

Unit Aviation Plan
Malheur National Forest
Umatilla National Forest
Wallowa-Whitman National Forest

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Appendices (The following appendices will be signed under separate cover sheets as completed and later added to the master Unit Aviation Plan)

- A. Blue Mt Province Aviation Mishap Response Guides (unit specific)
- B. Malheur Airbase Operations Plan
- C. Fraizer Helibase Operations Plan
- D. Sled Springs Helibase Operations Plan
- E. Umatilla SEAT Operations Plan
- F. La Grande Airtanker Base Operations Plan
- G. BMIDC Ramp Management Guide
- H. BMP Aerial Detection Guide
- I. BMP Backcountry Airstrips Management Guide
- J. BMP Air Attack Operations Plan
- K. BMP Pilot and Aircrew Briefing Packet
- L. Pre-Approved Projects – Risk Assessments
 - 1. Fire Suppression Activities
 - 2. Aerial Detection/Recon
 - 3. Administrative Travel
 - 4. Exclusive Use Helicopter Operations for Projects
 - 5. Search & Rescue

Acronyms found in this plan:

ACE - Aviation Conference and Education (IAT Program)

AMD - Aviation Management Directorate (formerly Office of Aircraft Services

)

BMP UAO Blue Mt Province Unit Aviation Officer

BPA - Blanket Purchase Agreement

CWN - Call When Needed

DAO - District Aviation Officer

IAT - Interagency Aviation Training program

PASP - Project Aviation Safety Plan

NOIFC - Northeast Oregon Interagency Fire Center

NOIDC - Northeast Oregon Interagency Dispatch Center

PICC - Pendleton Interagency Communications Center

RAG - Regional Aviation Group

RAO - Regional Aviation Officer

I. Purpose of this Aviation Operation Plan

The purpose of this plan is to align unit aviation planning and operations with national and Regional standards. This plan is designed to accompany and supplement National/Regional Aviation Management Plans, and all applicable agency manuals, handbooks, and operational guides, to derive a comprehensive unit aviation planning document. The Unit Aviation Plan is reviewed annually by the Blue Mt Province (BMP) Aviation Officer, and updated as changes are needed.

A. Objectives

The objective of the aviation management program on the Malheur/Umatilla/Wallowa-Whitman National Forests, referenced as the Blue Mt Province (BMP) forests, is to provide safe, efficient, and economic use of aircraft in conjunction with land management and fire suppression objectives.

This plan is provided as a reference tool to Line Officers, Aviation Managers, and forest aviation users to assist them in successfully meeting these objectives.

B. Program Overview

The Blue Mt Province Forests' rely heavily on aircraft support, with aviation activity accounting for an average of approximately 3,000 flight hours per year. The primary usage of aviation assets is related to fire management support and direct fire suppression activities, with the highest aircraft usage between June 15th and September 30th each year. The Blue Mt Province aviation program, as described in this plan, is within the Blue Mt Province Aviation Officers delegation of authority to plan and provide direction and oversight.

C. Organization and Staffing

Forest Supervisor: The respective Forest Supervisor is responsible for all aviation activities on the Malheur, Umatilla, and Wallowa-Whitman National Forests. Responsibilities outlined in FSM 5704.6 have been delegated to the BMP Aviation Officer.

Blue Mt Province Aviation Officer: The BMP Aviation Officer is designated by each Forest Supervisor, and is responsible for general oversight and guidance for all aviation operations being conducted on forest lands. This includes support to the fire program, resource programs (non-fire), and all administrative uses of aircraft. Primary UAO responsibilities include: Monitoring field compliance of existing aviation policy and standards, and communicating any newly implemented policy or standards to the field.

The position is responsible for initiating corrective actions related to deficiencies or misapplications of policy or standards, when detected, and as otherwise directed by line officers, and/or regional aviation management staff.

In the event that the BMP UAO is not available, the following will serve as designated alternates for the unit listed:

Jeff Meyerholtz, Malheur NF, John Day Airbase Manager
Brian Goff, Umatilla NF, Fire Staff Officer
Dennis Winkler, W/W NF, Asst. Fire Staff

The BMP UAO will ensure that designated alternates have the experience and training needed to meet the units needs, and is knowledgeable about current aviation related issues affecting these duties.

Some of the primary duties of the UAO position are the following:

1. Delegated review authority of Low and Moderate complexity Project Aviation Safety Plans (PASP's). See: Figure 2: PASP Review/Approval Criteria Pg 15.
2. Coordinates directly with the Dispatch Offices for planned administrative aircraft use on the Forest.

3. Maintains coordination with other government agencies, and cooperators on subjects involving aviation operations that affect the unit(s).
4. Participates in annual aviation related workshops and meetings, and participates in local/regional conference calls, as scheduled.
5. Coordinates activities with the local FAA, National Guard, and other local agencies that may operate on, over, or near forest lands.
6. Reviews unit SAFECOMS (form FS 5700-12), and coordinates with the Regional Aviation Safety Manager in determining follow up actions needed, and participates in Incident/Accident investigations, as requested.
7. Participates in contract development and contract administration, as necessary, with forest/regional level Contracting Officers.
8. The BMP UAO has the responsibility, and delegated authority, to stop any aviation activities that are unsafe, or are not being carried out within established agency policy and/or operating standards.

Dispatch Coordinator: All aircraft flights, both fixed wing and rotorcraft, will be ordered through the Forest Dispatch offices. The Dispatch Coordinator will have a thorough knowledge of aviation operations, and shall insure that dispatch operations that involve the use of aircraft are supervised by individuals meeting the standards set forth in Chapter II – Personnel Management.

The following roles and responsibilities are delegated from the BMP Aviation Officer to the Dispatch Coordinator position:

1. Maintain a file of all locally approved aircraft and pilots available to the forest, and assures agency ordering procedures, flight tracking/flight following, and mishap response standards are being met.
2. Participate in the Briefing and debriefing process with aircrews on forest aviation missions, and maintains operational coordination with other government agencies, and neighboring units on subjects involving aviation operations.
3. Initiates actions to order Aerial Supervision for any complex aviation operation (see: Figure 5 - Aerial Supervision Matrix; or NW Mob Guide 24.10.5)
4. Initiates aviation mishap response actions as outlined in the forest Aviation Mishap Response Guide (AMRG). Ensures that seasonal updates to the unit AMRG are accomplished and copies distributed to all permanent and temporary aviation bases, including IMT incident bases.

5. Schedule all administrative flights on the forest and coordinates with the Northwest Coordination Center (NWCC) for the use of regional aircraft. Identifies/assigns a qualified Flight Managers for all fixed wing missions
 1. May serve as the acting UAO when specifically designated, or when the designated forest alternate is un-available.

District Ranger: The District Ranger will designate a District Aviation Officer (DAO) who will function as the primary aviation contact on the unit. The DAO is officially the District Fire Management Officer (FMO), unless otherwise formally designated.

Several aviation responsibilities reside solely with the District Ranger (unit Line Officer), they include:

1. Approval authority (Signature) on unit Project Aviation Safety Plans (PASP's);
2. Approval authority (signature) for transportation of non-federal passengers on agency controlled flights. (Required form 5700-12 Day Trip Authorization);
3. Approval authority for Search & Rescue requests (Assistance to Co Sheriff's);
4. Specific authorizations for the use of mechanized equipment within designated wilderness areas (i.e. aircraft landings).

District Aviation Officers (DAO): District Aviation Officers should strive to develop and maintain aviation knowledge and skills through formal training and operational involvement. Aviation specific training and development records should be reviewed and updated annually. Suggested minimum training requirements are successful completion of Interagency Aviation Training (Aviation Supervisor position or equivalency). The following responsibilities are assigned to the District Aviation Officer's:

1. Is the initial contact on the unit for aviation related questions, and assists in operational planning. Assists Project Managers in the development, review, and approval of unit level Project Aviation Safety Plans.
2. Coordinates unit aviation training needs with the BMP UAO. Assists in identifying shortage positions needing program emphasis and development.
3. Provides a communication link from the districts to the BMP UAO, and likewise, from the BMP UAO to district personnel for dissemination of technical and safety related information, policy and program updates, etc.
4. May officially supervise exclusive use contract personnel, or be designated as COR on aviation contracts, if qualified.

Contracting Officer (CO): Forest level aviation contracts can only be approved by the Forest Contracting Officer (Marianne Klingler). The CO is responsible for contacting the BMP UAO whenever the use of aviation resources is proposed in a forest level contract. This is to ensure the proposed contract is clearly designated as either an **aviation “services”** or **aviation “end product”** contract. The importance of this pre-solicitation designation is for developing the appropriate contract clauses, specifications, and level of aviation oversight required by agency policy. **Note:** Any contract/agreement related inspection approvals (carding of aircraft and/or pilots) will be coordinated through the BMP UAO with the Regional Aviation Group in Redmond.

Note: All Aviation Services Contracts require an approved PASP. **End Product aviation contracts do not require a PASP** (Ref: Section III “Project Aviation Safety Plan Emphasis”).

Contracting Officer's Representative (COR): Aviation COR duties and responsibilities will be outlined in a Designation of Authority letter from the Contracting Officer. For aircraft contracts, the COR shall meet the Level I certification requirements listed in Departmental Regulation 5001-1. R-6 certified COR's, and the entire R-6 COR certification program can be referenced at the R-6 AQM fsweb site:
<http://fsweb.r6.fs.fed.us/aqm/cor/>

Aviation Project Managers: A Project Manager will be designated for all aviation projects on the forest. Project Managers are responsible for preparing a PASP for any project without previous approval (sign off), or listed as pre-approved in this Aviation Plan (see: Figure 2, Pg 15). The Project Manager is also expected to provide either 1) direct aviation supervision of project operations, if qualified, or 2) provide oversight (assurance) that on-site supervision and aviation position staffing meets or exceeds those established by the PASP. The primary responsibilities of the Aviation Project Managers are:

1. Develop PASP's and/or other planning documents as required [see IHOG Ch 3 “Operational Planning” (V.B.2.c) and FSM 5711.1].
2. Ensure safety and project operational briefings are provided to all personnel involved with the project, including the pilot(s).
3. Ensure that all aerial activities are conducted in accordance with all applicable policy, regulations, interagency guidance and contract specifications.
5. Keep the UAO, DAO, COR, and/or Contracting Officer briefed on daily progress, as requested or needed.
6. Immediately report aircraft accidents/incidents to the BMP UAO and submit a Safecom (form 5700-12) within required timeframes.
7. Maintain records and documents pertaining to project activities.

