



## CH-47F Chinook Avionics Trainer

**Providing high fidelity hands-on training of avionics for technicians in all units while also training intermediate level maintenance tasks.**

Kratos Defense & Security Solutions Inc., was selected by the Program Managers Office (PMO), Cargo Helicopters to provide a suite of new CH-47F Chinook Avionics Trainer (CAT) devices to support heavy lift helicopter maintenance training at the US Army's Aviation Logistics School (USAALS) in Fort Eustis, VA.

The CH-47F CAT is a High Fidelity Hands On Training System (HOTS) that provides Full task training through simulation of all avionics systems in fully integrated configuration within a fully immersive physical environment. The CAT replicates the aircraft interior and exterior spaces with a simulation of all Line Replaceable Units (LRU) necessary to support the 15N10 Avionics Mechanics program of instruction. The CAT Provides for training of specific tasks such as:

- **Fault Isolation Procedures (FIPs)**
- **Remove and Install (R/I) Tasks**
- **System and Subsystem Familiarization**
- **Servicing Tasks and Inspections**
- **Maintenance Operational Checks (MOCs)**
- **Component Identification**



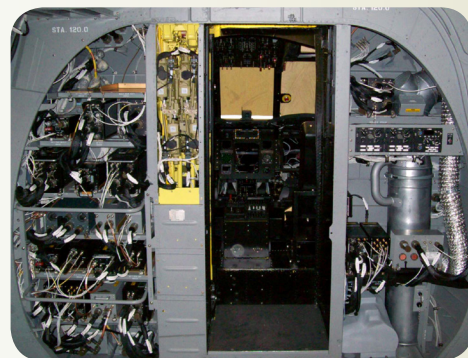
**The CAT also provides high fidelity training in an integrated avionics platform. This provides features required for unit and intermediate avionics maintenance tasks such as:**

- Simulation of 30 Avionics Subsystems with 231 Available Faults in Cables, LRU's and Sensors
- Test, Measurement, Diagnostic Equipment and Peculiar Ground Support Equipment PGSE).
- CH-47F Common Aviation Architecture System (CAAS) cockpit.
- AFCS command and Manual Articulation of controls, controls linkage and control Servos.
- Stand alone Instructor Operator Station for exercise control, fault insertion and event logging
- The trainer unique computer system and power supplies are mounted in a separate cabinet beside the trainer.
- Functional simulation and physical replications using trainer unique LRU's and components.

**Typical 15N training tasks include trouble shooting, isolation of faults and restoration of functionality for the following systems:**

- CH-47F Unique Systems and Equipment
- Data Networks (MIL-STD-1553B Data bus, Ethernet, ARINC 429, SMTPE 292 Video, Serial/discrete/Analog)
- CDU-7000
- Multifunction Display (MFD), MFD-268C3
- General Purpose Processor Unit (GPPU), GPPU-8600
- Data Concentrator Unit (DCU)
- Emergency/Auxiliary Control Panel (EACP), EACP 253M-4A
- Data Loader Unit DR-200
- Electronic Standby Instrument System (ESIS)
- Heads-Up Display (HUD), CV-4339(V)/AVS-7(V)
- Cockpit Voice Recorder / Flight Data Recorder (CVR/FDR)
- Embedded Global Positioning System (GPS)/Inertial Navigation Unit (INU) (EGI), CN-1689-H-764GU
- Very High Frequency Omni-Ranging (VOR) Instrument Landing System (ILS) and Marker Beacon(MB), AN/ARN-147(V)
- Automatic Direction Finder (ADF), AN/ARN-149(V)1
- Tactical Airborne Navigation (TACAN), AN/ARN-153(V)
- Radar Altimeter, APN-209G
- Stormscope, WX-500
- Digital Map System
- Digital Intercommunications System (DICS)
- Identification Friend or Foe (IFF) Transponder, AN/APX-118
- FM SINCGARS Radio, AN/ARC-201D(V)

- VHF/AM-FM Radio, AN/ARC-186(V)
- UHF/AM HAVEQUICK II Radio, AN/ARC-164(V)
- High Frequency (HF) Radio, AN/ARC-220(V)2
- High Frequency (HF) Radio, AN/ARC-220(V)2
- Improved Data Modem (IDM), MD-1359/A
- Blue Force Tracking (BFT) System
- Radar Warning System, AN/APR-39A(V)
- Common Missile Warning System (CMWS), AAR-57/ALQ-212
- Improved Countermeasures Dispenser (ICMD), D-61/ALQ-212
- Digital Automatic Flight Control System (DAFCS)
- Air Data Systems



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