2016 BLM National Aviation Plan
2016 BLM Nevada State Aviation Plan

Department of the Interior
Bureau of Land Management
Nevada State Office

This plan has been:

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This plan provides comprehensive information regarding BLM aviation organizations, responsibilities, administrative procedures and policy. This plan is implemented through BLM Instruction Memorandum.

The primary distribution of this document is electronic and available at:
http://www.blm.gov/nifc/st/en/prog/fire/Aviation/avlibrary.html

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Purpose – BLM Nevada

This is a combined document inclusive of the 2016 BLM National Aviation Plan and the 2016 BLM Nevada State Aviation Plan. The BLM Nevada State Aviation Plan is inserted in this document as a second tier to each applicable section of the National Plan. It is recommended that each BLM District in Nevada add their Unit Aviation Plan language as a third tier to this document. Nevada State Aviation Plan text is in **BROWN** (and is labeled as '**BLM Nevada**' in the case of a non-color view). The BLM Nevada State Aviation Plan (SAP) is procedural policy for aviation program/operations under BLM Nevada operational control and will be issued under Instruction Memorandum (IM).

BLM Nevada Aviation Program Mission Statement

The BLM Nevada Aviation Program provides leadership for safe and efficient aviation operations to meet the unique flight environments of rough terrain and high density altitudes within Nevada. Our goal is personal safety, risk management, proactive hazard identification and accident prevention with highly qualified and trained personnel in support of land management objectives.

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1.0 Aviation Plan

1.1 Purpose

The purpose of the Bureau of Land Management (BLM) National Aviation Plan (*NAP*) is to describe National Aviation Office (NAO) leader's intent, authority, role and responsibilities, program objectives, and to provide strategic and operational guidance to each organizational level. The NAO identified the need for a cohesive national aviation management plan that will allow all state, district/field offices, and aviation users to easily acquire the necessary information and policy to manage the BLM aviation program. Each organizational level plan provides the detailed operational procedures pertinent to their organization. This plan is supplemental and does not replace the policy as described in the Departmental Manual or the BLM Manual 9400

1.2 Mission Statement

The NAO is responsible for supporting all BLM fire and resource management programs through an active and professional aviation organization that:

- Develops and coordinates efficient aviation policy and management processes.
- Provides guidance for aviation programmatic and operational risk management.
- Leads aviation safety assurance and promotion programs.
- Provides aircraft acquisition support as specified by BLM management objectives.
- Develops and promotes a skilled aviation management workforce.

1.3 Aviation Program Objectives

The BLM aviation program provides the aviation tools to meet public expectation for efficient and safe management of the National System of Public Lands. Aviation management balances mission goals with the environmental considerations, available funding and safety of the involved personnel.

Safety: The priority in all BLM aviation missions is the safety of employees, contractors, cooperators and the public.

- Risk management as part of Safety Management Systems (SMS) will be inherent in all aviation missions and programs.
- All aviation personnel are empowered and expected to manage the risks of aviation operations and make reasonable and prudent decisions to accomplish the mission.
- Aviation personnel must take every opportunity to plan missions thoroughly, and respect aircraft and the environment in which they operate.
- Individuals will be held accountable for their decisions, which should be based on policy, principles, risk management, training, experience and the given situation.
- The agency is committed to ensuring our workplaces are free of recognized hazards. Prior to conducting any mission, all risks will be mitigated to the lowest acceptable level possible.

Professionalism: BLM personnel performing aviation functions must be service oriented and meet all qualification requirements of the Departmental and Bureau manuals, handbooks, and guides.

Diversity: Individual development, employee wellness and workforce diversity will be emphasized at all levels of the BLM aviation program.

Innovation: Management at all levels is responsible for enhancing the aviation program with a commitment to aviation safety and operational/management efficiency.

1.4 National Fire Aircraft Management Strategy

Aviation resources are one of a number of tools available to accomplish land management objectives. The proper utilization of aircraft in support of resource management programs serve as a force multiplier when dealing with issues of time, remoteness, terrain, large areas and distances.

This national strategy will:

- Optimize overall aviation capability.
- Apply effective management controls to suppression costs.
- Ensure that aviation assets are assigned to areas of greatest risk and/or highest probability of success.
- Maximize operational flexibility and mobility.
- Contribute to interagency suppression efforts.

The BLM national fire aircraft fleet composition is based on the National Interagency Aviation Council (NIAC) Aviation Strategy document, 2008, and is outlined in detail in the BLM Fire Aircraft Acquisition Plan (reference BLM *NAP Appendix 2*). Any changes in aircraft type or capability must be supported and approved by the Assistant Director of the BLM Fire and Aviation Directorate (FA-100).

In order to maximize effectiveness and efficiency, aviation resources should be centrally controlled, and operations must be locally executed. National strategy considers all BLM fire aircraft <u>and assigned personnel</u> to be national resources available for immediate assignment to areas of greatest national need regardless of their status in the Resource Ordering and Status System.

The BLM national aircraft management strategy is predicated on the NAO providing oversight to all BLM fire aircraft acquisition, coordination and allocation of aircraft between states. The NAO tracks tactical aircraft utilization along with monitoring fire activity, fire danger levels and forecasted weather. The NAO will modify contract terms (designated base, MAP, etc.) as required to ensure maximum utilization and effectiveness of firefighting aircraft.

The NAO coordinates with the State Fire Management Officers (SFMO) and their staff on aircraft needs, availability and re-positioning. SFMO will remain informed on the national situation, and will consult with Fire and Aviation's NAO and/or the Division of Fire Operations on assignment of BLM exclusive use aircraft to ongoing large fires.

The NAO facilitates aircraft pre-positioning with funding charge codes. During fire season, BLM exclusive use aircraft will be activated and mobilized to meet BLMs fire needs to the extent possible. Once authorized and acquired, all BLM exclusive use and severity funded aviation resources will be considered national resources subject to pre-positioning by SFMOs within their states, and by the national office on a national basis. This includes aviation personnel such as single engine airtanker (SEAT) managers and Air Tactical Group Supervisors (ATGS). The NAO

will coordinate with SFMOs and State Aviation Managers (SAM) prior to any movements. Supplemental fire aircraft acquisition will be in accordance with BLM *NAP* 3.10.

BLM Nevada – Discretion to utilize exclusive use aircraft for non-initial attack operations within the district is at the District Manager (DM) level. Assignment of exclusive use aircraft outside of the state for extended attack fire or non-fire projects requires communication and coordination with the SFMO. The SFMO will coordinate, with State Aviation Manager and District FMOs, the movement of aircraft within the state based on established priorities and anticipated critical fire weather and fire behavior.

1.5 Authority

This plan fulfills the departmental manual requirements outlined in *350 DM 1, Appendix 3*, and *BLM Manual 9400.3* Directives. This plan has been developed to provide policy standardization for all BLM aviation programs during 2016.

1.6 Policy

BLM aviation management and operations will be conducted within policies contained in the Federal Aviation Regulations, DOI 350-354 Departmental Manuals (DM), Operational Procedures Memorandums (OPM) and Handbooks (HB), and *BLM Manual 9400*.
In addition, the current version of the following Handbooks, Plans and Guides constitute BLM Aviation policy as specified in the *BLM Manual 9400*.

Exemptions/Waivers: Exemptions/waivers to federal aviation regulations and DOI regulations must be requested in writing to the BLM Aviation Division Chief. Final approval will reside at the OAS Director level (reference *351 DM 1.10*).

1.6.1 Handbooks

- *Aerial Capture, Eradication and Tagging of Animals Handbook (ACETA)*
- *Aviation Life Support Equipment Handbook (ALSE)*
- *BLM Wild Horse & Burro Aviation Management Handbook (WH&B)*
- *Interagency Aviation Transport of Hazardous Materials Handbook*
- *Law Enforcement Short-Haul Policy*
- *Military Use Handbook*

1.6.2 Plans

- BLM National Aviation Plan
- BLM State Aviation Plans
- BLM District/Unit Aviation Plans

1.6.3 Guides

- *Interagency Aerial Ignition Guide (IAIG, PMS 501)*
- *Interagency Aerial Supervision Guide (IASG, PMS 505)*
- *Interagency Airspace Coordination Guide (IACG)*
- *Interagency Airtanker Base Operations Guide (IATBOG, PMS 508)*
- *Interagency Helicopter Operations Guide (IHOG, PMS 510)*
- *Interagency Helicopter Rappel Guide (IHRG)*

- *Interagency Single Engine Airtanker Operations Guide (ISOG, PMS 506)*
- *Interagency Smokejumper Pilots Operations Guide (ISPOG)*
- *Interagency Standards for Fire and Fire Aviation Operations (Redbook)*
- *Interagency Aviation Training Guide (IAT)*

2.0 Aviation Management Organizations

2.1 Department of the Interior (DOI)

Office of Aviation Services (OAS): The OAS is responsible for Departmental functions related to aircraft services. The OAS provides service offerings that include; aviation safety services, aviation technical services, fleet management, fleet property accountability, aviation user training services, and flight scheduling and coordination services (reference *350 DM 1* for a complete list of functions and responsibilities). https://www.doi.gov/aviation/

Interior Business Center (IBC) Acquisition Services Directorate (AQD): The Aviation Acquisition Services Directorate provides department-wide centralized contracting for aviation flight services for DOI and DOI customers. Other acquisition management activities include property accountability and small purchase service in support of OAS and Bureau operations including DOI fleet aircraft. https://www.doi.gov/aviation/aqd

2.2 National Aviation Groups/Committees

Executive Aviation Board (EAB): The EAB is responsible for the Department of Interior aviation program. The Board provides executive oversight and performance accountability and assures that Department-wide strategies and initiatives are developed collaboratively and implemented consistently. Additionally, the Board provides final review and approval of policy, when needed. The EAB is chartered under the direction of the Assistant Secretary for Policy, Management and Budget. The EAB has authority over all aviation related boards/committees/groups within the Department. The BLM permanent member of the EAB is the Bureau Deputy Director.

Executive Aviation Committee (EAC): The EAC is chartered under the direction of the EAB. The Committee follows guidance and directives from the EAB and ensures full collaboration among members to ensure that EAB and Department objectives are met. The EAC also provides Bureau and Department level aviation program performance measurement metrics to the EAB. The EAC is responsible for establishing a Bureau Aviation Managers working group to be the primary surrogate of the Committee to engage in all DOI aviation related issues at the operational Bureau level. The BLM permanent member of the EAC is the Assistant Director, Fire and Aviation.

Executive Aviation Sub-Committee (EAS): The EAS is an advisory group for the EAC. The BLM representative to the EAS is the Division Chief, Aviation.

National Wildfire Coordinating Group (NWCG): The purpose of NWCG is to coordinate programs of the participating wildfire management agencies so as to avoid wasteful duplication and to provide a means of constructively working together. Its goal is to provide more effective execution of each agency's fire management program. The group provides a formalized system to agree upon standards of training, equipment, qualifications, and other operational functions. Agreed upon policies, standards, and procedures are implemented directly through regular agency channels.

- Membership: NWCG is made up of the USDA Forest Service; four Department of the Interior agencies: BLM, National Park Service (NPS), Bureau of Indian Affairs (BIA), and the Fish and Wildlife Service (FWS); the National Association of State Foresters and the Intertribal Timber Council. Membership is limited to one individual organization

representative, except the Forest Service will be represented by two representatives – one from fire and aviation management and one from fire research. http://www.nwcg.gov/index.htm

National Interagency Aviation Committee (NIAC):The Committee is established to serve as a body of resident aviation experts, assisting NWCG with realizing opportunities for enhanced safety, effectiveness, and efficiency in aviation related operations, procedures, programs and coordination. NIAC is chartered under the Equipment and Technology Branch of NWCG.

- Membership: Committee membership will reflect a mix of people who are knowledgeable in the subject area and who are from NWCG member agencies and organizations, including representation from OAS. http://www.nwcg.gov/branches/et/niac/index.htm

NIAC Sub Committees:

- Interagency Aerial Supervision Subcommittee (IASS)
  - ATGS Cadre
  - Leadplane Cadre
  - ASM Cadre
- Interagency Airspace Subcommittee (IASC)
- Interagency Airtanker Base Operations Subcommittee
- Interagency Airtanker Board (IAB)
- Interagency UAS Subcommittee (IUAS)
- Interagency Aviation Training Subcommittee (IATS)
- Interagency SEAT Board
- Smokejumper Aircraft Screening and Evaluation Subcommittee (SASES)
- Interagency Helicopter Operations Subcommittee (IHOpS)
  - Aerial Capture Eradication and Tagging Animals Unit (ACETA)
  - Interagency Aerial Ignition Unit
    - Helitorch Subunit
  - Interagency Helicopter Operations Guide Unit (IHOG)
  - Interagency Helicopter Rappel Unit
    - Rappel Equipment Subunit
  - Helicopter Short-Haul Unit

BLM Aviation Management Group (AMG): AMG is chartered under the BLM Fire Leadership Team to provide BLM leadership and expertise in all areas of aviation management. Promote aviation safety, standardization and efficiency in support of fire management and natural re-source activities. Provide representation in the development of aviation policy, acquisition plans and operational procedures.

- Membership: BLM; NAO program managers, State Aviation Managers, Liaison from Fire Operations (FA-300) and FLT.

BLM Air Attack Committee: The BLM Air Attack Committee is formed under the authority of the AMG with the concurrence of the BLM Fire Leadership Team (FLT) to provide national leadership in all areas of BLM air attack operations. Promote and coordinate safe, effective and efficient fire operations in order to accomplish Bureau of Land Management (BLM) fire management objectives. This will be done in collaboration with the AMG in coordination with the BLM National Air Attack Program Manager.

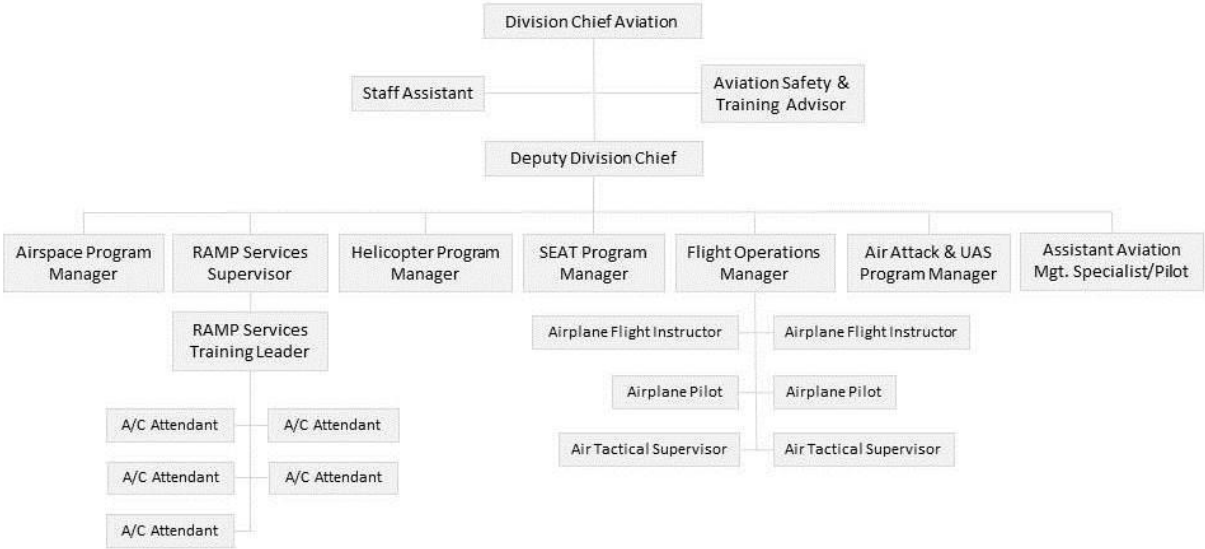
- Membership: The AMG designee (Co-Chair), The BLM National Air Attack Program Manager, one liaison from the Fire Operations Group (FOG), one voting representative each from those states with exclusive use air attack aircraft (ID, MT, NV, OR, UT, AK).

2.3 Bureau of Land Management (BLM)

BLM Director: The Director is responsible for the aviation management program. This responsibility is exercised through the Assistant Director for Fire and Aviation (FA-100).

Assistant Director, Fire and Aviation (FA-100): This position is responsible for aviation policy and program oversight. This responsibility is delegated and accomplished through the Division Chief, Aviation (FA-500).

2.4 National Aviation Office - NAO (FA-500): (reference BLM *NAP Appendix 1* for the NAO Staff contact information)



Division Chief, Aviation (FA-500): This position serves as principle aviation advisor to the Assistant Director for the BLM Fire and Aviation Directorate (FA-100), and other staff, BLM state office, and Departmental aviation programs. This position supervises the Deputy Division Chief, Staff Assistant and Aviation Safety & Training Advisor.

- Identifies and develops Bureau aviation policies and procedures, as well as standardized technical specifications for aviation missions for incorporation into the directives system.
- Coordinates aviation-related activities and services between the Washington Office (WO), and states with other wildland firefighting, regulatory, investigative, and military agencies.
- Represents the BLM at interagency meetings, on interagency committees developing government-wide aviation policies, requirements, procedures and reports, at aviation industry meetings and conventions.
- Plans and conducts technical and managerial analyses relating to the identification of aviation organization and resources appropriate for agency use, cost-effectiveness of aviation, other specialized missions, aircraft acquisition requirements, equipment developmental needs, and related areas.

- Provides oversight of aircraft acquisition and fleet management, contract administration, aviation operations, aviation safety, security and risk management, reviews and evaluations of state aviation programs.

Deputy Division Chief, Aviation: This position serves as the Deputy to the Division Chief and has responsibility for direction of all phases of the Aviation Division's program of work. This position supervises and provides program guidance and technical direction to the Flight Operations Manager, Helicopter Program Manager, SEAT Program Manager, Airspace Program Manager, Air Attack & UAS Program Manager, Assistant Aviation Management Specialist/Pilot and the Ramp Services Supervisor.

- Develops the BLM *National Aviation Plan.*
- Prioritizes and coordinates national allocation/reallocation of BLM fire aircraft.
- Manages the BLM NAO Operations, Labor and fire exclusive use contract budgets.
- Coordinates contracting and cooperator aircraft requests with AQD/OAS.
- Reviews states aircraft severity and preposition funding requests; coordinates with BLM Fire Operations.
- Serves as the standing Co-Chair of the AMG Committee.
- Serves as the aviation liaison to the Fire Operations Group.

Flight Operations Manager: This position provides oversight and supervision for the Aerial Supervision Module (ASM) program and standardization of all BLM flight operations.

- Serves on the Interagency Aerial Supervision Subcommittee (IASS) and leadplane cadre.
- May function as a qualified ASM/Smokejumper/PC-12 check pilot.
- Develops guidance for BLM aircraft and pilot standards.
- Develops and coordinates ASM operational procedures/training/certification.
- Provides guidance on light and medium fixed-wing aircraft operations and standards.
- Provides equipment and pilot procedures standardization and technical oversight for transport aircraft.
- Primary point of contact for management BLM Fleet (WCF) aircraft.
- Assigns BLM representative on the Smokejumper Aircraft Screening Equipment and Evaluation Board (SASEB) and Interagency Smokejumper Pilots Operation Guide Steering Committee.
- Coordinates primary relief for the Fleet Smokejumper aircraft.
- Coordinates oversight of BLM Smokejumper Pilot Flight Standards.

Aviation Safety & Training Advisor: This position provides leadership and technical expertise for aviation safety management systems, risk management and accident prevention programs. Has oversight of aviation training for BLM, providing training/certification guidance (curriculum, course materials, and instruction) for BLM fire and resource management aviation personnel.

- Serves as the BLM liaison to National Transportation Safety Board (NTSB) and OAS accident investigation teams.
- Oversees the BLM SAFECOM System and Management Roles.
- Compiles BLM aviation safety statistics and analysis.
- Serves on accident review boards.
- Develops and/or coordinates aviation training in support of BLM aviation programs.
- Serves as a member of the Interagency Aviation Training Subcommittee (IATS) and other interagency training working groups.
- Coordinates the development of web based training for both vendor and government communities.

- Primary point of contact for OAS Aviation Program Evaluations.

Helicopter Program Manager: This position provides oversight of the BLM Helicopter program.

- Reviews requests for exclusive use contracted helicopters, and coordinates with AQD, OAS and State Aviation Manager.
- Develops and establishes agency helicopter operational standards.
- Develops helicopter position requirements and training.
- Conducts site visits, reviews and inspections.
- Serves as a member of the Interagency Helicopter Operations (IHOpS) and BLM Helitack Steering Committees.

Single Engine Airtanker (SEAT) Program Manager: This position provides oversight and guidance to the SEAT and Scooper programs.

- Develops and coordinates requirements and training for the SEAT program.
- Performs site visits and inspections of SEAT operating bases.
- Develops contract specifications in coordination with both AQD and industry representatives.
- Chair of the Interagency SEAT Board. Attends Interagency Airtanker Board meetings as SEAT Advisor.
- Develops the *Interagency SEAT Operations Guide*.
- Coordinates with the BLM State Office Managers, SEAT contract activation and allocation of aircraft.
- Functions as national liaison with State SEAT programs.
- Supervises the National SEAT Coordinator (SECO) when activated.
- BLM advisor to the *Interagency Airtanker Base Operations* Subcommittee.
- BLM national lead for fire chemicals development and implementation. Maintains and updates fire chemicals policy, plans and direction. National COR for fire chemical contracts, BPAs, and EERAs. Wildland Fire Chemicals Systems interagency technical contact and DOI liaison. DOI (except BIA) representative on the Fire Chemicals Board. Organizes and conducts national level training in fire chemical application and use.

Air Attack & UAS Program Manager: This position provides national guidance and standardization for the BLM Air Attack and UAS programs.

- Develops and reviews exclusive use and on-call Air Attack and UAS contract specifications, coordinates with AQD, OAS and State Aviation Managers.
- Coordinates the BLM national ATGS training program (S-378, CRM, and associated flight training) in conjunction with interagency partners.
- Develops, coordinates, and implements strategic and tactical utilization of air attack aircraft, UAS, and associated personnel in conjunction with State Aviation Managers, Geographic Area Coordination groups, and interagency partners.
- Provides BLM direction for the *Interagency Aerial Supervision Guide* and relevant UAS policy/operations documents.
- Coordinates with Geographic Area Coordinating groups regarding the activities of the ATGS Cadre and the BLM Air Attack Committee.
- Serves as a qualified ASM/ATGS Instructor/Check Airman and coordinates staffing for the BLM national ATGS training platform.
- Serves as a member of the Interagency Aerial Supervision Subcommittee (IASS).
- BLM National point of contact for UAS Operations and UAS COA requests.

- Maintains a list of qualified BLM ATGS Instructors, ATGS Check Airman, and UAS operations personnel.

Air Tactical Supervisors (ATS): These positions serve as Air Tactical Supervisors on Aerial Supervision Modules.

- Develop and review ASM procedures, make recommendations to the Aerial Supervision Program Manager.
- Instruct NWCG S-378 ATGS and ATS courses and mentor trainee ATGS and ATS personnel.
- Serve as subject matter experts (SME) for aerial supervision, airspace coordination, SEAT and airtanker operations.

Air Tactical Pilots (ATP): These positions serve as ASM and/or leadplane pilots.

- Serve as a contract project inspector for the BLM contracted ASM planes.
- Serve as an SME for aerial supervision, airspace coordination, SEAT and airtanker operations.
- Develop and review ASM/Leadplane procedures, make recommendations.
- Provides aircraft and mission training for tactical resources as assigned.

Airspace Program Manager: This position provides program management and leadership on airspace coordination issues directly impacting aviation safety in BLM and U.S. Forest Service operations.

- Is an active member of the Interagency Airspace Subcommittee.
- Develops and implements the *Interagency Airspace Coordination Guide* as part of the committee.
- Coordinates directly with FAA headquarters airspace managers, FAA service area managers, and Air Route Traffic Control Center (ARTCC) Supervisors in developing cooperative efforts towards solving airspace conflict issues, including the Notice to Airmen (NOTAM) Entry System (NES) and temporary flight restriction (TFR) coordination.
- Initiates and maintains professional contacts with DOD DC Command, Air Combat Command, Air Mobility Command, Northcom, Southcom and Military Base Commanders in order to coordinate military operations with user agencies, and FAA in eliminating airspace conflicts. Participates in Airspace/Range Council meetings to heighten awareness of airspace issues.
- Provides leadership and expertise to USFS, BLM and OAS aviation safety managers regarding airspace issues. Participates in investigations when requested and assists in determining programmatic solutions to reducing near mid-air collisions.
- Provides leadership for national development of airspace instruction, field office aviation airspace techniques and procedures including the design and implementation of airspace training courses, participating as guest speaker and providing lecture material.
- Assists other agencies with specific airspace issues when requested.
- Manages the airspace coordination web site.
- Manages the development of the Airspace Coordinators (ASCO) for assignments to support regional and geographical airspace coordination.
- Assists with airspace issues involving Unmanned Aircraft Systems when requested.

Aviation Staff Assistant: This position provides a full range of administrative support to the national aviation staff.

- Prepares and approves travel authorizations and vouchers, processes payroll, monitors budget reports and credit card statements to ensure expenditures are correctly made.

- Works with FBMS to create purchase requisitions for interagency agreements, contracts and requisitions.
- Prepares all formal office correspondence, including memorandums, Instruction Memorandums and Information Bulletins.
- Coordinates meetings and conferences for local and national-level events.

Ramp Services Supervisor (FA-510): This position oversees and directs aircraft ramp operations providing ground aviation management and ground support services to based and transient aircraft, air crews, transient personnel and cargo on the NIFC Aircraft Ramp.

- Insures compliance with FAA, OSHA, EPA, BLM, OAS and airport aviation and security regulations.
- Develops the NIFC Ramp Services Operation Plan
- Manages interagency flight helmet repair service through the NFES for participating agencies and cooperators.

Assistant Aviation Management Specialist/Pilot: This position is developmental and provides the incumbent with the skills and background to compete for vacancies at the State and National levels, GS-12 and above. This position works under the guidance of national program managers as assigned, but is supervised by the Deputy Chief, Division of Aviation.

- Provides assistance to Aviation Program Managers within the National Aviation Office.
- Serves as a Developmental Pilot functioning as a Pilot Trainee and Pilot-In-Command of single and multi-engine reciprocating and turbine powered airplanes under visual and instrument flight rules.

2.5 BLM State/District/Field Office Organizations

BLM Nevada - The BLM Nevada aviation program is managed at two organizational levels within the state - State Office and Districts. The State Office Fire and Aviation (NV-913) is responsible for the statewide aviation program.

State Directors, District/Field Manager: Aviation responsibilities are outlined in *350 DM 1 Appendix 4*.

- State Directors are responsible for all aviation activities within their respective jurisdiction.
- Each state will assign a State Aviation Manager (SAM). The SAM position provides oversight of the state aviation program and support to the state/district/field offices on all aviation matters.
- District/Field Managers are responsible for all aviation activities within their respective jurisdictions.
- Each District/Field Manager will assign a Unit Aviation Manager (UAM) to provide oversight and staff assistance on all aviation matters.
- District/Field Managers are responsible for review and approval of Project Aviation Safety Plans, when required, for aviation activities within their respective jurisdictions.

BLM Nevada - Responsibilities in addition to those listed above are:
Districts are responsible for aviation activities conducted under BLM operational control within their district.

- Staffing aviation resources and equipping aviation managers and crews.
- Allocating funds to meet required aviation training (labor, flight time, travel, etc.).
- Allocate funds for non-fire aircraft contracts.

- Developing Project Aviation Safety Plans (PASP) for local projects utilizing aircraft.

Developing agreements with cooperators for aviation support of district programs.

District Manager

- Approve Unit Aviation Management Plans, PASPs, and requests for new aviation contracts or programs.

Field Office Manager

- Review and approve requests to use aircraft for resource projects.
- Review and/or approve PASPs.
- Coordinate projects using aircraft with the UAM.
- Coordinate aviation training needs of FO personnel as detailed in OAS Operational Procedures Memorandum (OPM-04) with the UAM.

State Fire Management Officer (SFMO): The SFMO is responsible for providing oversight and approval of the acquisition and use of BLM fire aircraft within their state.

- Provides state strategic direction and guidance.
- Has the authority to prioritize the allocation, reallocation, pre-positioning and movement of all fire aircraft assigned to the BLM within their state.
- Coordinates with Districts/Units, Geographical Area Coordination Centers (GACC), and NAO to maximize the utilization of Exclusive Use aircraft assigned to their state.
- Ensure all state assigned aerial resources are managed to maximize initial attack effectiveness.

State Aviation Manager (SAM): The SAM serves as the principal aviation professional for the State Director and is responsible for providing aviation program management, oversight and support to district/field office aviation operations within the state. The SAM has functional responsibility in the following areas and should have a delegation of authority for each area of responsibility:

- Develops and implements the state aviation management plan, and establishes aircraft safety and accident prevention measures.
- Reviews all Project Aviation Safety Plans (PASP) with a Final Risk Rating of “High” prior to implementation.
- Serves as the Contracting Officer’s Representative (COR) on all BLM aviation exclusive use contracts assigned to the state.
- Nominates candidates to the Contracting Officer for potential appointment as Alternate CORs (ACOR) and assigns Project Inspectors (PI) for all BLM exclusive use aviation contracts in their state.
- Authorized to order aircraft and ensures all aircraft ordering and dispatching occurs via a dispatch office.
- Provides aviation training support to the state office, field/district offices, and other cooperative agencies.
- Provides statewide statistical analysis and A-126 reporting.
- Coordinates with the NAO specialists regarding aviation issues.
- Coordinates with other interagency partners on regional and state levels.
- Is a member of a geographic area(s) coordinating group aviation committee.
- Designates and assigns an alternate SAM when needed.
- Reviews all potential End Product contracts that could conceivably utilize aircraft (reference BLM *NAP* 3.9).

- Collects annual BLM aviation statistics for the state to include: fire and resource flight hours and associated costs. Desired delivery to the NAO by November 1st annually. http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Administration.html
- Reference the *Interagency Airspace Coordination Guide* (Chapter 2, Roles and Responsibilities) for specific responsibilities.
- Reviews request for UAS projects to ensure agency compliance.

BLM Nevada - The BLM Nevada SAM has functional responsibilities in the following areas in addition to those described above:

- Conducts or coordinates SMS based assurance checks of aviation programs and activities under BLM Nevada operational control.
- Serves as the Lead Project Inspector for Battle Mountain/Stead/Winnemucca full service retardant base contracts.
- Coordinates State Office flight requests with the appropriate Dispatch Center.
- Serves as the statewide point of contact for airspace coordination issues. Coordinates with the NAO National Airspace Program Manager, and the multiple military bases in Nevada.
- The BLM Nevada SAM will participate in other national level groups and committees as requested by NAO and approved by the State FMO.
- Aviation operations under BLM Nevada operational control that have reportable events will be reviewed by the SAM

Zone/District Fire Management Officer (FMO): This position is responsible for hosting, staffing, supporting, providing daily management and dispatching all BLM fire aircraft assigned to their unit.

- Authorized, through a line officer delegation, to request additional fire aircraft; establish priorities; and allocate all fire aircraft assigned to the BLM within their unit or zone.
- Ensure that all BLM Exclusive Use aircraft and affected Airbases assigned to their unit are staffed for seven day coverage throughout the contract period barring adverse weather conditions and one hour callback provisions.
- Ensure status of all BLM fire aircraft assigned to their unit is reported each day to the GACC as either “Committed” or “Available”. Aircraft will not be designated as available “local only”.
- When directed by the state office, will mobilize BLM fire aircraft and assigned personnel as requested.
- Ensure BLM fire aircraft and aircrews are ready for potential long term assignments off-unit.
- Ensure that when dispatched off-unit, assigned aircraft managers and aircrew will accompany the aircraft to provide appropriate staffing.
- Delegates or performs the function of the UAM when this position is not assigned.

Unit Aviation Manager (UAM): Field offices (district/center/zones) must designate a UAM, either full time or collateral duty, to provide program oversight at the local level. Some Units may utilize Service First or similar agreements with interagency partners to provide the UAM (Unit Aviation Officer (UAO), Forest Aviation Officer (FAO)). The UAM is the principal local aviation professional and is responsible for managing and supporting the aviation program for the unit. The UAM has functional responsibility in the following areas and should have a delegation of authority for each area of responsibility:

- Ensures district/unit flight compliance with DOI/BLM/state and district policies and regulations.

- Confirms that a qualified flight manager is assigned to all project/resource flights.
- Ensures that visiting aircrews, pilots and incident management teams receive a Unit aviation briefing.
- Develops and implements the District/Unit aviation management plan (Interagency aviation management plans if applicable), as well as specific operating plans for other aviation programs (helitack, SEAT, airbase, and air tactical).
- May serve as the ACOR or PI on BLM exclusive use aircraft.
- Interagency Aviation Manager may also function as a COR for USFS contracts.
- Authorized to order approved aircraft utilizing agency procurement documents and processes. See *NAP 3.8.3* for DOI On-Call and USFS Type 1 and Type 2 helicopter CWN and *NAP 3.8.4* for DOI Aircraft Rental Agreement.
- Assists in development, review and briefing the appropriate level of signatory authority for PASP's per BLM *NAP 4.3.2*
- Ensures that airspace coordination procedures with the military airspace schedulers at the local dispatch center are current and that coordination with military airspace schedulers is completed prior to commencing project flights.
- Identifies unit flight hazards and coordinates the creation and annual updating of flight hazard map products (reference *Interagency Standards for Fire and Fire Aviation Operations*, Chapter 16, *IHOG* Chapter 3).
- Reviews unit SAFECOM reports and facilitates corrective actions.
- Ensure units' Aviation Mishap Response Guide and Checklist is updated in accordance with *NAP 5.12*, and functional.
- Facilitates, tracks unit aviation training, and coordinates with unit training manager and SAM.
- Conducts reviews and inspections of aviation facilities, aircrews and field operations.
- Coordinates arrangements for land use agreements/leases of aviation operations facilities.
- Ensures Aviation Security Plan is current and implemented.
- Collects and compiles aviation activity statistics and makes reports. http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Administration.html
- Coordinates with SAM all Senior Executive Service (SES) flights, and use of cooperator aircraft.
- Coordinates with SAM any aircraft flight service contracting needs.
- Designates and assigns an alternate UAM when needed.
- Coordinates with SAM on all potential End Product contracts that could conceivably utilize aircraft.
- Reference the *Interagency Airspace Coordination Guide* (Chapter 2, Roles and Responsibilities) for specific responsibilities.
- Reviews request for UAS projects to ensure agency compliance.

BLM Nevada – The UAM has functional responsibilities in the following areas in addition to those listed above:

- Responsible for reporting daily fire aircraft utilization to the SAM (via BLM NV Aviation Cost Tracker).
- Coordinates with the SAM any requests for: exclusive use aircraft contracting and performance requirements, contract modifications, extensions, change of start dates and requests for new Aircraft Rental Agreements (ARA) vendor or aircraft.

First Line Supervisors of BLM Pilots: Duties for this position are outlined in *350 DM 1 Appendix 3*. Duties include:

- Ensure employee pilots meet training requirements set forth by the Bureau as well as those outlined by *351 DM 3* and *OPM-22*.
- Ensure employee pilots maintain personal documentation of required training.
- Maintain an employee pilot training file.
- Pilot training records documentation will be submitted to the Alaska SAM for BLM Alaska pilots and to the BLM NAO for all other BLM employee pilots by May 15 annually.

