

The Integrator

INCOSE North Star Chapter



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North Star Newsletter

INCOSE North Star Newsletter Communication

Call for 2007 articles for *The Integrator*. North Star is seeking volunteers to provide 4 short (half to three quarters of a page) articles on Systems Engineering for 2007. In Particular, we are seeking a company to sponsor a year long theme associated with, for example, Medical Devices, Defense, or Environmental. Please contact Eileen.Arnold@incose.org if you wish to contribute articles every two months throughout the calendar year.

Added this year, a Brain Teaser to help keep any memory loss to a minimum!

Eileen Arnold, Editor BAE Systems

“The ideal engineer is a composite ... (S)he is not a scientist, (s)he is not a mathematician, (s)he is not a sociologist or a writer; but (s)he may use the knowledge and techniques of any or all of these disciplines in solving engineering problems.

[N. W. Dougherty](#)

Systems Engineering at its Best!

Having recently attended the INCOSE International Workshop in Albuquerque, NM with at least four other North Star members, Toni Gurvin, Paul Maggitti, Dave Walden, and John Palmer, it seems fitting to recap a sample of the Working Group progress in case you are interested in joining and helping to advance the practice of one of the many Systems Engineering topics being addressed by INCOSE.

A Multitude of Architecture Standards Activities

- ISO:TC184/SC5/WG1 (Four Enterprise Architecture Standards) JTC1/SC7/WG42 (based on IEEE 1471, ISO 15288, 12207, etc.)
- Governments:US: DODAF, FEAF, CADM, etc.
- Europe: MODAF, etc.

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Chapter Presidents Corner

At the international level, a membership in the International Council on Systems Engineering (INCOSE) provides the opportunity for systems engineers to expand their view of the engineering of complex systems and their knowledge of the many aspects of the practice. Project managers, software and hardware engineers and product developers are learning how to use the systems engineering process and apply it to their industries. INCOSE provides its members a global perspective of their job responsibilities. Through INCOSE, systems engineers can learn how the application of systems engineering techniques are used to improve their job performance and their organization's well being.

At the local North Star Chapter level, we are striving to provide opportunities for Systems Engineers to meet with their twin city counterparts and learn how systems engineering is practiced across the various commercial and military oriented companies in the area. For example in January we had a meeting at Eaton Hydraulics where we were briefed on their application of systems engineering, followed by a tour of their test lab. In February, we had a meeting at Goodrich where we were briefed by NVE Corporation on the principles and practical applications of spintronics technology, our first introduction to nanotechnology.

Refer to our North Star Chapter of INCOSE home page at <http://www.incose.org/northstar/> where you can find information on the schedule for the entire year, copies of past presentations (when they are made available to us), a link to the INCOSE job page, and occasional notices of job openings posted by INCOSE members.

If you have any questions or suggestions for making INCOSE more valuable to our members, please contact me at elliott.abrons@incose.org.

Elliot Abrons BAE Systems

North Star Chapter Website

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

- Others: OMG (SysML, UML, ArchSC), TOGAF, etc.

International Standards Under Development:

- System Life Cycle Processes, ISO/IEC 15288 JTC1/SC7/WG7 currently in final review draft, planned release in 2002
- Capability Evaluation, ISO/IEC 15504 (SPICE) JTC1/SC7/WG10 currently a "Technical Report" Full Standard planned for 2002 or later
- SE Data Exchange, ISO 10303-AP233 TC184/SC4/WG3/T8 currently in working draft form, planned release in 2002

Measurement

- COSYSMO User Manual v1.1

Model Driven System Design

- SE is on the cusp of transitioning to MBSE
- MBSE Workshop validated MBSE vision as it is in the draft version 2.0 SE Vision
- MBSE Workshop Artifacts Posted on INCOSE Connect
 - Abstracts, Presentations, Brainstorm, and Roadmap
<https://connect.incose.org/tb/MnT/mbseworkshop>

Other Working Groups currently recruiting new members:

REGAL (Requirements Engineering Guide for All)

SE in the Commercial World

Commercial Air Transportation

Intelligent Transit

Transportation Systems

Anti-Terrorism International

Global Earth Observation System of Systems (GEOSS)

Resilient Systems

Cost Engineering

Architecture

Human Systems Integration

Space Systems

Specialty Engineering

System Safety

System Security

Systems Science

Emerging Technology

SE Handbook

Process Improvement & Evaluation

Lean SE

Tools Integration and Interoperability

Verification and Validation

For more detail on the Working Groups above, go to:

<https://www.incose.org/membersOnly/memberInfo/addEditMemberInterests.cfm>

WELCOME NORTH STAR NEW MEMBERS!

Name	Title	Company
Paul Close	Principal SE	Medtronic Inc
Michael Fairman	SE	BAE Systems
Alan Smythe	Director	Boston Scientific
Robert Montague	Sr Senior SE	Boston Scientific CRM
Andy Mobley	SE	3M
Gregory Miller	Principal Dev. Engineer	Honeywell International Inc.
James Mullaney	Program Manager	General Dynamics
Dana Kromer	Senior Manager	General Dynamics

Brain Basher Beginnings

Here is a snippet of the entrance exam into the exclusive Brain Bashers Beginnings puzzle club:

Q1. The answer to question 2 is:

- A) B
- B) C
- C) A

Q2. The first question with B) as the correct answer is:

- A) Q3
- B) Q1
- C) Q2

Q3. The only answer not used so far is:

- A) A
- B) B
- C) C

Copyright: <http://www.brainbashers.com/showpuzzles.asp?puzzle=ZOFW>

Answer below.

2007 NORTH STAR MEETING CALENDAR

Date	Topic/Theme	Location
15 March	Moore's Law	U of Minnesota
12 April	Risk Management	GD-AIS
10 May	Symposium Papers	U of St. Thomas
27 June	INCOSE International Symposium	San Diego, CA
12 July	Brewery Tour and Social	Summit

Answer to puzzle: 1. C), 2. A), 3. B)