Technology Workshop Supports CNO’s Unified Maritime Strategy

By Dr. Phillip Pace

In announcing the next unified maritime strategy in October, Chief of Naval Operations Admiral Gary Roughead noted that the strategy confronts outstanding challenges and reflects a commitment by the maritime services to work cooperatively with friends, partners and allies to realize a shared vision of mutual security, stability and prosperity.

The Electrical & Computer Engineering Department has been engaged in coalition building for several years through both resident graduate education programs for international officers and specialized technical short courses for partner nations. One initiative that has been especially successful is the Technology for Information Operations (TIO) international workshop.

The concept for the three-week long TIO workshop has evolved since our first meetings in early 1996 with Swedish officials. The inaugural course was designed and approved within months and was presented to twelve officers from the Swedish National Defense College (SNDC). Called the SNDC Defense College (SNDC). Called the SNDC and presented to ten officers from the Swedish military, the course was designed to introduce students to the concept of the United States’ Information Operations (IO) strategy and its implementation.

The course topics ranged from high-speed networking to cruise missile technologies, synthetic aperture radar image compression techniques, ultra wideband impulse methods and other relevant technical issues. The NPS technology workshops have helped the Swedish military prepare for new roles in international missions. The Swedish Armed Forces has participated in multinational operations of the European Union (EU), NATO and United Nations and currently has an operational presence in more than 20 countries.

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The next TIO will be offered April 21 – May 9, 2008. Topics that will be included in this workshop include: quantum information systems, principles of operational testing and experimentation of weapon systems, unmanned aerial vehicles and payloads, advanced low probability of intercept radar waveforms, detection signal processing, coastal surveillance, long range shipping, and advanced networking concepts and decision making theory. The course will also include a field trip to EDO Corporation’s Reconnaissance and Surveillance Systems plant to participate in a series of technical lectures on electronic intelligence receivers and a tour of the manufacturing facility.

The CNO notes that a key element of the maritime strategy is trust. “Trust,” he said, “must be built over time so that our strategic interests and those of friends, partners and allies are continuously considered while mutual understanding, respect and cooperation are promoted.”

The Technology for Information Operations international workshop is one example of the vision of the Navy’s unified maritime strategy. It represents one of the many positive ways that Naval Postgraduate School students in the Graduate School of Engineering and Applied Sciences can be involved in international military affairs and coalition building.

Dr. Phillip Pace is the Director of the Center for Electro-Optics and Electronics Research at the Naval Postgraduate School. He earned his Ph.D. from the University of Cincinnati and has received five patents for defense-relevant circuits and chip designs.

Global Security Cooperation Center Opens

President Dan Oliver and Lt. General Robert Ovrd, III, Dean of the School of International Graduate Studies (SIGS) and Director of the Global Center for Security Cooperation, hosted an opening ceremony at the Global Center for Security Cooperation on Friday, Nov. 16, to mark the official establishment of the center which occurred on Oct. 1.

Dr. Jim Nadianer, Deputy Secretary of Defense for Partnership Strategy, Office of the Secretary of Defense (OSD), flew in especially for this event as the representative of the Secretary of Defense.

The Global Center arose from the vision of the Honorable Ryan Henry. Principal Deputy Under Secretary of Defense for Policy, in response to the 2006 Quadrennial Defense Review’s recognition of the ongoing and expanding requirements to engage with U.S. allies in coalition and interagency engagements.

The center’s mission is to develop and manage a single, integrated system of international education providers for the Defense Department and create new and better ways to support security cooperation strategy and the international educators who implement it.

Henry said in a letter to President Oliver and Dean Ovrd, “The Global Center is very important to our success in meeting the demand on our programs in all parts of the world. Your organization will assist us in getting the most from our Security Cooperation investments worldwide.”

Having the Global Center, an entity of the OSD, here at Naval Postgraduate School is another feather in NPS cap. In addition to the prestige of the center itself, it provides a direct link to OSD and the Defense Security Cooperation Agency, as well as showcasing NPS faculty and programs on an international level and demonstrating NPS program relevance to Global War on Terrorism activities such as building partnerships capacity of our partners and allies.

NPS is an important component of the Defense Security Cooperation Strategy, which specifies the many ways the United States reaches out to our partner nations. SIGS provides resident graduate programs for international officers, numerous mobile education teams that travel the world, and conducts seminars and conferences with other nations’ military and civilian leadership to help strengthen them and enhance U.S.-tto-relationships.

Henry said in a letter to Congressman Henry, “The Global Center will significantly enhance NPS’s reputation as the nation’s premier international military education provider.”

IN BRIEF

• Professor David R. Henderson of GS&BPP briefed his study, “Do We Need to Go to War for Oil?” to congressmen on Capitol Hill. Lawmakers present for the briefing included Representatives Ron Paul (Texas), Brad Sherman (California), James P. Mitchell (New Jersey), Roscoe Bartlett (Maryland), Walter Jones (North Carolina), John (Jimmy) Duncan (Tennessee), Paul Broun (Georgia), and Danny Rehberg (Montana).