BLM Pilot – Fleet (2101, 2181 position series) & Incidental/Dual Function: The pilot is in command of the aircraft and has ultimate responsibility, under both Federal Aviation Administration (FAA) and DOI policy, for the safety of the aircraft and personnel onboard. Other responsibilities include the following:

- Duties outlined in *350 DM 1 Appendix 3*.
- Meet training requirements set forth by the BLM as well as those outlined by *351 DM 3* and *OPM-22*.
- Maintain personal documentation of required training.
- Submit training records documentation to immediate supervisor by May 1 annually.
- Comply with all requirements of *351 DM 3* and any other applicable policy, including pilot qualification carding for authorized missions.
- Incidental/Dual Function pilots must have a letter of authorization issued by the BLM state office in coordination with the NAO. The letter describes the pilots' duties and restrictions to include any special use requirements (reference *351 DM 3.2C*).
- Operates the aircraft in accordance with applicable federal aviation regulations (FAR) and DOI/BLM guides, policy and procedures, and within aircraft contract specifications.
- Develops, activates and closes FAA or agency flight plans.
- Wears and uses personal protective equipment as required (reference *Aviation Life Support Equipment Handbook* (ALSE) and applicable operations Handbooks).
- Conducts mission planning, performs a thorough pre-flight inspection of the aircraft and briefs all passengers in accordance to *351 DM 1.5*.
- Does not deviate from flight plan or mission profiles unless agency authorization is received or as directed by air traffic control.
- Completes all flight records (OAS-AURM or AMD-23), completes OAS procedures as authorized.
- Arranges for aircraft maintenance as needed.

2.6 Aviation Positions

Aircrew Members: Government (BLM, USFS, other federal/state) employees which perform an active mission function during a flight on aircraft under BLM operational control are considered to be Aircrew Members (not passengers). Aircrew Members include, but are not limited to:

- ATGS , ATS
- Smokejumpers (jumpers and spotters)
- Helitack crew (crew members and manager)
- Designated observers - spotters
- Personnel conducting surveys or mapping
- Photo/video operators
- Loadmasters and flight attendants

Aircraft Dispatcher: Dispatch personnel trained in aviation mission operations, policies, and procedures who receive process and place orders for aircraft, provide flight following and other aviation support services. Duties include:

- Confirms that a BLM Flight Request 9400-1a (or equivalent) is utilized, completed for BLM operationally controlled non fire flights (point-to-point and mission flights).
- Provides flight following and coordinates with other agencies on flight following when air operations cross jurisdictional boundaries.
- Maintains a current *Aviation Mishap Response Guide and Checklist* and initiates emergency search-and-rescue procedures for overdue, missing, or downed aircraft. Required to test the plan at least annually through a simulation exercise. (See also *BLM NAP 5.12*)
- Follows the procedures established in the *Geographic* and *National Mobilization Guides.*
- Utilizes required boundary plan checklist (reference *IACG* Chapter 7) when dispatching any aircraft into identified dispatch boundary zones.
- Provides appropriate notification to assist in airspace coordination and de-confliction and meet any applicable airspace coordination agreements that BLM has with military airspace scheduling authorities (FAA, bordering dispatches, and military).
- Authorized to order and/or hire approved aircraft utilizing DOI AQD aircraft contract sources for non-fire and fire flights. Cooperator aircraft (USFS, state, and National Guard) can be ordered per fire master agreements and Unit Aviation Plan.
- Reference the *Interagency Airspace Coordination Guide* (Chapter 2, Roles and Responsibilities) for specific responsibilities.

Airspace Coordinator (ASCO): An Airspace Coordinator may be ordered to assist or assume airspace coordination duties. The Airspace Coordinator may be located at a GACC, local unit, Area Command, or State Office. Individual must have extensive experience coordinating airspace issues. Duties could include airspace deconfliction, Temporary Flight Restriction, coordination with DoD and FAA, activating airspace agreements, Pilot briefings and conflict resolution. For additional information, consult Chapter 2 “Agency Organizations, Roles and Responsibilities and Airspace Committees” of the *Interagency Airspace Coordination Guide*.

Aircraft Manager: Aircraft managers supervise tactical aircraft operations. Each manager complies with their appropriate *Interagency Operations Guide*, and is responsible for the following:

- Plans, coordinates, and supervises aircraft operations according to DOI/BLM policy.
- Directs pilots and crews, and provides operational and safety briefings to aircrews, project leaders, and passengers.
- Conducts and completes flight time reports, daily diaries, and all related documentation.
- Conducts mission planning and risk/hazard analysis with the pilot.

Flight Manager: A flight manager is a government employee that is responsible for coordinating, managing, and supervising flight operations, and will be designated for point-to-point flights transporting personnel. The flight manager is not required to be on board for most flights, however for complex multi segment flights a flight manager is recommended to attend the entire flight. The flight manager will meet the qualification standard for the level of mission assigned as set forth in the *Interagency Aviation Training (IAT) Guide*. The flight manager is supervised by the sending unit dispatcher until the destination is reached.

- Reference *National Interagency Mobilization Guide* Chapter 60 for specific responsibilities.
- Non-fire Special Use fixed wing missions (as defined by *OPM-29*) require oversight by a Fixed Wing Flight Manager-Special Use.

A helicopter flight manager is utilized to supervise missions limited to point to point transport of personnel from one helibase/airport to another helibase /airport, low and high level reconnaissance, and landings or takeoffs at unimproved sites; the helicopter flight manager is **not** expected to fulfill all the duties of a qualified resource helicopter manager. Rather, he/she is the government representative who coordinates with the pilot regarding the safety and efficiency of the flight.

Resource (Non-Fire) Helicopter Manager: A resource helicopter manager is utilized to supervise operations involving transport of groups of personnel or cargo from/to unimproved landing sites, external load operations, or other complex special-use project operations.

BLM has adopted S-271 and S-372 with the addition of the Interagency Resource Helicopter Manager task sheet (reference in *BLM NAP Appendix 11*). These requirements must be met in lieu of IAT training stipulations.

Interagency Resource Helicopter Manager Position Task Sheet (PTS) Implementation: All Resource Helicopter Managers will be responsible for meeting specific BLM training requirements as well as the Resource Helicopter Manager PTS.

All required training must be completed prior to the initiation of the Resource Helicopter Manager PTS. The individual tasks required for completion of the PTS must be evaluated by a qualified helicopter manager. A PTS is valid for 3 years from the day it is initiated. Upon documentation of the first task in the PTS, the 3 year time limit is reset from that new date. If the PTS is not completed in 3 years from the date of the PTS initiation (or first task being evaluated) the PTS will expire. A new PTS may be initiated. Prior experience documented in the expired PTS may be taken into account in completion of the new PTS at the discretion of the certifying official. All current qualification standards identified in this document must be applied at the time of the new PTS initiation.

Required Training:
S-271 Helicopter Crewmember
S-372 Helicopter Management:
(Triennial; after completion of S-372, must attend RT-372 once every 3 years)

Required Experience:
Successful completion of S-271 & S-372
Completion and Certification of Task Sheet as a Resource Helicopter Manager

Physical Fitness:
None required

These Positions Maintain Currency for Resource Helicopter Manager:
Helicopter Manager (HMGB)

Current trainees: In the past, some employees have used unofficial Resource Helicopter Manager task sheets/task books to document skills and experience. The use of unofficial task books/sheets is no longer allowed. In those instances where an employee has initiated and not completed an unofficial task sheet/task book, those individuals can transfer similar tasks to the new task sheet. The appropriate State Aviation Manager will adjudicate all issues arising from the change in task sheets. Completed tasks that mirror tasks in the official task sheet need not

be completed again. The employee is responsible for the completion of remaining tasks in the officially recognized position task sheet within the allowed PTS time frames.

Roles and responsibilities implementing this PTS are outlined on pages 3 & 4 of the Resource Helicopter Manager Task Sheet.

Documentation: Tracking the unit's or states qualified Resource Helicopter Managers will be the responsibility of the Unit Aviation Manager and the State Aviation Manager respectively. Qualification records will be maintained within the Interagency Aviation Training (IAT) website/database.

Vendor Pilot: All vendor pilots must conform to the procurement document requirements they are operating under.

3.0 Administrative Requirements

3.1 General

This section establishes: definitions, management responsibilities, policies, and procedures for administration of the aviation program in BLM.

New program requests involving aerial assets, not already approved by established Bureau policy, must be routed through the State Director to the Division Chief Aviation for approval.

3.2 Reporting and Documentation Requirements

General administration policy for BLM Aviation is found in *350 DM 1*.

- The approval and documentation of senior executive travel in agency and agency procured aircraft is as required by *OMB Circular A-126*. States shall forward biannual reports (April and October) to the NAO, who will forward to OAS.
- Documentation requirements for aviation activities shall follow requirements in *BLM Manual 1220* *Records and Information Management* Appendix 2, Combined Records Schedules, Schedule 10/8 and 9.
- Each office will maintain an aviation reference library and aviation files (these may be paper copies and/or electronic documents) per BLM Preparedness Review Checklist #4 "Aviation Management" located at: http://www.blm.gov/nifc/st/en/prog/fire/fireops/preparedness/preparedness_review/checklists.html
- Documents must be retained for at least three years. The designated aviation manager at the unit, state and national levels must be responsible for maintaining and updating all aviation related references, files and records.

BLM Nevada –

- Aircraft Managers are responsible for reporting daily the status and previous days' flight hours of BLM exclusive use fire aircraft and supplemental fire aircraft (On-Call, ARA, Cooperator) operating in their Unit. The SAM will send out notification of start-up and cut-off dates for reporting. The SAM will be the collection and reporting point for Nevada.
- UAMs will report fiscal year district aviation activity to the SAM by October 30.
- Contract Daily Diary will be maintained by contract Project Inspectors. Copies of all Aircraft Contract Daily Diary's will be forwarded to the SAM every 2 weeks. Significant contract performance events are to be documented and forwarded to the SAM. Contract related documents are to be maintained for 3 years after the final payment for the fiscal year.
- Each District and field Office will comply with BLM Preparedness Review Checklist #11 "Aviation Management".

3.3 Aviation Plans: National, State, Unit, and Project

BLM Manual 9400, *Aviation Management* specifies national aviation management policy. The national, state and district/field offices aviation plans describe procedures that implement policy direction in the *9400* manual. State and unit plans supplement national policies and procedures. State and field offices must not implement policy or procedures less restrictive than national policy. If a state or unit plan must contain more restrictive procedure, a written request, prior to implementation, is to be sent to the NAO.

National Aviation Plan (*NAP*): The BLM *NAP* provides comprehensive information regarding BLM aviation organization, responsibilities, administrative procedures and policy. The BLM *NAP* is intended to serve as an umbrella document that state aviation plans can follow for formatting and describe procedures applicable to the organizational level. The BLM *NAP* will be updated and issued annually prior to March 1 by the NAO. The *NAP* is approved by the Assistant Director of the BLM Fire and Aviation Directorate (FA-100).

- **NIFC Ramp Services Operation Plan:** The Ramp Services Operation Plan defines the mission, provides checklists, orientation outlines and instruction for employees and contractors and standardizes operating procedures at NIFC Ramp Services.

State Aviation Plans: Each state must publish an aviation plan that implements national policy and describes protocols specific to each state's aviation program. The State Aviation Plan serves as an umbrella document for Unit Aviation Plans. However the State Aviation Plan may also be designed to serve as an overall Unit Aviation Plan provided that the local unit administrative and operational procedures are incorporated along with the aircraft supplemental plans that are specific to each unit aviation program (see identified procedures listed under Unit Aviation Plans). State Aviation Plans are approved by the State Director. State Aviation Plans shall be updated annually prior to April 1 and submitted to the NAO for inclusion to the BLM Aviation web site: http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Administration.html

Unit Aviation Plans: Units (districts/field offices/zones) are required to maintain and update Unit Aviation Plans annually, which implement national and state policy and establish local procedures and protocol. Unit Aviation Plans are approved by the District/Field Office Manager. Unit Aviation Plans must address local administrative and operational procedures to include:

- Unit/state organizations
- Aviation facilities
- Radio use
- Repeater locations
- Phone and computer use
- Airspace coordination to include boundary zone deconfliction (reference *IACG* Chapter 7)
- Flight hazards
- Aircraft ordering
- Dispatching and flight following procedures
- Administrative procedures
- Identification of typical aviation missions
- Risk assessment and mitigation specific to the Unit or not addressed in State/National Aviation Plan (reference BLM *NAP 4.4*)
- Unit Aviation Plan, Supplemental Operational Plans or Project Aviation Safety Plans must address recurring aircraft operations. Examples include:
    - Airbase operations
    - Helitack operations
    - Smokejumper operations
    - Airtanker operations
    - Aerial Supervision.
    - Light Fixed Wing (Fire Detection and Recon, Logistical, etc.).
    - WH&B
    - ACETA
    - Law Enforcement operations
    - Non-Fire Aviation Activities

Project Aviation Safety Plans (PASP): A PASP will be developed and approved at appropriate levels depending on project/flight complexity and risk as required for specific non-fire flights/projects (reference BLM *NAP 4.3.2* for specifics regarding PASP requirements).

3.4 Aircrew Orientation Briefing Package

Each state and unit will create an Aircrew/Pilot Orientation Briefing Package. Ultimately, the format of this package will be standardized throughout the states. Unit aviation managers are responsible for providing visiting pilots, aircrews and Incident Management Teams with a briefing. The orientation briefing package serves as a source of information about local administrative and operational procedures (copy of the unit aviation plan, frequency sheets, repeater locations, flight following procedures, hazard map, known landing zones, fire behavior information, recommended lodging/dining list, maps, etc.).

BLM Nevada – Information contained in the Aircrew/Pilot Orientation Briefing package will be reviewed annual and updated as needed. The Great Basin Aircrew/Pilot Orientation Briefing Package may be used to satisfy the requirements of NAP 3.4. District UAM's should consider the information provided in the Great Basin packet and determine if supplemental information is needed in order to meet requirements of this section.

3.5 Land Use Policy for Aviation Activities

The regulation of aviation activities on or above BLM managed lands is typically dependent on resource management plan (RMP) direction, wilderness management regulations and any applicable federal aviation regulations.

Temporary aviation operations on BLM lands may be restricted due to resource management plan direction. UAMs should coordinate with resource managers to identify areas of restriction when developing district/field office level operating plans, unit aviation plan, and PASP. For information regarding implementing invasive species control measures for aviation activities reference BLM *NAP 5.14*. The local resource advisor is the focal point for coordinating the reporting of any fire chemical aerial application in or near waterways.

3.6 Budget

BLM exclusive use contract fire aircraft daily availability is budgeted by the NAO (FA-500). All exclusive use availability guarantees and fixed government ownership costs for fire aircraft are held at the NAO.

Non-Fire exclusive use contract and fleet aircraft are budgeted outside the NAO through a variety of sources.

BLM Nevada Aviation Cost Tracker (NVACT): An 'Aviation Cost Tracker' has been developed to track aviation (fire and non-fire) related costs including flight time, gallons of retardant and/or water delivered, as well as a number of other items. The NVACT SOP has been developed by the SAM, is reviewed annually and updated as needed.

3.7 Aircraft Flight Service Ordering

Only flights with a scheduled air carrier on a seat fare basis and with payment utilizing their federal government credit card are initiated by individual BLM employees. Aircraft acquisition and

procurement for all other flights are approved to be arranged only by IBC (AQD), (Exceptions - *353 DM 1.2.A* & *OPM-15)*. These flights are scheduled, managed and arranged by qualified aviation and dispatch personnel in their respective BLM offices and approved at the appropriate management level (reference state and unit aviation plans).

Aviation services under DOI contract or rental agreement are paid through the IBC. Contractors are responsible for final submission, for payment, through the processes defined by IBC. Assigned Flight/Aircraft Managers are responsible for submission of the AMD-23E. COTRs and CORs are designated by the CO to monitor aviation services contract performance and technical provisions of the contract.

When ordering aircraft, no modification of contract requirements are authorized, except by the CO.

Ratification of Unauthorized Commitments: Unauthorized commitments (orders with vendors without a current and valid DOI ARA or On Call contract) could be subject to the ratification procedures set forth in the Federal Acquisition Regulation 48 CFR 1.602-3 (reference *353 DM 1.8*).

Each type of On-Call contract or the ARA has specific ordering procedures. The procedures are found on the OAS web site: https://www.doi.gov/aviation/aqd/contracts

An ordering official is a person who places an order directly with a vendor. They must have the knowledge to conduct and document a cost comparison/ Contractor selection rationale. For BLM the only personnel that have Bureau authorization to order aircraft are qualified aircraft dispatchers, UAMs and SAMs.

Orders for service shall be placed with the Vendor who is determined to represent the best value to the Government, using tradeoff analysis. In selecting an aircraft, the ordering official must evaluate Vendors by trading-off the differences in capability and price. If one Vendor has both the better capability and the lower price, then that Vendor will be the best value. If one Vendor has the better capability and the higher price, the requestor will decide whether the difference in capability is worth the difference in price. If the requestor considers the better capability to be worth the higher price, then the more capable, higher priced Vendor will represent the ultimate best value to the Government.

When selecting a vendor with the better capability but a higher price, the ordering official must provide a short explanation to support this decision on the cost comparison.

Criteria evaluated are:

- Aircraft or contractor capability.
- Price (flight time, guarantees, mobilization, per diem, service truck mileage)
- Availability of the contractor to meet time frames.

Once the selection is made, it is the Bureau personnel's responsibility to ensure the aircraft and pilot offered by the vendor are approved for the mission.

Procedures for placing orders against the DOI On-Call/ARA for all "Non-Fire" and "Non-Emergency" aircraft services: The ordering unit shall complete a Request Form for DOI Flight Services (AQD-91) for all flights and submit the completed form to: aqd91@ibc.doi.gov

If utilizing the ARA and your estimate exceeds $25,000.00, contact your OAS Flight Coordination Center or the Contracting Officer.

The ordering official shall document the vendor price analysis on the second tab of the Flight Services Request Form (AQD-91). Selection of three sources within the local area to compare best value criteria will meet this competition requirement. When selecting a Vendor with the better capability but a higher price, the requester shall place a short explanation to support this decision on the AQD-91.

3.7.1 Inter-Agency Agreements (IAA)

DOI AQD Contract/ARA aviation services procured by BLM can be funded via an Interagency Agreement with AQD. This will require a substantial amount of lead time for Non-Fire aviation services to ensure the agreements for funding are in place before any flight activity takes place. The user of the aircraft must ensure that an Interagency Agreement (IAA) has been completed by their agency and accepted by DOI. That document will identify the amount, purpose, period of performance and source of the funding.

DOI AQD Contract/ARA Aviation Services Acquired in Support of Non-Fire Activities:
Aviation users must work with local UAM to assure Non-Fire aviation services are ordered in accordance with State/District protocols to include:

- Identifying the need for a non-fire flight.
- Completing an AQD-91 Flight Services Request Form / Best Value Comparison to identify a particular aircraft and associated cost.
- Completing a PR request with appropriate funding from benefiting activity.
- Creating a new IAA or modifying an existing IAA as needed, and referencing the existing IAA on the AQD-91.

BLM Nevada – All AQD-91s will be submitted to and processed by NVSO Program Analyst.

BLM Exclusive Use contract aircraft can perform BLM non-fire project work without the need to create an AQD-91 specific to that aircraft and mission. If no AQD-91 exists, the Aircraft Manager would just include the appropriate charge code for the BLM non-fire costs on their normal payment document and the benefiting activity will be expensed. If an AQD-91 has already been created and the Unit wishes to utilize those dollars already obligated on the AQD-91 then the Aircraft Manager will need to submit a separate payment document specific to just that project that references the Task Order created for the AQD-91. If this process does not occur, the unit could in effect be double billed if the Unit does not de-obligate the AQD-91 prior to year end fiscal blackout.

DOI Contract/ARA Aircraft Services Acquired in Support of Fire Management Activities:
The Department has provided direction to create miscellaneous obligations for intra-agency agreements with AQD. These obligation numbers will be disseminated by the National Aviation Office each fiscal year after the agreements for fire exclusive use availability and BLM fire management activities are executed.

A National IAA is established for BLM fire management activities (suppression, severity, prescribed fuels, emergency stabilization, burned area rehabilitation, and preparedness). The IAA obligation number for BLM Fire Management Activities is:

- 4500063379

A separate National IAA is established for BLM fire exclusive use aircraft availability and BLM NAO Fleet aircraft (N190PE, N49SJ, N618, N700FW) monthly rate. The IAA obligation number for BLM fire exclusive use aircraft availability and BLM NAO Fleet aircraft monthly rate is:

- 4500065208

BLM Nevada –

- Local dispatch office will order aircraft in accordance with Geographic Area and National Mobilization Guides. Once aircraft are identified by the dispatch process, the UAM or dispatcher will complete the *AQD-91 Flight Services Request Form / Best Value Comparison* to determine expected aircraft costs.
- UAM or dispatcher will submit AQD-91's to aqd91@ibc.doi.gov or fax to 208-433-5043 and cc NVSO Program Analyst.
- The original copy of the completed AQD-91 will be retained by the ordering district.

3.7.2 Cross Servicing with AQD for Contract/ARA Aviation Services Acquired in Support of Non-Fire Activities

Cross Servicing functionality in FBMS affords Bureaus 100% financial transparency of funding from requisition to award by eliminating the need for Interagency Agreements as well as the burden of managing IPAC's. The functionality allows requesting Bureaus to create requisitions in their business area of SAP that flow directly to AQD's area of PRISM for award. When awards are released in PRISM the obligation flows directly to the requesting Bureaus business area of SAP. Aviation users must work with local UAM to assure Non-Fire aviation services are ordered in accordance with State/District protocols to include:

- Identifying the need for a non-fire flight.
- Completing an AQD-91 Flight Services Request Form / Best Value Comparison to identify a particular aircraft and associated cost.
- Create a PR with the appropriate funding from benefiting activity.
    - The PR must be completed in accordance with the cross servicing instructions provided by AQD.
- Document the PR number in the block provided on the AQD-91.

3.8 Aircraft Contracts

Aircraft flight services in excess of $25,000 require an Exclusive Use aircraft contract or the use of: DOI On-Call or USFS Call When Needed (CWN) contract. Short term projects (< $ 25,000) may utilize the DOI Aircraft Rental Agreement (ARA) or the On-Call contract.

The DOI On-Call and USFS CWN contracts are competitive bid contracts that do not have a $25,000 limit like the ARA.

3.8.1 Non-Fire Exclusive Use Aircraft Contract Process

- State, field and district offices are required to submit a "Request for Contract Services" Form (AQD-13) to the SAM for all potential or desired contracted flight services. The SAM will review and approve/disapprove all AQD-13's. The SAM will work with the appropriate AQD Contracting Officer (CO) and NAO personnel to provide coordination, technical input, solicitation review, and decision making for each contract award.
- A "Pre-Validation of Funds for Contract Award/Renewal" Form (AQD-16) will be authorized by an appropriate budget officer prior to awarding or renewing Non-Fire aircraft contracts.

- The SAM will provide the NAO program manager with a copy of any AQD-13, AQD-16, "Notice to Proceed" (AQD-19), Request for Amendment/Modification and/or Request for Contract Extension for any Non-Fire Exclusive Use aviation contract at the same time the original request is forwarded to the AQD CO.

3.8.2 Fire Exclusive Use Aircraft Contract Process

- Any changes in aircraft type or capability that would significantly increase fixed costs must be supported and approved by the Assistant Director of the BLM Fire and Aviation Directorate (FA-100).
- State offices are required to submit Form AQD-13 to the appropriate NAO program manager for approval of all requested exclusive use aircraft. The NAO program manager will review all AQD-13's and work with the appropriate contracting officer in providing coordination, technical input, solicitation review, and decision making for each contract award.
- SAM will provide the NAO program manager with a copy of any AQD-19 and/or Request for Amendment/Modification for any Exclusive Use aviation contract at the same time the original request is forwarded to the AQD CO.
- All AQD-16's will be authorized by the NAO prior to awarding, renewing, or extending fire aircraft contracts.

Changing the Contract Start Date: Aircraft start dates can be changed to accommodate the government work or training schedules. If the start date is altered from that shown on the original AQD-16, the COR will notify the Deputy Division Chief, Aviation (FA-500). The start date of the exclusive use period may be adjusted up to 14 days prior to, or 14 days after the normal start date (as stated in the aircraft contract). The start date is established by a Notice to Proceed Form (AQD-19) issued by the COR. Adjusting the start date does not alter the length of the use period.

Funding through the following code; **LLFA540000LF1000000.HT0000** begins on the new start date and is available continuously for the total number of exclusive use days (excluding contract extension) specified in the contract.

BLM Nevada – Start dates

- The SAM will determine start dates in coordination with the Deputy State FMO, State FMO, NAO, OAS Western Region and AQD Contracting Officer.

Contract Extension: Mutual Extension - The exclusive use period may be extended on a day by day basis after the Mandatory Availability Period (MAP), provided that such extension is agreeable to both parties in writing prior to the extension. An extension on the use period creates use "outside" of the normal exclusive use period and requires early planning, coordination and a contract modification by the CO. It also requires a dedicated funding source approved by the NAO. Daily availability and subsistence/per diem are entitled to the contractor. Extensions are not guaranteed; they require written mutual agreement (contract modification). They are normally used when additional work is anticipated and other funding sources are available. Funding for extensions may be through BLM (i.e. suppression, severity, rehab, resources, etc.) or from another agency which requires a reimbursable agreement to be in place.

- Funding from **LLFA540000LF1000000.HT0000** is limited to the number of days specified in the contract and **is not** to be utilized during contract extension.

- Use Rates for Pay Item Codes (FT, SM, PD, EP, ET, SC, etc.) - All Use Rates will be charged to the appropriate office and benefiting activity, but not to the NAO code.
- SAM will make a request for any Exclusive Use contract extension a minimum of five working days prior to end of exclusive use period to the Deputy Division Chief, Aviation.
- Contract extension on Severity Funding must be requested by the State and approved by the National Office through the standard severity request process.

BLM Nevada – Request to extend a contract will be sent to the SAM no later than **2 weeks prior** to the exclusive use period termination.

3.8.3 On-Call/Call When Needed (CWN) Aircraft Contracts

AQD administers the DOI On-Call aircraft contracts and the USFS administers the Type 1 and Type 2 Helicopter CWN contract. Authorized BLM personnel (UAM, Aircraft Dispatcher) can hire aircraft using these contracts through the Resource Ordering and Status System (ROSS) as described in the contracts and the *National/Geographic Area Mobilization Guides*. Funding for these aircraft is made through specific incident emergency fire suppression, approved severity funding or approved non-fire activity funding. The emergency fire suppression funding is only available until the specific incident is controlled/out. Resource ordering procedures are described in the *Geographic Mobilization Guide*. The types of DOI On-Call and USFS CWN aircraft contracts available to BLM are:

DOI On-Call Contracts: Reference AQD web site for contract details and ordering procedures: https://www.doi.gov/aviation/aqd

There are separate contracts for:

- Small helicopters (ICS Type 3) – 4 to 6 seat helicopters.
    - Used for Fire Operations and Resource Management Projects.
    - DOI On-Call C17.4.2.2 NON-FIRE and ONE-DAY FIRE missions can be hired on a daily availability and fixed flight rate basis or a project flight rate basis. Orders placed and accepted on the basis of payment for daily availability and the fixed flight rate will be subject to contract clause C17.4.2.1.
    - Reference DOI On-Call C16.1.1 "….individual project cost comparisons and contractor selection rationale." is required.
- SEAT – Fire suppression.
- Air Tactical Fixed Wing – Fire Suppression or Non-fire missions.
- Wild Horse and Burro (WH&B) – Inventory/Census, herding and capture. WH&B DOI On-Call contract will be incorporated in the DOI On-Call ACETA contract starting in 2016. Herding and capture in-house operations must be accomplished under the ACETA contract. Census and classification may be accomplished under other DOI aircraft contracts.
- Aerial Capture, Eradication and Tagging of Animals (ACETA) – Inventory/Census, Herding, Marking/Eradication/High Velocity Darting, Net-Gunning/Low Velocity Darting, Wild Horse and Burro (WH&B) herding and capture.

USFS CWN Aircraft Contracts: Reference USFS web site for contract details and ordering procedures: http://www.fs.fed.us/fire/contracting/helicopters_cwn/helicopters_cwn.htm

There are separate contracts for:

- USFS National Type 1 and 2 Helicopter CWN contract - Medium to heavy lift helicopters. Project flight rates apply for non-fire projects.
- USFS Regional Type 3 Helicopter CWN contracts – Light, multi-purpose helicopters.
- USFS Exclusive Use and CWN contracted aircraft are available for DOI use per requirements of *OPM-39*.

3.8.4 DOI Aircraft Rental Agreements, Non-Fire – (ARA)

The ARA must NOT be utilized to obtain direct fire suppression aircraft and tactical fire support aircraft. Non-tactical operations that an ARA aircraft may be used for include; fire monitoring, fire detection, personnel or cargo transportation (non-Initial attack) etc. The ARA is used to procure flight services requested under a blanket purchase agreement (BPA), and are acquired under the authority of Federal Acquisition Regulations (FAR), Part 13, and BPA. These are not competitive contracts, thus have limitations of $25,000 total expenditure per ordered project. Project requirements of more than $25,000 must not be separated into several transactions to avoid expenditure limits. The OAS Regional Offices administer the ARA program through the Flight Coordination Centers. The AQD web site has a link to the Aircraft and Pilot Source List: https://www.doi.gov/aviation/aqd/aviation_resources

Resources are displayed by state and the database is searchable by: vendor, type of aircraft, special use qualification. The availability of ARA helicopters is limited as most helicopters are ordered, depending on project needs, from the DOI On-Call contracts: Small Helicopter, Wild Horse and Burro, or the ACETA. The airplanes available on the ARA Source List typically do not have the same level of avionics that the On-Call contracted planes have. ARA aircraft have a minimum flight hour daily guarantee.

The numbers of approved rental aircraft must be consistent with program objectives. Requests from the field to add new vendors must be carefully reviewed at the state and national level. All "Request for Rental Services" (AQD-20) will be reviewed and submitted by the SAM to the NAO. The appropriate NAO program leader (fixed wing, helicopter) will review the request and, if approved, forward to the OAS for processing. Some criteria for assessing need for additional rental aircraft are:

- Type of aircraft.
- The number of same type of aircraft available locally to the field offices.
- The estimated annual usage of that type of aircraft.
- Special services/equipment provided by the contractor.

3.8.5 Contractor Evaluations

In accordance with Federal Acquisition Regulation 42.1502, past performance evaluations shall be prepared at least annually and at the time the work under a contract or order is completed. The AQD-136A Form (Evaluation Report on Contractor Performance (Exclusive Use, On Call, CWN and ARA)) is used for documenting contractor performance for aviation services performed in support of DOI customers. This form is located at: https://www.doi.gov/aviation/library/forms#aqdforms

The CO will register each contract by submitting the contract information to the agency's CPARs office. For both exclusive use and on-call contracts, the Project Inspector (PI)/Flight Manager is responsible for completing the contractor evaluation form. The evaluations for the exclusive use contracts will be forwarded to the Contracting Officer Representative (COR) for review and entry into the CPARs system.

On Call includes; Small Helicopters, Air Attack, SEAT, ACETA and WH&B. The on-call contract evaluations shall be forwarded to the SAM. The SAM will review and forward the on-call evaluations to the respective Contracting Officer for entry into CPARs.

National Call When Needed (CWN) USFS Type1 and Type 2 helicopter contract. The PI/Helicopter Manager shall complete the USFS Contractor Performance Assessment Report and submit to the USFS CWN Contracting Officer with a courtesy copy to the SAM. The form is available in the vendors copy of the contract and at the following link: http://www.fs.fed.us/fire/contracting/helicopters_cwn/helicopters_cwn.htm

The CO will review and submit the evaluation to the Contractor for their review and signature. The contractor has 30 days to either accept the rating or provide comments. After agreement of both parties, the evaluation becomes an official past performance record which may be used in future source selections.

The PI/Flight Manager should discuss the evaluation with the contractor's representative before submission. If during the performance of a contract there are negative performance issues the PI should attempt to resolve issues with the contractor's representative and inform the UAM and COR of issues. If any issues cannot be resolved locally, then the COR will facilitate contacting the contractor and/or the CO.

3.9 End Product Contracts

End Product Contracts are not aircraft flight service contracts. They are used to acquire a product for the BLM (i.e., per-acre, per-unit or per-area, or per head basis). The intent of this type of procurement is for the contractor to supply all personnel and equipment in order to provide a "service" or "end-result." Many contractors utilize aircraft to meet the performance objectives of End Product contracts for activities such as: animal capture, seeding, spraying, survey, photography, etc. Since these are not flight services contracts, the AQD does not perform any acquisition service. End Product contracts are administered from the state office or BLM National Operations Center (Denver NOC) procurement units. All contracts with cost estimates greater than $100,000 are administered from the NOC.

These contracts will be conducted in accordance with *OPM-35. OPM-35* aids in determining whether an operation is being conducted as either "end-product" or "flight service" and supplements existing DOI policy regarding End Product contracts found in *353 DM 1.2A (3)*. If the provisions of *353 DM 1.2A (3)* and *OPM-35* are met, the aircraft will be operating as a civil aircraft and the aviation management principles normally required for public aircraft under BLM operational control do not apply.

BLM Nevada – All End Product Contracts involving aviation will be coordinated with the UAM and the SAM.

3.9.1 End Product Contract Specifications

Specifications in the contract must only describe the desired quantity or quality of the service or contracted end-result. BLM contracting officers, procurement specialists and aviation managers at all levels must be aware of these requirements. BLM contracting officers and resource specialists must consult with BLM aviation managers if the acceptable language guidelines do not address a specific project requirement or the contract solicitation does not follow the guidelines in *OPM-35*. State End Product contracts where contractors could conceivably utilize aircraft must be reviewed by the BLM SAM prior to solicitation to ensure that specifications and

language do not unintentionally imply or determine aircraft operation control. Bureau-wide End Product Contracts (i.e. Wild Horse & Burro) must be reviewed by the BLM National Aviation Office prior to solicitation.

The following list describes acceptable contract language for BLM End Product Contracts.

- No contract language describing aircraft or pilot capabilities, standards, requirements or aircraft specific payment provisions.
- The area of work should be described in terms of: scale of area, general topography, elevation, slope, vegetation, and accessibility by roads or off-road vehicles, land use restrictions for mechanized equipment, etc.
- Aviation Regulations - Acceptable Language: "The Contractor must comply with all applicable federal, state and local regulations."
- Airspace Coordination – In areas of military airspace it is acceptable to describe any BLM coordination agreements with military airspace scheduling or range control authorities and that it is the contractors' responsibility to coordinate their activities with the scheduling office or Range Control. Close coordination is necessary to ensure compliance with applicable airspace coordination agreements that states have with military authorities.
- Aircraft Equipment Specifications - Acceptable Language: Delete all reference to aircraft/equipment. Suggested example clause: "...Contractor is required to demonstrate to the government that the application equipment can be calibrated and will evenly distribute the designated seed at rates specified in the Project Area Narratives."
- Radio/Communication Requirements - Acceptable Language: "Contractor must provide a communication system so that contractor personnel engaged in the project at different locations can communicate at all times with each other, and so that government Project Inspectors may communicate with the contractor at any time to discuss performance matters." (The government VHF-FM radio system may have to be described.)
- Application validation: Marking/GPS - Acceptable Language: "Application equipment will be capable of physically marking or electronically mapping application routes to ensure that seed/fertilizer is applied evenly and completely and at the specified rates."
- Transporting, Passengers and Equipment - Acceptable Language: "Only approved contractor personnel, contractor equipment and government-provided equipment required for performance ... will be transported by contractor vehicles, trailers, animals or equipment."
- Safety Hazards - Acceptable Language: "Any ground or aerial hazards that would pose a danger to Contractor's personnel or operating equipment must be identified and mitigated by the Contractor prior to commencing operations".
- Aircraft Use Reporting - Acceptable Language: Do not mention or require flight hour/aircraft usage reports.

