

Closing Comments

Human Factors of UAVs: "Manning the Unmanned"



May 24-26, 2006

AZ Golf Resort, Mesa, AZ

Broadening our Scope



Figure 7-1. Team Retarius UGCV

Ground and Underwater Vehicles



image from small UAV of Pearlinton MS 8/31/05

Civilian Applications



PROGRESS?

Human Factors of UAVs: “Manning the Unmanned”



Themes & Quotes from Workshop

- Research Themes
 - Other platforms and ROSs
 - Improving SA
 - Controlling multiple UAVs

Themes & Quotes from Workshop

→ Variations

→ Mission, task, training, culture

→ Services: Army, USAF, Navy, Marines

→ Venue: Air, Water, Space, Ground

→ Vehicles/Platforms: Raven, Hunter, Shadow

→ Tasks/Missions: navigation, weapons, recon, maintenance, transport (FedEx)

→ One size probably does not fit all

Themes & Quotes from Workshop

- Conceptual Models
 - Manned flight
 - Robotics
 - Video gaming
 - Air traffic control

Themes & Quotes from Workshop

- Terminology
 - UAV, UAS, ROV, ROS, UV
 - Autonomous vehicles, automated functions
 - Operator, pilot
 - GCS, RCS (Remote Control System)
 - Homeland defense, homeland security

Themes & Quotes from Workshop

→ Quotes

- "The more you know, the more you know you don't know" – Beth Lyall
- "100% UAV errors are human factors errors" – Bruce Hunn
- "If you want to give the folks in the GCS a rest, deploy them forward" – Anthony Tvaryanas
- "There are many positive sign posts" – Goldy

Miscellaneous

- Please complete surveys
- Look for slides on www.cerici.org
- Other?



Hosted by the Cognitive Engineering Research Institute



**5810 S. Sossaman, Suite 106
Mesa, AZ**



Join us here Friday night for
CERTT & Dessert

7:30-9

Thanks to Workshop Organizing Team



Harry Pedersen
CERI & NMSU



Jennifer Winner
CERI & ASU



Ben Schaub
CERI & ASU

CERI Would Like to Thank the Sponsors of the 3rd Annual Human Factors of UAVs Workshop



**Human
Factors
and
Ergonomics
Society**

RESEARCH INTEGRATIONS

I N C O R P O R A T E D

Their Support Makes this Workshop Possible

THANK YOU!!!