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## Designing Humans for Unmanned Systems

The UAV community is leaning towards greater levels of autonomy in the belief that removing humans from the UAV control loop will reduce both labor costs and the frequency of human error. However, other considerations may outweigh these theoretical benefits. The purpose of this presentation is to demonstrate the continued need for humans and identify the associated human factors issues such as:

- Why do we still need humans?
  - Responsibility, dynamic re-tasking, emergency procedures handling.
- What kind of humans?
  - Pilots versus non-pilots
  - Officer versus enlisted
  - What kind of pre-selection criteria?
- What kind of human computer interface standards?
  - What are the ergonomic issues?
  - What are the cognitive issues?
  - What are the responsiveness issues?
- What kind of medical standards?
  - What are the disqualifying attributes?
  - What are the standards for temporary groundings?
  - What about prohibitions against self-medication?