3.9.2 End *Product Project Management*

Operational Control

During the performance of End Product contracts, BLM will not exercise operational control of the aircraft in any way. BLM will not direct the contractor as to flight profiles, flight following, landing areas (Except for areas that are off limits due to land management restrictions), fueling/loading procedures, use of personal protective equipment, etc. BLM personnel assigned to administer End Product contracts will have no aviation management responsibility or authority. Any directions to the contractor must be in terms of the service or end-result being specified; e.g. desired seed application coverage, number and disposition of animals captured, etc. It is

acceptable to inform military airspace scheduling authorities or range control that the contractor plans on performing work during specified time periods and provide the military authorities the contractor contact information. BLM dispatchers will not perform the airspace scheduling service for the contractor.

BLM Passengers or Aircrew: BLM personnel are not allowed to board any aircraft that is being provided by the contractor **during performance of the End Product contract**. Furthermore, BLM personnel must not become involved in any way with aircraft ground operations such as take-off and landing areas, loading, fueling, etc.

Aircraft Use Reporting: Since aircraft utilized by the contractor under BLM End Product contracts are operating entirely within the applicable 14 CFR as a civil aircraft, and procurement is not through AQD, the Bureau will not submit any billing invoice to AQD in conjunction with BLM End Product contracts. Any flight time incurred by the contractor will not be recorded or reported as DOI or Bureau aviation statistics.

Aircraft Incidents and Accidents: Although aircraft utilized by the contractor under BLM End Product contracts are operating entirely within the applicable 14 CFR as a civil aircraft, to continue to promote aviation safety the Bureau will report aviation incidents or accidents incurred by these contractors through the DOI Aviation Mishap Information System. These events should be noted in the Contract Daily Diary and reported through BLM channels as normally required for End Product contracts.

Reconnaissance/Observation Flights: Before, during or after the performance of an End Product contract it may be necessary for Bureau employees to aerially survey or inspect the project area. When flights transporting BLM personnel are required, an AQD aviation “flight service” procurement (completely separate from the End Product contract) is required. Aircraft and pilots must have current OAS approvals for the intended mission and a current DOI contract or Aircraft Rental Agreement must be in place. When a DOI procurement is utilized **all** DOI and Bureau aviation management policy, procedures and requirements must be applied.

Operations within Military Airspace: If an “End Product” contract project using aircraft is being conducted within Military Airspace (MOA, RA, MTR) it is the responsibility of the contractor to coordinate with the Military Airspace Scheduling Office. BLM Contracting Officers and CORs should inform the contractor of any BLM agreements with the Military organizations regarding airspace. The UAM may contact the Scheduling Office to alert them of the project and general time frames and provide contractor contact information.

BLM Nevada – If an End Product Contract project area is within any Nevada Military Airspace, the BLM will share pertinent BLM coordination agreements with military airspace scheduling or range control authorities. Close coordination is necessary to ensure compliance with applicable airspace coordination agreements that states have with military authorities. The BLM can not specify any aircraft performance or equipment standards or pilot qualifications.

3.10 BLM Supplemental Fire Aircraft Acquisition

When exclusive use aircraft cannot meet all demands, supplemental aircraft will be requested and acquired using the following procedures:

Fire Aircraft Needed Immediately for Initial Attack

- Obtain Bureau or cooperator aircraft from adjacent units under existing mutual aid agreements.
- Coordinate with BLM state office to obtain the BLM Exclusive Use aircraft from other locations within the state.
- Coordinate with the NAO to reassign BLM Exclusive Use aircraft from out of state.
- Hire On-Call/CWN aircraft available locally.

Fire Aircraft Needed to Fill Large Fire Orders: Aircraft will be obtained through normal dispatch procedures. The BLM exclusive use aircraft are primarily initial attack resources. Assignment of these aircraft to ongoing large fires will be the exception and require:

- Unit FMOs will consult with the appropriate SFMO.
- SFMOs will consult with NAO and/or the Division of Fire Operations.

Severity Fire Aircraft: Statewide needs will be met with existing aircraft within the state whenever possible. When state offices determine that supplemental aircraft are needed, they may submit a request for fire severity funding to the Fire and Aviation Directorate. Fire severity funding is the authorized use of suppression operations funds (normally used exclusively for suppression operations and distinct from preparedness funds) for extraordinary preparedness activities that are required due to an abnormal increase in fire potential or danger, or to fire seasons that either start earlier or last longer than planned in the fire management plan.

Specific direction is stated in Chapter 10 of the *Interagency Standards for Fire and Fire Aviation Operations*, which may be found at: http://www.nifc.gov/policies/pol_ref_redbook.html

- The NAO will consolidate and adjudicate all state office supplemental aircraft requests and determine the number/type/configuration and procurement method of aircraft. If there is a possibility to re-position a BLM aircraft from other areas, the NAO will coordinate the re-positioning of the aircraft. NAO then will make recommendations of severity funded aircraft needs to FA-300 Fire Operations, which makes final approvals of states' requests.
- Severity funding covers the following costs: aircraft mobilization, daily availability, per diem, proficiency/mission currency, rental vehicle, relief crew transportation, additional aviation management personnel base pay (non - BLM Fire employee), travel and per diem.

National Preposition Funding: Units may request national preposition funding to acquire supplemental fire operations assets. National preposition funding may be used to mobilize resources when BLM units:

- Do not have available preparedness funding
- Do not have available short-term severity funding; or
- Do not meet the criteria for use of national severity funding

Approved national preposition funding may be used only for travel and per diem costs for the duration of the assignment, and overtime labor costs associated with the original move. The Preposition Request Process can be referenced at:
http://web.blm.gov/internal/fire/fire_ops/toolbox_preposition_process.htm

3.11 Cooperator Aircraft

Cooperative aircraft operations and partnerships are encouraged for the purpose of efficiency and standardization in procedure. The NAO and the states shall make a concerted effort to

establish cooperative structures to increase capability and avoid duplication and conflicting procedures.

Use of Cooperator aircraft and pilots; affiliate, state/local government, military, or other federal agency aircraft by BLM employees may require prior inspection and approval by OAS, usually in the form of a Letter of Authorization (LOA) and/or Memorandum of Understanding (MOU). Proposed use of these aircraft must be requested through the SAM to the NAO. Current list of cooperators with MOU's and corresponding IB's are located at: https://www.doi.gov/aviation/library

Any employee who is asked to accompany personnel from another agency on other agency's aircraft must consult their respective aviation manager to ensure approvals are in place. States are encouraged to obtain necessary letters of authorization in advance of intended use period (reference *351 DM 4*).

When BLM utilizes other governmental agency aircraft and aircrews, the aircraft are considered to be under operational control of BLM. Annual Operating Plans or Interagency Agreements (IAA) specifies how re-imbursement for flight services is managed. Note: When using aircraft under USFS contracts reference *OPM-39*.

BLM Nevada – The Nevada Division of Forestry, Nevada Air National Guard, and Washoe County, based on successful pilot and aircraft approval, can be approved annually by OAS as a Cooperator for BLM Nevada.

3.11.1 Non-Federally Approved Aircraft

Reference *Interagency Standards for Fire and Fire Aviation Operations,* Chapter 16 for protocols regarding utilization of non-federally approved aircraft in response to federal wildfire: http://www.nifc.gov/policies/pol_ref_redbook.html

3.12 Senior Executive Service (SES) Flights

An aircraft may be used to transport SES personnel to meetings, administrative activities, or training sessions when it is the most cost effective mode of transportation. Prior approval is required by the solicitor's office for employees above the GS/GM-15 level, members of their families, and all non-federal travelers on the flight. These flights are typically requested through the SAM however some of the responsibilities may be delegated to UAMs (refer to applicable State Aviation Plan for specifics). DOI requirements and procedures are outlined in *OMB Circular A-126* and *OPM-07*. The OPM and OAS Forms may be found at the OAS document library: https://www.doi.gov/aviation/library

- Coordination with the BLM Aviation Manager prior to any SES flight activity is mandatory.
- All government aircraft use (including SES flights) must be requested and arranged at the local level (where the flight is to occur) utilizing a BLM Aircraft Flight Request 9400-1a (or equivalent).
- The SES flight requests require seven days advance notice.
- All mission flights (non point-to-point transportation), including the SES mission flights, will be approved by a local line manager. Special Use mission flights require the completion of a Project Aviation Safety Plan (PASP) and local line manager approval. Mission flights do not require prior approval from the DOI Solicitor's Office.
- All point-to-point SES transportation in government aircraft must be evaluated and approved by the Department of the Interior (DOI) Solicitor's Office.

- An AQD-91/Best Value Comparison Form is completed prior to using DOI contract aircraft (reference BLM *NAP 3.7*).

Reference BLM *NAP Appendix 3* for SES Flight Scheduling Guide

3.13 BLM Law Enforcement Flights

- The state and/or unit plan should describe all procedures related to BLM law enforcement aviation that occur at that level. A request to use, for BLM operational control projects, non-DOI contracted aircraft and personnel requires, prior to use, a fiscal agreement for the exchange of funds (reference *351 DM 4* & *OPM-39*).
- Utilizing aircraft that are not approved by DOI-OAS or USFS (DEA, National Guard, etc.) will require a Letter of Authorization (LOA) for those missions not identified in current MOU's.

3.14 Search and Rescue (SAR) Flights (see also BLM *NAP 3.71.1, 5.6, 5.12 & 5.16*)

- The use of BLM aircraft and aviation personnel for SAR operations are not considered normally planned BLM operations. DOI policy (*900 DM 1.10* and BLM *H-1112-1.40.C*) and the *Federal Land Policy and Management Act* (43.U.S.C. 1742) provide authority to incur expenses and to take a temporary lead role in any SAR emergencies in which immediate and quick response can save lives.
- Request for BLM aircraft to respond to a SAR mission is coordinated through the UAM, FMO/Duty Officer/IC and the responsible Line Officer.
- Documentation of the request can be made on a BLM Flight Request 9400-1a (or equivalent) on a resource order or in WildCad or equivalent dispatch program.
- Sheriff's Office SAR: Request for BLM aircraft to assist is typically routed through BLM law enforcement officials to the responsible Line Officer. If a request for assistance is made directly to the Dispatch Center, the authority to dispatch BLM aircraft and personnel is at the District/Field Office Manager level.
- Notification to the Air Force Rescue Coordination Center and FAA of BLM aircraft response is required if the SAR involves a missing or downed aircraft (reference *Interagency Aviation Mishap Response Guide*).
- BLM Exclusive Use contracted aircraft should not be released from their contract for non-agency search and rescue operations. If the local unit deems that exigent circumstances exist, and they are unable to provide funding, the COR will work with the CO to facilitate release. The NAO Program Manager should be notified of any release from contract after the fact.

BLM Nevada – Local and state authorities have the primary responsibility for locating persons lost on public lands. Bureau personnel must, to maximum extent feasible, cooperate and coordinate with local, state and other Federal agencies within their area of responsibility. Bureau personnel are authorized to assist them in searching for persons lost on or near public lands. BLM responsibilities are to participate in a supportive role; when other assistance is not available, to take the lead role when local SAR emergencies occur; to maintain the lead role until other assistance becomes available and responsibility is transferred.

3.15 National Guard and United States Military Aircraft Flights

- U.S. Military – Requests for U.S. military aircraft support is per agreement between Department of the Interior and Department of Defense. The National Interagency Coordination Center is authorized to coordinate (for fire and large Incident activations). The Military Use Handbook describes procedures.

Additionally, there are MOU's for non-fire and LE Counterdrug joint missions between DOI and DOD. Proposed use of these aircraft must be requested through the SAM. Refer to OAS website for current MOU's and corresponding IB's: https://www.doi.gov/aviation/library

- National Guard – Each state typically has an agreement between the State and the National Guard for fire support resources. A request for National Guard aviation support is coordinated with the Geographic Area Coordination Center (reference *National* and *Geographic Area Mobilization Guides*, *Military Use Handbook*, and *OPM-41*). A Cooperator Letter of Approval is required be in place prior to utilizing National Guard aircraft for those missions not identified in current MOU's. Additionally, there are MOU's for non-fire and LE Counterdrug joint missions between DOI and DOD. Refer to OAS website for current MOU's and corresponding IB's: https://www.doi.gov/aviation/library Proposed use of these aircraft must be coordinated through the SAM. Requests for approval for those missions not identified in current MOU's must be submitted through the SAM to the NAO.

3.16 Unmanned Aircraft Systems (UAS) flights (see also BLM *NAP 5.29*)
Departmental guidance for UAS operations is addressed in *OPM-11*, which is based on FAA regulations regarding UAS operations. UAS are flown under a variety of options which are identified at the FAA's website: http://www.faa.gov/uas/

FAA policy for UAS operations is that no person may operate a UAS in the National Airspace System without specific authority. For UAS operating as public aircraft the authority is the Certificate of Authorization (COA) or through a Memorandum of Agreement with the FAA. For UAS operating as civil aircraft the authority is special airworthiness certificates, and for model aircraft the authority is AC 91-57. For those UAS flight operations occurring in Special Use Airspace such as Military Operations Areas (MOA's) or Restricted Areas (RAs), written approval and permission must be obtained prior to conducting flight operations by the controlling or using agency assigned to manage the airspace.

A Certificate of Authorization (COA) or compliance with the DOI/FAA Memorandum of Agreement is required for all UAS operations prior to flight. Emergency use of Unmanned Aircraft Systems will not be allowed without an approved COA in place (reference *OPM-11 "DOI Use of Unmanned Aircraft systems (UAS)*": https://www.doi.gov/aviation/library/opm

A Memorandum of Agreement (MOA) between the FAA and DOI regarding operation of UAS in Class G airspace has been approved. The MOA can be referenced at: https://www.doi.gov/aviation/uas

OAS coordinates the purchase of UAS and authorizes BLM UAS crew positions (Pilot/Operator and Observer). Personally owned model aircraft are to be flown for recreation or hobby purposes and are not be used for agency purposes. **Agency employees are not authorized to purchase UAS with federal funds**. For further information, refer to: *OPM-11* or http://www.faa.gov/uas/publications/model_aircraft_operators/

Presidential Memorandum, February 15, 2015, *Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems* require that:

- Data not essential to the mission of the BLM should be destroyed within 180 days.

- UAS will only be used to collect data consistent with the authorized mission of the BLM. Any data-sharing agreements or policies, data use policies, and record management policies applicable to UAS shall conform to applicable laws, regulations, and policies.
- UAS collected information can only be shared outside of BLM if it helps to meet the authorized mission of this agency.
- It is prohibited to use UAS to collect, use, retain, or disseminate data in any manner that would violate the First Amendment or in any manner that would discriminate against persons based upon their ethnicity, race, gender, national origin, religion, sexual orientation, or gender identity.
- Program evaluations, per *NAP 4.5.3*, will include review of the unit's compliance with UAS policies and regulations.

Agency Performed UAS Project Approval – In addition to Departmental guidance, all UAS operations will be approved by BLM Line Management and the National Program Manager. A signed and approved PASP is required for all UAS operations. The National Program Manager will review all UAS PASPs prior to operations.

Agency Performed UAS Project Coordination – The BLM UAS Working Group will coordinate agency performed UAS projects in conjunction with the project requestor and State/Local aviation management. The BLM UAS Working Group is comprised of NAO and National Operations Center (NOC) UAS/Remote Sensing experts.

BLM Nevada – All proposed UAS operations will be discussed, early in the planning phase, with the appropriate UAM and the SAM. An approved PASP will be in place prior to the start of any UAS mission.

Considerations for Agency Performed UAS Projects/Operations:

- Feasibility: Initial feasibility discussions are conducted between the local unit proponent, UAM/SAM, and the BLM UAS Working Group. The Local unit line officer will make the decision to go forward with request.

- Request by BLM Unit: The Local unit (project requestor) will submit a request through the National Remote Sensing Request website. This site captures the information required to plan a project such as background, objectives, data product, and timeframes. The request will be reviewed by the BLM UAS Working Group and consultation/planning with the Local unit will commence. The BLM UAS Working Group receives email here: BLM_FA_UAS@BLM.gov

- **Requests must be initiated well in advance of the project which could be at least six months prior to the anticipated UAS project start date.**

- Request for Certificate of Authorization (COA), if needed: If the Bureau proposal is approved, the OAS UAS Coordinator will work directly with Bureau requestor and aviation manager to develop the FAA application for a COA. Collaboration and agreement will occur prior to official commitment of the application. The OAS UAS coordinator will keep the Bureau informed on the status and issuance of the COA.

Cooperator Agency UAS Project Coordination:

- Any other federal agency operating UAS within BLM jurisdiction will coordinate with the Line Officer and UAM prior to project commencement/UAS flight.
- A PASP must be reviewed by the UAM and signed as approved by the Line Officer prior to any UAS project commencement/UAS flight.
- The Line Officer will determine the need for a land use permit.

Commercial UAS Flights: These operations are permitted with the following authorizations:

- The operator has a current FAA Section 333 Exemption.
- The operator has a current FAA COA. The COA may be integrated into the Section 333 Exemption.
- The Operator obtains a land use permit approved by the Line Officer.
- The National Program Manager will be notified of all commercial UAS operations or end product contracts which utilize UAS.

Further information and an updated list of approved Section 333 operators can be accessed on the FAA website located here: https://www.faa.gov/uas/legislative_programs/section_333/

Note: NEPA has been categorically exempted for aerial photography and is referenced in 45 CFR 46.210e.

For additional information regarding minimum operational requirements, qualifications, emergency operations and interagency fire use of UAS reference *NAP 5.29* and *OPM-11*.

UAS Mishaps and SAFECOMS

- UAS mishaps must be reported as per DOI policy. Refer to BLM NAP 4.5.2.
- Cooperator UAS mishaps on BLM jurisdiction will be reported to the Local UAM and the National Program Manager. DOI mishap reporting policies also apply.

3.17 Dispatching - Flight Requests

All flights will be arranged by aviation dispatchers and/or appropriate aviation manager with the exception of:

- Flights with a scheduled air carrier on a seat fare basis (Part 121 or 135 scheduled flights open to the general public on a ticket sale basis). Seat fare is defined as the cost for a DOI employee to occupy one seat between two different airports/heliports when the aircraft is not under the exclusive control of the DOI. It does not include any charter or on-demand operation.
- Transactions to acquire an End Product contract.

All BLM flights must:

- Be approved at the appropriate management level.
- Be authorized and documented **prior** to takeoff.
- Use approved pilots and aircraft as directed by the DMs.
- Allow only authorized passengers.
- All passengers shall be given a preflight safety briefing by the pilot or qualified aircrew member as per *351 DM 1.5.B*.
- For all non-fire flights utilizing DOI contract aircraft, the user must assure that there is an Interagency Agreement in place with AQD that includes approved funding for the flight (reference *NAP 3.7*).

A BLM Aircraft Flight Request 9400-1a (or equivalent) is required to be completed for all non-fire flights that do not require a PASP (reference BLM *NAP 4.3.2*). The 9400-1a Form (Aircraft Flight Request/Schedule) can be accessed at:
http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Administration.html

The UAM must review the 9400-1a (or equivalent) Flight Request and obtain approval by appropriate level of authority as determined by the Unit's Line Management and documented in the Unit Aviation Plan.

3.17.1 Categories of Flight with specific procedures regarding Flight Requests

Life Threatening Emergency Flight Requests (See also BLM *NAP 3.14, 5.6 & 5.16*)

- Requests for aircraft to meet life threatening emergency needs should be filled with the closest available aircraft with the appropriate capability for the mission.
- Normal protocols associated with ordering/hiring of aircraft can be addressed as time allows after the initial response.
- Local Line Officers are responsible for all aviation activities within their jurisdiction. The response to a life threatening emergency must be coordinated with the UAM, FMO/Duty Officer and Line Officer.

Non-Fire Point to Point Flight Requests (see *NAP 5.7* Categories of Flight)

- Prior to hiring or arranging for the flight: Complete a cost analysis comparing costs of using a chartered or government owned aircraft versus commercial airline or driving, time frame requirements, other associated costs. An example Travel Cost Analysis Form (OAS-110) is located at: https://www.doi.gov/aviation/library/opm
- Prior to flight: 9400-1a (or equivalent) is completed. UAM reviews and appropriate approval obtained (state or local unit determination).
- AQD-91 and Best Value Comparison forms are not required for exclusive use aircraft but are required when comparing rentals to fleet, etc. (reference BLM *NAP 3.7*).
- Flight Manager designated.
- Resource tracking method determined.

Non-Fire Special Use Flight Requests (see *NAP 5.7* Categories of Flight)

- Lead time for flight request, IAA & Task Order issuance, as described in Unit Aviation Plan.
- UAM to assess project/mission complexity; determine whether a PASP is required (reference BLM *NAP 4.3.2*).
- 9400-1a (or equivalent) is approved by the appropriate level of authority for low complexity one time types of missions.
- If a PASP is required (reference BLM *NAP 4.3.2*), a 9400-1a Form may be used for dispatch office internal flight tracking purposes.
- AQD-91/Best Value Comparison Form is not required for exclusive use aircraft but is required when comparing rentals to fleet, etc. (reference BLM *NAP 3.7*).

Fire Point to Point Flight Requests (BLM Operational Control)

- Dispatch office receives a request, completes a resource order per dispatch procedures.
- The BLM Fire IAA # is used, and the DOI Fire contract Task Order # for the hired vendor is used.

- A flight manager is designated and resource tracking method determined (reference National and Geographic Mobilization Guides for details).
- The Dispatcher/UAM is responsible for conducting and documenting a cost comparison and Contractor selection rationale prior to hiring aircraft.

Fire Tactical, Direct Suppression, Logistical and Training Flight Requests

- Requests come from:
    - Incident commander (IC) or designated incident personnel (i.e., AOBD, ASGS, ATGS/ATS).
    - FMO or duty officer.
    - Per unit dispatching plan.
- The ordering official is responsible for conducting and documenting a cost comparison and Contractor selection rationale prior to hiring aircraft.
- The BLM Fire IAA # is used, and the DOI Fire contract Task Order # is used.
- Initial Attack aircraft requests can be documented on a Resource Order and/or Aircraft Dispatch form.
- Minimum dispatch information to be provided on forms sent to pilots, aircrews is: Destination latitude – longitude coordinates (Degrees and Decimal Minutes (DDD° MM.MMM')), Radio frequencies - air to air/air to ground/flight following, Incident name/contact (if any), Airspace hazards and dispatch boundary concerns, other aircraft being dispatched.
- The BLM standard format for aviation operations is Degrees and Decimal Minutes (DDD° MM.MMM'). Reference BLM *NAP Appendix 4* for additional details. Utilization of the correct format must be discussed between dispatch and the flight crew to assure accurate navigation.
    - Note: The format for the US NOTAM OFFICE for Temporary Flight Restrictions issued by the FAA and in ROSS will be in a Degree, Minutes and Seconds, input with NO punctuation (ddmmssN/dddmmssW).
- Training: Fire training flight requests are made by the supervisor/manager (Helitack, SEAT, and Aerial Supervision) to the FMO, duty officer, UAM and coordinated with the aircraft dispatcher.
- Contractor directed training flights are coordinated with the PI, airbase manager, or UAM. These flights are the responsibility of the contractor.

3.18 Aircraft Use Payment Systems

Aviation Management System (AMS): AMS is an IBC web based system utilized for generating and processing flight use invoices.

- BLM-AK currently renders payment to non-fire vendors via the BLM-AK Pilot Project.

AMS training - https://www.iat.gov/Training/modules/Flight_Payment/flight_payment_training.asp
AMS - https://ams.nbc.gov/maximo/webclient/login/login.jsp

Internet Payment Platform (IPP): The Internet Payment Platform (IPP) is a comprehensive electronic invoicing and payment information service made available to all Federal agencies and their suppliers by the U.S. Department of the Treasury's Financial Management Service (FMS). IPP centralizes transaction processing in the order-to-payment notification cycle, including purchase orders, invoices and payments: https://www.ipp.gov/

Aircraft Use Report Manager (AURM): The AURM is used within DOI for government owned "Fleet" aircraft billing to create aircraft use report data files which are emailed to **OASfleetmanager@ios.doi.gov** for uploading into the FBMS system. OAS Technical Services has also developed a "next generation" Aircraft Use Report Manager application for iPads.

Forest Service Aviation Business System (ABS): Flight time, daily availability, and other authorized charges or deductions shall be recorded on a Flight Use Report in ABS for all USFS contracted aircraft. The data shall be entered and reviewed by the government and the contractor's representative. BLM employees (including BLM AD employees) that are flight or aircraft managers with responsibility to input flight use data into the USFS ABS will need to register with the USFS ABS program. ABS can be found at: http://www.fs.fed.us/business/abs

3.19 Coding for Flight Use Reports

Documentation of all non-fleet flight services is accomplished on an AMD-23E Aircraft Use Report form, which is then entered into the Aviation Management System (AMS). The hard copy form acts as the 'Field Receiving Report' which provides evidence that the flight information is accurate. Until further notice, AMS will be the Government's "Electronic Receiving Report", which supports Contractor payments that are invoiced and paid through IPP.

BLM SAMs serve as the COR for exclusive use contract aircraft in their state. As such, they are responsible for ensuring that designated alternate CORs and aircraft managers are informed of all coding requirements and that flight invoices are properly completed. BLM pilots, in coordination with the SAM, are similarly responsible for proper flight invoice coding for fleet aircraft.

The following business rules apply to all BLM contracted aircraft:

3.19.1 Task "Order" Number

The contract number to be identified on the AMD-23/23E forms is the appropriate **order number** that was issued by the CO for the applicable contract.

- Reference https://www.doi.gov/aviation/aqd for On Call Fire Suppression Task Order Numbers for specific type of contract being utilized.

3.19.2 Billee Code

Billee Codes are a required field, for payment by AQD, on either the AMD-23E or AMS. The Billee Code is still the best method to query reports in AMS and should continue to be utilized for that purpose.

- For Exclusive Use contract aircraft, the "Home Unit" billee code will be used regardless of the operating location for all Pay Item codes when utilizing a BLM Task Order number.

3.19.3 Cost Strings

Exclusive Use aircraft: All BLM fire Exclusive Use aircraft will charge all AV during the exclusive use period (excluding contract extension) to the following NAO cost string:

LLFA540000LF1000000.HT0000

- Do not use this cost string for anything other than AV during the exclusive use period.
- All other pay item codes (FT, SM, PD, EP, ET, SC, etc) will be charged to the appropriate office and benefiting activity, **not** to the NAO code.

- All BLM Fire Exclusive Use aircraft approved by the NAO for contract extension will charge all AV during the extension period to an approved Severity code or the benefiting activity when appropriate.

On Call/ARA or Severity Funded aircraft: All Pay Item codes including AV (AV, FT, SM, PD, EP, ET, SC, etc) will be charged to the appropriate office and benefiting activity. Severity codes will not be utilized for any charges that should be charged to a suppression code. Suppression and severity formats are listed below:

- Fire suppression – **LLxxxxx000LF2000000.HU0000LFSPzzzz0000;** where **xxxxx** is the BLM Cost Center and **zzzz** is the "Fire Number".
- All other severity aircraft – **LLxxxxx000LF2100000.HT0000LFSRyyyy0000**; where **xxxxx** is the BLM Cost Center and **yyyy** is the Severity charge code.

Mission Use Codes: Mission Codes apply only to AMS line entries for flight time. Each specific type of flight will have the unique mission use code recorded. Example: A helicopter flies a total of 2.1 hours, but does 1.1 hours of bucket work; 0.5 hours initial attack delivery of firefighters, and 0.5 hours of recon. Each type of flight will be shown on its own line entry with the specific mission use codes.

3.20 FEPP
Reserved

3.21 FBMS
All BLM financial activities are managed through the DOI FBMS program. All fire retardant expenditures (Full service contract and bulk purchase) are entered into FBMS by the district or state level designated officials (reference state and unit aviation plans).

End of Year financial procedures are announced via the departmental and Bureau instruction memorandum (IM) system.

3.22 Aviation Program Reviews
Details about aviation program evaluations and fire preparedness reviews are described in BLM *NAP* 4.5.3.

3.23 New Program Requests
New program requests involving aerial assets, not already approved by BLM, must be routed through the State Director to the Division Chief, Aviation for approval. Upon NAO approval, new program requests will be forwarded for consideration of approval to the Associate Director, OAS. This request shall include a copy of the NAO approval, and a proposed Operations Plan (reference *NAP Appendix 12; BLM Aviation Enhancement Application Form*).

4.0 Aviation Safety Management Systems

4.1 General
The BLM Aviation Safety program is modeled after the aviation industry and FAA Safety Management Systems (SMS). Each BLM employee and contractor involved with aviation has the responsibility to plan missions thoroughly, conduct missions with a conservative attitude, and respect for the aircraft and environment in which the missions operate.

The BLM NAO Aviation Safety & Training Advisor is the focal point for the BLM national level program. SAM's are the focal point for state aviation programs, and the unit aviation manager (UAM) is the focal point for district/field office aviation program.

4.2 Safety Management Systems (SMS)
SMS serves to structure the BLM existing safety initiatives and provides a review process for how well those initiatives function. SMS is not a safety program; rather it is a system which organizes existing safety processes around the concept of system safety. SMS incorporates a proactive approach using hazard identification and risk management to achieve accident prevention. Additional information regarding SMS is available at the Lessons Learned website: http://www.wildfirelessons.net/Home/

SMS is divided into 4 components: Policy, Risk Management, Assurance, and Promotion.

4.3 Policy
SMS is a critical element of management responsibility in determining the agency's safety policy and SMS also defines how the agency intends to manage safety as an organizational core function.

- Policy guides aviation safety doctrine, philosophy, principles and practices.
- Policy provides framework for aviation plans (reference BLM *NAP 3.3*).
- Policy assists in the development of local standard operating procedures.
- Policy will foster and promote doctrinal principles and safety management systems within the states.

Aviation management policies describe; authorities, responsibilities, acceptable operating practices, and administrative procedures. These directives provide the structure for the SMS to effectively function. Safety is a product of effective policy and management processes. All aviation safety standards and policy requirements identified in the BLM *NAP 1.6* must be followed.

4.3.1 Aviation Life Support Equipment (ALSE)
All personnel engaged in aviation activities must wear appropriate Personal Protective Equipment (PPE), depending on the mission (reference *NAP 5.4* and *350 DM 1.2.C* regarding flights on foreign aircraft in foreign countries). Requirements are listed in *351 DM 1.7* and outlined in the *ALSE Handbook* and mission specific guides and handbooks. Reference BLM *NAP 5.22* and *5.27.1* for additional PPE requirements utilized for helicopter operations and low level (less than 500' AGL) fixed-wing flight operations. Any questions concerning the requirements and procedures for obtaining PPE are directed to the local aviation manager. Project leaders must ensure that appropriate and adequate ALSE, including PPE, is available

and worn by individuals. If required ALSE is not available, all flights will be canceled or postponed.

4.3.2 Project Aviation Safety Planning (PASP)

BLM Nevada – See Appendix 14 for Nevada supplement regarding PASP

Accident prevention is paramount when planning individual aviation projects. Flights may not deviate from Department and Bureau policy and procedures, except for safety of flight considerations. A PASP is required for non-fire Special Use projects. A 9400-1a (or equivalent) may be completed in lieu of the PASP for a low complexity/one-time non-fire mission flights. The PASP or 9400-1a must be reviewed by the UAM and approved by the appropriate level of authority per the state/unit aviation plan. Managers must be briefed by the UAM prior to their approval of the plan.

- PASP's that have a final risk assessment of high will require a SAM review prior to line manager approval.
- A courtesy copy of all PASP's will be routed to the SAM prior to implementation.

Projects that occur periodically over a season or fiscal year can have one PASP prepared and approved. In this situation a 9400-1a (or equivalent) will be required for each periodic flight. The 9400-1a approval level would be at the UAM level with a courtesy notification to the SAM.

For projects that are conducted by a units' aviation operations group (helitack, aerial supervision, smokejumpers); if the missions are typical and routine to the operational group with mission risk assessment documented in the groups' annual operations plan and the state and unit plan allows; then project/flight can be conducted, without a specific PASP, after completion of 9400-1a documentation.

- PASPs developed for reoccurring projects will be reviewed, updated and signed annually as per required elements of a PASP.

Required elements of a PASP include:

- Project name/Objectives/Supervision
- Justification
- Project date and location
- Projected cost of aviation resources
- Desired aircraft, make/model, pilot skills (Included if available and/or specific N# and pilot to be noted on 9400-1a)
- Communication Plan, Flight following and emergency search and rescue
- Flight routes/areas and altitudes
- Hazard identification (e.g., weather, takeoff or landing weights, landing areas, wire hazards, etc.)
- Wire Strike Prevention (*351DM1.9.C&D*)
    - Flight Environment Considerations: Bureau projects often dictate that flights be conducted in close proximity to the ground where wires are prevalent
    - Risk Assessment/Hazard Maps: To reduce wire strike potential, it is critical that a risk assessment be conducted prior to all low level flights. A low level flight hazard map must be constructed for the local operational area. All preplanned low level flights require a thorough map reconnaissance of the route to be flown
- Description of take-off and landing areas
- Pre-flight briefings/After Action Reviews

- Participants: List individuals involved in flights, their qualifications (HMGB, Aircrew Member, Passenger, etc.) dates of last aviation training and include individual's project responsibilities
- Aircraft and equipment approval
- Airspace Coordination and Aerial hazard identification
- Risk assessment utilizing the SMS worksheets as appropriate
- Personal protective clothing/equipment (if required)
- Load calculations and/or weight and balance information requirements
- Unit Aviation Managers review and signature (annually if reoccurring project)
- Project Lead Supervisor's and line officer's approval signature (annually if reoccurring project)

A good resource for aviation project planning can be found in the *IHOG* Chapter 3. Personnel needing assistance with mission flight or project planning requirements should contact their unit/state aviation manager. Risk assessments of the relevant project hazards can utilize maps, aerial photos, Google Earth photos, SkyVector.com maps to help identify and map out where the hazards are located. Particular attention in the risk assessment is essential when determining how to mitigate the risk by reducing exposure to hazards in: flight profiles, method of operations, external load operations, winter weather, and high/hot/heavy operations.

