

Dinosaur National Monument
AVIATION MANAGEMENT PLAN
2016

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I. INTRODUCTION/PURPOSE

The implementation of DO and RM 60 requires the development of an Aviation Management Plan for any National Park Service unit that utilizes aviation resources.

This plan establishes procedures for risk management in aviation operations that meet Department and Service policy guidelines and establishes operational procedures for aircraft ordering and mission approvals.

The scope of this plan is limited to aircraft under operational control of the NPS and employees of the NPS working with those aircraft. The purpose is to ensure safe aviation operations, protection of monument resources, and to ensure operations comply with all required guidelines, directives, and regulations.

Actions taken under this plan are not expected to individually or cumulatively have a significant environmental impact. This plan itself is excluded categorically from full National Environmental Policy Act documentation (40 CFR 1508.4; 516 DM.23A; 516DM2, Appendix 1.7). Air operations conducted as part of non-emergency projects/activities will be assessed as per NEPA guidelines in the course of routine project planning.

A. NPS Policy

Department Manual 350 – 354 defines aviation policy for the Department of the Interior. Directors Order 60 and Reference Manual 60 further define policy for the National Park Service.

In addition to established policy, the Aviation Management Directorate issues Operational Procedures Memoranda (OPM) that has the effect of policy. These OPM's are established for a defined time frame, generally not to exceed two years.

In addition to established policy, there are a number of handbooks and guides which have the effect of policy, including the following;

- Interagency Aviation Transport of Hazardous Materials Handbook,
- Interagency Airspace Coordination Guide,
- Interagency Helicopter Operations Guide (IHOG),
- Interagency Helicopter Rappel Guide,
- Interagency Helicopter Short-Haul Handbook,
- Air Freight/Para cargo Handbook,
- Aerial Capture, Eradication & Tagging of Animals (ACETA) Guide,
- Aviation Fuel Handling Handbook,
- Interagency Aerial Ignitions Guide,
- Heliport Installation Handbook.

In addition FAA Advisory Circular AC 70/7640-1K Obstruction Marking and Lighting addresses marking power lines and other aerial hazards. These guides can be found in the Fire and Aviation Management Office.

B. Compliance with Park Legislative Mandates

There are no legislative mandates for Dinosaur NM.

C. Park Aviation Policy

The monument encompasses 210,278 acres situated in both northwest Colorado and northeast Utah. The monument lands are extremely rugged and remote. Steep, narrow canyons, escarpments, and rims limit foot travel, making aircraft use cost-effective for most emergencies and many administrative and managerial functions.

More than 90% of the monument acreage has been recommended to Congress for wilderness designation. As prescribed in NPS policies (NPS Management Policies 2006, Director's Order 41), lands recommended for wilderness designation are managed as wilderness. Therefore, aircraft use will be managed in a manner to protect wilderness values. Flight activities during emergency situations may temporarily impact these values. Non-emergency flights are reviewed carefully by the monument interdisciplinary team (IDT) to avoid unnecessary flights, and thereby minimize impacts to wilderness values and the sound environment. A minimum tool assessment has been developed to allow aviation use in wilderness areas for fire management.

In the course of aircraft operations during some seasons, the potential exists to impact threatened, endangered, or species of special concern. Planning for any non-emergency aviation operation should include an assessment of potential impacts to these species. If the assessment indicates the potential for impacts to listed species, consultation with US Fish and Wildlife Service will be initiated in accordance with the Endangered Species Act (ESA, Section 7). Of particular concern for possible impacts from aviation operations are breeding/nesting peregrine falcons (recently delisted endangered species), as well as lambing desert bighorn sheep.

Peregrine falcon nesting occurs primarily on steep canyon walls. Maintenance of a flight altitude of 500 feet above ground level (AGL) and a buffer having a radius of 0.5-miles is sufficient during the period of March 15 through August 15 to minimize intrusion into nesting areas. Although Peregrine falcons use the same general location from one year to the next, exact nest location may vary. Landing of helicopters within breeding and nesting areas is to be avoided to the greatest degree possible during the same period. A map is included in Appendix G of this plan. **These restrictions will only apply to aircraft under operational control of the NPS.**

Desert bighorn sheep were at one time extirpated from the monument. In 1969 desert bighorn were reintroduced into the monument. Since that time, a small population has been developing through limited yearly reproduction. Extensive study has shown that lamb survival is cumulatively affected by a combination of predation, livestock diseases and human disturbance. To limit disturbance to lambing, aerial operations should maintain an altitude of 1000 feet AGL over primary lambing areas from January 15 through May 15. Maps identifying these areas are available from the monument Biology Office.

