

New for 2023

Technical Interest Item #: 619.1

Lead Org: 1st JSOAC

Title: (U) Aircraft Flight Profile/ "Big Data" Analysis & Feedback Tool

Category: Situational Awareness (SA)

Description:

(U) SOF is interested in the development of a consolidated resource to leverage historical and real-time data, such as the travel histories and details of specific aircraft with correlation to open source information, social media, and flight reporting. The capability output can be filtered and sorted to enhance operational advantage and minimize risk to force and mission in real-time. This capability would be able to assess pattern of life details associated with US, USG, DOD, or commercial aircraft critical to decision making, after action reporting and mission analysis.

Operational Scenario:

(U) SOF seeks to conduct movement of personnel and assets to an area of interest with a reduced profile. When determining if the planned movement is suitable and appropriate, the "Aircraft Flight Profile Management Database Tool" reveals that the aircraft is primarily associated with a distinctly different geographic area. Additionally, "tail watchers" have posted on social media pictures of the aircraft at various airfields. Based on the information available, the commander decides to utilize a different airframe for the mission. With the aircraft in flight, the tool is monitored for any indication of increased scrutiny or mission compromise.

General Conditions:

(U) Austere Site, Tactical Operations Center, Rear

Unique Conditions:

(U) None

Standards:

- (U) Compatible and available across all SOF networks
- (U) Collects and stores data from sensors or databases for a designated time period.
- (U) Delivers and integrates into CoP feed for real-time monitoring and tracking of aircraft.
- (U) Searches and filters data for recent and historical key terms to provide full spectrum social media and open source situational awareness.
- (U) Open coding for future adaptability and integration.
- (U) Cloud or physical data storage capability on all SOF networks.
- (U) Parameters set to automatically adjust classification as data is aggregated based on predetermined search terms and phrases.

Technology Research Areas:

(U) Several variations of platforms providing this specific type of data driven information to analysis are available. Determination on whether the most appropriate application includes management of this type of data as an input to systems and overlays that are already used in traditional intelligence reporting, or whether an entirely new interface and platform is required to be effective and efficient. Determination as to the optimal length of time related to historical lookback information required in order to maximize historical awareness and pattern of life understanding to enable effective analysis.