4.3.3 Aircraft Accident Investigation Process

The National Transportation Safety Board (NTSB) has the responsibility to investigate all aviation accidents except for military (49 CFR Parts 830 and 831, Public Law 106-181, and Federal Management Regulation 102-33.185). OAS Chief of Aviation Safety is typically invited by the NTSB to be a party to the investigation. NTSB is still the controlling authority. Policy, including responsibilities and procedures concerning DOI aircraft mishaps are contained in *352 DM 3*. Two Bureau positions may be established to assist the DOI Investigation Team: 1) as a selected member of the investigation team working directly for the OAS Safety Investigator-In-Charge (IIC), or 2) as the Bureau-designated on-site liaison to coordinate with the OAS Safety Investigator-In-Charge. NOTE: In many cases, the Bureau will provide only one representative to the investigation team and that individual will perform only as a liaison, or as both a team member and a liaison. OAS Chief of Aviation Safety, as the Departments representative to the NTSB, will determine who will participate. The NTSB IIC will then either accept or deny the individuals proposed by the Chief, or OAS IIC.

The BLM investigation team member:

- Must be requested by OAS to be an investigation team member.
- Will be appointed by the BLM Aviation Division Chief.
- Will normally be BLM NAO staff members or SAM.
- Must not have a personal interest in the mishap.
- Will work directly with the OAS Safety Investigator-In-Charge (IIC).
- Is bound by confidentiality regarding all aspects of the investigation and preliminary findings and conclusions.
- Will at no time express opinions of their own or recite opinions of others on the team.

The BLM Liaison:

- Will be appointed by the BLM Aviation Division Chief (FA-500).
- Will provide on-site coordination and support to the OAS Safety IIC for personnel, resources, transportation, office space, communications, etc.

- Will coordinate and facilitate in and out-briefings with local BLM management.
- Will serve as liaison between the investigation team and local BLM management, BLM specialists and/or incident management team.
- Will provide the IIC with technical expertise and Bureau organizational information.
- Will make arrangements for interviews, site visits, document review, etc.
- Will **not** conduct interviews or investigative actions unless requested by the IIC.
- Will be bound by confidentiality regarding all aspects of the investigation and preliminary findings and conclusions.
- Will at no time express opinions of their own or recite opinions of others on the team
- Must not have a personal interest in the mishap.

4.4 Risk Management

Risk management enables personnel at all levels to do exactly what the term implies: manage risks. The process of risk management applies to programs and operational missions. The risk management process is designed to mitigate risk to acceptable levels by the identification, assessment, and prioritization of risks followed by coordinated application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events.

These basic decision making principles must be applied before any anticipated job, tasks, or mission is performed:

- **Accept no unnecessary risk:** Unnecessary risk does not contribute to the safe accomplishment of a task or mission. The most logical choices for accomplishing a mission are those that meet all the mission requirements while exposing personnel and resources to the lowest possible risk.
- **Make risk decisions at the appropriate level:** Making risk decisions at the appropriate level establishes clear accountability. Those accountable for the success or failure of a mission must be included in the risk decision process. Supervisors at all levels must ensure subordinates know how much risk they can accept and when they must elevate the decision to a higher level.
- **Accept risk when benefit outweighs cost:** Weighing risks against opportunities and benefits helps to maximize unit capability. Even high-risk endeavors may be undertaken when there is clear knowledge that the sum of the benefits exceeds the sum of the potential costs.
- **Integrate risk management into planning and execution at all levels:** To effectively apply risk management, leaders at all levels must dedicate time and resources to incorporate risk management principles into the planning and execution phases of all operations. Integrating risk management into planning as early as possible provides the decision maker with the greatest opportunity to apply risk management principles.

Risk assessment can be divided into three levels:

1. **Time Critical:** This method is an “on-the-run” mental or verbal review of the situation using the risk management process without necessarily recording the information. The process is used to consider risk while making decisions in a time limited situation. Rapid risk assessment requires effective training of personnel, effective operational practices and a thorough understanding of objectives of the mission.
    - Note that “time critical” does not mean “hasty” or “uninformed.”
2. **Deliberate:** This type is used when planning time permits. It involves systematic risk identification, risk assessment/analysis, consideration of control options and risk decision making, implementation of controls, and supervision. Note that all of these may be

applied to time critical risk management; however, the time frame in which the rapid examination is performed is extremely compressed by the urgency of the situation. This will involve documentation of the process and actions.

3. **Strategic:** Strategic Risk management is conducted at the highest levels of the organization and is typically applied to multiple systems type complexity, and requires professional reviews. This method should be used in instances where new technology, change, or development of new programs or activities. It involves an analysis of cost/benefit of mitigations. The strategic process produces a more permanent record of findings and decisions used for long term planning, organizational decision-making and as authoritative training resources.

Risk Management Process: The process by which risk is managed is ongoing throughout the mission. It starts in the planning stage, continues to the approval and scheduling phase, is evaluated and adapted during the execution phase and is analyzed and collected as lessons learned in the post flight phase.

1. **Identify Hazards:** The first step in risk management is to identify hazards. The hazards are the potential sources of danger that could be encountered while performing a task or mission. Hazards include, **but are not limited to**, weather, time of flight, terrain, equipment, training, and proficiency level of personnel.
2. **Assess Hazards:** Hazard or risk assessment is part of the risk management process. Risk assessment can range from simple to complex, but must be detailed. The process of assessing hazard causes personnel to analyze the degree of risk associated with each threat, and place these in perspective relative to the objectives of the mission and organization.
3. **Develop Controls/Make Risk Decisions:** Starting with the highest threat, identify the risk control options that reduce exposure to the threats for all of those identified in the previous steps that exceed an acceptable level of risk.
4. **Implement Controls/Execute and Monitor:** Implement the plan and ensure that the risk controls are known by all and are utilized. Ensure that people know and do what is expected of them. A high level of risk that cannot be effectively controlled should be reported to the person supervising the operation. Continually evaluate the effectiveness of the controls and ensure that the risk remains in balance with the benefits.
5. **Supervise and Evaluate:** Note any changes to the operation, equipment, environment, and/or people and how they may affect your plan. It is important to remember that risk management is a continuous process! Adjust to changes in the situation in real time by remaining vigilant and maintaining your situation awareness to identify unexpected as well as planned threats. Track your progress by taking note of intermediate accomplishments that will denote and add up to the completion of your objective. Additionally, after action reviews are a good way to assure that the supervision and monitoring of the mission are effective and that lessons learned are captured for the future.

Risk Assessment Tools: As discussed previously, the second step of risk management is assessment of the threats/hazards. There are several tools that may be used to document the risk involved in the operation. A good source for a variety of risk assessment tools can be found in the *IHOG* Chapter 3: http://www.nwcg.gov/pms/pubs/pms510/23_Chapter03.pdf

The Aviation Risk Management Workbook as well as several completed aviation assessment are located at the BLM Aviation Safety website:
http://www.blm.gov/nifc/st/en/prog/fire/Aviation/safety.html

4.5 Assurance

The safety assurance component involves processes for quality control, mishap investigation, and program reviews. Assurance emphasizes:

- Continuous monitoring and evaluation
- Standards for evaluations
- Internal/external audits and evaluations
- Investigations
- Emergency preparedness and response
- Reporting and feedback

Quality assurance (QA) techniques can be used to provide a structured process for achieving objectives. BLM efforts to date have concentrated on the development and implementation of comprehensive policy revision, risk management processes, SMS promotion and training.

BLM Nevada – The BLM Nevada Aviation SMS Assurance Program is monitored by UAMs, SAM and NAO program managers.

- UAM and Aircrew supervisors conduct after action reviews (AAR) of projects, fire suppression operations, SAFECOM events.
- UAMs will forward any significant AAR findings to the SAM.
- UAMs will review PASP and risk assessments that are prepared by project aviation operations personnel.
- The SAM will make periodic site visits of airbases, projects and fire incidents. Coordination with the District FMO and UAM will be done, and results communicated to the State FMO, District FMO and UAM.

4.5.1 Aviation Safety Assistance Team (ASAT)

During high levels of aviation activity it is advisable to request an Aviation Safety Assistance Team (ASAT). An ASAT's purpose is to enhance risk management, efficiency, effectiveness and provide technical assistance while reviewing aviation operations. If an ASAT cannot be filled internally, the request may be placed with NICC through established ordering channels using individual overhead requests. An ASAT should operate under a Delegation of Authority from the appropriate State/Regional Aviation Manager(s) or Multi Agency Coordinating Group. Formal written reports shall be provided to appropriate manager(s) as outlined at the in-brief. A team should be developed to fit the need of the requesting unit and may consist of the following:

- Aviation Safety Manager;
- Operations Specialist (helicopter and/or fixed wing);
- Pilot Inspector;
- Maintenance Inspector (optional);
- Avionics Inspector (optional);
- Aircraft Dispatcher (optional).

4.5.2 Aviation Safety Communiqué - SAFECOM

The SAFECOM system is used to report any condition, observance, act, maintenance problem or circumstance which has the potential to cause an aviation-related mishap. **The SAFECOM system is not intended for initiating punitive actions.** Mission personnel are encouraged to collaborate on SAFECOM development prior to submission to avoid any punitive implication, submission duplication and to increase the narrative accuracy of events. Submitting a SAFECOM is **not** a substitute for "on-the-spot" correction(s) to a safety concern. It is a tool used to identify, document, track and correct safety related issues. All personnel involved in aviation activities are encouraged to submit SAFECOMs. A SAFECOM can be submitted via:

- Website: https://www.safecom.gov/

- Mobile application: https://www.safecom.gov/mobile/#/
- Phone: 1-888-464-7427

Personnel in doubt about completing a SAFECOM should contact their UAM. Reference the BLM *NAP Appendix 5* for BLM SAFECOM management roles.

- Elevated SAFECOM's will not be made "Public" until a determination/ investigation has been completed. The National Aviation Safety Manager (FA-500) will assign a liaison to OAS-Safety on a case by case basis.

4.5.3 Program Evaluations, Readiness Reviews, Site Visits

Aviation program evaluations/reviews are an integral part of the System Safety Assurance program.

BLM aviation program reviews are conducted at two levels within the department to insure that safety standards, policy compliance and Bureau efficiency objectives are being met.

BLM Fire Preparedness Reviews: Aviation functional operations and facilities are reviewed as part of the total Fire Preparedness review of field/district operations. Reviews are conducted every three years by a national level review team. District or state level fire readiness reviews are conducted annually. The SAM will be responsible for coordinating annual readiness reviews of the state's aviation crews/personnel, project and base site visits, and developing guidelines for UAM oversight of district/field office aviation activities. The SAM has the responsibility to ensure the reviews are being conducted for aviation operations within the required time frame and to identify well qualified individuals to conduct the review (reference *Interagency Standards for Fire and Fire Aviation Operations*, Chapter 18 for information).

BLM Nevada – BLM Nevada has a National preparedness review scheduled for 2019.

OAS Aviation Program Evaluation: OAS will administer an aviation program evaluation of each BLM state and the NAO every five years. The purpose of these evaluations is primarily to review non-fire aviation activities as they relate to administration, operations, safety, training and security. The NAO will identify qualified individuals to assist with the review (reference BLM *NAP Appendix* 6 for schedule). The SAM will assist with the review and provide scheduling and logistical support. Additional reviews may be conducted if a need is identified by the aviation division chief.

BLM Nevada – BLM Nevada is scheduled for an OAS Aviation Program Evaluation in 2018.

4.5.4 National Fire and Aviation Operations Alert System

The BLM Office of Fire and Aviation has established an "Operation Alert" system designed to provide field units and personnel with critical ground or aerial operational information in a timely manner. The system is intended to respond to emerging issues as identified through such means as SAFECOMS, SAFENETS, investigation reports, after action reviews, etc. This system is not a replacement for any existing formal notification and alert system such as Interagency Safety Alerts or Aviation Accident Prevention Bulletin. In fact, the intent is for the operations alerts to complement these existing systems in those instances where it is appropriate. These alerts will also complement the department and Bureau manual process. The operations alert system will provide time sensitive information to state and unit FMOs and aviation managers. It is anticipated that these individuals will provide the information to appropriate parties through established

channels and processes. The Office of Fire and Aviation, Operations (FA-300) and Aviation (FA-500) groups manage the program.

4.6 Promotion

The BLM must promote safety as a core value with practices that support a positive safety culture. BLM Aviation Managers are encouraged to promote aviation safety and accident prevention at every opportunity, within all fire and non-fire programs. Line Managers play a critical role in establishing a just safety culture at the State and Field levels. Safety promotion can be accomplished through:

- Training
- Communication
- Reporting and Feedback
- Safety and Mishap Information
- Safety Awards

4.6.1 Lessons Learned

National and State level aviation program managers are responsible for providing input into training curriculum development, lessons learned messages, development of new procedures and operational methodologies.

SAM's are responsible for disseminating pertinent aviation safety information, actively engaging resource and fire managers during annual work plan development.

Additional information regarding Lessons Learned is available at the Lessons Learned website: http://www.wildfirelessons.net/Home

BLM Nevada – The UAM can submit to the SAM aviation lessons learned from significant events. The SAM will coordinate the development of lessons learned with the FA-500 Aviation Safety and Training Advisor.

4.6.2 Aviation Safety Awards Program

Aviation safety awards are a positive part of the aviation program and are provided to all organization levels. National awards are given following the guidelines in *352 DM 4* for pilots and employees. Airward recommendation narratives are submitted through the SAM to the NAO Safety and Training Advisor.

5.0 Aviation Operations

5.1 General

As a Bureau, we are often challenged with working in high-risk and dynamic environments that are not always predictable. It is the responsibility of each employee, cooperator and contractor to conduct aviation operations that have been planned properly, approved by management, that utilize the correct equipment and personnel and are carefully executed per SOP to minimize risk. Safety is the first priority and leadership at all levels must foster a culture that encourages employees to communicate unsafe conditions, policies or acts that could lead to accidents without fear of reprisal. The four components of SMS (policy, risk management, assurance, and promotion) are critical to the success of safe operations.

State and local units are required to staff exclusive use aircraft assigned to their jurisdiction throughout the contract period and any extensions. Additionally local units will ensure that support functions (i.e. airtanker bases and local dispatch centers) necessary for the mobilization of national assets (i.e. large airtankers, lead planes, SEAT's, ASM's and fire helicopters) are staffed to support local dispatch as well as GACC to GACC and national mobilization.

5.2 Policy, Operational Guides and Handbooks

A list of all of the BLM aviation policy documents can be found in the BLM *9400* Manual and BLM *NAP 1.6*.

5.3 Public/Civil Aircraft Operations

DOI aviation activities include both "civil" and "public" operations. Civil aircraft operations must comply with 14 CFR (Federal Aviation Regulations) in the operation and maintenance of public aircraft with the few exceptions outlined in *DM 350-353.* Operators under contract to DOI are bound by that contract to conduct operations in accordance with their FAA-approved commercial operator or airline certificate specifications, unless otherwise authorized by the contracting officer.

Interagency standards for pilot duty days and flight time are 14 hours duty per day and 8 flight hours per day for both contractor and government pilots. If these standards are exceeded, the following time off requirements will be followed.

- 11 consecutive hours of rest if the duty day or flight time limitations are exceeded by not more than 30 minutes
- 12 consecutive hours of rest if the duty day or flight time limitations are exceeded by more than 30 minutes, but not more than 60 minutes
- 16 consecutive hours of rest if the duty day or flight time limitations are exceeded by more than 60 minutes

There will be no impact to the contractor's daily availability for these additional time-off requirements. Notification through the contracting chain of command should occur and a SAFECOM should be submitted.

Maintenance Test and Ferry Flights by Government Pilots on contracted aircraft:
Government Pilots may perform functional maintenance check-flights and ferry aircraft to and from the Contractor's maintenance facilities when it is in the best interest of the Government and the following conditions are met:

- Flights are not being paid for by the Government and the operational control remains with the Contractor.
- The test flight does not follow any installation, overhaul, major repair, or replacement of any engine, propeller or flight control system.
- The aircraft is operating under an approved and current OAS Inspection.
- Notification and approval from OAS and the NAO.

5.4 BLM Employees on Non-BLM Aircraft

All agency employees will comply with Bureau and DOI aviation policies when performing agency employment-related duties on board any organization's aircraft and/or aircraft operated under any other organization's operational control. These policies include, but are not limited to: approved aircraft and pilot (by carding or cooperator letter of approval), project aviation safety plans, flight following, PPE, appropriate flight management, etc. (reference *351 DM 4*).

Exceptions are:

- Flights in foreign countries (*351 DM 4.1.E.(4)*), (*350 DM 1.2.C*). Parts 350 - 354 of the DM do not apply to international DOI operations (except for fleet operations). However, BLM employees are expected to use good judgment and should attempt to follow DOI aviation policies to the extent practical.
- Undercover Law Enforcement missions (*351 DM 1.6.D*)
- Flights with a scheduled air carrier on a seat fare basis (Part 121 or 135 scheduled flights open to the general public on a ticket sale basis). Seat fare is defined as the cost for a DOI employee to occupy one seat between two different airports/heliports when the aircraft is not under the exclusive control of the DOI. It does not include any charter or on-demand operation (*353 DM 1* & *OPM-15*)

5.5 Passengers

A passenger is any person aboard an aircraft, when traveling on official BLM business, who does not perform the function of a flight crewmember or Aircrew member. Unauthorized passengers will not be transported in any DOI aircraft. For official, unofficial and unauthorized definitions, reference *350 DM 1.8*.

All passengers will:

- Use appropriate personal protective equipment (reference *ALSE Handbook*).
- Report aviation incidents, operations deviating from policy to the UAM and/or through the SAFECOM system.
- Emphasize personal safety as well as the safety of others involved in the flight.
- Meet the requirements of DOI *OPM-04*.

Agency employees in off duty status: Federal employees cannot utilize annual leave/LWOP or "volunteer" in order to circumvent agency policy. If any aspect of the employee's activity is related to their official duties, they are conducting agency business, irrespective of their pay status.

Reference the regulations regarding off-duty activities in accordance with the *Standards of Ethical Conduct for Employees of the Executive Branch* (5 CFR. Part 2635.802-803).

Non Federal passengers: (reference *IHOG 10-2, F*)

- General: A qualified Helicopter Manager or Flight Manager must be assigned to the mission. All requirements regarding use of personal protective equipment, flight following, load calculations, and hazard analysis must be followed.
- Resource/Project Missions: If the mission is special use, a Project Aviation Safety Plan must be required and approved by line management prior to the flight. It must show that the carriage of Non-Federal passengers aboard the aircraft is of an official nature and is advantageous to the agency. Since the Non-Federal passengers are designated official passengers, no flight release waiver is necessary
- Incident Missions: As a general rule, the Incident Commander on type I or II Incident Management Teams may authorize all flights with Non-Federal passengers on board. On local unit fires, the line manager or their designee is usually the approving authority. Flights on government aircraft with Non-Federal passenger aboard must be in the interest of the government. No flight release waiver is required. This general guidance may be further restricted by agency local unit policy. The air operations staff should check with the local area to ascertain any additional restrictions or necessary approvals.
- Restricted Category Helicopters: Carriage of Non-Federal passengers aboard restricted category aircraft is specifically prohibited.
- Local Unit Aviation Manager and State Aviation Manager must be notified prior to any flights with Non-Federal passengers aboard.

Volunteers: Volunteers when traveling on official business, are official passengers, within the terms of *350 DM 1.8.A.(3)* and BLM *9400.67.A*. Volunteers are not permitted to operate aircraft or serve as an aircrew member on any DOI aircraft. Volunteers aboard DOI aircraft performing mission flights must be pre-approved by the appropriate BLM line manager. During fire mission flights, the incident commander with delegation of authority or the local line officer are the appropriate levels of approval.

5.6 Emergency Exception to Policy

Federal employees who are involved in an event in which there clearly exists an imminent threat to human life, and there is insufficient time to utilize approved methods, may deviate from policy to the extent necessary to preserve life (reference *350 DM 1.3.B*). The following provisions and follow-up actions apply:

- Personnel involved are expected to use good judgment.
- Personnel involved in the decision making associated with deviating from policy must weigh the risks verses benefit.
- Any deviations must be documented on a SAFECOM.

5.7 Categories of Flight

The following terminology is used throughout this section under these definitions.

A **"Point-to-Point"** flight is one that originates at one developed airport or permanent helibase and flies directly to another developed airport or permanent helibase with the sole purpose of transporting personnel or cargo (this term does not apply to flights with a scheduled air carrier on a seat fare basis). These types of flights are often referred to as "administrative" flights and require the aircraft and pilot to be only carded and approved for point-to-point flight. A point-to-point flight is conducted higher than 500 feet above ground level (AGL). Point-to-point missions, when flown in Department owned or contracted aircraft, shall be considered civil aircraft operations and must be flown in full compliance with applicable provisions of 14 CFR.

NOTE: A developed airport is one that is listed in the FAA Sectional or FAA supplement for the geographic area.

A **"Special Use flight"** is defined as any flight other than point-to-point, conducted with the express purpose of performing (or directly supporting) an agency or resource management related task or tactical job such as fire suppression, wildlife census, reconnaissance, etc. These missions require special techniques, procedures and considerations due to increased risks inherent in such operations. Aircraft and pilots must be approved for each specific activity prior to use. Special Use flights require additional agency planning, active flight following, additional pilot and aircraft inspections and carding, and operational supervision by agency personnel (reference *OPM-29*).

5.8 Flight Planning - Unless exempted by *351 DM 1.4*, all flights will be conducted with an approved flight plan. (See also *National Interagency Mobilization Guide* Chapter 20)

Point-to-Point Flights will be tracked by a FAA - visual flight rules (VFR) or instrument flight rules (IFR) flight plan or on an international Civil Aviation Organization (ICAO) flight plan; or in accordance with a Bureau approved flight plan program; or in accordance with an OAS Director approved vendor flight program specified in a DOI procurement document. FAA flight plans may be supplemented by agency flight plans and the administrative tracking and notification procedures specified in the *National and Geographic Area Mobilization Guide*. A qualified flight manager (per *OPM-04*) will be assigned to perform the administrative functions and assure a briefing is given to the pilot and a pre-flight safety briefing is given to the passengers. A 9400-1a Form or other Aircraft Flight Strip (per Dispatch SOP) will be utilized to provide dispatch with the appropriate aircraft and pilot information, a passenger manifest, and an estimated time of departure and arrival.

Special Use Flights: Agency flight plans for fire/emergency mission flights will be documented on the Aircraft Flight Strip (per Dispatch SOP) and/or Resource Order. Agency flight plans for non-fire/non-emergency mission flights will be documented on the 9400-1a Flight Request/Schedule (or equivalent), Aircraft Flight Strip (per Dispatch SOP) and/or PASP. The flight manager and the pilot will plan the mission together. Approval to conduct non-fire/non-emergency mission flights is required prior to flight (see *NAP* 4.3.2). Elements to be considered are:

- Type of mission
- Environmental conditions – departure point, route, destination
- Time frames
- Logistics – fuel, landing areas, equipment, support crew
- Communications
- Airspace, flight hazards
- Aircraft and/or Pilot carding requirements (i.e. ACETA, Low-Level, etc. reference *OPM-29*)

5.9 Flight Following (See also *National Interagency Mobilization Guide* Chapter 20 and *Interagency Standards for Fire and Fire Aviation Operations* Chapter 16)

Sterile Cockpit All Aircraft: Sterile cockpit rules apply within a 5-mile radius of the airport. The flight crew will perform no radio or cockpit communication during that time that is not directly related to safe flight of the aircraft from taxi to 5 miles out and from 5 miles out until clearing the active runway. This would consist of reading checklists, communication with Air Traffic Control

(ATC), Flight Service Stations, Unicom, or other aircraft with the intent of ensuring separation or complying with ATC requirements. Communications by passengers or air crew members can be accomplished when the audio panels can be isolated and do not interfere with flight operations of the flight crew.

Exception: When conducting firefighting missions within 5 miles of an uncontrolled airport, maintain sterile cockpit until departing the traffic pattern and reaching final altitude. Monitor CTAF frequency if feasible while engaged in firefighting activities. Monitor CTAF as soon as practical upon leaving the fire and returning to the uncontrolled airport. When conducting firefighting missions within Class B, C, or D airspace, notify dispatch that ATC communications will have priority over dispatch communications.

Point-to-Point Flight following is accomplished by an authorized flight plan as outlined in *NAP 5.8*. Aircraft on FAA IFR flight plans are continuously tracked via radar. Radar tracking for VFR traffic is not guaranteed, but is available when requested if the controller workload, terrain, and operating altitude allow coverage. The designated flight manager will confirm that the pilot has filed and activated an authorized flight plan and performs several functions associated with the agency flight plan. When utilizing an agency flight plan, the pilot or flight manager will notify Dispatch upon departure, arrival at any interim stops, and arrival at the final destination. The flight following method is documented on the Flight Strip or 9400-1a Form.

Mission Flight Following is accomplished by flight crews and agency dispatchers using positive two-way communication (agency radio systems, satellite telephones, satellite texting), via the internet-based Automated Flight Following (AFF) system, or by agency personnel on the scene of an incident or project where the aircraft is operating.

The method of flight following for fire incidents is documented on an aircraft resource order or in a *Dispatch Center's Mobilization/Operating Guide*. The method for flight following non-fire missions will be documented in a PASP and/or 9400-1a (or equivalent).

Agency Flight Following: Begins with providing the departure time, souls on board (total personnel on the aircraft), quantity/duration of fuel, and heading to next check-in point. Position reports during a mission normally include the aircraft call sign, latitude, longitude, and heading. The default standard check-in for flight following is 15 minutes. If this is not possible, reporting frequency must be established and briefed prior to the mission and position reporting shall not exceed one hour intervals under normal circumstances (reference *351 DM 1.4.B*). If the 15 minute time limitation is to be exceeded, prior approval by the SAM is required (reference *9400*.45.C.2.a).

- In certain circumstances, a position report may be given by some other descriptive location, such as reference to a mission grid-square map, a prominent known landmark, etc.
- Flight following may be conducted by FAA air traffic control if the mission flight is operating within Class B, C, or D airspace, and with prior notification to dispatch.
- Position reports and tactical radio transmissions should not be given when operating within five miles of an airport in the "sterile cockpit" environment.

The BLM standard format for aviation operations is Degrees and Decimal Minutes (DDD° MM.MMM'). Reference BLM *NAP Appendix 4* for additional details. Utilization of the correct format must be discussed between dispatch and the flight crew to assure accurate navigation.
Local/on-scene Flight Following: Local flight following by incident or project personnel may be implemented and utilized only when certain requirements are met and in place (reference *IHOG 4.II.E.2*):

- Local flight follow procedures pre-identified and approved in the 9400-1a or PASP for project operations and in conjunction with Dispatch for tactical operations.
- Flights following procedures and responsibilities have been addressed in pre-flight briefings.
- Methods of flight following are in place and tested, including mandatory communication between designated flight following personnel and dispatch before flight operations begin. Positive communication with Dispatch must be maintained continuously during the operational period.
- A positive, clean "hand-off" must occur between dispatch and the project site when local flight following begins and ends.
- Backup/alternate communication devices are in place, available and tested.
- A reporting interval not to exceed fifteen minutes (or continuous visual contact) is maintained, and the location/status documented on a field radio log.
- Emergency accident and lost communication procedures must be briefed and understood by project flight following personnel, the pilot, flight manager, and dispatch.

Automated Flight Following (AFF): AFF is the preferred method of agency flight following by Dispatch Centers since the aircraft N-number/identifier, position, speed, and heading of each AFF-equipped aircraft is graphically depicted every two minutes. The ability to resume radio flight following will be maintained and utilized in the event the AFF system ceases to function (i.e. agency network internet connection failure or aircraft AFF transmitter failure). Reference the *National Interagency Mobilization Guide*, Chapter 20 for specific direction regarding AFF.

5.10 Radio Frequency Management/Communications

Agency specific policies for radio communications may be found in the *DOI Radio Communications Handbook (377 DM)*.

Do not use any frequency without proper authorization from the authorized radio frequency management personnel at the local, state, regional or national level.

BLM Nevada – BLM Nevada Dispatch Centers will monitor Air Guard and National Flight Following frequencies for proper use as described in *Interagency Standards for Fire and Aviation Operations Chapter 15*.

5.11 Overdue, Missing or Downed Aircraft

An aircraft is considered "overdue" when it fails to arrive within 30 minutes past the estimated time of arrival (ETA) and cannot be located. An aircraft is considered "missing" when its fuel duration has been exceeded, it has been reported as "overdue" to the FAA and the FAA has completed an administrative search for the aircraft without success. If an aircraft is overdue, missing, or downed, initiate the *Interagency Aviation Mishap Response Guide and Checklist* (NFES 2659). It is critical that the response plan is implemented, followed and documented throughout the duration of the event.

5.12 Mishap Response

The *Interagency Aviation Mishap Response Guide and Checklist* outlines appropriate response to a loss of flight following, or an aircraft incident or accident. The plan describes procedures and requirements, including initiation of SAR, fire and medical response, notification of OAS

Safety (1-888-4MISHAP) and BLM management. This guide (or equivalent) is specific to each Unit and shall be available in all Dispatch Offices (reference *352 DM 3.5*). The guide must be updated annually by the date established in the state aviation plan. Dispatch Centers are encouraged to augment the *Interagency Aviation Mishap Response Guide and Checklist* with additional local protocols and notification procedures and are required to test the Plan at least annually through a simulation exercise.

- Timely upward reporting of any confirmed or potential accident or incident is critical. If there is any doubt on how any occurrence might be classified contact your: State Aviation Manager, National Aviation Safety Advisor or the National Division Chief, Aviation (in that order) for clarification.

The *Interagency Aviation Mishap Response Guide and Checklist* is available at: https://www.doi.gov/aviation/library

BLM Nevada:

- Each district will have an *Interagency Aviation Mishap Response Guide and Checklist* updated annually, before May 15th, and with complete BLM notification information. In the event of a missing aircraft or known accident under BLM operational control or an event involving a BLM Nevada aircraft/aircrew, districts are to follow the Mishap Response Guide and Checklist. Immediate notification will be made in order of immediate availability: State Aviation Manager, State FMO or Deputy State FMO and State Director or Associate State Director.
- The SAM will notify the State FMO, NAO Deputy Division Chief. In the absence of the SAM, State FMO, Deputy State FMO or acting will make the contacts. BLM NAO Mishap Notification Tree as well as the NV Serious Incident Notification Chart will be followed.

5.13 Transportation of Hazardous Materials

Transportation of hazardous materials aboard agency contracted aircraft must meet the requirements set forth in the *Interagency Aviation Transport of Hazardous Materials Guide* (NFES1068). The *Interagency Aviation Transport of Hazardous Materials Guide* is available at: https://www.doi.gov/aviation/library/guides

Transport of hazardous materials aboard commercial aircraft must be in accordance with that company's policy.

BLM Nevada – BLM Nevada employees involved in transporting hazardous materials by aircraft will complete the IAT course A-110 "Aviation Transport of Hazardous Materials" and maintain currency every three years. A-110 is available on the *Interagency Aviation Training* website.

5.14 Invasive Species Control

Aquatic invasive species are easily transported in a variety of ways (i.e. helicopter buckets, scoopers, fixed tank helicopters and SEATs utilizing open water sources, fire engines and water tenders, and other water handling equipment). Agency personnel should become knowledgeable in the preventive measures associated with mitigating the spread of aquatic plants and invertebrates. Aviation managers should consult with local unit resource advisors to acquire information associated with: contaminated water sources, approved water sources, cleaning of equipment exposed to contaminated water requirements, and other pertinent information.

Work is underway to develop additional guidance and procedures in the cleaning of equipment that has been exposed to aquatic invasives. Additional operational guidelines for aquatic invasive species can be found in the *Interagency Standards for Fire and Fire Aviation Operations*, Chapter 2.

5.15 Fire Chemicals and Aerial Application Policy near Waterways

Interagency policy only allows the use of a product that is qualified and approved for intended use. A qualified products list (QPL) is published for each wildland fire chemical type and maintained on the Wildland Fire Chemical Systems (WFCS) web site: http://www.fs.fed.us/rm/fire/wfcs/index.htm

Personnel involved in handling, mixing and applying fire chemicals or solutions shall be trained in proper safe handling procedures and use the personal protective equipment recommended on the product label and material safety data sheet (MSDS). The MSDS for each approved fire chemical can be found on the WFSC web site.

Airtanker bases shall have appropriate spill containment measures in place. Consult with the local safety officer on requirements.

Products must be blended or mixed at the proper ratio by approved methods prior to being loaded into the aircraft by authorized personnel.

For operational guidelines on use of fire chemicals and the Policy for Delivery of Wildland Fire Chemicals near Waterways, reference the *Interagency Standards for Fire and Fire Aviation Operations*, Chapter 12.

5.16 Search and Rescue (SAR) (See also BLM *NAP 3.14*)

Agency line officers, managers or an incident commander may direct agency personnel to participate in SAR aviation missions on or over public lands.

- All personnel involved with SAR operations should remain within the scope of their employment.
- Proper planning, risk assessments, and briefing the mission prior to an event will significantly reduce risk and improve the odds of success.
- SAR operations could lead to actions in conflict with DOI policy (reference BLM *NAP 5.6* Emergency Exception to Policy).
- DOI policy (*900 DM 1.10* and BLM *H-1112-1.40.C*) and the *Federal Land Policy and Management Act* (*43.U.S.C. 1742*) provide authority to incur expenses and to take a temporary lead role in any SAR emergencies in which immediate and quick response can save lives.

5.17 Large Airtanker (LAT), Very Large Airtanker (VLAT) and CL-215/415 (Scoopers) Operations

Airtankers are a national resource and their primary mission is initial attack. GACCs mobilize these aircraft according to *National and Geographic Area Mobilization Guides*. In addition to federally contracted airtankers, military airtankers with the Modular Airborne Fire Fighting System (MAFFS) and cooperator aircraft may be utilized to supplement the federal fleet through established agreements.

Operational considerations concerning LAT, VLAT and Scoopers can be referenced in the *IASG*.

5.18 Airtanker Base Operations
The airtanker base manager and/or fixed base manager supervise ground operations in accordance with the *Interagency Airtanker Base Operations Guide* (*IATBOG*).

The *IATBOG* establishes qualifications, certification and currency requirements for BLM..

5.19 SEAT Operations
SEATs are a national resource and their primary mission is initial attack. Mobilization is managed by dispatch centers with support by a national SEAT coordinator and aviation managers. Operational considerations concerning SEATs can be referenced in the *DOI Exclusive Use SEAT SOP's*, *ISOG* and the *IASG*.

SEAT Manager (SEMG) responsibilities are outlined in the *ISOG*, and their training and currency requirements are contained in NWCG PMS *310-1*.

Utilization of remote/satellite SEAT bases must be in compliance with ISOG requirements.

5.20 Foreign Airtanker Operations
The *National Interagency Mobilization Guide* identifies procedures for ordering foreign airtankers. Requests for foreign airtankers will be ordered through the GACC and forwarded on to NICC. In accordance with *351 DM 2.3.C* all airtanker make and models, regardless of nationality, must be Interagency Airtanker Board approved. Each aircraft and pilot(s) will be issued Letters of Approval per the procedures outlined in *351 DM 4.1* and *351 DM 4.4* and the *National Interagency Mobilization Guide*. Operations of foreign airtankers will be consistent with the procedures outlined in the *IASG*.

5.21 Air Attack, ASM and Leadplane Operations
These air tactical resources conduct operations in accordance with the *IASG* and the policies and procedures prescribed in the *Interagency Standards for Fire and Fire Aviation Operations*. Dispatch and ordering procedures are accomplished in accordance with the *Geographic Area and National Interagency Mobilization Guide*.

