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 guidelines, 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 noteworthy 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 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 astounding.”

Brown said his colleagues can expect to engage in a significant amount of advisory work as a result of their new academy membership, which will bring them into contact with government officials, and 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.

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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 my family of members often attended the Coast Guard Academy, served in the submarine and surface fleets, worked at General Dynamics Electric Boat Divi- sion and the Underwater Sound Labora- tory. 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 LNL for thirty-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 con- text was an unrivaled opportunity. I also resonate with the vision of President Ol- iver and Provost Ferranti, seeing NPS as our final federal institute of technology, providing scientists, engineers, 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 lies at the nexus of basic science and applied investigation, the most inter- esting and fruitful part of the research landscape. Each feeds into the other, and an optimal balance of both is critical to our mission-effectiveness. His- tory repeatedly bears out that military and economic security has always gone hand-in-hand with science. Fundamental enquiry often re- sults in discoveries which can support or disprove the global balance of power over- night: witness nuclear fission in 1939. Thus, without compromising our R&D supporting our operational sponsors, it is in my highest priority to enhance and expand basic “4.1” type research at the School. Opportunities appear bright, as basic research is a high priority within the new Administrations agenda. Avenues to expand research at NPS – outreach, bolstering administrative sup- port, improving our intellectual property position and increasing industrial part- nerships, building new offices and labs, enhancing professional recognition of our researchers, etc. abounds, but our re- sources 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 priorities on top of what’s happening.

Because we conduct a lot of experiment- al work, some moderately hazardous, I want to confirm that our current opera- tions are safe, and that our safety pro- cesses reliably identify and mitigate risks for new activities. I also plan to ensure that the University have the resources 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- works accomplishments and concerns.

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 for all of NPS’s external con- stituencies. Across campus, web merch- ants have been attending information and training sessions for the launch. The Web site will be based on a new web content management software called Rhythmix. 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 homepage at http://sharpoint/WCM.

The web content management sys- tem 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 homepage, http://sharpoint/WCM. Go to the site and click on “Information Session” under the train- ing documents on the right. For more information, please contact Terri Bozvant (x7957), Louis Alagze (x2176) or Fran Norris (x2228).

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 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 ship.