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**PROGRAM DESCRIPTION**

The purpose of the ARL Walker Assistantship program is to support the education of outstanding future scientists and engineers who are pursuing research-based graduate degrees in a number of interdisciplinary areas aligned with the Applied Research Laboratory's (ARL) mission. The ARL Walker Graduate Assistantship is administered by the Applied Research Laboratory and is awarded to exemplary students pursuing Master of Science (MS) and/or Doctor of Philosophy (PhD) degrees in an engineering or engineering-related academic program. Since the Laboratory is a non-degree granting research unit of Penn State, every student has a primary academic home in one of the Colleges of the University.

Research topics are available from faculty members of all five Offices of the Laboratory and include such areas as undersea systems, fluids dynamics, structural mechanics, acoustics, materials, manufacturing, communications, navigation, and information sciences and technology. Students will have thesis or dissertation advisors from the Laboratory and possibly a co-advisor from the student's academic discipline. The number of awards varies from year-to-year based on quality of applicants and availability of advisors within the Laboratory.

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**STUDENT ELIGIBILITY**

Candidates must be accepted into the Penn State Graduate School. Students who have been awarded the Assistantship are usually earning their MS and/or PhD degrees in an engineering-related graduate program within Penn State University from the College of Engineering, College of Earth and Mineral Sciences, Eberly College of Science, or School of Information Sciences and Technology. Successful candidates typically have an undergraduate GPA of 3.5 or above (out of 4.0) during their junior and senior years. Because the Laboratory has been officially designated a "University Affiliated Research Center" by the Department of Defense and the U.S. Navy, participants in the program must be U.S. citizens.

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**APPOINTMENT**

The ARL Walker Graduate Assistantship provides full tuition and fees as well as a stipend for graduate students admitted into the program for a duration of 12 months each year. An annual report of academic progress is required to be completed for submission to ARL and the student's academic office. Assistantships are nominally allocated two years of funding to obtain a MS degree and four years of funding to obtain a PhD degree. Additional time may be granted with ARL's approval. Assistantships may be terminated prior to the completion of their full term of appointment if the candidate fails to meet program and academic unit standards of performance and conduct.

The ARL Walker Assistantships offered by the Laboratory allow the student to participate during the Fall, Spring, and Summer Semesters and provides both a stipend and full tuition. Master's and beginning PhD candidates are offered a part time appointment (20 hours per week) at Grade 14 for 18 weeks (360 hours) during fall and spring semesters. During the summer, students are typically appointed for about 12 weeks (up to 480 hours). PhD students who successfully complete candidacy examinations receive a stipend at Grade 15, and PhD students who successfully complete comprehensive examinations receive a stipend at Grade 16. Stipend amounts vary slightly from year-to-year based on the University salary schedule; for the 2010–2011 academic year, they typically ranged from \$23,000–\$25,000.

## **Application Requirements and Selection**

ARL welcomes applicants for the ARL Walker Graduate Assistantship. Applications will be accepted until March 9, 2012 (or until all available assistantships are filled) for the Fall 2012 semester. Application packages will be reviewed by ARL for the selection of assistantships. Preference will be given to students whose research interests align with the broad range of technical work being performed at ARL.

The application package should be submitted online at [http://www.arl.psu.edu/emp\\_walker\\_app.php](http://www.arl.psu.edu/emp_walker_app.php) and will include the following information:

- Applicant's résumé and transcripts.
- A short narrative statement detailing the applicant's background, pertinent qualifications, proposed area of study, and summary of goals upon receiving their graduate degree
- Academic semester for start of enrollment
- Proof of acceptance into an engineering-related graduate program within Penn State University (such as the College of Engineering, College of Earth and Mineral Sciences, Eberly College of Science, or School of Information Sciences and Technology)
- GRE scores from within the last 5 years
- Complete undergraduate academic transcripts and transcripts for any completed graduate work
- Two letters of recommendation

Proof of U.S. citizenship (e.g., copy of passport or birth certificate) and of acceptance into the listed graduate programs must be provided at the time of an interview prior to start of the Assistantship, along with copies of the letters of recommendation.

## **ERIC A. WALKER**

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Before World War II, Eric A. Walker was a professor and head of electrical engineering at Tufts College and the University of Connecticut. He was appointed associate director of the Underwater Sound Laboratory at Harvard early in World War II. When a portion of the laboratory was moved to Penn State in 1945 as the Ordnance Research Laboratory (now ARL), he became Laboratory Director and head of the Department of Electrical Engineering. He became dean of the College of Engineering and Architecture (1951), Vice President for Research (1956), then President of the University (1956–70).