La Grande Airtanker Base Manager (ATBM): The Airtanker Base Managers primary assignment is the safety, management, and supervision of the La Grande Airtanker Base and its personnel. He/she may be assigned to alternate or temporary bases, as needed. If the primary ATBM is away from their base, a fully qualified individual will be assigned to manage the facility. The ATBM's duties are listed in the job description for this position, and in the base operating plan (UAP Appendix F).

John Day Airbase Manager: The John Day Airbase Managers' primary assignment is the safety, management, and coordination/oversight of all agency exclusive use and temporary aviation resources based at the John Day airport. Permanently assigned resources include a Regional Type II (Rappel), National Type II (Large Fire Support / Rappel), a National Type I (Initial Attack support), and an Exclusive Use Single Engine Airtanker, and all associated support personnel. Temporary resources include various fixed and rotorwing aircraft assigned to the base in support of initial attack and project operations throughout the year. The John Day Airbase Managers' complete duties are listed in the job description for this position and the base plan.

Rappel Program (Base) Managers: The Rappel Base Managers' primary assignment is the safety, management, and direct supervision of the rappel program, and for assigned Regional, National, or CWN helicopters temporarily assigned to their base. The Rappel Base Managers' complete duties are listed in the job description for their position, and in the R-6 Rappel Program MOU, and are supervised by the unit FMO where the base is located [Frazier/Sled Springs], or by the Airbase Manager(John Day).

National Type II (Large Fire Support) Manager: The National Type II Managers' primary assignment is the safety, management, and direct supervision of the Large Fire Support helicopter and associated module of personnel. The National Type II Managers' complete duties are listed in the job description for their position, and within the Large Fire Support National Operating Plan, and is supervised by the John Day Airbase Mgr.

National Type I Manager: A qualified Helicopter Manager position is stationed in La Grande to staff an Exclusive Use National Type I helicopter, hosted by the Wallowa-Whitman NF. When available at the home base (LGD) this resource will be assigned to Initial Attack and Extended Attack support within the sub-geographic (Blue Mt Province) area. The Manager position will be made available to the BMP Forests for aviation projects outside the contract period, and is supervised by the BMP UAO.

Single Engine Air Tanker Manager: The Single Engine Air Tanker Base Managers' primary assignment is the safety, management, and supervision of the SEAT Base and associated personnel (Locations: John Day and Pendleton). He/she may be assigned to alternate and temporary bases, as needed. If the primary SEAT Base Manager is away from their base, a fully qualified individual will be assigned to manage the facility. The SEAT Base Manager duties are listed in the Interagency SEAT Operations Guide (ISOG) and the SEAT Base Operations Plans. (Appendix B, E.)

Leadplane Pilot: A Leadplane Pilot may be temporarily pre-positioned to the La Grande airtanker base when aviation activity dictates the need. The pilots are officially assigned to the Deschutes National Forest, with duty stations in Redmond, and all administrative functions are performed there.

Leadplane Pilot, Don Bell, currently serves as the Northeast Oregon Forests Liaison from the Regional Air Group (RAG).

Air Tactical Group Supervisor (ATGS): A qualified ATGS will be stationed in La Grande during the summer to staff an Exclusive Use Regional Air Attack Platform hosted by the Wallowa-Whitman NF. The La Grande ATGS' primary assignment is for sub-geographic (Blue Mt Province), aerial supervision for initial attack and extended attack incidents. ATGS position duties can be found in the Interagency ATGS guide.

CWN Helicopter Managers: A qualified Helicopter Manager will be assigned to all helicopters operating on the forests, as required by the IHOG Ch 2. Helicopter Managers may be available locally, or may be ordered via resource order through the Forest Dispatch offices. Once the helicopter is dispatched, all operations will be under the control of the assigned Helicopter Manager who will report directly to either the incident commander (fire) or project manager (non-fire) until the helicopter is formally released. Off forest assignments are contingent upon the availability of the individual and current availability status in the dispatch Resource Order Status System (ROSS).

Helicopter Crewmembers: Qualified Helicopter Crewmembers will be assigned to all helicopters operating on the forest, to meet IHOG staffing requirements (Ref: IHOG Chapter 2 – Personnel). Locally available crewmembers will be used to staff in-coming CWN helicopter resources for both Fire, and Non-Fire (Project) assignments. If local crewmembers are unavailable to fill out a required module, a resource order will be placed by the forest dispatch office for the position. Off forest assignments are contingent upon the availability of the individual and current availability status in the dispatch Resource Order Status System (ROSS).

Fixed Wing Flight Managers: All fixed wing flight activities require an assigned Flight Manager. This person's primary role is to manage the flight to ensure passengers are transported safely and flights are planned and executed to agency standards. The level of minimum training required of the Flight Manager position is dependant on the complexity of the mission. Flight management requirements are listed in Section III – Aviation Management Activities, and training requirements in Section VI- Aviation Accident Prevention Program.

All Forest Employees: It is imperative that when employees consider the use of aircraft that they become familiar with the policies and operating guidelines that direct their use, and solicit help for planning and execution of aviation missions. Employees can contact the DAO, UAO, or Dispatch Coordinator with any questions regarding aircraft usage, both for general transportation, or specific project support.

Forest employees that are licensed pilots may use privately owned, leased, or rented aircraft as transportation to and from official meetings and training, if specifically approved. Pilot minimum requirements can be referenced in FSM 5712.35.

As a government employee, further restrictions apply to the private use of aircraft during off duty time while in official travel status. Contact the Unit travel clerk or BMP UAO if clarification of this issue is needed.

Name	Title	Unit	Phone
Miles Hancock	BMP Unit Aviation Officer	MAF/UMF/WWF	541-975-5418
Jeff Pendleton	Forest Fire Staff Officer	MAF	541-575-3103
Rob Batten	Assistant Fire Staff Officer	MAF	541-575-3102
Bret Ruby	Forest Fire Staff Officer	WWF	541-523-1415
Dennis Winkler	Assistant Fire Staff Officer	WWF	541-523-1470
Brian Goff	Forest Fire Staff Officer	UMF	541-278-3748
*Elwood Stout	Dispatch Coordinator (JDCC)	MAF	541-575-3101
Rena Crippen	Dispatch Coordinator (BMIDC)	WWF/UMF	541-975-5402
Jeff Meyerholz	Airbase Manager (John Day)	MAF	541-575-3370
Brandon Culley	Airbase Operations Mgr (John Day)	MAF	541-575-3373
Eric Bush	Airbase Training Mgr (John Day)	MAF	541-575-3371
Eric Scholl	Airbase Equipment Mgr (John Day)	MAF	541-575-3375
JD Connell	Rappel Base Manager (Frazier)	UMF	541-427-5393
Griff Williams	Rappel Base Manager (Sled Springs)	WWF	541-426-5525
Joe Zinni	National Type I Manager (NOIFC)	WWF	541-975-5418
Russ Hurst	Airtanker Base Manager (NOIFC)	WWF	541-975-5725
Greg Loper	SEAT Manager (John Day)	MAF	541-575-3109
Doug Simler	SEAT Manager (Pendleton)	UMF	541-278-3732
Steve Cross	FMO/District Aviation Officer	MAF/BMRD	541-575-3302
Brian Bishop	FMO/District Aviation Officer	MAF/PCRD	541-820-3802
Dale Boyd	FMO/District Aviation Officer	UMF/HRD	541-676-2137
Mark Johnson	FMO/District Aviation Officer	UMF/NFRD	541-427-5384
Chad Pickering	FMO/District Aviation Officer	UMF/PRD	509-843-4630
Brett Thomas	FMO/District Aviation Officer	UMF/WWRD	509-522-6284
Noel Livingston	FMO/District Aviation Officer	WWF/BPRD	541-523-1906
Trish Wallace	FMO/District Aviation Officer	WWF/LGRD	541-962-8516
Nathan Goodrich	FMO/District Aviation Officer	WWF/WVRD	541-426-5583
* Acting			

Figure 1: Unit Aviation Organization

II. Personnel Management

A. Qualifications, Certification, and Position Enhancement Training

Unit Aviation Officer: Qualifications - The UAO should have a thorough knowledge of applicable federal regulations, agency aviation policy, and the components of agency aviation safety programs. The UAO's background should include aviation related experience, such as a sub-unit aviation officer or apprenticeship details, which include “hands on” fixed and rotor

wing aircraft management and oversight. Additional recommended training consists of:

- Completion of Senior Level Aviation Management (SLAM).
- Attendance at *Aviation Conference & Education* (ACE).
- Contracting Officer Representative (COR) training.
- Management Skills Training.
- M-410, Facilitative Instructor.
- Risk Management and Crew Resource Management Training.
- Private Pilot Ground School.
- Annual UAO workshop participation.

Alternate UAO's (Fire Staff, Assistant Fire Staff, Dispatch Coordinators): In addition to the recommended training listed above under UAO, the IAT requirements for Aviation Supervisor position should be planned into individual training and development plans. Attendance at an IAT ACE is highly recommended to meet this requirement, or to enhance aviation program knowledge.

District Aviation Officers (FMO's): In addition to the recommended training listed above under UAO, IAT requirements for the Aviation Supervisor position should be addressed in individual training and development plans. Attendance at an IAT ACE is highly recommended to meet this requirement, or to enhance overall aviation program knowledge.

District Rangers (Unit Line Officers): For those districts hosting exclusive use contracted aircraft, or utilizing aircraft on a routine basis to accomplish specialized missions, i.e. Backcountry Airstrip operations, Survey, Photo missions, etc., IAT Aviation Supervisor position training is recommended. "Aviation Program Overview for Line Managers" A-314 (released spring 2008) should be strongly considered to enhance aviation program knowledge.

Forest Supervisors (Forest Line Officers): IAT Fixed Wing Flight Manager qualifications are highly recommended in preparation for occasional administrative and mission use participation. The current IAT course titled "Aviation Program Overview for Line Managers" A-314 (released spring 2008) should be strongly considered to enhance aviation program knowledge.

Dispatch Office Staffing: Dispatch Coordinators have the responsibility to adequately staff their offices with qualified personnel to handle the anticipated aviation workloads on the forests. The following are suggested minimum standards for aviation dispatch personnel (staffing and supervision).

