

Global Command and Control System – Army (GCCS-A)

Executive Summary

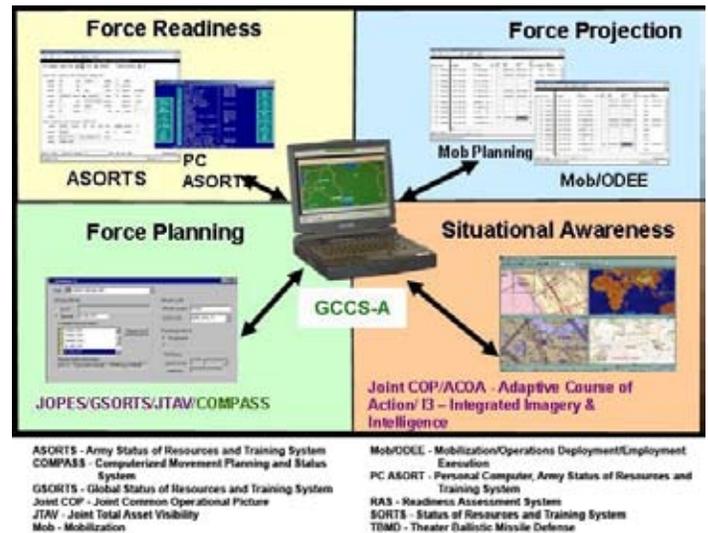
- The Army Test and Evaluation Command (ATEC) observed developmental and low level operational testing of the Global Command and Control System – Army (GCCS-A) in March 2006 at the Consolidated Test Support Facility at Fort Hood, Texas.
- ATEC collected data and reported on an operational test conducted at Headquarters United States Army Europe (USAREUR), Heidelberg, Germany, from May 1 - 18, 2006. This test primarily focused on functionality and connectivity within the architecture.
- The Joint Interoperability Test Command assessed interoperability between GCCS-A and Joint Operational Planning and Execution System (JOPES) during JOPES 4.0.2/3 operational testing from July 27 - August 4, 2006.
- Operational testing was mostly adequate and showed GCCS-A to be effective (with limitations) and suitable (with limitations). Information assurance testing at Fort Hood, Texas, was successful, but there is no nuclear, biological, and chemical contamination survivability strategy other than replacement. Some aspects of survivability and four functional aspects of the system still remain to be tested. Users were able to accomplish their mission.

System

- GCCS-A is the Army implementation of the U.S. Global Command and Control System.
- The GCCS-A system consists of software and computer hardware (commercial off-the-shelf and government off-the-shelf).
- The GCCS-A core system consists of situational awareness, force readiness, force projection, and force planning functionalities.
- Additional subsystems, core upgrades, and new functions can be fielded in future releases allowing GCCS-A to evolve as warfighter requirements change.

Activity

- ATEC observed developmental and operational testing of the GCCS-A in March 2006 at the Consolidated Test Support Facility at Fort Hood, Texas. Users from the 18th Airborne Corps performed detailed testing of the Command and Control Personal Computer (C2PC) application, which is used to display the Common Operational Picture (COP) on a desktop client machine. System administrators also carefully



- GCCS-A is built in compliance with the Defense Information Infrastructure Common Operating Environment to ensure interoperability with joint and other Army command, control, communications, computers, and intelligence (C4I) systems.

Mission

- Army Commanders utilize GCCS-A to exercise command and control over forces in support of joint and Army operations. Army commanders deploy GCCS-A at fixed command centers and at deployable tactical command centers.
- It provides Army commanders at all echelons of command with a single, integrated, scalable command, control, communications, computers, and intelligence system.
- It processes, correlates, and displays geographic track information on friendly, hostile, and neutral land, sea, and air forces, integrated with available intelligence and environmental information in support of the Army commander.

assessed installation documentation while loading and configuring the system.

- ATEC collected data and reported on an operational test conducted by USAREUR at Headquarters USAREUR and a subordinate command from May 1 - 18, 2006. Installation procedures, the COP, and the Movement and Planning

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Execution Tool applications were assessed during the operational test.

- The Joint Interoperability Test Command assessed interoperability between GCCS-A and JOPES during JOPES 4.0.2/3 operational testing from July 27 - August 4, 2006.

Assessment

- Operational testing at the Consolidated Test Support Facility determined GCCS-A had some problems with new COP symbols used for various aspects of low intensity conflict. Most of these symbols were displayed correctly. Army users stated the remaining problems were not of sufficient magnitude to prevent successful fielding. Information assurance testing at Fort Hood, Texas, was successful. Deployable laptops meet High Altitude Electromagnetic Pulse requirements, but there is no nuclear, biological, and chemical contamination survivability strategy other than replacement with spares.
- Operational testing at USAREUR found GCCS-A effective (with limitations) and suitable (with limitations). Survivability was not assessed at USAREUR. Limitations pertained to the C2PC client inability to display complicated collections of maps and some COP symbol problems. The C2PC application

did not properly handle correlations between electronic signals intelligence data and the units with the equipment producing the signals. Users can use GCCS-J workstations if concerned with GCCS-A COP limitations. The System Planning, Engineering, and Evaluation Device (SPEED), Effects Management Tool, All Source Analysis System COP overlays, and the Army Battle Command System Publish and Subscribe Server functional applications need additional testing in an operational environment which uses these capabilities.

There were no critical failures in any of the key performance parameters. By using a combination of GCCS-A and GCCS-J workstations, users were able to accomplish their mission.

- GCCS-A performed very well during JOPES interoperability testing in July/August 2006, with no significant problems.

Recommendations

- Status of Previous Recommendations. There was no FY05 report submitted on the GCCS-A.
- FY06 Recommendation.
 1. GCCS-A program should make necessary corrections and perform operational testing of functional applications not assessed during FY06 test events.