Realistic Moving Target Training
SVT WSD

Leadtech.co

2023

“Simulation-Based Training in the U.S. Army

Fidelity and Training Effectiveness”

Rand study concluded that effective simulators are *psychologically* and *physically* realistic

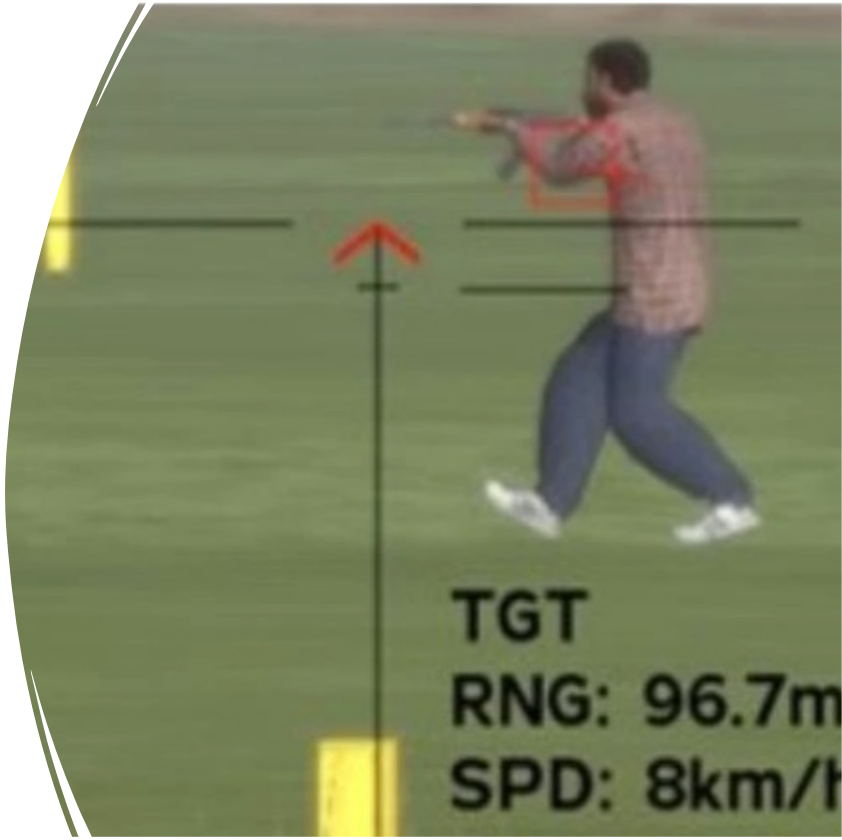
A marksmanship simulator should be realistic

A moving target at a range is a *physical simulation*

Canadian Simulator Study on Sideways Moving Targets

- Group trained with correct lead displayed **improved aim**
- **Lead-trained group used realistic targets**

- Group untrained on lead **showed no improvement** in aim
- Untrained group used front-facing silhouettes



"Moving-Target Intelligent Tutoring System for Marksmanship Training"

