

ADAMS – Technology Summary

The Advanced Deployable Aircraft Maintenance System (ADAMS) is a relevant, game changing approach to rigid walled deployable structures. Quickly assembled by end users with minimal training. Its current USAF development has proven it can meet the most stringent of Bioenvironmental and climate control requirements the Aircraft Maintenance community demands. The fabrication, composite repair and low observable coating restoration shelter is a “first of its kind” rapidly deployable kit. The ADAMS maintenance complex solution is an achievement that is unmatched to date. Ready to provide prepositioned war reserves, and post attack or natural disaster recovery stop gap operations anywhere in the world.



ADAMS Maintenance Complex at Hickam AFB

The ADAMS shelter system developed in close partnership with the Rapid Sustainment Office continues to provide capability anytime, anywhere as showcased within PACAF, AFSOC and most recently following Typhoon Mawar relief efforts in the Pacific Theater. The Trac9 family of shelter Innovations continue to advance as an agile, flexible capability with the ability to grow as the mission dictates. Its expandable, foldable, strong, kevlar composite construction provides a lightweight and strong solution to meet any need in a modular air mobility friendly solution - Advanced Deployable Air Mobility Shelter (ADAMS).



ADAMS Prepositioned shelters set-up following Typhoon Mawar at Andersen AFB

ADAMS - Benefits and Applications

The Air Force enterprise has immediate need having a national defense-related mission in the area of Advanced Deployable and Agile Modular Structures. The proposed solution will augment existing infrastructure with a surge capacity to support aircraft generation activities at sites that lack existing base support capability.

Air Force Maintenance, Medical and Special Operations end users can benefit from this system, supporting capabilities such as additive manufacturing, corrosion control, aircraft maintenance. The Medical community can benefit from a deployable solution that is ridged and can be easily sanitized to meet battlefield surgical needs. Each system will be readily able to interface with standard Air Force generators or existing facilities and can be shipped within standard Air Cargo containers or palletized.



ADAMS shelter being utilized as medical shelter at Cannon AFB

Development of this class of portable facilities and maintenance structures provides the Air Force with a Modular/Mobile system that can be rapidly deployed to austere locations throughout the world, providing safe and effective workspace in a variety of locations. One of the key elements of these structures that separates it from existing technology is its ability to expand to meet additional space requirements or mission needs. Unlike expandable ISO and shipping containers, the ADAMS can grow or shrink with mission changes and demands. It's plug and play take on sustainment challenges gives it the ability to be modified to meet any operational military need. It also has half the packed volume and double the square footage as compared to traditional expandable systems. It was specifically designed in close coordination with the maintenance community for ease of assembly and sustainment. It can be assembled by anyone with minimal training and requires no special tools or the need for heavy equipment support.

Air Force stakeholders at the field-level (e.g. base/wing/group/squadron) and depot-level are empowered customers that can transition the technology for their mission needs by using a variety of funding mechanisms, such as O&M IMPAC card purchases, blanket purchase agreements or contracts (depending on quantity), and the Phase III transition preference for direct purchases. PACAF/A4 among many others has indicated willingness to transition the resulting innovations

to Phase III contracts, subcontracts, or other instruments. AFSOC has already transitioned the technology to a Phase III contract in FY23.

Commercial applications include humanitarian aid, post natural disaster relief support, medical use, temporary housing, mobile labs, fabrication facilities, etc. The commercial use is as vast as this architecture is extremely versatile. It has already been used in several STEM activities as an additive manufacturing training lab and in STEM field camps for university, high school and elementary school students.

