

Email not displaying correctly? [View it in your browser.](#)



# Chesapeake Chapter INCOSE

International Council on Systems Engineering

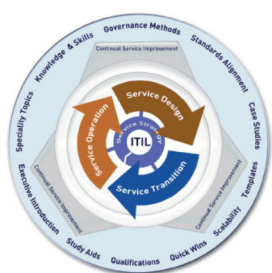
Print Issue  
Forward to a Friend  
Go to Back Issues

Vol. 1 Issue  
7

## July 2010 E-Newsletter

### Dinner Meeting - Wednesday 21 July 2010 Experiences and Lessons Learned on the Quality Service Management Initiative

Carl W. Deputy, Northrop Grumman



**Presentation:** How an IT organization manages its resources and capabilities to deliver valuable IT Services is best described as IT Service Management, and the most complete public framework is the international de facto standard called ITIL®. ITIL® describes a Service Lifecycle, beginning with a sound Service Strategy, followed by

Service Design, Transition, and Operations, all kept up to date through a Continual Service Improvement phase. But businesses adopting ITIL® are often unprepared for the cultural change required for enjoying the benefits of ITIL®. Without facing the organization's culture, identifying the roadblocks, and setting in place long term corrective actions, no business transformations are successful. This brief overview of ITIL® and organizational culture attempts to show the ITIL® lifecycle at a very high level, followed by a discussion on proven techniques for achieving cultural change.



**Speaker:** Carl Deputy is the Principal IT Service Management Consultant at TASC in Annapolis Junction, MD, and is the personal and full time ITSM and Organizational consultant for the Director of Enterprise IT Services for a large "Tech-heavy" government agency. He is certified at all levels of ITIL® (V2 and V3), ISO/IEC 20000, is a Collegiate level Master Instructor of Leadership Education, an ITIL® instructor, and has led large-scale organizational business transformations for the Department of the Navy, and the Defense Information Systems Agency.

**Meal:** Summer Cookout indoors - Grilled BBQ chicken - drumsticks thighs and breasts grilled and brushed with a nice BBQ sauce; roasted red potato wedges; cole slaw and watermelon slices, with

### July 2010

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

### In this Issue

- Next Dinner Meeting
- [Announcement: Systems Engineer of the Year - 2010](#)
- [Get to know...Our Our Membership Committee Director: Ms. Bhanumati Sunkara](#)
- [Last Month's Meeting](#)
- [Feature Article#1: Getting on the Step](#)
- [Feature Article#2: Emergence: The Mystery of Systems Engineering](#)
- [A Word from our President](#)
- [New Members for 2010](#)

This is the monthly newsletter for INCOSE Chesapeake, a local chapter of INCOSE International. We are a not-for-

garden salad dressing, rolls and butter, dessert, coffee and iced tea.

**Reservations:**

• **By website:** Credit card via PayPal, go to our [>>Registration Page<<](#) or

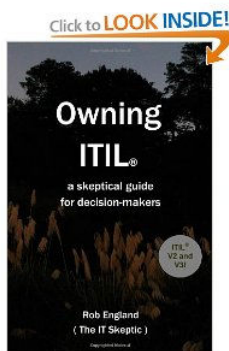
• **By email:** Contact Don York at [donald.york@tasc.com](mailto:donald.york@tasc.com)  
 For details on the presentation, more about the speaker, cost details, cancellations, and directions

>> [please download this month's flyer HERE](#) <<

**Presentation ONLY: FREE (no reservations necessary)**

The purpose of the Chesapeake Chapter is to foster the definition, understanding, and practice of world class systems engineering in industry, academia, and government. In light of that goal, every month at our dinner meeting we have a drawing for the latest in Systems Engineering literature. So come on out for a chance to win.