The IASG, Aerial Supervision Logbook and associated forms are located on the NWCG website: http://www.nwcg.gov/publications

Aerial supervision resources will be dispatched, when available, for initial and extended attack to enhance efficiency and safety of ground and aerial operations. The rapid response speed of aerial supervision aircraft is critical to maximizing initial attack safety, effectiveness, and efficiency. This includes responding to incidents outside of the dispatch zone and GACC boundaries.

The ROSS status of BLM exclusive use air attack aircraft and personnel will be updated daily as GACC available. Aircraft and personnel will be released from incident at the end of each day to be available for IA the following day.

In accordance with *NAP 2.5* BLM Exclusive Use aircraft will be staffed for seven day coverage throughout the contract period. To maintain currency requirements Regular Agency employees

will be prioritized to staff the aircraft in the event the assigned agency employee is not available (days off, etc.).

Air tactical aircraft must meet the avionics typing requirements listed in the *IASG* and the pilot must be carded to perform the air tactical mission.

5.21.1 Aerial Supervision Personnel

Personnel associated with aerial supervision will be trained to the standards in NWCG PMS *310-1* and the *IASG*. Training and qualification requirements for ASM crewmembers are defined in the *IASG*. Individuals performing duties as an ATS or ATP must be certified and authorized by the BLM NAO. ATS's will match days off with the ATP on the aircraft they are an aircrew member on. This is for the purpose of maximizing aircraft and crew availability.

ATGS training and currency requirements are contained in NWCG PMS *310-1*. However, additional currency requirements for BLM ATGS are defined in the *IASG*. The ATGS Cadre monitors and coordinates ATGS personnel and training at the GACC level and coordinates with National Program Managers, SAMs, GATRs, and the ATGS Cadre Chair.

Personnel who are performing aerial reconnaissance and detection will not perform aerial supervision duties unless they are fully qualified as an ATGS and the aircraft is equipped and carded for air tactical operations (reference BLM *NAP 5.27.2&3* for additional information on aerial observation).

5.22 Helicopter Operations

All BLM helicopter operations must be accomplished in accordance with the *IHOG*, unless otherwise waived by the NAO and/or the aircraft contract.

The applicable hover out of ground effect (HOGE) chart will be used to determine payload limits for all BLM helicopter operations for the first time landing into remote landing sites, or when the pilot deems that environmental conditions warrant use of HOGE chart.

BLM Exclusive Use contracted helicopters must meet the daily minimum staffing levels defined by *IHOG* (Chart 2-4), except for weather and 1 hour call back.

Utilization of the R-44 helicopter: Utilization of this model of helicopter shall be addressed in the State Aviation Plan. Additionally, the aircraft user shall review OAS Safety Information Bulletin NO. 05-02 "R-44 Helicopters" prior to ordering. This IB is located at: http://oas.doi.gov/library/ib/library/FY2005/05-02.pdf

BLM Nevada – Use of R-44 helicopters will require a briefing from the local UAM that will include DOI AM Information Bulletin 05-02. **See Appendix 15 for full IB**.

National BLM approval is required for new program requests to host the following:

- Cargo Letdown
- Short-Haul
- Rappel
- Rope Assisted Delivery System (RADS)
- Single-Skid, Toe-in, and Hover Exit/Entry (STEP)

Requests for approval are initiated by a State Office to the NAO with the final approval made by the aviation division chief. The "BLM Aviation Enhancement Application Form" has been developed for these requests (reference BLM *NAP Appendix 12*).

5.22.1 Helitack

All helicopter personnel responsibilities are outlined in the *IHOG*. CWN Helitack training and currency requirements are contained in the NWCG *PMS 310-1* to include the *Federal Wildland Fire Qualifications Supplement*. Exclusive use helitack minimum crew staffing, training and currency requirements are contained in the *Interagency Standards for Fire and Fire Aviation Operations*. Each unit hosting an exclusive-use helicopter is responsible for providing essential management, overhead, equipment, facilities and the resources necessary to fully support the helitack crew.

Host Units are encouraged to increase Helitack Crew size minimum requirements to enhance operational efficiency. Recommended staffing levels:

- Type 3 helicopter – 9 helitack personnel
- Type 2 helicopter – 17 helitack personnel

Hoverfill: BLM Exclusive Use helicopter crews' and aircraft may be allowed to utilize Hoverfill operations. Before an Exclusive Use Helitack Program utilizes hover fill operations, training, risk management, and operational procedures, must be outlined and approved within their Unit Aviation/Helitack Operations Plan.

Helicopter Emergency Longline Last Option (HELLO)

The HELLO mission is defined as transporting a critically injured person from an otherwise inaccessible location using a helicopter longline. HELLO is considered **a last resort option, when other methods are unavailable or cannot respond in the necessary time frame for life preservation.** HELLO can be considered, unitizing available resources in the field, to perform such a rescue, when faced with this type of life-threatening situation HELLO should be performed by exclusive use helicopter programs if possible. The ultimate goal is to get a critically injured patient to definitive care (hospital) by the quickest means available.
HELLO supporting documents can be referenced at:
http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Airops/Helicopters.html

Fire Helicopter Program Strategy:

The fire helicopter program strategy attempts to lay out a path forward into the future for the BLM's helitack programs. The some of the items identified in the strategy are:

- Helitack crew size adjustments to realize the full capability of contract helicopters
    - Type 2 helicopter crew staffing at 17
    - Type 3 helicopter crew staffing at 9
- Part 27 or Part 29 twin engine helicopter into the helitack fleet
- S-70 evaluation proposed for the 2016 fire season,
- Creation of a national helitack standard Operating Procedures (SOP) document

5.22.2 Rappel

Rappel activities will be conducted in compliance with the *Interagency Helicopter Rappel Guide*.

BLM currently does not conduct rappel operations.

5.22.3 Cargo letdown

BLM cargo letdown will be conducted in compliance with the *Interagency Helicopter Rappel Guide* and the BLM Cargo Letdown Protocol (reference BLM *NAP* Appendix 7). BLM personnel involved in cargo letdown operations shall record initial and recurrent training on the BLM Cargo Letdown Trainee Qualification Record (reference BLM *NAP* Appendix 8).

5.23 Aerial Ignition Operations

Aerial ignition operations and projects are accomplished in accordance with the *Interagency Aerial Ignition Guide*.

The DOI On-Call Small Helicopter contract provides for vendor supplied helitorch equipment and mix/load personnel. If a vendor supplied helitorch operation is desired, the CO must be contacted prior to ordering. The CO will negotiate the helitorch services pricing.

5.24 Wild Horse & Burro Operations (WH&B)

Wild Horse and Burro operations will be conducted in accordance with the BLM *WH&B Aviation Management Handbook H-4740-1*, the DOI On-Call WH&B contract and *NAP 4.3.2 Project Aviation Safety Planning*, if conducted as a flight service contract (reference *NAP 3.9* for End Product contract procedures). The WH&B On-Call contract will be absorbed by the ACETA contract by May of 2016. This will do away with the stand alone WH&B contract. Processes are being pursued to eliminate the *WH&B Aviation Management Handbook* and relocate the essentials to the *NAP* by 2017.

BLM Nevada – If BLM Nevada employees will act as aircrew members or passengers during WH&B operations, it must be noted in the Project Aviation Safety Plan and approved according to the Final Risk Level on the associated Risk Assessment. **No agency personnel shall be onboard the aircraft during drive trapping and capture operations**.

5.25 Aerial Capture, Eradication and Tagging of Animals (ACETA)

ACETA will be conducted as per the *ACETA Handbook* and DOI On-Call ACETA contract, if conducted as a flight service contract (reference *NAP 3.9* for End Product contract procedures).

5.26 Smokejumper Operations

Smokejumper dispatch and ordering is accomplished in accordance with the *Great Basin, Alaska and National Interagency Mobilization Guide*.

BLM Nevada – BLM Nevada has satellite jump bases at Winnemucca, Ely, and Stead, along with a reload cache in Elko.

5.26.1 Smokejumper Personnel

Smokejumpers: Smokejumper operations are performed according to the *Interagency Smokejumpers Pilots Operations Guide* (ISPOG) and the policies and procedures prescribed in the *Interagency Standards for Fire and Fire Aviation Operations*.

Smokejumper Pilots: The *ISPOG* serves as policy for smokejumper pilots' qualifications, training and operations.

5.27 Light Fixed Wing Operations

Fixed wing dispatch, ordering, and operations must be accomplished in accordance with state and unit aviation plans. At minimum flights must meet the requirements outlined in *NAP 3.17* for flight scheduling/operations.

BLM Nevada – The primary mission of BLM Nevada aerial supervision aircraft is aerial supervision during active wildland fire suppression activities. These aircraft can be utilized for detection, fire reconnaissance, and resource management flights. If other missions for the aircraft are planned, the District FMO, Duty Officer or Unit Aviation Manager will be the point of contact. Priority use of these aircraft will be given to Initial Attack.

5.27.1 Low-level Flight Operations (Less than 500' AGL)

The only fixed-wing aircraft missions authorized for low level operations are:

- Smokejumper/para-cargo
- ASM and lead operations
- Retardant, water and foam application
- Seeding/spraying
- Other missions approved by a PASP (i.e. resource recon <500' AGL)

Operational Procedures:

- Fixed-wing aircraft and pilots must be specifically approved for low-level flight operations.
- No passengers are allowed. Non-pilot participants must be qualified as Aircrew Member.
- A high-level recon will be made prior to low-level flight operations.
- All flights below 500 feet will be contained to the area of operation.
- PPE is required for all fixed-wing; low-level flights (reference *ALSE Handbook*). Flight helmets are not required for multi-engine airtanker crews, smokejumper pilots, Leadplane and ASM flight/aircrew members.

5.27.2 Fire Reconnaissance or Patrol flights

The purpose of aerial reconnaissance or detection flights is to locate and relay fire information to fire management. In addition to detecting, mapping and sizing up new fires, this resource may be utilized to describe access routes into and out of fire areas for responding units. Only qualified aerial supervisors (ATGS, ASM, HLCO and Lead/ATCO) are authorized to coordinate aircraft operations in incident airspace and give tactical direction to aviation assets. Flights with a "recon, detection or patrol" designation should communicate with tactical aircraft only to announce location, altitude and to relay their departure direction and altitude from the incident.

Required Training: Completion of A-100 Basic Aviation Safety

5.27.3 Non-Fire Reconnaissance/Aerial Observer

BLM non-fire fixed wing mission flights require that at least one agency person on that flight or at the departure/arrival base meet the IAT requirements of flight manager. Agency personnel must meet IAT requirements for Fixed Wing Flight Manager or NWCG comparable position. Reference *OPM-04* at: https://www.doi.gov/aviation/library

5.27.4 Single Engine IFR/Night Flight

For single engine night flight reference *351 DM 1.3*.

5.27.5 Backcountry Airstrip Operations

Reserved

5.28 Law Enforcement Operations (LE)

LE personnel involved in any aviation operation will adhere to DOI and Bureau aviation policy. Local LE personnel that are required to utilize aircraft to support LE operations shall discuss all aspects of the operation with the UAM or SAM, well in advance of operations. The BLM SAM must be briefed on all BLM law enforcement involvement in Short-Haul missions occurring within their state. The UAM will review all LE PASPs prior to commencing operations. Line officers shall be informed of LE aviation activities within their area of responsibility.

LE personnel involved with aviation activities shall receive and be current in required aviation training (NWCG and/or IAT) commensurate with the aviation position they will fill, prior to any aviation operations.

LE personnel will utilize aircraft and pilots that have been approved by OAS (carded/LOA/MOU) for the intended use.

Aircraft contracted for fire/resource operations are allowed to conduct non-threatening surveillance and reconnaissance law enforcement missions only.

- Certain LE operations could lead to actions in conflict with DOI policy; (reference BLM *NAP 5.6* Emergency Exception to Policy).
- Certain exceptions to policy for undercover Law Enforcement operations are addressed in *351 DM 1.6.D*.

BLM Nevada – BLM law enforcement may engage in aviation operations, typically with cooperator agencies such as County Sheriff Departments, State of Nevada, US Drug Enforcement Agency, and Nevada National Guard. The work and environment is dynamic in nature and requires attention to standard operating procedures, proficient mission planning and continual evaluation and control of the inherent hazards/risks.

5.29 Unmanned Aircraft Systems (UAS) (see also BLM *NAP 3.16*)

Minimum Operational Requirements: The following requirements must be met prior to any operational use of UAS:

- COA: A valid and current COA issued by the FAA or following the requirements established within the DOI/FAA MOA.

- A PASP will be completed by the UAM and project manager prior to flight operations, after the COA has been approved. The PASP will include stipulations identified in the approved COA. For those UAS flight operations under the MOA, stipulations contained within MOA will be included in the PASP. The National Program Manager will review all UAS PASPs.

DOI UAS Pilot Qualification Card: The following requirements must be met prior to piloting a UAS:

- DOI UAS Pilot Operator Training Requirements: DOI UAS Pilots must receive training with the specific aircraft to be flown. OAS will identify appropriate training, in conjunction with FAA regulations. Pilots must possess training certificates from OAS or OAS-approved sources prior to receiving OAS certification as a DOI UAS Pilot.

- Other DOI UAS Pilot Requirements: Other requirements (to be determined by OAS) may include FAA pilot certificate and FAA medical exams.
- The OAS UAS Coordinator will issue a DOI UAS Pilot Qualification Card that specifies the approved UAS aircraft that the Pilot is approved to fly.

Emergency UAS Operations:

- Personally owned UAS or model aircraft **may not** be used by federal agencies or their employees for interagency fire use.

- An emergency COA can only be issued by the FAA if the agency already has an existing COA for their aircraft.

- The request must be accompanied with a justification that no other aircraft exist for the mission and that there is eminent potential for loss of life, property, or critical infrastructure, or is critical for the safety of personnel.

- Cooperators, pilot associations and volunteer aviation groups or individuals may offer to fly unmanned aviation missions (i.e. aerial surveys, fire reconnaissance, infrared missions, etc.) at no charge to the IMTs. Although these offers seem very attractive, we cannot accept these services unless they meet FAA, USFS/DOI policy.

Interagency Fire use of UAS: Reference *Interagency Standards for Fire and Fire Aviation Operations*, Chapter 16 for protocols regarding utilization of UAS on federal wildfire: http://www.nifc.gov/policies/pol_ref_redbook.html

5.30 Fleet Aircraft

The BLM currently operates six Fleet aircraft. N49SJ, N190PE, N32PX, N437CC, N618 and N700FW are DOI owned aircraft operated by the BLM.

- N49SJ is a De Havilland DHC-6 Twin Otter; the primary mission is smokejumper delivery. BLM NAO provides overall management of the aircraft. The aircraft is assigned to the Great Basin Smokejumpers, in Boise.
- N190PE is a Pilatus PC-12; the primary mission is utility and fire logistics support. BLM NAO provides overall management of the PC-12. The aircraft is assigned to Alaska Fire Service a portion of the year and Boise NAO the balance of that year.
- N32PX is a Cessna 206; the primary mission is as a utility aircraft. The BLM Alaska-Office of Law Enforcement and Security will have primary use of the aircraft through the calendar year flown by dual function special agent/ranger-pilots. The management of the aircraft will fall under the BLM Alaska Aviation Office with mission management under AFO/AKSO and South Zone Dispatch Center.
- N437CC is a CubCrafters CC-18-180 Top Cub. The primary mission is as a utility aircraft. The BLM Alaska Office of Law Enforcement and Security will have primary use of the aircraft through the calendar year and flown by dual function special agent/ranger-pilots. The management of the aircraft will fall under the BLM Alaska Aviation Office with mission management under FDO/AKSO and South Zone Dispatch Center.
- N618 is a Beechcraft Super King Air B200; the primary mission is ASM/Lead plane operations. BLM NAO maintains overall management responsibility. The aircraft is assigned to the National Aviation Office.
- N700FW is a Quest Kodiak K-100; the primary mission is utility and fire logistics support. BLM NAO provides overall management of the K-100. The aircraft is assigned to Alaska Fire Service a portion of the year and Boise NAO the balance of that year.

BLM fleet aircraft are operated in accordance with the *BLM Fleet Aircraft Standard Operations Procedures Guide* (reference BLM *NAP Appendix 10*).

5.31 Non-Federally Approved Aircraft

Reference *Interagency Standards for Fire and Fire Aviation Operations*, Chapter 16 for protocols regarding utilization of non-federally approved aircraft in response to federal wildfire: http://www.nifc.gov/policies/pol_ref_redbook.html

5.32 Snow Operations

All snow operations will be conducted per Departmental Policy. *351 DM1.3 J(4)* Snow Operations, *351 DM1.6* Special Operations (A) Cold Weather & *351 DM 1.7* Special Use Activities.

6.0 Aviation Training

6.1 General

Aviation training is essential to ensure that BLM maintains a safe and efficient aviation operation in pursuit of the Bureaus mission. Aviation users, supervisors, and managers need to make certain that they and their employees are knowledgeable of the inherent hazards of aviation operations and have been provided the necessary skills, training and equipment to be successful conducting aviation operations. There are two separate, but linked, training programs for BLM Aviation; NWCG curriculum (fire) and Interagency Aviation Training (IAT) non-fire curriculum.

6.1.1 Fire Training and Qualifications

The National Wildland Coordinating Group's (NWCG) guides the fire and fire aviation qualifications. Personnel serving in NWCG positions need only meet the qualification and currency requirements required in the *National Incident Management System, Wildland Fire Qualifications System Guide* (NWCG PMS *310*-1), or other interagency guidance as appropriate (smokejumper spotter, ATS, ATGS, Lead/ASM pilot, BLM Exclusive Use Helitack, etc.).

BLM agency-specific qualifications not in the *PMS 310-1* can be found in the *Federal Wildland Fire Qualification Supplement*.

6.1.2 Aviation Training for Non-Fire Flight Activities and Positions

The DOI Aviation User's Training Program (IAT) regulates the "non-fire" aviation training requirements for Bureau personnel. Individuals holding a current qualification under the Incident Qualification Certification System (IQCS) may also be qualified to perform some equivalent non-fire aviation positions under IAT guidelines and do not require additional IAT training. Reference: One-Way NWCG Position to IAT Position Crosswalk located within *Interagency Aviation Training (IAT) Guide.*

Training requirements for non-fire aviation positions are located in *OPM-4.* A description of each position and role can be found in the Interagency Aviation Training (IAT) Guide.

For BLM Smokejumper specific non-fire positions reference BLM *NAP Appendix 9* (BLM Smokejumper Positions to Interagency Aviation Training (IAT) Functional Crosswalk).

Aircrew Member: An Aircrew member is a person working in and around aircraft who is essential to ensure the safety and successful outcome of the mission. Aircrew Members are required to:

- Be on board or to attend to the loading and unloading of passengers and cargo at all landings and takeoffs
- Attend to external loads
- Ensure all passengers have received a safety briefing prior to all flights.

Required training:

- A-100* Basic Aviation Safety (required in classroom for initial training)
- A-110 Aviation Transportation of Hazardous Materials (if involved in transport of Hazardous materials)
- A-116 General Awareness Security Training (one time)
- A-200* Mishap Review

*Required every three years

An employee may be authorized to complete the initial Aircrew Member training on-line, on a case-by-case basis and at the discretion of the SAM. A written request must come from the employee's supervisor to the SAM explaining why it is not feasible to attend and complete a classroom A-100 Basic Aviation Safety course prior to the day of the mission.

BLM requires that personnel involved with helicopter external load operations must comply with the following:

- All personnel involved in hover hook ups must complete S-271 Helicopter Crewmember or A-219 Interagency Helicopter Transport of External Loads.
- All personnel involved in long line work must be either:
  - Currently qualified as a Helicopter Crewmember (HECM) **or**;
  - Currently qualified as an aircrew member and completed A-219 Units 1-4 & 6.
- Documentation for non-fire personnel, indicating the completion of the required training to perform external load work must be maintained at the interagency aviation training website: https://www.iat.gov/
- *OPM-04* does not require any recurrent training for A-219 although refresher training conducted by a currently qualified person is strongly recommended prior to engaging in longline or hover hook ups.

BLM Pilot – Fleet (2101, 2181 position series) & Incidental/Dual Function:

All pilots will be entered into a pilot training program approved by the BLM Division Chief, Aviation.

All DOI-BLM Pilots must successfully complete the following training prior to receiving flight authority and participating as a Pilot on DOI-BLM missions:

- A-100 Basic Aviation Safety
- A-107 Aviation Policy and Regulations I
- A-110* Aviation Transportation of Hazardous Materials
- A-112 Mission Planning and Flight Request Process
- A-115 Automated Flight Following

Initial training required within 12 months of employment as a pilot:

- A-200** Mishap Review
- A-202 Interagency Aviation Organizations
- A-205 Risk management I
- A-208 Aircraft and Pilot Approval
- A-302 Personal Responsibility & Liability
- A-303 Human Factors in Aviation
- A-305 Risk Management II
- A-307 Aviation Policy and Regulations II
- A-310 Overview of Crew Resource Management
- A-312 Water Ditching and Survival (must be completed before overwater flight)

All courses one time completion unless noted
*Required every three calendar years
**Complete the most current available by end of each calendar year

Additional information on manned, Pilot – Training Program can be referenced within OPM-22.

6.2 Management Responsibility
Supervisors and managers are those individuals that have management or supervisory oversight responsibilities for programs using aviation resources for mission accomplishment.

6.2.1 Supervisory Personnel
A person who supervises employees that use aircraft to accomplish Bureau programs (first and second level supervisors.

Required Training:
- *M-3 Aviation Management for Supervisors (initial course either in a classroom or online)
- *A-200 Mishap Review

*Required every three years

6.2.2 Line Managers
Line managers are those individuals who are responsible and accountable for using aviation resources to accomplish BLM programs.

Required Training:
- *M-3 Aviation Management for Supervisors (initial course either in a classroom or online) **or**;
- *M-2 DOI Aviation Management for Line Managers briefing

*Required every three years

6.2.3 Aviation Managers at the Local, State and National Level
Individuals with aviation management responsibilities for a unit, state, regional or national level and serve as a focal point for aviation services and management. These include such positions as unit aviation managers (UAM/UAO), state, regional and national program managers, and helicopter and fixed-wing operations specialists. Training requirements can be found in the IAT Guide.

6.2.4 Aviation Contracting Responsibilities COR Training Requirements
BLM CORs and alternate CORs, on BLM exclusive use contracts, are required to have training in DOI aviation policy, basic contract administration, and contract performance verification and understanding technical aspects of contracts. Initial and recurrent COR training requirements can be found in the DOI *COR Manual* or obtained from AQD contracting officers. CORs are required to be registered in the Federal Acquisition Institute Training Application System (FAITAS) and be certified as a COR by the Federal Acquisition Institute before performing the duties of the position on a DOI contract. FAC-COR initial requests and renewal/maintenance requests should be submitted through the Lead Acquisition Official in the State for submission to the Bureau Procurement Chief in WO. These should not be submitted directly to DOI.
http://www.fai.gov/drupal/certification/fac-cor

6.2.5 Contractor and Cooperator Pilot Training
BLM aviation managers at all levels are responsible for assuring that contractors and cooperators are provided adequate briefings of mission requirements, standards and

procedures. This may be accomplished through classroom training, computer-based training, simulations, pre-work conferences, aircraft and pilot inspections, pre-flight briefings or other appropriate venues.

6.2.6 Pinch Hitter Training

Pinch Hitter training is encouraged to be completed by aviation personnel whose primary job requires extended flight time as an aircrew member, spotter, ATGS or reconnaissance duties. Requests for training should be routed via your immediate supervisor to your respective State Aviation Manager (SAM).

6.3 Instructor Standards

Standards for NWCG Instructors are outlined in NWCG *PMS 901-1 Field Manager's Course Guide*. Reference: http://www.nwcg.gov/pms/training/fmcg.pdf

Instructors for IAT courses will meet the IAT trainer requirements of the *Interagency Aviation Training Guide*. Reference: https://www.iat.gov/docs/IAT_Guide_2014_0331.pdf

6.4 Development

The NAO offers an Aviation Leadership Development Initiative (ALDI) opportunity for aircraft managers and unit aviation managers. This opportunity is available to GS-7 to GS-9 individuals who currently have aviation management responsibilities along with an interest in a career in aviation management. An Instruction Memorandum is issued periodically informing potential candidates of the opportunity and application process.

Aviation/Pilot and Pilot Mentor Developmental Program: The NAO has two separate Aviation/Pilot Developmental Programs that provide training for employee development in the aviation manager and pilot career paths. The objective for these positions is to develop well qualified aviation managers and pilot candidates with the necessary skills and background to compete for interagency aviation vacancies at the state and national level. These opportunities are for BLM employees that meet the requirements of 351 DM 3.2 and have identified career goals in flight operations. These programs are filled on an as needed basis and as candidates are identified.

7.0 Airspace Coordination

7.1 Interagency Airspace Coordination

Interagency airspace coordination is accomplished through the Interagency Airspace Subcommittee (IASC) charted under the NIAC. Guidance and education is provided through the *Interagency Airspace Coordination Guide* (IACG).

7.2 Flight Planning, Hazards and Obstructions

It is the pilots' responsibility to plan the flight. It is the flight managers' responsibility to provide information to the pilot for the project area and mission objectives. It is the aircraft dispatcher's responsibility to inform the aircrew of "boundary airspace" issues and coordinate with neighboring dispatch centers (reference Airspace Boundary Plan, this chapter). State/districts are responsible to develop area flight hazard maps or planning tools that are posted at: operating bases, aircrew briefing packages, and dispatch office. The following hazards or locally significant areas should be depicted:

- Military Airspace – Warning Area (WA), Restricted Area (RA), Military Operations Area (MOA), Alert Area (AA), Prohibited Area (PA), Military Training Routes (MTRs), Controlled Firing Areas (CFA), Slow Routes (SR), Aerial Refueling Routes (ARs) and Low Altitude Tactical Navigation (LATN) Areas.
- Airspace – Class B/C/D and National Security Areas
- Airports/airstrips – public and private, military
- Dispatch zone boundaries
- Parachute, hang glider, rocket, model airplane operating areas
- Towers over 200 feet. Other towers as locally determined significant
- Wires – Major transmission lines, other lines determined locally as significant (wires crossing – canyons, rivers, lakes, near airports)
- Update/Revision date

BLM Nevada – The SAM will ensure flight hazard briefing maps are current and available for BLM Nevada districts. UAMs will be responsible for obtaining these maps for their units.

7.3 Fire Traffic Area (FTA)

The FTA provides agency communication protocol through a standardized structure to enhance air traffic separation over wildfire or All-Risk incidents. The structure emphasizes established communications, clearances and compliances. See the *IASG* Chapter 4 for details:

7.4 Temporary Flight Restriction (TFR)

In order to enhance safety during an incident, the FAA may be requested to issue a TFR that closes the airspace to non-participating aircraft (with some exceptions). While there are currently nine different types of TFR's, the most commonly issued TFR for wildfire is 14 CFR 91,137 (a) 2 which is explicit as to what aviation operations are prohibited, restricted or allowed. Aviation Managers requesting a TFR should be familiar with the ordering procedures, coordination protocol and exceptions that are outlined in Chapter 6 of the *Interagency Airspace Coordination Guide*. TFR's are not authorized by the FAA for resource management projects. A NOTAM D may be requested through the aircraft dispatcher at a local GACC who will contact the local Flight Service Station (FSS).

Non wildfire TFRs are under the jurisdiction of the FAA. All participants involved with an "all risk" TFR should be acquainted with the FAA's publication "FAA Airspace Management Plan for Disasters" located at:
http://www.airspacecoordination.org/files/FAA%20AMP%20for%20disasters%20pdf%20version%20for%20website.pdf

Presidential TFR's (91.141) involve a set of 30 nautical miles and 10 nautical miles Temporary Flight Restrictions. Flights within the Presidential TFR's require coordination well in advance of the TFR implementation. For further information, contact the National BLM Airspace Program Manager

7.5 National Firefighting Aircraft Transponder Code (1255)

The FAA has provided the **1255** transponder code as the national designation for firefighting aircraft. It is not agency specific. The code must be utilized by aircraft responding to and operating over fire incidents supporting suppression operations unless otherwise directed by air traffic control (ATC). It is not to be used for repositioning or during cross-country flights. It is authorized specifically for firefighting and is not to be used for FEMA or all-risk disasters.

7.6 Airspace Boundary Plan

When resources are dispatched by multiple units to an incident or area that shares a common boundary, care should be taken to ensure safe separation and communication of responding aircraft. Boundary Plans should be prepared that focus on a 10 NM wide "neutral airspace" corridor for mutual or exchanged initial attack area's or zones. Agencies conducting flight activity within the boundary corridors should implement notification procedures to adjoining agencies and cooperators (reference *IACG* Chapter 7 for details).

7.7 Airspace Deconfliction

While the word "deconflict" is not in the dictionary, it is a commonly referred aviation term describing the process of reducing the risk of a mid-air collision or a TFR intrusion. Airspace deconfliction can occur for both emergency response and non-emergency aviation activities.

Deconfliction can be accomplished through the following measures:
Pilots must obtain all information pertinent to flight before flying. This is accomplished by obtaining a briefing from the FAA through the Flight Service Stations. This is the official source of NOTAM information.

Dispatching units may obtain scheduling information from DOD units that have special use airspace or military training routes and share this information as "hazards" information on the resource order when the aircraft are dispatched. For non-emergency flights, information may be shared through common communication protocol.

Aviation Internet websites are prolific on the internet. When used for obtaining airspace information, the user must be aware of any disclaimers regarding the timeliness of the information posted. The FAA's U.S. NOTAM office provides current TFR information through DOD Internet NOTAM Service (DINS) at: https://www.notams.faa.gov/dinsQueryWeb/ and www.faa.gov

7.8 Airspace Conflicts

Aviation personnel have a responsibility to identify and report conflicts and incidents through the Interagency SAFECOM System to assist in the resolution of airspace conflicts. When a conflict or incident occurs, it may indicate a significant aviation safety hazard. Conflicts may include near mid-air collisions (NMAC), TFR intrusions, and FTA communication non-compliance. Further guidance is available in the *Interagency Airspace Coordination Guide, Chapter 8.*

7.9 Operations along Foreign Borders

All aircraft operations along border patrol zones require coordination with the U.S. Border Patrol. The Dispatch Centers with foreign border zones will have an operational plan detailing the coordination measures with the U.S. Border Patrol Air Marine Operations Center (AMOC). All pilots and aircrews will be briefed about border zone flight procedures.

7.10 Airspace Agreements – Memorandums of Understanding

When Special Use Airspace (SUA's), MTR's, Slow Routes (SR's), or Aerial Refueling Routes (AR's) are located over lands within an agency's jurisdiction or within their area of normal flight operations (fire or non-fire), the agency should consider instituting an agreement with the appropriate DOD entity that schedules the airspace. Airspace agreements establish protocol for emergency and non-emergency contacts. They provide local level leadership a tool that defines protocols to address recurring activities, coordination of time critical responses, deconfliction and resolving issues in a timely manner.

The BLM states may establish agreements with military airspace authorities to coordinate BLM flight activities.

A template and sample format is provided in the *Interagency Airspace Coordination Guide, Chapter 12*.

BLM Nevada – BLM Nevada has a Letter of Agreement (LOA) with the Utah Test and Training Range (UTTR), Nellis Test and Training Range (NTTR), Fallon Naval Air Station, and Mountain Home Air Force Base. The LOA details specific requirements for BLM controlled aircraft to enter special use airspace. Reference the specific MOU for further information.

7.11 Emergency Security Control of Air Traffic (ESCAT)

ESCAT may be implemented due to an air defense emergency as directed by the North American Aerospace Defense Command (NORAD). Reference *Interagency Airspace Coordination Guide,* Chapter 4 for details.

8.0 Aviation Security – Facilities/Aircraft

8.1 Aviation Security Policy

The policies and procedures in this chapter are intended to make the theft of BLM aircraft more difficult and time consuming and therefore an unattractive target to potential criminals or terrorists. The BLM security program includes the following elements:

Department of Interior Security Policy: Departmental Manuals *444-1* and *352 DM 5* set forth the security requirements for all DOI aviation facilities and assigned aircraft. Reference DOI *Aviation Security Policy 352 DM 5*: http://elips.doi.gov/ELIPS/DocView.aspx?id=1107

Scope and Applicability

- To the extent applicable, the policies and procedures established herein are intended to supplement the minimum physical security standards detailed in *444 DM 1*, *Appendix A*. Nothing in this chapter reduces the requirements prescribed by *444 DM 1*, Physical Protection and Building Security, or any other requirement established by law or authority as it pertains to DOI aviation operations.
- The policies and procedures established herein are applicable to all BLM aviation facilities and aircraft owned or controlled by the DOI.
- Contractors are solely responsible for the security of their aircraft while under the control of the DOI. All DOI aviation contracts will include language describing the DOI aviation security policies applicable to contractor operations and require contractor compliance with those policies.

Definitions:

The term "aircraft operations area" (AOA) means the area within an aviation facility in which flight-capable aircraft are present for any purpose, including but not limited to the loading or unloading of cargo or passengers, refueling, maintenance, parking and storage.

The term "aviation facility" means any DOI owned or controlled real property used for aircraft landing and takeoff at which DOI owned or controlled aircraft are permanently based **(Greater than 180 days).**

The term "control" is used in two contexts.

- As it relates to aviation facilities, the term "control" refers to the condition existing when a BLM entity has authority to institute, modify or otherwise effect physical security changes at an aviation facility regardless of property ownership.
- As it relates to aircraft, the term "control" means "operational control" as defined in the Federal Aviation Regulations at 41 CFR 1.1: "Operational control with respect to a flight means the exercise of authority over initiating, conducting or terminating a flight." This definition is independent of aircraft ownership.

The term "dual-lock method" means using a combination of two locking devices or methods to physically secure or disable a parked aircraft for the purpose of reducing the probability of aircraft theft and associated misuse by unauthorized persons.

The term "risk assessment" refers to the result of a combined threat and vulnerability assessment. It can generally be characterized as an analysis of the probability of serious impact or damage resulting from a known or postulated threat successfully exploiting on or more vulnerabilities.

Risk Assessment
A "risk assessment" will be conducted for each BLM aviation facility (see definition above). Each aviation facility risk assessment will be periodically reexamined and adjusted as necessary to ensure it accurately reflects current conditions. At a minimum, reexaminations shall be conducted and documented every 2 years.

Security Plans
Security plans will conform to the following conditions:

- The *"Field Reference Guide for Aviation Security for Airport or other Aviation Facilities" (AAF)* is intended to provide a standardized method of assessing aviation airport facilities. Each unit is encouraged to utilize this written document to identify the appropriate level of security planning needed. https://www.doi.gov/aviation/library/guides
- Individuals preparing aviation facility security plans can reference the TSA "*Security Guidelines for General Aviation Airports"* TSA Information Publication A-001, which is available on the TSA Website at www.tsa.gov
- The scope and depth of the aviation facility security plan should be commensurate with the size and operations complexity of the facility for which it is prepared.

BLM Nevada – All BLM Nevada districts are responsible for completing the sections within the *DOI Field Reference Guide for Aviation Security for Airports or other Aviation Facilities (AAF)* on an annual basis. A copy of the completed document will be kept by the UAM and forwarded to the SAM.

