

# 2010 National Aviation Plan

BLM



Department of the Interior  
Bureau of Land Management  
April 2010





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/Administration.html>

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**[aviation.blm.gov](http://aviation.blm.gov)**

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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 has 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 departmental manuals or the BLM *9400 Manual*.

### 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 Division Objectives

The BLM aviation program goal is to provide the aviation tools that meet the public's expectation of efficient and safe management of the National System of Public lands. Aviation management is about balancing mission goals with the environment, budget 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. 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 and, prior to conducting any work project, all risks are 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 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 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 Deputy 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 and assigned personnel to be national resources available for immediate assignment to areas of greatest national need.

The BLM national aircraft management strategy is predicated on the NAO providing oversight of all BLM fire aircraft acquisition and the coordination of the allocation of aircraft between states. The NAO tracks tactical aircraft utilization along with monitoring fire activity, fire danger levels and forecasted weather. The NAO coordinates with the state fire management officers (SFMO) and their staff on aircraft needs, availability and re-positioning. State fire management officers (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 severity funded aviation resources will be considered, along with exclusive use funded aircraft 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 air tanker (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* 3.9.

## 1.5 Authority

This plan fulfills the departmental manual requirements outlined in *350 DM 1, Appendix 3*, and *BLM 9400.3 Directives*. This plan has been developed to provide standardization and policy for all BLM aviation programs, and sets the standards that will be aviation policy during 2010.

## 1.6 Policy

All BLM aviation operations and management are 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 9400 manual.

### 1.6.1 Handbooks

*Interagency Aviation Transport of Hazardous Materials Handbook*

*BLM Wild Horse & Burro Aviation Management Handbook (WH&B)*

*Military Use Handbook*

*Aerial Capture, Eradication and Tagging of Animals (ACETA) Handbook*

*Aviation Life Support Equipment Handbook (ALSE)*

### 1.6.2 Plans

BLM National Aviation Plan

BLM State Aviation Plans

District/Unit Aviation Plans

### 1.6.3 Guides

*Interagency Helicopter Operations Guide (IHOG)*

*Interagency Single Engine Airtanker Operations Guide (ISOG)*

*Interagency Smokejumper Pilots Operations Guide (ISPOG)*

*Interagency Airspace Coordination Guide (LACG)*

*Interagency Airtanker Base Operations Guide (LATBOG)*

*Interagency Helicopter Rappel Guide (IHRG)*

*Interagency Aerial Ignition Guide (LAIG)*

*Interagency Aerial Supervision Guide (LASG)*

*Interagency Standards for Fire and Fire Aviation Operations (Redbook)*

## 2.0 Aviation Management Organizations

### 2.1 Department of the Interior (DOI)

**National Business Center (NBC) Aviation Management Directorate (AMD):** The AMD is responsible for Departmental functions related to aircraft services. The NBC AMD provides service offerings that include; aviation safety services, aviation program management services, aviation user training services, and flight scheduling and coordination services. Reference *350 DM 1* for a complete list of functions and responsibilities.

**NBC Acquisition Services Directorate (AQD):** The Aviation Management Acquisition Branch provides department-wide centralized contracting for aircraft and related services for DOI and DOI customers. Other acquisition management activities include property accountability and small purchase service in support of AM operations including DOI fleet aircraft.

**Aviation Board of Directors (ABOD):** The ABOD is responsible for providing executive level bureau involvement in the formulation of DOI aviation policy and aviation management.

**Aviation Board of Directors Working Group (ABODWG):** The ABOD working group is an advisory group for the ABOD. The BLM representative to the working group is the Chief, Division of Aviation.

### 2.2 Bureau of Land Management (BLM)

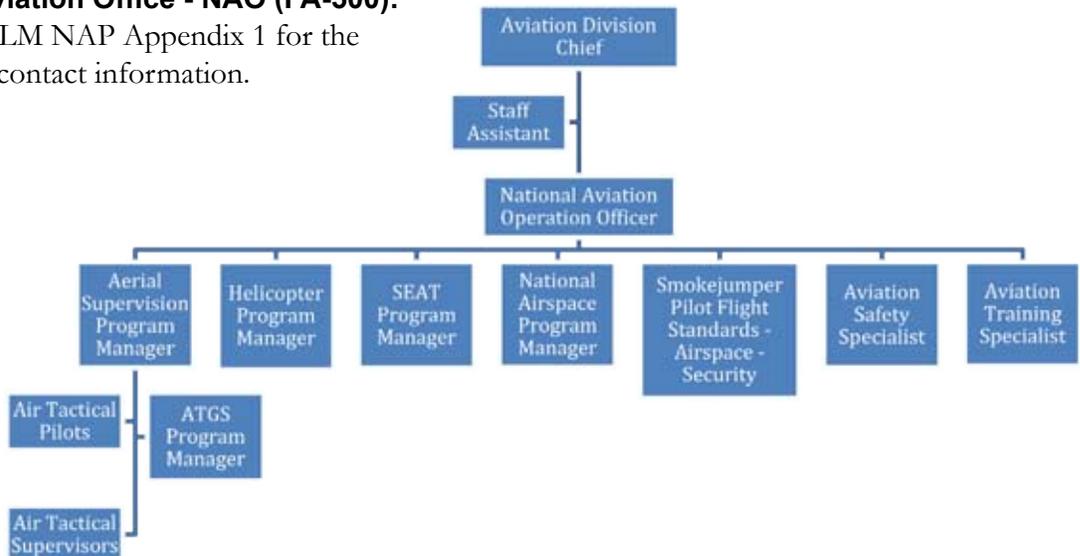
**BLM Director:** The Director is responsible for the aviation management program. This responsibility is exercised through the Assistant Director for Fire and Aviation (WO-400).

**Assistant Director, Fire and Aviation Directorate (WO-400):** This position is responsible for aviation policy and program oversight. This responsibility is delegated and accomplished through the Deputy Assistant Director, Fire and Aviation (FA-100)

**Deputy 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 Chief, Division of Aviation (FA-500).

### 2.3 National Aviation Office - NAO (FA-500):

Reference BLM NAP Appendix 1 for the NAO Staff contact information.



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

- Develops and maintains BLM aviation program policy within DOI and FAA regulations in the form of; BLM Manual, National Aviation Plan, Instruction Memoranda, Handbooks and Operational Guides.
- Is a member of the ABOD Working Group, and National Interagency Aviation Council (NIAC).
- Provides direction regarding aircraft acquisition, contract administration, aviation budget, aviation operations, aviation safety, aviation security and aviation program risk management.
- Is responsible for program oversight, evaluation, fleet management and program budget.
- 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, in 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 firefighting, other specialized missions, aircraft acquisition requirements, equipment developmental needs, and related areas.

**National Aviation Operations Officer (NAOO):** This position supervises the operational aircraft programs as well as the aviation safety, airspace coordination and aviation training programs.

- Serves as deputy to the Chief, Division of Aviation.
- 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 requests with AQD.
- Review states aircraft severity funding requests; coordinates with BLM Fire Operations.

**Aerial Supervision Program Manager:** This position provides oversight and supervision for the aerial supervision module (ASM) and air tactical group supervisor (ATGS) programs.

- Serves on the Interagency Aerial Supervision Steering Committee (IASSC) and leadplane cadre.
- Is a qualified ASM check pilot.
- Develops guidance for ASM aircraft and pilot standards.
- Develops and coordinates ASM operational procedures/training/certification.
- Provides guidance on light fixed-wing aircraft operations and standards.

**Aviation Safety Specialist:** This position provides leadership and technical expertise for aviation safety systems, risk management and accident prevention programs.

- Serves as the BLM liaison to National Transportation Safety Board (NTSB) and AMD accident investigation teams.
- Oversees the BLM SAFECOM management and Lessons Learned program.
- Compiles BLM aviation safety statistics and analysis.

- Serves on accident board of reviews.

**Aviation Training Specialist:** This position is responsible for oversight of aviation training for BLM, providing training/certification guidance (curriculum, and course materials, instructor) certification for BLM fire and resource management aviation personnel.

- Develops and/or coordinates aviation training in support of BLM aviation programs.
- Serves as a member of the Interagency Aviation Training Steering Committee (IATSC) and other interagency training working groups.
- Coordinates the development of web based training for both vendor and government communities.
- Provides oversight and guidance to the Scooper, Large Airtanker (LAT) and Very Large Airtanker (VLAT) programs.
- Assigned as BLM advisor to the *Interagency Air Tanker Base Operations Guide* (IATBOG) steering committee.

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

- Reviews requests for exclusive use contracted helicopters, and coordinates with AMD and SAM.
- 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 Air Tanker (SEAT) Program Manager:** This position provides oversight and guidance to the SEAT program.

- 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 AMD and industry representatives.
- Chair of the Interagency SEAT board. Attends Interagency Air Tanker Board meetings as SEAT Advisor.
- Coordinates with the BLM state offices, SEAT contract activation and plane allocation.
- National Liaison with state SEAT programs.
- Supervises the National SEAT Coordinator when implemented.

**Smokejumper Flight Standards Pilot - Airspace Coordination – Aviation Security:** This position is responsible for oversight of BLM Smokejumper Pilot Flight Standards, developing and coordinating guidance for airspace coordination, and BLM aviation security.

- Provides equipment and pilot procedures standardization and technical oversight for transport aircraft.
- Serves as the BLM representative on the Smokejumper Aircraft Screening Equipment and Evaluation Board (SASEB) and Interagency Smokejumper Pilots Operation Guide Steering Committee.
- Provides BLM guidance to the Interagency Airspace Steering Committee (IASC).

- Assists BLM states with airspace coordination issues.
- Coordinates aviation (aircraft and aviation operations facility) security with other DOI bureaus.

**Air Tactical Group Supervisor Program Manager:** This position provides guidance for the BLM ATGS operations.

- Develops air tactical plane contract specifications, coordinates with AMD Technical Services and SAM.
- Reviews all requests for air tactical plane exclusive contracts and coordinates with AMD.
- Coordinates the BLM national air tactical training program.
- Provides BLM direction for the *Interagency Aerial Supervision Guide*.
- Organizes the cadre of geographic area ATGS representatives.
- Coordinates nationally the training of BLM Air Tactical Supervisors.
- Serves as a qualified ASM/ATGS instructor and provides staffing for the BLM national ATGS training plane.

**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 air tanker 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 air tanker operations.
- Develop and review ASM/leadplane procedures, make recommendations.
- Provides aircraft and mission training for tactical resources as assigned.

**National Airspace Program Manager:** This position serves as the airspace coordination program manager and provides program management and leadership on airspace coordination issues directly impacting aviation safety in BLM, U.S. Forest Service and Department of Defense (DOD) operations.

- Develops and implements the *Interagency Airspace Coordination Guide*.
- Is an active member of the National Airspace Steering Committee.
- Coordinates directly with FAA headquarters airspace managers, FAA service area managers, and Air Route Traffic Control (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 AMD 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.

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

- Processes annual aviation utilization reports to the BLM Washington Office.
- Tracks and reconciles bureau-wide aircraft availability account.

