



INCOSE Region V
Huntsville Regional Chapter
Newsletter August 2007

The International Council on Systems Engineering is a not-for-profit membership organization founded in 1990. INCOSE is an international authoritative body promoting the application of an interdisciplinary approach and means to enable the realization of successful systems.

HUNTSVILLE CHAPTER SUPPORTS STUDENT ENGINEERS WITHOUT BOARDERS TRIP!

On July 19, the Huntsville Chapter of INCOSE agreed to sponsor a team of student and advisors from the UAH student group of Engineers Without Borders (EWB) with a check for \$1,000 to support their upcoming trip to Kenya to help a village improve their water supply.

The EWB students and advisors, including current INCOSE Huntsville Chapter member and past Chapter Secretary, Walter Hammond of SAIC/bdSystems, came to the Huntsville Chapter's July Board Meeting with a presentation and an appeal for our support.



Three EWB affiliated students will travel to Migori, Kenya in August to drill a badly needed well and begin a water distribution system. "The goal is to bring safe water to an orphanage and the area's only hospital," said Laura Barkett, a senior from Trinity, Alabama majoring in aerospace engineering and the UAH EWB Chapter president.



The orphanage is the Marindi Children's Home of Grace, founded in 2004 by Steve James, a Huntsville Hospital nurse anesthetist, and his wife Greta.

The orphanage grew from Steve and Greta James' efforts to honor the memory of their daughter, Brittney, who had helped a boy in Migori through donations to the Christian Children's Fund before her death at age 19.

The orphanage is now home to more than 100 children, including eight with HIV/AIDS.



Barkett said the main reason is that the students chose to work with the James's group - www.kenyarelief.org - was that help is so badly needed by the orphanage and Migori's Ojele Hospital, which provides the only medical care available to thousands of Kenyans stricken by poverty and AIDS.

A non-profit organization, Kenya Relief, is accompanying and facilitating arrangements for the UAH students and one EWB member to Migori, which is situated in Nyanga Province, located in the far southwest corner of Kenya.

More information and their presentation can be found on the INCOSE Huntsville Chapter website.

Excerpts of this article were take from the Huntsville Times, July 19, Local Section page B1

NEXT CHAPTER MEETING

August 16, 2007

Location: 4901 Corporate Drive, Building B, Huntsville, Al. SAIC Millennium Room, at 5:30 p.m. – 7:30 p.m.

Presentation Topic: SUPERSYSTEMS

Speaker: William (Bill) F. Sowder, a Technologies Group Director at Teledyne Brown Engineering in Huntsville, Alabama.



What might appear to be an empty space as we are taught to believe, is actually a seething ferment of virtual particles. Vacuum is not inert and featureless but alive with throbbing energy and vitality.

A real particle such as an electron from classical physics must always be viewed against this background of this frenetic activity. When an electron moves through space it is actually swimming in a sea of virtual particles of many varieties.

The dynamics of these interactions constitutes “Supersystems” that will become frontiers for future explorations. It is time for us to seek the “Energy in the Vacuum”.

Mr. Sowder has over 50 years in the field of Ballistic Missile Defense. He retired from Boeing where he was the Test Director for the NMD/GMD Program. He was the Test and Evaluation IPT Lead that staffed, designed, and implemented the system-of-system flight and ground test activities.

Bill has participated in the early BMD efforts from Nike Zeus, Nike-X, SAFEGUARD, Site Defense, LOAD, SDI, GPALS, to the recent GMD deployment.

Bill graduated from Ohio State in 1954 with a Bachelor in Aeronautical Engineering, and from UAH in System Engineering in 1976.

UPCOMING CHAPTER MEETING

September 20, 2007

Location: Teledyne Brown Engineering, 300 Sparkman Drive Huntsville, Al. Meeting is in the training Room through the Main Building North Entrance, at 5:30 p.m. – 7:30 p.m.

Presentation Topic: The New Joint Procurement Paradigm

Speaker: Mr. Don Jarman, Deputy Director over the ‘Center for Strategic Studies Thinktank’ at Teledyne Brown Engineering in Huntsville, Alabama.



Military Transformation to Jointness dictates - *in order to fight ‘jointly’ you must learn to ‘procure’ jointly, ‘develop’ jointly and ‘test’ jointly.*

Joint procurement has been a challenge with traditional military entities in charge of their own budgets and procurements. The

closest we have come is the MDA ‘capabilities-based acquisition program’, and it took a new ‘agency’ to accomplish this.

We cannot afford a new agency every time we need to bring Services, Developers and Warfighters together. Therefore, future joint system-of-system procurements will need a new professional adjunct to the System Engineering profession. That new construct is called the ‘Mission Engineer’.

This Mission Engineer construct will be the single most important procurement paradigm shift since introduction of the Systems Engineering Process in the 1940’s.

Mr. Jarman has over 40 years of advanced systems-of-systems engineering experience in National Missile Defense, Nuclear Power, and Global Energy, Homeland Security and Infrastructure Projects on a global basis.

Mr. Jarman currently heads up Teledyne’s Targets and Countermeasures and Return-to-Rocketry Programs in Huntsville. He is considered to be one of the top “Business Engineering and Integration” experts in Huntsville and has been awarded numerous government and industry citations for Defense Program Excellence and Team Leadership.