Training
Employees (aircrew member minimum) involved in the control or use of aviation resources or facilities shall complete the appropriate level of aviation security training. A-116 General Awareness Security Training is available at www.iat.gov

BLM Specific Policy/Guidance:

BLM HSPD12 Policy:
http://www.blm.gov/ut/st/en/res/efoia/instruction_memorandums/2008/im_no__ut_2008-029.html

Aviation Security Questionnaire:
http://www.blm.gov/pgdata/etc/medialib/blm/nifc/aviation/security.Par.72738.File.dat/SecurityQuestions.doc

8.2 USFS Facilities Security Assessments
Reserved

8.3 USFS Security Response Actions
Reserved

8.4 General Aviation Security Awareness Programs

The BLM utilizes the AOPA Airport Watch Program for Security Awareness: http://www.aopa.org/airportwatch/

The Department of Homeland Security (DHS) TSA implemented a national toll free hotline that the general aviation (GA) community can use to report any "out-of-the-ordinary" event or activity at airports. The hotline is operated by the National Response Center and centralizes reporting to the appropriate local, state and federal agencies.

To report any suspicious activity at your airport- Call (866) *GA-SECURE* (866) 427-3287

8.5 Cooperators Aircraft Security

Military or government agency cooperator aircraft under DOI operational control shall adhere to their department-specific aircraft security policies.

8.6 Aircraft Physical Security Requirements

At any time an aircraft, controlled or owned by the DOI, is not directly attended by its assigned flight crew, ground crew, or government managers, it will be physically secured in a manner that disables the aircraft from being utilized.

Exceptions

- Military or government agency cooperator aircraft under DOI operational control. Such cooperator aircraft shall adhere to their department-specific aircraft security policies.
- Aircraft mechanically incapable of flight.

Security Devices: The DOI aircraft contracts specify the aircraft security measures and it is the contractors' responsibility for the aircraft security. Approved security devices require using a dual lock method consisting of any combination of anti-theft devices attached to the aircraft for the sole purpose of locking flight controls, aircraft power, or directional ground movement. Pilots and aircrews must be diligent in pre-flight procedures to prevent engine start up with security measures in place. These may include any combination of the following:

- Locking hanger doors
- Keyed Magneto, starter or master switch
- Hidden battery cut-off switches
- Throttle, mixture/fuel, fuel cut-off locks
- Control surface gust-locks; propeller locks (chain, cable, mechanical) - **(airplane only)**
- Locking wheel, chock or aircraft tie downs
- "Club-type" devices for control yoke

8.7 Aviation Facility Security Requirements

Security risk assessments will be performed on all BLM aviation facilities, temporary bases and aviation airport facilities (AAF) which meet the definition of "aviation facility", using the *DOI Field Security Guidelines for General Aviation*.

- Completed assessment should be housed within the unit's aviation plan as an appendix or chapter.

Aviation Facility Security – Suggested Enhancements

After completing the AAF Airport Characteristics Measurement tool and determining your facilities total score, reference the *Suggested Airport Security Enhancements template* included within the *Field Reference Guide for Aviation Security for Airport or other Aviation Facilities (AAF) pg. 6.*

- The total score obtained from the Airport Characteristics Measurement Tool is considered minimum mandatory security requirements.

For a more in depth list of suggested airport Security Enhancements reference TSA Information Publication A-001, *Security Guidelines for General Aviation Airports*, Appendix B: www.tsa.gov

Suggested area enhancement may include:

Signage

- Signage should be multi-lingual where appropriate.

Lighting

- Lighting type and illumination levels will comply with published Illuminating Engineering Society (IES) standards and will not supersede standard aviation guidelines governing runway lighting and nighttime flight requirements.

Fencing

- Install perimeter security fencing as needed to control access to the AOA and all other sensitive areas.
- Fence height and other characteristics will comply with standard FAA guidelines where appropriate. Where FAA guidelines are not available, minimum fencing characteristics will be sufficient to meet access control needs.

Access Control

- The number of access points should be minimized and their use and conditions regularly monitored.
- Any access point through a fence or other boundary should not only be able to control or prevent access, but also differentiate between an authorized and an unauthorized user.
- Anti-pass back, anti-piggyback and anti-tailgating systems or protocols should be implemented where appropriate.
- Gates when appropriate should be constructed and installed to the same or greater standard of security as any adjacent fencing in order to maintain the integrity of the area.
- Pedestrian/personnel gates can be constructed using a basic padlock or designed with an electrical or mechanical locks or keypad/card system.

8.8 Exceptions

If facility ownership or control constraints preclude full implementation of the identified minimum mandatory security requirements, notification must be immediately given to the NAO in writing.

- Written notification will detail the minimum mandatory security requirements(s) which cannot be implemented and the circumstances preventing the implementation. A waiver of the requirements may be requested.
- Pending the response, the facility will comply with *352 DM 5.10*, “Aircraft Physical Security Requirements.”

8.9 Transportation Security Administration (TSA)

BLM employees who are traveling on commercial airlines are personally responsible for compliance with TSA and DOT hazardous cargo regulations.

9.0 Aviation Facilities

9.1 General
All BLM aviation support facilities will be constructed, maintained, and operated in compliance to applicable regulations/direction of DOI, BLM, FAA, OSHA and lease agreements.

9.2 Aviation Facilities (Permanent and Temporary)
BLM has permanent and temporary airbases managed by the districts/field offices. Permanent air bases include heavy airtanker and SEAT retardant bases, and airplane and helibase/heliport facilities with permanent or temporary fixtures that are used on a continuous or seasonal basis. These aircraft bases of operations include government owned or leased aviation facilities on federal or non-federal land where BLM has primary responsibility for operations, maintenance and oversight. Facility base reviews shall be conducted in accordance with the *Interagency Helicopter Operations Guide (IHOG), Appendix E; Interagency Airtanker Operations Base Guide (IATOBG), Chapter 5 Section B*; and *Interagency Standards for Fire and Fire Aviation Operations, Chapter 18,* as appropriate.

9.3 Temporary Operations Bases
Temporary operations bases are those that are used to support short term projects and wildland fire. These bases can be located on federal, state, local government or private land. Permission to operate on the land should be obtained prior to use. Land use agreements may have to be set up describing payment terms, use limitations and land restoration measures. For wildland fire operations the NWCG *Interagency Incident Business Management Handbook* chapter 20 (24.2) describes procedures. Only procurement officials with warrant authority may enter into agreements. For non- wildland fire situations the state/district procurement official is the point of contact for agreements.

BLM Smokejumper Bases: The BLM Smokejumpers primary operations bases are Fairbanks, Alaska, and Boise, Idaho. Each smokejumper base has multiple sub-bases that are established to support smokejumper operations on as-needed basis. Some sub-bases are located in BLM owned facilities and some are leased.

9.4 Safety
Aviation facilities must comply with safety regulations described in DOI manuals, guides and handbooks, and the Occupational Safety and Health Administration (OSHA). Buildings, equipment and aircraft operating surfaces (helibase, airplane parking and retardant base) will be inspected annually for safety and maintenance deficiencies, by the unit aviation manager and/or unit health and safety officers.

9.5 Permanent Facility Construction Planning/Funding and Maintenance
Reference *BLM Manual 9100 - Engineering*

9.6 BLM Owned/Operated Airstrips
Reference the document titled *Recreational Airstrips on Public Lands* located at: http://www.blm.gov/nifc/st/en/prog/fire/Aviation/avlibrary.html

Appendix Contents

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7. BLM Cargo Letdown Protocol
8. BLM Cargo Letdown Trainee Qualification Record
9. BLM Smokejumper Positions to Interagency Aviation Training (IAT) Functional Crosswalk
10. BLM Fleet Aircraft Standard Operations Procedures
11. Task Sheet for the Position of Resource Helicopter Manager
12. BLM Aviation Enhancement Application Form
13. Acronyms
14. Nevada PASP Supplement
15. DOI Aviation Management Information Bulletin 05-02 (from section 5.22)

Appendix 1 - BLM National Aviation Organization Directory

Position	Name	Duty Station	E-Mail	Office Number	Cell Number
Division Chief, Aviation (FA-500)	Rusty Warbis	Boise, ID	rwarbis@blm.gov	(208) 387-5448	(208) 867-0323
Deputy Division Chief, Aviation	Brad Gibbs	Boise, ID	bgibbs@blm.gov	(208) 387-5182	(208) 863-6219
SEAT Program Manager	Glen Claypool	Boise, ID	gclaypoo@blm.gov	(208) 387-5160	(208) 859-7506
Flight Operations Manager, Bravo 8	Don Bell	Boise, ID	dbell@blm.gov	(208) 387-5185	(541) 604-1043
Helicopter Program Manager	Bryan Bitting	Boise, ID	bbitting@blm.gov	(208) 387-5173	(208) 407-6440
Aviation Safety/ Training Advisor	Kirk Rothwell	Boise, ID	mrothwell@blm.gov	(208) 387-5879	(208) 914-8483
Airspace Program Manager	Julie Stewart	Portland, OR	j5stewar@blm.gov	(503) 808-6728	(503) 780-0097
Air Attack & UAS Program Manager	Gil Dustin	Boise, ID	gdustin@blm.gov	(208) 387-5181	(970) 210-6153
Air Tactical Supervisor	Ken Perry	Lancaster, CA	kperry@blm.gov		(661) 350-5225
Air Tactical Supervisor	Charlie Brown	Durango, CO	c5brown@blm.gov		(907) 903-7794
Air Tactical Pilot, Bravo ?	Vacant				
Air Tactical Pilot, Bravo 7	Ryan Curl	Driggs, ID	rcurl@blm.gov		(208) 521-9300
Air Tactical Pilot, Bravo 6	Greg House	Houston, TX	ghouse@blm.gov		(832) 278-3069
Air Tactical Pilot, Bravo 4	Paul Lenmark	Dillon, MT	plenmark@blm.gov		(406) 660-0257
Aviation Staff Assistant	Cindy Barto	Boise, ID	cbarto@bmm.gov	(208) 387-5180	
Assistant Aviation Mgt. Specialist/Pilot	Lisa Allen	Boise, ID	lmallen@blm.gov	(208) 387-5197	(208) 972-1677
Ramp Services Supervisor	Gary Deide	Boise, ID	gdeide@blm.gov	(208) 387-5529	(208) 890-7479
Ramp Services Training Leader	Don Hubbartt	Boise, ID	dhubbart@blm.gov	(208) 387-5529	(208) 867-8518

Appendix 2 - BLM Fire Aircraft Acquisition Plan

Purpose: This plan establishes the baseline configuration and acquisition strategy for the BLM firefighting fleet composed of government-owned, exclusive use contract and any other long-term aircraft acquisitions. The plan consists of Acquisition Principles, the BLM Firefighting Aircraft Summary Table and individual Aircraft Category Acquisition Summaries.

Acquisition Responsibilities: Government-Owned, Exclusive Use and other long-term acquisitions will be initiated, managed and funded by the National Office to achieve cost efficiencies and limit uncoordinated acquisition. State and field offices have the authority to secure short-term aircraft acquisitions (On-Call, CWN, Rental).

Quality (Best Value): To the extent possible, BLM will acquire aircraft that provide the best performance, capacity, speed, technology and safety features available and affordable. Government ownership, long-term contracts, multiple-aircraft contracts, sharing of contracts and innovative procurement methods will be explored to achieve economies whenever possible. Conversion of contract aircraft to government-owned shall be analyzed for cost savings in the following prioritized categories: Utility, SMJ, ASM. Aircraft will not be secured by any procurement method until there is commitment and capability by the hosting unit to provide the appropriate management support to maximize effectiveness, i.e. staffing levels, qualifications, facilities, equipment/vehicles and administrative support.

Standardization/Interoperability: To the extent possible, BLM will acquire like make/model aircraft with standardized equipment and configuration to meet the needs of specific mission categories, regardless of geographic area. Interoperability and standardization provide the most efficiency in regards to government-owned aircraft and government pilots.

National Mobility: All Government-Owned and Exclusive Use aircraft will be considered BLM national resources and will be acquired with national mobility in mind. Hosting locations (designated bases) must be committed to providing staffing, facilities and administrative functions in support of mobilizing aircraft nationally. Aircraft specifications, requirements and payment terms will be established to facilitate long-term assignments within the lower 48 states and to/from Alaska.

Baseline Fleet Numbers & Budget Fluctuations: Baseline numbers of aircraft, by category, are currently derived from the Interagency Aviation Strategy approved by the Fire Executive Council (FEC) and NWCG in 2008. Future changes to the BLM fire aircraft fleet shall be determined by fire planning tools approved by the BLM FLT/ELT, or by other strategic interagency plans approved by the FEC/NWCG. If budget constraints dictate a reduction in core aviation assets, these reductions will be absorbed primarily in categories that have the most elastic CWN component and/or that do not impact aerial delivered firefighter capabilities (SEAT, Scooper, ATGS, and Utility). When planning tools or strategic plans indicate an increase in aircraft numbers, aircraft will be attained through CWN/On-Call procurement and hosted in locations that are best suited to logistically support both the aircraft and personnel associated.

BLM Fire Fighting Aircraft Summary Table

National Interagency Aviation Council (NIAC) Interagency Aviation Strategy											
BLM FIREFIGHTING AIRCRAFT FLEET PROJECTION SUMMARY											
Approved by: National Wildfire Coordinating Group and Fire Executive Council - July 2008											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ATGS	9	9	10 (9)	10 (9)	10 (9)	10 (9)	10 (9)	10 (10)	10	10	10
ASM	3	5 (3)	5 (3)	5 (4)	5 (5)	5 (5)	5 (4)	5 (4)	5	5	5
Heli T2	6 (9)	7 (9)	8 (9)	9 (9)	10 (9)	10 (6)	10 (6)	10 (8)	10	10	10
Heli T3	18 (14)	17 (14)	16 (14)	15 (14)	14 (14)	14 (17)	14 (17)	14 (19)	14	14	14
SMJ	7	7	7	7 (7)	7 (7)	7 (7)	7 (7)	7 (7)	7	7	7
Scooper	2	2	2	2 (2)	2 (2)	2 (2)	2 (2)	2 (3)	2	2	2
SEAT	17 (12)	17	20 (14)	20 (13)	25 (11)	25 (11)	25 (33)	25 (33)	25	25	25
Utility	4	4	4 (5)	4 (5)	4 (5)	4 (5)	4 (4)	4 (5)	4	4	4
Heli T1	0	0	0	0	0	0	0	0	0	0	0
Infra-Red	0	0	0	0	0	0	0	0	0	0	0
LAT	0	0	0	0	0	0	0	0	0	0	0
Transport	0	0	0	0	0	0	0	0	0	0	0
Aircraft/YR	66 (60)	68 (65)	72 (63)	72 (63)	77 (62)	77 (62)	77 (82)	77 (89)	77	77	77
XX = Projected FY Fleet, (XX) = Actual FY Fleet											

AIR ATTACK PLATFORM

PURPOSE: Multi-Purpose; Air Tactical Supervision, Fire Recon, Detection, Personnel Transport.

CURRENT SPECIFICATIONS, FAR: High wing, piston driven aircraft with air tactical type 1 avionics. Cruise speed 165 KIAS, payload of 780 lbs, and endurance of 4 hours. FAR 91, 135, 43.

MINIMUM AIRCRAFT: Aero Commander 500 series.

TARGET SPECIFICATIONS: High wing turbine aircraft with air tactical type 1 avionics. Cruise speed 200 KIAS, payload of 2,000 lbs, endurance of 4 hours, and outfitted for ATGS training (rear audio panel). Add additional VHF AM radio and air conditioning.

TARGET AIRCRAFT: Turbine Aero Commander.

ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE: 90 Days Exclusive use Exclusive Use contracting provides economical acquisition that must be dedicated to air tactical needs during in a 3-4 month period. Although multi-purpose aircraft is suited for a wide variety of non-fire missions, sufficient work does not exist in off-season to warrant longer contracts or government-owned procurement.

FLIGHT CREW: Vendor Provided.

CURRENT TOTAL: 10 - TARGET TOTAL: 10

HOSTING LOCATION(s): Ontario, NAO (Training) Grand Junction, Boise, Pocatello, Salt Lake City, Billings/Fairbanks, Cedar City, Stead, Roswell/Twin Falls and Elko.

AERIAL SUPERVISION MODULE

PURPOSE: Multi-Purpose; Air Tactical Supervision, Leadplane, Recon and Training.

CURRENT SPECIFICATIONS, FAR: Multi-engine turbine airplanes, IFR single-pilot and approved for flight into known icing conditions; Single-engine service ceiling @ ISA > 12,000 Ft; 200 KIAS cruise speed @ 75% power; Fuel endurance @ 75% power > 4.0 hrs; Type 1 avionics package with the addition of 1 AM, 1 FM, TCAS, and smoke system. 14 CFR Parts 23, 43, 91, and 135.

MINIMUM AIRCRAFT: BE-A90 (U-21)

TARGET SPECIFICATIONS: The items listed above under current specifications including total airframe times < 10,000 hrs, pressurization and visibility enhancements and increased cruise speeds of >300 KIAS.

TARGET AIRCRAFT: To be determined

ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE: 180 Days Exclusive-Use Contract IDIQ. The predominate aircraft use is fire related, national in scope, seasons vary in length and intensity from year to year. The 180 day IDIQ contract gives the agency the ability to maximize aircraft use and availability during the length of the season and then use CWN aircraft during peak use months or for specific coverage periods. Government ownership should be explored.

FLIGHT CREW: Government Provided

CURRENT TOTAL: 4 - TARGET TOTAL: 5

HOSTING LOCATION(s): Exclusive-Use Contract IDIQ Boise, Driggs, Houston, Fleet aircraft Boise

TYPE II HELICOPTERS

PURPOSE: Multi-Purpose; Tactical, Logistical.

CURRENT SPECIFICATIONS, FAR: Turbine engine Single pilot helicopter; Economy Cruise Speed of 95 KIAS. Range of 250NM. Passenger capacity of 9 and HOGE-J of 1,650lbs. @ 7,000 & 25c.; External Load Weight Indicator in cockpit; Wire strike protection system (mechanical); Two panel-mounted VHF-AM and two panel-mounted VHF-FM radios; One Automated Flight Following System; Panel mounted GPS ; Vendor supplied fuel servicing vehicle with operator and vendor provided mechanic. FAR 133, 135, 137.

MINIMUM AIRCRAFT: Bell 205++; Bell 210; Bell 214; Bell 212- HP.

TARGET SPECIFICATIONS: Single pilot helicopter; Economy Cruise Speed of 135 KIAS. Range of 500NM. Twin engine and FAR Part 29 Certificated. Passenger capacity of 9 and HOGE-J of 2,000lbs. @ 7,000 & 25c. GPS XM weather display capabilities, Hoist, cargo let-down, and/or Rope Assisted Deployment System and voice data recorders may be requested.

TARGET AIRCRAFT: Agusta Westland 139; Eurocopter 155B1; Eurocopter EC145; Siskorsky S-70C.

ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE: 90-130 Days. The predominate aircraft missions are fire related; seasonal in nature. Although well suited to many non-fire applications, there is not enough need outside of fire season to justify government-owned or long-term contracts. Efficiencies may be realized by sharing >130 day contracts within agency or with other federal agencies.

FLIGHT CREW: Vendor Provided.

CURRENT TOTAL: 6 - TARGET TOTAL: 10

HOSTING LOCATION(s): Apple Valley, CA-1 Lakeview, OR-1 Fort Wainwright-2, Fort Yukon-1 Galena-1, Additional T2 Helicopters to be phased-in when dollars are available (Location TBD).

TYPE III HELICOPTERS

PURPOSE: Multi-Purpose; Tactical, Logistical.

CURRENT SPECIFICATIONS, FAR: Single pilot Turbine engine helicopter; Economy Cruise Speed of 95 KIAS. Range of 300NM. Passenger capacity of 5 and HOGE-J of 650 lbs. @ 7,000 & 25c. External Load Weight Indicator in cockpit; Wire strike protection system (mechanical); Two panel-mounted VHF-AM and two panel-mounted VHF-FM radios; One Automated Flight Following System; Panel mounted GPS. Vendor supplied fuel servicing vehicle with operator. FAR 133, 135, 137, Part 127 Certification.

MINIMUM AIRCRAFT: Eurocopter AS-350B2; Bell 206L4 with High Altitude Tail Rotor.

TARGET SPECIFICATIONS: Single pilot Turbine engine helicopter; Economy Cruise Speed of 120 KIAS. Range of 350NM. FAR Part 27 Certificated. Passenger capacity of 5 and HOGE-J of 1,200 lbs. @ 7,000 & 25c. GPS XM weather display capabilities, Hoist, cargo let-down, and/or Rope Assisted Deployment System and voice data recorders may be requested.

TARGET AIRCRAFT: Eurocopter AS-350B3; Agusta Westland AW-119 Koala; Bell 407.

ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE: 90-130 Days Exclusive Use Contract. The predominate aircraft missions are fire related; seasonal in nature. Although well suited to many non-fire applications, not enough requirement outside of fire season to justify government-owned or long-term contracts. Efficiencies may be realized by sharing >120 day contracts between geographic areas with dissimilar fire seasons.

FLIGHT CREW: Vendor Provided.

CURRENT TOTAL: 18 - TARGET TOTAL: 14

HOSTING LOCATION(s): Fort Wainwright (3), Elko, Galena, Ely, St. George, Las Vegas, Weaver Mtn. /Lewistown, Vale, Ravendale, Moab, Rifle, Salt Lake, Miles City, Rawlins, Boise, Burns, Twin Falls.

SMOKEJUMPER PLATFORM

PURPOSE: Multi-Purpose; SMJ Deployment, Para Cargo Delivery.

CURRENT SPECIFICATIONS, FAR: Required Seats 6 (min). Minimum payload 3,000 pounds. Endurance with designated jumpload 2.5 Hours. Maximum 1.3 Vs1 in smokejumper configuration 105 KIAS. FAR 91, 135, 121.

MINIMUM AIRCRAFT: BE-90, BE-99A, BE-200, DHC-6 100/200/300, Casa 212, 100/200/300, DC3TP, Dornier 228, C-23 A/SD-330, C208B.

TARGET SPECIFICATIONS: Turning capability into dead engine at 1.3VSO (Center of gravity related to payload compartment of two jumpers and two spotters at door should be considered). Maneuverability at drop speeds. Minimum stable jumper drop speed (not to exceed 100 knots) Flight and environment characteristics with door removed. FAA certified to fly with door removed. Engine compatibility to wide range of power and negative thrust. Minimum stable cargo drop speed of less than 120 KIAS. Trim change with speed and power variations. Straightforward and easy to manage systems. Meets minimum one engine out (critical engine) service ceiling policy (9000 feet density altitude at -3 o C with a capability of 50 feet per minute rate of climb). Minimum jumper exit door size must be at least 25 inches wide and at least 36 inches high. Provisions for restraint of smokejumpers.

TARGET AIRCRAFT: Same as minimum aircraft (SASEB list).

ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE: 6 Exclusive Use Contract/1 Government-Owned Aircraft. 90-120-365 Days. Aircraft missions are fire related; seasonal in nature. Although well suited to many non-fire applications, not enough requirements outside of fire season currently justify an entire government owned category. One government-owned aircraft provides leveling competition to a limited contractor pool. Where costs can be sustainably reduced, additional government-owned aircraft may be cost-effective.
Vendor provided (6 aircraft), Government provided (1 aircraft).

CURRENT TOTAL: 7 - TARGET TOTAL: 7

HOSTING LOCATION(s): Fort Wainwright (3) contract, Boise (1) Fleet, (2) Contract, Fort Wainwright/Boise (1) shared contract.

SCOOPERS Type 3 (800 to 1,799 gallons)

PURPOSE: Single-Purpose; Purpose Built, Tactical.

CURRENT SPECIFICATIONS, FAR: Multi-engine piston or turbine water scooping tanker airplanes specifically designed for firefighting; minimum tank capacity of 1400 gallons of water; minimum payload of 1000 U.S.G of water with 3.5 hours of fuel @ 3000’ PA, 25°C; minimum cruise speed of 150 KIAS, TAS. Drop speed of 125 KIAS; 4 hours endurance at maximum cruise power and optimum altitude with 45 minute fuel reserve; Capable of operating from a 5000’ gravel surface at certified takeoff weight @ 3,000’ PA and 25°C; Airplanes offered shall be approved by the U.S. Department of Agriculture/U.S. Department of the Interior Interagency

Airtanker Board; The original equipment manufacturer (OEM) must provide engineering and logistical support for the aircraft make and model offered Part 137.

MINIMUM AIRCRAFT: CL-215.

TARGET SPECIFICATIONS: Multi-engine turbine water scooping tanker airplanes specifically designed for firefighting; minimum tank capacity of 1600 gallons of water; Minimum payload of 1000 U.S.G of water with 3.5 hours of fuel @ 3000' PA, 25°C; Minimum cruise speed of 170 KIAS. Drop speed of 125 KIAS; 4 hours endurance at maximum cruise power and optimum altitude with 45 minute fuel reserve; Capable of operating from a 5000' gravel surface at certified takeoff weight @ 3,000' PA and 25°C; Airplanes offered shall be approved by the U.S. Department of Agriculture/U.S. Department of the Interior Interagency Airtanker Board; The original equipment manufacturer (OEM) must provide engineering and logistical support for the aircraft make and model offered.

TARGET AIRCRAFT: CL215T, and/or CL-415.

ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE: Minimum 80 Days Exclusive Use Contract. The aircraft are single-purpose with only seasonal use applications. Limited number of aircraft are owned and operated in the private sector. Exclusive Use contracts of at least 80 days provide adequate incentive to industry to maintain and provide these aircraft for use by the Federal Government. Establish/maintain On-Call and Variable Term contracts to provide an avenue for new vendors to establish a contract history with the Federal Government and compete for Exclusive Use contracts in the future.

FLIGHT CREW: Vendor Provided.

CURRENT TOTAL: 0 TARGET - TOTAL: 2

HOSTING LOCATION(s): Fort Wainwright AK.

SCOOPERS Type 4 (Maximum of 799 gallons)

PURPOSE: Single-Purpose; Purpose Built, Tactical.

CURRENT SPECIFICATIONS: Amphibious Air Tractor 802F-Turbine powered PWC PT6A-67F (minimum 1600 SHP) or equivalent. Interagency Airtanker Board (IAB) approved Type 3 Air Tank/Gate system. Aircraft tank capacity of 800 US gallons. Aircraft needs to be capable of dispensing both water and fire retardant. Endurance of 2 hours and 30 minutes, 650 gallons of water, 200 lb. pilot at 3000' PA 25 degrees Celsius. Aircraft capable of operating from 5,000 ft. gravel runway at certified gross takeoff weight @ 3,000 ft. PA and 25C. Cruise airspeed of at least 140 kts true airspeed. Aircraft must have the IAB approved or Interim approved gate installed on the aircraft. The original equipment manufacturer (OEM) must provide engineering and logistical support for the aircraft make and model offered Part 137.

MINIMUM AIRCRAFT: Amphibious AT-802F PT6 67F “Fire Boss”

TARGET SPECIFICATIONS and TARGET AIRCRAFT: Are the same as the specifications outlined above in Current Specifications.

ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE: Establish/maintain On-Call contracts to provide an avenue for new vendors to establish a contract history with the Federal Government and compete for Exclusive Use contracts in the future.

FLIGHT CREW: Vendor Provided.

CURRENT TOTAL: 4 - TARGET TOTAL: 4

HOSTING LOCATION(s): Fort Wainwright AK

SINGLE ENGINE AIRTANKERS

PURPOSE: Single Purpose; Tactical Retardant & Suppressant Delivery.

CURRENT SPECIFICATIONS, FAR: Single pilot turbine engine agricultural application type aircraft modified to the aerial retardant delivery role. “On Call” contract specifications are: low wing, tank size of 500 U.S. gallons, and payload of 4,600 pounds. They are capable of operating with the above payload at a pressure altitude of 7000 feet at an outside temperature (OAT) of 30 degrees Celsius. Endurance of at least 1.5 hours with full contract load of retardant at 75% max rated power. Part 137, 91, and various sections of Part 135.

MINIMUM AIRCRAFT: Ayres thrush S2rT-45, Dromader M18T, G-10 w/500 gallon tank.

TARGET SPECIFICATIONS: Single pilot turbine engine agricultural application type aircraft modified to the aerial retardant delivery role. Contract specifications are: low wing, tank size of 700+ U.S. gallons, payload of 6,440 pounds. Capable of operating with the above payload at a pressure altitude of 7000 feet at an outside temperature (OAT) of 30 degrees Celsius. Endurance of at least 1.5 hours with full contract load of retardant at 75% max rated power.

TARGET AIRCRAFT: Air Tractor 802.

ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE: 60 day Exclusive Use Contract. Aircraft are mission specific and must be modified from the standard agricultural application aircraft, as delivered from the manufacturers. As a retardant delivery aircraft there are no other use for these types of aircraft. Significant efficiencies would be realized with longer term Exclusive Use contracts (90 to 120 day periods) for a larger number of total aircraft. This would reduce the government’s dependence on higher priced On-Call contracts during peak periods during the fire season.

FLIGHT CREW: Vendor Provided.

CURRENT TOTAL: 33 - TARGET TOTAL; 25 BLM, 33 DOI

HOSTING LOCATION(s): Initial distribution to GACC's; Southwest (7), Great Basin (14), Rocky Mountain (5), Northwest (4) Northern Rockies (3). Contracts have staggered start dates. As fire season progresses from south to north so will the SEATS based on forecasted and existing fire load.

UTILITY FIXED-WING

PURPOSE: Multi-purpose; Logistical, Cargo & Personnel Transport, Law Enforcement.

CURRENT SPECIFICATIONS, FAR: Single engine or Multi-engine, airplane allowing unobstructed downward and lateral views from right front cockpit seat. They are capable of short gravel airstrip operations. FAR part 135.

MINIMUM AIRCRAFT: C-206, AC-680, CC-180.

TARGET SPECIFICATIONS: In addition to the current specifications listed above: Single-engine or Multi-engine, turbine aircraft. WAAS-enabled GPS.

TARGET AIRCRAFT: C-206, AC-680, AC-690, PC-12 or C-208, K-100.

ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE: 60-120 Days Exclusive Use Contract/Government Owned Multipurpose aircraft suited well to fire and non-fire missions. Amount of resource work outside of fire season may justify only one government-owned utility aircraft.

FLIGHT CREW: Contractor Provided/Government Provided for the PC-12.

CURRENT TOTAL: 5 - TARGET TOTAL: 6

HOSTING LOCATION(s): Based in Fairbanks AK (1 aircraft shared with L-48, Aug - Feb).

Appendix 3 - SES Flight Scheduling Guide

These flights are typically requested through the SAM however some of the responsibilities may be delegated to UAMs (refer to applicable State Aviation Plan for specifics).

The OAS-110 will be utilized as the parent or cover document for additional pages of documentation. Additional information regarding SES flight scheduling to include *OPM-7* and OAS-110 Form is located at: https://www.doi.gov/sites/doi.gov/files/uploads/OPM-07_Appendix_6.pdf

1. Gather information needed to develop the flight plan and OAS-110.
   - Determine the nature of flight. Is it-point-to-point, mission/special use, etc.?
   - Determine the proposed itinerary/schedule requirements.
   - Determine any special needs: security, dual-pilot crew, etc.
   - Assess and consider any travel schedule time limitations for SES employees and time needed to accomplish objectives.
   - Names, passenger and baggage weights, salaries. (If only annual salaries are available, multiply that number by 1.2 and divide by 2087 to derive the approximate hourly salary.)

2. Notify solicitor of impending request (courtesy call) at least a week to ten days prior to the proposed flight.

3. Conduct research and document cost estimate for the elements in each of these three options.

   a. Scheduled commercial air carrier (not applicable for mission flights)
      - Use only contract travel agency quotes to determine airfare estimates.
      - Does itinerary meet time frame requirements?
      - Cost of airfare and booking fees
      - Cost of rental car from airport to meeting location
      - Additional lodging and per diem costs incurred if travelling by airline
      - Total employee salaries for time spent in travel status. (Add one hour of preflight airport time to the flight time, plus time spent driving rental car to location where fleet or charter aircraft would have otherwise flown to any locations not served by airlines.)

   b. Fleet Aircraft
      - Confirm if fleet aircraft are even available within reasonable distance.
      - Include ferry flight time and standby costs with passenger transport flight time estimate.
      - Document total salaries for employee's time spent flying on fleet aircraft.

   c. Charter Operators

- Use only established contract vendors with carded pilots and aircraft capable of carrying the required passenger manifest and weight.
- Compare two or more competing vendors using the AQD-91 form; maintain documentation in local files and use the best-value vendor in the OAS-110 cost analysis.
- Include ferry flight costs, guaranteed time, and standby rates (if applicable) in cost estimate.

4. Determine the cost for each of the three options above and document on the OAS-110. Document and forward an explanation why any of the three options was not considered possible or reasonable. Examples:
   - Proposed flight is a reconnaissance mission that can't be performed by scheduled air carriers.
   - Scheduled airline service cannot meet SES employee time constraints or schedule, or would incur additional days in travel status. (Forward itinerary and additional salaries that would be incurred to illustrate infeasibility.)

5. Forward the completed OAS-110 and attached documentation to the Solicitor through the SAM, or with courtesy copy sent to the SAM (refer to specific State Aviation policy).

6. Be sure a qualified Flight Manager is assigned to tend to the safety requirements and administrative details associated with the flight.

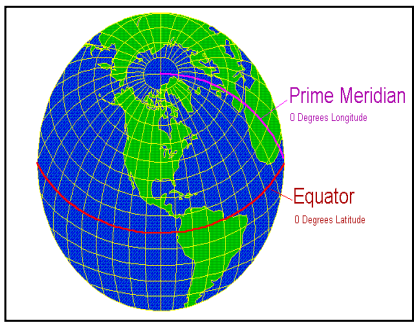
7. A Project Aviation Safety Plan (PASP) should be developed for all SES Mission Flights, even those deemed to be "one-time, non-complex." A 9400-1a (or equivalent) may be used as a supplemental manifest and flight tracking device on point-to-point flights.

