

REVOLUTIONIZING AIR COMBAT TRAINING

- Increased operational training realism through next-generation capabilities



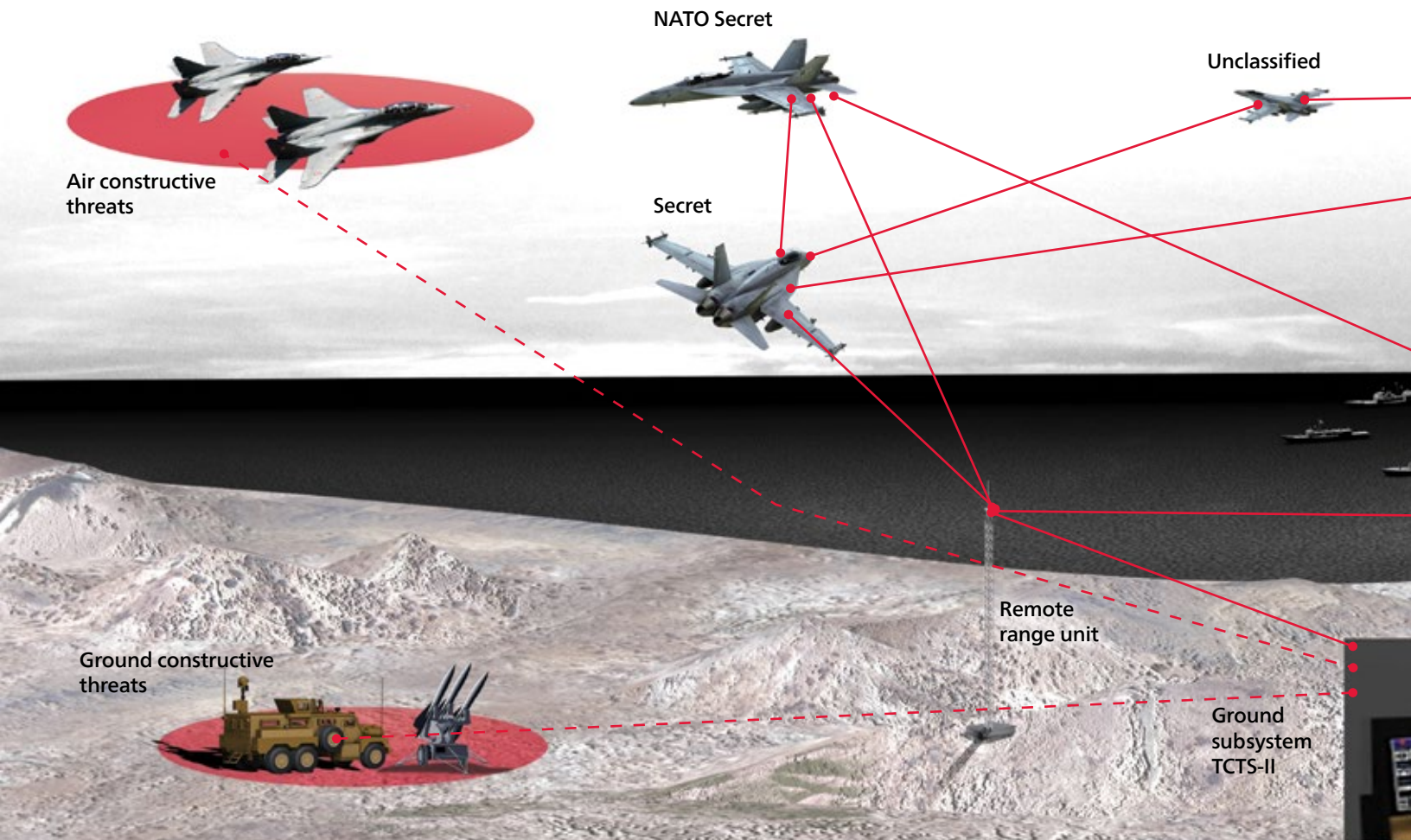
TACTICAL COMBAT READINESS

With the U.S. Navy and U.S. Marine Corps Tactical Combat Training System (TCTS) Increment II, you'll get improved readiness across the training spectrum. TCTS II connects 5th-gen and 4th-gen aircraft training missions and brings significant real-time training benefits to all participants in a simulated, highly contested, highly congested combat environment. The system enables live, blended with synthetic (virtual and constructive), real-time air combat training with additional onboard participant-embedded processing and weapon flyout models, tethered and autonomous training operations, and low end-to-end network latency through industry interfaces.

