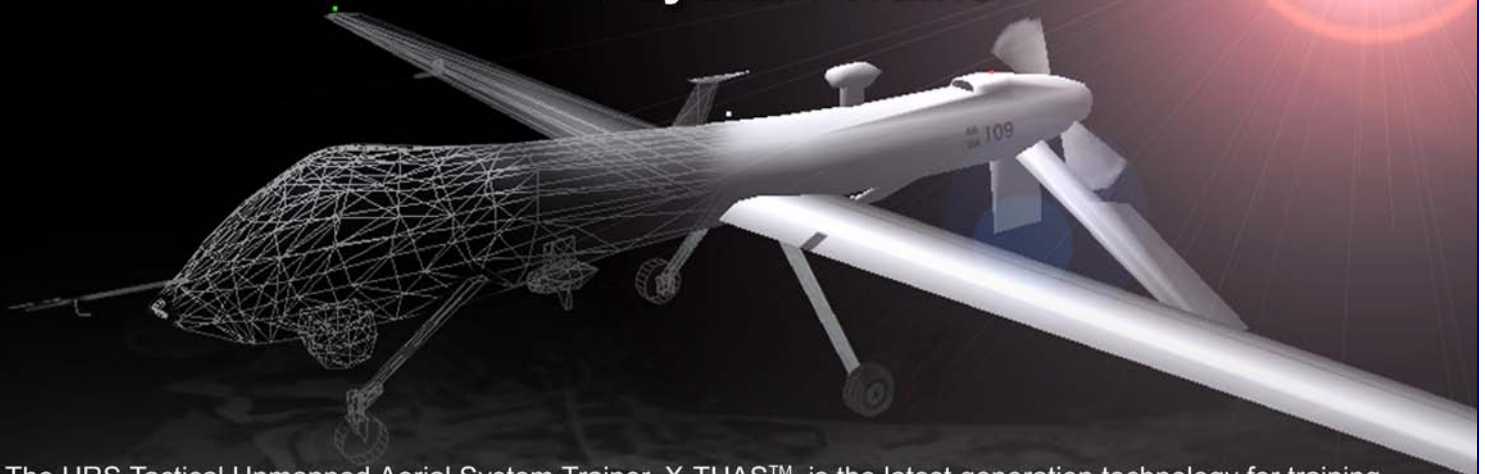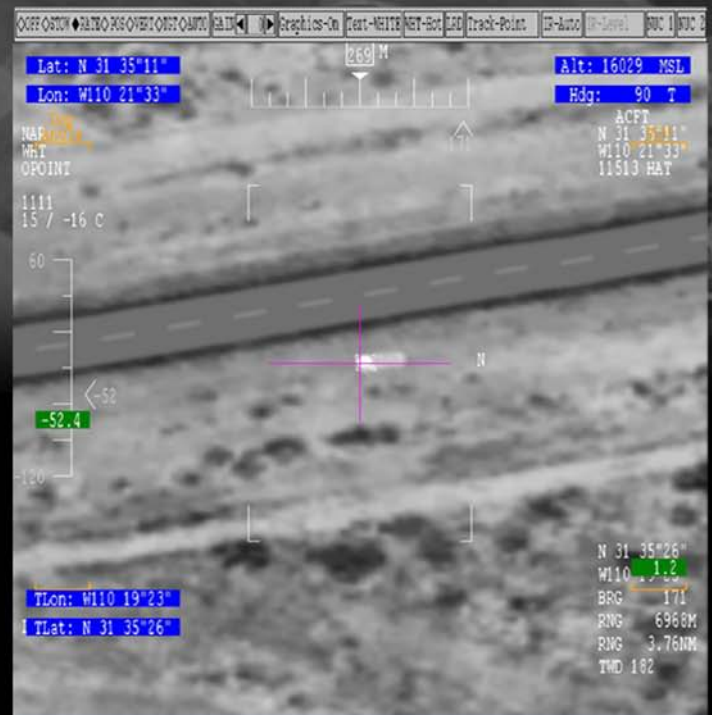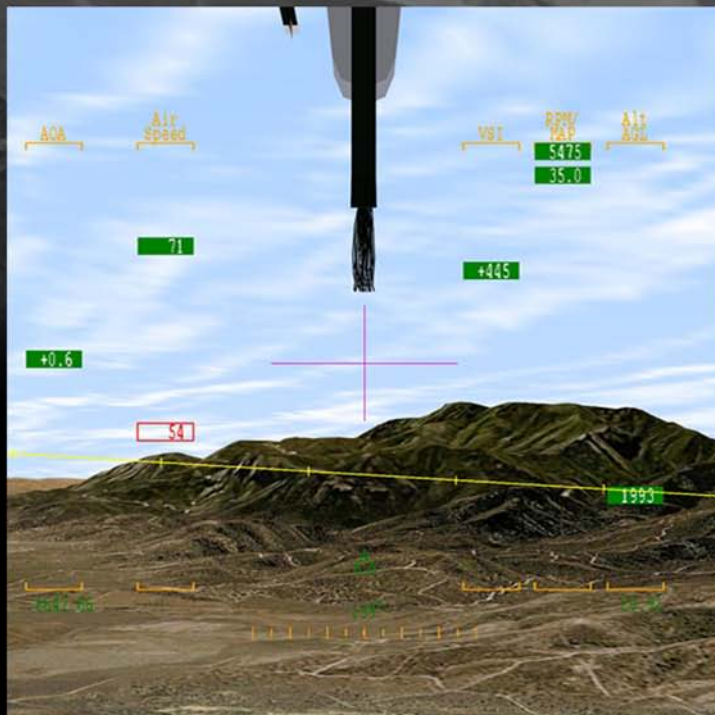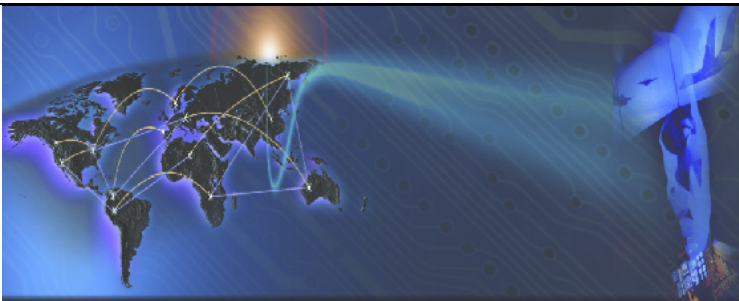# X-TUAS™ Tactical Unmanned Aerial System Trainer