Fixed Wing Operations

There are no backcountry airstrips located within the monument.

Light single or twin engine reconnaissance aircraft are used to detect fires, monitor fire operations, wildlife tracking, and for special projects. Non-special use reconnaissance flights must remain over 500 feet AGL, and should remain above 2,000 feet AGL as much as possible, dropping down only for limited periods of time. Non-special use flights are typically classed as high reconnaissance flights. As such, personal protective equipment is not required for such

flights. If the flight is classed as special use, all required personal protective equipment must be worn.

Air Tankers

Retardant is restricted within Dinosaur National Monument. Approval for use of such aircraft in the monument will be made by the monument Superintendent or acting. The Fire Duty Officer may approve retardant only when there is imminent threat to life or property. The Duty Officer will cancel the retardant as soon as the threat is alleviated. The Duty Officer will report to the Superintendent and the Chief of Resource Stewardship and Science as soon possible that retardant has been dropped and the quantity of retardant dropped. If retardant or foam is used, it must be kept out of all waters. As a rule, no retardant or foam shall be used within 300 feet of streams or wetlands. The use of retardant shall follow the Principles of Retardant Application as found in the Incident Response Pocket Guide NFES #1077.

Other procedures for air tankers will follow appropriate local, regional and national mob guides.

Smokejumpers/Para cargo

Smokejumpers have been used successfully within the monument. Dinosaur has two main canyons formed by the Green and Yampa rivers, and several side canyons that pose some operational hazards that may limit use of smokejumpers/Para cargo in these areas. Typically these areas include steep canyon walls and the potential for unpredictable winds. The use of smokejumpers should be coordinated with the Chief of Resource Stewardship and Science to ensure impacts to wilderness values are minimized. Ordering smokejumpers will follow normal fire ordering procedures.

Helicopter Operations

Most aircraft use comes by way of helicopter operations. Developing and training personnel with the skill and ability to manage these needs safely and effectively is a program management focus within the Fire and Aviation Management program. There are several helispots pre-identified on the monument. Selection of helispots will be under the direction of the FMO/Aviation officer or acting Duty Officer. However, the pilot always has the final say on the landing zone. Helicopters are permitted to land on lands designated for wilderness per the fire management minimum tool analysis. Construction of new helispots should be avoided.

Dipping out of the Green or Yampa Rivers within the monument is prohibited. Approval for dipping will be made by the monument Superintendent or acting. The Fire Duty Officer may approve, but only when there is imminent threat to life or property. The Duty Officer will cancel the dipping in the river as soon as the threat is alleviated. The Duty Officer will report to the Superintendent and Chief of Resource Stewardship and Science as soon possible.

Special Use and PPE

All helicopter flights under operational control of the federal government will be considered special use and require the use of full personal protective equipment by everyone on board the aircraft. Pilots will provide their own equipment, as specified in contract or rental agreement specifications. The National Park Service will provide all required PPE, except for boots which are provided by individuals. A stipend for the boots may be approved per agency or monument policy. Approved flight helmets (see IHOG chapter 9) will be worn by all helitack crewmembers

and by all passengers, except when transporting crews to a fire from a managed point to a managed point with qualified helitack personnel at both points. OAS grants an exemption from this requirement only for fire crews being flown to or from a fire with an improved helispot (manager, wind indicator, fire extinguisher). This exemption allows fire crew members to wear fire resistant shirt and pants, leather gloves, and fire helmets, and to use ear plugs and safety goggles/glasses in place of a fire resistant flight suit and gloves and a flight helmet. There is no exemption for other incident types, including search and rescue within the monument.

Air ambulance missions, which involve only transportation of victims to medical facilities where NPS employees or volunteers are not on board the aircraft, fly under FAA guidelines, and PPE is not required. It is not permitted for an NPS employee to take himself or herself off duty for this purpose. When an aircraft is ordered in an air ambulance configuration, it should be expected that NPS employees or volunteers would not fly on the mission. A SAFECOM will be filed if a deviation from this policy occurs.

II. PROGRAM MANAGEMENT

A. Organization and Responsibility

Superintendent or Acting Superintendent

- Ensures overall aviation management complies with departmental policy, NPS Aviation Guidelines (DO-60/RM60) and all relevant legal requirements.
- Ensures an aviation management program that meets Department and NPS standards is planned and implemented and revised annually as needed.
- Ensures monument employees from all divisions adhere to this aviation management plan.
- Resolves disputes related to denial of non-emergency flight requests, as described in this plan.
- Approves non-emergency special use flights.

