

NAE Elects Three NPS Professors in One Year

By MC2 Kellie Arakawa

Within a single year, three professors from the Naval Postgraduate School (NPS) have been awarded the highest professional distinction an engineer in the U.S. can receive - lifetime membership to the National Academy of Engineering (NAE).

In February 2008, Operations Research (OR) Distinguished Prof. Gerald Brown became the only faculty member in NPS history elected to NAE membership. Just one year later, Distinguished Professors Donald Gaver and Alan Washburn - who are also in the OR Department - were elected to the NAE for their contributions to defense-related research.

NAE conducts independent studies in engineering and technology. According to the academy's membership guide-

lines, members are recognized for at least one of two categories, which include "engineering research, practice or education, including, where appropriate, significant contributions to the engineering literature," and "the pioneering of new and developing fields of technology, making major advancements in traditional fields of engineering or developing/implementing innovative approaches to engineering education."

Election into the NAE involves an extensive examination of a candidate, who must be nominated by an NAE member with at least three supporting references from other NAE members. After a peer committee reviews each candidate and selects official nominees, the entire academy votes in new members. For 2009, 65 members were elected, bringing the total number of NAE members worldwide to 2,246.

According to the academy, Washburn was elected to the Industrial, Manufacturing and Operational Systems Engineering section for his "analytical contributions to search theory and military operations research and their application to antisubmarine, mine and information warfare."

Washburn, who has been teaching at NPS for 39 years, said he was "flabbergasted" and honored when he received news of his selection. Washburn holds a Ph.D. in electrical engineering, but said it has been quite some time since he's conducted research in the engineering field. "So it was sort of stunning after all this time to be inducted into the academy," he explained.

Gaver, who holds a doctoral degree in mathematics, was elected to the Industrial Manufacturing and Operational Systems Engineering section as well, but selected specifically for his "contributions to reliability, maintainability, and queueing concepts, with applications to telecommunications and military systems." Much like Washburn, Gaver was extremely surprised when he received news of his NAE membership. He said it was a "great and welcome recognition."

"I am delighted and astonished to have all three of us in the National Academy of Engineering coming from a single department in the same university," Brown stated. "The three of us are in entirely different fields of OR, so

for this department to be recognized by the National Academy of Engineering across such a wide area and after all these years of not having any representation at all is just astonishing."

Brown said his colleagues can expect to engage in a significant amount of advisory work as a result of their new academy membership, which he described as both challenging and rewarding. In his first year as an NAE member, Brown has testified before Senate, House and White House representatives, and has been asked to serve on several influential panels and committees. He has also worked with Wall Street experts and leaders in industry and technology addressing the current financial crisis.

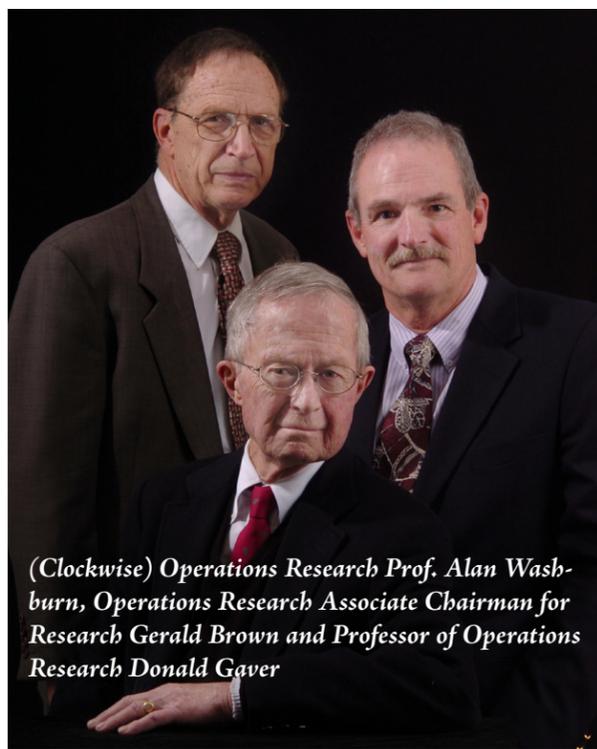
"I can promise that the two new members are going to enjoy themselves and benefit from a new level of access to people of accomplishment and authority ... it's a delight and it's a lot of work and responsibility," Brown explained.