**This month's door prize is:**  
**Owning ITIL®: A Skeptical Guide For Decision-Makers**  
*by Rob England*



**Announcement:**  
**Systems Engineer of the Year - 2010**



INCOSE has long encouraged formal programs for training systems engineers and professional activities for honing systems engineering skills. The INCOSE Chesapeake Chapter Systems Engineer of the Year (SEY) award complements these existing programs by providing more complete

recognition of the efforts required to function as a systems engineer. The goals of this award are to:

1. Recognize exceptional achievement in systems engineering practice and/or academics achievement;
2. Clarify and incentivize the systems engineering profession;
3. Improve sharing of good and best practices among systems engineers; and
4. Encourage investment in the next generation of systems engineers.

profit organization dedicated to providing a forum for professionals practicing the art and science of Systems Engineering in the Northern & Central Maryland & Southern Pennsylvania area.



**20th Annual INCOSE International Symposium**



**Date:** 12 - 15 July 2010  
**Where:** Chicago, IL

Highlights of the 2010 INCOSE International Symposium are:

**Technical Program and Professional Development**

- 4 Industry-acclaimed keynote speakers
- 96 Technical papers/presentations
- 8 Panels 17 Tutorials - at no additional fee!
- 38 INCOSE working group meetings
- 2 Offsite technical tours
- Academic Forum

The award is administered by the Board of the Chesapeake Chapter of INCOSE with the Past SEY winners selecting the candidate from those applications received by the due date. The award recognizes performance during the previous three-years and is to be presented at the Chesapeake Chapter Holiday Awards banquet. This award is a certificate outlining the winner's achievements, a plaque, and complimentary monthly chapter meeting dinners for the next year.

All members of the Chesapeake Chapter of INCOSE are eligible for SEY award consideration. The evaluation is based on three key factors:

- **Project impact (40%):** Major contributions to successful execution of complex and difficult projects;
- **Outreach (30%):** Helping others to enhance their system engineering skills through leadership, instruction, or publication; and
- **Professional Service (30%):** Helping to build and grow professional and standards organizations both inside and outside your company by giving service to INCOSE.

Go to the [SEY webpage](#) to make a nomination. Self-nominations will be accepted as well.

Application packages should be submitted no later than Oct 1st 2010. Copies of the application package will be posted on our [SEY webpage](#) along with instructions on how to submit the application.

#### Calendar of Dates

- 09/15/2010 - Nominations Due
- 10/01/2010 - Application Packages Due
- 10/13/2010 - Proposed Candidate presented to BOD
- Holiday Dinner - SEY Winner Announced

#### Get to Know ...

### Our Membership Committee Director: Ms. Bhanumati Sunkara



Bhanumati Sunkara holds bachelor degree in Electrical and Communication Engineering from Government College of Engineering, Kakinada, India. Other educational background includes graduate level courses in Computer Science from Johns Hopkins University and various other engineering courses within

- Youth Engineering Education Outreach Program
- Awards

Don't miss this great opportunity

[Click here for more information](#)

#### Mark your Calendars:

**Date:** 16 August 2010  
**Presentation:** *Architecture Design, Simulation and Visualization Using SysML*  
**Speaker:** Gundars Osvalds

[>>download Aug flyer HERE<<](#)

**Date:** 15 September 2010  
**Presentation:** *Cybersecurity - Just Another 'Y2K'?*  
**Speaker:** J.O. McFalls; Point One

**Date:** 20 October 2010  
**Presentation:** *Human Systems Integration*  
**Speaker:** John Winters, CHFP; Basic Commerce and Industries, Inc.

**Date:** 17 November 2010  
**Presentation:** *Panel: Cyber-Security*  
**Speaker:** Various

The Chesapeake Chapter is always looking for volunteers to speak at our upcoming meetings! Please contact our Programs Director, [Mr. Donald York](#), if you would like the opportunity to speak or can recommend someone.

Westinghouse/NGC. She worked at Westing house/Northrop Grumman Corporation, Electronic Systems for 33 years in Systems Engineering and Software Quality Engineering. Systems Engineering experience is in Requirements Management, Radar Flight Data Analysis and Integration and Test activities. Mission Assurance experience includes Software Quality audits, engineering tool certifications, customer interface for Radar system sell off efforts, test software and test data evaluation. Received customer recognition award for supporting the customer in various efforts.

- IEEE Member - From 1986 to 2003
- INCOSE member since 2005 and has been the membership chair for Chesapeak chapter since 2006.

