Unmanned Systems – Training Experimentation and Simulation (US-TES) Laboratory

EXHIBIT FACT SHEET

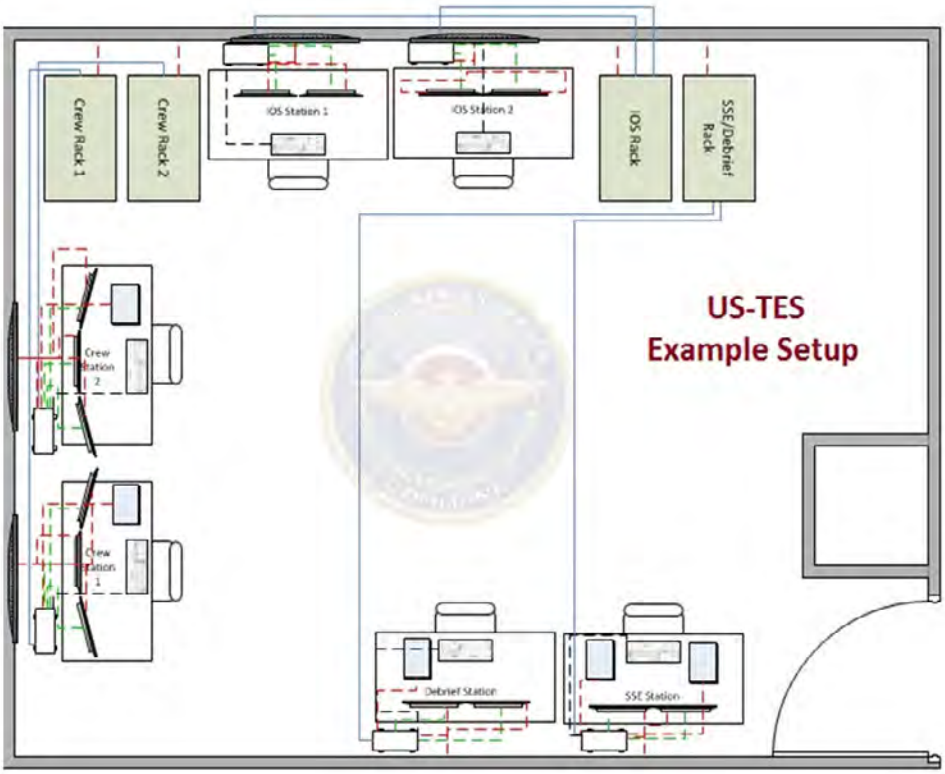
The US-TES lab provides government, industry, and research personnel hands-on access to emerging Unmanned Systems technology in an inter-operable environment.

Many engineers, researchers, and test teams with a focus on training require access to emerging Unmanned Aerial Vehicle (UAV) technologies to complete their work but gathering and/or installing necessary equipment can prove costly and create scheduling constraints. The US-TES lab can provide cleared users access to emerging UAV technologies without having to manage, install, or purchase specialized equipment. Teams can remain focused on the details of their singular project versus spending time, effort, and money on common infrastructure.

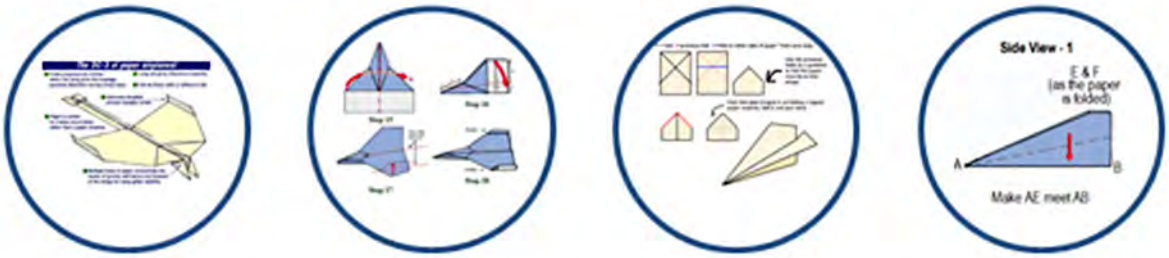
The US-TES lab provides crew workstations along with powerful reconfigurable hardware in a centralized server environment. Each workstation can be reconfigured as an Instructor Operator Station (IOS), Crew Station, Debrief and/or Specialized Station and can have their video/audio/chat repeated on any or all other stations. Software is pushed via virtual machines to each of the local desktops and can consist of both operational and developmental packages.

Toolsets Provided

- Centralized Computing Environment (Secure and Non Secure)
  - Twelve R7910 rack mounted workstations (2133MHz, 64GB)
  - Image Generation (8 Channels)
    - EO/IR Sensor Capabilities
    - CONUS, ASIA, Africa terrains
  - Terrain Server
  - Distributed Comms. Server



Connects UAV Training Users with Emerging Technologies



UAV Software • Modeling Tools • Simulated Environments • IOS • Crew Stations • Software Development • Test Environments • Terrains • Interoperability • Comms

- Workstations
  - Four to six Reconfigurable Workstations (IOS/ Operator/Student/Specialized)
  - Up to six 23" Touch Screen Monitors
  - Ancillaries – Flight Joysticks, Trackballs, Mice
  - Reconfigurable Tablets for Comms, Manuals, etc.,
  - Ergonomic and Adjustable Chairs
  - Wall Mounted TVs for Overhead Displays
- COTS Software
  - Operating Systems (VMWare, Redhat, Windows)
  - Modeling Software (Matlab, Simulink, Visio)
  - MS Office Products

Typical US-TES Users

- Research Psychologist – Research, SBIR, ONR Efforts
- Instructional Systems Design – Mission Task Lists, Documentation, Analysis of Effort
- Systems Engineers – Requirements Analysis, Experimentation, 6DOF Modeling
- Test Teams – Dev/Integration Testing, Test Scripting, Discrepancy Verification
- Operational Users – Scenario Development, Testing, Documentation Verification
- Educational – Research, Developmental, Test efforts

For further information on this exhibit, or on business opportunities with NAWCTSD, please contact our Business Support Team by telephone at (407) 380-4903, by e-mail at orlo_businesssupportteam@navy.mil, or by mail at Business Support Team, NAWCTSD, 12211 Science Drive, Orlando, FL 32826.