UAV-Enabled Wilderness Search and Rescue: Mike Goodrich

- Find and assist lost people
  - Forests
  - Deserts
  - Waterways
- Volunteer teams
  - Trained searchers
  - Not trained pilots
  - UAV fit into existing team
- Speed
  - Search radius ++ 3Km per hour
  - Search area: radius^2
- Cost
  - Equipment: $5K - $10K
  - Hours and errors

QuickTime™ and a
DV/DVCPRO - NTSC decompressor
are needed to see this picture.

Field Trial Tactics:
What is the Human-Robot Ratio?

- How many humans
  - UAV Operator
  - Sensor Operator
  - Mission Manager
  - Ground Searchers?

- Three roles to run UAV
  - Fan-out is 1/3
  - 3 humans per UAV

- Too many humans

QuickTime™ and a
decompressor
are needed to see this picture.

Most Pressing Issues for WiSAR

- Make the UAV irrelevant
  - It's all about the camera
- Support multiple information consumers
  - Video analyst, ground searcher, incident commander
- Need minimal, robust system
  - Reapid response untrained pilots, and FAA restrictions
  - Packable, cheap, quick to deploy