Dinosaur Chief, Division of Resource Stewardship and Science

- Provides oversight of aviation plan implementation, as delegated.
- Monitors emergency incidents where standards will likely be compromised.
- Discusses deviations from policy guidelines and monument procedures with appropriate supervisors.
- Reviews mission risk assessments for non-emergency flights as needed.

Chief, Visitor and Resource Protection

- Coordinates law enforcement missions with National Guard or other approved agencies.
- Assigns personnel to protect crash sites during accident investigations.
- Coordinates aviation use for Search and Rescue and Emergency Medical Services with the Fire and Aviation Management Officer.
- Conducts SAR for victims of aviation mishap

Dinosaur Fire and Aviation Management Officer

- Develops and implements aviation management plan and oversees day-to-day aviation activities within the monument or delegates portions to qualified persons.
- Requests temporary flight restrictions through the appropriate dispatch center (TFR) under 14 CFR 91.137 if necessary, following procedures in the Interagency Airspace Coordination Guide.
- Conducts periodic aviation training needs analysis.
- Implements an appropriate aviation safety and accident prevention program.
- Certifies aviation qualifications of monument staff.
- Performs mission risk assessments for emergency flights as needed.
- Ensures proper procedures by monitoring events where compromise of policy may occur.
- Receives reports of safety deviations and ensures SAFECOMS are originated and responded to as needed.
- Ensures necessary flight-related documents are complete and accurate.
- Ensures Interagency Aviation Transport of Hazardous Materials Guide (351 DM) standards are followed.
- Assigns personnel to helicopter projects when needed.
- Develops requests for special use non-emergency flights, with field users.
- Ensures adequate facilities, funds, and equipment to implement program.
- Informs monument Safety Committee about aviation safety issues.
- Reviews monument aviation management plan annually and updates as needed.
- Maintains a library of current aviation policy manuals and basic aviation safety training materials.

Craig Interagency and Uintah Basin Interagency Dispatch Center Managers

Each will accomplish the following within their dispatch area boundaries

- Orders aircraft for NPS missions
- Maintains resource status of Call When Needed (CWN) helicopter and fixed wing aviation resources.
- Assists with planning of missions as needed.
- Provides flight following when requested with 15 minute check-ins within area of responsibility.
- Implements plan for overdue aircraft.
- Notifies monument Fire and Aviation Management Officer of issues or incidents involving monument aviation missions.
- Ensures dispatchers have needed skills through formal and on-the-job training.
- Receives reports of safety deviations and ensures SAFECOMS are originated and responded to as needed.

The Flight Manager

- Ensure pilot and aircraft are agency approved and current for planned mission.
- Ensure the pilot briefs passengers on in-flight safety, emergency exits, and emergency equipment.

- Ensure there is direct communication capability from the aircraft to a station performing flight following.
- Advise pilots of hazards observed, and ensures pilot follows planned flight routes, flies within mission profile, and performs as requested unless something extraordinary occurs.
- Request pilots to terminate flight if unsafe operations are being conducted.
- Initiate OAS-23E to verify flight services provided.
- Ensure loose gear of passengers is secured.
- Ensure pilot and all passengers are wearing Personal Protective Equipment (PPE) needed for the mission.

Incident Commander (IC)

- Orders appropriate aircraft through either the Uintah Basin or Craig Interagency Dispatch Center to meet incident needs.
- Identifies expected mission needs at time of initial order and updates dispatch on additional mission needs or changes in mission profiles.
- Ensures aircraft and pilot are certified for each mission by checking cards personally or having them checked by operations personnel.
- Ensures qualified helicopter personnel are committed to the incident to ensure compliance with department and agency standards.
- Ensures that PPE policy is adhered to by all incident personnel, including the aircrew for OAS flights. The IC can make no deviations to policy.
- Ensures that pilots receive an adequate mission and hazard briefing.
- Ensures that landing zones are secured from public access.
- Requests temporary flight restriction as needed, through the appropriate dispatch center.
- Ensures flight following procedures for the duration of the mission.
- Ensures that administrative payment procedures are followed for vendor payment; i.e., submitting OAS-23E, account numbers, etc.