## 2.4 BLM State/District/Field Office Organizations

**State Directors, District/Field Office Manager:** Aviation responsibilities are outlined in *350 DM 1 Appendix 3*.

- State directors are responsible for all aviation activities within their respective jurisdiction.
- Each state will assign a 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 office managers are responsible for aviation activities within their units. Each assigns a unit aviation manager (UAM) to provide oversight and staff assistance on all aviation matters.

**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 regarding aviation resources assigned to their state.
- Ensure all state assigned aerial resources are effectively utilized for initial attack incidents.

**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.

- 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” or above prior to implementation.
- Serves as the Contracting Officer’s Representative (COR) on all BLM aviation exclusive use and/or variable term contracts assigned to the state.
- Nominates candidates to the contracting officer to appoint project inspectors (PI) for all BLM aviation exclusive use contracts in their state and Alternate CORs as necessary.
- Authorized to order aircraft, 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.
- Responsible for reporting statewide aircraft use for all aircraft under their operational control to the NAO on a daily basis.
- Coordinates with the NAO specialists regarding aviation issues.
- Coordinates with other interagency partners on regional and state levels.
- Designates and assigns an alternate SAM when needed.
- Reviews all potential End Product contracts that could conceivably utilize aircraft.
- Will submit annually to the NAO the BLM Law Enforcement Aviation Statistics form for all law enforcement aviation operations within their state (reference BLM *NAP* 5.28).
- AMS Role - Reserved

**Zone/District Fire Management Officers (FMOs):** 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.
- When directed by the state office, will mobilize BLM fire aircraft and assigned personnel as directed.
- Delegates or performs the function of the UAM when this position is not assigned.

**Unit Aviation Manager (UAM):** field offices (district/center/zones) shall 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. 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:

- Supervises Assistant UAM and/or Airbase/Aircraft managers.
- 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, incident management teams receive a Unit aviation briefing.
- Develops and implements the District/Unit aviation management plan, as well as specific operating plans for other aviation programs (helitack, SEAT, airbase, and air tactical).
- May serve as the alternate COR or PI on BLM exclusive use aircraft.
- Authorized to order approved aircraft utilizing agency procurement documents and processes.
- Assists District/Unit project leaders in development of PASP's.
- Ensures that airspace coordination with military airspace schedulers is completed prior to project flight commencement.
- Identifies unit flight hazards and coordinates the creation/update of flight hazard map products.
- Reviews unit SAFECOM reports, facilitate corrective actions.

- Ensure units' *Interagency Aviation Mishap Response Guide* and Checklist is updated by April 15, 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.
- 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.
- Will submit as required to the SAM, the BLM Law Enforcement Aviation Statistics form for all law enforcement aviation operations within their unit (reference BLM *NAP* 5.28).
- AMS Role - Reserved

**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 3.2B*).
- 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 *DOI 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 (AMD-2 or AMD-23), completes AMD AMS procedures as authorized.
- Arranges for aircraft maintenance as needed.

## 2.5 Aviation Positions

**Aircrew Members:** Government (BLM, USFS, other federal/state) employees which perform an active mission function during the 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
- Loadmasters and flight attendants

**Aircraft Dispatcher:** Local dispatchers trained in aviation mission operations, policies, and procedures generally fulfill aircraft dispatching duties. Duties include:

- Confirms that BLM Flight Request Form (9400-1a) 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 an up to date *Interagency Aviation Mishap Response Guide and Checklist* and initiates emergency search-and-rescue procedures for overdue, missing, or downed aircraft.
- Follows the procedures established in the *Geographic* and *National Mobilization Guides*.
- Utilizes required boundary plan checklist (reference *LACG* 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 AMD 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.

**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 (LAT) Guide*. The flight manager is supervised by the sending unit dispatcher until the destination is reached.

- Reference *National Mobilization Guide* chapter 60 for specific responsibilities.

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 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.

Reference the *IHOG* Chapter 2 for specific duties, responsibilities and training requirements. BLM has adopted the training requirements for resource helicopter manager found in *IHOG* Chart 2-1. These requirements must be met in lieu of IAT training stipulations.

Reference *IHOG* Chapter 2, page 2-2 for “Resource Helicopter Manager” and “Helicopter Flight Manager” requirements and when resource helicopter manager shall be utilized.

**Vendor Pilot:** All vendor pilots shall conform to the procurement document requirements they are operating under as well as the standards contained in *351 DM 3.3*.

## 2.6 National Aviation Groups/Committees

### BLM Aviation Management Group (AMG)

- Purpose: Provide BLM leadership and expertise in all areas of aviation management. Promote aviation safety, standardization and efficiency in support of fire management and natural resource activities. Provide representation in the development of aviation policy, acquisition plans and operational procedures.
- Membership: BLM NAO primary staff members, SAM’s, Liaison from FA 300.

### National Wildfire Coordinating Group (NWCG) - <http://www.nwcg.gov/index.htm>

- Purpose: 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 U.S. 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.

**National Interagency Aviation Committee (NIAC)** – <http://www.nwcg.gov/branches/et/niac/index.htm>

- Purpose: 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 is composed of one representative from: BLM, NPS, BIA, and the FWS; two representatives from: U.S. Forest Service and the National Association of State Foresters, one of which will be from a northeastern or southern state, and one from a western state. A representative from the AMD will serve as a policy advisor to the DOI members of NIAC.

NIAC Sub Committees:

- Smokejumper Aircraft Screening and Evaluation Board
- Interagency SEAT Steering Committee
- Interagency Airtanker Board
- Interagency Aerial Supervision Steering Committee
- Interagency Airspace Steering Committee
- Automated Flight Following Steering Committee
- Interagency Aviation Training Steering Committee
- Interagency Airworthiness Steering Committee
- Interagency Airtanker Base Operations Steering Committee
- Interagency Helicopter Operations Steering Committee
  - IHOG Working Group
  - Rappel Working Group
    - Rappel Equipment Sub-Working Group
  - Aerial Ignition Working Group
  - Aerial Ignition Sub-Working Group
  - Training Working Group
  - ACETA Working Group
  - Short Haul Working Group

**2.7 Program Overview**

Reserved

## 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, shall 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 AMD.
- 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 file(s). Documents shall be retained for at least three years. The designated aviation manager at the unit, state and national levels shall be responsible for maintaining and updating all aviation related references, files and records.
- State offices are responsible for daily reporting of fire aircraft status and flight hours of BLM exclusive use and supplemental fire aircraft to the NAO. The NAO tracking of aircraft utilization is used for assessing potential fire aircraft availability for re-positioning. The NAO will send out notice for aircraft utilization reporting start and stop dates. The NAO will provide the reporting form (excel spreadsheet) and reporting instructions.

### 3.3 Aviation Plans: National, State, Unit, PASP

*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 by the NAO. The *NAP* is approved by Assistant Director, Fire and Aviation (WO-400).

**State Aviation Plans:** Each state shall 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. State aviation plans shall be updated annually prior to April 1 (June 1 for 2010), and submitted to the NAO for inclusion to the BLM Aviation web site: <http://www.blm.gov/nifc/st/en/prog/fire/Aviation.html>

State aviation plans are approved by the State Director.

**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 shall 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 *LACG* Chapter 7)
- Flight hazards
- Aircraft ordering
- Dispatching and flight following procedures
- Administrative procedures
- Identification of typical aviation missions
- Risk assessment and mitigation (reference *BLM NAP* 4.4)
- Unit Aviation Plans shall also address recurring aircraft operations through the use of Supplemental Operational Plans or Project Aviation Safety Plans. 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**

It is recommended that each state or unit create an Aircrew/Pilot Orientation Briefing Package. Unit aviation managers are responsible for providing visiting pilots, aircrews and Incident Management

Teams 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, hazard map, fire behavior information, recommended lodging/dining list, maps, etc.).

### 3.5 Land Use Policy for Aviation Activities

The regulation of aviation activities on or over BLM managed lands is typically dependent on resource management plans (RMP) direction, wilderness management regulations and any applicable federal aviation regulations. The BLM aviation management personnel (NAO, states, or district) serve as technical advisors only to the state director, district manager, or field office manager.

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. All exclusive use availability guarantees and fixed government ownership costs for fire aircraft are held at the NAO.

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

### 3.7 Aircraft Contracts

Aircraft flight services in excess of \$25,000 require an Exclusive Use aircraft contract or the use of: On-Call (AMD) or call when needed (CWN) (USFS) contract. Short term projects (< \$ 25,000) can use the AMD Aircraft Rental Agreement (ARA) system or the On-Call contract.

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

#### 3.7.1 Non-Fire Exclusive Use Aircraft Contract Process

- State, field and district offices are required to submit a “Request for Contract Services” Form (AMD-13) to the SAM for all potential or desired contracted flight services. The SAM will review and approve/disapprove all AMD-13s. The SAM will work with the appropriate AQD contracting officers 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 (AMD 16) will be authorized by an appropriate budget officer prior to awarding or renewing Non-Fire aircraft contracts. After the award or renewal, AQD CO and BLM COR will assume their traditional roles and responsibilities of contract administration.
- The SAM will provide the NAO program manager with a copy of any AMD-13, AMD-16, Notice to Proceed, Request for Amendment/Modification and/or Request for Contract Extension for any Non-Fire Exclusive Use/On-Call aviation contract at the same time the original request is forwarded to the AMD CO.

### 3.7.2 Fire Exclusive Use Aircraft Contract Process

- Any changes in aircraft type or capability must be supported and approved by the Deputy Assistant Director of the BLM Fire and Aviation Directorate.
- State offices are required to submit Form AMD-13 to the appropriate NAO program manager for approval of all requested exclusive use aircraft. The NAO program manager will review all AMD-13s and work with the appropriate contracting officers 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 Notice to Proceed and/or Request for Amendment/Modification for any Exclusive Use/On-Call aviation contract at the same time the original request is forwarded to the AQD CO.
- All AMD-16s will be authorized by the NAO prior to awarding, renewing, or extending fire aircraft contracts. After the award or renewal, AQD CO and BLM COR will assume their traditional roles and responsibilities of contract administration.

**Changing the Start Date:** Aircraft start dates can be changed to accommodate government work or training schedules. If the start date is altered, the NAOO. 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 (stated on AMD-16). The start date is established by a Notice to Proceed Form (AMD-19) issued by the COR. Adjusting the start date does not alter the length of the use period; funding through

**LLFA540000LF10000AV.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.

**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.

- Funding from **LLFA540000LF10000AV.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 days prior to end of exclusive use period to the NAOO.

**Variable Term SEAT Contracts:** AMD administers the variable term SEAT contract. These contracts are funded by the NAO through preparedness and/or severity. The contracts have set exclusive use periods (30, 60, 90 days) with no use period extensions. The contractors are selected from a priority ranking list that the AQD Contracting Officer maintains. The rankings are based on contractor performance evaluations submitted by Project Inspectors, CORs, Aerial Supervisors, and UAMs. The contract can be activated by request from a SAM to the NAO SEAT program manager,

and then onto AQD. The activation date is variable depending on BLM state needs. There also is no designated operating base, but there is a “one time” designated dispatch point that is used to calculate mobilization and de-mobilization costs. Aircraft can be activated for one state and subsequently be re-positioned on an as needed basis. The original designated COR remains the COR for the full term of the contract. The SEAT Manager may be or may not be repositioned with the plane. Reference AMD web site <http://amd.nbc.gov/> for contract details.