Even as TCTS II improves training realism to "train like you fight," it protects warfighting tactics, techniques and procedures (TTP), and it enables scalable training scenarios from individual to collective, home stationed to deployed, and across service, allied and coalition security boundaries. The combination of open system Multiple Independent Levels of Security (MILS) architecture and government data rights ensures rapid adaptation to emerging threats and missions, while on range or while deployed.

TCTS Inc. II replaces and advances the existing range training infrastructure and fields the first certified MILS synthetic-inject-to-live training capability in both airborne and ground equipment. Collins Aerospace and Leonardo DRS bring mature technologies and solutions to your operational training.

TCTS Inc. II — secure, real-time, simultaneous training



MATURE

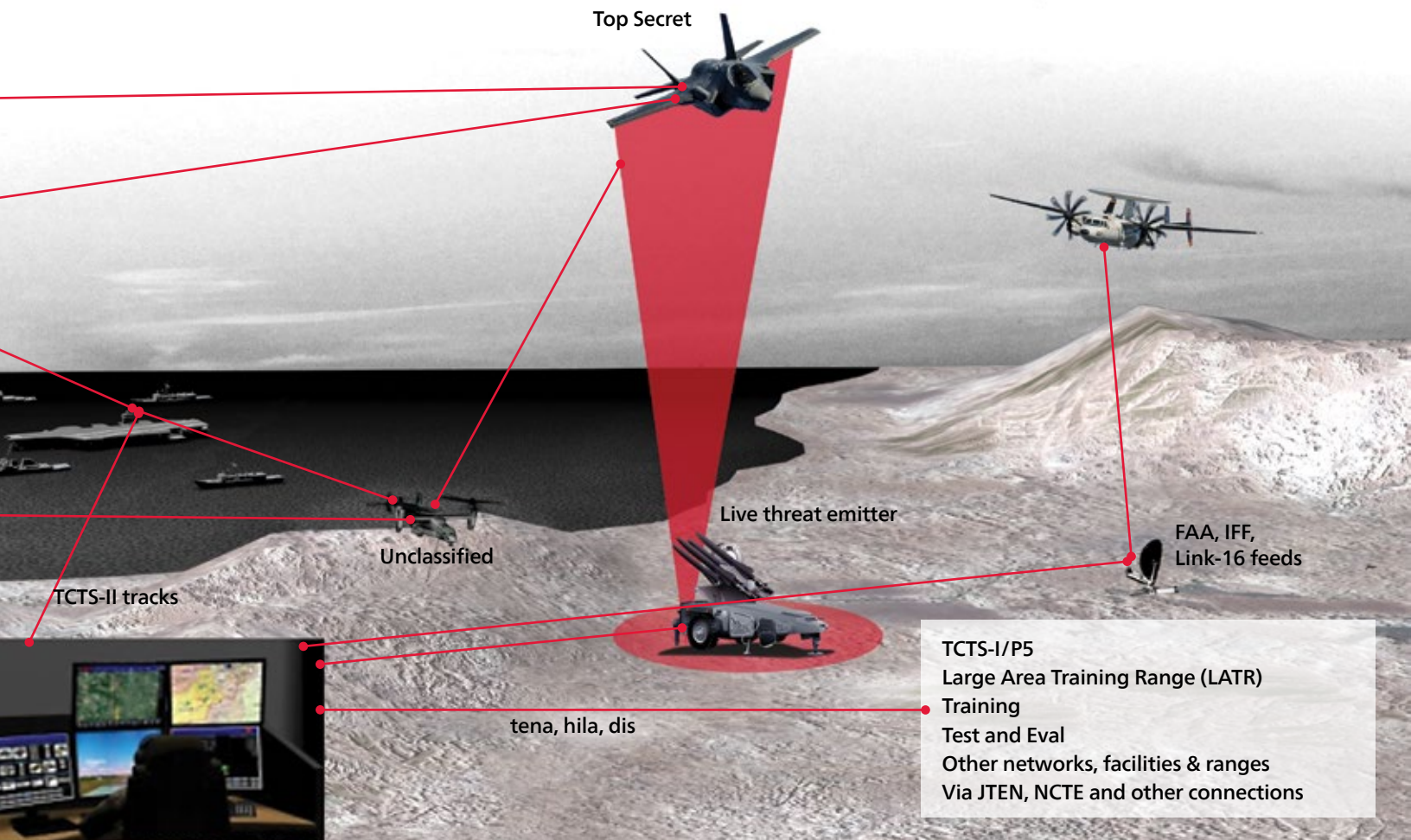
Leverages a fielded system, currently at Major Range and Test Facility Base (MRTFB), and adds mature training and operational functionality with an inherent capability to scale and evolves to the most current operationally relevant warfighter training needs