Learn even more about the other Board Members in the [About section of our new improved Website.](#)

[Return to top.](#)

### Did You Miss Last Month?

## Lecture: Systems Engineering when the Stakes are High and Time is Short - Lessons from the Lunar Reconnaissance Orbiter



In the midst of a very high profile project with a very demanding schedule, David Everett's team decided to go to a Chinese Restaurant after another grueling day of work. One of team mates opened his fortune cookie at the end of the meal only to find this very prophetic message:

*People forget how fast you did a job – but they remember how well you did it.*

This became the team's mantra as they strove to make the Lunar Reconnaissance Orbiter (LRO) succeed in its mission to reconnoiter the moon prior to returning astronauts to the moon in the not-too-distant future.

Mr. Everett not only told us this fascinating story but also gave us a plethora of lessons learned, observations, mistakes and the success factors for the LRO project. Even better he provided a gallery of moon images from the many and various instruments on the LRO, which is even now circling the moon.

### More Events in the Area:



#### NASA's Goddard Space Flight Center

Date: July 13, 2010, 1:00 pm

Presentation: *Support of Human Space Flight*

Speakers:

- Warren Mitchell, ai solutions, Inc
- Syed Hasan, Honeywell Technology Solutions, Inc
- Jason Laing, ai solutions, Inc

[More Info Here](#)

#### Symposium on the C & O Canal Engineering

Date: July 24, 2010

Presentation: *The C & O Canal folks are putting on a Symposium on the C & O Canal Engineering at Shepherd University*

[More Info Here](#)

What's the **lowdown** on **CSEP?**



The International Council on Systems Engineering has established a multi-level Professional Certification Program to provide a formal method for recognizing the knowledge and experience of



If you missed it, not to worry -- you can download his presentation >>[HERE](#)<<

Visit our [Library section of our Website](#) to also find other copies of presentation materials from previous meetings or other gatherings of interest. Poke around and see if anything looks interesting.

[Return to top.](#)

### Feature Article #1

## Getting on the Step

by George Anderson



“Hold 250 knots IAS in the climb until reaching 10,000 feet and thereafter maintaining a constant .65 Mach until reaching assigned cruise altitude.”

“After reaching level flight, maintain climb power until reaching .77 Mach, then trim the

aircraft and reduce power to cruise setting before engaging the autopilot”

The words of the pilot’s handbook describe the process of flying a heavy jet transport category aircraft to cruise altitude in a deceptively straightforward and uncomplicated manner. This is a great oversimplification of what is really taking place in the cockpit.

Pilots do not just control airplanes. In fact, a system engineering analysis of aircraft operation would discover that the pilot is an integral part of the aircraft control loop. This means that the pilot is receiving information from the aircraft and providing both information and commands to the aircraft in a continuous process.

In system engineering terms, the pilot is connected to the aircraft physically through a two-way broadband bus that carries data, commands, and perhaps status messages. All this is accomplished using the senses of sight, sound, tactile pressure, the balance sensors in the inner ear and the motive force of hands and feet. Much of this interchange goes beyond written procedures, has subliminal clues, and normally has to be learned by repetitive exposure to the various conditions actually encountered in flight.

[Interested? Read More.](#)

[Return to top.](#)

systems engineers, regardless of where they may be in their career.

[Read more details at the INCOSE Website.](#)

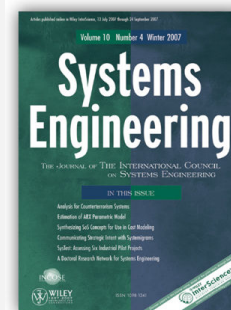
**UMBC**

**Training Centers**  
offers  
**a CSEP Prep Course**  
**Dates: 4 Saturday Mornings,**  
**July 10th -- 31st**  
**Location: UMBC Training**  
**Centers @ 1450 S. Rolling**  
**Road, Baltimore, MD 21227**

[>>Register Here<<](#)

Also check out other local CSEP Exam Preparation and other Systems Engineering training opportunities at our [Education page](#)