### 3.7.3 On-Call/Call When Needed (CWN) Aircraft Contracts

AMD administers the On Call aircraft contracts and the USFS administers the USFS/DOI Type 1 and Type 2 Helicopter CWN contracts. Authorized BLM personnel (UAM, Aircraft Dispatcher) can hire aircraft using these contracts through the incident resource ordering system as described in the contracts and the *National/Geographic Area Mobilization Guides*. Funding for these aircraft is made through specific incident emergency fire suppression or approved severity 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 AMD On-Call and USFS CWN aircraft contracts available to BLM are:

**AMD On-Call Contracts:** Reference AMD web site at <http://amd.nbc.gov/> for contract details and ordering procedures. There are separate contracts for:

- Small helicopters (ICS Type 3) – 4 to 6 seat helicopters.
  - Used for Fire Operations and Resource Management Projects.
  - AMD 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 AMD On-Call C16.1.1 “...individual project cost comparisons and contractor selection rationale.” is required.
- SEAT – Fire suppression.
- Air Tactical Fixed Wing – Fire Suppression.
- Wild Horse and Burro (WH&B) – Census, herding and round-up.
- Aerial Capture, Eradication and Tagging of Animals (ACETA) – Inventory/Census, Herding, Marking/Eradication/High Velocity Darting, Net-Gunning/Low Velocity Darting.

**USFS CWN Aircraft Contracts:** Reference USFS web site at [http://www.fs.fed.us/fire/contracting/helicopters\\_cwn/helicopters\\_cwn.htm](http://www.fs.fed.us/fire/contracting/helicopters_cwn/helicopters_cwn.htm) for contract details and ordering procedures. There are separate contracts for:

- USFS/DOI 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*.

### 3.7.4 AMD Aircraft Rental Agreements, Non-Fire – (ARA)

ARA aircraft are not authorized for tactical fire operations. The AMD ARA are aircraft 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 shall not be separated into several transactions to avoid expenditure limits. The AMD Regional Offices administer the ARA program through the Flight Coordination Centers. The AMD web site has a link to the Aircraft and Pilot Source List ([http://amd.nbc.gov/ara\\_Disclaimer.htm](http://amd.nbc.gov/ara_Disclaimer.htm)). 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 AMD 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.

A “Best Value Determination Record” Form AMD-9 (BVD) must be completed and retained on file locally for any ARA procurement that is anticipated to exceed \$2,500 (reference BLM *NAP* 3.13).

The procurement and payment process does not preclude aircraft charter services from meeting life-threatening emergencies. Under such circumstances, bureaus are authorized to use the charter procedures set forth in the Federal Property Management Regulations (FPMR) under subpart 101-41.2, Transportation Services Furnished for the Account of the United States (reference *353 DM 2.2C*).

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” (AMD-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 AMD 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.

### 3.7.5 Contractor Evaluations

Contractor performance evaluations are a critical element of effective contract management. The evaluations are used by contracting officers (CO) to assess contractor solicitation bid packages, determine contractor ordering preference rankings, alert AMD acquisition/contracting officer technical representatives (COTR) to performance issues. SAM are charged with developing a contractor evaluation collection system for their state aviation activities.

The AMD 136 form is to be used for documenting contractor performance. There are form variations that are specific to the contract being utilized. These forms are located at: <http://amd.nbc.gov/library/forms.htm>

- AMD 136A: On Call Small Helicopter, Air Tactical, SEAT (CWN & VT), and ARA.
- AMD 136C - ACETA contract.
- AMD136D - WH&B contract

Contract project inspectors (PI) complete the evaluations, submit them to the COR and provide a copy to the UAM. The PI 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 COR of issues. If any issues cannot be resolved locally, then the COR will facilitate contacting the contractor and/or the CO.

### 3.8 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 AMD does not perform any acquisition service. End Product contracts are administered from the state office or 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.

#### 3.8.1 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 acceptable language guidelines in *OPM-35*. End Product contracts where contractors could conceivably utilize aircraft must be reviewed by the BLM SAM to ensure that specifications and language do not unintentionally imply or determine aircraft operation control.

The following list describes acceptable contract language for BLM End Product Contracts. Close coordination is necessary to ensure compliance with Departmental Manual and applicable airspace coordination agreements that states have with military authorities.

- No contract language describing aircraft or pilot capabilities, standards or requirements.
- 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 shall 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.
- 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 shall 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.

### 3.8.2 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 AMD, the bureau will not submit AMD-23, Aircraft Use Report 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:** Since aircraft utilized by the contractor under BLM End Product contracts are operating entirely within the applicable 14 CFR as a civil aircraft, the bureau will not 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 a 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 AMD aviation “flight service” procurement (completely separate from the End Product contract) is required. Aircraft and pilots must have current AMD approvals for the intended mission and a current AMD contract or Aircraft Rental Agreement must be in place. When an AMD 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, provide contractor contact information.

### 3.9 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.
- 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 will submit a severity or other funding request to Fire and Aviation Directorate as outlined in the *Redbook*.

- 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, rental vehicle, relief crew transportation, additional aviation management personnel base pay (non - BLM Fire employee), travel and per diem.

### 3.10 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 state/local government, military, or other federal agency aircraft by BLM employees may require prior inspection and approval by AMD, usually in the form of a Letter of Authorization. Proposed use of these aircraft must be requested through the SAM to the NAO.

Any employee who is asked to accompany personnel from another agency on other agency's aircraft must consult their respective aviation manager. States are encouraged to obtain necessary letters of authorization prior to fire season (reference *351 DM 4* and *OPM-53*).

When BLM utilizes other governmental agency aircraft and aircrews, the aircraft are considered to be under operational control of BLM. Annual Operating Plans or Inter-governmental obligation agreements specify how re-imbusement for flight services is managed. Note: When using aircraft under USFS contracts reference *OPM-39*.

### 3.11 Senior Executive Service (SES) Flights

An aircraft may be used to transport personnel to meetings, administrative activities, or training sessions when it is the most cost effective mode of transportation. These flights are requested through the SAM and some of the responsibilities may be delegated to UAMs. 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. The requirements and procedures are outlined in *OMB Circular A-126* and *OPM-07*. The OPM and AMD Forms may be found at the AMD document library. <http://amd.nbc.gov/library/index.htm> (Reference BLM *NAP* Appendix 3 for SES Flight Scheduling Guide)

### 3.12 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. 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 shall:

- 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.

A BLM Aircraft Flight Request Form (9400-1a) is required to be completed for all non-fire flights that do not require a PASP. The 9400-1a may be utilized on individual flights that occur on an irregular basis within a long duration PASP. The 9400-1a Form can be accessed at:

<http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Administration.html>

The reverse side of the form 9400-1a may be used as a PASP for low complexity one-time special use missions. The UAM must review the 9400-1a 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.

There are eight (8) general areas with specific procedures regarding flight requests:

**1. Non-Fire Point to Point** (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 (AMD-110) is located at: <http://amd.nbc.gov/library/opm/AMD-110.pdf>
- Prior to flight: 9400-1a Form is completed. UAM reviews and appropriate approval obtained (state or local unit determination).
- A BVD form is completed prior to hiring ARA aircraft (reference BLM *NAP* 3.13).
- Flight manager designated.
- Resource tracking method determined.

**2. Non-Fire mission** (see *NAP* 5.7 Categories of Flight)

- Lead time for flight request as described in Unit Aviation Plan.
- UAM to assess project/mission complexity; determine whether a PASP is required.
- 9400-1a Form is approved by the appropriate level of authority for one time low complexity types of missions.
- If a PASP is required, a 9400-1a form may be used for dispatch office internal flight tracking purposes.
- A BVD form is completed for hiring ARA aircraft.

**3. Fire Point to point**

- Dispatch office receives a request, completes a resource order per dispatch procedures.
- A flight manager is designated and resource tracking method determined (reference *National and Geographic Mobilization Guides* for details).
- A BVD form is completed for hiring ARA aircraft.

**4. Fire Tactical, direct suppression logistical, and training**

- Requests come from:
  - Incident commander (IC) or designated incident personnel (i.e., AOBD, ASGS, ATGS/ATS).
  - FMO or duty officer.
  - Per unit dispatching plan.
- Initial Attack aircraft requests can be documented on either or both the Resource Order, Aircraft Dispatch form.
- Minimum dispatch information to be provided on forms sent to pilots, aircrews is: Destination latitude – longitude coordinates, Radio frequencies - air to air/air to ground/flight following, Incident name/contact, Airspace – TFR, military, dispatch boundary concerns, other aircraft being dispatched.
  - The specific format to be utilized for the latitude – longitude coordinates must be discussed and agreed upon by dispatch and the flight crew to assure accurate navigation. Reference BLM *NAP* Appendix 4 for additional details.
- Training: Fire training flight requests are made by the supervisor/manager (Helitack, SEAT, 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.
- A BVD form is completed for hiring ARA aircraft.

## 5. SES Flights

- Requests are made to the SAM. Reference specific details for SES Point to Point and Mission Flights in *OPM-07*, BLM *NAP* Appendix 3 and State Aviation Plan.

## 6. BLM Law Enforcement

- 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 *OPM-39*, *OPM-53*).
- BLM law enforcement aviation statistics form shall be completed by the SAM and/or UAM for all law enforcement aviation operations and submitted annually to the NAO (reference BLM *NAP* 5.28).

## 7. Search and Rescue (SAR)

- The use of BLM aircraft and aviation personnel are not considered normally planned BLM operations. BLM does not budget for SAR operations.
- **BLM aircraft mishaps or BLM employee mishap:** Request for BLM aircraft to respond to are coordinated through the UAM, FMO/Duty Officer and the District Manager. Documentation of the request can be made on a 9400-1a Form or in WildCad or equivalent dispatch program (reference BLM *NAP* 5.12, 5.16 for additional information).
- **Cooperators' aircraft or other mishap:** Request for BLM aircraft to respond to are coordinated through the UAM, FMO/duty officer and the district manager. Documentation of the request can be made on a 9400-1a Form or in WildCad or equivalent dispatch program.

- **Sheriff Office SAR:** Request for BLM aircraft to assist is typically routed through BLM law enforcement officials to the district manager. 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. Documentation of the request can be made on a 9400-1a Form or in WildCad or equivalent dispatch program. Notification of BLM aircraft response to the Air Force Rescue Coordination Center is required.

## 8. National Guard and United States Military

- 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. The *Military Use Handbook* describes procedures.
- National Guard – Each state typically has an agreement between the State and the National Guard. 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*).

### 3.13 Aircraft Flight Service Ordering

Only flights with a scheduled air carrier on a seat fare basis are initiated by individual BLM employees with payment utilizing their federal government credit card. Aircraft acquisition and procurement for all other flights are approved to be arranged only by NBC (AQD), (Exceptions - 353 DM 1.2A). 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 AMD contract or rental agreement are documented on an Aircraft Use Report Form (AMD-23). DOI/BLM Fleet aircraft usage is documented on Form AMD-2. Paper and electronic versions of the AMD-23 and AMD-2 will be available 2010. Contractors are responsible for final submission, for payment, of the AMD-23; BLM pilots are responsible for submission of the AMD-2. CO/TRs and CORs are designated by the CO to monitor aviation services contract performance and technical provisions of the contract.

