

# Human Factors Issues in Combat Identification & Human Factors Issues in Imagery Analysis using UAV's Joint Workshop Events

Gold Canyon Golf Resort & Conference Center

Wednesday, May 14<sup>th</sup> 2008 – Resort Pavilion

## Interactive Poster-Demo Session

3:00 pm to 5:30 pm

*Resort Pavilion –  
Light refreshments served and  
cash bar available.*

Both topics will be represented in Poster and Demonstration form during this time.

### Human Factors Issues in Combat Identification

Presenter: Krisstal Clayton, NMSU, **Using State Trace Analyses to Measure Effects of Automation Errors on Cognitive Processes**

### Human Factors Issues in Imagery Analysis using UAV's

Presenters: Doug Limbaugh and Jeff Getzlaff - Kutta Technologies  
Title: **Bi-Directional Remote Video Transceiver (BDRVT), Unified Ground Control Station (UGCS), Network-Centric Distributed UAV Access System**

Presenters: Dr. Bill Marshak and Dominic Bartek - Sytronics, Inc.  
Title: **Retrofitting Mission Essential Supplemental Information into Existing Ground Control Stations**

Presenter: Dr. Ericka Rovira, US Military Academy  
Title: **The Development of A Decision Support Tool to Dynamically Re-task Intelligence Surveillance and Reconnaissance Assets**

Presenter: Jay Shively, US Army/ARMDEC  
Title: **Playbook® Control of Multiple UAS in a Coordinated Target Engagement"**

## Event Dinner

6:00 pm to 8:00 pm

Please join us for an Event Dinner (with cash bar) which will be served on the pavilion of The Gold Canyon Golf Resort.  
*A pre-purchased Dinner Ticket is required.*

# Human Factors Issues in Imagery Analysis using Unmanned Aerial Vehicles

Gold Canyon Golf Resort & Conference Center

**Thursday, May 15, 2008 – Upper Towne Hall Meeting Space**

7:15 am to 8:00 am	Workshop Check in; AM Beverage Service
8:00 am to 8:10 am	Opening Comments: <b>Dr. Nancy Cooke</b> , Arizona State University and Cognitive Engineering Research Institute
	<b>Human Imagery Analysis Performance</b>
8:10 am to 8:35 am	Presenter: <b>Bill Evans</b> , University of Central Florida Title: The Effects of Motion on ROV Target Identification Tasks
8:35 am to 9:00 am	Presenter: <b>Michael Curtis</b> , University of Central Florida Title: Usability of Image Generation Platforms to Produce Oblique Viewpoints
9:00 am to 9:25 am	Presenter: <b>Thomas Fincannon</b> , University of Central Florida Title: Constructs of Spatial Ability and Their Influence on Performance with Unmanned Systems
9:25 am to 9:50 am	Presenter: <b>Joseph Keebler</b> , University of Central Florida Title: A Cognitive Basis for Combat Misidentification
9:50 am to 10:20 am	Break
	<b>Technology for Improving Human Imagery Analysis Performance</b>
10:20 am to 10:45 am	Presenter: <b>Patricia McDermott</b> , Alion Science and Technology Title: To send or not to send: Does the transmission of unmanned vehicle imagery help or hinder Soldier performance?
10:45 am to 11:10 am	Presenter: <b>Lamar Warfield</b> , Air Force Research Laboratory Title: Multi-Video Inspection Performance: Results of 3 Preliminary UAV Studies
11:10 am to 11:35 am	Presenter: <b>Dr. Ryan Kilgore</b> , Charles River Analytics, Inc. Title: Determining the Impact of Haptic Peripheral Displays for UAV Operators
11:35 am to 12:00 pm	Presenter: <b>Doug Limbaugh</b> , Kutta Technologies Title: CONOPS for the Army's new Bi-Directional Remote Video Transceiver (BDRVT)
12:00 pm to 1:10 pm	Lunch will be served on the Towne Hall Patio.

# Human Factors Issues in Imagery Analysis using Unmanned Aerial Vehicles

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**Thursday, May 15, 2008 (continued)**

<b>Thursday, May 15, 2008 (continued)</b>	
	<b>Perspectives on Improving Human Imagery Analysis Performance</b>
1:10 pm to 1:30 pm	Presenter: <b>Bruce Hunn</b> , Army Research Laboratory Title: Imagery Analysis Enhancement by the Synthetic Sensation Approach to Information Integration (SSAI)
1:30 pm to 1:50 pm	Presenter: <b>Gloria Calhoun</b> , Air Force Research Laboratory Title: Augmentations for Enhancing UAV Video Display Utility
1:50 pm to 2:10 pm	Presenter: <b>Commander Jeff Huddleston</b> , NAVAIR Title: UAV Imagery and the Next Step
2:10 pm to 2:30 pm	Presenter: <b>Dr. Jim Staszewski</b> , Carnegie Mellon University Title: Models of Human Expertise as Blueprints for Instruction
2:30 pm to 2:50 pm	Presenter: <b>MSgt. Claude Ezzell</b> , United States Air Force Title: The New Era of Critical Thinking for the Imagery Analyst
2:50 pm to 3:15 pm	Break
<b>Panel Session</b>	<b>Panel on Improving Human Imagery Analysis Performance</b>
3:15 pm to 4:50 pm	Panelists: <b>Bruce Hunn, Dr. Jim Staszewski, MSG Claude Ezzell, Commander Jeff Huddleston</b> , Ft. Huachuca sensor operators: <b>1SG Donald Pezzatta, 1SG Andrew Delcourt, and SSG Jonathan Hoehn</b> Facilitator: <b>Dr. Nancy Cooke</b> This eclectic panel of UAV operators, researchers, and engineers will discuss and attempt to integrate the perspectives offered in the preceding paper session. It will then lead the workshop in a discussion regarding future research and development needs in this area.
<b>Summary</b>	Closing Comments:
4:50 pm to 5:00 pm	<b>Dr. Nancy Cooke</b> , Arizona State University and Cognitive Engineering Research Institute