

**Ronald A. DeLap, Ph.D.
Major, USAF (Retired)**

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Executive Summary:

Employment experience:

Current: Professor of Engineering and Physics

Previous:

Dean of Engineering – 6+ years at two universities

Teaching at the University level – 10 years at multiple universities

Adjunct/Assistant/Associate/Dept. Chair

Undergraduate and graduate, including MS and Ph.D. research supervision

Industrial experience at Delphi Automotive and IBM

Military experience

16 years commissioned service, USAF

Engineering Research including national-level consulting (Congress, Secretary of the AF)

Leadership of major DoD projects

ROTC Vice Commander (UCLA and Loyola Marymount)

Classified research at highest levels (NSA)

6 years enlisted service, USAF

Radar Repair Technician, promoted well ahead of peers, to E5 in 4 years

High-school teaching

3 years teaching math and science

2 years at Calvary Baptist Academy, Midland, Michigan

1 year at New Horizons Academy in the Dominican Republic

Education

Certificate in Higher Education Leadership, Harvard University, summer 2014

Ph.D. The University of Michigan, Ann Arbor. Electrical Engineering/Systems Engineering

MSEE Michigan Technological University, Electrical Engineering, Control Systems emphasis

BSEE Michigan Technological University, Computer emphasis

Employment history:

January 2017-present: Professor of Engineering and Physics, Point Loma Nazarene University

2011-2016: Dean, School of Engineering and Engineering Technology, LeTourneau University.

- Managed budget of \$4M
- Supervised 40 faculty/staff
- Grew program from 455 (fall 2011) to 540 students (fall 2016)
- Increased income to program by 400%
- Lowered discount rate by 4%
- Increased standardized test scores of incoming classes
- Increased first year retention from 68% (2010-11) to 90% (2015-16)
- Increased graduate (MS) enrollment from 2 (2011-12) to 20 (2015)
- Increased grant-writing activity by 600% in three years
- Supervised first ever successful NSF Career Grant proposal at LeTourneau (\$400K)
- Subsequently supervised two additional NSF grant proposals (total of \$520K)
- Supervised second ever successful interdisciplinary Keck Grant proposal at LeTourneau (\$250K)
- Led 3 successful ABET accreditation inspections, one of which was deemed by the Penn State chair as “best I’ve ever seen in 13 years,” selected by ABET as a “best practices” example.
- Hired 13 stellar faculty, including an astronaut Ph.D. from MIT and three world class engineers from national laboratories (Oak Ridge, Sandia, and Pacific Northwest)
- Hired LeTourneau’s first ever tenure-track female and African American engineering professors
- Improved our US News national ranking from 79 in 2011, to 31 in 2016. Maintained #1 ranking among all engineering schools in the CCCU.
- Diplomatically removed 2 underperforming faculty and one underperforming secretary
- Grew LeTourneau’s reputation with premier companies and universities in the US, saw LETU grads hired by SpaceX, Google and Mercedes Benz, among others, and accepted with full rides to MIT, Notre Dame and Cal Tech grad schools. Cal Tech advisor called his PhD student “one of my best ever.”
- Set Guinness World Record, most simultaneously operating 3D printers (Instituted LeTourneau’s 3D printing mandate - every freshman was required to build his/her own – great for retention and recruiting!)
- Promoted and grew the co-op program substantially
- Based on success in engineering, was selected to take on additional leadership as Dean of Business and Computer Science starting 2016.
 - Dean of over 60% of the University’s on-campus student population.

2010-2011: Dean of the College of Engineering, Technology, and Economic Development, Lake Superior State University (LSSU).

- Appointed after serving two years as an Assistant Professor
- Doubled freshman enrollment in one year
- Successfully led ABET inspection (1 observation, 0 weaknesses)
- Established engineering living-learning dormitory
- Established working relationship with Michigan Economic Development Corp.
- Grew our Prototype Development Center into a profitable enterprise

2008-2010: Assistant Professor of Electrical Engineering, LSSU.

- Taught undergraduate coursework in electrical engineering
- Chaired 2 faculty search committees
- Served as faculty advisor for Society of Women Engineers
- Performed funded research for the Energizer Corporation
- Prepared reports for ABET accreditation visit
- Wrote and won a grant for installation of solar/turbine power systems
- Nominated for and served as Vice-Chair of the Michigan Academy of Science, Arts, and Letters' Engineering division

2007-2008: Senior Design Engineer, Delphi Automotive.

- Redesigned and improved existing power steering systems
- Designed systems for future applications
- Developed power steering system which was adopted into 2010 GMC truck lines
- Worked with automakers from around the world

2003-2007: Self-employed.