The currently recognized qualification standards for aviation dispatching are:

1. NWCG position of **Dispatcher, Aircraft (ACDP)**, or
2. IAT **Aviation Dispatcher** position, or
3. Equivalency certification for NWCG or IAT positions (above)

Minimum Office Staffing – When aviation operations are being conducted, dispatch offices should maintain a minimum staffing level of a Supervisory Dispatcher meeting NWCG or IAT Aviation Dispatcher position qualifications. The expectation is for the supervisor to provide direct aviation dispatching oversight to subordinate dispatchers assigned to flight activity, in cases when qualified aviation dispatchers are either unavailable, absent, or otherwise in short supply.

Aviation related training to further enhance the **Aviation Dispatcher** position includes:

- Level 3 training listed in 5109.17 for (**ACDP**) position
- Private Pilot Ground School
- Attendance at an IAT Aviation Conference and Education (ACE)
- Intermediate Aviation Operations course (R-6)
- Attendance in R-6 Aviation Awareness workshops/seminars

Dispatcher Positions - The goal of the BMP aviation program is to advance all dispatch personnel responsible for aviation resource ordering, mission planning, and/or flight monitoring, to the NWCG (ACDP) or IAT Aviation Dispatcher position standard. To help accomplish this, the following should be given emphasis by each Dispatch Coordinator (office).

- Update office operating plans to clearly identify the level of aviation responsibility for each position, and identify appropriate minimum aviation training and position development standards.
- Develop personnel training and development plans for each employee related to their current position and associated level of aviation responsibility. Position enhancement training should be identified, as well, for the employees future target position(s).
- Strive to meet the new 5109.17, NWCG, *Dispatcher Aviation (ACDP)* position requirements, including level 3 coursework, as soon as practical, for all office positions with aviation responsibilities (D-312 ACDP training - new 2008).
- Coordinate with BMP UAO for formal and informal local aviation training that enhance position development. (i.e. aviation workshops, meetings, pre-season briefings, etc)

NWCG (Fire Positions): Aviation training should be addressed in all employees Individual Training and Development Plans. Required and suggested training and experience requirements can be found in the Wildland Fire Qualifications Subsystem Guide, 310-1, and FSH 5109.17.

Basic Air Operations (S-270) is the fundamental fire related aviation course, and is required of all employees proceeding to the Crew Boss level or

above. Fire operations personnel, at or above the Division Supervisor/Type III IC level, are encouraged to reinforce their aviation tactical and logistical skills by attending Intermediate Air Operations (S-370), Helicopter Crewmember (S-271), aviation related fire details, and/or attend an IAT *Aviation Conference & Education* (ACE).

A. **Interagency Aviation Training (IAT):** The IAT Program, formally adopted by the Forest Service in 2005, identifies interagency (DOI/FS) aviation positions and required training standards. All non-fire aviation positions, and some NWCG Fire aviation positions, have specific IAT coursework requirements, i.e. "A-courses". (Ref. 5109.17 for fire position requirements, and for non-fire positions, See: Chapter VI, A. Aviation Safety - Education and Training, and the IAT Guide.

The full IAT Guide and FS appendix 1 (FS Requirements) can be found at the IAT web site: <https://www.iat.gov/>

III. Aviation Management Activities

Forest aviation activities are categorized as either **Administrative Use**, commonly termed "Point to Point" or **Mission Use** (Fire or Project related).

To qualify as Administrative Use, the flight must originate at a developed airport or helibase with a direct flight route to another developed airport or helibase. Admin flights are conducted solely for the purpose of transportation of cargo or personnel, and take place entirely above 500 feet AGL, except for take-off and landing. Administrative flights are considered Low Risk flight operations, with no additional personal protective equipment (PPE) requirements, however, consideration should always be given for adequate apparel and footwear for the environmental conditions, and personal survival kits/equipment items, is highly recommended.

Mission Use flights are all flights not qualifying as Administrative Use, and can be either Project or Fire support related. Mission Use flights require special pilot qualifications and techniques, crewmember training requirements, and/or require PPE. Risk Levels can be Low to High, depending on the mission profile, with all Mission Use flights requiring specific planning (PASP) and/or approval (UAO or Line Officer) per section III- Aviation Management Activities, and guidelines in FSM 5700, FSH 5709.16, and IHOG.

Operational planning of all aviation activities will be done with the utmost concern for personnel safety. The Interagency Helicopter Operations Guide (IHOG) Chapter 3 Operational Planning will be the standard applied to all rotorwing aviation planning. For fixed-wing aviation planning, FSM 5700, and FSH 5709.16 will also be used for standards and guidelines.

The primary aircraft uses for the Forests are: fire detection and reconnaissance, tactical fire suppression (fixed wing retardant/water application, and helicopter external load delivery of water and cargo), personnel and internal cargo transport,

aerial ignition, project reconnaissance or survey flights, and administrative use travel. Search and rescue and law enforcement support missions are also routinely carried out.

The planning for many routine flight activities is contained in this plan as “Activities approved under this Plan” (Figure 2.). Mission Risk Assessments covering the pre-approved flight activities are included in Appendix M, and reside with the BMP UAO. Any aviation project not described in this plan should have a specific PASP developed, and submitted as soon in the planning process as possible to obtain the required level of review/approval. Some high risk or high complexity missions require a regional level review by the Regional Aviation Officer/ Regional Aviation Safety Officer, and the Regional Aviation Technical Specialists responsible for the specific mission activity. (See: Figure 2: PASP Approval Criteria below)

A. Project Aviation Safety Plan (PASP)

Line Officer’s (Forest Supervisor/District Ranger) have the primary responsibility for aviation project planning (FSM 5711), and specific aviation planning approval authority (ID 5710-2005-1). The BMP UAO has the delegated responsibility to continuously monitor, promote and improve air operations by providing assistance to all forest staff and functions, including Project Aviation Safety Plan processing/review.

Figure 2 below illustrate the review and approval level required for common flight activities, and although not specifically required, a project specific PASP or Mission Risk Assessment should always be considered, if planning time permits.

This plan constitutes authority to perform most fire suppression, and some non-fire aviation activities without submission of a project-specific aviation safety plan (PASP).

Figure 2: PASP Approval Criteria

Activities approved under this plan	Activities authorized with BMP UAO review, and Line Officer Approval.	Activities requiring a PASP Regional level review, prior to approval.
Fire Suppression/Fire Support Activities Aerial Detection/Fire recon Administrative Use - Travel Radio / Lookout Site Supply (EU) Helicopter Reconnaissance (EU) Search and Rescue (Immediate Response) Backcountry Airstrip Operations	Aerial Ignition Aerial Application (Seed, Fertilizer) CWN Helicopter Ops. (Non-Fire) Resource Recon - Fixed Wing Wildlife or Botany Surveys/Census LE Spotter/Detection/Recon Aerial Photography	Law Enforcement (Special Mission) Aerial Application (spraying) Aerial Cone Collection. High Complexity External Load (Heli) Flights with cooperators and/or contractor a/c. All MISSION USE flights not yet identified.

- Approved PASP’s are kept on file in the BMP UAO’s office.
- Updated PASP forms (templates) can be requested from the BMP Aviation Officer or Helicopter Base Managers.

Flight Activities Approved Under This Plan

1. Fire Suppression and Support:

Fixed and rotary wing aircraft may be used for initial attack, extended attack, and large fire support (fire suppression activities) and shall follow agency policy and procedures outlined in the Interagency Standards for Fire and Fire Aviation Operations, FSM 5700 Aviation Management, FSH 5709.16 Flight Operations, and field level Operating Guides related to the assigned mission/ function (i.e. IHOG, Aerial Supervision Guide, Rappel Guide, etc.)

Safety Management Systems (SMS) concepts and principles will guide management and oversight of fire operations, to promote a positive safety culture with an emphasis on personal safety and accident prevention.

2. Aerial Detection / Fire Reconnaissance:

Fire detection and fire reconnaissance flights may be made with either fixed or rotorwing aircraft and shall remain above 500 feet AGL except during takeoffs and landings. All flights will be requested/ordered through the forest dispatch offices with a qualified Flight Manager identified and a positive flight tracking plan established (Radio/AFF). Mission flight routing will be pre-planned with safety critical mission information disseminated between aircrews (relayed) and identified within the dispatch system (neighbor notifications/statusing). Airspace considerations; MTR status, FTA locations, and other known hazards will be pre-briefed and managed as the mission progresses. Aircrew members shall assist with “See and Avoid” within airport traffic area’s and enroute, and shall be prepared to assist with time critical risk assessments and decision making as the flight progresses (CRM).

3. Administrative Travel:

Light fixed wing aircraft may be used for moving firefighters to incidents or other personnel to training/meetings when it is an efficient and cost effective method of travel. In addition to the pilot filing an FAA or agency flight plan, the sending dispatcher is responsible for resource tracking and informing pilots of flight tracking procedures (*Chapter 24.3 NWCC Mobilization Guide*). Pilots performing Admin Use flights shall be instructed to check in at intermediate stops (schedule permitting) and at the final destination. A Fixed Wing Flight Manager will be designated on the flight manifest, and all authorizations/justifications for administrative use of aircraft will be in accordance with the PNW Aviation Management Plan direction, Section: Administrative Aircraft Use.

4. Exclusive Use (Rappel/Helitack) Resources for Project Work:

The Exclusive Use Helicopters stationed at John Day, Fraizer and Sled Springs are available for project work throughout the summer when not specifically engaged in fire or training assignments. In most cases, the project will only need to pay for the hourly flight cost, making their utilization cost effective, being that daily availability costs are pre-obligated from fire program funds. **Note:** The uncertainty of fire activity limits the planned use of exclusive use resources.

The Exclusive Use Module (Manager and Crewmembers) shall have direct oversight of exclusive use aircraft operations, including planning and logistics considerations, aircraft utilization plans, and personnel assignments. Unit trainee assignments are encouraged for such projects. [i.e. HECM (T) or HELR]]

Requests or inquiries on Helicopter availability and scheduling should be routed through the unit dispatch offices or the fire program Staff Officer as a starting point.

5. Search & Rescue Emergencies/Assistance

Pilots and Aircrew Members involved in Search and Rescue missions must focus on “time critical” risk management techniques and solid Crew Resource Management to address all risk decisions essential for safe operations. A mission specific risk assessment should be accomplished by the mission flight manager, if time permits, and reviewed in the mission brief to consider all information known at the time of dispatch. County Sheriff’s “requests for aircraft assistance” require a focus on good interagency communication and coordination with specific Line Officer approval for any involvement of FS aviation resources. Requests and approvals are a function of the dispatch offices.

