Joint Center for Robotics (JCR)
Dr. Jim Overholt
15 April 2008
**Joint Center for Robotics (JCR)**

**Advanced Planning Briefing for Academia (APBA) Presentation, The original document contains color images.**

**Security Classification of:***

- **Report:** unclassified
- **Abstract:** unclassified
- **This Page:** unclassified

**Limitation of Abstract:** UU

**Number of Pages:** 6
“White Hat” Organization - Understand the needs of the user and create partnerships with Academia, Industry and OGA
Safe Operations and 360° SA

Tactical behaviors

Platform Mobility

High-Speed Tele-operation

UGV – Soldier Interfaces

Autonomous Control

Arm and Manipulator
Articulation

Communications

Power Management

Non-LOS SA
Manned And Unmanned Vehicle (MAUV) SIL

Live   Virtual   Constructive
JCR – Academic Success Stories

University of Michigan

Auburn University

Oakland University

Lawrence Technological University

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.
Relevant academic projects that align university expertise with UGV needs

- 12-24 month efforts emphasizing immediate needs (short term)
- 2-3 year efforts with specific drop out points of technology (long term)
- On-site personnel helping in development of “Capability Cells”

University of Michigan ‘New’ Fall 08 Unmanned Ground Vehicle Degree

Teamwork & Leadership

Breadth in Engineering

Overview and Capstone Project

Depth in Engineering

From Research to the Soldier

The University of Michigan, other participating universities, companies, and organizations will work within a tech transfer ecosystem to focus research on technologies which demonstrate a clear path to the soldier.

The Research Continuum

1. Focus on TARDEC priorities
2. Meet stringent requirements for a focus on the soldier
3. Maintain educational research standards
4. Can deliver tangible results (prototypes, demonstration units, etc.)

Key Partners:
- TARDEC
- WSU
- U-M
- MSU
- Other Universities

Under the TARDEC umbrella, the GRRC will direct research projects and partnerships that:

- Commercialization Plan
- TARDEC Delivery to the Soldier
- Project and Proposal Evaluations
- Researchers
- GRRC Executive Committee Filter

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.