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ADAPT: Tactical Assault Kit: Collaborative

Mission Planner

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ADAPT

Tactical Assault Kit: Collaborative Mission Planne

Naval Postgraduate School

Background, Research Question

- The Tactical Assault Kit (TAK), available on Android, Windows and IOS devices, is a smartphone-based application that allows enhanced mission command. It has been a critical tool in Advise and Assist partner operations in Iraq, where it was deployed with great success against ISIL in 2014, and is still the primary C4ISR platform for US partner operations.
- Over the last several years TAKs use by USSOF and Inter Agency partners has continued to expand at an accelerated rate.
- TAK does not currently produce mission orders or CONOPS. Mission products are still developed on legacy systems.
- Research Question: How can a capstone project at NPS enable mission planning using TAK by increasing the speed and quality of planning products, while simultaneously reducing human-in-the-loop errors?



Preformatted Mission Template Selection and Modification Concept Sketch

JOINT OPERATIONS CENTER RECCE TEAM LEADER COMPLETE CONOP

Tactical Assault Kit Collaborative Mission Planner

Research Design

- The Collaborative Mission Planner (CMP) produces CONOPs built collaboratively by multiple TAK devices. The CMP creates mission products as a living product of planning
- TAK CMP was developed using Design Thinking Methodologies.

ADAPT team held weekly design sessions in person, via VTC, and telephonically for 6 months to develop the TAK CMP

Results

- USSOCOM is developing the CMP plugin for all TAN applications.
- The development of mission command software is a long, multiple capstone process which has to be done in sequences by follow on capstone teams.
- Our Capstone mainly built the initial architecture and framework for TAK CMP, focusing on an intuitive process of building mission products.

The "So What"

- TAK CMP will be fielded to all SOCOM units after field experimentation of the latest SOMPE Software.
- CMP provides an agile real-time JIIM planning and execution tool to all government TAK-user entities



Next Steps

- Expand the CMP to address CWMD specific planning requirements
- Test the TAK CMP at SOF exercises. Incorporate feedback into future versions.



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