

Joint Time Critical Targeting Experimentation

Sean D. O'Neil

781-271-2951 • sdo@mitre.org

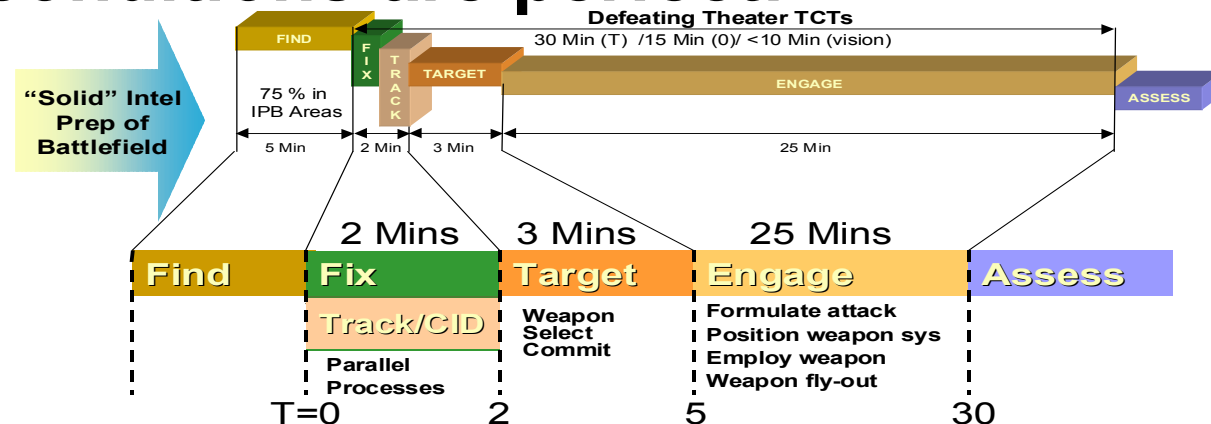
Air Force MOIE

The logo for the MITRE Technology Program, featuring a stylized graphic of stacked blocks in yellow, orange, and blue to the left of the text.

MITRE
Technology
Program

Problem

- Time Critical Target timelines require:
 - Detecting TCTs within 5 minutes of their becoming critical
 - Tracking continuously for ~30 minutes to complete engagement
- We can only do this now if the conditions are perfect!



Background

■ Situation

- Multiple sensors, programs/systems, contractors, service involvement
- Prevalence of prototypes
- Ambiguous/opaque target set

■ Issues

- no end-to-end program
- intra and inter-service discontinuity
- Allied Force/Noble Anvil/Enduring Freedom Findings: Doctrine and System Shortfalls

Objective

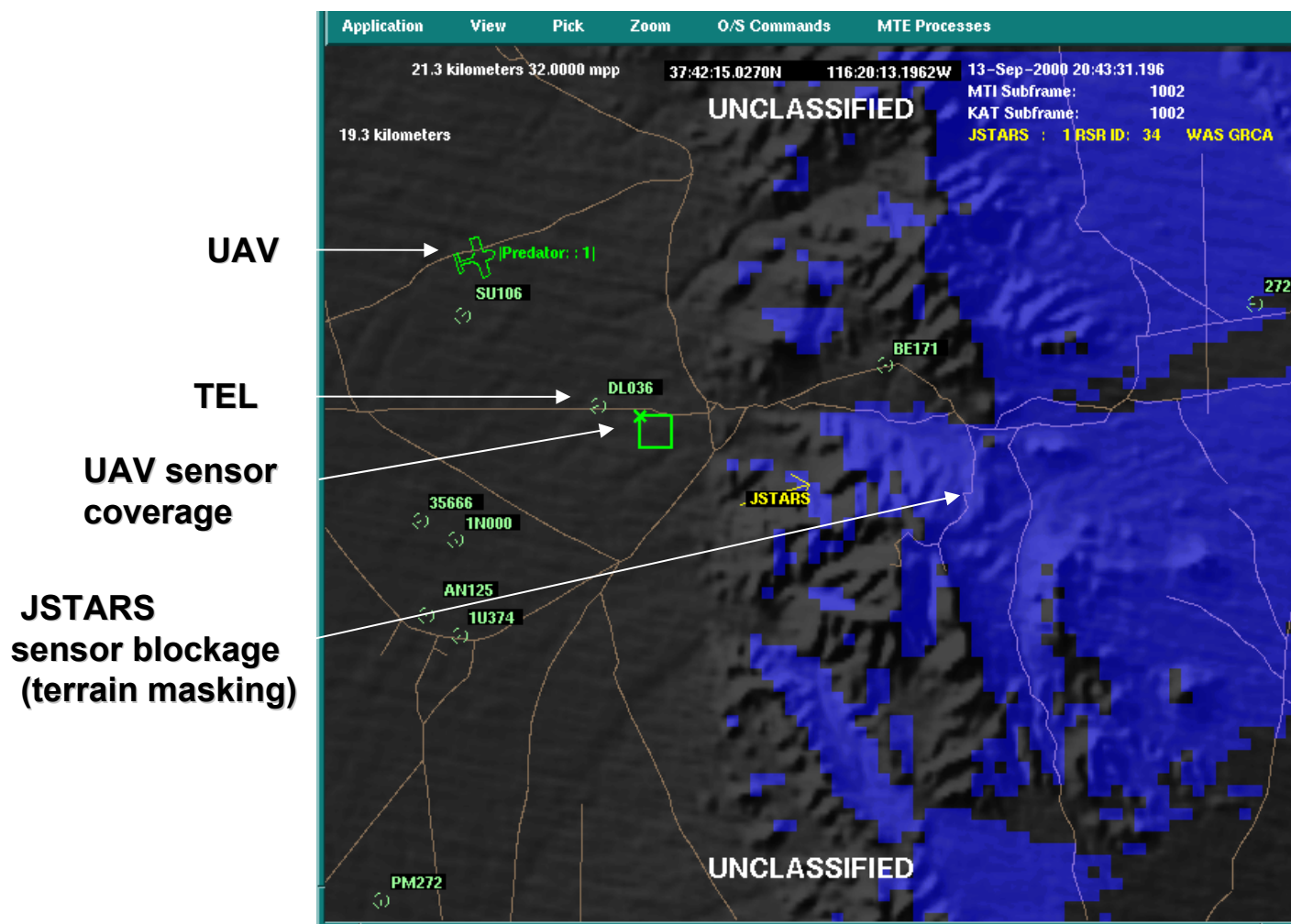
- **Develop capacity to explore inter and intra-service TTPs (Tactics, Techniques, and Procedures) through the development of a multi-service, distributed TCT experimentation capability**