Earlier, Gaver had been on three National Research Council Committees: Statistics in Nuclear Regulatory Research, a National Academy of Science/National Research Council Panel on Electro- Magnetic Pulse Vulnerability, and a NAS/NRC committee on Combining Information.

All three professors agreed that their election to the NAE speaks to the quality of the OR Department, as well as the environment of the school. Gaver said NPS' unique environment helps stimulate cutting-edge technical and operational research, and both Washburn and Brown described the OR Department as one of the best on the planet. Washburn also points out that NPS houses many accomplished engineers who are just as deserving of the honor.

Brown considers the OR Department a "well-kept secret," because a significant amount of its research is classified. "So it's quite remarkable when researchers who only have a fraction of their work exposed are being elected to the NAE," he said. "There's a lot of really good work going on here."

For more information about the NPS OR Department visit www.nps.edu/academics/GSOIS/OR.



(Clockwise) Operations Research Prof. Alan Washburn, Operations Research Associate Chairman for Research Gerald Brown and Professor of Operations Research Donald Gaver

WASC Team Visits in March

By Dr. Fran Horvath

The second phase of a three-phase process of reaffirmation of accreditation by the Western Association of Schools and Colleges (WASC) is coming to a close when a team from WASC visits the campus from March 11-13, 2009, to conduct the Capacity and Preparatory Review. Headed by Dr. Mary Lyons of the University of San Diego, the WASC team - comprised of administrators and faculty from other universities - will evaluate the School on a variety of capacity and resource issues and interview many groups, including most of the standing committees, as well as key administrators, students and staff. In addition to formal interviews, campus personnel have two opportunities to interact with the WASC team by participating in an open campus meeting on Thursday, March 12 at 8:30 a.m. in Ingersoll Hall, Room 122, and/or through posting comments about NPS at a confidential email address at nps_wasc@yahoo.com. The information gathered during the visit will be added to the reports and data the School has already submitted to WASC. At the conclusion of their visit, on Friday morning, the WASC team will report their findings to NPS leadership.

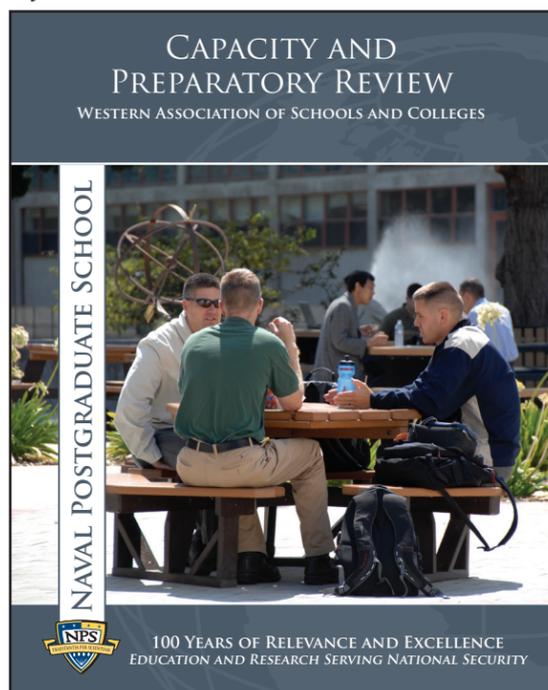
The School completed the first phase of the reaccreditation process when the NPS Institutional Reaccreditation Proposal (IRP) was submitted to WASC in 2006. In December 2008, in preparation for the WASC team's visit this month, the Capacity and Preparatory Review (CPR) Report was submitted to WASC. Both the IRP and the CPR Report are available on the NPS WASC website at <http://intranet.nps.edu/WASC/Default.aspx>.

