

KC-46

INTEGRATED MAINTENANCE TRAINING SYSTEMS (MTS)

The KC-46 aircraft is replacing the KC-135 fleet of air refueling tanker aircraft. The foundation of the aircraft is a Boeing 767 aircraft with the 787 cockpit and integrated avionics systems to which refueling, mission and defensive avionics systems are added. The requirement from the Air Force was for a Maintenance Training System consisting of six maintenance trainers augmented with a simulation-based virtual training system and a suite of 20 advanced classrooms including Interactive Multimedia Instruction (IMI) and a full curriculum integrated with a Learning Management System (LMS) and an Instructor Operating Station (IOS). As a subcontractor to Boeing, Kratos is specifically responsible for:

- A full simulation of all the aircraft and mission systems (to meet over 3000 training tasks and theory of operation)
- Integration of the simulation and LMS with part-task trainers called Augmented Hardware Training Devices (AHTD)
- Development of 31 courses supported by and blended with simulation/virtual-based IMI
- An instructor friendly custom LMS/IOS to manage instructor led lessons, simulation based courseware and hands on performance
- The Flight Deck (Avionics) AHTD
- The Refueling AHTD
- Integration of all instructional elements to include classroom, IMI, virtual IOS/LMS and hardware devices (simulated and actual aircraft hardware).
- The entire training system is data managed from tasks through curriculum to training devices.



AROS



WARP



VMTS



FLIGHT DECK



The KC-46 maintenance training blended solution utilizes different types of instructional media in the delivery of the maintenance training curriculum. The Virtual Maintenance Training Systems (VMTSs) and AHTDs incorporate IMI that is fully simulation-based and integrated via the local area network to provide a comprehensive schoolhouse environment. The schoolhouse environment includes Instructor-Led Training (ILT) with simulation based virtual media and self-paced elements in the classroom to improve student comprehension of complex topics in preparation for performance-based events.

The KC-46 MTS consisting of 31 courses, the AHTDs and a simulation driven virtual KC-46 provides training on:

- System Theory of Operation
- Component Location and Identification
- Fault Isolation Procedures (FIP's)
- Remove and Install (R/I) Tasks
- System and Subsystem Familiarization
- Servicing Tasks and Inspections
- Maintenance Operational Checks (MOC's)

In addition to providing state-of-the-art training devices and dynamic media designed for the student to fully meet performance objectives, the lesson design for instructor-led, theory-based curriculum utilizes contemporary adult learning theories. Facilitation of discovery learning, challenge questions, and critical thinking in engaging simulation based scenarios promotes active learning and learner-centric courseware. Course curriculum flow provides interactive classroom activities followed by immediate practice, integrating the cognitive and the psychomotor, true blended training.

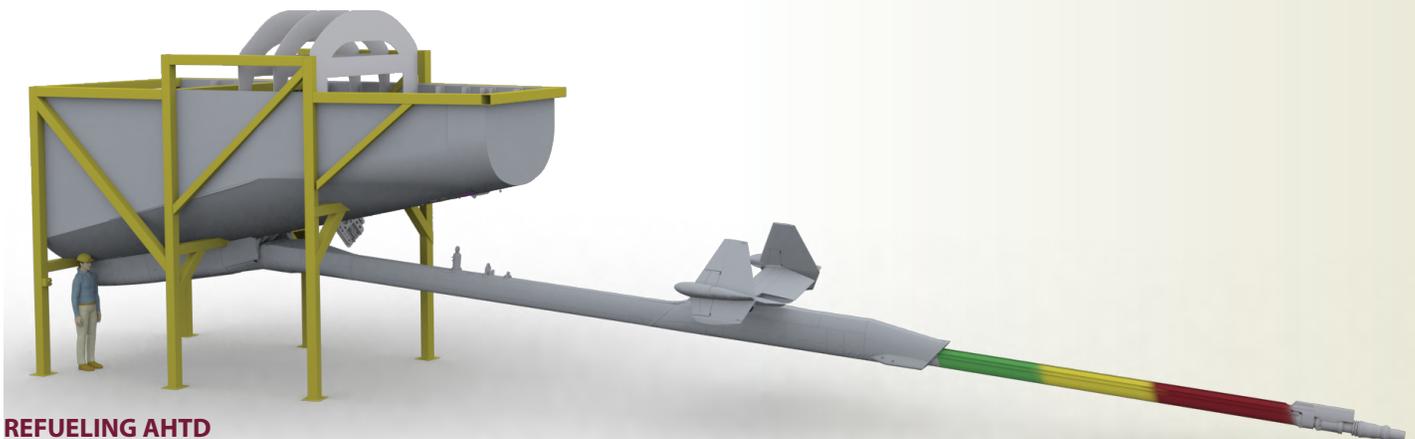
In addition to the development of the integrated system, Kratos has designed the training system to be highly supportable to significantly reduce overall life cycle costs.

About Kratos Training Solutions

Kratos Training Solutions specializes in assuring the readiness, reliability and operational effectiveness of Warfighter systems by supplying lifecycle Training Solutions to its defense, government and commercial customers.



VIRTUAL COCKPIT



REFUELING AHTD

SS-KTS052

KRATOS
FROM STRENGTH TO SUCCESS