8. The SAM will report any SES flight hours to the NAO twice each year (October 1 and April 1).

Appendix 4 – Latitude/ Longitude Information

If coordinates are wrong…

- Risk/danger/liability goes up
- Calculations become erroneous (weight/distance/fuel ratios)
- People can't find the "right" spot
- Data goes onto maps in the wrong place
- We look bad as an organization, a unit, an individual
- Contractors/pilots become angry/confused/frustrated



Latitude

- Parallel east-west lines
- Measures 90° North and 90° South of equator

Longitude

- Lines run south to north.
- Measures east and west of the prime meridian
- Lines converge at North and South poles

Common Formats

Format	Example
Decimal Degrees (DDD.DDDDD ^{O})	64.84052^{o} N by 147.60437^{o} W
Degrees and Decimal Minutes (DDD ^{O} MM.MMM')	64° 50.431' N by W 147° 36.262' W
Degrees, Minutes and Seconds (DDD ^{O} MM' SS.S")	64° 50' 25.5" N by W 147° 36' 15.5" W

Notation	
Degrees	o
Minutes	'
Seconds	"
Decimal	.
Hemisphere	N, S, E, W or -

On-line Calculators for converting between Formats:
http://www.fcc.gov/mb/audio/bickel/DDDMMSS-decimal.html
http://www.calculatorcat.com/latitude_longitude.phtml

GPS Datums

- Datums define the origin and orientation of latitude/longitude lines
- Describing a place by lat/long is not good enough. The datum must also be stated.
- Changing the datum changes the lat/long of a point on the surface of the Earth
- There are hundreds of different Datums, agencies use different Datums.
- Referencing lat/long coordinates to the wrong datum can result in position errors of hundreds of meters

Know your agency's standard Format and Datum

- BLM Aviation (Degrees and Decimal Minutes, WGS84)
- BLM GIS (Various)
- TFRs (Degrees, Minutes and Seconds, WGS84). US NOTAM OFFICE FORMAT ddmmssN/dddmmssW
- BLM Fire (Degrees and Decimal Minutes, WGS84)
- FAA Temporary Flight Restrictions (Degrees, Minutes and Seconds). US NOTAM OFFICE FORMAT ddmmssN/dddmmssW

Remember…

- Use only ONE period/decimal point when writing a latitude or longitude in Decimal Degrees, or Degrees, Minutes and Seconds.
- Do NOT use periods/decimal points for degrees or minutes when writing a latitude or longitude in Degrees, Minutes and Seconds
- There can NEVER be more than 60 seconds in Degrees, Minutes and Seconds format
- Do NOT mix formats
- Know and use proper Datum

Appendix 5 - BLM SAFECOM Management Roles

POSITION	AUTHORITY	RESPONSIBILITIES	CRITICAL NOTES
Individual	Submission	Fills out the SafeCom form, completing all required fields including initial determination of Operational Control. Completes the Original Text in both the Narrative and Corrective Action fields. Consults with mission personnel prior to submitting electronically to OAS and hardcopy to UAM.	Fill out completely and accurately. Report only the facts. Narratives should be brief and concise.
BLM UAM	Submission	If only a hardcopy has been submitted, submits electronically to OAS.	X
	E-Mail Notification	Receives e-mail notification of all initial, modified and completed SafeComs identifying their BLM Field Office as having operational control.	Provide feedback to person submitting (unless anonymous)
	Corrective Actions	Takes corrective action at the local level and describes these actions in the Public Text area of the Corrective Action field. Include your Job Title (do not enter personal information)	Must treat all corrective action descriptions as if they were public.
BLM State Aviation Manager	E-Mail Notification	Receives e-mail notification of all initial, corrective action, modified and completed SafeComs identifying BLM operational control within their State.	Coordinate with UAM.
	Corrective Actions	Review all information. May take and document additional corrective actions.	X
	Modify Actions	Authority to change all SafeCom information (except for name of the submitter and the original narrative).	Coordinate with UAM. Verify and amend all info for accuracy.
	Operational Control	Make final determination of the Agency, State/Region and Field Unit that has Operational Control.	Determines who will receive e-mail notification.
	Category	Select the appropriate category to classify the SafeCom.	Multiple categories possible.
	Make Public	Copies Original Text into the Public Text area for both the Narrative and Corrective Action fields. Sanitizes the Public Text. Makes the SafeCom "Public" (if overly sensitive, consult with NAO before making public)	Ensures all Public Text is sanitized in Narrative & Corrective Action fields prior to making public.
BLM National Aviation Safety Advisor	E-Mail Notification	Receives e-mail notification of all initial, corrective action, modified and completed SafeComs nationwide that identify BLM operational control.	Coordinate with SAM.
	Corrective Actions	Takes additional corrective actions, if necessary, and documents on the SafeCom.	Coordinate with SAM
	Modify Actions	Authority to change all SafeCom information (except for name of submitter and the original narrative).	X
	Make Public	Has the authority to sanitize information and make the SafeCom "public" (if not already done at the State level). Coordinates with OAS.	Ensures all Public Text is sanitized in Narrative & Corrective Action fields prior to making public.
	Completion	Has the authority to make the SafeCom "complete".	X
	Distribution	Distributes all "Public" BLM SafeComs to BLM SAMs and Other Agencies.	Coordinates with OAS.
	Designates Users	Authority to identify all BLM users and their appropriate permission levels. Must notify OAS of additional users/changes/updates.	Coordinates with OAS.
	Out of Agency	Authorized to review other agency "Public" SafeComs. Read Only!	X
Elevated Safecoms	All Actions	OAS or NAO recommends SafeCom be elevated. NAO-Safety retains control of Elevated Safecom and coordinates with SAM for proposed action. Coordination will take place with the SAM to gather detailed documentation.	Action may include lessons learned write up, safety alert etc. Important to follow up with Contracting Officer through the chain of command if aircraft or personnel are not meeting contract specifications.
	Make Public	NAO-Safety will make Safecom public with concurrence of SAM. Pictures, reports and sensitive material may or may not be made public but will be accessible to those with modify access.	Elevated Safecoms will not be made "Public" until investigation has been completed.

Appendix 6 - OAS Aviation Program Evaluation Schedule

2008 – Nevada

2009 – Montana, Idaho

2010 – Alaska

2011 – Arizona, New Mexico, Wyoming

2012 – NAO, Colorado, California

2013 – Oregon/ Washington, Utah

2014 – Nevada, Eastern States

2015 – Idaho, Montana

2016 – Alaska, Arizona

2017 –New Mexico, Wyoming

2018 – NAO, Colorado, Nevada, California

2019 – Oregon/ Washington, Utah

2020 – Idaho, Montana, Eastern States

2021 – Alaska, Arizona

2022 –New Mexico, Wyoming

2023 – Colorado, California

2024 – NAO, Nevada

2025 – Oregon/ Washington, Utah

2026 – Idaho, Montana, Eastern States

Appendix 7 - BLM Cargo Letdown Protocol

Cargo letdown is a procedure used to lower cargo out of a hovering helicopter to the ground with the use of a nylon line and rappel anchor. This procedure is used by helitack programs across the country to get needed equipment and supplies to the ground when conventional methods are not the most efficient option.

National BLM approval is required to host a cargo letdown program. Requests for approval are initiated by a state office to the NAO with the final approval made by the Division Chief, Aviation.

NAO approval allows for internal cargo letdown operations but, external cargo letdown (off the hook) operations may also be authorized. Initial approval will be based upon indicated need and limited to one field season. Subsequent conditional approval must be requested after the initial field season and validated based on proper utilization and justification of continued need. Approved cargo letdown programs will be re-evaluated in conjunction with new helicopter contract solicitations. Several administrative procedures need to be addressed as part of the request for approval; the state office must supply the NAO with the following documents:

1. Initial justification to include nomination of one Helicopter Cargo Letdown Spotter Trainee candidates (HCLS(T)).

2. Request for Contract Modification from COR to 2. NAO to:
    a) Provide for a contractor purchased cargo letdown anchor. Costs to the contractor would be recovered in an adjusted Daily Availability rate negotiated by the CO.
    b) Add additional “Special Pilot Requirements for Cargo Letdown” language.

3. Approved copy of the complete Helibase Operations Plan prior to implementation.

4. Cargo Letdown Operations Plan. This plan would supplement the Helibase Operations Plan. The Cargo Letdown plan should describe all aspects of the letdown program to include:
    a) Risk Management mitigation measures
    b) Decision Matrix (under what parameters will this operation be conducted
    c) Detailed operational procedures
    d) Detailed equipment and configuration descriptions
    e) Equipment certification/inspection/retirement intervals and documentation
    f) Personnel training, experience and proficiency f) requirements and record-keeping
    g) Letdown mission documentation and record-keeping
    h) Year-end statistical data on form “BLM Annual Helitack Data Master (May 2013)”. The form is available for download on the BLM NAO website, Aircraft Operations, Helicopters, at: http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Airops/Helicopters.html

i) Completed copies of all BLM Cargo Letdown Spotter Trainee Qualification Record will be sent to the BLM state aviation manager (SAM) and the BLM helicopter program manager annually.

The NAO will provide assistance in arranging for Pilot and HCLS(T) certification as well as help with obtaining necessary required equipment.

The general operational procedures for cargo letdown are established in the *Interagency Helicopter Rappel Guide* (IHRG). This document provides additional direction to BLM cargo letdown operations.
BLM Cargo Letdown Operations will be conducted in accordance with the IHRG, specifically the applicable portions of:

1. Chapter 3 Equipment
2. Chapter 4 Documentation
3. Chapter 7 Cargo Letdown Operations
4. Appendix B Model Specific Cargo Procedures
5. Appendix E Spotter Training.

Notwithstanding the *IHRG* the BLM also requires that:

1. To be considered for cargo letdown spotter training, the trainee must:
    a. Be a fully qualified Helicopter Manager.
    b. Be a current member on an exclusive use helitack crew.
    c. Meet the prerequisite experience, training, and currency requirements outlined in the *Interagency Standards for Fire and Fire Aviation Operations* “Exclusive Use Fire Helicopter Position Requisites” for the position they encumber.
    d. Only the helitack supervisor, assistant and/or squad leader positions will be qualified as cargo letdown spotter.
    e. Any deviation from these additional BLM requirements must be approved in writing by the SAM with a courtesy notification to the NAO Helicopter Program Manager.
    f. Initial cargo letdown training must be conducted by a DOI OAS training specialist or a fully qualified spotter (HERS/HCLS). The OAS Safety training specialist or designee cargo/rappel check spotter (is responsible for conducting the final initial check ride and certification of a HCLS(T).
    g. When coordinating for and during training it is important that clear communications are maintained between the designee trainers (if utilized), the DOI OAS training specialist and the BLM Helicopter Program Manager.
        - Each component of training (tower, mock-up, and live helicopter) may take one to two full days to satisfy the training requirements; this may vary based on the number of and progression of students. Requesting unit and trainees must be prepared to commit to the necessary time frames and associated expense when entering into agreement with Trainers.
    h. This training is performance based and trainees will only move forward as specific training targets are met. It must be understood that there is the potential that a

selected trainee could fail to complete the training due to inadequate performance.

i. When utilizing the *IHRG*, Trainers will address only information directly associated with Cargo Letdown training and will not cover rappel specific operations unless authorized by NAO.

j. Tower training (if utilized) can be generic. Mock-ups and live cargo letdown training must be helicopter model specific to the aircraft utilized by the trainee and will follow the current model specific cargo letdown procedures in the *IHRG*.

k. All trainees will utilize the attached "BLM Cargo Letdown Spotter Trainee Qualification Record" to assure all aspects of training are completed as well as for record keeping purposes. This documentation shall include further training recommendations and a clear picture of the trainee's current level of competence.

l. Re-currency: Each year, to re-qualify, a spotter must complete:
    - Attend and/or participate as an instructor at annual helicopter cargo letdown training.
    - Complete deployment of three loads of cargo from the helicopter to the satisfaction of the appropriate agency certifying official. Subsequent re-qualification certification may be conducted by a qualified spotter (USFS or DOI). Typical terrain must be utilized for at least one of the three loads.

2. To be considered for approval as Helicopter Cargo Letdown Check Spotter (HCCS), the trainee must:

a) Be nominated by the SAM to the NAO.
b) Be a current helitack supervisor or assistant on an exclusive use helitack crew.
c) Meet the position/prerequisites for check spotter in *IHRG* 7.4.2.
d) Meet the prerequisite experience, training, and currency requirements outlined in the *Interagency Standards for Fire and Fire Aviation Operations* "Exclusive Use Fire Helicopter Position Requisites".
e) Subsequent recurrent certification may be conducted by a qualified Check spotter (USFS or DOI) with the concurrence of the respective SAM.

3. Pilots must meet all the following requirements:

a) Meet the appropriate requirements of the procurement document to include having logged additional experience as pilot-in-command as follows:
    - 50 hours -- Total hours in make, model and series offered.
    - 25 hours -- Rappel, cargo letdown or long line requiring precision placement, last 12 months.
b) Annually attend a cargo letdown training/re-currency training session. This training must be conducted and documented by a qualified spotter and will include:
    - Briefing and familiarization on letdown bracket and hard points for the specific model.
    - Seating arrangements for cargo and spotters.
    - Cargo placement/location and deployment sequence and method.
    - Exit procedures and sequence.

- Perform a minimum of six ground mockups in the aircraft model to be used, including rigging the aircraft for cargo letdown mission and deploying cargo.
- Briefing on any peculiarities of the specific model.
- Demonstrate ability to operate helicopter during three cargo letdown sequences.
- Demonstrate ability to work with spotter.

c) Upon meeting the above requirements, the pilot may be approved for helicopter cargo letdown operations by an OAS or USFS helicopter inspector pilot.
d) The pilot must maintain currency in helicopter cargo letdown flying at the same frequency required of the spotter (every 14 days). If this cannot be accomplished every 14 days, a proficiency flight must be completed prior to any actual operational mission.
e) The helicopter must meet the requirements of the departmental manual and the procurement document, as appropriate.
f) All cargo letdown equipment will be approved for use in accordance with the requirements outlined in the *IHRG*.

Please contact National Helicopter Program Manager, Bryan Bitting, at (208) 387-5173 if you have questions or require assistance.

Appendix 8 – BLM Cargo Letdown Trainee Qualification Record

INSTRUCTIONS FOR COMPLETING QUALIFICATION RECORDS

Each requirement or task for each qualification record shall be completed under the direct supervision of a qualified HERS/HCLS and signed and dated by the evaluating Spotter Trainer. Comments should be included in the space provided to ensure appropriate documentation of performance and to provide feedback to trainees. The number of evaluations of each task is not limited to the number of signature lines provided within the Evaluator/Date column.

CARGO LETDOWN TRAINEE:

TRAINEE'S NAME	DUTY STATION	PHONE NUMBER

TRAINEE RECOMMENDED BY:

NAME	TITLE	PHONE NUMBER

QUALIFICATION RECORD INITINATED BY:

NAME	TITLE	PHONE NUMBER

Helicopter Make/Model:	
Notes:	
SIGNATURE	DATE

Position: CARGO LETDOWN SPOTTER **Trainee**:

TASK: CARGO LETDOWN GROUND TRAINING		**Evaluator**	**Date**	**Comments**
1.	Review IHRG Sections 3,4,7			
2.	Equipment inspections procedures			
3.	Documentation of equipment			
4	Discuss model specific procedures			
5.	Review Go-No Go checklist & Discuss mission specific Risk Mgt.			
6.	Discuss CRM and spotter directions with pilot			
7.	Discuss emergency procedures with pilot present			
TASK: CARGO LETDOWN SIMULATOR (optional)		**Evaluator**	**Date**	**Comments**
1.	Tower, simulator briefing			
2.	Cabin configuration and rigging (model specific)			
3.	Verbalization with pilot			
4.	Proper equipment checks			
5.	Cargo configuration			
6.	Cargo equipment orientation			
7.	Rigging and deploying cargo			
8.	Maintain visual on cargo			
9.	Emergency procedures			
TASK: CARGO LETDOWN MOCK-UPS		**Evaluator**	**Date**	**Comments**
1.	Proper Briefing crew /pilot			
2.	Proper rigging /model specific			
3.	Verbalization with pilot			
4.	Proper equipment checks			
5.	Cargo configuration			
6.	Cargo equipment orientation			
7.	Maintain control during deployment			
8.	Maintain focus and control of mission			
9.	Emergency procedures			
TASK: CARGO LETDOWN INITIAL LIVE HELICOPTER		**Evaluator**	**Date**	**Comments**
1.	Proper rigging /model specific			
2.	Proper Briefing crew /pilot			
3.	Proper Equipment Checks			
4.	Proper Verbalization			
5.	Ensure power check completed			

6.	Select adequate cargo letdown site and alternate sites and notify ground resources of mission (Stay Clear)			
7.	Maintain aircraft and rotor clearance throughout sequence			
8.	Maintain visual on cargo letdown line and cargo			
9.	Maintain controlled decent of load to the ground			
10.	Maintain focus and control of mission			
TASK: CARGO LETDOWN CHECKRIDE		**Evaluator**	**Date**	**Comments**
1.	Configure helicopter with proper Cargo rigging and perform appropriate equipment checks			
2.	Maintain communication with appropriate flight following authority			
3.	Identify flight hazards			
4.	Identity adequate cargo letdown and alternate emergency sites			
5.	Assess helicopter performance capabilities at local temp. and altitude, perform powercheck			
6.	Assist pilot to position helicopter over cargo letdown site			
7.	Deploy cargo using appropriate verbiage with pilot			
8.	Maintain clearance of cargo from all obstacles			
9.	Maintain aircraft and rotor clearance throughout cargo sequence			
10.	Deploy cargo maintaining controlled decent at all times			
11.	Establish communication with firefighters on the ground. Report to appropriate flight following authority			
12.	Debrief with HERS/HCCS			
TASK: ASSIST IN INSTRUCTION OF CARGO LETDOWN TRAINING		**Evaluator**	**Date**	**Comments**
BASE NAME:				
1.				
2.				
3.				
TASK: CHECKRIDE PROCEDURAL ERROR FREE CYCLES		**Evaluator**	**Date**	**Comments**
1.	Low < 75’ AGL			
2.	Low < 75’ AGL			
3.	Medium 75’ to 150’ AGL			
4.	Medium 75’ to 150’ AGL			
5.	High Above 150” AGL			
6.	Low - Typical Terrain			
7.	Medium - Typical Terrain			
8.	Medium - Typical Terrain			
9.	High - Typical Terrain			
10.	High - Typical Terrain			

CARGO LETDOWN SPOTTER TRAINEE APPROVAL RECOMMENDATION

Additional Cargo Letdown Training Recommended			
	No	Yes	Date

Recommendation:

Spotter Trainer Name Signature Date

Successful Completion of Cargo Letdown Training			
	No	Yes	Date

Annual Recertification		
Annual Recertification		
Annual Recertification		
Annual Recertification		
	Date	Certifying Official

Comments:		

Check Spotter Name **Signature** **Date**

Appendix 9 – BLM Smokejumper Positions to Interagency Aviation Training (IAT) Functional Crosswalk

	IAT Positions										
BLM Position	Passenger	Aircrew Member	Fixed Wing Flight Manger	Fixed Wing Flight Manager Special Use	Helicopter Flight Manager	Resource Helicopter Manager	Aviation Dispatcher	Project Aviation Manager	Aviation Manager	Supervisor	Aviation Technical Specialist
Smokejumper	X	X									
Smokejumper Spotter	X	X	X	X							
Paracargo Head Kicker	X	X	X	X							

* IAT position descriptions can be referenced within the IAT Guide @ www.iat.gov

BLM Smokejumper position Functional Crosswalk

The BLM Functional Crosswalk only applies when operating within the smokejumper program mission description. **No equivalencies are granted for single resource qualifications outside of smokejumper operations**.

Example: As a Qualified and Current Fire Smokejumper Spotter, BLM recognizes that a person's ability to successfully function as a Passenger, Aircrew Member, Fixed Wing Flight Manager and Fixed Wing Flight Manager – Special Use, for non-fire aviation jobs described in *OPM-4* and the *IAT Guide*.

Note 2: Any BLM employee qualified in the above identified BLM position listed within Smokejumper related Guides or Manuals are also able to function in that position in a non-fire assignment. Ex: Individual qualified to perform as a Paracargo Head Kicker on a fire incident can also be a Fixed Wing Flight Manager on a resource paracargo mission.

Definitions and Reference

Smokejumper – An experienced professional fireman who is trained to parachute into wildfires in remote areas and in rugged terrain.

- Referenced in the Interagency Smokejumpers Pilot Operating Guide (ISPOG)

Smokejumper Spotter – A senior smokejumper who is trained to be in-charge of smokejumper missions.

- Referenced in the Interagency Smokejumpers Pilot Operating Guide (ISPOG), Spotter Training Manual & Smokejumper Spotter Video.

Paracargo Head Kicker – A senior paracargo specialist who is trained to be in-charge of paracargo missions.

- Referenced in the BLM Smokejumper Paracargo Manual.

Appendix 10 - BLM Fleet Aircraft Standard Operations Procedures

The Bureau of Land Management currently operates six fleet aircraft, N49SJ, N190PE, N700FW, N618, N437CC and N32PX. The following procedures will be utilized for all BLM fleet aircraft.

Administration

Aircraft

N49SJ, N190PE, N32PX, N700FW, N618 and N437CC are DOI owned aircraft operated by the BLM. N49SJ, N618 and N190PE are Boise based and maintenance is managed through OAS Headquarters in Boise ID. N32PX, N700FW and N437CC are Alaska based and maintenance is managed through Alaska Region OAS in Anchorage.

N49SJ – DE Havilland DHC-6-300 Twin Otter
BLM NAO maintains overall management responsibility. The aircraft is assigned to the Boise Smokejumpers.

N618 – Beechcraft Super King Air B200
BLM NAO maintains overall management responsibility. The aircraft is assigned to the National Aviation Office.

N190PE – Pilatus PC-12
BLM NAO maintains overall management responsibility. The aircraft is assigned to Alaska Fire Service a portion of the year and Boise NAO the balance of that year.

- N190PE core use period will be mid-April through mid-September as dictated by conditions.
- The Aircraft will transition to Alaska as negotiated with AFS and the BLM National Flight Operations Manager. That will usually occur on or around mid-April depending upon anticipated needs.
- The Aircraft will transition to Boise from Alaska when negotiated by AFS and the NAO Flight Operations Manager.
- Funding for the transition to Boise will be done under a resource order or as designated by the NAO Flight Operations Manager.

N700FW – Quest Kodiak K-100
BLM NAO maintains overall management responsibility. The aircraft is assigned to Alaska Fire Service a portion of the year and Boise NAO the balance of that year.

- N700FW core use period will be mid-April through mid-September as dictated by conditions.
- The Aircraft will transition to Alaska as negotiated with AFS and the BLM National Flight Operations Manager. That will usually occur on or around mid-April depending upon anticipated needs.
- The Aircraft will transition to Boise from Alaska when negotiated by AFS and the NAO Flight Operations Manager.

Funding for the transition to Boise will be done under a resource order or as designated by the NAO Flight Operations Manager.

N32PX – Cessna U206F
The BLM Alaska-Office of Law Enforcement and Security will have primary use of the aircraft through the calendar year flown by OAS carded BLM-AK law enforcement pilots. The management of the aircraft will fall under the State Aviation Office with mission management under ADO and Southern Zone Dispatch Center.

N437CC – Cub Crafters CC-18-180
The BLM Alaska-Office of Law Enforcement and Security will have primary use of the aircraft through the calendar year flown by OAS carded BLM-AK law enforcement pilots. The management of the aircraft will fall under the State Aviation Office with mission management under FDO and Southern Zone Dispatch Center.

Pilots
Pilots seeking to be qualified in BLM aircraft will be approved through the NAO and must attend an approved simulator training course in that aircraft type. If no simulator training is available, a training plan will be developed to meet the training needs of the Pilot and approved by the NAO.

Staffing
BLM aircraft are staffed to meet the appropriate mission as denoted below.

Lower 48 Staffing
- N49SJ: Primary staffing will be provided by the BLM Smokejumpers with secondary relief staffing from the NAO. During the fire season the aircraft is staffed 7 days a week.
- N190PE, N700FW: Primary staffing will be provided by BLM Alaska during the core operational use.
- N618: Primary staffing will be provided by the BLM NAO.
- N437CC: N/A
- N32PX: N/A
- The Temporary Duty Assignment for the Alaska pilot while in the L48 will allow travel to the domicile or equivalent at the end of a 27 day period.
- Outside of the core use period the NAO Flight Operations Manager will prescribe staffing levels with available pilots.

Alaska Staffing
- N190PE, N700FW: The aircraft will be staffed on a 12 on, 2 off schedule during the Alaska use period. Days off will be established so as to not coincide with the scheduled days off of other logistics aircraft.
- N32PX: The aircraft will be staffed to meet the needs of the Anchorage Field Office.
- N437CC: The aircraft will be staffed to meet the needs of the Fairbanks Field Office.

Fleet Aircraft Use Report Manager (AURM)

The AURM is used within DOI for government owned “Fleet” aircraft billing to create aircraft use report data files which are emailed to **OASfleetmanager@ios.doi.gov** for uploading into the FBMS system. Download the latest version of the AURM from the OAS website. OAS Technical Services has also developed a "next generation" Aircraft Use Report Manager application for iPads. Because the **AURMA** is not released to the public, it is not available on the iTunes app store. Instead, contact Sherry Lambert (208-433-5084, shery_lambert@ios.doi.gov)

Fuel

Lower 48

When utilizing either the Government Multiservice Aircard or the OAS MasterCard, fleet aircraft will attempt to purchase fuel at a DOD Vendor.

- Record flight time under the pay item code “FW” (Wet Rate) on the OASAURM when receiving fuel from these locations.
- Receipts for fuel purchased through the Government Aircard Multiservice program will be mailed directly to OAS Fleet Activities Specialist (Andrea Peckham) weekly.
- Fuel or other items (oil, maintenance, etc) purchased with the OAS MasterCard will follow OAS requirements, and signed statements with receipts will be provided in the requisite time and format to the appropriate authority.
- Both fleet aircraft may purchase fuel through the NIFC ramp and no charge code is required. Fuel is part of the flight rate on both fleet aircraft.
- NIFC ramp fuel receipts must be submitted in the same manner as the Government Aircard program, IE weekly to OAS Fleet Activities Specialist.

Alaska

Alaska Fire Service has fueling contracts for Fort Wainwright and Galena. Record flight time under the pay item code “DF” (Dry Rate) on the OAS AURM when receiving fuel from these locations. Fuel received at these locations will be recorded on an OAS-59 provided to the pilot by the fueler.

- For fueling away from these locations, utilize the procedures outlined above (1.5.1).

Navigation/Charting data base updates

The data bases will be purchased by the BLM Aviation Office through the aircraft account. Those services (electronic and paper) will be updated by the pilot currently assigned to the aircraft in the requisite time intervals specified.

Aircraft Mission

N49SJ

Primary mission is as a Smokejumper aircraft.

- During fire season the aircraft is staffed 7 days a week.
- Outside of fire season this aircraft is staffed during normal business hours.
- While this aircraft is not in fire season aircraft maintenance is sought during normal business hours.

- During fire season maintenance support is encouraged to use extraordinary measures (overtime, AOG parts, charter aircraft to transport maintenance personnel and/or parts, etc…) to keep the aircraft in flight status per the maintenance procedures that follow.

N190PE

- Primary mission as a multi-role utility, Air Attack and logistics aircraft.
- During the core use period this aircraft is staffed at single pilot duty requirements. 12 on 2 off or 6 on and 1 off with a maximum of 14 hour duty days.
- During the non-core use period the aircraft is staffed as the NAO Flight Operations Manager requires.
- During all operations maintenance support is sought during normal business hours as determined by the maintenance procedures that follow.
-
- There is currently no provision for a relief pilot in the core use period.
- The in-flight opening door is approved for use for photogrammetry.
- Special Use (<500” AGL) require an ALSE approved flight helmet.

N700FW

- Primary mission as a multi-role utility, Air Attack and logistics aircraft.
- During the core use period this aircraft is staffed at single pilot duty requirements. 12 on 2 off or 6 on and 1 off with a maximum of 14 hour duty days.
- During the non-core use period the aircraft is staffed as the NAO Flight Operations Manager requires.
- During all operations maintenance support is sought during normal business hours as determined by the maintenance procedures that follow.
- There is currently no provision for a relief pilot in the core use period.
- Special Use (<500” AGL) require an ALSE approved flight helmet.

N618

- Primary mission as an ASM/Lead aircraft.
- During the core use period this aircraft is staffed at single pilot duty requirements. 12 on 2 off or 6 on and 1 off with a maximum of 14 hour duty days.
- During the non-core use period the aircraft is staffed as the NAO Flight Operations Manager requires.
- While this aircraft is not in fire season aircraft maintenance is sought during normal business hours.
- During fire season maintenance support is encouraged to use extraordinary measures (overtime, AOG parts, charter aircraft to transport maintenance personnel and/or parts, etc…) to keep the aircraft in flight status per the maintenance procedures that follow.
- N618 meets all the requirements to perform ASM missions; Air Tactical missions must be conducted only with qualified ATP/ATS.
- There is currently no provision for a relief pilot in the core use period.
- The in-flight opening door is not approved for use at this time.

N32PX

- Primary mission to support the BLM's Law Enforcement program.
- Enhanced patrol and investigative coverage to lands and resources that were previously unpatrolled for their remoteness and distance from Anchorage and the state's road system.

N437CC

- Primary mission to support the BLM's Law Enforcement program.
- Enhanced patrol and investigative coverage to lands and resources that were previously unpatrolled for their remoteness and distance from Fairbanks and the state's road system.

Single Engine Operations

351 DM 1.3 provides authorization for DOI aircraft to perform night and IFR operations in Single Engine aircraft.

United States Forest Service FSM 5716 provides authorization for the Forest Service to perform night and IFR operations in Single Engine aircraft.

Aircraft Scheduling

N49SJ
Scheduled through the Boise Smokejumpers.

N190PE
Scheduled by Alaska Interagency Coordination Center (AICC), Aircraft Desk while in Alaska or the National Interagency Coordination Center (NICC) while in the Lower 48. During the non-core use period the NAO Flight Operations Manager will schedule the aircraft.

N618
Scheduled through Boise Interagency Dispatch Center.

N700FW
Scheduled by Upper Yukon Dispatch Center, Aircraft Desk while in Alaska or the National Interagency Coordination Center (NICC) while in the Lower 48. During the non-core use period the NAO Flight Operations Manager will schedule the aircraft.

N32PX
Scheduled by Alaska Southern Zone Dispatch Center.

N437CC
Scheduled by Alaska Southern Zone Dispatch Center.

Maintenance

Use of a government contract requires the permission of the appropriate Contracting Officer. For unscheduled maintenance or scheduled maintenance from other than the Boise contractor, a list of government contract maintenance facilities is included in each airplane. Flight Crew members will contact OAS to assure the proper payment schedule is in place (i.e. credit cards or purchase order) and that the facility has the pertinent expertise, manuals, tools, and parts to perform the work. Flight crewmembers will need to assure that the repair facility understands the BLM discrepancy reporting and sign-off procedures.

- If a maintenance issues arises in the field, the Flight Crew Member on duty will contact the OAS Aircraft Maintenance Specialist as soon as possible.
- In the event that they are not available, you may then contact the appropriate maintenance facility directly. For minor unscheduled maintenance, Flight crewmembers may contact the vendors directly. The OAS Aircraft Maintenance Specialist shall be contacted as soon as possible.
- The maintenance organization contact and frequently used vendor information located in below.

Exhibit 300 Performance Tracking

Current goals for fleet aircraft are:

Fiscal Year	Strategic Goal(s) Supported	Performance Measure	Actual / Baseline	Planned Performance Metric (Target)	Performance Metric Results (Actual)
2010 - 2015	Hours flown in support of the BLM mission(s)	200 hours	0*	+/- 10% of targeted hours	These Metrics are measured and reported annually by the OAS -2A/AMS and the aircraft use summary provided by OAS
2010 - 2015	BLM Mission Support	Specific Mission hours as detailed in the Business Case Analysis	0*	+/- 10% of targeted flight hours for each Identified mission	These Metrics are measured and reported annually by the OAS -2A/AMS and the aircraft use summary provided by OAS
2010 - 2015	BLM Aviation Goals- Multirole utility, logistics and mission support	Fleet Availability Rate	0*	+/- 10% of Scheduled Missions are Accomplished	These Metrics are measured and reported annually by the OAS -2A/AMS and the aircraft use summary provided by OAS. A Non Payment (NP) code will be utilized with a corresponding code identifying the reason(s) the aircraft is unavailable other than scheduled or routine maintenance.
2010 - 2015	BLM Aviation Goals- Multirole utility, logistics and mission support	Accident/ Incident Rate	0*	0 Accidents or Incidents	These Metrics are measured and reported through the Safecom system

Lost flight time will be documented on the OASAURM utilizing the following procedures:

Exhibit 300 Performance Tracking of Flight Time for Fleet Aircraft

Flight time lost due to the following tracked on the OAS AURM

- NC in Pay Item Code
- Code entered in Use Code with an explanation note in the remarks section
- Note the time lost
- Delay codes based on International Air Transport Association (IATA)

Delay Code	Item description
07	Unable to meet schedule due to maintenance
08	Aircraft connection(s) due to misc. traffic, flight operations, ground handling, etc.
11	Acceptance of Passengers
21	Documentation
36	Fueling
41	Aircraft Defects
43	Non Scheduled maintenance, special checks, and additional work beyond normal maintenance
45	AOG (Aircraft On the Ground for technical reasons)
51	Damage during flight operations, bird or lightning strikes, turbulence
52	Damage during ground operations
71	Weather
81	ATC (Air Traffic Control)
99	Miscellaneous, explain in remarks

Appendix 11 - Task Sheet for the Position of Resource Helicopter Manager

TASK SHEET FOR THE POSITION OF RESOURCE HELICOPTER MANAGER

February 2011

TASK SHEET ASSIGNED TO:
INDIVIDUAL'S NAME, DUTY STATION, AND PHONE NUMBER
TASK SHEET INITIATED BY:
OFFICIAL'S NAME, DUTY STATION, AND PHONE NUMBER
LOCATION AND DATE THAT TASK SHEET WAS INITIATED

The material contained in this Task Sheet accurately defines the performance expected of the position for which it was developed This Task Sheet is approved for use as a position qualification document in accordance with the instructions contained herein.

EVALUATOR

DO NOT COMPLETE THIS UNLESS YOU ARE RECOMMENDING THE TRAINEE FOR CERTIFICATION

VERIFICATION / CERTIFICATION OF COMPLETED TASK SHEET FOR THE POSITION OF:

RESOURCE HELICOPTER MANAGER

FINAL EVALUATOR'S VERIFICATION

I verify that all tasks have been performed and are documented with appropriate initials. I also verify that_____has performed successfully as a trainee and should therefore be considered for certification in this position.

_____

FINAL EVALUATOR'S SIGNATURE AND DATE

_____

EVALUATOR'S PRINTED NAME, TITLE, DUTY STATION, AND PHONE NUMBER

AGENCY CERTIFICATION: I certify that _____ has met all requirements for qualification in this position and that such qualification has been issued.

_____

CERTIFYING OFFICIAL'S SIGNATURE AND DATE

_____

CERTIFYING OFFICIAL'S NAME, TITLE, DUTY STATION, AND PHONE NUMBER

US Forest Service & DOI
POSITION TASK SHEET

Position Task Sheets (PTS) have been developed for designated positions within the aviation management branch of the US Forest Service & DOI. Each PTS lists the performance requirements (tasks) for the specific position in a format that allows a trainee to be evaluated against written guidelines. Successful performance of all tasks, as observed and recorded by an evaluator, will result in a recommendation to the agency that the trainee be certified in that position.

Evaluation and confirmation of the trainee's performance of all the tasks may involve more than one evaluator and can occur on projects, in classroom simulation, and in other work situations. Designated PTSs require position performance during which the majority of required tasks are demonstrated on an actual Project. Performance of these tasks in a classroom setting is NOT qualifying. It is important that performance be critically evaluated and accurately recorded by each evaluator. The bullets under each numbered task are examples or indicators of items or actions related to the task. The purpose of the bullets is to assist the evaluator in evaluating the trainee; the bullets are not all-inclusive.

THE SPECIFIC AVIATION TASKSHEET OF "RESOURCE HELICOPTER MANAGER" IS NOT TRANSFERRABLE TO NWCG QUALIFICATIONS RELATED TO PRESCRIBE OR WILDLAND FIRE. THE SPECIFIC TASKBOOKS FOR NWCG ICS POSITIONS WILL BE ACCOMPLISHED ON THE APPROPRIATE INCIDENTS AND/OR PROJECTS.