6. Backcountry Airstrip Operations

The Wallowa-Whitman has several category III and IV airstrips that are utilized periodically by fire, recreation, and other departments. (See: Figure 6) Aircraft performance and limitations are a critical safety consideration for operations into all category IV airstrips, and an airstrip specific pilot endorsements is required.

All Flights shall be ordered/scheduled through the Forest Dispatch Office, with a Flight Manager identified who meets BMP - Advanced Fixed Wing Flight Manager training requirements. See: Ch VI (A. Safety Education and Training Pg 34).

Refer to Ch V – Facility Management, (C. Back Country Airstrips) for additional Backcountry Airstrip information.

Missions with Special Planning Emphasis:

1. Helicopter External Loads:

By their nature, these projects contain the most potential hazards for the pilot and personnel involved and are considered “High Risk” missions. Safety of personnel (Operational Risk Management) will be the prime planning consideration with a mission risk assessment required. (Ref: *IHOG Ch 11- Cargo Transport, and Ch 3 - Operational Planning*).

NOTE: All CWN and cooperative helicopter external load projects require a Project Aviation Safety Plan (PASP) prior to operations.

1. Agency Law Enforcement Flights:

All agency Law Enforcement missions will be planned in accordance with the *PNW Aviation Management Plan, section: Law Enforcement Aviation Plan*.

Law Enforcement flights shall have a PASP with and an assigned agency Flight Manager. Dispatch roles and responsibilities will be outlined in the PASP, and may include cooperator notification/coordination procedures specific to the interagency aspects of the mission. **Note:** All regional and national level helicopter contracts specifically state: “contractor pilots have the *right of refusal* for any cooperative law enforcement missions they don’t feel comfortable with”.

1. **Helicopter Logging and “End Product” Operations:**

Contracted Helicopter Logging and other End Product contract operations pose a significant airspace hazard to firefighting and other mission related aviation activities. Project areas need to be declared, and routine communications established to the extent possible.

For flight operations related to timber sales or other end product contract, the project administrator shall provide dispatch with the following information:

1. Name, type, and location of the project.
2. Estimated date(s) project will be conducted.
3. Identify designated COR/project inspector’s name and contact number.
4. Maps showing project location, planned landing areas, and fueling sites.
5. Aircraft N#’s, and frequencies being monitored, if applicable.
6. Contractor’s name and contact telephone number.

Once received, Dispatch will update the forest flight hazard map, and notify any pilots/aircrews transiting in or near the project area.

1. **Forest Service Employees who Pilot Aircraft on Official Business:**

An employee not hired as a pilot, must meet the following criteria in order to pilot aircraft on official business.

1. For all mission use operations, the employee shall possess the basic pilot qualifications listed in FSM 5712.35, and the mission specific qualifications in FSM 5730.
2. For point-to-point transportation of the employee alone, the following qualifications are required (*Ref: FSM 5712.35*):
 - a. A current, valid FAA private pilot certificate and Class III medical certificate.
 - b. Two hundred hours of pilot-in-command experience.
 - c. Five hours experience in category and class of aircraft within the preceding 60 days.
 - d. Approval in writing (*FSM 5712.2*).

IV. Aircraft

A. Government Owned/Leased Aircraft Management

Government owned/leased aircraft within the Pacific Northwest Region include; four King Air 90's used for Leadplane and Administrative transportation, two C 23 Sherpas used for Smokejumper missions, and one Aero Commander 500B used for Aerial Photography. These aircraft are operated and managed by the Regional Aviation Group (Redmond Air Center). Dispatch requirements are found in the Northwest Mobilization Guide Ch. 20.

B. Exclusive Use Aircraft

Figure 3: BMP Exclusive Use Contract Aircraft

Location	Aircraft	Mission	Approx Contract Dates
John Day	Type II Rappel	Initial Attack - Regional	June 7 nd - Oct 4 th
John Day	Type II Restricted	Support - National	June 16 th - Sept 13 th
John Day	Type II Rappel	Initial Attack - National	July 3 rd - Sept 30

Frazier	Type III Helitack	Initial Attack - Regional	June 3 nd - Sept 20 th
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Sled Springs	Type II Rappel	Initial Attack - Regional	June 7 th - Oct 4 th
La Grande	Type I Helicopter	Initial Attack - National	April 30 th - Oct 26 th
La Grande	Type I Air Attack F/W	Initial Attack - Regional	July 3 rd - Sept 16 th
Pendleton	Single Engine Air Tanker	Initial Attack - Forest	July 2 st - Sept 14 th
John Day	Single Engine Air Tanker	Initial Attack - Forest	July 6 th - Sept 24 th
La Grande	Large Air Tanker	Initial Attack - National	July 1 st - Oct 25 th

A. Call When Needed (CWN) Aircraft

CWN Light Fixed Wing are available through R-6 LFW Contract (FS), and through Aircraft Rental Agreements (ARA's) administered through

the Department of Interior, Aviation Management Directorate (AMD) in Boise. These aircraft are available on a “Call When Needed”, procurement and selection basis through the Forest Dispatch offices. The contract Schedule of Items can be found at:
<http://www.fs.fed.us/r6/ppm/fire-procurement.shtml>

BMP Hosted Light Fixed Wing Vendors

- *Spence Air Service*

- *Enterprise
Eagle Cap Aviation*

- *La Grande
Baker Aircraft*

- *Baker City
Skyrunners*

- *Walla Walla
Hermiston Aviation*

- *Pendleton
Wilderness Air*

Lexington

CWN Type III Helicopters are regionally contracted in R-6 for fire and project use, and ordered through standard dispatch channels (Ref: *Northwest Mob Guide Ch 20*).

Note: The contract Schedule of Items, and Specified Flight Rate Sheets, can be accessed from the PNW Acquisition Management (Fire Procurement) web:

<http://www.fs.fed.us/r6/ppm/fire-procurement.shtml>

BMP Hosted Type III - Light Helicopter Contractors

Leading Edge Aviation

*Clarkston WA
Hillcrest Aviation*

Lewiston ID

A. National CWN Type I & II Helicopters

Contracted out of the National Interagency Fire Center, Boise ID, and are procured via standard Mob Guide Ch 20 procedures. The Contract, Schedule of Items, and Specified Flight Rate sheets can be accessed from the National Contracting web page:

<http://www.fs.fed.us/fire/contracting/>

A. Cooperating Agency Aircraft “approval Letters”

Cooperating agency “public use” aircraft must be formally pre-approved by the Regional Aviation Officer. This is typically done by the issuance of a letter of approval, carried on board the aircraft. In the BMP area this may most commonly apply to the WA DNR Type II helicopters, OR State Police fixed wing, and the Oregon and Washington Air National Guard helicopters.

B. Aviation “End Product” Contracts

FSM 5700 requires a pre-solicitation determination for aviation related contracts as either; “End Product” or “In-Service”, and the UAO has the responsibility to coordinate with forest procurement offices (Contracting Officer(s)) for adding determinations into the contract file.

See: Form FSM 5711.2 – Exhibit 01 – End Product Exhibit (Figure 4.)

Note: End Product COR’s/Project Inspectors are responsible for reporting Flight hours to the UAO, at the conclusion of the project, for aircraft use upward reporting purposes.

Figure 4: 5711.2 - Exhibit 01 End Product Exhibit

If the answer is YES to any question below you must use the flight services process and contract. If the answers are NO, you may use the end-product contract.	Aerial photo remote sensing	Aerial application (spray/seed)	Aerial Ignition	Animal capture (net gun, dart, paintball, etc.)	Animal herding/gathering	Your project *
1 Are agency personnel going to be on the aircraft for this mission?						
2, 10 Is the aircraft currently being used as a public aircraft?						
3 Is a helicopter manager required for this mission?						
4 Is a “chief of party” or “flight manager” required for this?						
5 Are you asking or requiring (written or verbal) the pilot/crew to wear PPE?						
6 Are you asking for aircraft and pilot requirements (i.e. Cessna 206, or pilot must have PPE and Flight helmet)?						
7 Are you requiring “pilot standards”?						
8 Are you directing aircraft maintenance?						
9 Are you controlling or directing aircraft “movement” (telling the aircraft where to go, how to do the project, how often to check in)?						
10 Are you requesting exclusive control? Is the aircraft already under Government contract?						

* This may include incidental use of aircraft for various missions not identified in the exhibit. When evaluating such missions, local or regional aviation managers can assist in making decisions on type of procurement to use.

The _____ Project is recommended to be performed as an End Product Contract.

Reviewed By:

Unit Aviation Officer, National Forest

Date

C. **Aircraft Ordering, Scheduling, Dispatching and Tracking**

1. Administrative Flights

Ordering and Scheduling: Passengers will contact dispatch for assistance with the completion of required cost comparisons and/or authorization documentation in accordance with the *Northwest Aviation Management Plan, section: Administrative Aircraft Use Plan*. Dispatch offices, as agency authorized procurement office, will contact vendors and order/schedule all flights. Aviation users should be prepared to provide their dispatch office(s) with the following information:

- Passengers by names, weights, and weight of cargo. (Identification of designated Fixed Wing Flight Manager)
- Requested flight date(s) and time(s).
- Point of flight departure, pick up points, and final destination.
- Identify whether the flight is one way or round trip.
- Accounting charge numbers, Job Code (s).
- A Day Trip authorization (5700-12) form approved by a Line Officer for any non-federal passenger(s)

Flight orders should be placed at the earliest possible time to allow for adequate ordering and coordination of flights. The dispatch office will provide the ordering person with a flight confirmation as soon as final arrangements have been made.

Unless agency flight following is being utilized (optional), the pilot shall file an FAA flight plan, and shall notify dispatch if departure times will be + or - 30 minutes from those identified in the flight plan, and will be instructed to notifying dispatch upon reaching the final destination.

Lead Plane Use: Administrative Flights utilizing R-6 Lead Planes or aerial photo aircraft will be coordinated through the NWCC Aircraft Desk for approval and inclusion into the regional flight schedule.

2. Fire Related, Project and Emergency Flights

Ordering and Scheduling: All aircraft involved in fire suppression will be ordered/dispatched through the Forest Dispatcher in accordance with administrative procedures established in Chapter 20 of the NICC, NWCC

or unit Mobilization Guide, or as otherwise specified in dispatch office Operating Plans.

Note: Dispatch offices should alert pilots and aircrews of an impending fire dispatch, as soon as possible, with any information available at that time, to best prepare them for the mission.