SVT WSD Specs All Silhouette Targets

Least realistic target to simulate movers

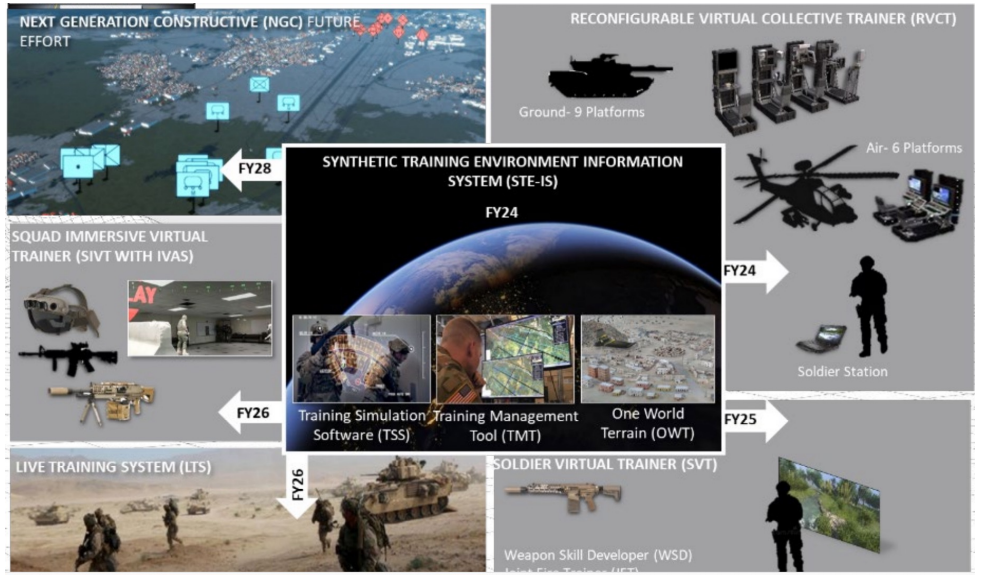
Ignores PEO STRI robotic targets

Misuse of Silhouettes as Moving Targets

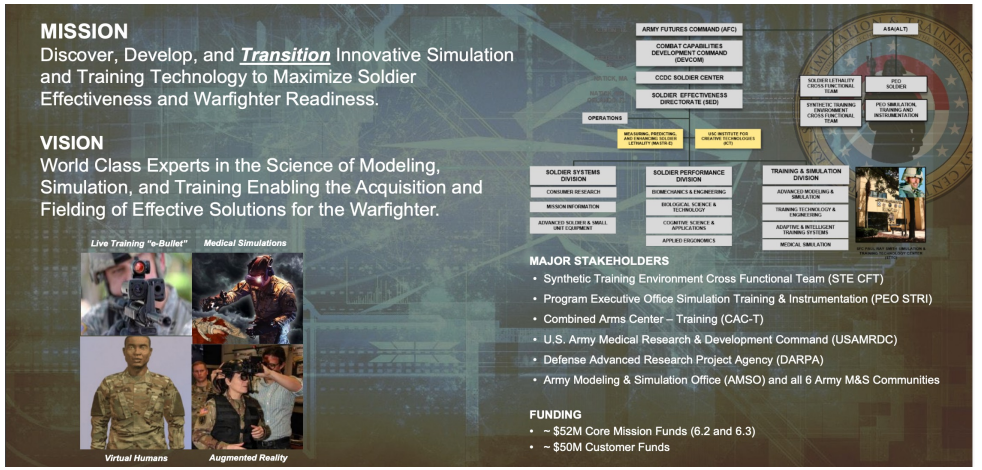
- Silhouettes are unrealistic **as sideways movers**
- Silhouettes an inaccurate measurement of lead
- 80% of WSD leads are incorrect as silhouettes

- **Artifact of range operator status quo**
- **Inhibits uptake of robotic targets**
- **No future as sideways movers**

Nothing at TSIS about Simulating Paper Silhouettes



- **How do we improve Live Training at U.S. Army home stations with simulations? (posts, camps and stations)**
- **Virtual Metaverse vs. Live Mixed Reality?**



Movers Evidenced Realistically in Simulator

- WSD contractor can display lead on **realistic targets**
- Commercially available solution
- Efficacy proven in Canadian DRDC study
- Rand Study compliant
- No change in hardware
- Change order to spec

Hitting a Moving Target is a Learned Skill

- Spatial lead is a learned skill in most sports
- Movers without lead require less practice
- The more the lead, the more the technique + practice