The URS Tactical Unmanned Aerial System Trainer, X-TUAS™, is the latest generation technology for training both payload and air vehicle operators. X-TUAS™ is based on the URS X-IG image generator software for real-time rendering of the UAS sensor view together with controls, displays, and a 2D tactical map for air vehicle operations. The X-TUAS™ system accurately reproduces the GCS hardware within a small footprint.

X-TUAS™ has been designed to support various training including initial, sustainment operations, and tactical explorations. Additionally X-TUAS™ has been designed to operate in both virtual and constructive training environments.

Bringing Reality to the Visual World...

Air Vehicle Operation Features

- Automatic Flight Control System (AFCS)
- Flight symbology
- 2D tactical map display imported from up to 250 different file formats
- AMPS/PFPS interfacing
- Route planning
- Route database
- AV checklist operations
- Air space situational awareness
- High-fidelity air vehicle modeling

Payload Operation Features

- UAS vehicle specific HUD symbology
- EO/IR sensor views
- Laser ranging and designation
- Geo-stabilized point and target tracker
- Sensor pan and zoom
- Missile fire and detonation
- Realistic weapon and target effects
- Contrast based Image Auto-Tracker (IAT)
- Multiple integrated SAF for realistic threat environment

Standard Interfaces

- Distributed Interactive Simulation (DIS)
- High-Level Architecture (HLA)

Instructor Operating Station (IOS)

- Network control of up to eight independent X-TUAS™ stations
- Mission rehearsal
- Scenario and lesson plan selection
- Atmospheric effects control
- Multiple cloud, fog, and haze layer models
- Continuous time of day based on geographic location
- Activation/deactivation of emergency procedures either manually or through pre-selected criteria
- Automated monitoring and logging of trainee actions under emergency procedures
- Easy export of logged data into multiple formats
- After Action Review (AAR) record/replay capability