### Discover Systems Engineering



Read the current issue free on-line for a limited time: [Click Here](#)

Copyright (c) 2010 Wiley Periodicals, Inc., A Wiley Company

Check out these articles:

- *Obstacles to the flow of requirements verification (p 1-13)*
- *The Concept of Reference Architectures (p 14-27)*
- *Human view dynamics - The*

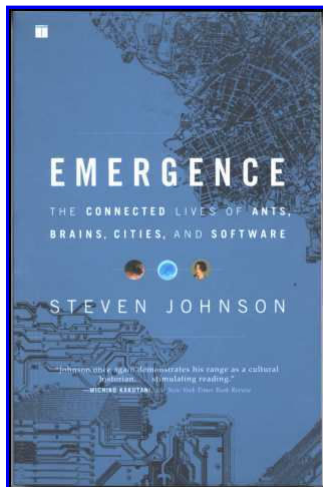
## Feature Article #2

# Emergence: The Mystery of Systems Engineering

by Paul Martin

It's a well know cartoon. Two scientists are gazing at an eminence blackboard filled from top to bottom with a complicated formula filled with mathematical equations and process jargon and symbols. One of the scientists points to an area of the blackboard where the process states, "Then a Miracle Occurs." He explains to his partner, "I think we need to be more explicit here in step 29." I can't but laugh every time and yet it's so profoundly true it makes me shudder.

Our whole Systems Engineering profession is build around decomposition, implementation, integration and verification. And so this mystery (or miracle) of emergence is just assumed or taken for granted. I teach this stuff at the graduate level and even I am unsure how to explain why properties and/or capabilities will emerge when you put together components of a system. Even though these various individual pieces have none of the properties and/or capabilities of the larger system. It just happens.



My interest in emergence came about when I was exploring the phenomenon of "Unintended Consequences." I wanted to know if there was a way we could plan and manage these unexpected results of our system development efforts. "Unintended Consequences" are basically unwanted emergent properties. And just like the senseless task of looking for an "unknown, unknown" risk, how can you predict the unpredictable?

You can't but you can at least appreciate the mystery unfolding before your very eyes.

There is an excellent book appropriately called, [Emergence](#), by *Steven Johnson* which explores this topic in detail from a more societal point of view.

By the way, [another really great exploration of Emergence was also done by one of my favorite radio show and podcast, "Radio Lab."](#) It's well worth a listen.

[Return to top.](#)

NATO approach (p 72-79)

• *Systems analysis of emerging IPTV entertainment platform: Stakeholders, threats, and opportunities* (p 95-107)

As a member of INCOSE you have online Access to the current and past issues of *The Journal of Systems Engineering* via the [Wiley InterScience](#) site. Search the archives and download papers of interest. Registration on the Wiley site is required. Instructions for accessing the SE Journal can be found in [INCOSE Connect](#)

With Connect you can also download the latest April Issue of *INSIGHT: Reflections on the Technical Engine of INCOSE*



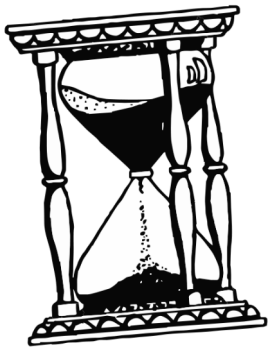
Click on image above and Log-In today.

**Did You Know:**  
You can earn PDUs by serving your local chapter

If you have a CSEP (or an ASEP) you can pursue activities in one or more of the three categories:

- Technical Society Participation Category
- SE Course Work and Publication Category
- SE Job Function Participation Category

to earn the minimum of 120



## A Word from our President

Time defines the human existence. Our personal time runs as sand through the hourglass. Choose your path and follow it resolutely.

## The Plan.

June is the month where you see many organizations entering the summer doldrums of spotty or low attendance. Our Chesapeake Chapter meeting attendance so far this year has continued to be commendably high with 39 persons in attendance on June 16, 2010.