Dispatch units are responsible to assist in the flight planning process, and perform standard Aviation Dispatcher functions for acquiring and assembling essential aviation safety related information, the most important of these being, but not limited to:

- a. **Identification of Flight Hazards:** Identify all known aerial hazards within the incident operational area, including power lines, towers, other responding agency aircraft, and determining if the mission will be near, or within, any special use military airspace (MOA's/MTR's). **Note:** A plotting check on the Forest Hazard Map should be made for each incident.

- b. **Confirmation of Communications:** Identify and confirm the assigned Flight Following (Command), and Air-to-Air, and Air-to-Ground (Tactical) frequencies assigned to the incident or area of operation.
Note: Boundary fire coordination procedures should receive special emphasis in the BMP area.

- c. **Check Navigational Information:** Obtain verification of navigational information, i.e. GPS coordinates, legal description, geographic place name(s) etc., prior to providing them to aircrews. **Note:** A plotting check on the dispatch map, or in established dispatch software, should be made in each instance.

Upon receipt of all applicable information, a Resource Order or Tactical Aircraft Dispatching Form will be provided to the pilot and aircrews prior to the aircrafts mobilization to the incident.

Figure 5 - Aerial Supervision Matrix

This table summarizes aerial supervision over incidents. References (Ref) are listed below the table*.

Situation	Lead/ATCO/ASM1	Ref	ATGS	Ref
Airtanker not IA rated	Required	1		
MAFFS	Required	1		
Retardant drops in congested areas	Order	1	May use until Lead/ATCO/ASM1 arrives on scene	
Level II rated SEAT operating over an incident with more than one (1) other tactical aircraft on scene	Required if no ATGS	1	Required if no Lead/ATCO/ASM1	1

Foreign Government airtankers	Required if no ATGS	1	Required if no Lead/ATCO/ASM1	1
Retardant drops conducted earlier than 30 minutes prior to sunrise, or later than 30 minutes after sunset	Required if no ATGS	1, 2	Required if no Lead/ATCO/ASM1	1, 2
4 or more airtankers <u>assigned</u>	Order	1	Order	1
2 or more helicopters with 2 or more airtankers <u>over</u> an incident	Order	1	Order	1
Periods of marginal weather, poor visibility or turbulence	Order	1	Order	1
2 or more airtankers <u>over</u> an incident	Order	1	Order if no Lead/ATCO/ASM1	3

When requested by airtanker or ATGS	Required	1	Required	
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Smokejumper or paracargo aircraft with 2 or more airtankers <u>over</u> an incident	Order	1	Order	1, 4
Incident has two or more branches			Order	1, 4

*This table summarizes interagency aviation supervision policy, but individual agency policy must be consulted for currency and consistency. **Note:** Aerial Supervision Modules (ASM1) may act as either a Lead or ATGS depending on incident requirements.

(1) Interagency Lead Plane Operations Guide (ILOG), and Interagency Air Tactical Group Supervisors Guide (IATGS, NFES #1393).

(2) Requires determination by ATGS or Lead that visibility and safety factors are suitable and dispatch has been notified of this determination.

(3) USFS FSM 5716.32

(4) Both the ILOG and ATGS Guide reference ordering an ATGS only for these missions. FSM 5716.32 classifies these missions as COMPLEX. An ATCO and/or HLCO should be ordered as appropriate in addition to the ATGS

“Congested Area” Dispatch Considerations: The following guidelines apply to tactical aircraft operational areas where the general public or buildings may be involved. (i.e. Urban Interface)

1. Aerial application of fire retardants in congested areas shall be avoided in normal situations. Where such operations are considered necessary because of special circumstances, and when specifically authorized, the following limitations shall apply [Ref. (FSM 5714.11) GE-392]:

- a. Air tanker operations in congested areas must be conducted only at the specific request of the responsible agency. (i.e. Agency with Operational Control)
- b. A Forest Service Lead plane with qualified Pilot (ATCO), or Air Tactical Supervision Module (ASM) must be, at a minimum, On Order for all airtanker operations in congested areas.

- c. An Air Tactical Group Supervisor (ATGS) may provide temporary aerial supervision until the Lead Plane (ATCO) or Air Tactical Supervisor Module (ASM) arrives on the scene, at which time the ATCO or ASM must directly supervise all such airtanker operations
- d. The Air Traffic Control (ATC) facility responsible for airspace control in vicinity of a proposed airtanker operation must be notified and a Temporary Flight Restriction, if appropriate, must be requested by the Forest Service or other responsible fire agency through their appropriate dispatch center prior to the commencement of airtanker operations.
- e. No airtanker operation will be conducted unless the controlling platform (Leadplane Pilot (ATCO), Air Tactical Group Supervisor (ATGS), or Air Tactical Supervision Module (ASM)) has established positive communication with the on-scene Incident Commander, or designee.

The Single Engine Air Tanker (SEAT): FS Exclusive Use SEATs in John Day and Pendleton shall be ordered through the forest dispatcher in accordance with the tactical aircraft ordering procedures previously described. See also: *Interagency SEAT Operations Guide (ISOG)*.

- a. Use of non-federal "Cooperator" SEATs is limited to only those specifically referenced within fire operating plans/agreements.
- b. Incident base elevations or operational altitudes (ASL) should be relayed to SEAT bases, prior to dispatch, for performance planning purposes.
- c. SEAT re-loading is authorized at the La Grande Airtanker Base.

Helicopters: All helicopter ordering and dispatching will be coordinated through the Forest dispatch offices. When a scheduling conflict occurs between administrative use and emergency's, the emergency shall take precedence.

Helicopter Landing Areas will be planned according to IHOG standards and all Helibase locations will be pre-approved by the BMP UAO, assigned AOB, or ASGS prior to use.

Note: BMP dispatch units should all be familiar with the PNW Aerial Firefighter Pre-positioning plan, 2006, related to Regional Rappel and Smokejumper resources.

Tracking of Aircraft: The Forest Dispatch offices are responsible for tracking (flight following) all initial attack suppression aerial resources, to include the direct control of granting approval of any formal "hand off" of

the flight following function to Aerial Supervision aircraft or Helicopter Crew personnel.

- **Aerial Supervision Flight Following:** The Flight Following function may be coordinated by the Incident Supervisory Aircraft (ATGS/Lead Plane) only when specifically confirmed between dispatch and the aircrew of the Supervisory Aircraft (i.e. ATGS, ATCO).

- **Helicopter - Local Flight Following:** (positive tracking and check in's by trained ground based personnel "on-site") may only be utilized if a formal request ("hand off/initiation confirmation"), radio call, is made between the helicopter personnel requesting local flight following and the responsible dispatch office. Ensuring continuous, positive radio contact shall be a pre-condition for granting Local Flight Following procedures. A radio notification shall be made at each start and stop of operations, along with periodic "Ops Normal" check ins communicated at no less than every hour. (30 minutes check ins are suggested) **Special Note:** If the integrity of a responsive Search and Rescue cannot be maintained, then local flight following should not be considered, or agreed to, by the parties involved.

Tracking of aircraft on project fires will be a joint venture between the Dispatch Office, ATGS and/or AOBBD assigned to the incident.

Note: Special emphasis should be placed on the planning for complex communication procedures related to area's where IMT's have initial attack responsibility, and may likely request, or rely on, assistance from other forest IA aerial resources. Formal Initial Attack agreements, between the IMTs and dispatch, with specific coordination language, is strongly suggested in these situations.

Communications: Mission Use aircraft are expected to follow standard Flight following procedures (15 minute radio check ins), unless otherwise authorized at the point of dispatch, *See below: Authorized uses of Automated Flight Following for mission use aircraft.*

All dispatch offices and mission use aircraft will continuously monitor National Air Guard, and understand the frequencies intended uses. (Ref: IHOG Pg 4-11. In the event communications cannot be established with incoming resources, or communications are lost during operations, then a communication on National Air Guard should be established between the dispatcher and aircrews to resolve the problem.

Incoming aircrews should be briefed that if communications are lost during operations, and a call on National Air Guard cannot resolve the problem, then pilots should immediately return to the departure base, or nearest alternate base, and check in with forest dispatch by telephone.

Narrow Band Emphasis: Both Command and Tactical frequencies shall be identified on the Resource Order or Tactical Aircraft Ordering Form, with appropriate identification as either Narrow Band (N), or Wide Band (W).

Note: Special attention and monitoring must be made with any planned integration of cooperator agency aircraft. In some cases, cooperator aircraft may be utilizing VHF-FM equipment that doesn't have Narrow Band compatibility. In these cases, communications are still possible, but communications may be significantly degraded.

Airport Advisory Frequencies: All aircrews are expected to monitor and utilize the published Common Traffic Advisory Frequency (CTAF), and obey FAA standard or published traffic patterns for operations at any established airport. Also, aircrews and passengers are reminded to observe and enforce the use of **Sterile Cockpit Procedures** (*Only essential communication within a airport/helibase traffic area*).

Automated Flight Following (AFF) - AFF procedures (policy) can be found in Ch 20 of the Mobilization Guide.

General Emphasis points on Flight Following and AFF use are:

- Dispatch offices shall maintain the capability to monitor AFF anytime flight activities are being conducted.
- The decision to utilize AFF, as the **primary mode of flight following**, shall always be determined and communicated during the pre-flight planning process.
- Standard 15 minute radio calls, as a preferred option, may be decided at the discretion of the dispatch unit monitoring the flight activity. (*mission specifics, capabilities, and mission safety may dictate the method used*)
- Aircraft AFF units are expected to be operating during all flight activities, even if standard 15 minute radio calls are utilized. (*contract requirement*)
- **Note:** Be Aware that some cooperating agency aircraft still may not meet federal interagency standard for AFF, as required equipment.

