CAE USA is the prime contractor for the United States Air Force’s KC-135 Aircrew Training System (ATS). CAE USA won the contract in December 2010 and is responsible for comprehensive KC-135 aircrew training services over the next 10 years. The KC-135 ATS program delivers initial qualification, requalification, continuation and upgrade training for KC-135 aircrews, including pilots, navigators and boom operators for the USAF as well as several international militaries. As the prime contractor, CAE USA provides program management, academic and simulator instruction, maintenance and logistics services, training device upgrades, and a Training Systems Support Center.

**Program background and history**

The KC-135 Stratotanker is the USAF's primary aerial refueling aircraft. The USAF currently operates a fleet of more than 400 KC-135 tankers, which first entered service with the USAF in 1957. The KC-135 is expected to remain in service for decades to come, and will be joined by the new KC-46A tanker. The KC-135 ATS program began in the early 1990's when the USAF outsourced its aircrew training to industry. Under the current KC-135 ATS program, CAE USA provides aircrew training services at 13 locations in the United States and internationally for more than 3,700 KC-135 pilots, co-pilots, navigators and boom operators.

**KC-135 ATS training locations**

CAE USA, along with its subcontract partner Delaware Resource Group (DRG), is providing on-site aircrew training services with a fleet of 19 KC-135 operational flight trainers (OFTs) at the following worldwide locations:

- Altus Air Force Base (AFB), Oklahoma, which is the formal training unit for the KC-135
- McConnell AFB, Kansas
- Scott AFB, Illinois
- Fairchild AFB, Washington
- MacDill AFB, Florida
- Grissom AFB, Indiana
- March Air Reserve Base (ARB), California
- Milwaukee Air National Guard (ANG) Base, Wisconsin
- Pittsburgh ANG Base, Pennsylvania
- Seymour Johnson AFB, North Carolina
- Royal Air Force (RAF) Base Mildenhall, United Kingdom
- Kadena Air Base, Japan
- Hickam AFB, Hawaii
**KC-135 OFT upgrades**

CAE USA has been providing a range of upgrades to KC-135 OFTs. CAE has updated the input/output system on the KC-135 OFTs, which has enhanced simulator reliability and maintainability. The visual display systems were also upgraded to state-of-the-art high-definition systems that provide aircrews with greater visual fidelity of the synthetic environment. Additionally, CAE has modified the stabilizer trim system on the KC-135 OFTs to ensure concurrency with the actual aircraft.

Currently, CAE is upgrading a range of KC-135 aircrew training devices so that they can be used on the United States Air Force's Distributed Training Center Network (DTCN). CAE is performing a range of upgrades and updates to KC-135 OFTs and KC-135 boom operator weapon systems trainers (BOWST) so they can be used for Mobility Air Force Distributed Mission Operations (MAF DMO) training.

With the ability to connect the various KC-135 training devices to the DTCN, the USAF will have increased capability for virtual air refueling and air refueling formation training over a secure network. In addition, CAE is ensuring the training center facilities housing KC-135 aircrew training devices meet the required physical security and cybersecurity requirements established by the U.S. Department of Defense.

**Training Systems Support Center (TSSC)**

CAE USA operates and maintains the KC-135 Training Systems Support Center (TSSC) at Altus AFB. While operational maintenance of the training devices is handled at each of the KC-135 sites, CAE’s staff at the TSSC is responsible for maintaining the product baselines to ensure commonality and consistency across all KC-135 ATS sites. The CAE staff at the TSSC provides the following services:

- Aircrew training device support
- Instructional material support
- Configuration control and data management
- Maintenance data collection and inventory control

The TSSC is currently managing several modifications to the KC-135 training devices, including the KC-135 OFTs and the Boom Operator Weapon System Trainer (BOWST). These training devices, along with new instructional material, will ensure KC-135 aircrews are training with material that is concurrent with the KC-135 functional baseline.