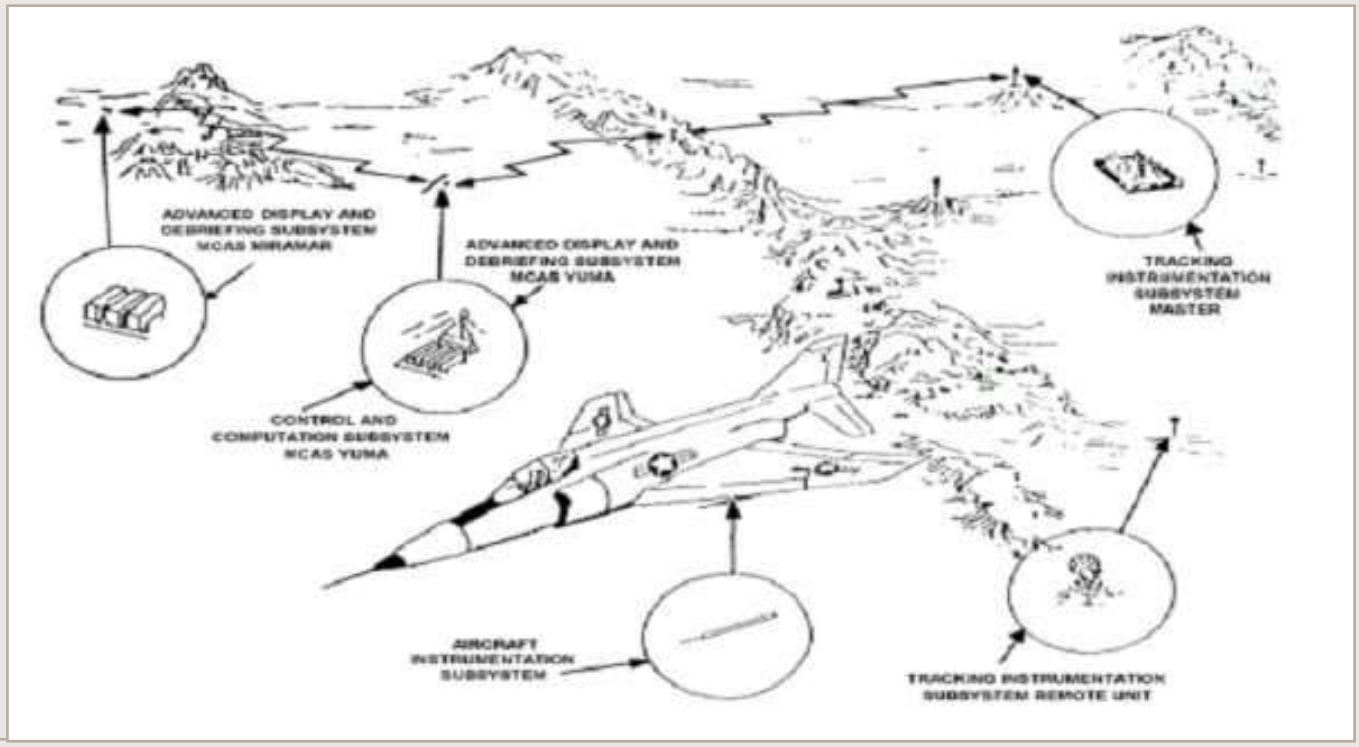
TACTS Airborne Subsystem Software Support Activity



Operational diagram

The Tactical Aircrew Combat Training System (TACTS) provides the facility to train combat aircrews in air combat maneuvering (ACM), no-drop bomb scoring (NDBS), anti-radiation missile (ARM) delivery and electronic warfare (EW). The system is installed to include a defined airspace large enough for simultaneous training exercises tracking 36 high-activity aircraft. The system processes aircraft data that includes position, velocity, attitude and airmass parameters from each aircraft. TACTS also processes downlinked weapon data for the purpose of monitoring and evaluating pilot performance in a tactical scenario.

Fixed-wing package (AIP-FW)

Fixed-wing internal package (AIP-FWI)

for more information

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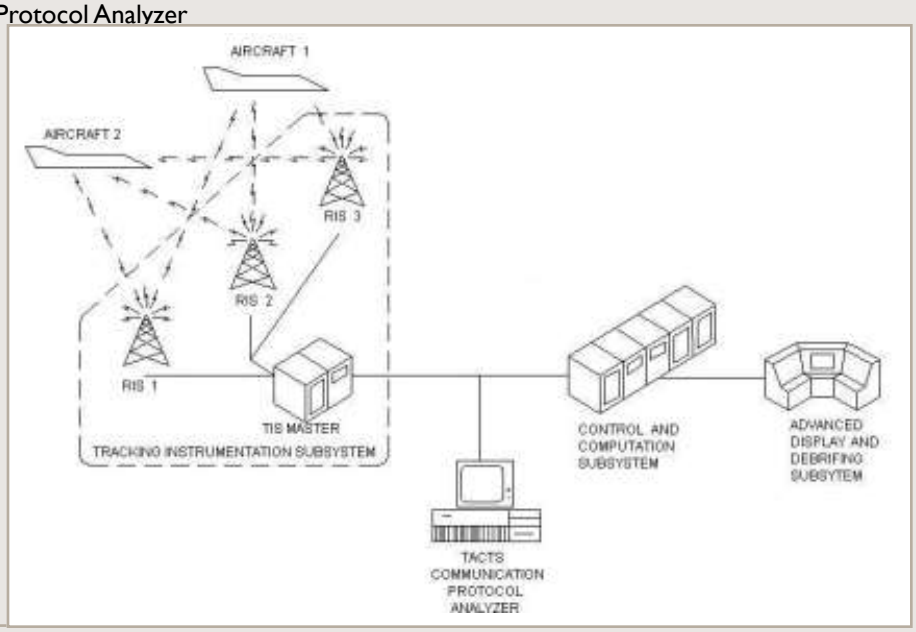
TACTS Communication Protocol Analyzer (TCPA)

The purpose of TACTS Communication Protocol Analyzer (TCPA) is to provide the TACTS/ACTS operators the means to monitor message traffic between the Control and Computation Subsystem (CCS) and the Tracking Instrumentation Subsystem (TIS). The TCPA provides:

- Live monitoring of TACTS TIS-to-CCS (TIS/CCS) and CCS-to-TIS (CCS/TIS) communications
- Detailed element viewing of TIS/CCS and CCS/TIS data
- Recording of TIS/CCS and CCS/TIS data
- Operator-friendly data reduction of recorded data using spreadsheet software (e.g., Microsoft Excel)
- Replay of recorded data using the TISM
- Display of live transmission delay of TIS response
- Statistical data on communications link (e.g., message checksum, uplink parity)



TCPA network

TACTS Instrumentation Subsystem Module (TISM)

TISM is an emulator for the TIS and range portions of the TACTS system. All data associated with typical TIS-to-CCS transfer is simulated with the TISM. All aircraft flight data and weapons data are collected to form a TISM scenario. Scenarios contain the number of aircraft that exist in a given encounter and precisely what each of those aircraft do as they perform a specific task.

Depot-Level Test Set

The Depot-Level Test Set (DLTS) provides that capability to perform depot-level testing for the TACTS Aircraft Instrumentation Subsystem (AIS) P4A, the Aircraft Instrumentation Subsystem Internal (AISI) and the Aircraft Instrumentation Subsystem Encrypted (AISI(K)).