

The Integrator

INCOSE North Star Chapter



Volume 3, Issue 3

June 2007

North Star Newsletter

INCOSE North Star Newsletter Communication

This year's newsletter features a series of articles on INCOSE Working Groups. June's article is on Resilient Systems.

Eileen Arnold, Editor BAE Systems

"Engineering is a great profession. There is the satisfaction of watching a figment of the imagination emerge through the aid of science to a plan on paper. Then it moves to realization in stone or metal or energy. Then it brings homes to men or women. Then it elevates the standard of living and adds to the comforts of life. This is the engineer's high privilege."

Herbert Hoover (1874 - 1964)

Systems Engineering at its Best!
INCOSE's Resilient Systems WG

The purpose of the Resilient Systems Working Group is to use systems engineering principles to enhance the resilience of systems to reduce the likelihood of and to recover from disasters. Resilience is the ability of organizational, hardware and software systems to mitigate the severity and likelihood of failures or losses, to adapt to changing conditions, and to respond

Continued on page 2

Chapter President's Corner

Elliot Abrons, BAE Systems

It is an evolving goal of the North Star chapter of INCOSE to identify opportunities where the chapter, its members, and colleagues can serve the community both at the local and global level. In this year's issues of the Integrator, we are identifying opportunities for members to participate in Working Groups with INCOSE's global community of Systems Engineers.

At the local level, our chapter, along with local chapters of AFE, ASCE, ASQ, ASME, ECM, ESSP, HEC, IEEE, ISA, MGS, MSPE, SAME, SME, and SWE, is a member of the Minnesota Federation of Engineering, Science, and Technology Societies (MFESTS). MFESTS (www.MFESTS.org) "proactively promotes the participation of professional individuals in endeavors that will better prepare the youth of our society for future careers in the engineering and science fields." Two such activities are "Future City Competition, Minnesota" and "MATHCOUNTS, Minnesota." As details and dates for involvement in these activities become available, we will provide the information to you.

We also distribute notices of other opportunities such as our recent notice that addresses the Society of Women Engineers' (SWE) new program, "WOW! That's Engineering," and the Science Technology Engineering Preview Summer's (STEPS) Engineering Camp. If you have suggestions for suitable events for Chapter involvement, feel free to forward your ideas to me (elliott.abrons@incose.org) and I'll present them to the Leadership Committee for consideration.

North Star Chapter Website

<http://www.incose.org/northstar>

Please join us for the
The Seventeenth International Symposium of the

INTERNATIONAL COUNCIL ON SYSTEMS
ENGINEERING

June 24-28

Town and Country Resort
San Diego, California, USA

appropriately after the fact. The study of system resilience includes the creation of a robust infrastructure that designs, builds, tests, maintains, and operates the system. The scope is larger than design, reliability, human factors or system safety. It is an infrastructure wide topic to include customers, developers, suppliers, and all other stakeholders. System resilience has a large interest in cultural, sociological and psychological causes of human-made disasters. Hence, it is truly multidisciplinary. Complexity and adaptability figure heavily in resilience. The Resilient Systems Working Group is a part of the INCOSE Public Interest Sector.

The Resilient Systems Working Group (WG) is a node in the international Resilience Engineering Network. The URL for the Resilience Engineering Network is: www.resilience-engineering.org. The Proceedings for the Second Symposium on Resilience Engineering in November of 2006 in Juan-les-Pins, France can be found on this site. The group also has a relationship with the Robust Systems Working Group of the Association Française d'Ingénierie Système (AFIS), the French equivalent of INCOSE. The book *Resilience Engineering: Concepts and Precepts* can be ordered from Ashgate Publishing Limited from the following site: www.ashgate.com. Another web site that may be of interest is the System Safety Society (<http://www.system-safety.org/>).

The first WG project is a Resilience Lexicon. The project leader is Rick Dove. This project will capture the unique words and definitions associated with resilience. The second WG project is an Expanded Resilience Bibliography. The Project Leader is Duarte Gonçalves. This project will document the many articles and books associated with resilience. It will also provide a short paragraph describing the content and value of each article or book. A future project is a Resilience Report. The project Leader is Scott Jackson. The purpose of this project will be to develop a report on resilience that will be understandable by the public and political decision makers. This is a long term project and will follow the completion of the Lexicon and the Expanded Bibliography.

There will be many activities in San Diego at the International Symposium in June relative to resilience. There will be one paper, and two panels. One of the panels is on the cultural aspects of risk; the other panel has to do with resilience to terrorist attacks. The Resilient Systems WG will be meeting twice, once on Monday and on Thursday. Check the symposium program for details.

Chair: Scott Jackson, jackessone@cox.net
Co-chair: Rick Dove: dove@parshift.com
<http://www.incose.org/practice/techactivities/wg/rswg/>

WELCOME, NORTH STAR NEW MEMBERS!

Name	Company	Title
Hamid Ahrar	Goodrich	Principal SE
Craig Carlson	3M Company	SE Specialist
Hector Delgadillo Thome	UnitedHealth Group	Tech Lead
Amy Erickson	Boston Sci.	Principal SW Eng.
Mark Feitel	Unavailable	Unavailable
John Hoffman	LMCO	Senior Staff SE
David Kaminski	LMCO	SR Staff Eng
Marc Loos	Boston Sci.	Principal Eng
Grant Madison	LMCO	SE
Carrie McCollor	BAE Systems	Project Manager
Kathleen Radke	ATK	Dir. Mission Assr
James Swenson	Goodrich	Principal SE
Lane Vaught	LMCO	SE

2007 Meeting Calendar

14 June	SoS Complexity	GD-AIS
24 June	INCOSE International Symposium	San Diego, CA
12 July	Brewery Tour and Social	Great Waters Brewery
9 August	Standards - Symposium Debrief	LMCO
12 September	Electric Machinery Tour	EM
11 October	SE Certification	ATK
8 November	IEEE Joint Meeting	Habitat for Humanity
13 December	Member Holiday Party + Guest	