

# **Program Overview**



- What is the FCS-Equipped Unit of Action?
  - In 2003, the U.S. Army and its Lead Systems Integrator (LSI) team of Boeing and Science Applications International Corporation (SAIC) were joined by 23 partners to play key roles in the U.S. Army's Future Combat Systems (FCS) program.
  - FCS is the Army's multifunctional, multi-mission, re-configurable, networked system-of-systems, designed to maximize joint interoperability, strategic transportability, and commonality of mission roles

- FCS is primary mechanism to transform the Army to a lighter, more responsive

lethal force

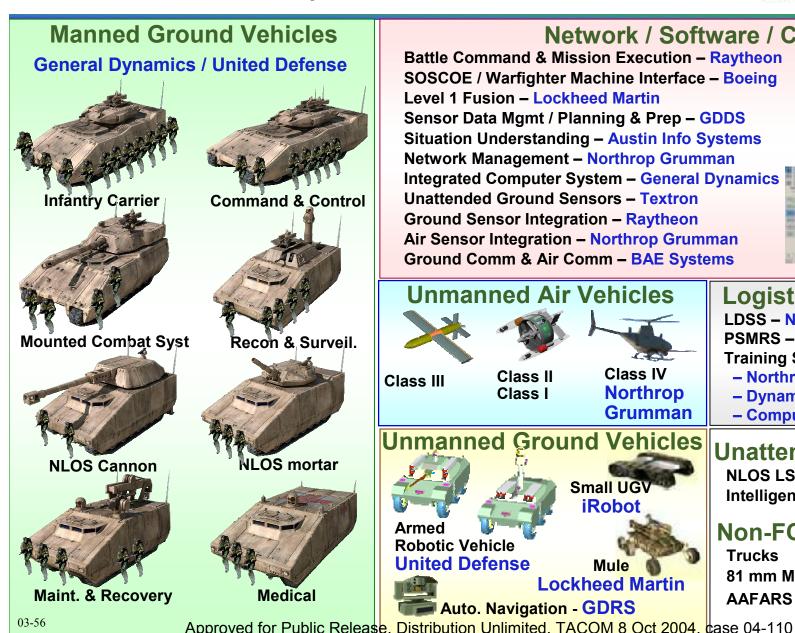
 Who is currently involved in the FCS Equipped Unit of Action?

Twenty-three (23) Partners who are
 Tier 1 suppliers to Boeing or SAIC,
 resulting in Tier II suppliers that span
 twenty-nine (29) states



### **FCS Unit of Action Elements** One Team Partner Responsibilities





#### Network / Software / C4ISR

**Battle Command & Mission Execution – Raytheon SOSCOE / Warfighter Machine Interface - Boeing** Level 1 Fusion - Lockheed Martin Sensor Data Mgmt / Planning & Prep - GDDS Situation Understanding - Austin Info Systems **Network Management – Northrop Grumman Integrated Computer System – General Dynamics** Unattended Ground Sensors - Textron **Ground Sensor Integration – Raytheon** Air Sensor Integration - Northrop Grumman **Ground Comm & Air Comm - BAE Systems** 









#### **Unmanned Air Vehicles**



Class III

Class II Class I

Class IV **Northrop** Grumman

#### Logistics & Training

**LDSS - Northrop Grumman PSMRS – Honeywell Training Support** 

- Northrop Grumman
- Dynamics Research Corp
- Computer Science Corp

# Unmanned Ground Vehicles Unattended Munitions



**NLOS LS (LAM, PAM) Intelligent Munition System** 

#### Non-FCS Elements

**Trucks** 81 mm Mortar AAFARS, HTARS

# FCS LSI Opportunities



- The LSI has upcoming competitions for previously deferred systems:
  - Unmanned Aerial Vehicles (UAVs) Class II, and III
    - Industry Day planned (watch the FCS website)
    - Request For Proposals scheduled to go out early 2005
- LSI Spiral Development and Technology Planning (SD&TP) IPT will participate in the 8th Annual Army Small Business Conference, November 17-18
  - Technologies of high interest to the FCS program to be identified
  - Focus on innovative technology enablers for systems that are lightweight, inexpensive, mobile, lethal, reliable, sustainable, network-centric, and interoperable
  - Soliciting technical "white papers" beginning Q1 CY05
- Logistics (2005)
  - Interoperability Kits
  - Logistics Data Repository
  - Interactive Electronic Technical Manual (IETM)

# FCS LSI Opportunities



- Purchase and modification of HMMWV vehicles (Q1 '05)
- Various Engineering Services and Support (on-going)
- COTS and Open Source software (on-going)
- Engineering Support Logistics Modeling and Simulation
- Engineering Support Logistics External Integration
- Electronic components, computer and test equipment for the System of Systems Integration Lab (SoSIL)
- Electronic components, computer and test equipment for Transportable Node
- Engineering Support to Integration, Simulation & Test

