

Update

the navy's university

Naval Postgraduate School - Monterey

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desert storm contributions

NAVAL POSTGRADUATE SCHOOL CONNECTION . . . NPS research was a contributing factor toward the allied success in Operation Desert Storm. While troops continue to withdraw from the theater, post-war Kuwait continues to be a focal point for important research. NPS contributions include:

- The USAF used a computer program called "Heavy Attack" for munitions planning, partly developed by **Prof. Gerry Brown** of the NPS operations research department to determine optimal mixture of aircraft sorties and weapon loads based on designated targets, and to identify procurement actions.

- The USMC's 1st Marine Expeditionary Force used research into German World War II battle methods to improve field combat effectiveness. The information was presented to the Marines on-scene by NPS **National Security Affairs Prof. Russel Stolfi**. A reserve USMC lieutenant colonel, Stolfi was called up to active duty during the hostilities.

- Army field combat systems, especially armor and anti-armor weapons and laser-guided missiles, particularly vulnerable to desert weather, benefited from NPS **Physics Prof. Don Walters'** techniques to predict atmospheric impact on the effective range of these weapon systems.

- NPS **Operations Research Prof. Mike Bailey** helped fine tune a new system to increase electronic warfare capabilities of the Navy's EA-6B aircraft.

- The Kuwaiti oil well fires' impact on the environment is being studied by NPS **Meteorology Prof. Phil Durkee** and several NPS students. Scientists from several universities are sending data obtained by instruments to NPS to be merged at NPS' interactive digital environmental analysis lab.



faculty notes

BALL ON NATIONAL PANEL . . . NPS Aeronautics Prof. **Bob Ball** has been selected to serve on the National Academy of Science's study panel to examine methods of assessing aircraft vulnerability and combat survivability.

FINDING BURIED TREASURE . . . Prof. **Bill Garwood's** "mixed ocean model" for predicting changes in current, temperature, salinity and speed of sound has a new application. In use by the Fleet Numerical Oceanography Center to compute search and rescue patterns, it was one of the tools used to find the mail steamer SS Central America which sank in the Atlantic in 1857 carrying three tons of gold.

TUMMALA SENIOR IEEE MEMBER . . . Electrical and Computer Engineering Prof. **Murali Tummala** has been elected a senior member of the **Institute of Electrical and Electronics Engineers (IEEE)**. Fewer than 8 percent of IEEE's 300,000 members have been selected for this honor.

OPS RESEARCH EDITORS . . . "Naval Research Logistics," an international journal focusing on naval operations research, applied statistics, logistics and general quantitative modeling, is feeling the impact of the NPS operations research department. Prof. **Richard Rosenthal** is the new editor-in-chief, Prof. **Don Gaver** serves on the editorial advisory board and professors **James Eagle** and **Patricia Jacobs** are associate editors.

SECURITY STRATEGY LAUDED . . . National Security Affairs Prof. **James Tritten** received the Bronze Medal from the U.S. Naval Institute's Arleigh Burke Essay Contest in May for his article on a new U.S. national security strategy.

PROMOTION AND TENURE AWARDS . . . The following promotions and tenure awards were recently announced:

- Promoted to Full Professor: Donald Danielson, mathematics; Chin-Hwa Lee, electrical and computer engineering; Carlisle Wash, meteorology; David Yost, national security affairs.

- Promoted to Associate Professor and awarded tenure: Donald Abenheim, national security affairs.

- Awarded tenure: Brij Agrawal, aeronautics and astronautics; Mary Batteen, oceanography; Tung Bui and Douglas Moses, administrative sciences; William Colson, physics.

- Promoted to Associate Professor: Steven Baker, physics; Jeffrey Burl and Ramakrishna Janaswamy, electrical and computer engineering; Clyde Scandrett, mathematics.

- Promoted from Military Instructor to Assistant Professor: Cmdr. David Wadsworth, operations research.

EDUCATOR/CIVIC LEADER BOULDRY DIES . . . Prof. Emeritus **John Bouldry** died of cancer in May. An expert in radar and electronic warfare, Bouldry joined NPS in 1946, making the move to Monterey in the early 1950s. He was chairman of the electronic warfare academic group from 1980 until his retirement in 1986. He was a captain in the Naval Reserve and as a civic leader, played a principal role in the urban renewal and redevelopment of downtown Monterey.