Helicopter Manager

- Ensures aircraft and pilot are certified for each mission by checking cards.
- Manages incident helicopter operations to OAS and agency standards.
- Ensures that all incident personnel, including the aircrew wear PPE.
- Ensures that pilots receive an adequate mission and hazard briefing.
- Ensures landing areas are free of debris and staged with fire extinguisher and wind indicator.
- Ensures traffic control for safety of visitors and employees.
- Monitors take-off and landings, directs pilot by radio or hand signals.
- Works with pilot to complete helicopter load calculation for each mission, and manifests passengers and documents cargo for each flight.
- Provides load calculations and manifests to monument aviation manager after incident.
- Assures safety of helibase operations, takes action to correct problems on-site.

Fire Program Management Assistant

- Ensures OAS-23Es have correct account code for all flights.
- Ensures obligations of funds are made as needed.
- Assists helicopter manager in obtaining account numbers.
- Maintains records of monument aviation use.
- Assists monument Fire and Aviation Management Officer in reviewing OPAC billings.

Budget Analyst

- Ensures OAS-23Es are properly obligated in FFS for all monument uses.
- Submits notices of OPAC billings to monument Fire and Aviation Management Officer for review.
- Ensures obligations of funds are made in a timely manner.

B. Qualifications/Training Needed to Manage Program

The FMO has been delegated the responsibility to be the Collateral Duty Aviation Officer (AO). The Interagency Aviation Training Guide establishes training for those employees with aviation responsibilities. OAS requires the monument's Fire and Aviation Management Officer to maintain currency in aviation policy and procedures through attending modules of aviation training every three years.

To ensure that the monument has qualified aviation personnel, as many staff as possible should attend and maintain currency in the A-100 curricula, Basic Aviation Safety. This will provide the minimum training for monument personnel required to fly on a DOI mission. In addition, supervisors of monument staff that will fly on a DOI mission are required to take and maintain currency in M3, Aviation Management Training for Supervisors. Training records will be maintained in Fire and Aviation Management Office. Both A-100 and M3 are good for a 3 year time period.

All fire personnel and all others who expect to fly on special use missions must attend Combination Helicopter/Airplane Safety, A-100. This training needs to be maintained with a refresher every three years. Those who might fly on an incidental basis must be given a thorough pre-flight briefing and must attend a 30-minute aviation safety session on aircraft performance and use of PPE.

The IHOG will be the operations policy manual for all wildland fire operations within the monument involving helicopters. It will also be followed for non-fire incidents. In no case will pilot daily flight hour limitations be exceeded. This is normally 8 hours per day (dependent on contract), and during extended fire seasons may be reduced to seven hours per day.

Specific training needs for employees' positions can be found in Interagency Aviation Training matrix in appendix J. Reference the IAT Guide for further training information. Dinosaur NM does not require any extra training above that which is described in the IAT Guide.

C. Dispatching and Controlling Flights

1. Routine Flights

Routine flights are ones that can be scheduled in advance. Examples include fence maintenance, research, training, photography, animal surveys, visitor use surveys, VIP orientation, non-emergency personnel transport, and ecosystem management/restoration.

- Routine Flight Request/Flight Plan
Routine flights originate from a project manager who requests authorization from the Superintendent. The "Department of the Interior Aircraft Flight Request/Schedule" form will be used. The form is found in Appendix B. Funds for a routine flight can be obligated by normal procurement procedures. A Purchase Request (PR) will be completed and submitted to the Budget Technician after consultation with the Fire and Aviation Management Officer.

The Fire and Aviation Management Officer will analyze project proposals for hazards and risk exposure, and assist the project manager in determining how to accomplish the project safely. The NPS Project Aviation Safety Plan template found in Appendix C will be used to make this determination. To determine that the project can be conducted safely, the Fire and Aviation Management Officer will assist the project manager in preparing a flight request form for review and approval by the monument Superintendent. Once approved, the Fire and Aviation Management Officer will order the required aircraft.

All flights will be tracked utilizing standard flight following procedures through the dispatch center that processed the order for the flight. The flight may be tracked locally (by the incident); however, this needs to be communicated to the dispatch center.

2. Non-Routine (Emergency) Flights

a. Search and Rescue Operations

SAR flights will be ordered by the Ranger through County Dispatch. Fire personnel may assist with the SAR but coordinate this with Fire Dispatch. Fire dispatch may also be requested to flight follow SAR aircraft.

b. Medical Evacuations

Medical flights will originate from the IC and will be ordered through the appropriate dispatch center. Fire ICs may order through fire dispatch but fire dispatch will contact the County Dispatch. LE Rangers may order medical flight directly through the County Dispatch. There is a local medical flight helicopter in Vernal and they are the preferred option due to their capabilities. If the medical flight is needed on a fire the IC must coordinate with Rangers to reduce duplication of ordering.

