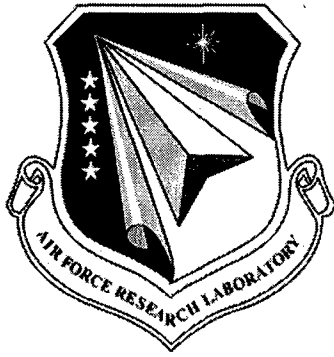


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AFRL-HE-WP-TP-2006-0088

**Intelligence, Surveillance, and
Reconnaissance (ISR) Planning
Capability**

Gilbert G. Kuperman

**Human Effectiveness Directorate
Cognitive Systems Branch**

June 2006

Interim Report for January 2004 to June 2006

20061023053

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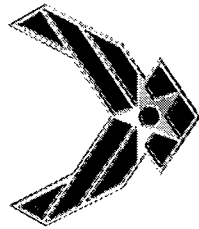
**Air Force Research Laboratory
Human Effectiveness Directorate
Warfighter Interface Division
Cognitive Systems Branch
WPAFB OH 45433-7604**

REPORT DOCUMENTATION PAGE

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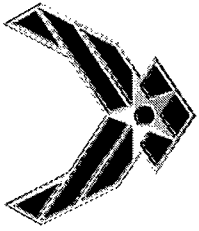
ISR Planning Capability

Interim Report: WU 7184X06C

Jun 2006

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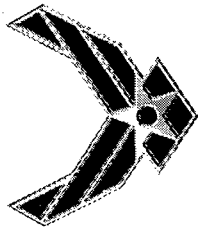


ISR Planning Capability

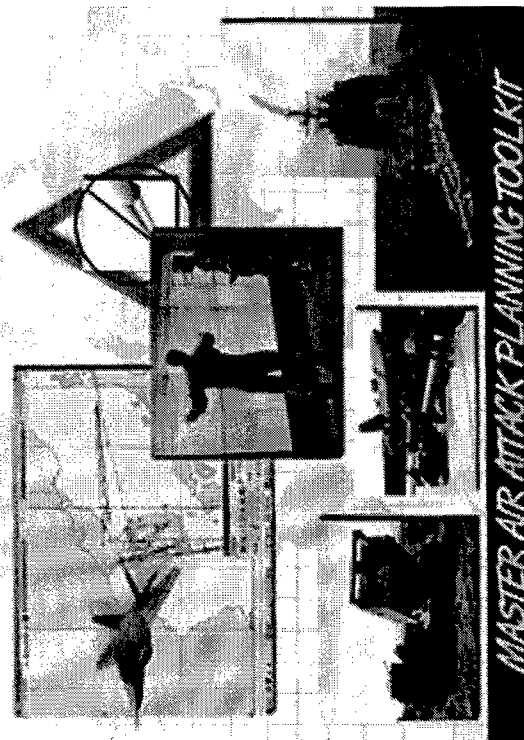


- **Project Description: Development and demonstration of shared battlespace awareness display capability between the ISR and Combat Operations Divisions of the AOC.**
- **What does it do? Conceptual displays to support ATO ISR collection plan execution monitoring, adjustment, and retasking**
- **Products and benefits to the customer:**
 - **Enhanced capability to visualize actual ISR collection activities and plans in spatial and temporal contexts**
 - **Current Synchronization Matrix is static and referenced only to planned activity over time**



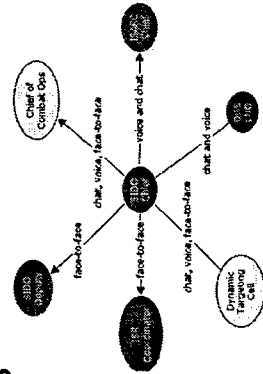


Information Requirement Analysis for Dynamic Management of ISR Assets



Description

- Human-system interface enhancements for MAAP Toolkit / WebTAS to better support ISR collection planning and dynamic ISR management
- Cognitive Task Analysis
- Human-Centered Design and Assessment Methodologies



Resource Information

FY04	FY05	FY06	FY07	FY08
\$250K	\$181K	\$200K	\$250K	\$200K

Milestones:

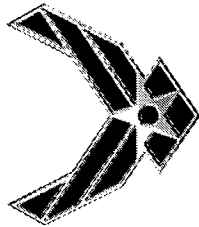
- FY04: Analyses of MAAP TK and WebTAS
- FY05: Decision Analysis of ISR Managers
- FY06: Information Requirements Analysis-based display concepts and mission scenario
- FY07: HSI Concept Designs
- FY08: Refined HSI Concepts

Note: Actual FY06 funds = 90% of programmed

Products & Benefits to Customer

- Improved situation awareness for the planning, monitoring, and control of ISR assets
- Improved decision support for ISR planning and dynamic management
- Improved insight into the impact on ATO execution of sensor re-tasking
- Common tool for Intel and Combat Operations Divisions (in AOC) for ATO generation support

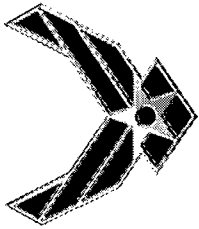




Issues



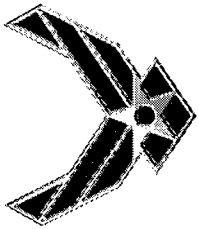
- Follow on 6.2 effort is programmed (“Dynamic Multi-Sensor Mission Planning and Exploitation”) but does not begin until FY11, resulting in two year “gap”



Transition and Follow on Work



- **Transition:**
 - **ISROE: “Dynamic ISR Warfighter Demonstrations” was approved on 27 Feb 06 for FY07/08 6.3 funding**
 - **Project introduction briefing provided to AFC2ISRC/ISRB/CC**
 - **Commander’s Predictive Environment (CPE):**
 - **Possible (Being explored with Dr. Miller)**
 - **Human Factors for the AOC (HF-AOC):**
 - **Possible (Being explored with Mr. Monk for expansion to include Strategy and Combat Plans Divisions)**
- **Follow on: FY11 start for “Dynamic Multi-Sensor Mission Planning and Exploitation”**



Funding and Execution



- OBS: 100%
- Expenditures/Invoice: 78% (Cumulative [as of 2/28/06])