Don graduated from Wichita State University in 1974 with a Bachelor of Science in Mechanical Engineering and performed his MBA studies at the University of Tennessee in 1976.

UPCOMING TECHNICAL SOCIETY/OTHER MEETINGS

[2007 Space & Missile Defense Conference & Exhibition](#)

Date: August 13-16, 2007

Location: Von Braun Center, Huntsville, Alabama

Theme: Celebrating 50 Years in Space & Missile Defense

Conference highlights include presentations in the areas of global ballistic missile defense systems development and operation, as well as integration, synchronization, and capability development to meet new threats. The conference will also include a training and technology track focused on emerging technologies. Sessions will also cover space support to the warfighter, homeland defense, and the integration of cruise missile defense.

Confirmed speakers include Gen. James E. Cartwright, commander, U.S. Strategic Command (USSTRATCOM); Lt. Gen. James A. Abrahamson, director, Strategic Defense Initiative Organization; and MG Howard B. Bromberg, chief of staff, USSTRATCOM.

INCOSE NATIONAL NEWS AND EVENTS

[AIAA Joint Conferences & Exhibits](#)

Date: 20 - 23 Aug 2007

Location: Hilton Head, South Carolina

Conference 1: Guidance, Navigation and Control

This year's technical program includes many sessions in the areas of control theory analysis and design, GN&C concepts in air traffic control systems, and multivehicle control.

Conference 2: Atmospheric Flight Mechanics

Presentations will cover the topics of aircraft dynamics, unsteady and high angle-of-attack aerodynamics, flying qualities, system identification, aerospace vehicle flight testing, projectile and missile dynamics, unmanned aerospace vehicles, reusable launch vehicles, and reentry and aeroassist vehicles.

Conference 3: Modeling & Simulation Technologies

Emphasis will be on the changing requirements resulting from military operations, including urban combat, while addressing the design and development of flight simulation hardware, software, systems, innovative approaches, applications, and relative advances that keep modeling and simulation tools a viable, effective, and efficient engineering tool.

[SE of Complex Systems Conference](#)

Date: October 28 - November 02, 2007

Location: Boston, MA

INCOSE is sponsoring a conference on the Systems Engineering of Complex Systems in association with the International Conference on Complex Systems.

Recognizing the potential impact of complexity and complexity science on the continued evolution and maturation of Systems Engineering, and the need for venues for the presentation and distribution of active research and practice in this area, papers will include Systems Engineering of those systems often described with the terms system of systems, ultra-large systems, mega-systems, and enterprises.

Emphasis will be in the areas where multiple, independent stakeholder communities collide; or where the "system" under study is not under the control of a single entity; or where the character of the social, cultural, or business aspects impact the technical.

Contact: Doug Norman (AD for Enterprise Sector), Brian White (AD for Systems Science Enabler Group); or Sarah Sheard (INCOSE Fellow) for more information.

[10th Annual Systems Engineering Conference](#)

Date: October 22 - 25, 2007

Location: Hyatt Islandia, San Diego, CA USA

The primary objective of the 10th Annual Systems Engineering Conference is to provide insight, information and lessons learned into how we can improve the overall performance of defense programs via a better, more focused application of systems engineering, that will lead to more capable, interoperable and supportable weapon systems for the warfighter, with reduced total ownership

costs, to help our military meet its current and new Mission Area and Capabilities requirements.

The tenth annual Systems Engineering Conference is jointly sponsored by INCOSE and the NDIA SE Department

MEMBER NEWS

Please send your Member News to our Secretary, John Jellicorse, at jellicorse_john@bah.com, or call him at 922-2783.

COMPANY NEWS

Please send your Company News to our Secretary, John Jellicorse, at jellicorse_john@bah.com, or call him at 922-2783.

JOB OPPORTUNITIES

[Systems Engineering Job Bank](#)

INCOSE has partnered with JobTarget to deliver a full-featured job site developed explicitly for the systems engineering community. Individuals can post their resume to the anonymous resume bank free of charge and create personal job alerts so that they are notified when opportunities of interest are available. Employers can search the focused resume database and post job openings.

The new job bank allows job seekers to: search targeted opportunities; post your resume for free (and anonymously); choose what to divulge in your resume; stay connected to the employment market; and receive alerts for opportunities of interest. Visit the job bank today, and take advantage of this new resource:

CONTACT INFORMATION

Find us on the web at www.incose.org/huntsville. Please contact John Jellicorse at 256-922-2783 with any Newsletter inputs at any time, and questions or comments about this newsletter.

For questions or comments regarding the INCOSE Huntsville Regional Chapter (HRC), please contact Chester Williams at chester.williams.jr@saic.com, 256-971-6703.

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Your INCOSE HRC officers need your inputs to make this newsletter better speak to your needs. We solicit YOU, the INCOSE membership, for items of interest from your company, local conferences, published tech papers or books, news regarding job transfers, new jobs, etc.

Your Local Chapter Contact Points (detailed bios at <http://www.incose.org/huntsville>)

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