

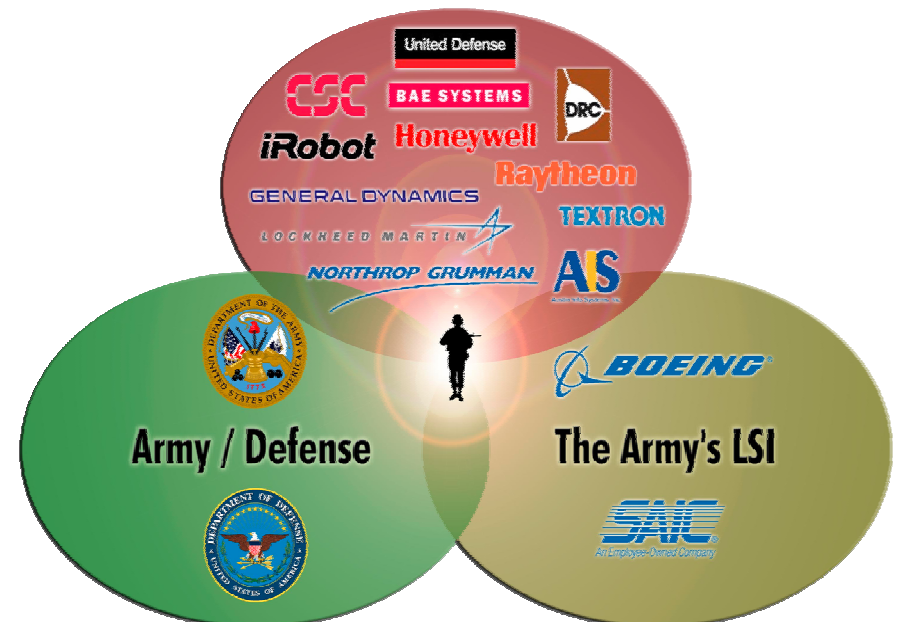
Eighth Annual Army Small Business Conference

Steve Marion
FCS Senior Program Director

McLean, VA
17 November 2004

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



Manned Ground Vehicles

General Dynamics / United Defense



Infantry Carrier



Command & Control



Mounted Combat Syst



Recon & Surveil.



NLOS Cannon



NLOS mortar



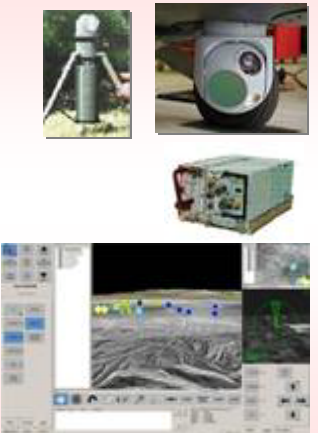
Maint. & Recovery



Medical

Network / Software / C4ISR

Battle Command & Mission Execution – Raytheon
 SOSCOE / Warfighter Machine Interface – Boeing
 Level 1 Fusion – Lockheed Martin
 Sensor Data Mgmt / Planning & Prep – GDSS
 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




Armed
Robotic Vehicle
United Defense



Small UGV
iRobot



Mule
Lockheed Martin



Auto. Navigation - GDRS

Unattended Munitions

NLOS LS (LAM, PAM)
 Intelligent Munition System

Non-FCS Elements

Trucks
 81 mm Mortar
 AAFARS , HTARS

FCS Small Business Involvement

- Small Business is a critical element of the FCS Program
- 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; SB database managed by Boeing
- Small Business goals established at a program level and flowed down to all Partners
- 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!