WSD Movers Qualified at Range

TRADOC/ PEO STRI control 659 ranges

53 of the ranges are slated to have robotic targets

Average 4 to 6 robots per range

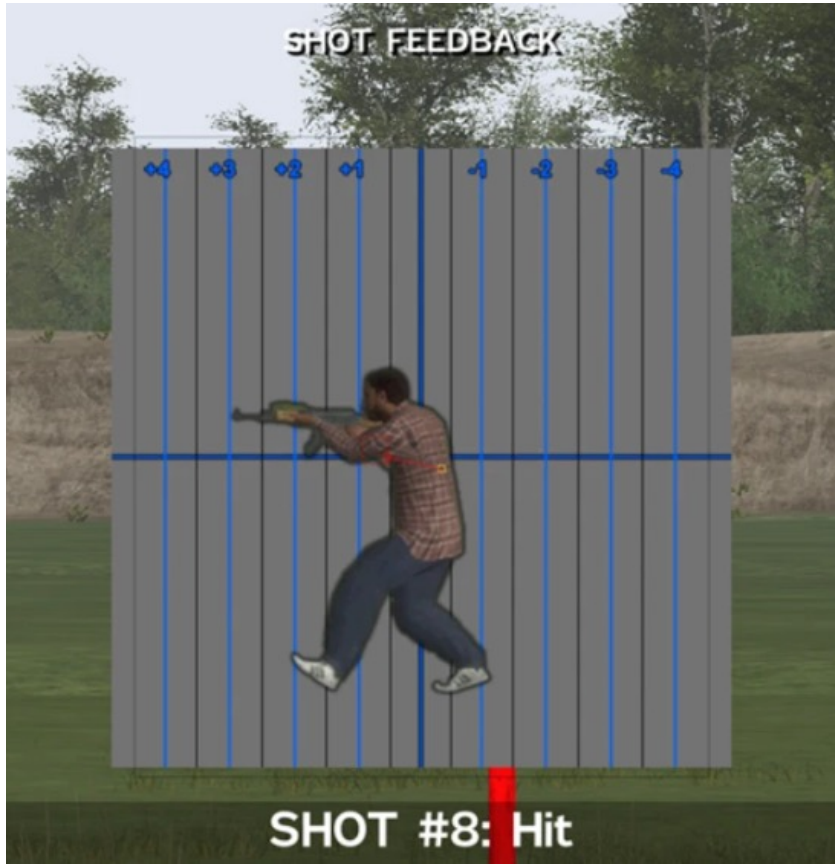
WSD sideways movers require lead

Simulate movers realistically

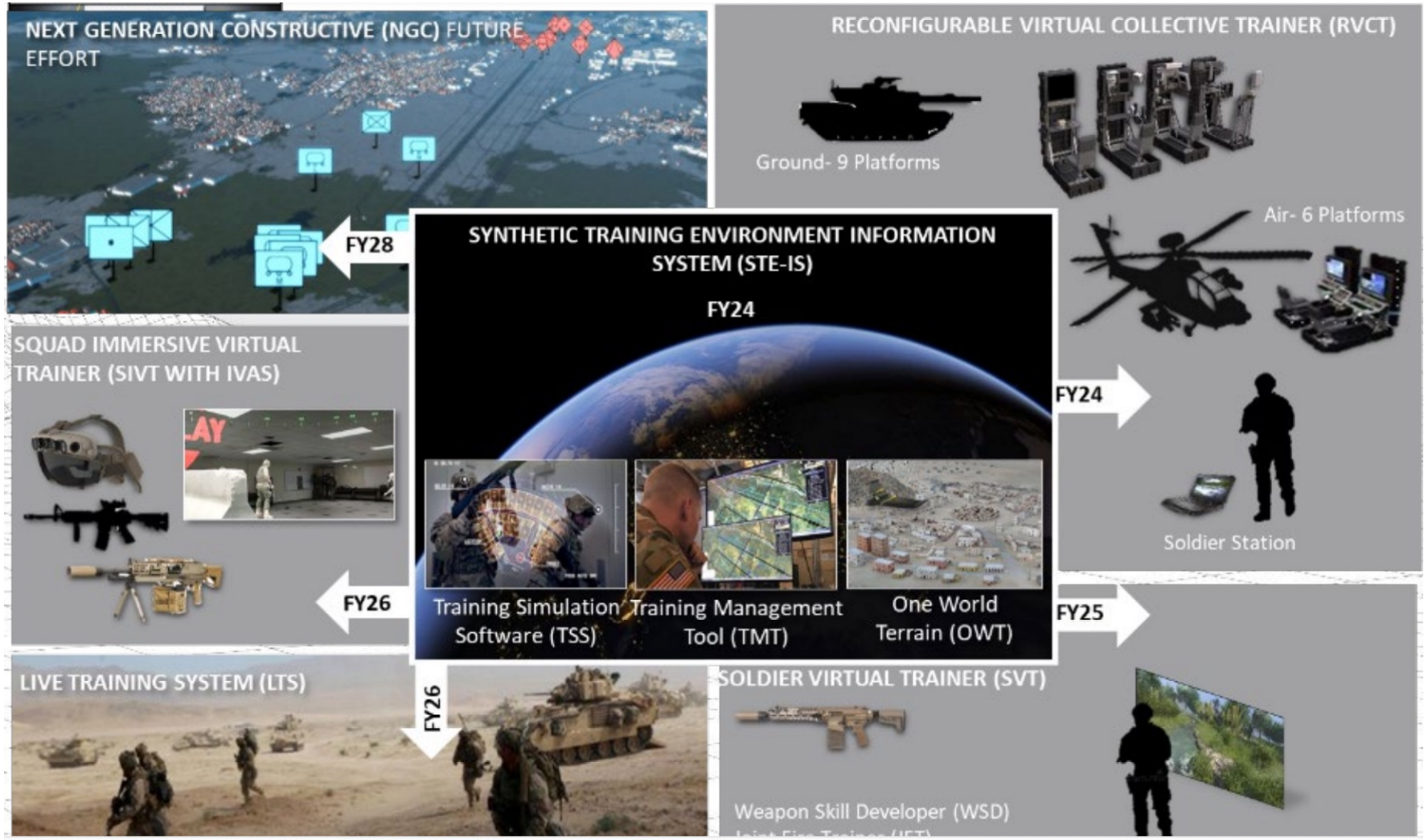
Qualify sideways movers on robots

Use Robots to Qualify on Sideways Movers

- Robots are most effective **as *sideways movers***
  - Orthogonal routes
  - Oblique routes
- Silhouettes can be used **where no lead is required**
  - Incoming routes
  - Outgoing routes
  - Stationary