On occasion, one of the river outfitters will order a medevac for one of their clients. Each year they are sent a reminder that they must contact the Fire and Aviation Management Officer. The contact list for the outfitters is found in

Appendix I. The FMO will call the interagency fire dispatches to inform them of the aircraft operations.

c. Emergency Fire Operations

Flights will be ordered through the appropriate dispatch office by the IC or Duty Officer. The IC will notify the Duty Officer of all requested flights.

d. Law Enforcement Emergencies

Rangers will order flights through their LE dispatch. Rangers will contact the Aviation Officer for notification of the flight in order to coordinate within any other flights on the monument.

e. Administrative Emergencies

The Aviation Officer will place the order for the flight through the appropriate dispatch center. If time allows a PASP will be completed, but at least a risk analysis should be.

D. Records and Reports

Dispatchers will provide copies of completed flight plans to the Fire and Aviation Management Officer, who will maintain a file for three years.

1. Daily Flight Reports and Payment Procedures

Flight records will be initiated by the pilot and the project personnel, completed and signed by the Aviation Project Manager. These will be provided to the Fire and Aviation Management Officer for review. The Aviation Project Manager will maintain a user copy file and provide the vendor with a copy as agreed upon. A copy will be sent to the Fire Program Management Assistant, who will verify accounts and included costs, and provide a copy to the monument budget analyst for obligation. The original will be mailed to the vendor, and a copy kept in the monuments' files for three years.

The Fire and Aviation Management Officer will review OPAC billings provided by the monument budget analyst for accuracy and will advise on any need to increase obligations or other problems.

2. Aviation Reports

The Fire and Aviation Management Officer will prepare all annual aviation reports of aviation activities, flight hours, and costs. Copies will be provided to Regional and National (FIRE) Aviation personnel as required.

3. Accident Reporting

Procedures can be found in the "Aircraft Mishap Notification, Investigation, and Reporting Handbook."

Aviation Mishaps are defined in 350 DM 1 and can be divided into the following five categories:

- Aircraft Accident
- Incident with Potential
- Aircraft Incident
- Aviation Hazard
- Maintenance Deficiency

Any such event will be reported to OAS through the Monument Fire and Aviation Management Officer on a SAFECOM form. For an aircraft accident or serious aircraft incident, the NPS Regional Aviation Manager and/or National NPS Aviation Officer should be contacted as soon as possible; they in turn, will contact OAS.

OAS is required to be involved in all aircraft accident investigations involving DOI. The National Transportation Safety Board (NTSB) will in many cases lead the investigation team. OAS conducts on-site investigations for all aircraft accidents and serious aircraft incidents; administrative investigations are made for all other aviation mishaps. The purpose of the OAS investigation is for accident prevention and accident trend analysis.

If a known or suspected aircraft accident or serious incident occurs, the dispatcher on duty will IMMEDIATELY inform the Fire and Aviation Management Officer, who will contact the Regional Aviation Manager and monument Superintendent. The monument will provide the OAS Aviation Safety Manager information needed for Form AMD-77, Initial Report of Aircraft Mishap. The Aviation Incident/Accident Response Guide includes an AMD-77 and phone numbers.

All other aviation mishaps are to be reported within five days if possible, using a SAFECOM.

III. AVIATION OPERATIONS

A. Aircraft Safety

1. Aircraft Data Cards

All aircraft and pilots utilized for NPS missions will be carded according to Departmental and agency policies. Employees must ensure of proper carding prior to utilization.

2. Personal Protective Equipment

All special use flights must use required PPE as described earlier in this plan. The fire program maintains a cache of flight equipment that staff can borrow for the flight.

3. Flight Manifest and Load Calculations

Load calculations will be completed and documented for the first flight of the day. Additional load calculations will be made throughout the day's operation as the envelope for helicopter operations changes; i.e., operating at higher density altitudes, with a different pilot, with different aircraft equipment configuration (lengths of long line, bucket capacity, etc.), with different landing type (HIGE or HOGE), or with heavier fuel loads. If the helicopter operation is continuing within the same parameters of the original load calculation, a new load calculation is not required. However, a manifest is required of all passengers for each flight. This manifest must be written and a copy left at the point of departure. A SAFECOM will be filed if flights are not properly manifested, or if load calculations are not completed as required.