Most Commonly Used Radio Frequencies

U.S. Forest Service- Umatilla National Forest			
Dispatch Center: Blue Mountain Interagency Dispatch Center , La Grande. Call Sign: "La Grande Dispatch" Phone:(541)-963-7171 24 hour phone:(541)-786-5457, Fax (541)-663-0533, Email:			
	RX	TX	Tone

Air-To-Air	132.475 (N)	132.475 (N)	None
Nat Flt Follow	168.650 (N)	168.650 (N)	110.9 Tx/Rx
Air-To-Ground "C"	167.6250 (N)	167.6250 (N)	None
SEAT Ramp	(V) 123.975	(V) 123.975	None
Air Guard	168.625 (N)	168.625 (N)	110.9 Tx
Umatilla N.F. Flight Follow North Half			
Diamond Peak	164.825 (N)	169.000 (N)	151.4
Umatilla N.F. Flight Follow South Half			
Tower Mountain	164.125 (N)	170.325 (N)	141.3

U.S. Forest Service- Malheur National Forest			
Dispatch Center: John Day Interagency Communications Center Phone: (541)-575-1321, Fax (541)-575-3027, Email:			
	RX	TX	Tone
Air-To-Air	132.475 (N)	132.475 (N)	None
Fire Net (Flight Follow)	170.350 (N)	170.350 (N)	136.5 (Fall)
	170.350 (N)	170.350 (N)	123.0 (Dixie)
	170.350 (N)	170.350 (N)	103.5 (Snow)
Primary North Direct	172.400 (N)	172.400 (N)	None
Nat Flt Follow	168.650 (N)	168.650 (N)	110.9 Tx/Rx
Air Guard	168.625 (N)	168.625 (N)	110.9*
Air-To-Ground "C"	167.3750 (N)	167.3750 (N)	None
SEAT Ramp	(V) 123.975	(V) 123.975	None
JDHB Deck	169.200 (N)	169.200 (N)	None

U.S. Forest Service- Wallowa-Whitman National Forest			
Dispatch Center: Blue Mt Interagency Dispatch Center , Call Sign: "La Grande Dispatch" Phone: (541)-963 - 7171, Duty: (541) 786-5457, FAX (541) 962-			

8673	Email:		
		RX	TX
			Tone
Zone Air-to-Ground "F"		167.5500 (N)	167.5500 (N)
Nat Flt Follow		168.650 (N)	168.650 (N)
Zone Air to Air (Victor)		(V) 132.225	(V) 132.225
Air Guard		168.625(N)	168.625 (N)
LGD Airtanker Ramp		(V) 123.975	(V) 123.975
Grande Ronde Fire Zone Flight Follow		170.525 (N)	164.800 (N)
Wallowa Fire Zone Flight Follow		166.000 (N)	164.025 (N)
Burnt Powder Fire Zone		164.150 (N)	168.150 (N)
			123.0 (Beaver)

*As per FSH 6609.14, Sec 41.31 (on Aircraft radios only, not base stations)

D. **Justification, Financial Management, and Reporting**

Justification: Aircraft needs and requirements are established through preplanned dispatch block cards, IC/on-scene requests, and/or the experience of the supervisory dispatcher for initial attack responses.

When the Forest Service uses a State/local government owned and operated aircraft, authority for such usage, and any resulting cost reimbursements to/from the State/locality, will be specifically based from within existing and supplemental fire operating agreements.

Financial Management: The contract designated COR is responsible for informing all contract and rental agreement pilots and vendors of specific agency payment procedures. (ABS implementation as of June 1st 2007)

Government Representative Signature: A review of form 6500-122, and signature, by a government representative is necessary on each Daily Flight Invoice for FS procured aircraft. This Government Representative is typically the designated COR, Flight Manager (either fixed wing or helicopter), or the Aircraft Dispatcher to confirm services have been provided to the government. **Note:** The designated COR is ultimately responsible for the quality control of invoice documentation and submission into the Aviation Business System (ABS) database.

All aircraft payments are currently being processed through the ABS electronic database from the Albuquerque service center (ASC).

All forest level aviation "services" and "end product" contracts will be initiated and processed through the respective forest Contracting Officer who will negotiate all aircraft rates and local payment processes, as appropriate.

Reporting: Information contained on the Flight Invoice (form FS 6500-122) will be entered into the ABS database for payment processing, flight data upward reporting and local year-end aviation use reporting.

Note: AMIS inputs are now a component of ABS (2007).

The BMP UAO will provide a comprehensive CY- BMP Aviation Use Report to the three Forest Supervisors in the spring of each year. Miscellaneous aviation use reports can be requested from the BMP UAO on an as needed basis.

Each Aviation Base or Program Manager is responsible for submitting Annual Use Reports for their specific Regional/National program area. A copy of these reports shall be submitted also to the BMP UAO, annually.

A. **FACILITY MANAGEMENT**

Forest Service aviation facilities include airtanker bases, smokejumper satellite bases, permanent helibases, and backcountry airstrips.

A. Airtanker Bases

1. The Wallowa-Whitman hosts a Large Airtanker Base, located at the Union County Airport in La Grande. See Appendix F for specifics.
 1. The Malheur hosts a Single Engine Airtanker Base , located at the Grant County Regional Airport in John Day. See Appendix B for specifics.
 2. The Umatilla hosts a Single Engine Airtanker Base , located at the Eastern Oregon Regional Airport in Pendleton. See Appendix E for specifics.

B. Helibases

1. The Malheur hosts a permanent Helibase, located at the Grant County Regional Airport in John Day, OR. See Appendix B for specifics.
2. The Umatilla hosts a permanent Helibase, located at the Fraizer Work Center near Ukiah, OR. See Appendix C for specifics.
3. The Wallowa-Whitman hosts a permanent Helibase, located at the Sled Springs Work Center near Enterprise, OR. See Appendix D for specifics.
4. The Wallowa-Whitman hosts facilities and improved helipad at the Union Co Airport, to host the National Type I Helitanker, or to stage incoming or transitioning helicopter resources. See Appendix I for specifics.

C. Back Country Airstrips. There are unimproved airstrips within the national forest boundaries for FS and public use. The use of these airstrips varies seasonally. The FS authorizes “agency use” of some of these airstrips, essentially for firefighter and project work, while the public uses them for recreation access.

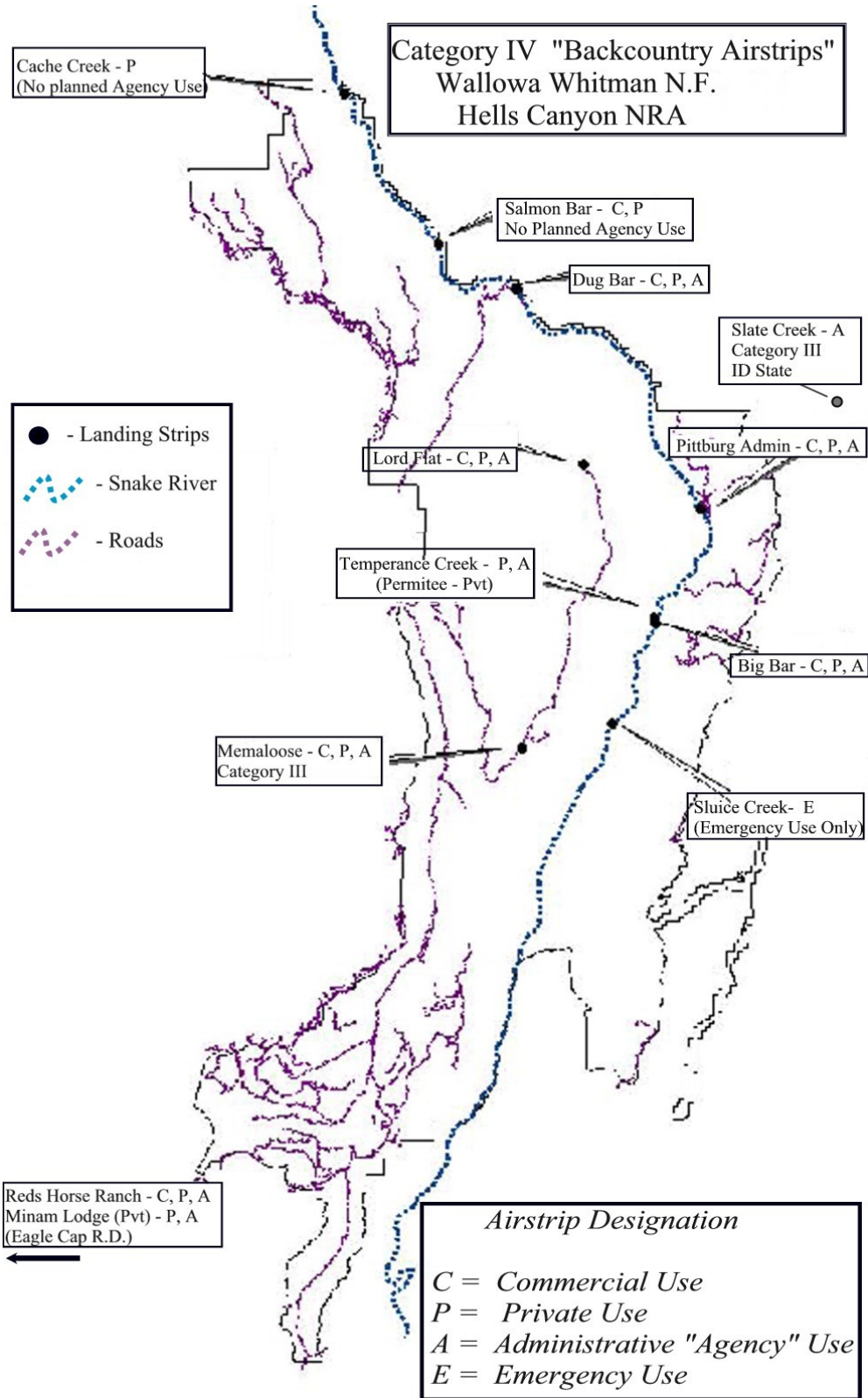
(See: Figure 7 for airstrip designations, Appendix J for more specifics).

Figure 6: Airport/Airstrip Category typing

Category I	None in local area
Category II	Baker City, La Grande, Joseph, Enterprise, Pendleton, Walla Walla, John Day, Ontario, McCall, Grangeville, Redmond, The Dalles

Category III	Slate Creek (ID State), Halfway (pvt)
Category IV Agency Use	Memaloose, Reds Horse Ranch, Lord Flat, Dug Bar, Big Bar, Pittsburg Landing, Temperence Creek (HCNRA Permitee) Minam Lodge (Pvt)

Figure 7 - WWF Backcountry Airstrip Designations (Ref: HCNRA Management Plan)



Approved Category III Airstrips:

Slate Creek (State of Idaho)
Halfway (Private)

Category III Airstrips are generally unpaved unlighted and intermittently maintained. No specific agency pilot endorsements are required.
Recommended aircraft High performance single engine; Cessna 180,185,206, Piper Super Cub and Twin Engine Cessna 336, 337, Twin Otter, Sherpa.

