DIGIFLIGHT
Accelerate Mission Success

Delivering Situational Awareness Increases Battlefield Effectiveness

Overview

Given the complexity of fighting in urban environments like those we face in Afghanistan and Iraq, battalion commanders and other leaders need an effective command and control system with combat navigation to track and communicate with every individual infantry warfighter on the battlefield. When armed with a situational awareness system, every soldier knows the exact positions of his comrades and enemies... and where to go when given a mission to execute.

Challenge

The U.S. Army's mission to quickly develop and deliver enhanced situational awareness capability down to the battalion level in the field resulted in the Department of Defense turning to the corporate world to support this effort. DigiFlight is one of several organizations being tapped for its expertise in monitoring and managing acquisition test and evaluation methodologies for this critical military program.

Approach

Now in the second phase of four (see Timeline sidebar), the DigiFlight team is immersed in a fast-track, constantly evolving acquisition program for a computerized command and control system. For the warfighter, this situational awareness system provides tactical information, including other soldiers' locations, on a helmet-mounted display, supported by radio communications. For troop leaders, an individual soldier's precise location appears on an active digital map image.

The system integrates mature commercial electronic technologies and secure communications for the brigade combat team. In addition to delivering test and evaluation expertise for this ambitious initiative, DigiFlight continually provides analysis and recommends innovative methodologies the program team can embrace and execute to remain on track and ensure success.

Situational Awareness System Timeline

- **April 2009**: Technology Development (TD) contracts awarded to three of the top ten major Defense Contractors for prototype systems to satisfy this mission

- **July 2009**: DigiFlight joins program team, starts implementing developmental and operational test and evaluation processes, provides Information Assurance support, delivers feedback to vendors for design modifications, and prepares required documentation to advance program through Milestone C

- **April 2010**: Capabilities Development Document (CDD) and Critical Operational Issues and Criteria (COIC) approved

- **July 2010**: Systems Engineering Plan (SEP) Finalized

- **September 2010**: Limited User Test (LUT)— Infantry units evaluate prototypes and one of three vendors is contracted to deliver desired capability

- **October–November 2010**: Approve Test and Evaluation Master Plan (TEMP), and conduct reliability, operational and excursion pilot tests

- **March 2011**: Initial Operational Test and Evaluation (IOTE) on 10% of Full Rate Production (Army to deliver more than 20K systems to field during a five-year period)

- **April 2011**: Milestone C/Proceed to Low Rate Initial Production

- **2012**: Deliver capability to Department of the Army

- **2013**: Deliver capability to infantry brigade combat teams in the field

Accelerating Mission Success

Changing requirements demand agile response and creative resolution. In one instance, DigiFlight identified additional equipment for the test/fix/test cycle, allowing the situational awareness program to meet minimum requirements to enter the critical Limited User Test (LUT) phase. Without this quick-thinking adjustment, the program faced loss of funding, derailment and, potentially, termination. In another example of timely analysis and correction for mission accomplishment, DigiFlight noted that in order for the capability to pass initial testing, the requirements had to be revised to reflect the impact of the instrumentation device on the system's maximum communication distance.

> "DigiFlight has provided excellent test and engineering support to the program. The company provided timely support and responded to technical direction extremely well."
>
> –May 2010 Performance Report

Beyond the 24x7x365 dedication to keep this program moving forward, DigiFlight also plays a critical communications and coordination role between the program team and Department of Defense senior management. The progress of this high-visibility acquisition program, on the top ten list of U.S. Army priorities, is tracked closely all the way up the chain of command to the U.S Army Chief of Staff.

Soldiers armed with this situational awareness system won't get lost; they will know the exact locations of comrades and enemies; they will be able to adapt to constantly changing dynamics of combat; and they will have the tools to share critical mission information. Every soldier becomes a decisive weapon.

To find out more about how DigiFlight can help you accelerate mission success, please contact us at dfihr@digiflight.com or 703.774.1080/866.DIGI.FLT (866.344.4358).

ABOUT DIGIFLIGHT

DigiFlight helps government and commercial customers accelerate mission success with technology solutions that protect our national security. Our unique core competencies enable us to deliver integrated support services for all critical phases of acquisition and technology management—Aerospace Technical & Acquisition Solutions, Compliant Solution Architectures, Cybersecurity, Integrated Acquisition & Technology Management, Systems and Software Development, Systems Engineering & Technical Assistance and Test & Evaluation. Highly skilled DigiFlight teams apply a holistic mindset to ensure that our customers' capabilities interoperate securely and effectively in operations and warfare environments.