**alumni
news**

NPS ALUMNI ASSOCIATION . . . June graduates were the first to have an opportunity to enroll as **charter members of the new NPS Alumni Association**. Establishment of the association has been a goal of NPS for several years. The decision to proceed came as a result of supportive responses to a January survey of alumni (1986 - 1990 graduates) and to news releases. With interest and value clearly evident, the goal was finally made possible when the Naval Postgraduate School Foundation (NPSF) agreed to sponsor the association. **The association is open to all NPS graduates and friends of NPS.** The annual membership fee is \$10 (\$13 for non-U.S. addresses.) Members will receive a quarterly newsletter. The association's goal is to provide a means of networking and a platform for sharing ideas among NPS alumni. An expansion to the association's activities will follow. To become a charter member send a letter with name, rank, service, NPS curric, graduation date and mailing address and a check for annual membership dues to:

**NPS Alumni Association, NPS Foundation, INC.,
P.O. Box 8626, Naval Postgraduate School,
Monterey, CA 93943-5000.**

nps graduate survey

To what extent did NPS . . .	%	None	Little	Not sure	Some	Great
Help meet requirements of your subspecialty		3	5	10	31	51
Improve your analytical skills		1	2	3	41	53
Help meet your personal goals		1	2	4	28	65
Thesis a valuable component of your graduate education		5	8	10	30	47
Professors make themselves available for assistance		5	9	6	27	53
Non-academic activities become important part of NPS experience		1	4	5	36	54

Graduate surveys were mailed to 2,600 U.S. graduates in January. Almost half responded. In addition to the questions above, open form response questions asked, "Which courses have proved most beneficial?" and, "What merits or pitfalls of attending NPS would you mention in counseling a junior officer?" Frequent responses to "merits" included: beautiful location, comraderie and stimulating exchange between students of other services and countries, long-lasting friendships and networking development, and being paid to devote full time to pursue a degree. "Pitfalls" were: promotion concerns, timing of

attendance, student time and payback tour which may result in significant period outside of primary career path, and NOB fitness reports.

Survey results and individual survey comments are being thoroughly reviewed by faculty and staff. Many of the recommendations will be addressed during curric reviews.

Survey recipients were also asked their opinion on a school name change. The survey results, a local committee's findings, and concerns of the cost of a name change, resulted in a determination to maintain the name as the Naval Postgraduate School.

Moving?

Attention alumni and friends: If you are moving, please fill in the change of address and mail to: Superintendent (Code 042), Naval Postgraduate School, Monterey, Calif. 93943-5000.

Name _____

New address _____

City/State _____ Zip _____

Check here only if you do not want this information released to the NPS Alumni Association.

research news

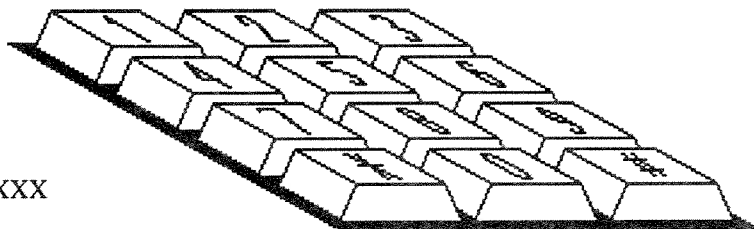
ANOTHER NPS FIRST . . . The Naval Postgraduate School initiated the first space test of a new computer memory technology. The experiment, aboard Orbital Sciences Corporation's ORBCOMM-X, is designed to test the reliability and durability of a thin-film ferroelectric memory device. The briefcase-size spacecraft was deployed by an Ariane rocket, launched July 16 from Kourou, French Guiana. Scientists believe that ferroelectric memories have the potential to significantly advance today's computer technologies, especially the on-board computing power of aircraft, missiles and satellite systems. **Dr. Rudy Panholzer**, chairman of the NPS space systems academic group, is the principal investigator in the project.

campus developments

NAME THAT BUILDING . . . Construction is about 40 percent complete on the 108,000 sq. ft. academic building next to the fire station. Now, if it just had a name. Official Navy criteria provides a wide range of choices. The superintendent has directed that the person to be honored be directly related to NPS. **Options include former superintendents, provosts, faculty members and graduates of any service or nation who have distinguished themselves in their careers.** Submit nominations to: Naval Postgraduate School, Public Affairs Officer (042), Monterey, Calif. 93943.

key nps telephone numbers

Commercial (408) 646-XXXX
or Autovon 878-XXXX



Admissions	3093	Director of Research	2098
Alumni Association	2339	DRMEC	2306
Aviation Safety Programs	2581	Dudley Knox Library	2485
BOQ/BEQ Desk	2060	Executive Assistant	2513
Commissioned Officers Club	2170	Flag Lieutenant	2513
Dean of Faculty & Graduate Studies	3411	Flag Office	2511
Dean of Instruction	2391	Provost	2371
Dean of Research	2098	Public Affairs Office	2023
Director of Military Operations	2406	Quarterdeck (24-hour duty officer)	2441
Director of Programs	2291	Registrar	2591

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