Forest Service Unmanned Aircraft Systems (UAS) Committee

Tactical Fire Remote Sensing Advisory Committee Meeting

March 20, 2012

USDA Forest Service, Remote Sensing Applications Center, FSWeb: http://fsweb.rsac.fs.fed.us WWW: http://www.fs.fed.us/eng/rsac/



Current Forest Service Perspective on UAS

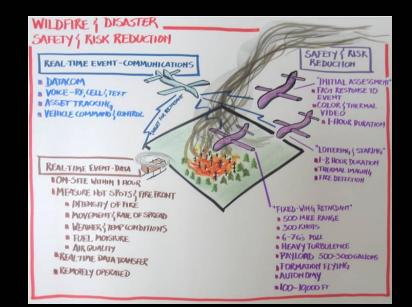
- Several UAS missions conducted in recent years
 - Operational, research and demonstration/evaluation
- Agency leadership recognizes the potential and importance of UAS operations
 - Fire management
 - Law enforcement
 - Research
 - Forest health

- Resource mapping/inventory
- Engineering
- Communications



Current Forest Service Perspective on UAS

- UAS in the context of agency manned aircraft program
 - Augment, not replace
 - Identify niche applications
 - Technology transfer benefits







Current Forest Service UAS Policy

- UAS are considered the same as manned aircraft (FSM 5713.7)
 - Acquisition
 - Carding of pilots/aircraft
 - Inspections
 - Maintenance

- Avionics
- Training
- Operations
- Agency requirements to utilize UAS (FS NASMP)
 - Coordination with WO F&AM UAS technical contact and RAO
 - Completion and approval of USFS and FAA documentation/procedures
- Agency aviation policy and procedure reviews are needed
 - Recommendations to facilitate UAS program development and operational implementation



Forest Service UAS Committee

• Committee scope/focus areas:

- Assess implications of UAS policy decisions on the current or proposed manned aircraft programs
- Risk assessment of any proposed UAS operations
- UAS strategic planning
- Charter developed and committee organized in early CY2012
 - Membership representation from USFS deputy and staff areas
 - Charter to be signed soon
- Meeting schedule
 - First meeting: February 28 March 1, 2012
 - Next meeting: March 23, 2012



Forest Service UAS Committee

• Committee objectives:

Agency aviation policy review/recommendations

- Related to the acquisition and operational use of UAS and associated technologies.
- Develop agency UAS mission protocols
 - To conduct requisite interim UAS missions and inform future operational use of UAS.
- Prepare agency UAS guidance documentation
 - Communication plan, strategic plan, and risk assessment documentation



First UAS Committee Meeting Summary (Notable Items/Needs)

- Interest in conducting UAS missions
 - Several deputy/staff areas and field units
 - Demo/eval, research and operational missions
 - Large and small platforms
- Leverage UAS capabilities and resources of external agencies
 - Support operational Forest Service objectives
 - Utilization of facilities with restricted airspace
- Implement support for agency UAS application areas
 - Identify/define specific mission requirements
 - Establish long-standing advisory groups



First UAS Committee Meeting Summary (Notable Items/Needs)

- Rulesets for UAS vs. manned aircraft in conducting specific missions
 - Based on mission requirements, safety, information needs, etc.
- Establish protocol to conduct UAS risk assessment
 - Relative to type of UAV used
 - Identify areas of high aviation risk to avoid
- Establish contracts to acquire UAS services from vendors
 - Demo/eval missions
 - Operational missions



First UAS Committee Meeting Summary (Notable Items/Needs)

- Address frequency spectrum planning, allocation and management for conducting UAS missions
 - USDA approved spectrum frequencies for authorized use
 - Reduce inadvertent interference with data/communication links
- Develop UAS airworthiness inspection procedures and documentation
- Develop strategic planning documentation
 - Review documentation of other agencies
 - Develop similar policies where feasible
- Conduct workforce planning/staffing analysis to address UAS operational costs



First UAS Committee Meeting Summary (Action Items)

- Finalize and sign committee charter
- Identify effects of FAA Modernization and Reform Act of 2012 on UAS committee objectives and tasks
- Develop project plan for UAS committee objectives and tasks
- Develop agency UAS communications plan
- Conduct review of frequency spectrum issues
- Develop strategic planning documentation
- Identify resources to complete UAS committee tasks

Forest Service UAS Committee Membership

- Committee Chair (Bob Roth)
- Airworthiness/Aircraft and Pilot Inspection (Gil Elmy)
- Aviation Policy (Eddie Morris)
- Aviation Safety (Ron Hanks)
- Communications (Steve Jenkins)
- Engineering (Everett Hinkley)
- Forest Health Protection (Jeff Mai)
- Forest Service Information Technology (Sean Triplett)
- ICS/Fire Suppression (Mike Quesinberry)
- Law Enforcement and Investigations (Tim Lynn)
- Remote Sensing Applications Center (Brad Quayle)
- Regional Aviation Officer (Dan Zimmerman)
- Research and Development (Matt Dickinson)
- Technology and Development (Rey Farve)

(SMEs will be added as interim members)

Thanks

Comments/Questions?



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