I believe that the attendance at our meetings is but one measure of our success, and it is one that is especially satisfying to the BOD Program and Communications Directors. To them, it is validation that their decisions and hard work are being recognized by the membership. Please do your part as a member and read the newsletters, note the scheduled speakers, and mark your choices on your day timer well in advance. Consider, if every Chesapeake INCOSE member attended just two membership meetings a year, we would be forced to expand our facilities.

June is also the month during which the BOD assesses the health of our efforts and makes adjustments for the remaining half of the year. I want to briefly summarize this task with you as we completed most of it at our marathon board meeting on June 9, 2010.

This year our activities were guided primarily by two Plans: the [FY2010 Operations Plan](#) and the [Membership and Outreach Plan for 2010](#). The President and President-Elect drafted these plans and they were accepted by the BOD in the first quarter FY2010. Both plans reflect lessons learned from an analysis of previous year's activities. For metrics, we used the guidelines provided by the INCOSE INTERNATIONAL Chapter Circle Awards. These awards essentially recognize the activities that make Chapters successful and healthy while supporting the Systems Engineering profession.

Our track record over the past several years was excellent in many areas of vital importance to the membership. We typically scored highest in our Activities, INCOSE support and Operations. We mirrored that performance by low scores in Communications, Membership and Outreach.

Given that a growing chapter is the bedrock of success, it was necessary to address these three areas and significantly improve our

PDU's required for recertification. Under the Technical Society Participation Category you can "Participate on Professional Technical Society working groups, committees, etc." or "Perform Leadership Role in Professional Technical Society at local, national or international level" and earn 1 PDU/hour of effort. Best of all, there are no limits placed on the amount of PDU's you can earn this way.

Bottom line ♦ Volunteer Today to help make the Chesapeake Chapter of INCOSE the best in the world.

---

**This Newsletter is to serve our members and is open to all for contributions. Do you have an interesting idea for an article? A review of a new book related to engineering? [Let us know.](#) We'd love to hear about it. It may wind up in a future issue of our Newsletter.**

---

## New Members for 2010

- Lynne Ambuel; Senior IA Engineer for Johns Hopkins University Applied Physics Lab
- Michael Anderson; Systems Engineer
- John Benson; Analyst for JHU/APL
- Richard Bernstein; Sr. Systems Engineer for

efforts. Here is the snapshot of how we stand at mid-year with our efforts:

FY10 Planned	FY10 Jun Accomplished	Remarks
Improve Website	Website improved and updated weekly	Continues to grow, driven by membership needs
Publish a monthly newsletter	Published from February on	Needs membership input to succeed
Measure member response to Website and Newsletter	Contract services used to track outreach and conduct surveys	Used to target services
Perform outreach visits to local employers of SE	15 small firms approached on a two-step plan to increase membership and provide a sponsorship relationship for chapter activities.	President and Vice President  Made these contacts as well as several others to CAB members
Recruit new committee members	6 new committee members as of June 9, 2010	One, Glenn Gillaspay is our new Treasurer
Establish Technical means of broadcasting our monthly meeting speaker.	In accordance with JH and JHAPL, we are scheduling our first streaming media event in July. Look for instructions on the web site or call.	Look for instructions on the web site or call.
Outreach letter mailed to all 43 CSEP members in Maryland	Mailed June 18, 2010	Asks for support of the Chapter Mission and announces reception
Planning for an exclusive CSEP reception at the Engineer' Club in Baltimore	Date being negotiated with speakers and Club week ending June 25, 2010	Pilot for a possible annual event.

#### JHU/APL

- Gwendolyn Boyd; Executive Asst Chief of Staff for JHU APL
- Pete Brueggemann; Senior Staff Engineer for Motorola
- Carey Chang; Mechanical Engineer for Science Applications International Corporation
- Nathan Cho; Systems Engineer for Northrop Grumman Corporation
- John Cornyn; Sr. Systems Engineer for Northrop Grumman Corporation
- Erik Engbrecht; Systems Engineer for Northrop Grumman Electronic Systems
- Tracy Fisher; Senior Systems Engineer for The Johns Hopkins University Applied Physics Laboratory
- Glenn Gillaspay; Systems Engineer for DoD
- Gene Givens; Sr. Systems Engineer for AMPS Strategies/PEO IEW&S - PM Robotic & Unmanned Sensors
- Keith Hensley; Software Engineering Manager for Saft America Inc.