Entry of experience into IQCS will be as project only, not as qualified for positions requiring arduous or moderate duty fitness standards as precursors to qualification in wildland or prescribed fire positions.

RESPONSIBILITIES:

- The **Home Unit/ District/Forest** is responsible for:
  Selecting trainees based on the needs of the home unit and higher levels.
  Ensuring that the trainee meets the training and experience requirements included in the Interagency Aviation Training Guide as well as the Interagency Helicopter Operations Guide.
  Initiating PTSs to document task performance.
  Explaining to the trainee the purpose and processes of the PTS as well as the trainee's responsibilities.
  Providing opportunities for evaluation and/or making the trainee available for evaluation.
  Providing an evaluator for local assignments.
  Tracking progress of the trainee.
  Confirming PTS completion.
  Determining certification per local policy.
  Issuing proof of certification.

- The **Trainee** is responsible for:
  Reviewing and understanding instructions in the PTS.
  Identifying desired objectives/goals.
  Providing background information to an evaluator.
  Satisfactorily demonstrating completion of all tasks for an assigned position within three years.
  Assuring the Evaluation Record is complete.
  Notifying home unit aviation manager when the PTS is completed and providing a copy.
  Keeping the original PTS in personal records.

- The **Evaluator** is responsible for:
  Understanding the IHOG
  Being qualified and proficient in the position being evaluated.
  Meeting with the trainee and determining past experience, current qualifications, and desired objectives/goals. Reviewing tasks with the trainee.
  Explaining to the trainee the evaluation procedures that will be utilized and which objectives may be attained.
  Identifying tasks to be performed during the evaluation period.
  Accurately evaluating and recording demonstrated performance of tasks. Satisfactory performance shall be documented by dating and initialing completion of the task. Unsatisfactory performance shall be documented in the Evaluation Record.
  Completing the Evaluation Record found at the end of this PTS.
  The bullets under each numbered task are examples or indicators of items or actions related to the task. The purpose of the bullets is to assist the evaluator in evaluating the trainee; the bullets are not all-inclusive.

- The **Final Evaluator** must be currently qualified as a resource or fire Helicopter Manager. Only the Evaluator on the final position performance assignment (the assignment in which all remaining tasks have been evaluated and initialed) will complete the Final Evaluator's Verification statement inside the front cover of the PTS recommending certification.

- The Unit **Training Specialist/Unit Aviation Manager (UAM)** is responsible for:
  Identifying Project evaluation opportunities.
  Assuring that trainees have met prerequisites.
  Identifying and assigning a qualified evaluator that can provide a positive experience for the trainee, and making an accurate and honest appraisal of the trainee's performance.
  Providing PTSs to approved trainees on the Project when home unit was unable to provide them.
  Documenting the assignment.
  Conducting progress reviews.
  Conducting a close-out interview with the trainee and evaluator and assuring that documentation is proper and complete.
  Notifying trainee's home unit.

- The **Certifying Official** from the Home Agency (**Unit Aviation Officer/State Aviation Manager/Regional Aviation Manager/ Regional Helicopter Operations Specialist, whichever is applicable)** must review and confirm the completion of the PTS and make a determination of agency certification. This determination should be based on the Trainee's demonstration of acceptable position performance, as well as the completed PTS—which includes a Final Evaluator's Verification. Only the Certifying Official from the Home Agency has the authority to certify an individual's qualifications.

POSITION: RESOURCE HELICOPTER MANAGER

TASK	CODE*	EVALUATION RECORD#	EVALUATOR: Initial & date upon Completion of task
GENERAL 1. Assemble Helicopter Manager Kit.	O		

2. Administer helicopter contracts/agreements in accordance with agency policy:
• Conduct pre-use inspection of helicopter and fuel service vehicle (if applicable) to ensure compliance with contract/agreement specifications as related to mission required equipment, systems (commo, GPS, AFF, etc...) and operation. Document as per agency policy.
• Verify and review required onboard documents for compliance and currency such as:
  ○ Transportation of HazMat Guide
  ○ DOT exemption
  ○ Copy of contract or agreement,
  ○ Helicopter flight manual and aircraft logbook
  ○ Agency aircraft data card
  ○ Pilot approval card
• Maintain communication with appropriate agency aircraft contracting personnel.
• Establish daily work schedules for pilots, mechanics and fuel truck drivers.
• Complete daily diary and flight payment documents.
• Complete safecoms as needed.
• Complete project contractor evaluation and forward to Contracting Officer.
	P		

3. Demonstrate knowledge of agency's aviation safety policies as applicable to duties of the position and tasks within this book : • Evaluate project or program using the Risk Management Workbook. • Brief the evaluator as to whether JHA/Risk Management Worksheet or PASP adequately addresses critical system elements and key hazards. • Identify any additional hazards and mitigations not included/or alternate mitigations for the Workbook.	O		
4. Establish and maintain positive supervisory interpersonal and interagency working relationships.	P		
5. Ensure that: • Assigned personnel are in good mental and physical health. • Assigned personnel are motivated to carry out assignments. Morale problems are dealt with immediately. • Fatigue producing conditions on projects are resolved.	P		

*Code: O = task can be completed in any situation (classroom, simulation, daily job, etc.) P = task must be performed on a project (Resource Project, search & rescue, planned event, Law Enforcement, etc.)

POSITION: RESOURCE HELICOPTER MANAGER

TASK	CODE*	EVALUATION RECORD#	EVALUATOR: Initial & date upon Completion of task
6. Provide for the safety and welfare of assigned personnel during the entire period of the project: • Recognize potentially hazardous situations and mitigate them. Inform participants of hazards. • Ensure that personnel are qualified for assignments or mentored by qualified individuals. • Ensure adequate rest and hydration is provided to assigned personnel.	P		
MOBILIZATION 7. Ensure that flight planning, flight-following and resource tracking requirements are met: • Obtain Resource Order, Flight Request or other mission information. • Work with pilot to develop agency and/or FAA flight plans. • Obtain appropriate radio frequencies, phone numbers, area maps and known aerial hazard maps for mission. • Conduct or ensure that flight following is accomplished at established intervals.	P		
PROJECT ACTIVITIES 8. Provide helicopter and helicopter personnel tactical capabilities to Project supervisor: • Identify missions that aircraft and pilot are approved to perform; passenger, cargo and longline, etc. • Ensure they are suited to the project mission requirements. • Identify qualifications and special capabilities of assigned helicopter personnel. • Identify helicopter accessories and equipment available in support vehicles or at field camps and order additional equipment if needed.	P		
9. Conduct preflight and post flight briefings with all involved personnel: • Review Project Aviation Safety Plan (PASP) prior to each mission. • Establish mission objectives, timeframes, reporting locations, travel routes, etc... • Identify and discuss performance, safety and/or efficiency problems encountered. • Identify adjustments in future operations.	P		
10. Establish helispots as needed for the project in coordination with the pilot: • Ensure adequate approach & departure clearance as well as the safety circle in accordance with IHOG minimum requirements for types of helicopters to be utilized. • Ensure that IHOG required equipment is available and staged at appropriate locations.	P		
11. External Load missions are conducted per the requirements within IHOG, Chapter 11 Cargo Transport. • Coordinate with pilot to ensure sling sites meet minimum requirements. • External Load equipment and cargo inspected prior to use • Equipment and rigging methods utilized per IHOG chapter 9 and 11	P		

*Code: O = task can be completed in any situation (classroom, simulation, daily job, etc.) P = task must be performed on a project (Resource Project, search & rescue, planned event, Law Enforcement, etc.)

POSITION: RESOURCE HELICOPTER MANAGER

TASK	CODE*	EVALUATION RECORD#	EVALUATOR: Initial & date upon Completion of task
12. Flight Crew time and scheduling: • Continuously monitor and document flight and/or duty hours of pilots, mechanics and/or fuel truck drivers to ensure that agency limitations are not exceeded. • Schedule and manage flight and duty times to meet current and projected work objectives. • Ensure that relief pilots, mechanics, etc. are scheduled and assigned when required.	P		
13. Ensure that helicopter pilot accurately completes and approves helicopter load calculation: • Reflecting current aircraft configuration. • Appropriate flight manual performance charts and environmental conditions. • Flight crew weights, fuel quantity on board. • Elevations at takeoff and landing sites. • In-ground or out-of-ground landing sites. • Density altitude.	P		
14. Verify that helicopter is maintained to agency contract standards: • Review aircraft logbook entries to ensure that scheduled maintenance inspections are completed at required intervals. • Contact agency maintenance specialist during un-scheduled maintenance or major component replacement. • Facilitate return-to-contract availability process. • Inform supervisor/UAM/COR of current or future helicopter maintenance/unavailability.	P		
15. Ensure that turbine power assurance checks are conducted and documented as required by the procurement document. Contact agency maintenance specialist if trend analysis indicates sub-par engine performance.	P		
16. Ensure helicopter safety policies are adhered to: • Confirm that actual helicopter payloads do not exceed the calculated allowable payload. • Appropriate personal protective equipment (PPE) is utilized for all missions. • Ensure crash rescue/response procedures and equipment are established and communicated to all helicopter personnel. • Comply with all requirements in the Interagency Aviation Transport of Hazardous Materials Guide and exemption. • Follow all special mission agency safety requirements.	P		
17. Receive demobilization instructions. Brief participants, and flight following personnel on demobilization procedures and responsibilities. Ensure that Project and agency demobilization procedures are followed.	P		

*Code: O = task can be completed in any situation (classroom, simulation, daily job, etc.) P = task must be performed on a project (Resource Project, search & rescue, planned event, Law Enforcement, etc.)

INSTRUCTIONS for EVALUATION RECORD
There are four separate blocks allowing multiple evaluations to be made, if required. These evaluations may be made on projects, simulation in classroom, or in daily duties. This should be a sufficient number of forms for qualification if the individual is adequately prepared and opportunities are present. If additional blocks are needed, a page can be copied from a blank Task Sheet and attached.

COMPLETE THESE ITEMS AT THE START OF THE EVALUATION PERIOD:

Evaluator's name, Project/office title, and agency: List the name of the evaluator, his/her project position or office title, and agency.

Evaluator's home unit address and phone: Self-explanatory

#: The number in the upper left corner of the experience block identifies a particular experience or group of experiences. This number should be placed in the column labeled "Evaluation Record #" on the Qualification Record for each task performed satisfactorily.

Location of Project/Simulation: Identify the location where the tasks were performed by agency and office.

Project Kind: Enter kind of project, e.g., animal survey, search and rescue, flood, etc.

COMPLETE THESE ITEMS AT THE END OF THE EVALUATION PERIOD:
Number and Type of Resources: Enter the number of resources and types assigned to the project pertinent to the trainee's Task Sheet position.

Duration: Enter inclusive dates during which the trainee was evaluated. This block may indicate a span of time covering several small and similar Projects if the trainee has been evaluated on that basis, i.e., several initial attack fires in similar fuel types.

Recommendation: Check as appropriate and/or make comments regarding the future needs for development of this trainee.

Date: List the date the record is being completed.

Evaluator's initials: Initial here to authenticate your recommendations and to allow for comparison with initials in the Qualifications Record.

Evaluator's Qualification/rating: List your certification relevant to the trainee position you supervised.

Evaluation Record

TRAINEE NAME/ TRAINEE POSITION_____

#1	Evaluator's name: Project/office title & agency:			
Evaluator's home unit address & phone:				
Name and Location of Project or Simulation (agency & area)	Project Kind (Animal survey, search & rescue, etc.)	Number & Type of Resources Pertinent to Trainee's Position	Duration (inclusive dates in trainee status)	Management Level
			to	

___The tasks initialed & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee.
___I recommend the following for further development of this trainee.
___The individual has successfully performed all tasks for the position and should be considered for certification.
___The individual was not able to complete certain tasks (comments below) or additional guidance is required.
___Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.
___The individual is severely deficient in the performance of tasks for the position and needs further training (both required & knowledge and skills needed) prior to additional assignment(s) as a trainee.
Recommendations:

Date: _____ Evaluator's initials: _____ Evaluator's Qualification/rating:_____

#2	Evaluator's name: Project/office title & agency:			
Evaluator's home unit address & phone:				
Name and Location of Project or Simulation (agency & area)	Project Kind (Animal survey, search & rescue, etc.)	Number & Type of Resources Pertinent to Trainee's Position	Duration (inclusive dates in trainee status)	Management Level
			to	

___The tasks initialed & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee.
___I recommend the following for further development of this trainee.
___The individual has successfully performed all tasks for the position and should be considered for certification.
___The individual was not able to complete certain tasks (comments below) or additional guidance is required.
___Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.
___The individual is severely deficient in the performance of tasks for the position and needs further training (both required & knowledge and skills needed) prior to additional assignment(s) as a trainee.
Recommendations:

Date: _____ Evaluator's initials: _____ Evaluator's Qualification/rating:_____

Evaluation Record
(Continuation Sheet)

TRAINEE NAME/ TRAINEE POSITION_____

#3	Evaluator's name: Project/office title & agency:			
Evaluator's home unit address & phone:				
Name and Location of Project or Simulation (agency & area)	Project Kind (Animal survey, search & rescue, etc.)	Number & Type of Resources Pertinent to Trainee's Position	Duration (inclusive dates in trainee status)	Management Level
			to	

___The tasks initialed & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee.
___I recommend the following for further development of this trainee.
___The individual has successfully performed all tasks for the position and should be considered for certification.
___The individual was not able to complete certain tasks (comments below) or additional guidance is required.
___Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.
___The individual is severely deficient in the performance of tasks for the position and needs further training (both required & knowledge and skills needed) prior to additional assignment(s) as a trainee.
Recommendations:

Date: _____ Evaluator's initials: _____ Evaluator's Qualification/rating:_____

#4	Evaluator's name: Project/office title & agency:			
Evaluator's home unit address & phone:				
Name and Location of Project or Simulation (agency & area)	Project Kind (Animal survey, search & rescue, etc.)	Number & Type of Resources Pertinent to Trainee's Position	Duration (inclusive dates in trainee status)	Management Level
			to	

___The tasks initialed & dated by me have been performed under my supervision in a satisfactory manner by the above named trainee.
___I recommend the following for further development of this trainee.
___The individual has successfully performed all tasks for the position and should be considered for certification.
___The individual was not able to complete certain tasks (comments below) or additional guidance is required.
___Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.
___The individual is severely deficient in the performance of tasks for the position and needs further training (both required & knowledge and skills needed) prior to additional assignment(s) as a trainee.
Recommendations:

Date: _____ Evaluator's initials: _____ Evaluator's Qualification/rating:_____

Appendix 12 – BLM Aviation Enhancement Application Form

The following template applies to aviation enhancement requests for programs such as rappel, short-haul and cargo let-down, RADS. Additionally the template should be used for changes in utilization of aviation programs already approved.

The intent of the template is to organize information required by aviation and line managers to make informed decisions.

Published standards have been established to prevent aviation mishaps and to provide a standardized approach to efficient and effective operations. Aviation enhancements have inherent increases of exposure of personnel which require careful scrutiny to ensure the operational gain is worth the risk and that identified hazards are mitigated where possible.

REVIEW AND APPROVALS

Prepared By:	Date:
State Aviation Manager Review:	Date:
District Manager/Line Managment, Approval:	Date:
State Director, Approval:	Date:
National Aviation Office Program Manager Review::	Date:
Division Chief Aviation, Approval:	Date:

Background: *Provide information pertaining to the program that will undergo enhancement. Include any historic information applicable to past practices and success or other operator's ability to perform the required aviation elements without the BLM restrictions.*

Objectives: *These must be clearly stated and achievable with the criteria provided that will be used to measure success and attainment. What is the District trying to accomplish with the enhancement?*

Justification: *What benefit accrues to the BLM or the District by granting the enhancement*

Benefit and Risk Analysis: *Benefits of the use of the enhancement will be provided along with the analysis of the risks that will be involved. Describe the consequences of use and non-use of the enhancement to BLM policy.*

	Benefits	Risks	Consequences for BLM Policy

Note:

Limitations and Controls: *Provide a description of any barriers that would affect the use of this enhancement? Indicate which can be mitigated and which cannot?*

Funding provisions: *Describe how any additional funding would be accessed and where any savings would be applied.*

Contracting issues: *Describe any contract modification that would be needed to meet the needs of this enhancement and vendor's requirements in order to accept them.*

Security provisions: *Describe any additional security measures that will be needed to assure aircraft and crewmembers are not harmed as a result of expanded operational abilities.*

Training and support provisions: *Describe the training and support needs applicable for the enhancement and how these will be satisfied without affecting other existing program elements?*

Other methods available: *Provide a comprehensive description of other methods of accomplishing the objective and the limitations these pose. Describe any restrictions these methods possess and possible solutions that would make them viable options.*

Appendix 13 - Acronyms

310-1	Wildland Fire Incident Management System
9400-1a	BLM Flight Request Form
AAF	Aviation Airport Facilities
ABOD	Aviation Board of Directors
ABS	Forest Service Aviation Business System
ACETA	Aerial Capture Eradication and Tagging of Animals
ACMIS	Acquisition Career Management Information System
ACOR	Alternate COR
AD	Administratively Determined
AFF	Automated Flight Following
AFS	BLM Alaska Fire Service
AGL	Above Ground Level
ALSE	Aviation Life Support Equipment Handbook
AMD-23	Aircraft Use Report Form
AMG	BLM Aviation Management Group
AMOC	Air Marine Operations Center - US Border Patrol
AMS	IBC Aviation Management Systems
AOA	Aircraft Operations Area (AOA)
AQD	Acquisition Services Directorate
AQD-13	Request for Contract Services
AQD-16	Contract Award/Renewal Recommendation and Funding Availability Certification
AQD-19	Notice to Proceed
AQD-20	Request for Rental Services
AQD-91	Flight Services Request Form
ARA	Aircraft Rental Agreement
ARTCC	Air Route Traffic Control
ASAT	Aviation Safety Assistance Team
ASM	Aerial Supervision Module
ATC	Air Traffic Control
ATGS	Air Tactical Group Supervisor
ATP	Air Tactical Pilot
ATS	Air Tactical Supervisor
AURM	Aircraft Use Report Manager (Fleet)
AV	Exclusive Use Contract Availability
BLM	Bureau of Land Management
BPA	Blanket Purchase Agreement
BVC	Best Value Comparison (Part of AQD-91)
CO	Contracting Officer
COA	Certificate of Authorizations
COR	Contracting Officer’s Representative
COTR	Contracting Officer Technical Representative
CFA	Controlled Firing Areas
CWN	Call When Needed
DHS	Department of Homeland Security
DINS	Internet NOTAM Service - DOD
DM	Departmental Manual
DOD	Department Of Defense
DOI	Department of the Interior
EAB	Executive Aviation Board
EAC	Executive Aviation Committee
EAS	Executive Aviation Sub-Committee
EATPL	Emergency Air Traffic Priority List
ESCAT	Emergency Security Control of Air Traffic
ETA	Estimated Time of Arrival
FAA	Federal Aviation Administration
FAIRS	Federal Aviation for Interactive Reporting System
FAO	Forest Aviation Officer
FAR	Federal Acquisition Regulations

FAR	Federal Aviation Regulations
FMO	Fire Management Officer
FOR	Fixed Operating Rate
FPMR	Federal Property Management Regulations
FTA	Fire Traffic Area
FWFM	Fixed Wing Flight Managers
GA	General Aviation
GACC	Geographical Area Coordination Centers
GTR	Government Transportation Request
HB	Handbooks
HOGE	Hover Out of Ground Effect
IAA	Interagency Agreement
IAIG	Interagency Aerial Ignition Guide
IASC	Interagency Airspace Subcommittee
FWFM	Fixed Wing Flight Managers
IASG	Interagency Aerial Supervision Guide
IASS	Interagency Aerial Supervision Subcommittee
IAT	Interagency Aviation Training
IATBOG	Interagency Airtanker Base Operations Guide
IATS	Interagency Aviation Training Subcommittee
IBC	Interior Business Center
IC	Incident Commander
IES	Illuminating Engineering Society
IFR	Instrument Flight Rules
IHOG	Interagency Helicopter Operations Guide
IHOpS	Interagency Helicopters Operations Subcommittee
IHRG	Interagency Helicopter Rappel Guide
IIC	OAS Safety Investigator-In-Charge
IPP	Internet Payment Platform
ISOG	Interagency Single Engine Airtanker Operations Guide
ISPOG	Interagency Smokejumper Pilots Operations Guide
IWP	Incident With Potential
LAT	Large Airtanker
LATN	Low Altitude Tactical Navigation Areas
LE	Law Enforcement Operations
LOA	Letter of Authorization
M3	Aviation Management for Supervisors training course
M-410	Facilitative Instructor
MAC	Multi-Agency Coordination
MACAP	Mid Air Collision Avoidance Program
MAP	Mandatory Availability Period
MAFFS	Modular Airborne Fire Fighting System
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheet
NAO	BLM National Aviation Office
NAP	BLM National Aviation Plan
NIAC	National Interagency Aviation Committee
NIAIS	National Interagency Airspace Information System
NM	Nautical Mile
NORAD	North American Aerospace Defense Command
NOTAM	Notice to Airmen
NTSB	National Transportation Safety Board
NWCG	National Wildfire Coordinating Group
OAS	Office of Aviation Services
OAS-2	Fleet Use Report
OPM	Operational Procedures Memorandums
OSHA	Occupational Safety and Health Administration
PASP	Project Aviation Safety Plan
PI	Project Inspector
PPE	Personal Protective Equipment
QPL	Qualified Products List
RADS	Rope Assisted Deployment

Redbook	Interagency Standards for Fire and Fire Aviation Operations
RMP	Resource Management Plans
ROSS	Resource Ordering and Status System
SAM	BLM State Aviation Manager
SAR	Search and Rescue
SASEB	Smokejumper Aircraft Screening Equipment & Evaluation Board
SEAT	Single Engine Airtanker
SEMG	Single Engine Airtanker Manager
SES	Senior Executive Service
SFMO	State Fire Management Officer
SME	Subject Matter Expert
SMS	Safety Management System
SR's	Slow Routes
SUA	Special Use Airspace
TFR	Temporary Flight Restriction
TSA	Transportation Security Administration
UAM	Unit Aviation Manager
UAO	Unit Aviation Officer
UAS	Unmanned Aircraft Systems
USFS	United States Forest Service
VFR	Visual Flight Rules
VLAT	Very Large Airtanker
WFCS	Wildland Fire Chemical Systems
WH&B	Wild Horse and Burro

Appendix 14 – BLM Nevada Project Aviation Safety Plan (PASP) supplement

In accordance with the DOI OPM-06, BLM National Aviation Plan as well as the State Aviation plan, all project aviation safety plans will use a 'narrative' format. This format will use a few sentences (or as much detail as needed) to address each of the bullet points/elements listed in section 4.3.2. If an element is not required, it must be addressed as N/A or not applicable. Accident prevention is paramount when planning individual aviation projects. Flights may not deviate from Department and Bureau policy and procedures, except for safety of flight considerations. A PASP is required for non-fire Special Use projects. A 9400-1a form may be completed in lieu of the PASP for a low complexity/one-time non-fire mission flights. The PASP or 9400-1a shall be reviewed by the UAM and approved by the appropriate level of authority per the state/unit aviation plan. Managers shall be briefed by the UAM prior to their approval of the plan.

- PASP's that have a final risk assessment of **High** will require a SAM review prior to line manager approval.
- A courtesy copy of all PASP's will be routed to the SAM prior to implementation.

Projects that occur periodically over a season or fiscal year can have one PASP prepared and approved. In this situation a 9400-1a form will be required for each periodic flight. The 9400-1a approval level would be at the UAM level with a courtesy notification to the SAM.

For projects that are conducted by a units' aviation operations group (helitack, aerial supervision, smokejumpers); if the missions are typical and routine to the operational group with mission risk assessment documented in the groups' annual operations plan and the state and unit plan allows; then project/flight can be conducted, without a specific PASP, after completion of 9400-1a documentation.

- PASPs developed for reoccurring projects will be reviewed, updated and signed annually as per required elements of a PASP.

Required elements of a PASP include (See OPM-06 for details on required elements):

- Project Name, Objectives and Supervision
- Justification
- Project date(s)
- Project location
- Projected cost of aviation resources
- Desired aircraft, make/model (Included if available and/or specific N# to be noted on 9400-1A)
- Pilot (skills, aircraft and missions qualified for – if known)
- Participants – Flight Manager, Aircrew, passengers, etc.
- Communication Plan, Flight following and emergency search and rescue
- Flight routes/areas and altitudes
- Hazard identification (e.g., weather, takeoff or landing weights, landing areas, wire hazards, etc.)
- Wire Strike Prevention (351DM1.9, C&D)
    - Flight Environment Considerations: Bureau projects often dictate that flights be conducted in close proximity to the ground where wires are prevalent. Flights made in confined areas (e.g. deep, narrow canyons) require that a prior ground and/or aerial survey of hazards be made.

- Risk Assessment/Hazard Maps: To reduce wire strike potential, it is critical that a risk assessment be conducted prior to all low level flights. A low level flight hazard map shall be constructed for the local operational area. A copy of the hazards map shall be provided to the pilot prior to any project flight.

- Description(s) of take-off and landing areas
- Pre-flight briefings – using a mission risk assessment worksheet (GAR model)/After Action Reviews
- Personnel qualifications and currency of all personnel involved in the mission/project
- Aircraft and equipment approval
- Airspace Coordination and Aerial hazard identification
- Risk assessment utilizing the SMS worksheets as appropriate
- Personal protective clothing/equipment (if required)
- Load calculations and/or weight and balance information requirements
- Unit Aviation Managers review and signature (annually if reoccurring project)
- Project Lead Supervisor's and line officer's approval signature (annually if reoccurring project)

A proper risk assessment will be completed and included in the plan. These risk assessments can be found in the Aviation Risk Management Workbook. This workbook has risk assessments designed by subject matter experts for specific missions (Aerial Detection Survey, Aerial Application – Seeding, etc.). This document can be found here: http://www.fs.fed.us/fire/av_safety/risk_management/index.html#ra

BLM Nevada – BLM NV PASPs and Risk Assessments will be reviewed and approved ***before implementation*** at the appropriate level based on the final risk level of the SMS Risk Assessment and Mitigation Worksheet.

Final Risk Level	Review Level Required	Approval Level Required
Low	Unit Aviation Manager	District/Field Office Manager
Medium	Unit Aviation Manager	District/Field Office Manager
Serious	State Aviation Manager	District Manager
High	State Aviation Manager	State Director

BLM Nevada – A courtesy copy of all approved BLM NV PASP's will be forwarded to the *State Aviation Manager* at least 3 business days prior to project implementation.

BLM Nevada – PASP's are to be reviewed and approved by a Line Officer (District Manager, FO Manager or acting). Districts may delegate approval of low complexity projects to the UAM or other designated position if specified in the Unit Aviation Plan.

BLM Nevada – Project area maps for BLM NV will be completed utilizing GIS with an Aeronautical Sectional Chart background with overlay of the HMA or Project area. This will facilitate Airspace de-confliction with Military Schedulers. State and District "Known Aviation Hazard" Maps can be accessed at the BLM NV Fire and Aviation sharepoint (see also BLM *NAP* 7.2)

BLM Nevada – All BLM NV PASPs shall be completed in narrative format following the outline above meeting the requirements in OPM-06 Appendix B, with the exception of Aerial Ignition projects, which may utilize the standard format as found in the *Interagency Aerial Ignition Guide*.

Mission Risk Assessment Worksheet		
Risk rated 1-10 for each category. *Overall Mission Risk* 1-35 *Green* / 36-60 *Amber* / 61-80 *Red*	Rating	Mitigations should be considered for any category rated higher than 5. Mitigation(s)
***Supervision**:* Presence, accessibility and effectiveness of leadership for all teams and personnel. Clear chain of command.		
Planning: Current SOP/Operations Guidelines, team trained in accordance with same. Adequate mission planning time. Required equipment and training is provided. Briefs/debriefs planned, team input solicited.		
Team Selection: Level of individual training and experience. Cohesiveness and atmosphere that values input/self-critique.		
Team Fitness: Level of overall physical fitness of team. Level of crew member rest/fatigue and overall morale. Team members with major life distractions.		
Communication: Infrastructure: Radio communications possible throughout area of operations (presence of portable repeaters). Communications plan established and rehearsed. Good CRM techniques in place.		
Contingency Resources: MOU's in place with participating cooperators. Planning accomplished with cooperators. Shared communications plan and frequencies		
Environment: Extreme temperatures, inclement weather elevation, difficulty of terrain (aspect, foliage, slope etc.), long approach, remoteness, high density altitude.		
Incident Complexity: Severity and probability of mishap. Potential for incident that would tax the current staffing levels.		
Total		

Appendix 15 – DOI Aviation Management Information Bulletin NO. 05-02

In reply refer to: 113A-4

March 4, 2005

DOI AM INFORMATION BULLETIN NO. 05-02

To: All DOI Aviation Operations

From: Robert H. Lewis, Acting Associate Director, Aviation Management

Subject: R-44 Helicopters (Supersedes OAS IB No. 02-02)

The Robinson Helicopter Company has manufactured two R-44 models to date, the R-44 and R-44 II. This bulletin is to familiarize the user with the R-44 characteristics and operating limitations.

We have several R-44s in the procurement system and continue to have interest in this aircraft for resource work; however, the end user may expect the same or similar performance and payloads as a light turbine helicopter. The economics of the R-44 is an attractive alternative to the higher cost turbine-powered helicopters. Its lower hourly rates and high cruise speed make it cost effective for some natural resource flight requirements; it is well suited for missions such as passenger transport to prepared low altitude locations and low level visual reconnaissance. However, it is not suited for all DOI helicopter flight profiles requiring maximum power output, abrupt control inputs, and/or accelerated maneuvering. DOI bureaus choosing this aircraft must consider how it fits into their aviation programs. Aviation managers should provide written guidance to their users detailing the R-44's suitability in meeting aviation requirements.

R-44 and R-44 II Characteristics and Operating Limitations

1. The R-44 is powered by a six-cylinder piston engine, rated at 225 horsepower. The R-44 II engine is rated at 245 horsepower.
2. The R-44 has three passenger seats. Due to mission requirements and/or environmental conditions, the number of passengers may be less than seats available.
3. The average equipped weight per aircraft is approximately 1,490 lb for the R-44 and 1,510 lb for the R-44 II.
4. The maximum gross weight is 2,400 lb for the R-44 and 2,500 lb for the R-44 II.
5. The fuel consumption is approximately 15 gph of 100-octane low lead aviation gasoline (100LL Avgas).
6. The fixed weight reduction for load calculation purposes has been established at 75 lb.
7. Sample payload: Pilot (200 lb), fuel for 1 hour and 30 minutes and reserve (approximately 171 lb), plus survival kit (20 lb) equals 391 lb. Note: These figures are based on sea level performance. Increases in altitude and temperature will decrease the allowable payload and performance. Do not use these figures for actual flight. SAMPLE ONLY.

R-44 R-44 II

Maximum gross weight 2,400 Maximum gross weight 2,500
Pilot, fuel, survival kit -391 Pilot, fuel, survival kit -391
Aircraft equipped weight -1,491 Aircraft equipped weight -1,510
Fixed weight reduction -75 Fixed weight reduction -75
Allowable payload 444 Allowable payload 524

Vigilance must be exercised when operating this aircraft in any of the following conditions:

1. At or near maximum gross weight (due to reduced aircraft performance).
2. More than two passengers (due to reduced aircraft performance, weight, and reduced fuel supply).
3. At pressure altitudes above 4,000 feet (due to reduced aircraft performance) (Safety Tip 13).
4. Any natural resource flights that involve landings at locations other than prepared sites due to fire danger (Safety Notice SN-17).
5. Flights that require abrupt control inputs or accelerated maneuvers (Safety Tip 17).
6. Single skid, toe-in, or step-out landings will not be approved due to the design of the landing gear and lateral center of gravity limitations (Safety Notice SN-13).

Due to the number of accidents in the history of this make and model, the Federal Aviation Administration issued a **Special Federal Aviation Regulation** (SFAR No. 73-1). This SFAR increases pilot flight time and currency requirements, in addition to the requirements of 14 CFR Part 61. No other aircraft has this restriction.

In addition to the SFAR, the Robinson Helicopter Company has published a number of Safety Tips and Safety Notices. These items directly affect the use of this aircraft in "natural resource" operations. The following are excerpts from those Tips and Notices:

> **Safety Tip 13**. When operating at higher altitudes (above 3,000 or 4,000 feet), the throttle is frequently wide open and the RPM must be controlled with the collective.
>
> **Safety Tip 15**. Never land in tall dry grass. The exhaust is low to the ground and very hot; a grass fire may be ignited.
>
> **Safety Tip 17**. With hydraulic controls, use special caution to avoid abrupt control inputs or accelerated maneuvers. Frequent or prolonged high-load maneuvers could cause premature, catastrophic failure of critical components.
>
> **Safety Notice SN-13**. DO NOT ATTACH ITEMS TO THE SKIDS. The landing gear strut elbows have cracked on several helicopters when the pilot attempted to carry an external load strapped to the landing gear skids. The landing gear is optimized to take high "up" loads. Consequently, it has a very low strength in the opposite or "down" direction.

Safety Notice SN-17. NEVER LAND IN TALL GRASS. The engine exhaust is very hot and can easily ignite tall grass or brush. One R22 was completely destroyed by fire after a normal landing in tall grass.

Safety Notice SN-30. LOOSE OBJECTS CAN BE FATAL. A recent fatal accident occurred when the pilot allowed her kneeboard to go out the left door and strike the tail rotor. Any loose object striking the tail rotor can cause failure of the tail rotor blade.

1. Walk completely around the aircraft checking fuel caps, tail rotor, and for anything which could catch a skid, such as a connected static line.
2. Stow or secure all loose objects in the cabin.
3. Firmly latch all doors.
4. And, never fly with a left door removed. (Remove only the right door for ventilation.)

Safety Notice SN-37 EXCEEDING APPROVED LIMITATIONS CAN BE FATAL. Many pilots do not understand metal fatigue. Each time a metal component is loaded to a stress level above its fatigue limit, hidden damage occurs within the metal. There is no inspection method which can detect this invisible fatigue damage. The first indication will be a tiny microscopic crack in the metal, often hidden from view. The crack will grow with each repetition of the critical stress until the part suddenly breaks. Crack growth will occur quite rapidly in drive system parts from the high frequency torsional loads. It will also occur rapidly in rotor system components due to the high centrifugal force on the blades and hub. Damaging fatigue cycles occur with every revolution of an overloaded drive shaft or rotor system.

If a pilot exceeds the power or airspeed limits on a few occasions without failure, he may be misled into believing he can safely operate at those high loads. Not true. Every second the limitations are exceeded, more stress cycles occur and additional fatigue damage can accumulate within the metal. Eventually, a fatigue crack will begin and grow until a sudden failure occurs. If the pilot is lucky, the part will have reached its approved service life and be replaced before failure. If not, there will likely be a serious or fatal accident.

WARNING

1. Always operate the aircraft well below its approved VNE (never exceed speed), especially in turbulent wind conditions.
2. Do not operate the engine above its placarded manifold pressure limits.
3. Do not load the aircraft above its approved gross weight limit.
4. **The most damaging conditions occur when flying or maneuvering at high airspeeds combined with high power settings.**