Phase three encompasses the Educational Effectiveness Review (EER) which will occur in 2010, and preparations for this phase have already begun. The NPS Educational Effectiveness Steering Group (EESG) has been formed, and was announced via a campus-wide email from Provost Ferrari at the end of February.

Membership of the EESG initially includes: Robert Dell, Professor and Chair, Operations Research Dept; David Olwell, Senior Lecturer and Chair, Systems Engineering Dept; Knox Millsaps, Professor and Chair, Mechanical & Astronautical Engineering Dept; Daniel Moran, Associate Professor, NSA Dept, and Faculty

Council Chair; U.S. Air Force Lt. Col. Bryan Hudgens, Lecturer, GSBPP; Ali Rodgers, Director NPS Faculty Development; and Douglas Moses, Vice Provost, Academic Affairs.

The EESG will provide direction for Educational Effectiveness activities at NPS and oversight for the Educational Effectiveness Review by WASC. The charter for the EESG states that the group will act both as an advisory committee to the NPS administration concerning Educational Effectiveness activities and practices at the university, and as a review committee for consideration of new Educational Effectiveness initiatives at NPS, and will also provide leadership, coordination and planning of the preparation of the NPS Educational Effectiveness Self-Study which is due July 2010, and for the WASC Educational Effectiveness campus visit in October 2010. Completing the accreditation process marks a major milestone in the School's efforts to meet its strategic goals and objectives.



IN BRIEF

- ♦ Planning continues for the Memorial Day Concert on the Lawn, Monday, May 25, 2009. Many Centennial activities will be included in this year's event. Volunteers are needed to assist in this worthwhile community open house. Contact Alan Richmond, Director of Marketing & Community Relations at Ext. 3649 to see how you can help!
- ♦ NPS sponsored the CNO-high priority Innovation Seminar hosted by the Naval Warfare Development Command (NWDC), which provided a special opportunity for faculty and students to become skilled innovators by using thought, tools and techniques in generating creative visions for new naval concepts. Attendees were able to apply their learning in a systematic way in future Concept Development and Concept Generation across the Navy, and were also eligible for selection as participants in future NWDC innovation initiatives.
- ♦ Monterey county supervisor Dave Potter presented the 2008 Transportation Excellence Award to Mary Lou Vossen, Secretary to the Dean of the Graduate School of Business and Public Policy, and her husband, Jim, producers of the "Your Town" radio and television program, which focuses on topics related to county transportation. "Your Town" is broadcast weekdays from 5:00 pm to 6:00 pm on KNRY 1240 AM, Comcast Cable channel 24 and on the internet at www.ampmedia.org.

Message From Dean of Research Karl Van Bibber



Thanks to the NPS community for making me feel welcome. The School feels like home, having been born and raised in New London, Connecticut, where members of my family attended the Coast Guard Academy, served in the submarine and surface fleets, worked at General Dynamics Electric Boat Division and the Underwater Sound Laboratory. As a boy, watching the world's first nuclear submarine, the Nautilus, go out to sea was a life-defining moment!

NPS is my return to academia, having worked at LLNL for twenty-three years after leaving the Stanford faculty. When asked why NPS rather than a civilian

university, my answer was simple: NPS really matters, and stewarding university research within a national security context was an unrivaled opportunity. I also resonate with the vision of President Oliver and Provost Ferrari, seeing NPS as our future federal institute of technology, providing scientists, educators, program and acquisition managers for the broad national and global security enterprise. That will enhance, rather than detract from our primary role in training highly skilled unrestricted line officers.