More than 200 Small Businesses currently supporting FCS
and the number is rising

FCS LSI Opportunities

- The LSI has upcoming competitions for previously deferred systems:
 - Unmanned Aerial Vehicles (UAVs) Class II, and III
 - Industry Day planned for December 1, 2004 in St. Louis, MO (Information provided on FCS website)
 - Request For Proposals scheduled to go out early 2005
- LSI Spiral Technology Integration task lead, Dr. Richard A. Lawhern, is presenting at today's afternoon breakout session for more detailed discussions of Small Business participation
 - Identifying technologies of high interest to the FCS program
 - Focusing on innovative technology enablers for systems that are lightweight, inexpensive, mobile, lethal, reliable, sustainable, network-centric, and inter-operable
 - Soliciting technical "white papers" beginning Q1 CY05
- Logistics (2005)
 - Interoperability Kits
 - Logistics Data Repository
 - Interactive Electronic Technical Manual (IETM)

FCS LSI Opportunities

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

Partner Opportunities

- Opportunities for both the LSI and partners are listed on or linked to the FCS website
- Opportunities exist for 2nd and 3rd 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
<i>Manned Ground Systems</i>	
General Dynamics Land Systems 38500 Mound Road Sterling Heights, MI 48310-3200 Email: gamached@gdls.com Web Address: www.gdls.com	Gears (Class 13 and up) Rubber Products Electrical Components Tube Assemblies Bearings Hose Assemblies Electrical Wiring Harnesses Circuit Card Assemblies Mechanical Cable Assemblies Electro-Mechanical Parts Machined Parts (brackets, supports) Gaskets Submit Supplier Information
Top	

Example from FCS Website

Partner Contact Information



Partners	Description	Contact Name	Phone Number	Email
Raytheon Network Centric Systems	Battle Command & Mission Execution	Valerie King	508-490-2331	valerie_king@raytheon.com
Raytheon Network Centric Systems	Ground Sensor Integrator	Randy Whitaker	972-344-8302	r-whitaker@raytheon.com
Northrop Grumman Integrated Systems	Unmanned Aerial Vehicle Class IV UAV	Vicky Harper-Hall	310-814-0553	Vicky.Harper-Hall@ngc.com
Northrop Grumman Information Technology	Training Support	Sandy VanDerEems	703-556-1714	Sandy.VanDerEems@ngc.com
Northrop Grumman Mission Systems	Network Management	Pat Austin	703-968-1244	Pat.Austin@NGC.COM
Northrop Grumman Electronic Systems Corp.	Air Sensor Integrator	Susan Adams	626-812-1224	Susanne.adams@northropgrumman.com
Northrop Grumman Mission Systems	Logistics Decision Support Systems	Pat Austin	703-968-1244	Pat.Austin@NGC.COM
General Dynamics Robotic Systems	Autonomous Navigation System	Gerry Simmons	410-876-9200	gsimmons@gdrs.com
General Dynamics C4 Systems	Sensor Data Mgmt. / Planning & Preparation	Ron Steele	480-441-8840	Ron.steele@gd-decisionssystem.com
General Dynamics Land Systems	Manned Ground Systems	Doug Gamache	586-825-7883	gamached@gdls.com
General Dynamics Advanced Information Systems	Integrated Computers	Lynn Simmons	508-880-1658	Lynn.Simmons@gdc4s.com
Lockheed Martin ORINCON Defense	ISR Sensor Fusion	Victor Gomez	858-455-1367	victor.gomez@lmco.com
Lockheed Martin Missiles and Fire Control	MULE	Cathy Usztan-Bedford	972-603-1268	cathy.usztan-bedford@imco.com
BAE Systems	Ground & Air Platform Communications	James Nunemaker Alex Carroll	973-305-2604 703-668-4457	james.nunemaker@baesystems.com
Textron Systems	Unattended Ground Sensors	Jim Hester	978-657-1236	Jhester@systems.textron.com
Dynamics Research Corp.	Training Support	Paul Lemire	800-522-4321	plemire@drc.com
Honeywell Defense & Space Electronic Systems	Platform Soldier-Mission Readiness System	Bill Spofford	505-282-5548	billspofford@honeywell.com
United Defense, L.P. Ground Systems Division	Armed Robotic Vehicle	Barbara Knox	717-876-1522	barbara.knox@udlp.com
United Defense, Armament Systems Division	Manned Ground Systems	Rick Richter	763-572-7904	richard.richter@udlp.com
Computer Sciences Corp.	Training Support	Vivian Scheithauer	703-876-1250	vscheithauer@csc.com

