

STRATO-T

STRATO-T, the Sustainment Technologies, Research and Automation for Transformative Operations Testbed, is a KC-135 Stratotanker innovation testbed located at Air Capital Flight Line in a stretch of property near McConnell Air Force Base in Wichita, Kansas. STRATO-T is driven by a strategic agreement with the National Center for Manufacturing Sciences and supporting partnerships with the U.S. Transportation Command and the U.S. Air Force Air Mobility Command.

Leveraging NIAR's digital engineering experience throughout these and other studies, STRATO-T generates vital KC-135 digital models to improve the long-term supportability of this critical air refueling asset.



GOAL:

Study, develop and test innovations for reducing legacy aircraft operations costs

WHO WE SERVE:

- Government agencies
- Industry clients
- Academic institutions

SUPPORTS EVALUATIONS/STUDIES OF:

- Innovative sustainment
- Energy efficiency
- Aircraft automation concepts

EXPECTED OUTCOMES:

- Application of innovative technology, systems integration requirements, and their suitability and value in use.
- Development and transfer of technical information related to extending the useful lifespan of legacy aircraft, modernizing aircraft systems, and exploring innovations in operations and maintenance.
- Advance technology readiness levels including aircraft automation, advanced manufacturing, maintenance and repair techniques
- Information collection for human system development, predictive maintenance, aircraft threat mitigation, and other uses.
- Aircraft automation concepts

ABOUT THE AIRCRAFT:

The selected KC-135 aircraft is approximately 60 years old and otherwise destined for long-term desert storage. It possesses inherent physical/structural and electronic characteristics gained from decades of military service, providing otherwise unobtainable impacts of generations of maintenance, upgrade, environmental exposure, and global operational use. The aircraft's service life confers artifacts that are highly representative of the condition and performance of other legacy aircraft, resulting in a uniquely realistic environment for test and demonstration of new technologies.

- Manufacturer: Boeing
- Model: KC135R Stratotanker
- Year built: 1963
- Registration #: 63-8881
- Alternative Code/Name: Bad Company

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