NPS lives at the nexus of basic and applied investigation, the most interesting and fruitful part of the research landscape. Each feeds into the other, and an optimal balance of both is critical to our mission-effectiveness. History repeatedly bears out that military and economic security has always gone hand-in-hand with the advance of basic science. Fundamental enquiry often results in discoveries which can support or disrupt the global balance of power overnight: witness nuclear fission in 1939. Thus, without compromising our R&D supporting our operational sponsors, it is my highest priority to enhance and expand basic "6.1" type research at the School. Opportunities appear bright, as

basic research is a high priority within the new Administration's agenda.

Avenues to expand research at NPS – outreach, bolstering administrative support, improving our intellectual property position and increasing industrial partnerships, building new offices and labs, enhancing professional recognition of our researchers, etc. abound, but our resources to effect change are not infinite; therefore the Research Board and I are developing an "A-list" of priorities, and providing weekly "Research Briefs" to keep the president and provost abreast of what's happening.

Because we conduct a lot of experimental work, some moderately hazardous, I want to confirm that our current operations are safe, and that our safety processes reliably identify and mitigate risks for new activities. I also plan to ensure that we're fulfilling our responsibility to adequately protect classified information and ITAR material information. I will also be visiting researchers and seeing research on the bench and in the field. I invite you to visit me, or email your news-worthy accomplishments and concerns. We'll do our best to assist you.

Karl van Bibber (HA-220B; x3241; kavanbib@nps.edu)

Faculty Notes

Former Vice President Al Gore invited **NPS Prof. Wieslaw Maslowski** to join him as scientific advisor at the recent international conference on climate change at Poznan, Poland. Gore referred to Maslowski and his research results by name in Gore's recent testimony before the U.S. Senate, found at: http://www.swamppolitics.com/news/politics/blog/2009/01/gore_obama_stimulus_good_for_c.html.

In addition, an international team of explorers is making a trek across the ice to the North Pole this winter and they are receiving daily ice cover forecasts and direction from Maslowski and his NPS research team. Maslowski met with the entire team from the Carlin Arctic Survey (CAS; <http://www.catlinarcticsurvey.com/>) in the Observer at <http://www.guardian.co.uk/environment/2009/jan/25/melting-arctic-north-pole-explorers>) to discuss the final details of getting

NPS data on snow, sea ice and the upper ocean for validation of real-time model predictions using operational ECMWF hindcast and forecast products. This expedition is co-sponsored by His Royal Highness Prince Charles, Prince of Wales, and Maslowski has been invited to tea with the Prince as part of the planning process for the upcoming expedition.

Feature article titled "Merging Financial and Managerial Accounting: Strategic Cost Management and Enterprise Risk Assessment Under SOX" in the January/February 2009 issue of the Journal of Corporate Accounting & Finance, by John Shank and Joe San Miguel. This research was near completion when Shank passed away in 2006. SOX is short for the Sarbanes-Oxley Act passed by Congress in 2002 "to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws."

Tenure-Track Faculty Hires

Assistant Professor Richard Moore joined the department of Meteorology on Feb. 1, 2009, bringing expertise in weather

analysis and forecasting with an emphasis on the dynamics of weather systems that result in extreme weather events. Moore

earned his Ph.D. from Colorado State University and recently studied as a post-doctoral Fellow in Zurich, Switzerland.

Announcements

On Feb. 9, 2009, **Capt. Janice Wynn** became the NPS Dean of Students, bringing with her a wealth of leadership and educational experience. A native of Oak Harbor, Wash., and a graduate of the University of Washington, Wynn was commissioned through the NROTC Program in 1982. She holds a Master's degree in National Security Affairs/Middle East and North Africa Studies from the Naval Postgraduate School, a Master's degree in Strategic Studies from the Naval War College, and is a graduate of the Joint Forces Staff College. She holds subspecialties in Logistics & Transportation Management as well as Education and Training Management.