Each type of On Call contract or the ARA has specific ordering procedures. The procedures are found on the AMD web site: <http://amd.nbc.gov/apmd/cwn/cwn.htm> When ordering aircraft, no modification of contract requirements are authorized, except for by the CO.

An ordering official is a person who places an order directly with a vendor. They must have their bureau's authorization to order aircraft. They must have the knowledge to complete the Best Value Determination Record. For BLM the only personnel that have bureau authorization to order aircraft are qualified aircraft dispatchers, UAMs and SAMs.

**Best Value Determination:** A "Best Value Determination Record" Form AMD-9 (BVD) must be completed by the Ordering Official and retained on file locally for any ARA procurement that is anticipated to exceed \$2,500. The BVD form and instructions used for ordering ARA aircraft are found at [http://amd.nbc.gov/fc/ara\\_order.htm](http://amd.nbc.gov/fc/ara_order.htm)

When selecting a vendor with the better capability but a higher price, the ordering official shall place a short explanation to support this decision on the BVD and retain in an ordering file for three (3) years. The AMD flight coordination center may request a review of the ordering official's documentation.

BVD 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.

If a project is expected to cost in excess of \$25,000, special approval by an AMD flight coordination specialist (or an AQD CO) is required. The ARA may not be utilized for any procurement or project that is going to exceed \$100,000. (A project-specific flight services contract would be awarded in lieu of using the ARA in this case.)

**Ratification of Unauthorized Commitments:** Unauthorized commitments (orders with vendors without an 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 2.5.C*).

### 3.14 Aircraft Use Payment Systems

**AMD Aviation Management Systems (AMS):** Reserved – <https://www.iat.gov/ams/>

**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. 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>

### 3.15 Coding for Flight Use Reports

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:

#### 3.15.1 Billee Code:

- Each user of DOI contracted aircraft will have a billing code known as a billee code. These codes are issued by AMD. Non DOI entities can have a billee code.
- For Exclusive Use contract aircraft, the "Home Unit" billee code will be used regardless of the operating location for all Pay Item codes.
  - Exception - When a non BLM entity utilizes a BLM exclusive use or BLM procured AMD On-Call contracted aircraft for non fire suppression activities and there is no Inter-governmental Obligation agreement (IGO) in place. To use other agency charge code the user must have a billee code assigned to them by AMD. When a non-BLM office billee code is used the charge code does not need to conform to standard BLM charge code format.
- When a non DOI entity utilizes their billee code there will be a surcharge by AMD.

### 3.15.2 Fund Codes:

**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 fund code:

**LLFA540000LF10000AV.HT0000**

- Do not use this fund code 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 a specific Fund Code provided by the NAO.

**Variable Term SEAT Pre-Suppression aircraft:** All BLM variable term SEAT pre-suppression aircraft will charge all AV during the exclusive use period (excluding contract extension) to the following NAO fund code:

**LLFA540000LF10000AV.HT0000**

- Do not use this fund code for anything other than AV during the variable term 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.

**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 should not be utilized for any charges that can be legitimately charged to a suppression code. Suppression and severity formats are listed below:

- Fire suppression – **LLxxxxxxxLF20000AV.HU0000LF.SP.zzzz0000**; where **xxxxxxx** is the BLM Cost Center and **zzzz** is the “Fire Number”.
- BLM Variable Term SEAT Severity aircraft will charge as appropriate to a specific Fund Code provided by the NAO.
- All other severity aircraft – **LLxxxxxxxLF20000SR.HT0000LF.SR.yyyy0000**; where **xxxxxxx** is the BLM Cost Center and **yyyy** is the Severity charge code.

**Mission Use Codes:** Each specific type of flight will have the unique mission use code recorded. Example being: 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 by mission use code.

**User Unit Codes:** Reserved

### 3.16 Fleet Aircraft

The BLM currently operates two Fleet aircraft. N49SJ and N109OPE are DOI owned aircraft operated by the BLM.

- N49SJ is a De Havilland Twin Otter assigned to the Boise smokejumpers, the primary mission is as a smokejumper aircraft.
- N190PE is a Pilatus PC-12 assigned to Alaska Fire Service (AFS), the primary mission is as a multi-role utility and logistics aircraft.

BLM fleet aircraft are operated in accordance with the *BLM Fleet Aircraft Standard Operations Procedures Guide*.

**3.17 FEPP**

Reserved

**3.18 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.

**3.19 Aviation Program Reviews**

Details about aviation program evaluations and fire preparedness reviews are described in *BLM NAP* 4.53.

**3.20 New Program Requests**

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

## 4.0 Aviation Safety Management Systems

### 4.1 General

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

The BLM NAO Aviation Safety Specialist is the focal point for the BLM national level program. SAM 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/Additional.aspx?Page=177>

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. 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 for additional PPE requirements utilized for helicopter 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.

### 4.3.2 Project Aviation Safety Planning (PASP)

Accident prevention is paramount when planning individual aviation projects. Flights may not deviate from Department policy and procedures, except for safety of flight considerations. A written PASP or; at a minimum for low complexity/one time flight projects, a 9400-1a Form shall be completed and approved for every non-fire mission flight or aviation project. The PASP's shall be reviewed by the UAM and approved by the appropriate level of authority per the state/unit aviation Plan. Managers should be briefed by the UAM prior to their approval of the plan.

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 annual groups' operations plan and the state and unit plan allows; then project/flight can be conducted after completion of a 9400-1a documentation.

- PASP's that have a final risk assessment of high or above will require a SAM review prior to line manager approval.
- The reverse side of the form 9400-1a may be used as a PASP for **low complexity one-time** non fire mission flights.
- A courtesy copy of all PASP's will be routed to the SAM prior to implementation.

Required elements of a PASP include:

- Supervision
- Project name/objectives
- Justification
- Protect date and location
- Projected cost of aviation resources
- Aircraft/pilot/participants
- Flight following and emergency search and rescue
- Aerial hazard identification
- Risk assessment
- Personal protective clothing/equipment
- Load calculations and weight and balance information.
- Supervisor's and line officer's approval signature

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, AeroPlanner 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, 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). AMD 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 6*, the *Aviation Mishap Notification, Investigation and Reporting Handbook*. *352 DM 6.6* identifies two bureau positions that may be established to assist the DOI Investigation Team: 1) as a selected member of the investigation team working directly for the DOI Investigator-In-Charge (IIC), or 2) as the bureau-designated on-site liaison to coordinate with the DOI 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. When a NTSB Investigator is participating it will be their decision on who will function as a team member.

The BLM representative team member:

- Must be requested by AMD 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 be fully trained and qualified to investigate aircraft accidents.
- Must not have a personal interest in the mishap.
- Will work directly for the DOI 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.
- Will provide on-site coordination and support to the DOI 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 manage 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 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 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.nifc.gov/policies/ihog.htm>

Another excellent source is the risk management page located on the SMS link of the Wildland Fire Lessons Learned Center website: <http://www.wildfirelessons.net/Additional.aspx?Page=181>

There is several completed fire aviation assessments as well as some resource aviation examples.

#### 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.

#### **4.5.1 Safety and Technical Assistance Team (STAT)**

The STAT can be formed to support aviation resources and personnel operating in the field during periods of increased aviation operations. The purpose of these teams is to enhance safety, efficiency, effectiveness, and provide on-site technical assistance. STAT teams are ordered by geographic multi-agency coordination (MAC) groups who will determine the size and make-up and provide the team with specific goals and a delegation of authority.

#### **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. 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, when they feel it is warranted. This form is located on the SAFECOM web page: <https://www.safecom.gov/entry.asp>. Electronic submission is preferred but a SAFECOM may also be completed telephonically by calling 1-888-464-7427. Personnel in doubt about completing a SAFECOM should contact their UAM. Reference BLM *NAP* Appendix 5 for BLM SAFECOM management roles.

#### **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. Districts 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 *Redbook* chapter 18 for information).

**AMD Aviation Program Evaluation:** AMD 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). Additional reviews may be conducted if a need is identified by the aviation division chief.

#### **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 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 and aviation groups will manage the program.

#### **4.6 Promotion**

The BLM must promote safety as a core value with practices that support a positive safety culture. Safety promotion can be accomplished through:

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

##### **4.6.1 Lessons Learned**

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

SAM 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/Additional.aspx?Page=177>

##### **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 7* for pilots and employees. Air Award recommendations can be submitted through the SAM to the NAO aviation safety specialist.

## 5.0 Aviation Operations

### 5.1 General

As a bureau, we are 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 throughout the contract period. 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 shall comply with 14 CFR (Federal Aviation Regulations) in the operation and maintenance of public aircraft with the few exceptions outlined in *DM 350-354*. Operators under contract to DOI/BLM 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.

**Exemptions/Waivers:** Exemptions/waivers to federal aviation regulations and DOI regulations must be requested in writing to the BLM aviation division chief. Depending on the policy in question, final approval may reside at the BLM Assistant Director or Aviation Management Associate Director level.

### 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 4.1 and 4.2*). Exceptions are:

- Flights in foreign countries (*351 DM 4.1.B.4*)
- Covert Law Enforcement missions (*351 DM 1.6D*)

### 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 air crewmember. Unauthorized passengers will not be transported in any DOI aircraft. For official, unofficial and unauthorized definitions, reference *350 DM 1.7*.

**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 *350 DM 1.7*.

**Volunteers:** Volunteers when traveling on official business, are official passengers, within the terms of *350 DM 1.7.A.3* and *BLM 9400.67A*. 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 1.2*). 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 versus benefit.
- Any deviations shall 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).

A **“Mission 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. DOI refers to many such missions as “Special Use” in *OPM-29*; these missions require special techniques, procedures and consideration. Air-

craft and pilots must be approved for each specific activity prior to use. Mission flights require additional agency planning, active flight following, additional pilot and aircraft inspections and carding, and operational supervision by agency personnel.

All passengers on a Mission Flight must be essential to the mission.

## 5.8 Flight Planning

**Point-to-Point** Flights will be tracked by a FAA - visual flight rules (VFR) or instrument flight rules (IFR) flight plan that is filed by the pilot with the FAA and activated upon departure. 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 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 some form of 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.

**Mission Flights:** 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

## 5.9 Flight Following

**Point-to-Point Flight following** is accomplished by the FAA plan and tracking process augmented by the dispatch notification procedures described above. 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 the pilot has filed and activated the FAA 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 agency radio systems or 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 Form.

**Agency Radio 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 shall be established and briefed prior to the mission and position reporting shall not exceed one hour intervals. If the 15 minute time limitation is to be exceeded, prior approval by the SAM is required (reference 9400.45C2a). If the one hour time limitation is to be exceeded, prior approval at the State level is required (reference 351 DM 1.4.C.2.b).

- 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 specific format to be utilized for the latitude – longitude coordinates for flight following check-in points, etc., must be discussed and agreed upon by dispatch and the flight crew to assure accurate navigation. Reference BLM *NAP* Appendix 4 for additional details.

