International Map Industry Association
DC MeetUp
January 31, 2019

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U.S. Army Geospatial Center

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PRESENTATION ABSTRACT

2019 International Map Industry Association DC Meetup - Army Geospatial Center Abstract

The three major topics of this presentation will be an overview of the Army Geospatial Center [AGC], its Warfighter Support Directorate and the GeoPDF Production Program

The U.S. Army Geospatial Center (AGC) is a major subordinate command center under the Army Corps of Engineers whose vision is to enable geospatial information dominance. It does this is within the framework of its core functional areas that support the Army Geospatial Enterprise: Warfighter Support and Production; Enterprise Development and System Acquisition Support and Research, Development, Test and Evaluation. As the Army's geospatial knowledge Center, it provides a decisive advantage by extending, filling and connecting National System for Geospatial Intelligence capabilities. AGC employs a knowledgeable and diverse staff of more than 350 Department of Defense civilians, contractors and military personnel who lend their extensive expertise to support the three program areas driving the AGC mission - Warfighter Support, Systems Acquisition and Support and the Geospatial Research Laboratory which is co-located with the Army Geospatial Center and engages in research to support the development of the Army Geospatial Enterprise as well as develop geospatially-enabled technologies for the Army and Nation.

Warfighter Support Directorate provides geospatial engineering support to the Army's generating and operating forces focused on fulfilling critical geospatial production gaps and provides technical reachback, data collection, production, exploitation and dissemination of geospatial information tailored to the Army's mission requirements and mission command systems. The GeoPDF Program is under the purview of the Warfighter Support Directorate

AGC's GeoPDF Program is tasked with producing GeoPDF versions of all AGC products. The GeoPDF files are small (two to ten megabytes) with geospatial information embedded in the header of the PDF file and can be vector or raster based and even a combination of both. The files can contain attributes, layers and now a SQLite database file containing all of the vector, raster and attribute information used to create the map of which the file represents. This SQLite file is in the OGC GeoPackage standard format. The project began by taking all of the NGA standard paper map sheets for a test country and creating GeoPDFs out of them. These files where then packaged with an index sheet for easy use. It was an instant hit. AGC known then as the Topographic Engineering Center (TEC) obtained all 60,000 USGS Digital Raster Graphic (DRG) files and has converted them into GeoPDFs and gave them to USGS who has made them available free via the USGS on-line store (www.store.usgs.gov). The GeoPDF Program oversees the production of AGC products Urban Tactical Planners (UTP), Engineering Route Studies (ERS), Urban Water Graphics (UWG), Buckeye Map Book (BMB), Cultural Maps, Historical Photo Analysis (HPA) reports, Inland Electronic

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Navigation Chart Data & Country/Area Overviews as GeoPDF end products along with converting other outside maps/atlases into GeoPDFs as needed.

BIO

For the last 18 years, Ray Caputo, has worked at the US Army Geospatial Center [AGC] as a Geographer and GeoPDF Program Lead.

Has over 32 years of experience in the Mapping/GIS field and has held positions in Local, State and Federal Governments, and also throughout the commercial sector.

Earned a B.S. in Geography from the State University of New York at Oneonta.

Past work experience includes:

INDUS Corporation
Business Development and part of the Department of Justice Civil Rights GIS Support contract

Chugach (Chew-gaa-ch) Development Corporation
GIS/Mapping Project Manager for the INS/Border Patrol Remote Video Surveillance contract's mapping initiative

CACI
Oracle Database Administrator for custom written Revenue Management System and MicroStation CADD Interface for the Metropolitan Washington Airport Authority

City of Manassas, Virginia
Supervisor of Mapping Department and GIS Manager

Virginia Department of Transportation
Photogrammetrist

Mapcom Systems
Cartographer

Topo-Metric
Photogrammetrist