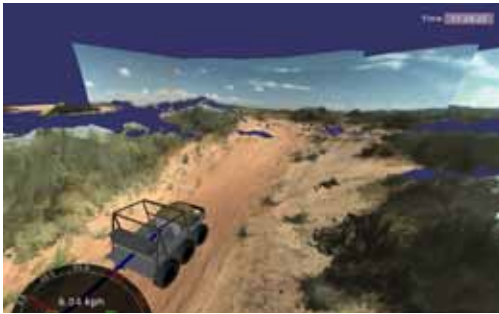


# Autonomous Systems

## World's Best UGV Autonomy

- Tested at military sites across the U.S.
- Assisted driving to full autonomy
- Operator stays in control at all times



### Situational Awareness: SACR

- Faster, easier teleoperation & indirect driving
- Photo-realistic, real time 3D video
- View from different perspectives around vehicle
- Supports large & small vehicles



### Off-Road Autonomy: UPI

- Advanced perception & learning-based autonomy
- Highly mobile, rugged Crusher UGVs drove thousands of kilometers in the field
- Successfully navigated desert, mountain, densely forested, wetland & urban terrain



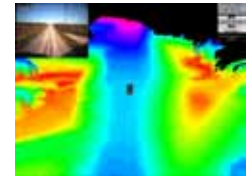
### Robotic Wingman: BAE Black Knight

- Controlled from Bradley Fighting Vehicle
- 24/7 RSTA support
- Assisted autonomy and safeguarding

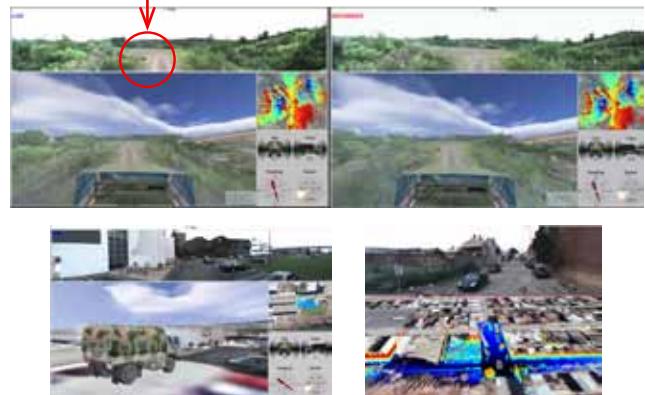


### Lighten the Load: R-Gator

- John Deere R-Gator with NREC perception and obstacle detection
- Full autonomy plus safeguarded teleoperation



Change  
Along Route



### On-Road Autonomy & Perception: Convoying

- Road following
- See-through-dust sensing
- Operator interfaces with live & virtualized views
- Switch between live & recorded video to spot roadside hazards
- 3D scans superimposed on overhead map to aid navigation