

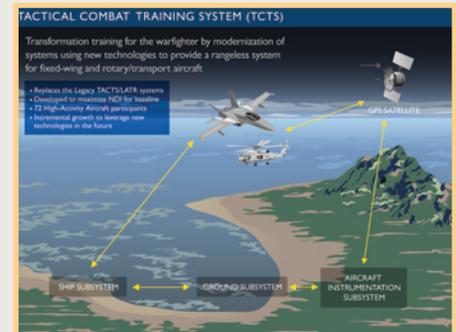
Tactical Combat Training System



The Tactical Combat Training System (TCTS) is an ACAT IV acquisition program replacing current Navy airborne training instrumentation systems for tracking of aircraft in support of tactical training exercises at various training ranges over land or at sea.

Using Global Positioning System (GPS) satellite tracking, TCTS provides continuous, live, real-time tracking of air exercise participants up to approximately 350 nautical miles (line of sight plus one relay) from any Remote Range Unit (RRU). Training ranges can be equipped with up to 20 RRUs to provide an expansive live coverage area. TCTS tracking information is collected by the RRU and relayed to the Ground Subsystem (GS), where it can be combined with data available from Link-16, Radar Acquisition Display System (RADS), Electronic Warfare Server (EWS), Ground Tracking System (GTS) and other systems to form a total picture of the events occurring in the training/operational areas covered by the RRUs.

TCTS can also be used in a rangeless mode, requiring no ground infrastructure at all. During an exercise, the same data that TCTS is transmitting on the data link is recorded on a solid-state Data Recording Device (DRD) inserted in the Airborne Subsystem (AS). After an exercise, TCTS exercise data can be debriefed from the live recording at the control center or at any other GS site that can read the DRDs. The ability to read and debrief from the DRDs gives TCTS a rangeless capability that is limited to Time, Space, Position Information (TSPI) and weapon simulations. TCTS supports training requirements that range from single-platform, unit-level operations to complex, multi-platform scenarios typical of fleet exercises. TCTS can also support multiple independent operations.



Operational diagram

GPS-based tracking system:

- GPS-aided inertial measurement unit provides full-state vector
- 100 high activity player capacity and 100 low activity player capacity
- 350 nautical mile live tracking range including line of sight plus one relay
- Rangeless capability available for TSPI and weapon simulations
- Includes aircraft interface and real-time weapons data collection
- Continuous operation
- Multiple simultaneous exercises and missions
- Fixed-wing and rotary-wing aircraft can be instrumented

Participant packages for fixed-wing, rotary-wing and ship platforms

FOR MORE INFORMATION

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