

SIGNAL FUSION AIRBORNE PLATFORM™

Airborne Multi-Waveform Communications Aggregation/Relay for Austere and DDIL Environments

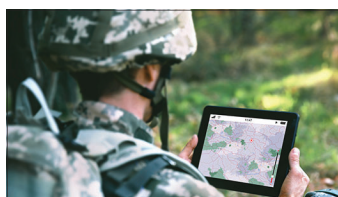


RESILIENT AIRBORNE COMMUNICATIONS SOLUTION THAT ENABLES SECURE VOICE AND DATA INTEROPERABILITY AMONG DISPARATE WAVEFORMS

Tribalco's strategic airborne communications gateway solution establishes nearly instantaneous voice and data communications between the U.S. military, host nations, and surrogate forces.

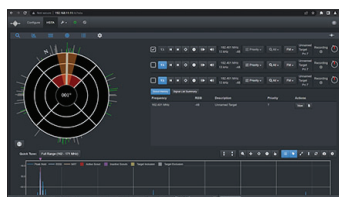
By acting as a relay node, the Signal Fusion Airborne payload enables cross-banded waveforms to connect disparate communications networks, digital and analog radios, and data networks across the battlefield, even in contested and Denied, Disrupted, Intermittent, and Limited (DDIL) environments.

Connects platforms, sensors, and shooters for enhanced communications, improved mission processing, and more effective EW operations



ASSURED POSITIONING, NAVIGATION, AND TIMING

- Includes embedded GPS
- Can mitigate jamming via available anti-jam waveforms
- Embedded Chip-Scale Atomic Clock (CSAC) maintains time accuracy with >1ns drift



SOFTWARE DEFINED RADIO-BASED PAYLOAD

- Carries up to four waveforms on each multi-mission SDR
- Able to change waveforms while in flight
- Connects to any ground radio (audio or data link) when paired with Tribalco's Signal Fusion Platform™



ASSURED INTEROPERABLE COMMUNICATIONS & PERSISTENT COVERAGE

- Supports Intelligence, Surveillance, Reconnaissance & Targeting
- Provides airborne edge compute resources
- Presents hardware-agnostic Kubernetes (K8) software clusters that can be changed on-the-fly

Seamless Interoperability

Enables unified communications regardless of waveform (LMR, tactical communications, SAT-COM, 5G, LTE, and Wi-Fi) in DDIL environments

EW Capability

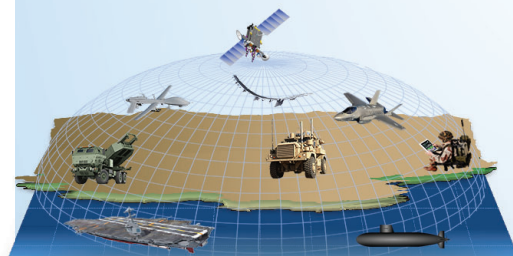
Provides a library of on-demand electronic warfare techniques for pre-mission or in-flight requirements

Redundant Data Link Capabilities

Provides multiple configurable options for air-to-air and air-to-ground data links

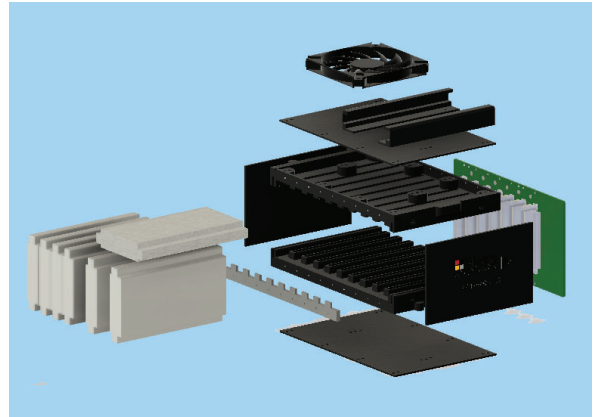
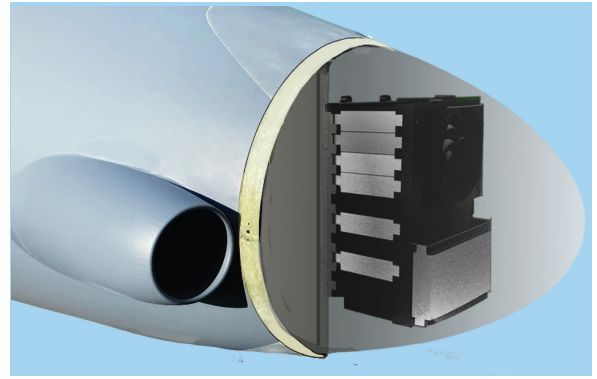
Enables Beyond-Line-of-Site Communications

Common Operating Picture Solution Capable Interfaces with standard COP formats such as Cursor On-Target



SF Airborne Platform™

Strategic and Tactical Airborne Communications Gateway Integrates with Advanced C2 and Ground Control Packages



STRATOSPHERIC CAPABLE

- Environmentally Controlled
- DO-160 Ready



ASSURED PNT

- Embedded GPS SAASM or M-Code Receiver
- Available Anti-Jam Waveforms
- Embedded CSAC



RADIO GATEWAY

- Audio/Data
- IP/RoIP
- Relay and Cross-Banding



EW CAPABILITIES ON DEMAND

- Library of EW Techniques
- Pre-Mission and In-Flight Configurations



VOICE/DATA INTEROPERABILITY

- LOS/BLOS/MANET
- SATCOM
- RoIP
- Unicast/Multicast
- VoIP



BUILT-IN SENSORS

- Temperature/Power Status
- GPS Location
- Cursor On-Target Location Data



SOFTWARE DEFINED RADIOS

- 20 MHz – 6 GHz
- 3U VPX CMOSS Chassis
- 2-4 Channels, Tx or Rx Reconfigurable per Card



Tribalco is a global systems integrator and OEM engineering C5ISR solutions for customers around the world. As a named NSA CSFC Trusted Integrator, Tribalco is at the forefront of technology advancement in engineering, producing, and deploying NSA-compliant solutions that enable customers to securely access, exploit, and share classified data across commercial networks with U.S. and partner nations, often in extremely challenging environments.