Approved Category IV “Backcountry” Airstrips

Memaloose (upland strip)
Reds Horse Ranch (Eagle Cap Wilderness)
Minam Lodge (Eagle Cap Wilderness - Private)
Lord Flat (HCNRA upland strip)
Dug Bar (HCNRA river corridor strip)
Pittsburg Landing (HCNRA river corridor strip)
Big Bar (HCNRA river corridor strip)
Temperance Creek(HCNRA river corridor strip)

These airstrips are the most restrictive, and require higher performance standards for both aircraft and pilot.

Recommended aircraft High performance single engine; Cessna 180,185,206, Piper Super Cub and Twin Engine Cessna 336, 337.

Category IV Airstrip - Pilot Requirements

Category IV strips are classified as Mountain/Remote Airstrips, and before being dispatched to a Category IV airstrip the pilot must have a current airstrip specific endorsement on his/her pilot card, initialed by the regional pilot inspector.

Category IV airstrip pilot endorsement Requirements: At a minimum;

- Pilots must have 200 hours pilot experience in Typical Terrain and Density Altitudes.
- Pilots must complete 5-takeoffs/landings at 2 different category IV airstrips in the preceding 12 months.
- Pilots are also restricted from operating at category IV airstrips which they have not landed at in the preceding 12 months

Category III & IV Airstrips not approved in this plan

Planned agency use from any category III or IV airstrip not specifically referenced above, as approved, will only be considered on a case by case basis, and after formal review by the Regional Aviation Officer, and approval from the appropriate line officer. A Project Aviation Safety Plan (PASP) is required for obtaining such approvals. Contact the BMP UAO for more information.

VI. AVIATION ACCIDENT PREVENTION PROGRAM

A. Aviation Safety - Education and Training

The Forest Service training requirements for aviation related positions are found in either the FSH 5109.17 (*Wildland Fire Qualifications and Training Handbook*), for fire related positions, or within the Interagency Aviation Training (IAT) Program Guide, for non-fire aviation positions. Fire Qualification/Non-Fire Position Equivalency: Individuals holding a current aviation position certification under the Incident Qualification and Certification System (IQCS/Red Card) are qualified to perform in equivalent non-fire/resource aviation positions, and require no further IAT specific training.

Interagency Aviation Training Program (IAT): The IAT program supplements the NWCG Wildland fire Training and Certification System by standardizing national aviation training curriculums and positions, and hosts many basic and intermediate web based coursework required to meet both initial and recurrent training requirements for most aviation positions. The IAT web site can be found at: <http://iat.gov/> IAT Personal Profile: All forest personnel with aviation qualifications (fire & non-fire) are required to establish a personal IAT profile in order to record completion of both web based and classroom training modules; to obtain and print course Certificates of Completion; and to access individuals IAT historical training records. *Questions related to IAT administration should be directed to the BMP UAO.*

IQCS updating responsibility for “stand alone” IAT coursework: The IQCS database only recognizes those “A-courses” that are NWCG components of S-course curriculums (example: S-270, S-271, etc). For IQCS records to be updated accurately for stand alone coursework, the following needs to occur:

- **Instructors** of stand alone IAT A-courses are responsible for getting class lists (completion records) to forest IQCS managers to update individual records. *This is in addition to administration responsibilities in the IAT database.*
- **Individuals** completing IAT web based coursework (example: A-110, A-112 “refreshers”) are responsible for getting a certificate of completion to the forest IQCS manager.

Non-Fire Fixed Wing Positions - Training

Fixed Wing Flight Manager (FWFM): (Former FS “Chief of Party”) A requirement for all Administrative Use “Point to Point” transport and low complexity fixed wing missions. **Note:** Coursework may be accomplished via Web-Based training modules, or in the classroom (est. 4 hrs). Classroom sessions are scheduled annually within the Northeast Oregon Training Area.

BMP - Advanced Fixed Wing Flight Manager: Locally developed curriculum focusing on mission planning, human factors, and risk management, delivered in conjunction w/ basic FWFM course (est. 4 hrs). Required for Flight Managers participating in routine, moderate complexity mission flights, e.g. Detection, Survey/Recon, Backcountry. Trainee experience required.

- A. **Accident/Incident Reporting:** The formal reporting of aviation hazards, incidents, and mishaps is an integral part of the Forest Service National Aviation Safety and Mishap Prevention Plan. The Aviation Safety Communique’ SAFECOM system provides the backbone of our accident prevention communication network, and all employees who manage, or are otherwise involved with aviation operations, shall be familiar with the form, and reporting requirements.

Incident: SAFECOMS are used to report any condition, overservice, act, maintenance problem, or circumstance, which has the potential to cause and aviation-related mishap.

Note: The SAFECOM system is not a substitute for “on-the-spot correction(s) to a safety concern, or is it intended for initiating punitive actions, but rather it is a tool used for documenting occurrences, tracking of incident/mishap follow up actions, and for agency-wide trend analysis related to aviation safety issues. Anyone involved with Forest Aviation operations may file a report at any time

The forest employee most directly involved with the incident is responsible to submit a SAFECOM form electronically into the SAFECOM database within two (2) working days of the incident at:
<http://www.aviation.fs.fed.us/safecom/entry>.

The BMP UAO will maintain a log of SAFECOM’s filed on the three forests.

Incidents with Potential/Accidents: In the case of Accidents or Incidents with Potential, the BMP UAO or his/her acting will be notified immediately by Dispatch, regardless of the time of day, in accordance with the Forest Aviation Mishap Response Guide. A SAFECOM shall be submitted as soon as practical.

Note: A complete discussion, with definitions, for Incidents, Incidents with Potential, and Accidents can be referenced in IHOG Appendix C.

Mishap Investigations: The level of agency involvement in agency mishap investigations is determined by the National Aviation Safety Office (NASO).

Unit Aviation Mishap Response Guide: Dispatch units and the BMP UAO are responsible for preparing and annually updating of the Unit Aviation Mishap Response Guide which addresses at a minimum; overdue and missing aircraft procedures, aircraft incident/accident reporting forms, and emergency contact lists and notification protocols for reporting aircraft mishaps.

An updated copy of the Unit Aviation Mishap Response Guide shall be distributed seasonally to each aviation base, and to each temporary aircraft base.

Figure 9: BMP Aviation Accident Notification Guide (following page) supplements the Unit Aviation Mishap Response guide, by further clarifying expectations and notification responsibilities of the on-scene “Officer in Charge”, Dispatchers, the BMP UAO, and Fire Staff Officers.

Figure 8: BMP Aviation Accident Notification Guide

Unit Dispatch / On Scene “Officer in Charge” (OIC)

- Initiate unit Emergency Action Plan (EAP) (Initial response based on situation, i.e. Ground Ambulance, Air Ambulance, Haz Mat response, etc.)
- Document all preliminary details/information (situation) to pass on with initial notifications.
- Insure an “on scene” Officer In Charge (OIC) is identified, and remains on scene until relieved of duty by UAO or assigned designee.
- Initiate and maintain a positive communication link with OIC. Radio frequency, Phone number, etc. (Routine check in’s to update

documentation, order additional resources, update dispatch on situation at the scene.)

NOTE: Established crash/fire/rescue plans, at public airports, is primary to any agency response. Close coordination is essential as to not delay life saving efforts and for assumption of control of the mishap site.

- **Dispatch notifies:**
 - Unit Aviation Officer (UAO):
 - FAA Flight Service Station *
 - County Sheriff's Office **
 - GACC
 - 1-888-4MISHAP (1-800-464-7427)

- **UAO notifies:**
 - Forest Fire Staff Officer (FMO)
 - Regional Aviation Safety Officer (RASO)***
 - Regional Aviation Officer (RAO)
 - Regional Aviation Contracting Officer (RACO)

- **Fire Staff Officer notifies, or coordinates notification of:**
 - Forest Line Officer (Forest Supervisor)
 - Forest Law Enforcement Officer (LEO)
 - Forest Public Information Officer (PIO)
 - Forest Safety Officer
 - Forest Personnel Officer
 - District Ranger

Fire Staff's will coordinate with Line Officer, LEO, PIO, Safety Officer, and Personnel Officer to make all required notifications at the Regional level within their respective departments.

* - Notification to preclude National SAR response due to ELT activation.

** - Activates local/regional S&R unit, if applicable.

*** - RASO will coordinate with National Office Aviation / NTSB on appropriate level of Investigation.

A. **Pre-Mission Planning**

Aircraft Selection: When planning aircraft operations, select aircraft that will best perform the mission with the greatest degree of safety. In the earliest stages of planning, employees should contact unit aviation personnel (Dispatch, Helicopter Base Managers, Unit FMO's, the BMP UAO) for advice in selecting a suitable aircraft for the proposed mission. The Regional Aviation Group (Program Staff) are also a valuable resource for aviation planning matters.

Aircraft Approval: All rented, leased, or contracted pilots and aircraft able to perform Mission Use and Special Missions (Fire Ops) for the Forest Service will be certified/approved for the specific mission by a qualified FS or DOI Aircraft/Pilot Inspector, and have a current pilot and aircraft card available for inspection to FS employees. If a pilot/aircraft card is expired, not signed off for the intended mission, or is not provided when requested, employees are instructed to refuse the flight until the carding discrepancy

is corrected. Immediate notification to Dispatch, the BMP UAO, or the Regional Air Group should be made to correct any discrepancy.

Certifications (approval cards) for pilots or aircraft may be either an Interagency (DOI/FS) form, or a DOI or FS specific form, with each being accepted by both agencies. **Note:** Other federal or state agency approvals are not acceptable without a specific letter from the Regional Aviation Officer, required to be carried aboard the aircraft. Letters will specifically outline approved aircraft (by N#), pilots (by name), and list any approved missions for the aircraft.

Mission/Project Planning: Employees are expected to plan all missions and projects in accordance with agency policy and guidance, and the unit specific procedures outlined in this plan. (See: Chapter III Aviation Management Activities and Chapter VI - Aviation Accident Prevention Program).

Pilot/Aircrew Orientation: All incoming Pilots and aircrews assigned to the forests will be provided a unit familiarity and safety briefing by the forest employee in charge, or other designated individual (Dispatcher, Base Manager, Unit FMO, BMP UAO) on the contents of the BMP Pilot and Aircrew Briefing Packet (See: UAP Appendix N). This should be accomplished before the first operational period, or at the earliest reasonable time.