- Launched and managed a highly successful videography company in Michigan
- Designed the remotely controlled cameras for this company (both wired and wireless)
- Designed marketing campaigns, hired and fired cameramen and editors, and managed budget
- During 2003-2008 was substantially involved in caring for an ill parent

2004-2007: Adjunct Professor of Electrical Engineering, Saginaw Valley State University.

- Taught undergraduate engineering courses
- Consistently received the highest possible ratings from students
- Was subsequently pursued for full time employment

2005-2007: High school teacher, Calvary Baptist Academy, Midland, Michigan.

- Taught Chemistry, Physics, and Algebra to high-school students

2002-2003: High school math/science teacher in the Dominican Republic

- Taught Chemistry, Physics, English, and Algebra to at-risk high-school students
- Left this position due to ill parent in the U.S

1986-2002: Commissioned Officer, USAF.

UCLA & Loyola Marymount University

- Spent significant time as acting Commander of a major ROTC detachment, in charge of all aspects of operation
- Led IG inspection effort during Commander's absence and received an "Excellent" rating (These inspections are comparable to regional accreditation visits)
- Taught management and leadership classes for Air Force cadets
- Provided guidance/mentoring to undergraduates
- Led efforts to develop articulation agreements with local community colleges

- Led highly successful fundraising efforts to provide scholarships for underfunded students
- Successfully increased enrollment of underrepresented populations
- Mentored subordinates (officer and enlisted), helped them develop professionally

Los Angeles Air Force Base:

- Specialized in managing the design of satellite radar systems (Discoverer 2). As the lead systems engineer, led the entire design team (200+ scientists and engineers)
- Consulted on national level with Air Force Research Labs, Program Offices, the National Security Agency, the National Reconnaissance Office, members of Congress, and high level Air Force leadership up to and including the Secretary of the Air Force (I personally briefed her). Briefed up to 12 generals at a time on space based radar and data fusion.
- Organized and led numerous national level symposiums at Los Angeles Air Force Base, Air Force Space Command, Wright Patterson Air Force Base, DARPA, and other locations.
- Served as a consultant to the national-level Air Force Science Advisory Board.
- Personally selected by Maj. General Tattini to be the Los Angeles Air Force Base spokesman for all matters related to Space Based Radar Systems.
- Strongly advocated with Congress and the Secretary of the Air Force for designs which I believed in, based on my engineering expertise in phased array radar systems.

Air Force Institute of Technology:

- Served as an Associate Professor for 4 years, Dept. Chair for 2 years.
- Taught control systems (classical and modern, analog and digital), GPS, inertial navigation, and digital signal processing.
- Supervised grad-student research (MS and PhD) in control systems, array signal processing, and MEMS technology. Developed the first-ever Air Force gyroscope on a chip.
- Consulted with Holloman Air Force Base Central Inertial Guidance Test Facility - assisted in design and installation of new sensor field for navigation system analysis.
- Served as a member of the organizing committee for the IEEE International Signal Processing Symposium in Detroit, MI. Worked closely with AFL/CIO, coordinating display set-up.

National Security Agency:

- Worked as a design engineer on various classified data collection systems. All involved array signal processing. Held a Top-Secret, compartmented security clearance.
- Worked with all military branches as well as British and Australian armed forces personnel.

Education:

- BSEE, MSEE: Michigan Technological University. Emphases on computer, power, and control systems.
- Ph.D. University of Michigan. Degree is in Electrical Engineering – Systems. Emphasis on array signal processing. Co-authored chapter in text published by Prentice Hall.
- Post-Graduate Educational Leadership Training, Harvard School of Education (Summer 2014).

Selected Publications:

DeLap, R.A., "Recent and current Air Force space based radar efforts." Proceedings, 1999 IEEE Aerospace Conference, Volume 3, pages 185 - 194

David S. Pirolo and Ronald A. DeLap, "Space-Based Moving Target Indicator System Roadmap," 17 March 1998. (Air Force document which outlined 20 year development plan).

A.O. Hero and R.A. DeLap "Task specific criteria for adaptive beamforming with slow fading signals," *Advances in Spectrum Analysis and Array Processing: vol. III*, S. Haykin, Ed., **Prentice Hall**, 1995.

A.O. Hero and R.A. DeLap, "Adaptive beamforming for slow Rayleigh fading signals," *Proceedings of IEEE Workshop on Statistical Signal and Array Processing*, Quebec, Canada, pp. 169-172, June 1994.

R. DeLap and A.O. Hero, "A new method for adaptive wideband beamforming," *Proceedings of the IEEE 1993 International Conference on Acoustics, Speech and Signal Processing*, Vol. IV, pp. 348-351, Minneapolis, MN, April 1993.

References: Available on request