Dr. Robert F. Dell has been appointed as Chairman of the Department of Operations Research (OR) from

Jan. 1, 2009 to Dec. 31, 2011. Dell has been an active contributor to the OR Department's accomplishments since joining the faculty as an Assistant Professor in 1990. His recent awards include the Military Operations Research Society 2008 David Rist Prize (yearly prize for the best implemented military operations research study), the Military Operations Research Society 2007 Richard H. Barchi Prize (for the best paper presented at the annual symposium), the Department of Navy Superior Civilian Service Award in 2006, the 2006 Hamming Excellence in Teaching Award, and the 2005 Department of the Army Dr. Wilbur B. Payne Award for Excellence in Analysis.

New NPS Internet Site Coming!

NPS will soon be launching a new look for its external Web site. Starting March 18, the new format will be a more user-friendly site, providing up-to-date information to all of NPS's external constituencies. Across campus, web managers have been attending information and training sessions in preparation for the launch. The Web site will be based on a new web content management software called Rhythmyx. The first training ses-

sion for web managers was Feb. 23 and more will be held during the month of March. To see a complete list of training sessions, please go to the sharepoint at <http://sharepoint/WCM>.

The web content management system will allow campus web managers to have more direct control over their sites. There will also be a reduction in redundant sites as well as better control over dead linkages. The new

system affects only the external site – the Intranet will not be changing at this time.

An overview of the project can be found on the sharepoint, <http://sharepoint/WCM>. Go to the site and click on "Information Session" under the training documents on the right. For more information, please contact Terri Brutzman (x7957), Louis Algaze (x2176) or Fran Horvath (x2228).

CALENDAR

March 4

Adm. Jonathan W. Greenert
Commander, U.S. Fleet Forces
NPS site visit
POC Protocol Ext. 2466

March 5-6

U.S. Army Lt. Gen. Franklin L. Hagenbeck
Superintendent, U.S. Military Academy
NPS site visit
POC Bard Manager Ext. 2695

March 7

OSSC Quarterly Bargain Fair
La Mesa Community Center Parking Lot 9:00 - Noon
POC: bargainfair@npsossc.org

March 9-13

WASC Accreditation Team Visit
POC Dr. Doug Moses Ext. 3218

March 10

David Wennergren
Deputy Assistant Secretary for Information Management and Technology and DoD Deputy Chief Information Officer
Secretary of the Navy Guest Lecture
POC Protocol Ext. 2466

March 16-20

Abel Laureate Dr. Peter Lax
New York University
Distinguished Lecture
POC Dean Sri Ext. 2660

March 17

Winter Quarter Awards Ceremony
King Hall
POC Sonya Solomon Ext. 2075

March 19-20

CHDS/Department of Justice Conference
POC Mark Fish Ext. 1927

March 20-31

Lt. Col. Stephen Seichter
German Armed Forces Transformation Center
To attend International Data Farming Workshop and NATO Et-029 Coordination Meeting
POC Susan Sanchez Ext. 2780

March 24

New Student Orientation and Information Fair
King Hall
POC Sonya Solomon Ext. 2075

March 26-27

Graduation Rehearsal and Ceremony
King Hall
POC Sonya Solomon Ext. 2075

March 27

U.S. Coast Guard Adm. Thad Allen
U.S. Coast Guard Commandant
Graduation Speaker
POC Protocol Ext. 2466

HISTORICAL HIGHLIGHTS

The hull of the first U.S. Navy ship to be named in honor of a Naval Postgraduate School alumnus was laid down on March 23, 1918 at Newport News, Virginia. The USS Thomas (DD-182), a Wickes class destroyer, was named for Lt. Clarence Crase Thomas, who began his postgraduate studies in electrical engineering in 1913. Thomas, the first naval casualty of World War I, was in charge of a naval unit aboard the merchant ship SS Vacuum when it was attacked by the German submarine U-21 on Jan. 28, 1917 west of the Hebrides Islands. He was awarded the Navy Cross posthumously for his heroic efforts to defend the SS Vacuum.



Historical Highlights are provided by the Dudley Knox Library.