SEY award committee formed.	Solicited applications and provided timetable to the membership in June 2010	All members are encouraged to apply.
Establish joint meetings with other engineering chapters, societies, and groups	Outreach to AIAA, IEEE, and AOC locally	First pilot meeting will be with AIAA in the fall
Sponsor a Student INCOSE Chapter	Chesapeake Chapter with Johns Hopkins University and the Applied Physics Lab has jointly been organizing this. We are scheduling a formal announcement in August.	A student leadership team must be in place and have written charter and bylaws before we make the announcement
Planning started on the Holiday Reception and Awards night	Tentatively scheduled for Wed, December 1, 2010	SEY award announced at the reception
Speaking engagements	President and INCOSE President Elect to NASA Greenbelt	August 3, 2010
2010 Chapter Brochures approved by the BOD	2000 printed in 4 color in February 2010	Approximately 700 of 2000 distributed. Please help us get these to our potential members and supporters

The above efforts capture much of what we have done or are in sight of doing. It is obvious that the participation of the membership on the committees is vital to our success. There simply is not enough time for the BOD to attend to all of the many tasks.

Committee service is also my strongly preferred path to Chapter leadership. With elections coming up in September, I am keenly aware of the need to have the best candidates imbued with the most current understanding of our mission and current operations running for elected office. Learning on the job is no longer an adequate or desirable path to assure our continued growth and success.

I appeal to the membership to participate in some aspect of committee service and to run for elected office. The BOD is truly a

- Roy Hines; Associate for Booz Allen Hamilton
- Jeffery Hoellein; Systems Engineering for Northrop Grumman
- Matthew Keating; Senior Associate for Booz Allen Hamilton
- Valerie Mallder; Principle Staff for Johns Hopkins University Applied Physics Laboratory
- Yvette McDonald; Systems Analyst for Lockheed Martin
- Clayton McKindra; Program Manager for Federal Aviation Administration
- Liz Morrissey; Systems Architect for Northrop Grumman
- Puran Nebhnani; Technical Lead/Systems Architect for Secured Sciences Group, LLC
- Eric Ragin; Principal Engineer for CyberPoint, International
- Mark Sabins; Chief Engineer for SAIC
- Wyman Spacil; Fellow Engineer for Northrop Grumman

unified decision making body and its success is vital to all. Every member's participation at some level will influence our future.

[Return to top.](#)

- **Aaron Speight; Mechanical Engineer for SAIC**
- **Jennifer Suppa; Associate Professional Staff II for Johns Hopkins University Applied Physics Laboratory**
- **Michael Trela; Space Systems Engineer for Johns Hopkins University Applied Physics Lab**
- **Terri Wolfrom; Senior System Engineer/Enterprise Architect for Stinger Ghaffarian Technologies**

We welcome our new 2010 members. We look forward to seeing you at our meetings and tutorials.

---

Our Chapter now has a presence on



Check it out and join our group so we can together discuss the latest in Systems Engineering news and events.



Keep up with the latest news and events. Find out about our new Board of Directors. Explore our extensive library of previous lectures from our Monthly Dinner Meetings. Learn of the Benefits of Joining INCOSE. Check out Systems Engineering education in the local area. All this and more awaits you at our [INCOSE Chesapeake Chapter Website](#).

For any comments or suggestions about this newsletter please e-mail our [President, George Anderson](#) or our [Communications Officer, Paul Martin](#). We value your feedback.

**Board of Director Officers, 2010**

- President: Mr. George Anderson
- Past President: Mr. Glenn Townson
- President Elect: Mr. John Lewis
- Treasurer: Mr. Glenn Gillaspay
- Secretary: Mr. Bob Berkovits

**Directors at Large**

- Communications: Mr. Paul Martin
- Programs: Mr. Donald York
- Membership Committee: Ms. Bhanumati Sunkara

**Please use the Forward email link below so we can invite your friends to join our mailing list. Thanks in advance.**

INCOSE Chesapeake Chapter © 2010