**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:

- Local flight follow procedures pre-identified and approved.
- Personnel are properly trained and qualified.
- Flights following procedures have been addressed in pre-flight briefings.
- Methods of flight following are in place and tested, including communication with dispatch before flight operations begin.
- 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 should 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*, section 2 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.

### **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 DOI-AMD Safety (1-888-4MISHAP) and BLM management. This guide is specific to each Unit and shall be available in all Dispatch Offices. The guide must be updated annually by the date established in the state aviation plan.

The *Interagency Aviation Mishap Response Guide and Checklist* is available at: <http://www.nwccg.gov/pms/pubs/pms503.pdf>

### **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: <http://amd.nbc.gov/safety/library/hazmathb0105.pdf>

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

### **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, engines and tenders, and other water handling equipment). Agency personnel should become knowledgeable in the preventive measures associated with the prevention of 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 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 *Redbook*, Chapter 2.

### **5.15 Fire Chemicals and Aerial Application Policy Near Waterways**

For operational guidelines on use of fire chemicals reference the *Redbook*, Chapter 12.

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 MSDSs for all approved fire chemicals can be found on the WFCS web site.

Airtanker bases shall have appropriate spill containment facilities (and equipment) 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.

### **5.16 Search and Rescue (SAR)**

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).

### **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 Personnel**

The airtanker base manager supervises ground operations in accordance with the IATBOG.

The BLM airtanker base manager and BLM fixed wing base manager certification process is described in BLM *NAP* Appendix 7.

### **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 *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.

## 5.20 Foreign Airtanker Operations

The *National 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 2.3C all airtanker make and models, regardless of nationality, will be Interagency Airtanker Board approved. Further each aircraft and pilot(s) will be reviewed (issued letters of Approval) following the procedures outlined in OPM-53, 351 DM 4.1 and 351 DM 4.4 and the *National Mobilization Guide*. Operations of foreign airtankers will be consistent with the procedures outlined in the *LASG*.

## 5.21 Aerial Supervision/Leadplane Operations

Air Attack platforms are considered local unit, incident, or geographic resources. ASM and leadplanes are national resources. These air tactical resources conduct operations in accordance with the *LASG* and the policies and procedures prescribed in the *Redbook*. Dispatch and ordering are accomplished in accordance with the *Geographic Area and National Mobilization Guides*.

Aerial supervision resources will be dispatched, when available, for initial and extended attack to enhance efficiency and safety of ground and aerial operations.

Air tactical aircraft must meet the avionics typing requirements listed in the *LASG* 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 *LASG*. Training and qualification requirements for ASM crewmembers are defined in the *LASG*. Individuals performing duties as an ATS or ATP must be certified and authorized by the BLM NAO.

ATGS responsibilities are outlined in the *LASG*, and their training and currency requirements are contained in NWCG PMS 310-1. 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.

## 5.22 Helicopter Operations

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

All personnel involved in BLM helicopter operations and all BLM personnel onboard cooperator/affiliate helicopters shall comply with the PPE requirements in *IHOG* Chapter 9. The only exception from the *IHOG* PPE requirements is on flights with a scheduled air carrier on a Seat Fare Basis (reference BLM *NAP* 3.12 - Dispatching - Flight Requests).

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: Any proposed utilization of this model of helicopter must be approved by the BLM SAM. Additionally, the SAM should review IM 2003-006 “BLM Utilization of Robinson R-44 Helicopters” with the requesting user prior to approval. This IM is located at: <http://web.blm.gov/internal/fire/Directives/im2003.htm>

#### **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. Exclusive use helitack minimum crew staffing, training and currency requirements are contained in the *Redbook*. 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.

#### **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 8). 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 9). 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 aviation division chief.

#### **5.22.4 RADS**

Reserved

### **5.23 Aerial Ignition Operations**

Aerial ignition operations and projects are accomplished in accordance with the *LAIG*.

The AMD 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)**

Wildhorse and Burro operations will be conducted according to the BLM *WH&B Aviation Management Handbook H-4740-1* and AMD On-Call WH&B contract.

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

ACETA will be conducted as per the *ACETA Handbook (351 DM 2 - 351 DM 3)* and AMD On-Call ACETA contract.

### **5.26 Smokejumper Operations**

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

### 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 *Redbook*.

**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 shall be accomplished in accordance with state and unit aviation plans. At minimum flights must meet the requirements outlined in *9400 Manual* section .45 for flight scheduling/operations.

### 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

Operational Procedures:

- 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, LEAD 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 incident airspace operations and give 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.

### 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 meets the IAT requirements of flight manager.

### 5.27.4 Single Engine IFR/Night Flight

For single engine night flight reference *351 DM 1.3.B, 1.3.E* and *OPM-55*.

### 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 for the intended use.

Aircraft contracted for fire/resource operations are not mandated to participate in potentially hazardous or threatening LE operations. Missions outside of the scope of the contract require a contract modification.

- 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 operations of a covert nature are addressed in *351 DM 1.6.D*.

LE personnel will submit as required to the SAM/UAM, the BLM Law Enforcement Aviation Statistics form for all law enforcement aviation operations. The form is located at: <http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Administration.html>

### 5.29 Unmanned Aerial Systems (UAS)

Interest and possible use of UAS, formerly unmanned aerial vehicles (UAV), are increasing. The FAA is in the process of final rule making regarding UAS operations. Operations of UAS under FAA Advisory Circular AC 91-57 (Radio Controlled Aircraft) are intended for hobbyists and not government or commercial operators. Certificate of Authorizations (COA) for all UAS operations are required.

The FAA has requested representation from each agency (i.e. DOI, USFS, U.S. Navy, etc.) in the unmanned aircraft system group. The FAA has designated the AMD as the representative for the DOI in the COA process. Reference *OPM-11* for DOI policy guidance.

All requests to utilize UAS must be routed through the respective SAM to the NAO.

1. **UAS Request/Approval Process:** Bureaus shall not conduct UAS operations until 1) requests are approved by bureau line management, bureau national aviation manager and the AMD; 2) all minimum requirements have been met. Requests must be initiated at least eight months (estimated) prior to the anticipated UAS mission start date.
  - a) Feasibility by Bureau Unit. Initial feasibility discussions are conducted between bureau unit, local bureau aviation manager and AMD UAS coordinator. Local unit line officer makes decision to go forward with request.

- b) Request & Proposal by Bureau Unit: The local unit will prepare and submit a formal request to initiate a UAS project (memo signed by line officer). This proposal shall include the general purpose, objectives and justification for utilizing UAS.
  - c) Bureau National Aviation Manager Review: The request shall be routed through the bureau state/regional office to the bureau national aviation manager for review and approval/disapproval. If approved, the proposal will be forwarded to AMD.
  - d) AMD Review and Approval: The AMD UAS Coordinator will review the proposal, communicate directly with the bureau requestor and bureau national aviation manager to gather information and either approve or disapprove the request.
  - e) Request for Certificate of Authorization (COA): If the bureau proposal is approved, the AMD 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 AMD UAS coordinator will keep the bureau informed on the status and issuance of the COA. The COA, once issued, shall serve as the UAS operations plan.
2. **Minimum Operational Requirements.** The following requirements must be met prior to any operational use of UAS:
- a) COA: A valid and current COA issued by the FAA.
  - b) DOI UAS Operator Training Requirements: DOI operators of UAS vehicles must receive training in the specific vehicle to be operated. AMD will identify appropriate training, in conjunction with FAA regulations. Operators must possess training certificates from AMD or AMD-approved sources prior to receiving AMD certification as a DOI UAS operator.
  - c) Other DOI UAS Operator Requirements: Other requirements (to be determined by AMD) may include FAA pilot certificate and FAA medical exams.
  - d) DOI UAS Operator Letter of Authorization: When a DOI employee has satisfied all requirements listed above, The AMD UAS coordinator will issue a DOI UAS Operator/Pilot Letter of Authorization (LOA). The LOA must specify the UAS vehicle(s) that the operator is approved to operate.

## 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 and training to be successful conducting aviation operations. There are two separate, but linked, training programs for BLM Aviation.

#### 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 *Wildland Fire Incident Management System* (NWCG PMS 310-1), or other interagency guidance as appropriate (smokejumper spotter, ATS, ATGS, Lead/ASM pilot, BLM Exclusive Use helitack, etc).

#### 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 (performance based system) are also qualified to perform equivalent non fire/resource aviation positions under IAT guidelines and do not require additional IAT training (reference NWCG/IAT Functional Crosswalk BLM *NAP* Appendix 10) Some NWCG courses are equivalent to and fulfill the required aviation training. Those equivalencies can be found in the *Interagency Aviation Training Guide*.

Reference [http://amd.nbc.gov/library/opm/fy2009/opm\\_09-04.pdf](http://amd.nbc.gov/library/opm/fy2009/opm_09-04.pdf)

**Air Crewmember:** An air crewmember is a person working in and around aircraft who is essential to ensure the safety and successful outcome of the mission. This includes personnel fulfilling the role of aircraft manager, such as fixed wing managers and helicopter managers.

Air crewmembers are required to take the courses listed in *OPM-4* in a classroom for the initial training. An employee may be authorized to complete the initial B3 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 B3 session prior to the day of the mission. Refresher training for Aircrew members is required once every three years and can be taken online.

Additional training is required to function in higher level air crewmember positions. A quick reference for the training requirements for non-fire aviation positions can be found in *OPM-4* Appendix 1. A description of each position and role can be found in *Interagency Aviation Use and Management Qualifications Guide*. BLM requires that non fire personnel involved with helicopter external load operations must comply with the following:

- Non-Fire Personnel involved in hover hook ups must complete S-271 and A-219 Units 1-6.
- Non fire personnel involved in long line work must be a qualified aircrew member and complete A-219 Units 1-4 and Unit 6.

- Documentation, for non fire personnel, indicating the completion of the required training to perform external load work shall be maintained at the interagency aviation training website <https://www.iat.gov/>
- *OPM-04* does not require any recurrent training for A-219 and thus bureau employees will not need any further external load training beyond the initial class as long as personnel maintain currency in the position.

## **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**

Supervisors are those individuals responsible for employees that use aircraft to accomplish bureau programs. Supervisors must attend the aviation management for supervisors training course (M-3). BLM supervisors can take the initial course either in a classroom or online. Refresher for M-3 is required once every three years. Supervisors should reference *OPM-4* and *Interagency Aviation Use and Management Qualifications Guide* for further information on required training.

### **6.2.2 Line Managers**

Line managers are those individuals who are responsible and accountable for using aviation resources to accomplish BLM programs. Line managers must attend the aviation management training for supervisors (M-2) training course or attend a DOI aviation management line managers briefing course once every three years.

### **6.2.3 Aviation Managers at the Local, State and National Level**

This applies to personnel who are delegated or authorized to plan, organize, direct, control, oversee, or administer aviation or aviation safety programs within the BLM. The training requirements for aviation managers can be found in *OPM-4, Appendix 1*. An in-depth description of each position and role can be found in *Interagency Aviation Use and Management Qualifications 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 AMD contracting offices (<http://www.doi.gov/pam/CORManual.doc>).