# Partner Opportunities



- Opportunities for both the LSI and partners are listed on or linked to the FCS website
- Opportunities exist for 2<sup>nd</sup> and 3<sup>rd</sup> tier support to recent, pending and future selections

#### FCS Business Opportunities

Intelligence, Surveillance, and Reconnaissance | C4ISR - Battle Command | C4ISR - Network Systems | Unmanned Ground Vehicle | Unmanned Air Vehicle | Manned Ground Systems | Supportability | Training Support

FCS Partner Contact Information	Business Opportunities
Intelligence, Surveillance, and Reconnaissance	
Raytheon Network Centric Systems Plano, Texas Randy Whitaker - Manager, Supplier Diversity Telephone: 972-344-8302 Fax: 972-344-8354 Email: <u>r-whitaker@raytheon.com</u> Web Address: www.rsytheon.com/connections/static/node3335.html	Laser Rangefinder / Detector Electro-optical infrared / Visible near-infrared Camera Acoustic-Seismic-Magnetic Sensor Passive RF Sensor Chemical Detection Sensor Biological Detection Sensor Radiological / Nuclear Sensor Combat Identification Aided Target Recognition Bubmit Supplier Information
	'ор

## Example from FCS Website

## How to Get Involved with FCS



- Regularly check the FCS Website Home Page at: www.boeing.com/fcs
- Located on this website:
  - FCS Business Opportunities of the LSI and 23 Partners (Contacts with websites)
  - Information on Submitting Unsolicited Proposals
  - Partners' Requests for Quotations / Information
  - FCS Business Opportunities
    - FCS Supplier Information Submittal Form
  - Supplier Diversity information (specific LSI / Partner Small Business contacts provided in FCS Business Opportunities Brochure)
  - FCS calendar with upcoming conferences and events
  - Submit Questions to LSI and Partners

## FCS External Web Site





and Website links **Submission of Proposals** not covered by an RFP solicitations and/or requests for information Partners opportunities, contacts, and submittal form, and LSI Technology **Supplier Diversity** information and contacts

# FCS Business Opportunities



#### LSI (Boeing and SAIC) Technology Areas of Interest



Networked Battle Command and Situation Awareness	Force Lethality
Advanced Data Visualization Techniques	Advanced Line of Sight Lethality and Effects
Advanced Distributed Data Management Architectures and Techniques	Advanced MCS Ammunition
Advanced High-Speed Distributed Computing	
Advanced Low-Profile Conformal Antennas	Survivability
Advanced Position/Navigation and Tracking for the FCS	
equipped Unit of Action  • Air-Ground Blue Situation Awareness	• IED and UXO Sensing and Neutralization on the Move
Automated Sensor Data Fusion for Precision	<ul> <li>Innovative Mine Detection by Dismounted Soldiers</li> <li>Mine Clearance and Neutralization by Autonomous</li> </ul>
Engagement and Fire Control	Unmanned Vehicles
Command Decision Associates and Assistant Tools for Ground Warfare	
Disposable Unattended Sensors	
Highly Accurate Automated Machine Language     Translation	Sustainment Footprint
Improved Battle Command on the Move	
Information Operations	Advanced Line-of-Sight Lethality
Multi-Level Secure Operating Systems	Advanced Vehicle Drive Train Components
Secure Subterranean Wireless Networks	Failure Models for Embedded Digital Electronics and
Small Affordable Multi-Spectral Sensors (Ground and	Mother Boards
Air)	• Fault Tolerant/Self-Repairing Computer Operating
Small Lightweight Laser Designators     Soldier Combat ID	Systems
Tactical Wireless Network Assurance	Ultra High Density Energy Storage
• Through-Wall and Through Foliage Sensing	Ultra Reliability Prognostics     Water from Air
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## FCS Small Business Involvement



- Small Business goals established at a Program level and flowed down to all Partners
- Significant program-wide focus on outreach and open opportunities in support of SB goals and program key tenets
  - Ongoing FCS presence at numerous events (AUSA, APBI, Army Small Business Conference, etc.)
  - FCS website for program-wide opportunities, announcements, inquiries, and supplier submitted interest/information forms
  - Partner outreach processes in place
- Upcoming system level procurements will feature industry days and supplier input as with past competitions
- Mentor Protégé for FCS technology development areas being sought
  - Submit your ideas and interest!

Approximately 100 Small Businesses currently supporting FCS and the number is rising

# In Summary...



- Key partners have been identified and their sub-tier source requirements and selections are in progress
  - Partner locations, products provided, and contacts are available on the FCS web site and in the handout we have available here today
- Our Outreach and Supplier Diversity initiatives are in place with focused and concerted collaborative efforts to identify and incorporate the "Best of Industry"
- The FCS program already one of the largest Government Defense programs has just increased significantly in content and scope.
  - Additional emphasis placed on the spiraling out of capability to the warfighter after modeling & simulation and test
  - Planning for capability spirals and efforts toward previously deferred systems are now underway in conjunction with our partners
- With such a large, evolving, and dynamic program, continue to watch the FCS web site for further opportunities and developments as they are identified