

## DEBRA GOOKIN

### CURRENT POSITION

#### ROTARY INTERNATIONAL

**Fiji Home Water Filter Project Lead** – Responsible for proposal development and project oversight to provide microfilters to reduce waterborne illnesses in homes in villages around Savusavu, Fiji.

**Jim Krause Memorial Bike Ride Volunteer Coordinator**- oversees 100 volunteers to raise funds for pancreatic cancer research and other charities

### SKILLS & ABILITIES

Led development, installation and operation of Navy systems worldwide. Extensive experience in technical leadership, working across organizations and competencies. Developed business opportunities through excellence in science, engineering and administrative practices.

### EXPERIENCE

#### SPAWAR NAVY SENIOR SCIENTIST

1980-2012

**Staff Scientist** - Mentored scientists and division staff on technical management and leadership such as strategic planning, business development, team building and employee supervision. Managed \$60,000,000 DARPA maritime surveillance programs \$ 50,000,000 for maritime surveillance. Led projects to reduce vulnerability to electronics counterfeits and supply chain risk.

**Personnel System Transition Lead** - Led Command during transition between personnel systems. Coordinated with Human Resource organizations, Navy and DoD Commands. Provided leadership internally to transition team (legal, financial, operational, business systems, communication). Led internal communications effort including All Hands briefs, topical brown bag meetings, press releases, web sites, emails to all hands, briefs to senior leadership. Executed risk mitigation strategy including Help Desk, practice run-throughs, and tailored training.

**Head of the Networks Division** - Provided supervision, management and strategic leadership for 125 engineers, scientists and staff. Overcame personnel losses (retirement, reorganizations) to maintain division size. Anticipated future business needs and trends to change the division business strategy to respond to changes in environment. Balanced networks research and system engineering to transition science and technology into fielded operational systems. Managed division overhead

(\$2.5M/yr) and oversaw project funds (\$40M/year). Led investigation into new network technologies (mobile ad-hoc networks, distributed networking, multi-cast protocols, IPv6, fiber optic wavelength-division multiplexing).

**Advanced Digital Network System (ADNS) Program Manager –**

Managed ADNS during critical transition period from research and development to operational system and program of record. Provided internet protocol network capability to ships and shore sites across RF communications in 4 battle groups. Oversaw over 100 team members, including scientists and engineers in Charleston, SC and San Diego, CA and a \$30,000,000 project budget. Applied new networks technology to overcome limitations of ship to ship and ship to shore communications. Reviewed and authored technical literature. Designed and adapted equipment for shipboard installation. Wrote test procedures for pre-installation checkout, system integration tests and shipboard operational verification tests. Led teams for network research and development, testing, procurement/installation, and logistics support.

**SATCOM Division Business Development Manager** -Developed division business strategy in conjunction with senior scientists, branch heads and division staff. Supported division members with marketing strategies, connections to sponsors and related work, and other advice to enhance their success in gaining and maintaining good sponsor and project work in the division business areas. Measured return on investment to access value of business development manager to division compared against the investment costs.

**Electro-optic Systems and Technology Branch Head** - Supervised and participated in physical science projects in photonics, fiber optics, lasers and detectors. Published papers and patents in surveillance techniques utilizing these technologies.

**Other Scientific Experience** - Ferroelectric polymers and ceramics for hydrophones, undersea laser communications, low probability of detection communications, magnetic ASW and sonar signal processing, hydromechanics, airborne acoustics. Field tests at sea, Mission Bay tower, P3 aircraft, and land sites.

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EDUCATION

**UNIVERSITY OF CALIFORNIA, SAN DIEGO**

Electrical Engineering and Computer Science, 1983

**SAN DIEGO STATE UNIVERSITY, SAN DIEGO**

Bachelor of Science, 1980

**AWARDS**

- Meritorious Civilian Service Award for leadership during transition to NSPS (2008)
- NCCOSC Commander's Teaming Award (1997)
- Meritorious Civilian Service Award for geolocation system fielded at Naval Space Command (1996)
- Chairman 1991 SPIE Conference on Optical Devices for Signal Processing
- Certificate of Commendation, ADM Miller, ONR/ONT (1990)
- Nominated Woman Scientist of the Year (Society of Women Engineering) (1987)
- Who's Who of Women Engineers of the 80s
- Who's Who of American Scientists
- National Science Foundation Panel Member
- American Society of Electrical Engineering Mentor
- Government-Industry Data Exchange Program representative

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**PUBLICATIONS**

- 12 Patents in physical sciences
- 14 Refereed Journal Publications in physical sciences