### **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.

### **6.3 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/iatprogram.pdf>

### **6.4 Records Management**

Reserved

### **6.5 Tuition and Travel**

Reserved

### **6.6. Development**

Reserved

### **6.7 IAT/NWCG Crosswalk**

Reference BLM *NAP* Appendix 10

## 7.0 Airspace Coordination

### 7.1 Interagency Airspace Coordination

Interagency airspace coordination is accomplished through the Interagency Airspace Steering Committee (IASC) chartered under the NIAC. Guidance and education is provided through the *Interagency Airspace Coordination Guide*.

An extensive list of airspace information and links is available on the BLM Aviation web site: <http://www.blm.gov/nifc/st/en/prog/fire/Aviation/Airspace.html>

### 7.2 Airspace System Information

A thorough pre-flight briefing should be obtained prior to flight. The flight service stations are the official source of NOTAM information and should be contacted at 1-800-WX-BRIEF for the latest information. For current airspace information, pilots should call flight service at 1-800-992-7433; go to <http://www.faa.gov> for special interest NOTAMS.

### 7.3 The National Interagency Airspace Information System (NIAIS)

Mostly related to fire management, the NIAIS is a web-based system that displays comprehensive aviation airspace information. This system provides complete graphical temporary flight restriction (TFR) information on current aeronautical charts. The web site is: <http://airspace.nifc.gov> (No login or password required for the TFR information).

### 7.4 Flight Planning, Hazards and Obstructions

All mission types of flights are limited to VFR daylight. Flight below 500 feet AGL requires a high level recon (above 500' AGL) of the project area before descent to mission operating flight profiles.

The BLM has contracted with AeroPlanner.com to run the TFR web site and provide a flight planning service. This web site has a link to a flight planning service which accessible with the following log-in and password.

**Airspace Flight Planning:** <http://airspace.nifc.gov> /<http://aeroplanner.com>

<b>BLM Aviation</b>	<b>Login:</b>	<a href="mailto:blm@blm.gov">blm@blm.gov</a>	<b>Password:</b>	blmaviation
<b>Helicopter</b>	<b>Login:</b>	<a href="mailto:copter@blm.gov">copter@blm.gov</a>	<b>Password:</b>	blmcopter
<b>Smokeyjumper</b>	<b>Login:</b>	<a href="mailto:jumper@blm.gov">jumper@blm.gov</a>	<b>Password:</b>	blmjumper
<b>Seat</b>	<b>Login:</b>	<a href="mailto:seat@blm.gov">seat@blm.gov</a>	<b>Password:</b>	blmseat
<b>Dispatchers</b>	<b>Login:</b>	<a href="mailto:dispatcher@blm.gov">dispatcher@blm.gov</a>	<b>Password:</b>	blmdispatcher
<b>National Park Service</b>	<b>Login:</b>	<a href="mailto:nps@blm.gov">nps@blm.gov</a>	<b>Password:</b>	npsaviation
<b>Fish&amp; Wildlife Service</b>	<b>Login:</b>	<a href="mailto:ffws@blm.gov">ffws@blm.gov</a>	<b>Password:</b>	fwsaviation
<b>BIA</b>	<b>Login:</b>	<a href="mailto:bia@blm.gov">bia@blm.gov</a>	<b>Password:</b>	biaaviation
<b>USFS Aviation</b>	<b>Login:</b>	<a href="mailto:usfs@blm.gov">usfs@blm.gov</a>	<b>Password:</b>	usfsaviation
<b>AMD</b>	<b>Login:</b>	<a href="mailto:amd@blm.gov">amd@blm.gov</a>	<b>Password:</b>	amdaviation
<b>Minerals and Mining</b>	<b>Login:</b>	<a href="mailto:mms@blm.gov">mms@blm.gov</a>	<b>Password:</b>	mmsaviation
<b>U.S.GS</b>	<b>Login:</b>	<a href="mailto:usgs@blm.gov">usgs@blm.gov</a>	<b>Password:</b>	usgsaviation
<b>Air National Guard</b>	<b>Login:</b>	<a href="mailto:ang@blm.gov">ang@blm.gov</a>	<b>Password:</b>	angaviation
<b>MAFFS</b>	<b>Login:</b>	<a href="mailto:maffs@blm.gov">maffs@blm.gov</a>	<b>Password:</b>	maffsaviation
<b>Air Tanker pilots</b>	<b>Login:</b>	<a href="mailto:tanker@blm.gov">tanker@blm.gov</a>	<b>Password:</b>	tankeraviation

Flight Hazards – 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 – Restricted Area, MOA, Alert Area, MTR
- 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 determine significant
- Wires – Major transmission lines, other lines determined locally as significant (wires crossing – canyons, rivers, lakes, near airports)

## 7.5 Fire Traffic Area (FTA)

The FTA provides a standardized initial attack sequence structure to enhance air traffic separation over wildfire or all risk incidents. The structure emphasizes established communications, clearances and compliances. See the *Interagency Aerial Supervision Guide* (IASG) Chapter 4 for details. [http://www.blm.gov/style/medialib/blm/nifc/aviation/aerial\\_supervision.Par.58629.File.dat/IASG.pdf](http://www.blm.gov/style/medialib/blm/nifc/aviation/aerial_supervision.Par.58629.File.dat/IASG.pdf)

## 7.6 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 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*. The guide is located at: <http://www.nifc.gov/nicc/logistics/references.htm>

Presidential TFR's (91.141) are a 30 nautical mile radius zone that moves as the President moves, and limits aircraft to only presidential and military aircraft. Violation of presidential TFR may involve military interception.

## 7.7 National Firefighting Transponder Code (1255) Aircraft Transponder Code (Firefighting)

The FAA has provided the **1255** transponder code as the national designation for firefighting aircraft. It is not agency specific. The code shall 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.

## 7.8 Airspace Boundary Plan

When resources are dispatched by more than one unit to an incident 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).

## 7.9 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 is 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/>

### **7.10 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 Chapter 8 of the *Interagency Airspace Coordination Guide*.

### **7.11 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.

### **7.12 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 Chapter 12 of the *Interagency Airspace Coordination Guide*. The guide is located at: <http://www.nifc.gov/nicc/logistics/references.htm>

### **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 *LACG* 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 10* set forth the security requirements for all DOI aviation facilities and assigned aircraft. Reference DOI *Aviation Security Policy 352 DM 10*: [http://206.131.241.18/app\\_DM/act\\_getfiles.cfm?relnum=3670](http://206.131.241.18/app_DM/act_getfiles.cfm?relnum=3670)

#### 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 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.

#### 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](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>

Field Reference Guide for Aviation Security for Airport or other Aviation Facilities: <http://amd.nbc.gov/library/handbooks/frgasaaf.pdf>

### 8.2 USFS Facilities Security Assessments

Reserved

### 8.3 USFS Security Response Actions

Reserved

### 8.4 Regional Homeland Security Advisory Response Plan

Reserved

## 8.5 Facility Homeland Security Advisory System Response Plan

Reserved

## 8.6 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

## 8.7 Cooperators Aircraft Security

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

## 8.8 Aircraft Physical Security Requirements

Whenever 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.

**Security Devices:** The AMD 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; start relay switches
- Throttle, mixture/fuel, fuel cut-off locks
- Control surface gust-locks; propeller locks (chain, cable, mechanical) - **(airplane only)**
- Locking devices for aircraft tie downs
- Locking devices for pilot directional flight control (i.e., yoke, stick, or cyclic)

## 8.9 BLM Security Risk Assessments - Facilities

Security risk assessments will be performed on all BLM aviation facilities, temporary bases and aviation airport facilities (AAF), using the *DOI Field Security Guidelines for General Aviation*. This document is available at the following link: <http://www.blm.gov/style/medialib/blm/nifc/aviation/security.Par.2221.File.dat/AAF.pdf>

An AAF is owned or controlled real property that has been developed or improved for aircraft (landing and takeoff) at which BLM owned or controlled aircraft are regularly or intermittently based. Facility risk assessments are to be submitted to the BLM SAM and then onto the BLM NAO annually.

**Security- Supplement Requirements:** When use of these “Suggested Airport Security Enhancements” is indicated, the supplemental requirements listed herein will be considered mandatory and in addition to those prescribed by the TSA security guidelines for general aviation airports listed below.

**Signage:** Signage should be multi-lingual where appropriate.

**Lighting:** All access points leading from uncontrolled areas into the aircraft operations area (AOA) or other sensitive areas should have adequate lighting. Lighting type and illumination levels will comply with published Illuminating Engineering Society (IES) standards but will not supersede standard aviation guidelines governing runway lighting, nighttime flight requirements, etc.

**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.

#### **8.10 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, lease agreements.

### 9.2 Aviation Facilities (Permanent and Temporary)

BLM has permanent and temporary airbases managed by the districts/field offices with oversight provided by the NAO and state offices. Permanent air bases include heavy air tanker 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.

### 9.3 Temporary Operations Bases

Temporary operations bases are those that are used to support short term projects, 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, land restoration measures. For wildland fire operations the NWCG *Interagency Incident Business Management Handbook* chapter 20 (24.2) describes procedures. A procurement official 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). Building 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. Coordination with the state/district engineering and budget staff will be necessary to facilitate repairs.

### 9.5 Permanent Facility Construction Planning/Funding and Maintenance

Reserved

### 9.6 BLM Owned/Operated Airstrips

Reserved

## Appendix Contents

1. BLM National Aviation Organization Directory
2. BLM Fire Aircraft Acquisition Plan
3. SES Flight Scheduling Guide
4. Latitude – Longitude Information
5. BLM SAFECOM Management Roles
6. AMD Aviation Program Evaluation Schedule
7. BLM Airtanker Base Manager and Fixed Wing Base Manager Certification Process
8. BLM Cargo Letdown Protocol
9. BLM Cargo Letdown Trainee Qualification Record
10. NWCG to IAT Functional Crosswalk
11. Acronyms

