Integration of UAS into the Forest Service
Presentation Topics

• Overview of FS UAS governance
• Recent UAS activities
• Current work and program support
• Vision and next steps
FS UAS Program Organization

- Aviation Management
- FAA/FCC/laws
- Business Need
- Agency-owned
- Public Use
- Service Providers
FS UAS Program Organization

UAS Advisory Group
- FS Staff Areas
  • Technical expert and user community representation
  • Facilitates communications and application development

UAS Executive Steering Committee
- WO Staff/Directors
  • Chief-level direction
  • Provide broad policy recommendations

UAS Program Manager
- WO F&AM Staff
  • UASAG Chair
  • Responsibility to enforce FSM
  • Authority over communication tools

Interagency Fire UAS Subcommittee
- NWCG Members
  • Qualifications
  • Resource typing, ordering
  • USFS Representation
Direction and Guidance - Highlights

• Public UAS Use:
  • FAA maintains authority over all civil airspace
    • FAR 101, PL 112-95 provides right to fly for hobby or recreational use
    • “In accordance with a community-based set of safety guidelines…” (use must be defined by a nationwide community-based organization)
    • FAR 107 provides avenue for professional use by the public in coordination with land management (can also cover hobby/recreational use)
  • Special designations (Wilderness, TFRs) include restrictions
Direction and Guidance - Highlights

• Agency UAS Use:
  • Policies must ensure UAS are “used appropriately to further our mission with public safety, privacy, and civil rights safeguarded” – Chief’s Letter July 2016
  • Follow Aviation planning process for all flight activities
    • RAO/UAS PM coordination, PASP, Operations Plan
  • Privacy and PII must be addressed when conducting missions and handling imagery and data (assume all collected data contains it) – PM 2015-Feb-15
    • Additional USDA direction may be forthcoming
  • Acquisition: All UAS are aircraft, must be acquired IAW Aviation, Acquisition regulations (centralized acquisition and property management)
    • End-product contracts not centralized – follow Acquisition guidance
Examples of Recent FS sUAS Projects

1. Placer River Trail Bridge Inspection / Chugach NF (June 2015)
2. North Fire Support / Cibola NF (June 2016)
3. FHP/FM Aerial Survey / Apache-Sitgreaves NF (September 2016)
4. Eurasian Milfoil Mapping / Fishlake NF (September 2016)
5. Blackjack/Bluebird Mine Aerial Survey / Umatilla NF (October 2016)
6. Riparian Monitoring Survey / Wallowa-Whitman NF (June 2017)
8. Pioneer Post-Fire Aerial Survey / Boise NF (July 2017)
What are the Currently Available Methods to Use UAS on NFS Lands?

- **End Product Contracts** - Focus is on the data needed. UAS cannot be specified, but could be used to meet contract.

- **Contract for Flight Services** - Uses the same process and has the same timeframe as contracting for manned aircraft.
  - Additional contracting vehicles are currently being investigated, developed and implemented
    - NRCS UAS Services BPA
    - F&AM CWN contract

- **External Partners** - Utilize UAS flight services from other agencies, partners and cooperators.
  - Agreements required for all UAS flight services provided to the Forest Service.
  - Aircraft and pilots need to be carded appropriately for the mission.
Program Support

• For public use management: Public Affairs support, LE&I engagement, Rec and Wilderness
  • Ongoing coordination of policy and procedures

• Contracting UAS services: NIFC Incident Support Branch (ISB)
  • All UAS acquisition and contracted services under FS operational control are managed by ISB
  • UAS Program to develop standard language, desk guide to distribute to all contracting offices to ensure that end-product contracts do not become aircraft services
Outreach and Assistance

Public Awareness Campaigns

UAS policy guidance and reference materials for FS staff
Strategic Vision

- To foster safe, legal, respectful and enjoyable use of UAS for the public on National Forests
- To facilitate safe, efficient and cost-effective use of UAS for Forest Service work when UAS are the right tools for the job.
Next Steps

• Enhanced internal outreach/education
  • Agency-wide webinars
  • Improved Web presence
  • Summarize and split up guidance by application
• Establish a Program “toolkit”
  • Durable, flexible resource sharing agreements with partners
  • Contracts for services, equipment
  • Effective, available UAS training and mission request process
Next Steps

• Continuous Improvement
  • Baseline needs metrics from recent FS Needs Assessment survey
  • Plan to meet identified needs
  • Monitor performance through mandatory use reporting
  • Periodically reassess needs and adjust plan
Resources

• Internal FS UAS Website
  • http://fsweb.wo.fs.fed.us/fire/fam/aviation/uas/index.htm

• Public-facing UAS Website
  • https://ems-team.usda.gov/sites/fs-uas-proj/SitePages/Home.aspx
Questions?

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