THE C2 FIX INITIATIVE

What It Means for Sustainment Forces

■ *By MG Michelle K. Donahue*

The Army is facing critical questions about its ability to survive in an increasingly lethal and complex battlefield. Recent lessons from global conflicts underscore the importance of mobility and dispersion to enhance survivability. To effectively conduct command and control (C2) within these constraints, the Army is reevaluating the systems and networks used within divisions.

The C2 Fix Initiative

The C2 Fix initiative aims to streamline and modernize the communications networks of a division and its assigned brigade combat teams (BCTs). It coordinates across multiple program executive offices and program managers (PMs) to provide the necessary equipment for an updated network focused on C2 on the move (OTM) or at the quick halt (ATQH). Leveraging existing technologies, C2 Fix simplifies operations for lower-echelon units by offering an integrated, deployable network. A significant change within the C2 Fix initiative is the shift to the sensitive but unclassified encrypted environment at the brigade and below levels, which empowers junior leaders that may not have had access to information in a Secure Internet Protocol Router environment.

This network combines current programs of record with commercially available capabilities to improve the commander's access to assured voice communications, a shared common operational picture (COP), and digital fires. Upgrades in satellite communications (SATCOM), leader and vehicle radios, and the COP form the core of these improvements.

New SATCOM capabilities enable smaller command posts to operate with C2 OTM or ATQH configurations. The network relies on a mix of military geostationary satellites and proliferated low Earth orbit (pLEO) satellites, which enhance resilience by providing coverage even if one satellite fails. The closer proximity of pLEO satellites also reduces latency, resulting in quicker data transmission and improved throughput with near-global coverage.

In vehicles and tactical operations centers (TOCs), the Joint Battle

Command-Platform (JBC-P) will be upgraded to the TAK-based Mounted Mission Command (MMC) software, which is interoperable with Android Tactical Assault Kit (ATAK) devices. This software-only upgrade allows for a shared COP across formations, enhancing situational awareness from TOCs to individual devices carried by dismounted Soldiers.

The new capabilities are designed to move C2 closer to the forward tactical edge with lighter, more mobile, and user-friendly equipment. When fully deployed, the C2 Fix initiative will enable smaller, more survivable command posts and an adaptable C2 architecture that supports multiple access points.

Impact on Sustainment Units

As these new C2 capabilities come online, sustainment organizations must adapt their tactics, techniques, and procedures (TTP) to maximize the benefits within their operational areas. C2 Fix has been fielded to units within the 101st Airborne Division and the 25th Infantry Division, and lessons learned from their combat training center (CTC) rotations have provided valuable insights. This transition has presented both opportunities and challenges for sustainment forces, particularly for logistics support battalions (LSBs) and division sustainment support battalions (DSSBs).

C2 Fix has had a positive impact on sustainment units' survivability, integration, and flexibility. For instance, the pLEO terminal, which replaces the larger satellite trailers formerly housed in brigade support battalions (BSBs), offers greater mobility and reduced visibility with quick setup and teardown times. Additionally, the tactical radio integration kit allows all integrated tactical network variants to function on a single battlefield network, reducing TOC size and enhancing mobility. Assured communications are further bolstered by redundant access to cellular and SATCOM networks, with devices such as the Mobile User Objective System satellite radio and mobile broadband kit, which tap into local or private cellular networks as part of the communications plan. The use of ATAK end user devices, TSM radios, and handheld Army Navy/Portable, Radio, Communication-163 leader radios increase access to data and enhance integration with BCT mission command systems.

With this improved situational awareness and robust communications network, sustainment units have successfully experimented with innovative ways to support their BCTs. The latest edition of Field Manual 4-0, Sustainment Operations, emphasizes sustaining units operating in base clusters, encouraging smaller and more survivable brigade support area configurations. During CTC rotations, units creatively adapted these concepts, leveraging C2 Fix assets to best support their BCTs.

Challenges and Areas for Improvement

Although the C2 Fix initiative improves the communications infrastructure, some challenges remain when it comes to sustaining the maneuver force during multidomain operations. In current units that have undergone C2 Fix, the vehicles with JBC-P Logistics have not been upgraded to MMC software, which limits data exchanges between sustainment units and the formations they are supporting. Additionally, disparities in the allocation of Nett Warrior (end user devices, mobile Wi-Fi pucks, and leader radios) in sustainment versus maneuver units limits the overall integration of sustainers. Additionally, the current logistics status (LOGSTAT) report included in the MMC software does not compile information at echelon and requires manual entry at each level, increasing planning time and opportunities for error. To increase survivability, units have experimented with their internal TTP and conducted their CTC rotations in smaller base clusters, instead of the larger brigade support area. While the base cluster concept has shown potential, there is a need for additional pLEO platforms to maintain access to critical sustainment enterprise systems and provide enduring support to the BCTs.

Current Initiatives

To address these challenges, U.S. Army Combined Arms Support Command (CASCOM); the Network Cross-Functional Team; the Program Executive Office Command, Control, Communications, and Network; the Maneuver Capabilities Development and Integration

SSG Devin Sasser, network communications systems specialist, Maneuver Combat Advisor Team 2310, 2nd Security Force Assistance Brigade, configures a microwave satellite terminal to increase tactical communication to support exercise African Lion 2024 in Dodji, Senegal, May 27, 2024. (Photo by SFC Nicholas J. De La Pena)

Directorate; and the Mission Command Center of Excellence have been coordinating revisions to the basis of issue for sustainment brigades, DSSBs, division sustainment troops battalions, and BSBs/LSBs. These revisions aim to increase Nett Warrior allocations in sustainment formations to provide increased access for leaders at the E-6 level and above. CASCOM, in coordination with the Army's Artificial Intelligence Integration Center, the Army Software Factory, and the PMs for mission command and Integrated Personnel and Pay System-Army are actively working on applications to address logistics COP, LOGSTAT and personnel status concerns within the MMC software system. Additional efforts have already begun to pay dividends: sustainment units are now eligible for MMC software upgrades with help from local Communications-Electronics Command offices. CASCOM will continue close coordination with multiple stakeholders to resolve foreseeable communications challenges, enabling better communication and coordination across dispersed formations.

Moving Forward

As the Army fields C2 Fix and ultimately moves toward next-generation C2, sustainment forces must remain active in testing and evaluation efforts to ensure their needs are considered. With modernization efforts reshaping force structure, doctrine, and technology, sustainment personnel must continue pushing the boundaries of C2 Fix to ensure it meets the demands of future battlefields.

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