Pilot/Aircrew Pre-Flight Briefing: A Formal Pre-flight briefings, covering both the specifics of the mission and safety (communications, analysis of hazards, etc.), will be carried out by the Base Managers, Dispatcher, or Flight Manager directly responsible for supervision and management for the flight activity.

Employee Authority: All forest personnel reserve the right to suspend operations for any pilot or aircraft which, in the opinion of the forest employee, operates in an unsafe manner, violates standard operating procedures, violates contract provisions, or otherwise performs in an unsatisfactory manner.

A. **Operational Risk Management (ORM)**

Personnel who directly supervise and oversee flight activities are ideally situated to identify hazards, determine the hazards level of risk, implement controls, and make sound risk control decisions. The following are some key emphasis area's of ORM that all BMP aviation personnel, from Line Officers to field personnel, should be familiar with.

The four basic Principles of Risk Management.

1. **Accept No Unnecessary Risk.**
2. **Accept Risk Only When Benefits Outweigh Costs.**
3. **Make Risk Decisions at the Appropriate Level.**
4. **Integrate Risk Management into Mission Planning, Preparation, and Execution.**

Levels of Risk Assessment: Risk assessment, the second step in the ORM process can be divided into three categories. It's important to understand that conducting ORM is limited by the amount of time available for planning. With this basic understanding, there will be less confusion as

to the appropriate level of process and documentation that needs to be applied.

1. **“Time Critical” Risk Assessment:** An “on the run” mental or verbal review of the situation using the basic risk management process without recording the information. This is most frequently applied by pilots and aircrew members in routine fire operations, or search and rescue missions. *(All BMP flight managers are expected to be assertive in regard to pilot/aircrew communications (CRM), and actively participate in sound “Time Critical” Risk Assessment decision making.)*

2. **Deliberate Risk Assessment:** Used when planning time permits, and where there is an opportunity to address hazards before commencement of the actual mission. Some form of documentation typically exists, i.e. IHOG Risk Assessment Worksheets, PASP w/ briefing checklists, National Risk Assessments, etc. *(These are the most common forms of Risk Management we perform on a regular basis, relating to Risk Decisions being made at the appropriate management level, i.e. Line Officer approval authority on PASP’s, IMT AOBD/IC approvals, etc)*

3. **In Depth or “Strategic” Risk Assessment:** This process deals with long range planning for complex missions, most commonly at the agency or program level, i.e. implementation of new technologies/ technique etc.

Risk Management Guidance: IHOG Ch 3 Operational Planning; and the National FS Aviation Safety Center web site provides a complete discussion on the agency accepted application of Risk Management into agency flight activities.

http://www.fs.fed.us/fire/av_safety/Systems_Safety/av_risk_mgt/index.html.

Figure 9 depicts those risks and hazards that are common to all aircraft operations. Each Project Aviation Safety Plan (PASP) will identify other risks/hazards that are associated with those specific activities. If risks/hazards identified in this section require special emphasis, they may be included in the PASP Risk Assessment as well.

Figure 9: risks and hazards common to all aircraft operations

Phase	Hazard/Risk ID	Risk Assessment	Control Options	Residual Risk
All	Aircraft Airworthiness	High	Aircraft provided by a contractor shall comply with all Federal Air Regulations and respective state regulations of the Board of Aeronautics.	Low
All	Compliance	High	All aircraft will be operated in a safe and	Low

	e with directives		prudent manner in accordance with the specific Federal Aviation Regulations and Agency policies. Should an emergency occur, the pilot-in-command shall follow the standard procedures as outlined in Federal Aviation Regulations.	
All	Aircraft Loading	High	<p>The pilot is responsible for the proper loading of aircraft. Loading will be under the pilots direction and will be inspected by the pilot prior to takeoff. Loading shall always be within allowable center of gravity (CG) limits and the certificated gross weight shall not be exceeded.</p> <p>The actual useful load will not exceed that which will ensure safe handling and performance of the aircraft, as deemed necessary by the pilot. Reductions in loads will be made for density and altitudes, and substandard landing fields.</p>	Low
All	Cargo Storage	Medium	<p>Accessory equipment, baggage, or cargo will be securely fastened in the aircraft to prevent; (1) injury to the occupants of the aircraft; (2) damage to the aircraft, its accessories, baggage, or cargo; (3) interference with piloting or jamming of the controls; or (4) adverse change in performance characteristics of the aircraft.</p> <p><i>Hazardous Materials:</i> Extreme danger may arise from improper packaging and shipment of hazardous materials in aircraft due to pressure changes. Each aircraft manager will follow "Aviation Transport of Hazardous Materials Guide" (1/99); see IHOG, also.</p>	Nil
Resource Flights	Known Hazards and Operational Information	High	<p>Before missions, pilots will be thoroughly briefed on other aviation traffic, terrain, and location of surface hazards, such as box canyons, radio towers, power cables, and telephone lines. No person shall engage in any aviation activity unless that person has been briefed by the pilot or the Project Aviation Officer or representative on safety and emergency procedures. Pilots will read and sign the USFS R6 "Fact Sheet" for pilots (contracts or rental attached). The Fact Sheet will then become a part of the contract.</p>	Low
Ground	Smoking	Very High	<p>There will be no smoking within 100 feet of the aircraft during fueling operations. Smoking in</p>	Nil

Operations			flight will be authorized by the pilot-in-command only.	
All	Flight Crew Fatigue	High	Flight duty limitations as specified in IHOG page 3-21, Appendix A4, A40,41 for helicopter operations, and FSH 5709.11 for fixed-wing operations, will be adhered to.	Low
Ground Operations	Aircraft Fueling	High	<p>Fuel handling will be done in accordance with BLM/Forest Service, Federal, State and local standards/requirements (see IHOG chapter 13).</p> <p>All fuel being placed into aircraft fuel tanks will be filtered by micron filters as per Regional fuel handling policies.</p> <p>Static electricity grounding and landing must comply with contract requirements.</p> <p>Fueling aircraft while the engines are running ("Hot Fueling") will be permitted in accordance with contract requirements.</p> <p>All personnel will deplane during fueling operations.</p> <p>Federal personnel will not fuel contractor or rental agreement aircraft.</p>	Low
Helicopter Flight Operations	Personnel unfamiliar with operations around helicopters	Very High	<p>All personnel involved with helicopter operations will be familiar with the following restrictions:</p> <ol style="list-style-type: none"> 1. Stay at least 50 feet from small operating aircraft and at least 100 feet from large aircraft unless activity engaged in operation. 2. Watch out for the main and tail rotors of helicopters. 3. Unless equipped with safety goggles or glasses, do not watch landings, takeoffs, or hovering, closer than 100 feet from a helicopter. 4. Smoking in or near an aircraft is prohibited at all times. 5. Approach or leave aircraft only when authorized by pilot or manager. 6. Approach or leave aircraft only from the front or left side and always in such a manner that the pilot can see you at all times. 7. Always depart and approach a helicopter at a slight crouch. 8. When on uneven ground, approach and 	Medium

			<p>leave a helicopter on the downhill side.</p> <p>9. When approaching with long handled tools, hold tool handles parallel with the ground to keep them clear of the main rotor path of helicopters.</p> <p>10. Helmets or hardhats equipped with a chin strap in use shall be worn when boarding, riding in, or leaving helicopters.</p> <p>11. Before takeoff, fasten and adjust the seat belt and shoulder harness and keep fastened until instructed by the pilot to release it.</p> <p>12. Never reach up or dart after loose objects that may have blown away while approaching, boarding, and leaving a helicopter.</p> <p>13. Always allow the pilot to open and close and secure cabin and baggage doors in all fixed wing aircraft.</p> <p>14. Obtain a safety briefing prior to each flight (IHOG Chapter 10)</p>	
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VII. AIRSPACE

A. Airspace Coordination:

Positions such as Unit Aviation Managers, Dispatchers, Flight Managers, Project Managers, and Aircrew Members are all collectively responsible for successful airspace coordination. Specific direction and guidelines are outlined in the Interagency Airspace Coordination Guide (IACG), available on the web at: <http://www.fs.fed.us/r6/fire/aviation/airspace/web/index.html>

Airspace considerations requiring continual emphasis include;

- **Military Activities (MTR's/MOA's):** The possibility of conflicts with military activities should be considered during any aviation activity. (Flight Planning)
- **Congested Area Operations:** i.e. Urban Interface. Coordinated efforts between responding aerial resources, ground personnel, and the public is especially critical to overall mission safety. (FSM 5714.11 - exhibit 01)
- **Temporary Flight Restriction (TFR's):** Implemented when other aircraft may pose a significant hazard to incident aircraft. (Ordered via dispatch.)
- **Fire Traffic Area (FTA) Procedures:** Essential for safe aircraft coordination over an incident. Must be briefed to all incoming aerial resources (Pilots and Aircrews).
http://www.fs.fed.us/fire/av_safety/fta/index.html
- **Dispatch Boundary Area's:** Neighboring unit aircraft responding to the same geographical area's pose a significant hazard to one another if not adequately coordinated, i.e. Aircraft identifier (N#) and operating frequencies shared.

The following should be addressed pre-season on each dispatch unit:

- Airspace hazards identified on Forest hazard or dispatch map
- Dispatch personnel adequately trained in airspace coordination.
- Airspace Critical Contacts, phone lists, updated annually.

B. Aviation Flight Hazard Maps

1. A Forest hazard map will be located in the dispatch offices and each aviation base, including any established temporary base (SEAT base or helibase). Inclusion of local hazards will be an on-going process, as new hazards are identified and reported by field aviation personnel. The Forest Dispatch map will be the collection point for any new identified hazards that need inclusion into the Aviation Hazards base map.

The following, at a minimum, will be identified on the base hazard maps:

- Military Training Routes and Operating area's (MTR's/MOA's)
- Primary power transmission lines.
- Microwave and wind turbine tower sites.
- Significant high bridges or misc towers.
- Aerial logging and/or high line cable operations.

VIII. PROGRAM AND ACTIVITY MONITORING, REVIEW, AND FOLLOW UP

Aviation program activities will be continually monitored by the BMP UAO for safety, cost effectiveness, accident prevention, and suitability of aircraft selection (procurement). Follow-up on mission effectiveness will be conducted by the BMP UAO with assistance from the appropriate national or regional aviation program staffs, primarily through annual program reviews. Agency aviation manuals, handbooks, and operational guides will be reviewed annually, and this plan and plan appendixes will be updated accordingly.