## Appendix 1 - BLM National Aviation Organization Directory

Position	Name	E-Mail	Phone Number
Aviation Division Chief, (FA 500)	Kevin Hamilton	<a href="mailto:kevin_hamilton@nifc.blm.gov">kevin_hamilton@nifc.blm.gov</a>	(208) 387-5448
National Aviation Operations Officer	Brad Gibbs	<a href="mailto:brad_gibbs@nifc.blm.gov">brad_gibbs@nifc.blm.gov</a>	(208) 387-5182
SEAT Program Manager	Mark Bickham	<a href="mailto:mark_bickham@nifc.blm.gov">mark_bickham@nifc.blm.gov</a>	(208) 387-5872
Smokejumper Flight Standards Pilot - Airspace Coordination – Aviation Security	Vacant		
Aerial Supervision Program Manager, Bravo 3	Rusty Warbis	<a href="mailto:rusty_warbis@nifc.blm.gov">rusty_warbis@nifc.blm.gov</a>	(208) 387-5185
Helicopter Program Manager	Bryan Bitting	<a href="mailto:bryan_bitting@nifc.blm.gov">bryan_bitting@nifc.blm.gov</a>	(208) 387-5173
Aviation Safety Specialist	Joe Bates	<a href="mailto:joseph_bates@nifc.blm.gov">joseph_bates@nifc.blm.gov</a>	(208) 387-5879
Aviation Training Specialist	Glen Claypool	<a href="mailto:glen_claypool@nifc.blm.gov">glen_claypool@nifc.blm.gov</a>	(208) 387-5160
National Airspace Program Manager	Julie Stewart	<a href="mailto:julie_stewart@or.blm.gov">julie_stewart@or.blm.gov</a>	(503) 808-6728
Air Attack Program Manager/Air Tactical Supervisor	Gil Dustin	<a href="mailto:gil_dustin@blm.gov">gil_dustin@blm.gov</a>	(970) 260-8904
Air Tactical Supervisor	Ken Perry	<a href="mailto:ken_perry@blm.gov">ken_perry@blm.gov</a>	(661) 723-2588
Air Tactical Supervisor	Vacant		
Air Tactical Pilot, Bravo 5	Mike Lynn	<a href="mailto:mike_lynn@nifc.blm.gov">mike_lynn@nifc.blm.gov</a>	(661) 723-2583
Air Tactical Pilot, Bravo 7	Ryan Curl	<a href="mailto:ryan_curl@nifc.blm.gov">ryan_curl@nifc.blm.gov</a>	(970) 275-4590
Air Tactical Pilot, Bravo 6	Greg House	<a href="mailto:gregory_house@nifc.blm.gov">gregory_house@nifc.blm.gov</a>	(281) 202-7097
Aviation Staff Assistant	Cindy Barto	<a href="mailto:cindy_barto@nifc.blm.gov">cindy_barto@nifc.blm.gov</a>	(208) 387-5180
SEAT Coordinator	Detailers	<a href="mailto:SEAT_Coordinator@nifc.blm.gov">SEAT_Coordinator@nifc.blm.gov</a>	(208) 387-5419

## 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, variable term 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, Variable Term 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, Exclusive Use and Variable Term aircraft will be considered BLM national resources and will be acquired with national mobility in mind. Hosting locations (designated bases) shall be committed to providing staffing, facilities and administrative functions in support of national mobility. 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 NATIONAL AVIATION PLAN**

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	10	10	10	10	10	10	10
ASM	3	5 (3)	5 (3)	5	5	5	5	5	5	5	5
Heli T2	6 (9)	7 (9)	8 (9)	9	10	10	10	10	10	10	10
Heli T3	18 (14)	17 (14)	16 (14)	15	14	14	14	14	14	14	14
SMJ	7	7	7	7	7	7	7	7	7	7	7
Scooper	2	2	2	2	2	2	2	2	2	2	2
SEAT	17 (12)	17	20 (?)	20	25	25	25	25	25	25	25
Utility	4	4	4 (5)	4	4	4	4	4	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 (?)	72	77	77	77	77	77	77	77
(X) = Actual FY Fleet, [X ] = Projected FY Fleet											

## AIR ATTACK PLATFORM

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

**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 need in 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:** 9    **TARGET TOTAL:** 10

**HOSTING LOCATION(s):** Ontario, NAO (Training) Grand Junction, Boise, Pocatello, Salt Lake City, Lewistown, Cedar City, Reno/Stead, 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.

**TARGET AIRCRAFT:** BE-E90, PC-12

**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:** 3    **TARGET TOTAL:** 5

**HOSTING LOCATION(s):** Exclusive-Use Contract IDIQ Boise, Lancaster, Stead, Houston, CWN Fort Wainwright.

## 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. Passenger capacity of 9 and HOGE-J of 3,000lbs. @ 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 too 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 >130 day contracts within agency or with other federal agencies. Exclusive Use Contract.

**FLIGHT CREW:** Vendor Provided.

**CURRENT TOTAL:** 9 **TARGET TOTAL:** 10

**HOSTING LOCATION(s):** Apple Valley, CA-1 Boise, ID-1 Burns, OR-1 Lakeview, OR-1 Twin Falls, ID-1 Fort Wainwright-2 Fort Yukon-1 Galena-1 1 Additional T2 Helicopter to be phased-in by FY 2012, through conversion of T3 (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. 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:** 14 **TARGET TOTAL:** 14

**HOSTING LOCATION(s):** Fort Wainwright (2), Elko, Galena, Ely, St. George, Las Vegas, Weaver Mtn. /Lewistown, Vale, Ravendale, Moab, Rifle, Salt Lake, Miles City, Rawlins.

## **SMOKEJUMPER PLATFORM**

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

**CURRENT SPECIFICATIONS, FAR:** Required Seats 6 (min). Total payload 3000 minimum 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 °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

**PURPOSE:** Single-Purpose; PurposeBuilt, 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:** 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:** 2 **TARGET TOTAL:** 2

**HOSTING LOCATION(s):** Fort Wainwright.

## SINGLE ENGINE AIR TANKERS

**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. 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 hopper.

**TARGET SPECIFICATIONS:** Single pilot turbine engine agricultural application type aircraft modified to the aerial retardant delivery role. "Variable Term" 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, Ayres Thrush 660/730 series.

**ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE:** 30-90 Days Variable Term Contract. The predominate aircraft are mission specific and must be modified from the standard agricultural application aircraft, as delivered from the manufacturers. Once modified these aircraft can only be flown as firefighting aircraft since the fire gating systems preclude their use as agricultural application aircraft. As mission specific aircraft (retardant delivery) there is no other use for these types of aircraft outside the fire season. There is not enough use outside the fire season to justify government owned aircraft for this mission, or for long-term contract or lease. Additional efficiencies may be realized with longer term contracts and shared contracts.

**FLIGHT CREW:** Vendor Provided.

**CURRENT TOTAL:** 17 **TARGET TOTAL:** 25

**HOSTING LOCATION(s):** Safford (2), Lakeview, Grand Junction, Cedar City (2), Twin Falls (2), Burns (2), Boise, Winnemucca, Billings, Stead (2), Miles City (2), San Bernardino (2), Porterville (1), Tooele (1)

## UTILITY FIXED-WING

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

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

**MINIMUM AIRCRAFT:** C-206, AC-680.

**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.

**ACQUISITION METHOD, MANDATORY PERIOD, and ACQUISITION RATIONALE:** 60-120 Days Exclusive Use Contract/GovernmentOwned 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

The AMD-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 AMD-110 form is located at: <http://amd.nbc.gov/library/sestravel.htm>

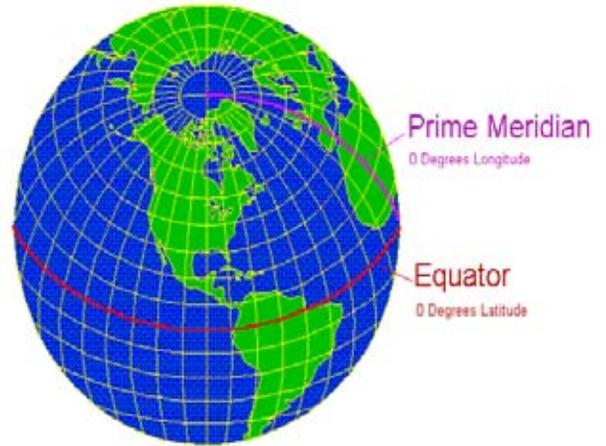
1. Gather information needed to develop the flight plan and AMD-110.
  - Determine the nature of flight. Is it-point-to-point, mission/special use, etc.?
  - Determine the proposed itinerary/schedule requirements.
  - Assess and consider any travel schedule time limitations for SES employees and time 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 GovTrip or 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.
    - Multi-engine aircraft shall be used for all SES flights.
    - Compare two or more competing vendors using the AMD-BVD form; maintain documentation in local files and use the best-value vendor in the AMD-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 AMD-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 AMD-110 and attached documentation to the Solicitor through the SAM, or with courtesy copy sent to the SAM.
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 form 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
Degrees Decimal Degree (DD)	N 64.84052° by W 147.60437°
Degrees Decimal Minutes (DDM)	N 64° 50.431' by W 147° 36.262'
Degrees Minutes Seconds (DMS)	N 64° 50' 25.9" by W 147° 36' 15.7"

### Notation

- Degrees: °
- Minutes: '
- Seconds: ''
- Decimal: .
- Hemisphere: N, S, E, W or -

### On-line Calculators for converting between Formats:

- <http://www.fcc.gov/mb/audio/bickel/DDMMSS-decimal.html>
- [http://www.calculatorcat.com/latitude\\_longitude.phtml](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

- Aviation (DDM, WGS84)
- BLM GIS (Various)
- TFRs (DMS, WGS84)
- Fire (DMS, Various)

Remember...

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

**BLM NATIONAL AVIATION PLAN**

**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. Submits electronically to AMD 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 AMD.	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 Specialist	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 AMD.	Ensures all Public Text is sanitized in Narrative & Corrective Action fields prior to making public. X
	Completion	Has the authority to make the SafeCom "complete".	Coordinates with AMD.
	Distribution	Distributes all "Public" BLM SafeComs to BLM SAMs and Other Agencies.	Coordinates with AMD.
	Designates Users	Authority to identify all BLM users and their appropriate permission levels. Must notify AMD of additional users/changes/updates.	X
	Out of Agency	Authorized to review other agency "Public" SafeComs. Read Only!	X

**Appendix 6 - AMD Aviation Program Evaluation Schedule**

2005 - New Mexico, Wyoming, NAO

2006 - Colorado, California

2007 - Oregon/ Washington, Utah

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

## Appendix 7 - BLM Airtanker Base Manager and Fixed Wing Base Manager Certification

**General:** All new and existing BLM Airtanker Base Manager (ATBM) trainees and Fixed Wing Base Manager (FWBM) trainees must complete the training requirements as outlined in the *LATBOG*.

The individual tasks required for completion of the ATBM or FWBM task book must be evaluated by a qualified ATBM or FWBM. If the task book is not completed three (3) years from the date of the task book initiation, the task book will no longer be valid. A new task book may be initiated and all current qualifications standards will apply.

All ATBMs and FWBMs are encouraged (not required) to attend airtanker base refresher training and or the Biennial BLM National Aviation Conference.

**Currency Requirements:** For the positions identified in the *LATBOG*, the maximum time allowed for maintaining currency is three (3) years for airtanker base positions. Currency for a position can be maintained by meeting any of the following requirements:

Successful performance in the position qualified for within three (3) years.

Successful performance in a position identified in the *LATBOG* as “Other Position Assignments that Will Maintain Currency”.

Successful performance in a higher position(s) for which that position is a prerequisite, providing the individual was previously qualified in that position.

Each office is responsible for annually certifying qualifications of its airtanker personnel based upon the requirements of the *LATBOG*. This responsibility includes evaluation of personnel for recertification in cases where position qualifications are no longer valid due to a lack of current experience.

**Currently Qualified:** Employees who are currently qualified, as an ATBM and/or FWBM, will maintain their qualifications.

**New Trainees:** Complete the training identified in the *LATBOG* and ATBM and/or FWBM task book process within three years. Issuance of a task book is not dependent upon completing training first.

**Current Trainees:** In the past, some employees have used unofficial ATBM and FWBM task books to document skills and experience. The use of unofficial task books is no longer allowed. In those instances where an employee has initiated and not completed an unofficial task book, those individuals can transfer similar tasks to the new task book. The appropriate state aviation manager will adjudicate all issues arising from the change in task books. Completed tasks that mirror tasks in the official task book need not be completed again. The employee is responsible for the completion of remaining tasks in the officially recognized *LATBOG* task book within three (3) years.

