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# On Demand Training Solutions for Maintenance Technicians



# Aviation Systems Engineering Company (ASEC)

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### **Contact:**

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**SYSCOM:** Naval Air Systems Command (NAVAIR)

**Program Sponsor:** PMA-205, Naval Aviation Training Systems

### **Other Potential Programs:**

NAVSEA, NETC, US Army Training Command, Air Force Training Command, Space Force Training Command

**Current TRL: 4** 

Projected TRL: 5 / Q3 2023

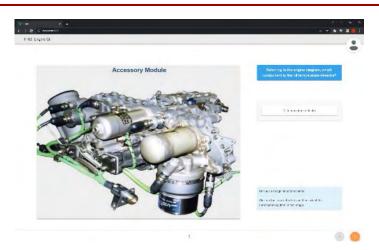
## **Keywords:**

Maintenance training, readiness, on demand, adaptive, mixed methods, performance assessment

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## THE CHALLENGE

The Navy needed an adaptive training environment with integrated capabilities to assess knowledge and performance of skills that are scalable to operational maintenance department training needs and flexible to instructor-in-the-loop to instructor-less practice.

## THE INNOVATION

The web-based Adaptive Training and Assessment for Aviation Maintainers (ATAAMs) environment assesses and remediates trainees on system overviews and the principles of operation for an aircraft, which enables them to efficiently progress from Apprentice to Artisan. Through computer-based training that does not require specialized equipment, ATAAMs can assess the maintainer's level of knowledge against designated learning objectives to identify potential knowledge gaps or identify skill decay. After the initial knowledge assessment, ATAAMs delivers targeted remediation to meet the trainee's individual needs by utilizing an organic node-based architecture to deliver a true intelligent tutoring system. Through iterative reassessment, the technology offers feedback reports for leadership to ensure maintainer proficiency is maximized, while standardizing and accelerating professional development.

#### THE NAVY BENEFIT

ATAAMs will produce significant improvements in readiness while reducing associated costs, as it continues the standardized professional knowledge training that Sailors are rarely exposed to after their initial entry training. That increased system knowledge will reduce repair turnaround times, increase supply chain efficiencies, and also reduce the need for external support (i.e., engineering assistance requests). ATAAMs is deployable on assets already owned by the military, so there will be no additional equipment costs. Trainees will not spend time training on material on which they already have an acceptable level of knowledge; instead, ATAAMs will provide trainees with focused training in areas that meet their personal needs. ATAAMs truly aligns with Ready Relevant Learning (RRL) principles, and is able to provide individually targeted training, anytime, anywhere.

## THE FUTURE

Evaluation of ATAAMs will continue to improve and expand its capabilities to meet the Fleet's needs. ATAAMs is one of the most adaptable training tools available and is ready for investment to meet any training need.