• The NPS new media placement consultant, Gebrung Associates, has visited NPS in November to meet with the president, provost and several department heads in an effort to increase visibility for NPS through news stories in prestigious publications such as the Chronicle of Higher Education, Time, Newsweek, USA Today and the New York Times.

• Research by the Explosive and Energy Group, led over the last five years by Professors Ronald Brown (Physics) and Jose Sinduhdy (Mechanical Engineering) and supported by the Office of Naval Research, have helped develop methods for amplifying explosive detonation power. Approximately 25 NPS students have contributed significantly to this progressive work, including theoretical modeling computational simulation, and participation in off-site testing. In 2007, significant power gains were reached in experiments conducted at Naval Air Warfare Center-China Lake, and a practical application for enhancing underwater blast output was demonstrated by workers at the Naval Surface Warfare Center-In Indian Head. An upcoming experiment at Lawrence Livermore National Laboratory will assess the feasibility of reducing warhead weight and size while meeting demanding performance requirements.

• Lt. Cmdr. John Mentzer, a June graduate of the Mechanical Engineering program, placed 24th in the times trials for the Olympics which will be held in China in 2008.

• The new digital production/photo studio is under construction in Herrmann Hall (Room 034, formerly the Peacecock Room). State-of-the-art editing equipment and HD digital cameras will be installed in December and in January 2008 shooting of the new television program “NPS in Review” will commence.

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Appointments

The U.S. Senate has approved the appointment of Dr. Doug Brook, GSIBP professor and former Dean of the school, as the next Secretary of the Navy, Financial Management and Comptroller. During a farewell luncheon on Nov. 20, Business School Dean Robert Beck noting that the appoint- ment will be a loss to NPS faculty and students, said, “He is really on TAD to DC and well is acknowledged with a certificate and rosette, which will be presented to Dr. Colson in Boston on Saturday, February 16, 2008 during the AAAS Fellows Forum, a part of the association’s annual meeting.

Faculty Notes

Lt. Gen. Robert Ovrd

Lt. Col. Lee Ewing (NPS Operations Research Department), Bill Tarantino (Confluent-Data Systems) and Greg Purcell (US Military Academy Systems Engineering Department), received the Kooopman Prize on Nov. 5 during the annual meeting of the Military Applications Section of INFORMS. The Koopman Prize recognizes the outstanding publication in military operations research Research, Development and Acquisition, Technology and Logistics Department).

Distinguished Professor David Sbraby (NPS Operations Research Department) was awarded thewards prize, which recognizes career ac- complishments in practicing or managing military operation research. Assistant Prof. John H. Repot of the Operations Research Department has been awarded a three-year Young Investi- gator Award from the Air Force Office of Scientific Research (AFOSR).

Dr. William B. Colson of the Physics Department has been elected to the rank of Fellow for the American As- sociation for the Advancement of Sciences (AAAS) for his "outstanding contributions to the fundamental under- standing of free-electron lasers and their subsequent develop- ment throughout the world today." The honor of Fellow began in 1874 and will be looking forward to his return with fresh new ideas for all."

The current Naval Engineers Journal produced a special issue on Human Sys- tems Integration (HSI). Four of the nine articles in the journal were written by HSI faculty and students from the Operations Research Department including Professors Nita Miller, Mike McCauley and Larry Shattuck.


GSIBP faculty and students were cit- ed and referenced in the new COMMUNICATIONS on Army Acquisition and Program Management in Expeditionary Opera- tions report entitled, Urgent Reform Re- quired: Army Expeditionary Contingency, authored by former Undersecretary of Defense, Acquisition, Technology and Logistics Dr. Jacques Gambles. Lecturer E. Cory Yoder was cited twice in the fi- nal report that was formally distributed early in November. First, for his work, “Engagement versus Disengagement: How Structural and Commercially-Based Regulatory Changes Have In- creased Risks in Federal Acquisitions,” published originally through the busi- ness school’s Acquisition Research Working Paper Series, and later in the Journal of Public Procurement. Yoder was cited a second time in the commissions report for, “The Yoder Three-tier Model for Optimal Planning and Execution of Contingency Contracting,” also published originally as an NPS GSIBP Acquisition Research Working Paper. Additionally, two MBA project teams’ works were cited in the report. First, “Joint Contingency Contracting,” au- thored June 2005 by Ellsworth Johnson, Bryan Paxton, Edward Thorst and Lisa Haptonstall under the advishlorship of Lecturers Jeff Corak and Cory Yoder and Associate Professor Keith Smader. The second MBA project cited was “Analysis of Contingency Contracting Support Plan within the Joint Planning Process Framework,” December 2003 by Michael Anderson and Gregory Flaherty under advishlorship of Lecturers Gary Simon and Marshall Engelbeck.