## Appendix 8 - 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 only but, external cargo letdown (off the hook) operations may 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 helicopter cargo letdown spotter trainee candidates (HCLS(I)).
2. Request for Contract Modification from COR to 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 requirements and record-keeping
  - g) Letdown mission documentation and record-keeping
  - h) Year end statistical data on form "BLM Annual Helitack Data Master V2'1 (02/08/08).xls". The form is available for download on the BLM NAO website at: <http://aviation.blm.gov/airops.htm> , Aircraft Operations, Helicopters.
  - 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(I) 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 *Redbook* “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.
  - f) Initial cargo letdown training shall be conducted by a DOI AM training specialist or a fully qualified spotter (HERS/HCLS) with the concurrence of the respective DOI AM Training Specialist. The DOI AM 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 AM training specialist and the BLM helicopter program representatives.
    - 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 external letdown or rappel specific operations unless authorized by NAO.
  - j) Tower training (if utilized) can be generic. Mock-ups and live cargo letdown training shall 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) Recurrency: 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) with the concurrence of the respective DOI AM training specialist. Typical terrain shall 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. Upon concurrence NAO will request DOI AM Training Specialist to audit candidate for approval.
  - b) Be a current helitack supervisor or assistant on an exclusive use helitack crew.
  - c) Meet the position/prerequisites for check spotter in *IHRG 7.2.2*.
  - d) Meet the prerequisite experience, training, and currency requirements outlined in the Red-book "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 shall 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/recurrency training session. This training shall 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 a DOI AM or USFS helicopter inspector pilot.

- d) The pilot shall 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 9 - 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 INITIATED BY:**

NAME	TITLE	PHONE NUMBER

**Helicopter Make/Model:**

Notes:


Signature

DATE

**BLM NATIONAL AVIATION PLAN**

**Position:** CARGO LETDOWN SPOTTER

**Trainee:**

<b>TASK: CARGO LETDOWN GROUND TRAINING</b>		<b>Evaluator</b>	<b>Date</b>	<b>Comments</b>
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			
<b>TASK: CARGO LETDOWN SIMULATOR (optional)</b>		<b>Evaluator</b>	<b>Date</b>	<b>Comments</b>
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			
<b>TASK: CARGO LETDOWN MOCK-UPS</b>		<b>Evaluator</b>	<b>Date</b>	<b>Comments</b>
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			
<b>TASK: CARGO LETDOWN INITIAL LIVE HELICOPTER</b>		<b>Evaluator</b>	<b>Date</b>	<b>Comments</b>
1.	Proper rigging /model specific			
2.	Proper Briefing crew /pilot			
3.	Proper Equipment Checks			
4.	Proper Verbalization			
5.	Ensure power check completed			

**BLM NATIONAL AVIATION PLAN**

**Position:** CARGO LETDOWN SPOTTER **Trainee:**

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			
<b>TASK: CARGO LETDOWN CHECKRIDE</b>		<b>Evaluator</b>	<b>Date</b>	<b>Comments</b>
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.	Identify 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			

<b>TASK: ASSIST IN INSTRUCTION OF CARGO LETDOWN TRAINING</b>		<b>Evaluator</b>	<b>Date</b>	<b>Comments</b>
BASE NAME:				
1.				
2.				
3.				

**BLM NATIONAL AVIATION PLAN**

**Position:** CARGO LETDOWN SPOTTER **Trainee:**

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		

Date Certifying Official

Comments:

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

Appendix 10 - NWCG to IAT Functional Crosswalk

 NWCG Position		Passenger	Aircrew Member	Fixed Wing Flt Manger	Fixed Wing Flt Mgr Sp Use	Helicopter Flight Manager	Resource Helicopter Mgr	Aviation dispatcher	Project Aviation Mgr	Aviation Manager	Supervisor	Aviation Tech. Spec.
ACAC	Area Command Aviation Coordinator	Yellow							Yellow	Yellow		
AOBD	Air Ops Branch Director	Green							Green	Green		
ASGS	Air Support Group Supervisor	Cyan							Cyan	Cyan		
ATGS	Air Tactical Group Supervisor	Blue	Blue	Blue	Blue							
ABRO	Aircraft Base Radio Operator	Light Blue										
DECK	Deck Coordinator	Purple	Purple									
HEB1/2	Helibase Manager	Dark Purple	Dark Purple			Dark Purple	Dark Purple					
HLCO	Helicopter Coordinator	Yellow	Yellow									
HECM	Helicopter Crewmember	Grey	Grey									
HMGB	Helicopter Manager	Orange	Orange	Orange		Orange	Orange					
SEMG	SEAT Manager	Green	Green	Green								
TOLC	Take off and Landing Coordinator	Pink										

**Note 1:** NWCG to IAT one-way Functional Crosswalk

**Example:** As a Qualified and Current Fire Helicopter Manager (HMGB), BLM recognizes that person’s ability to successfully function (without any additional training) as an Air crewmember, Helicopter Flight Manager and Resource Helicopter Manager for non-fire aviation jobs described in *OPM-4* and the *IAT Training Guide*.

**Note 2:** Any person qualified in NWCG aviation positions is also able to function in that position in a non-incident assignment. Ex: Individual qualified to perform as a Helibase manager on a fire can also be a Helibase manager on a spray project.

**Note 3:** Due to the requirements of wildland fire, BLM does NOT recognize any IAT to NWCG functional equivalencies.

**BLM NATIONAL AVIATION PLAN**

**Appendix 11- Acronyms**

310-1	Wildland Fire Incident Management System	IASG	Interagency Aerial Supervision Guide
9400-1a	BLM Flight Request Form	IASSC	Interagency Aerial Supervision Steering Committee
AAF	Aviation Airport Facilities	IAT	Interagency Aviation Training
ABOD	Aviation Board of Directors	IATBOG	Interagency Air Tanker Base Operations Guide
ABS	Forest Service Aviation Business System	IATSC	Interagency Aviation Training Steering Committee
ACETA	Aerial Capture Eradication and Tagging of Animals	IC	Incident Commander
AFF	Automated Flight Following	IES	Illuminating Engineering Society
AFS	BLM Alaska Fire Service	IFR	Instrument Flight Rules
AGL	Above Ground Level	IHOG	Interagency Helicopter Operations Guide
ALSE	Aviation Life Support Equipment Handbook	IHOPS	Interagency Helicopters Operations Working Group
AMD	Aviation Management Directorate	IHRG	Interagency Helicopter Rappel Guide
AMD 16	Pre-Validation of Funds for Contract Award Form	IIC	DOI Investigator-In-Charge
AMD-110	Travel Cost Analysis Form	ISOG	Interagency Single Engine Airtanker Operations Guide
AMD-13	Request for Contract Services Form	ISPOG	Interagency Smokejumper Pilots Operations Guide
AMD-19	Notice to Proceed Form	LAT	Large Airtanker
AMD-19	Notice to Proceed Form	LE	Law Enforcement Operations
AMD-20	Request for Rental Services Form	M3	Aviation Management for Supervisors training course
AMD-23	Aircraft Use Report Form	M-410	Facilitative Instructor
AMD-9	Best Value Determination Record (BVD)	MAC	Multi-Agency Coordination
AMG	BLM Aviation Management Group	MACAP	Mid Air Collision Avoidance Program
AMOC	Air Marine Operations Center - U.S. Border Patrol	MAP	Mandatory Availability Period
AMS	AMD Aviation Management Systems	MAFFS	Modular Airborne Fire Fighting System
AOA	Aircraft Operations Area (AOA)	MSDS	Material Safety Data Sheet
AQD	Acquisition Services Directorate	NAO	BLM National Aviation Office
AR's	Aerial Refueling Routes	NAOO	BLM National Aviation Operations Officer
ARA	Aircraft Rental Agreement	NAP	BLM National Aviation Plan
ARTCC	Air Route Traffic Control	NBC	National Business Center
ASM	Aerial Supervision Module	NIAC	National Interagency Aviation Committee
ATC	Air Traffic Control	NIAIS	National Interagency Airspace Information System
ATGS	Air Tactical Group Supervisor	NORAD	North American Aerospace Defense Command
ATP	Air Tactical Pilot	NOTAM	Notice to Airmen
ATS	Air Tactical Supervisor	NTSB	National Transportation Safety Board
AV	Exclusive Use Contract Availability	NWCG	National Wildfire Coordinating Group
BLM	Bureau of Land Management	OPM	Operational Procedures Memorandums
BPA	Blanket Purchase Agreement	OSHA	Occupational Safety and Health Administration
BVD	Best Value Determination Record (AMD-9)	PASP	Project Aviation Safety Plan
CO	Contracting Officer	PI	Project Inspector
COA	Certificate of Authorizations	PPE	Personal Protective Equipment
COR	Contracting Officer's Representative	QPL	Qualified Products List
COTR	Contracting Officer Technical Representative	RADS	Rope Assisted Deployment
CWN	Call When Needed	Redbook	Interagency Standards for Fire and Fire Aviation Operations
DHS	Department of Homeland Security	RMP	Resource Management Plans
DINS	Internet NOTAM Service - DOD	RWG	Rappel Working Group
DM	Departmental Manual	SAM	BLM State Aviation Manager
DOD	Department Of Defense	SAR	Search and Rescue
DOI	Department of the Interior	SASEB	Smokejumper Aircraft Screening Equipment & Evaluation Board
EATPL	Emergency Air Traffic Priority List	SEAT	Single Engine Air Tanker

## BLM NATIONAL AVIATION PLAN

ESCAT	Emergency Security Control of Air Traffic	SEMG	Single Engine Air Tanker Manager
ETA	Estimated Time of Arrival	SES	Senior Executive Service
FAA	Federal Aviation Administration	SFMO	State Fire Management Officer
FAIRS	Federal Aviation for Interactive Reporting System	SHWG	Short Haul Working Group
FAR	Federal Acquisition Regulations	SME	Subject Matter Expert
FAR	Federal Aviation Regulations	SMS	Safety Management System
FMO	Fire Management Officer	SR's	Slow Routes
FOR	Fleet Fixed Operating Rate	STAT	Safety and Technical Assistance Team
FPMR	Federal Property Management Regulations	SUA	Special Use Airspace
FTA	Fire Traffic Area	TFR	Temporary Flight Restriction
FWFM	Fixed Wing Flight Managers	TSA	Transportation Security Administration
GA	General Aviation	UAM	Unit Aviation Manager
GACC	Geographical Area Coordination Centers	UAS	Unmanned Aerial Systems
GTR	Government Transportation Request	UAV	Unmanned Aerial Vehicles
HB	Handbooks	USFS	United States Forest Service
HOGE	Hover Out of Ground Effect	VFR	Visual Flight Rules
IAIG	Interagency Aerial Ignition Guide	VLAT	Very Large Airtanker
IASC	Interagency Airspace Steering Committee	WFCS	Wildland Fire Chemical Systems
IACG	National Interagency Airspace Coordination Guide	WH&B	Wild Horse and Burro

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