

Joint Forces Command KEY CONTRACTOR CAPABILITIES

To execute its diverse mission, especially its transformation and integration role, JFCOM has developed and improved a rented complex in Suffolk. This facility contains extensive computer support infrastructure, as well as demonstration rooms, laboratories, collaboration infrastructure and connections to a wide range of classified and unclassified communication networks. This facility is unique and tailored to support the examination and testing of hardware as well as the development of prototype hardware and new military business rules for command and control. This facility has also been used for specialized training that has leveraged emerging capabilities in modeling and simulation.

To support JFCOM in the execution of its missions, the DoD and contractors have, invested in a wealth of high end infrastructure, in multiple facilities throughout Northern Suffolk. As is the case with JFCOM, within these facilities are extensive networks of laboratories, computer support systems, and demonstration rooms. This infrastructure, which is absolutely essential to the multitude of functions related to JFCOM's transformation and integration role is unique.

Notwithstanding the vast amount of infrastructure that's in place in and around the JFCOM campus in Northern Suffolk, the even more significant, unique, capability associated with JFCOM is the human capital. Many of the JFCOM missions require specialized skills. For a number of cost saving measures the DoD has relied on contractors to provide these services. Until recently, civil service positions have not existed to provide these skills, nor have there been identified military billets (positions) that have these skills. The workforce in Hampton Roads has evolved over time to fill this shortfall and has, for the defense industry, become a national asset. Assembled over many years of recruitment from the region's diverse military population, contractors supporting JFCOM have attracted and retained highly skilled individuals from every facet of the military. This real-life experience, combined with the depth of science and technology provided by the industry's scientists and engineers, has evolved into highly skilled teams which think and act from a joint perspective. JFCOM is the only major command which requires this unique skill mix; one that is unlikely to be found elsewhere. These skills include (but are not limited to):

Communications Engineering
Computer Science
Process Modeling
Software Development
Systems Engineering

Electrical Engineering
Operations Research
Process Re-engineering
Configuration Management
Enterprise Engineering

Command and Control
Military Theory
Training
Surveillance
Experimentation Theory
Non-Governmental Operations
Encryption
Network Design
Human Factors Engineering
Integration Engineering
Information Assurance
Spatial Analyses
Project Management

Intelligence
Tactics
Logistic Theory
Reconnaissance
Experimentation Management
Law Enforcement
Web Design
Database Design
Requirements Engineering
Modeling and Simulation
Security Engineering
Facilitation
Test and Evaluation

The Hampton Roads metro area features the highest concentration of Military personnel in the United States and as such is home to an impressive amount of DoD facilities. This list includes, but is not limited to:

NAVY

Naval Station Norfolk
Naval Air Station Oceana
Naval Center Portsmouth
Norfolk Naval Shipyard
Commander: Naval Region Mid-Atlantic
Commander: Naval Surface Force, U.S. Atlantic Fleet

ARMY

Fort Eutis
Fort Monroe
Fort Story

AIR FORCE

Langley Air Force Base

MARINE CORPS

U.S. Marine Corps Forces, Atlantic

COAST GUARD

U.S. Coast Guard, 5th Atlantic Fleet

U.S. Coast Guard Training Center Yorktown

U.S. Coast Guard Finance Center

U.S. Coast Guard Command and Control Engineering Center

U.S. Coast Guard Air Station Elizabeth City

DEPARTMENT OF DEFENSE

Joint Forces Staff College

Defense Link

U.S. Joint Forces Command

NATO

Headquarters

Supreme Allied Command Transformation

The strategic and significant presence of these bases and organizations present a unique opportunity and expertise in joint capabilities for training and operations. The presence of these facilities in Hampton Roads also provides a renewable workforce. It is estimated that approximately 15,000 military personnel retire/exit annually from these installations. This statistic is evident after speaking with JFCOM contractors. Contractors' have disclosed that as much as 80% of their workforce is composed of military veterans with unique training and experience in all five military services: Army, Navy, Air Force, Marines, and Coast Guard. Collectively, this workforce has virtually every military skill needed to support the advancement of our nation's defense: aviation, infantry, Naval surface and sub surface warfare, communications, intelligence, special operations, logistics, cyber warfare, information technology, amphibious operations, search and rescue, and on through any military skill set that needs to be applied in the joint environment. Many of JFCOM contractor employees have extensive experience working with allied forces, including current support to NATO Allied Command Transformation. Over 70% of the JFCOM contractor workforce has a BA/BS, and close to half hold advanced degrees. Those individuals without college degrees bring extensive talent in specialized skills such as special operations, communications and network engineering. Many of these employees are from military families with spouses or children serving in the military throughout the world – which increases their focus and sense of mission accomplishment. On the more specific asset

of Joint capabilities, JFCOM contractors shared the following regarding the skills that exist in Hampton Roads:

