#### GENERAL DYNAMICS Mission Systems

## **Integrated Mission Planning & Airspace Control Tools (IMPACT)**

The software-based aviation mission planning & airspace control solution



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.

#### **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.

# Integrated Mission Planning & Airspace Control Tools (IMPACT)

#### **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.

ien Acft_Serp_L	L.msnx 😎						New Ro	ute Uncalcule	Ke   #	
Route1	Number Symbol		Fix/Point Description	Coordinate	Altitude Temperature			Leg Distance Total Distance	Leg Time *	
Segment1	Pl	ST	KHRT/A	16R EU-29839-66232	38 ft MSL	04112		- total (Friday et al		
	•	51	HURLBURT FLD	16K EU-29839-66232 38 ft	15 °C	30	10000 lb		0000.00 02/2	
	P2 0	TP	CEW/R CRESTVIEW	16R EV-30686-10382 255 ft	1000 ft AGL 13 °C	220 G 30	325 lb 9674 lb	27.6 nm 27.6 nm	00+07+31	
	P3	TP	MGM/R MONTGOME	165 EA-64100-65277 271 ft	1000 ft AGL 13 °C	220 G 30	388 lb 9286 lb	85.6 nm 113.2 nm	00+23+21 0030:51 02/2	OP12
	P4 O	TP		165 EC-09286-25586 743 ft	1000 ft AGL	220 G 30	417 lb 8869 lb	91.5 nm 204.7 nm	00+24+58 0055:49 02/2	UP11
	P5	TP		165 EC-29076-32372	1000 R AGL	220 G	55 lb	12.1 nm 216.8 nm	00+03+18	the second second
	Pé	TP		165 EC-64121-49003	1000 ft AGL	220 G	99 lb 8715 lb	22 nm 238.8 nm	00+05+59	
	6 0	TP		165 EC-64914-57950 853 ft		220 G 0	22 lb 8693 lb	4.9 nm 243.6 nm	00+01+19 0106:26:02/2	
	Pill	TP		165 EC-89178-78052 784 ft		220 G	82 lb 8611 lb	17.9 nm 261.5 nm	00+04+53 0111:19 02/2	and the second s
	<sup>P2</sup> O	TP		165 FD-21131-21893 1007 B		220 G	146 lb	32.1 nm 293.6 nm	00+08+45 0120:04:02/2	
	P10	TP		165 FD-46735-52467 938 ft		220 G	101 lb	22.4 nm 316 nm	00+06+05 0126:10 02/2	
	P11 O	TP		165 FD-40213-79512 1584 ft		220 G	68 lb 8296 lb	15 nm 331 nm	00+04+05 0130:16 02/2	
	P12	TP		165 FD-17993-95184 1817 ft		220 G 0	66 lb 8228 lb	14.7 nm 345.7 nm	00+04+00 0134:16 02/2	Alla La Contra
	P13	TP		165 ED-04812-66376 1181 ft	1000 R AGL	220 G 0	90 lb 8137 lb	20 nm 365.7 nm	00+05+27 0139:43 02/2	The Color of the
	P14	TP		165 FD-00195-43575 583 ft	1000 ft AGL	220 G	57 lb 8080 lb	12.7 nm 378.3 nm	00+03+27 0143:10 02/2	
	P15	TP		165 ED-74318-15422 500 ft		220 G 0	101 lb	22.1 nm 400.4 nm	00+06+02 0149:12 02/2	
	P16	TP		165 EC-54464-92312 603 ft		220 G	82 lb 7899 lb	18 nm 418.4 nm	00+04+54 0154.05 02/2	1011007002
	P17	TP		165 EC-45578-72810		220 G	57 lb	12.4 nm	00+03+22	1251 0274022 Elev

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.

### GENERAL DYNAMICS

**Mission Systems** 

info@gd-ms.com • GDMissionSystems.com US & Canada: 1-877-449-0600 • Global: Your AT&T Country Code + 877-466-9467 • DSN: 312-282-1048

©2022 General Dynamics. All rights reserved. General Dynamics reserves the right to make changes in its products and specifications at anytime and without notice. All trademarks indicated as such herein are trademarks of General Dynamics. All other product and service names are the property of their respective owners. ® Reg. U.S. Pat. and Tm. Off.