Activities

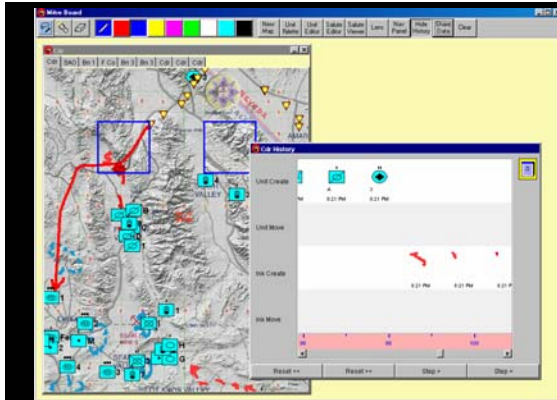
- Incorporate MTIX (MTI eXploitation workstation) into SWIFT TCTF capabilities
- Add scenario driver and sensor simulation capabilities
- Develop network connectivity to MITRE-Reston Strike Cell and MITRE-FTMO I2WD facility
- Build/install collaborative tools for multi-cell target development on suspected TCTs
- Participate in series of joint experiments

Highlights

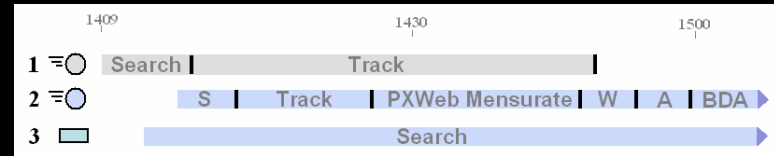
JEFX 2000, day 3 live fly...DMTIX tracks TEL after merging from sensor terrain masking...indicated on-the-fly in blue



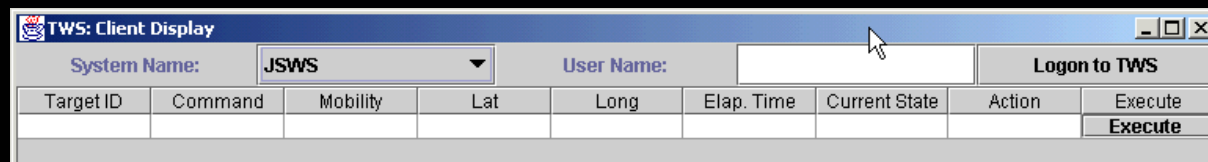
Highlights/Demonstration



TCT Battleboard (BB)



Target Status Board (TSB)



Target Workflow System (TWS)

Impacts

- **Improvements to the “find, fix, track, and engage” portion of F2T2EA process through...**
 - **Better battlefield and ISR visualization**
 - **Improved exploitation products**
 - **Collaborative target development**

Future Plans

- Improved collaboration through automatic linking and modification to internal product databases
- Experimentation with live JSTARS, Global Hawk, Hairy Buffalo, and B2 data from FY02 AMSTE II experiments
- Improved exploitation through incorporation of advanced trackers and other tools
 - HRR, SAR/ISAR, SIGINT/GMTI, etc.