- Joint concept development and experimentation to project and evaluate future joint military concepts in fields ranging across the entire spectrum of military requirements. Examples span from operations with non government agencies - to control of weapons of mass destruction - to future logistics and sustainment operations.
- Modeling and simulation skills to develop and manage models which support joint experimentation, training, operations, and concept development
- Joint operational support to assist in the rapid world-wide deployment and standup of joint task force headquarters.
- Joint training, ranging from large global exercises, to individual training for key military leaders
- Technology assessment and capability integration skills to determine what new technologies are suited for joint military applications, focusing on the integration of government and commercial off-the-shelf technologies
- Network and communications engineering to establish and operate laboratories and multiple networks to support joint experimentation, training, operations, and capability integration
- Evaluating the joint interoperability of systems, focusing on command and control, intelligence, and logistics, in an operationally realistic context.

An additional unique attribute that has evolved in Suffolk and Hampton Roads as the modeling and simulation industry has grown, has been the development of the next generation's workforce. Suffolk Public Schools and the Prudent Center for Industry and Technology have both partnered with private industry to develop groundbreaking courses to encourage and educate those who will be future leaders in M&S. Tidewater Community college and Old Dominion University have also expanded their offerings to provide degrees based on the industry. A student in Hampton Roads is now able to receive Associates, Bachelors, Masters and PhD degrees in Modeling and Simulation.

HAMPTON ROADS MODELING & SIMULATION CONTRACTORS*

Accenture
Adayana
Alelo
Alion Science & Technology Corp
Applied Research Associates, Inc.
A-T Solutions
Atmospheric & Environmental Research
BAE Systems
BI Simulation
Bihrl Applied Research Inc
Biomx Corporation
Boeing
Boeing
Booz Allen Hamilton, Inc.
Breakaway
C2 Technologies, Inc.
Caci Newco Incorporated
CAE USA
CAIC, Inc.
Calytrix
Carpe Occasio Technology Systems
Command Post Technologies, Inc.
Computer Sciences Corp
Cougaar Software
Craig Technologies
Cubic Defense Applications
Dataline, Inc
DDL Omni Engineering, LLC
Dynamic Animation Systems
Dynamics Research Corp
Dynamis
Echostorm
Engineering & Computer Simulations, Inc.
Enterprise Information Services, Inc.
Enterprise Management Systems
Evidence Based Research, Inc.
FGM
Forterra Federal Systems
L-3 Communications
Laser Shot, Inc.
Lockheed Martin
Loyola Enterprises, Inc.
MAK Technologies, Inc.
MASA Group
McLane Advanced Technologies
Mitre Corporation
Mitre Group
MPRI
MYMIC
Northrop Grumman Corp
Novonics Corporation
ODU Research Foundation
Raydon Corporation
Raytheon
Reger
Science Applications Intl Corp
Scientific Research Corporation
Simis
Simventions
Spectrum Comm Inc
Sra Int'l Inc.
SRI
Systems Studies & Simulations
Tapestry
Tecmasters Inc.
Teksystems
The Aegis Technologies Group, Inc.
The Harrington Group, Inc.
Trideum
Trinet Acquisition Corp
Unisys Corp
Unisys Corporation
Universal Systems & Technology, Inc.
URS Federal Technical Services
Veraxx Engineering Corporation
Vertex Solutions, Inc.

General Dynamics
Ii Corps Consultants, Inc.
In The Arena
Intelligent Decision Systems, Inc.
Intergraph Corp
Intervise ITT Corporation
JF Taylor
JL Marshall

Visense
Visual Awareness Tech. & Consulting
VMASC
VMD Systems Integrators, Inc.
Werner Anderson
Whitney, Bradley & Brown Inc.
Wyle Labs
Xdin
Zel Technologies, LLC

* Narrative provided by the City of Suffolk; contractor listing provided by the Hampton Roads Partnership, September 2010.