

## Integrated Training Environment (ITE) Requirements and Capability Gaps Abstract

The Integrated Training Environment (ITE) is a system of systems that, by design, combines and connects key training enablers in a persistent and consistent manner to accurately train Mission Command (MC) according to the Commander's training objectives within the appropriate Operational Environment. The ITE focus is on home station training and provides commanders with increased realism through the replication of the complexities of the current operational environments while maximizing and integrating the current fielded training aids, devices, simulations and simulators (TADSS), along with other enabling training capabilities.

The Next Generation Simulation Training program to address the future operational environment will be the Synthetic Training Environment (STE). The STE will modernize the way the Army will train the Force in 2025 and beyond. The STE will converge Constructive, Virtual and Gaming environments into a single Synthetic environment. The STE will support training for all warfighting functions, the full operational environment, to include cyber, and the social, cognitive and physical elements of the Human Dimension. It is a leap ahead from the execution focused, legacy system of systems, and multi-environment approach of the current ITE.

The ITE Requirements and Capability Gaps Panel brings together key Government, Industry and Academic experts to discuss the evolution of training from the current ITE to future initiatives for the Live-Synthetic Training Environment to train Soldiers and teams in a Complex Operational Environment (OE). The panel will present user requirements, proposed science and technology needs, and current industry and academic perspectives on implementation of the Live-Synthetic Training Environment. The panel will also address convergence of the Constructive, Virtual and Gaming environment in a Synthetic Environment and the need to deliver collective training at a point of need.

The panel will discuss opportunities for the community to build training capabilities for the Synthetic Environment to greatly enhance Live training.

This panel is for those interested in gaining a better understanding of ITE/STE activities within the training community. Project managers, engineers, technology managers, and business development personnel should attend this interactive session. The panel will provide presentations and will interact through real time questions from the audience.



# ITE Panel

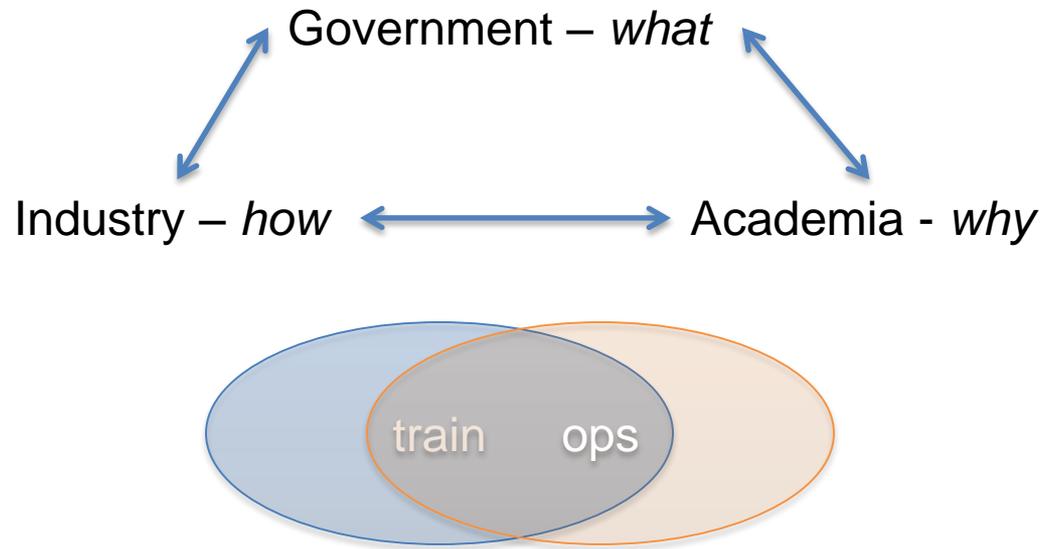


- COL Roland Gaddy, PM ITE, PEO STRI
- COL David Cannon, TCM ITE, TRADOC
- Mr. Rob Parrish, CE, Virtual, PM ITE, PEO STRI
- Mr. Harry Sotomayor, CE, Constructive, PM ITE, PEO STRI
- Dr. Todd Richmond, ICT, USC
- Mr. Bryan Cole, CESI
- COL (USA, Ret) Gary Coleman, L-3 Link Simulation & Training
- COL (USA, Ret) Jim Shiflett, Leidos
- Moderator: Mike Genetti, Rockwell Collins Simulation & Training Solutions





# ITE Panel—Dr. Todd Richmond



Training is becoming more “real” while operations are becoming more “virtual” (mixed)

Our “**reality**” will be profoundly **MIXED** – VR/AR/Physical has profound implications

Academia (and artists) work at the edges regardless of profit margins or ROI

That type of research/work needs to happen in concert with more directed efforts





# ITE Panel—Mr. Bryan Cole



- **Conditions**

- Requirements are dynamic
- Mostly Digital Natives
- Robots / Drones
- Conventional vs. Asymmetric threat
- Kinetic vs. Non-Kinetic Weapons
- Legacy vs. New TADSS

