/Calls for Papers
Chapter News
Mark Your Calendar
About this Journal
Advertising in eJSS
Contact Us
Puzzle

Vol. 47, No. 6 • November-December 2011

Outside the Lines

"The ISSS at Half a Century"

by Ira J. Rimson and Ludwig Benner, Jr.

Page: [1](#) | [2](#) | [3](#) | [4](#)

ISSS System Components

The ISSS system's components are Society-sponsored functions and activities by which it achieves its objectives, identified on its Website as:

1. Organizational management and administration, including administrative forms, records and reports
2. Chapter meetings
3. Annual conferences
4. Bi-monthly *Journal of System Safety*
5. Online technical resources
6. Providing system safety professional points of view to entities outside of the Society
7. The ISSS Bulletin Board
8. Online employment opportunity listings
9. The Tech Fellows' Corner

These components generate outputs that benefit the membership. To analyze the system processes that produce these outputs, we need to decompose them:

1. **Organizational management and administration, including administrative forms, records and reports:**
The Society's organizational management and administration should achieve orderly operations, organizational sustainability and satisfaction of its legal responsibilities. These processes include selecting personnel who manage the Society and its activities, providing funding and staffing resources for the Society's operations, and establishing and evaluating its goals and professional policies.
2. **Chapter meetings:**
Members' professional development results principally from personal interactions and knowledge shared at meetings of local chapters.
3. **Annual conferences:**
Annual conferences are forums at which papers examining new and innovative progress in system safety are presented and discussed among attendees, contributing to members' professional development.
4. **Bi-monthly *Journal of System Safety*:**
The print and online *Journal of System Safety* adds to the professional development of members with discussions of provocative and useful system safety information and applications to a wide audience.
5. **Online technical resources:**
Online technical resources for members include system safety-related government documents, links to relevant Websites, papers from historic conferences and articles from the *Journal of System Safety*.
6. **Providing professional position inputs to other entities:**


System Safety Engineering Summer Class


Instructor:
Dr. Nancy Leveson

Date:
June 18 – 22, 2012

Location:
Seattle, Washington

For more information, please go to:
<http://sunnyday.mit.edu/announce12.html>





The ISSS has contributed to rulemaking proceedings, and is represented on the Board of Certified Safety Professionals.

7. **ISSS Bulletin Board:**

The ISSS Website contains a bulletin board accessible to members.

8. **Online employment opportunities:**

Members may submit and access posting of job openings on the Website.

9. **The Tech Fellows' Corner:**

Fellow members can share their knowledge and experience by posting articles or white papers, or engaging in dialogue in this section of the Website.

[« previous page](#) [next page »](#)

² <http://www.system-safety.org/jss/>

³ <http://www.system-safety.org/> — under "Products and Resources"

⁴ <http://www.system-safety.org/techfellows/>





Vol. 47, No. 6 • November-December 2011

Outside the Lines

"The ISSS at Half a Century"



by Ira J. Rimson and Ludwig Benner, Jr.



Page: [1](#) | [2](#) | [3](#) | [4](#)

What Next?

To help the ISSS meet future challenges and flourish as it moves into its next 50 years, we need to hear members' thoughts about our Society:

- What did you expect of the Society when you joined?
- How well have those expectations been met?
- How has it helped you meet your professional needs?
- What do you expect your membership in the "ISSS system" to provide to you in the future?
- What ISSS system goals and components do we need to change or add to make it ready for a system safety analysis?

We'll use your feedback to improve the accuracy of the Society's model and report it in our next column. Please send your feedback to us at journal@system-safety.org by January 31, 2012.

Copyright © 2011 by Ira J. Rimson and Ludwig Benner, Jr. All rights reserved.

[« previous page](#)

- President's Message
- From the Executive Vice President
- From the Editor's Desk
- Outside the Lines
- In the Spotlight:
 - The Use of Safety Cases in Certification and Regulation
 - Safety Implications of Software in Safety-Critical Devices
- System Safety in Healthcare
 - Swiss Cheese Model for Investigating the Causes of Adverse Events
- Announcements
- Gains from Losses:
 - Facts, Fiction and Public Perception
- Book Review:
 - Murder by Electrocution, by David MacCollum
- Unintended Consequences:
 - TWA Flight 800 Accident
- Opinion (MacCollum)
- Upcoming Conferences/Calls for Papers
- Chapter News
- Mark Your Calendar
- About this Journal
- Advertising in eJSS
- Contact Us
- Puzzle

eJSS Archive is

for business!

Each issue of the eJSS is available at www.system-safety.org/jss/ejss.php