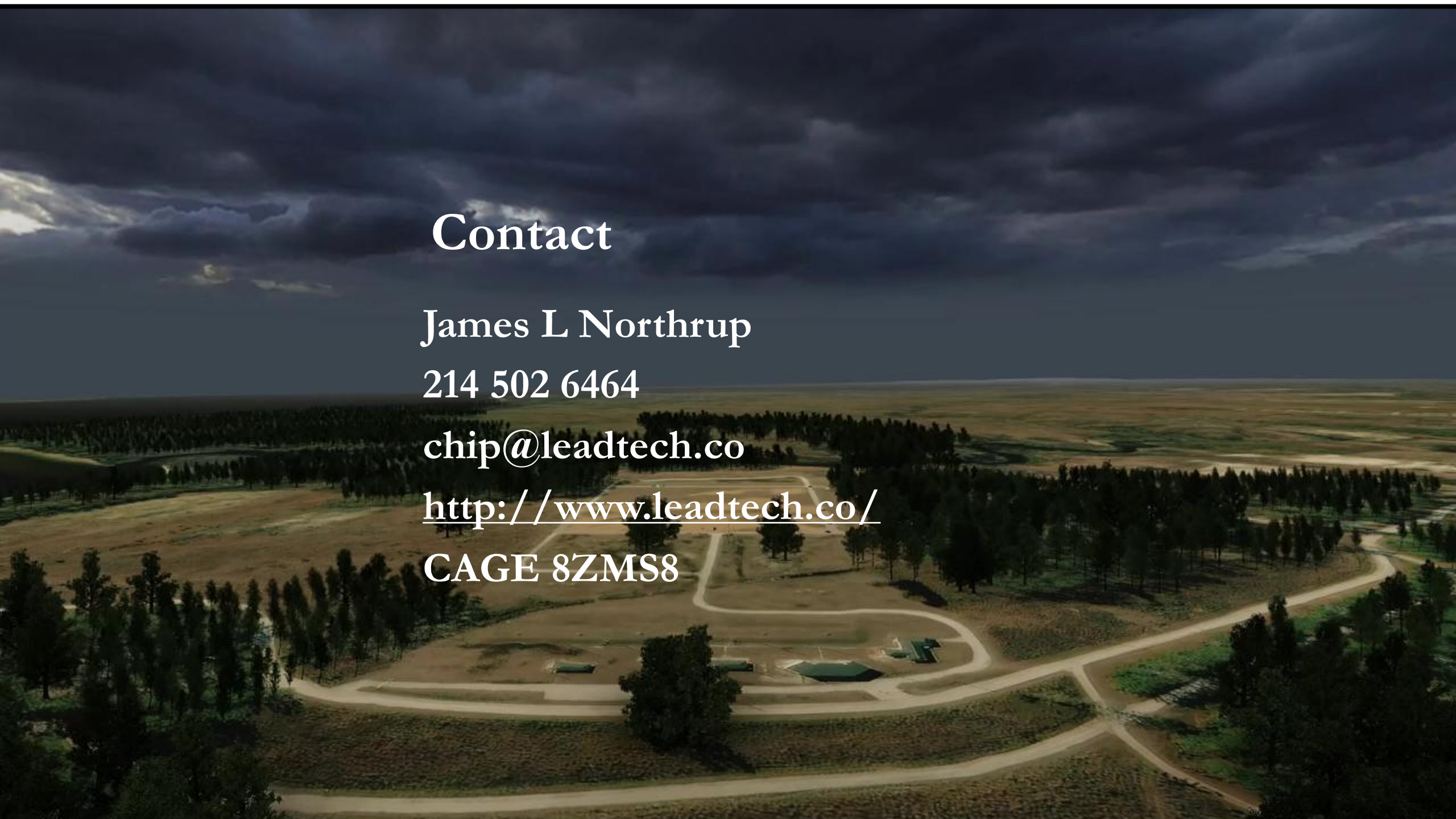


SVT's Future Starts With WSD



Conclusions

- SVT can use best practices in WSD
- Contractor can display correct lead
- Contractor can display realistic targets
- Sideways movers qualified at range on robots
- TRADOC/ PEO STRI/STE best practices



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