FCS Update & Testing

Bud Irish

SAIC Vice President

FCS Integrated Phases, Simulation & Test Deputy IPT MGR

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Army Leadership's View

"Future Combat Systems is the core of our modernization effort and will provide our Soldiers an unparalleled understanding of their operational environment, increased precision and lethality, and enhanced survivability."

"We believe it's affordable and we believe it's an investment that we have to make."

*The Honorable Pete Geren - Secretary of the Army
Senate Armed Services Committee
February 26, 2008*

**The Honorable Pete Geren
Secretary of the Army**

"We're listening to our soldiers and commanders in the field, and we are giving them the capabilities they need – as fast as we can so that they can win in the current fight."

*General George Casey, Jr. – Chief of Staff, U.S. Army
U.S. Army News Release
June 26, 2008*

**Gen. George W. Casey, Jr.
Chief of Staff, U.S. Army**

"Future Combat Systems is exactly the full-spectrum system that we need for our future."

*General George Casey, Jr. – Chief of Staff, U.S. Army
Senate Armed Services Committee
February 26, 2008*

"Modernization is not an option."

"FCS is more than a program, it is an Army imperative."

*The Honorable Dean Popps - Acting Assistant Secretary of
the Army for Acquisition, Logistics and Technology
February 2, 2008*

**The Honorable Dean Popps
Acting ASAALT**

FCS – Army's #1 Modernization Priority

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Delivering a Versatile 21st Century Army

FUTURE COMBAT SYSTEMS
FCS
One Team-The Army/Defense/Industry

Non-Line of Sight Mortar (NLOS-M) XM1204

Infantry Combat Vehicle (ICV) XM1206

Non-Line of Sight Cannon (NLOS-C) XM1203

Armed Robotic Vehicle – Assault Light (ARV-A[L]) XM1219

Mounted Combat System (MCS) XM1202

Non-Line of Sight Launch System (NLOS-LS) XM 501

Communicate See Understand Act

Network

Medical Vehicle Treatment (MV-T) XM1208

Reconnaissance and Surveillance Vehicle (RSV) XM1201

Class I Unmanned Air Vehicle (UAV) XM 156

Medical Vehicle Evacuation (MV-E) XM1207

APS

Field Recovery and Maintenance Vehicle (FRMV) XM1205

Command and Control Vehicle (C2V) XM1209

MULE-T XM1217

MULE-C XM1218

Class IV Unmanned Air Vehicle (UAV) XM 157

Small UGV (SUGV) XM1216

Tactical and Urban Unattended Ground Sensors

Multifunctional Utility/ Logistics and Equipment Countermine and Transport

AN/GSR-10   AN/GSR-9

Recent Program Accomplishments

- ✓ **Completed Non-Line-of-Sight Cannon P1 Prototype delivery and testing to support NLOS-C Milestone C**

- ✓ **Completed Spin Out 1 Tactical Field Test, Field Demonstration, Test and Evaluation, and Preliminary Limited User Test**

- ✓ **Completed all System and Platform Preliminary Design Reviews, including Class I and IV UAVs, MULE UGV, Manned Ground Vehicles and Network**

- ✓ **Completed Integrated Mission Test One**

- ✓ **System of Systems Common Operating Environment 2.0 Deliveries/Testing**

- ✓ **First successful Active Protection System (APS) End to End Test**

- ✓ **Airborne Standoff Minefield Detection System Captive Flight Test**

Executing to Support Army Modernization

Combined Test Organization (CTO) Established 2004 - Charter

The mission of the CTO is to ensure the planning and execution of the Future Combat System (FCS) Test and Evaluation Program at minimum cost and duplication of effort to meet developmental and operational testing requirements.

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Plan Together, Test Once, Share the Data

- **Equal Partnership between PMO, LSI and ATEC**

- **Synchronizing Developmental and Operational test planning**

- **Sharing test resources and support**

- **Collecting, sharing and assessing test data jointly**

- **Minimizing duplication of test support and time required to execute combined testing**

- **Preserving OT independence**

- **Reduce Program Risks wherever possible**

CTO Details of Operation

- **Manage all FCS T&E funding – except LSI allocated**

- **Manage all FCS Component, System Level, and System of System Level developmental and integration testing**

- **Approve all test plans for Gov and LSI testing**

- **Integrate, coordinate, and plan Combined Developmental and Operational Testing in accordance with the FCS TEMP**

- **Support Live Fire and Operational Testing**

New way of doing business… brings FCS to life…..

Doctrine

Personnel & Facilities

Organization

FFID

Leadership

Training

Materiel

Developing New Doctrine and Tactics, Techniques & Procedures (TTPs)
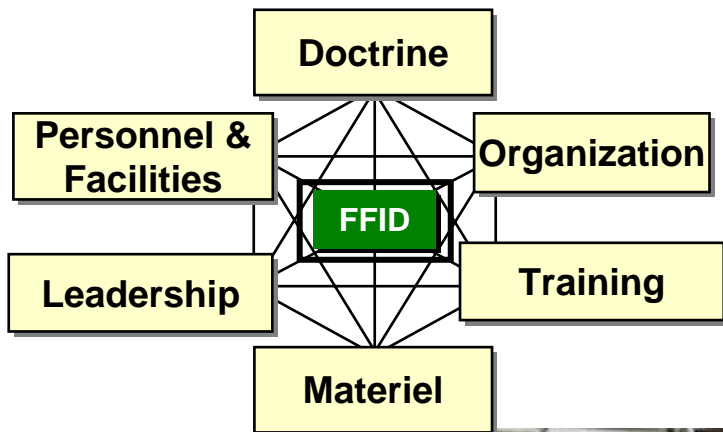
Executing Network Enabled Operations

Real Soldiers and Leaders…

Operating in live and virtual events…

To deliver real answers

Conducting Integrated Training

Evaluating Material

….. Integrating capabilities for the current and future modular force!!

Army Evaluation Task Force (AETF) In Action

AETF P-LUT

UAS Image FBCB2

Emplacing U-UGS

SUGV on Point

CL1 UAV in Overwatch

Emplacing T-UGS

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Integrated Mission Test – 1 (IMT1)

✓**Mission Test with Soldiers**

- 45 Soldiers used a prototype Warfighter Machine Interface (WMI) and Battle Command System in a virtual-constructive relevant environment
- Soldier feedback on WMI design and cognitive assessment of the WMI
- First full scale system of systems (SoS) integration

✓**System of System Common Operating Environment (SOSCOE) Scalability and Discovery Test**

- Large scale (100 platform) network emulation at the service layer
- Identified areas to reduce network load and improve robustness

✓**Common Operating Picture (COP) Dissemination Test**

- First large scale (100 platform) COP emulation at the application layer
- Confirmed value of geographical dissemination on local COPs and identified areas for improvement

✓**SoS Simulation Framework Maturation Test**

- Confirmed maturation of simulations and tools to support future SoS testing.

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FCS Production Activities

Summary

- **Program executing to achieve successful '09 DAB**

- **Platform and Network PDRs complete; supporting successful Systems of Systems Preliminary Design Review**

- **FCS providing capabilities to current force**
  - **IBCT TFT/FDT&E/LUT**

- **Supporting testing and technologies on track**

- **FCS Program is healthy and meeting commitments**

Delivering a Versatile 21st Century Army