FCS Business Opportunities



Technology Areas of Interest



<p><u>Networked Battle Command and Situation Awareness</u></p>	<p><u>Force Lethality</u></p>
<ul style="list-style-type: none"> • Advanced Data Visualization Techniques • Advanced Distributed Data Management Architectures and Techniques • Advanced High-Speed Distributed Computing • Advanced Low-Profile Conformal Antennas • Advanced Position/Navigation and Tracking for the FCS equipped Unit of Action • Air-Ground Blue Situation Awareness • Automated Sensor Data Fusion for Precision Engagement and Fire Control • Command Decision Associates and Assistance Tools for Ground Warfare • Disposable Unattended Sensors • Highly Accurate Automated Machine Language Translation • Improved Battle Command on the Move • Information Operations • Multi-Level Secure Operating Systems • Secure Subterranean Wireless Networks • Small Affordable Multi-Spectral Sensors (Ground and Air) • Small Lightweight Laser Designators • Soldier Combat ID • Tactical Wireless Network Assurance • Through-Wall and Through Foliage Sensing 	<ul style="list-style-type: none"> • Advanced Line of Sight Lethality and Effects • Advanced MCS Ammunition
	<p><u>Survivability</u></p>
	<ul style="list-style-type: none"> • IED and UXO Sensing and Neutralization on the Move • Innovative Mine Detection by Dismounted Soldiers • Mine Clearance and Neutralization by Autonomous Unmanned Vehicles
	<p><u>Sustainment Footprint</u></p>
	<ul style="list-style-type: none"> • Advanced Line-of-Sight Lethality • Advanced Vehicle Drive Train Components • Failure Models for Embedded Digital Electronics and Mother Boards • Fault Tolerant/Self-Repairing Computer Operating Systems • Ultra High Density Energy Storage • Ultra Reliability Prognostics • Water from Air

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 and Questions
 - 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
- **Reach out to the LSI and Partners to express your interest and capability**
- **Focus on areas of technology and express interest across the One Team**

FCS External Web Site



Boeing Home **Integrated Defense Systems** **Phantom Works**

[fcs overview](#)
[what's new?](#)
[briefings](#)
[industry collaboration](#)
[archive](#)
[questions](#)

Partners
Unsolicited Proposals
Partners Requests for Information / Quotes
FCS Business Opportunities
Supplier Diversity
Class II & III UAV Bid Opportunities

Partner lists and Website links
Submission of Proposals not covered by an RFP
Partner posted solicitations for requests for information
Partners opportunities, contacts, and submittal form, and LSI Technology areas of interest
Supplier Diversity information and contacts
LSI posted solicitations (requests for information/ proposals, white papers), news, and events

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

site navigator
 BOEING HOME

▶ PRODUCTS & SERVICES ▶ E-BUSINESS ▶ BOEING WORLDWIDE ▶ INVESTOR RELATIONS	EMPLOYMENT EMPLOYEE/RETIREE DOING BUSINESS GEN INFO/IMAGES	CORP. GOVERNANCE NEWS SECURE LOGON
---	---	--

[Contact Us](#) | [Text Index](#) | [Site Terms](#) | [Privacy](#) | [Copyright](#) © Boeing. All rights reserved.

www.boeing.com/fcs

In Summary...

- Small businesses are important to the FCS Program
- Dedicated resources are in place across the program
- Competition and Small Business opportunities are key focus areas for all FCS team members
- Key partners have been selected - 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 and we are making good progress
- To date more than 200 Small Businesses have been involved with FCS, representing more than \$100M of funded subcontracts across 25 States