- **Approach**

- First build and publish the Architecture
- Standards based & Open Source
- Adopt and actively evolve industry standards
- Agile development methodology
- Contractor agnostic, open and distributed integration environment
- Test Harness & Automated Testing
- AI Augmented
- Runtime infrastructure
- Incentivize savings to customer
- Incentivize collaboration

- **Solution**

- Change at the point of need
- Train with operational systems
- Haptic fidelity
- 24/7 availability
- Train what you need with who you have





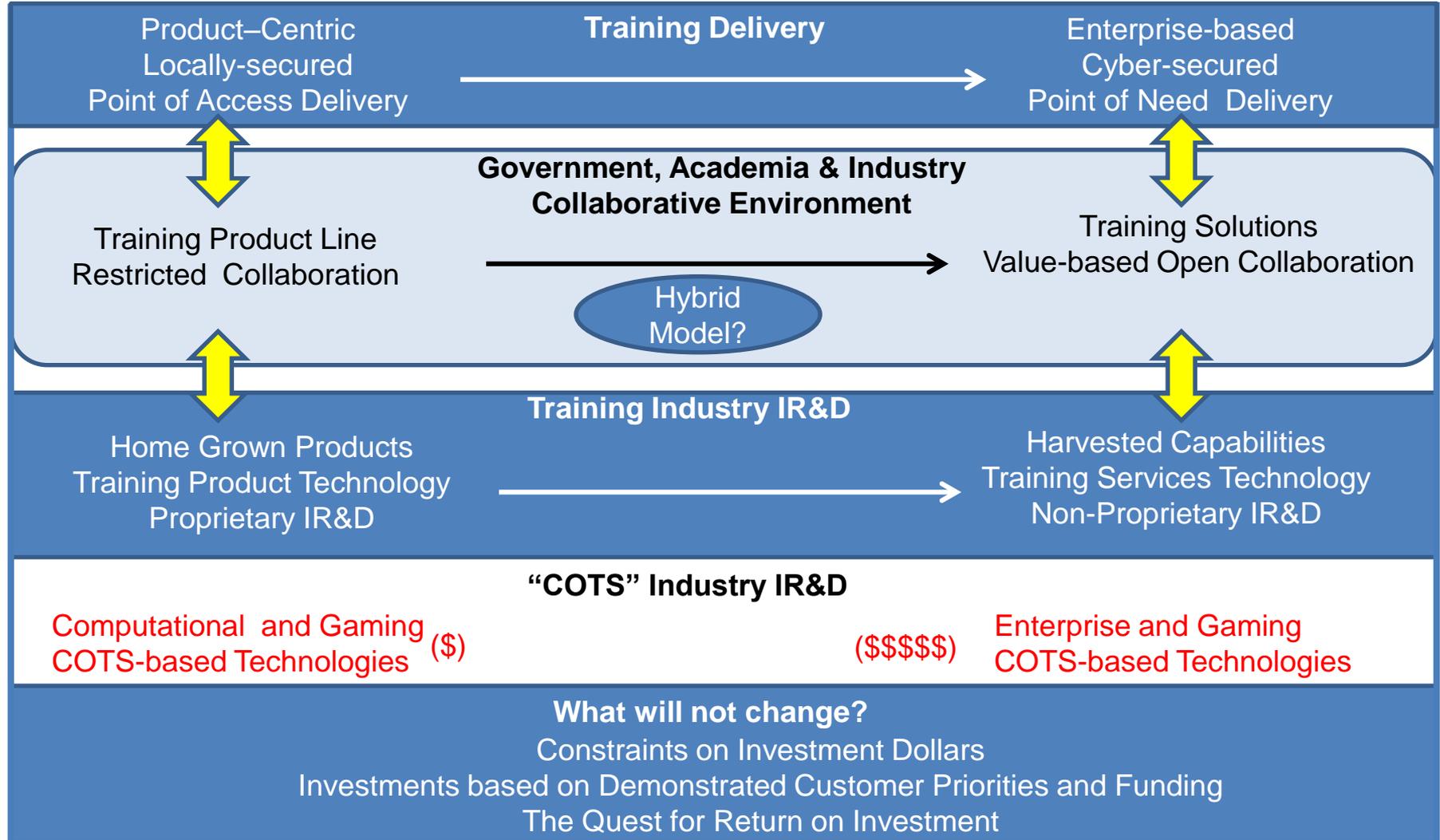
# ITE Panel—COL (USA, Ret) Gary Coleman



THEN

NOW

FUTURE





# ITE Panel—COL (USA, Ret) Jim Shiflett



- The Interface is the Operational System.
- Cloud Technology will have a major and disruptive impact on setup and delivery of training – Leidos IRAD.
- IA is not going away, so make it work to your Benefit and Improve Cyber protection.
- Cost Reductions and Simplification are possible by applying the three points above.
- The Govt needs Practical Procedures for Industry IR&D IP investment in this domain space for the ITE/STE/FHTE Future.





# QUESTIONS??