SECURE

Uses previously accredited multi-security level architecture, the latest NSA approved cybersecurity system, End Cryptographic Unit (ECU) and cross-domain solutions (CDS). CRIIS is part of the MATURE rational, however CDS and ECU now meet new NSA RTB requirements not imposed on CRIIS.

OPEN

Future Airborne Capability Environments (FACE™) conformant open architecture lends itself to interfacing with a variety of existing and future best in class 3rd party applications such as live monitor and debrief, embedded training and near peer threat models





AIRBORNE FORM FACTORS



Airborne Subsystem (AS)



Internal Mount (IM)



Internal Rack-mounted Subsystem (IRSS)



F35 Internal Mount (JSF IM)

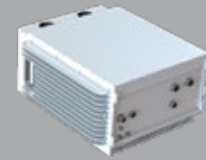
GROUND STATION FORM FACTORS



Common Ground Subsystem (CGS)



Portable Ground Subsystem (PGS)



Remote Range Unit (RRU) Subsystem

PORTABLE SUPPORT EQUIPMENT



PLATFORM

AH-1 W/Z

AV-8B

CH-46E

E-2C/D

EA-18G

EP-3E

F-16A/B

F-16N

F-35A/B/C

F-5N/F

F/A-18A/B/C/D/E/F

HH-60H

KC-130J

MH-53E

MH-60R/S

MV-22B

P-3C

P-8A

SH-60B/F

UH-1Y

We have a solution for your platform



UNMATCHED OPERATIONAL REALISM

- Ensures live participants are able to “train like you fight” in highly contested, highly congested air combat situations
- Adds depth to exercises by securely enabling 5th-gen, legacy and coalition forces to train together in real-world environments and with real-world threats
- Integrates with current training assets such as electronic warfare threat emitters and ground-based participants
- Features Synthetic Inject to Live (SITL), with full-fidelity threat and weapon simulations for multiple weapon types
- Supports real-time kill notification with real-time Range Training Officer (RTO) adjudication
- Creates more effective, efficient training using inflight configurable training missions

CERTIFIED SECURITY

- Get the secure network connectivity you need to share the right data with the right people in your most challenging training scenarios.
- The only air combat training system with NSA encryption that supports security requirements of today’s 5th-gen and 4th-gen fighters and can be run at system high
- Multiple levels of security (MLS) architecture capable of four simultaneous encryption channels from Unclassified to Top Secret
- Multiple Independent Levels of Security (MILS) in both airborne and ground subsystems for tethered or autonomous operations

ENHANCED SCALABLE TRAINING CAPABILITY

- The scalable system supports participants from a small squadron to a large-force exercise. It advances air combat proficiency training while adapting to future training needs.
- 10x more network capacity than existing combat training system within the same bandwidth – 100+ live participants with excess capacity for blended live, virtual constructive (LVC) exercises
- User defined messages interact directly with the aircraft, providing rapid training scenario adaptation to emerging threats and missions
- Scalable training exercises – connect multiple ranges with TCTS II capability to create a common test and/or training battlespace

OPEN ARCHITECTURE

Our Future Airborne Capability Environment (FACE™) conformant open architecture lends itself to interfacing with a variety of debrief and live monitoring software systems. The system complies with standard interfaces such as HLA, DIS, TENA, and Ethernet.

- Industry Standard I/O between subsystems and major functional components (LRU/WRAAs)
- The Government has a right to use all interface data.
- Ability to advance future technology insertions through open architectures/standards and avoid vendor lock

To learn more, go
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