Integrated Mission Planning & Airspace Control Tools (IMPACT)

The software-based aviation mission planning & airspace control solution

Overview

The Integrated Mission Planning and Airspace Control Tools (IMPACT) software suite converges the mission planning capabilities of the Aviation Mission Planning Systems (AMPS) with the airspace control capabilities of the Tactical Airspace Integration System (TAIS) into a single role-based, hardware-agnostic, software-centric solution. IMPACT will span Command Post, Mobile/Handheld, and Mounted Computing Environments, including the Aviation Mission Command Server (AMCS) on Aviation platforms.

IMPACT consists of several components that deliver dedicated capabilities in support of U.S. Army aviation across the Command Post Computing Environment (CPCE), Mobile/HandHeld Computing Environment (M/HHCE), Mounted Computing Environment (MCE), and the Aviation Mission Computing Environment (AMCE). In its initial configuration, IMPACT will include command post-focused capabilities delivered as IMPACT-C and Mobile/Handheld capabilities delivered as IMPACT-M.

Robust airspace control and aviation mission planning capabilities.

Broad Army, Joint and partner nation interoperability.

Powerful browser-accessed, fully 3D, role-based web application delivered by fully virtualized software solution.

Aircraft situational awareness supported by modern tactical links, standards, and ATC radars.
**Airspace Control**
- Full 4D airspace control capabilities including ACO and ACMREQ processing, UAP management and live airspace updates.
- Streamlined airspace clearance processing via tight integration with Army Fire Control Systems
- Broad airspace command and control interoperability with joint and partner nation tactical system via published standards like USMTF, VMF, ADATP3, ASCA, KML, and Geopackage, and proprietary interfaces with systems like CPCE SitaWare, and AMDWS.

**Aviation Mission Planning**
- Interoperable with AMPS, Enhanced Tactical Route Tool, and any XPLAN based engine.
- Detailed LOS and acoustic detection analysis
- Mission planning sharing and collaboration with CPCE, and MH/H
- Web client import export for easy transitions from AMPS and other planning systems
- DAFIF support
- Predictive situational awareness for aircraft
- One-click conversion of mission plans to airspace requests

**Shared COP**
- Shared COP via COE compliant data sharing with Army, Joint and partner nation tactical systems and sensors
- Dynamic synchronization of airspace changes with participating tactical system
- Combined COP for airspace manager, mission planner, and airspace requestor roles

**IMPACT’s aviation mission planning capabilities deliver high quality visualization and analysis capabilities, including line-of-sight (Yellow) and acoustic detection.**

**IMPACT’s aviation mission planning enables detailed visualization and analysis of vehicle specific flight plans.**

**IMPACT’s airspace control capabilities provide best-in-class capabilities for creating, analyzing, managing and communicating complex airspace usage through a fully 3D browser-accessed web application.**