4. Flight Plans/Flight Following

Flight plans will be submitted prior to flight. Dispatch will flight follow for each flight and check in on 15 minute intervals. If Automatic Flight Following is active the 15 check are still necessary unless discussed prior to the mission with dispatch. Flight following may be accomplished locally by the incident.

5. Communications

Frequencies will be identified and confirmed during the planning process. Communication will be checked prior to the flight. If communication cannot be established with dispatch or on ground resources than the mission will be canceled or delayed until corrected.

6. Pilot Authority

The pilot has the ultimate authority to make decisions on flight path, landing zones and passengers and cargo.

7. Pilot Duty Limitations

Pilot duty days will follow policy as directed in the contract. At times this duty day or flight time may be reduced due to fire season severity; the national office will implement this policy. Non-compliance will result in a SAFECOM.

8. Low Level Flights

Due to concerns for peregrine falcons, flights should remain above 500 AGL and it is preferred flights remain above 2000. Low level flights should only occur when low recon is required.

9. Transporting Hazardous Material

Reference 49 CFR Parts 171-180, IHOG Chapter 11 and Interagency aviation transport of hazardous materials handbook and guide

10. Smoking

Smoking is prohibited on all flights under NPS operational control.

11. Pilot Briefings

The pilot will receive a briefing prior to the mission. Intent of the mission, flight path, passengers, load, frequencies, hazards and hazardous materials will be a part of this briefing.

12. Flight Hazard Maps

A flight hazard map is located in Appendix F of this plan. A map will be given to the pilot or aviation manager prior to flight.

13. Flight Restrictions and noise impact mitigation

In order to maintain wilderness values, a minimum tool analysis should be done for each project that will require landing in proposed wilderness. A minimum tool has been completed for fire and fuels operations. This analysis will apply to all fire management actions. It is preferred that all flights maintain at least 2000 feet AGL and avoid peregrine nests, map included in Appendices.

14. Air Space Restrictions

The monument has no special restrictions.

B. Aviation Security

Dinosaur NM does not have any facility to keep aircraft overnight. Aircraft should be flown to a nearby airport for overnight parking. If aircraft need to remain on the monument overnight due to mishap or occurrence such as running out of fuel or exceedance of pilot duty day, arrangement should be made to protect the aircraft and scene until it can be removed.

IV. SPECIFIC MISSIONS

A. Wildland Fire Initial Attack Operations

Each helicopter used for fire management operations will have a Helicopter Manager (HMGB) and helitack crew assigned to it. The helitack personal will meet NWCG standard. Helitack crew will work for the Initial Attack Incident Commander or other appropriate supervisor in an ICS organization. When there is no qualified IC on the incident, the helitack manager may assign a qualified IC, with concurrence of the Fire and Aviation Management Officer or Duty Officer. Support vehicles may be managed directly by the helitack manager when necessary to ensure safety of the crew or to improve efficiency of logistical operations.

B. External Loads

External loads will be built and loaded by qualified personnel according to interagency standards (IHOG). Accurate weights of gear will be obtained through use of scales as needed. Weights of attachments and ropes will be included in the load calculation. Cargo nets, swivels, and lines owned by the monument will be checked after each use for wear and replaced as needed.

Weights for equipment and tools to be moved for projects will be obtained by weighing on scales and then tagging or marking weights directly on the objects.

C. Winter Operations

Winter operations are not anticipated except for SAR operations. Winter reconnaissance flights by fixed wing or helicopter to search for lost parties and rescue victims are not common. If a landing is expected, a helicopter and crew certified for snow landings will be requested. A helicopter manager familiar with the monument and potential landing zones will fly with the pilot to assist in selection of landing areas. In the event the monument is required to undertake a winter SAR, the Regional Aviation Manager should be contacted to discuss a waiver to allow for cold weather clothing (i.e. synthetic outerwear) that is not specifically covered in the Aviation Life Support Equipment handbook. 2.2 C.

D. Special Projects

Federally initiated seeding, spraying, wildlife survey projects, Aerial Capture, Eradication and Tagging of Animals (ACETA) and other non-fire/emergency flights within the monument must be approved by the Superintendent. Project Aviation Plans must be submitted to the monument Fire and Aviation Management Officer who will interact with the IDT to ensure the project is designed and managed within minimum tool constraints. Upon approval, the monument Aviation Officer will assure that properly certified aircraft and pilot will be obtained. In some cases, this can be done by contracts that operate outside the normal OAS procurement procedures, as an end-service contract. Use of an end-service contact should be discussed with the Intermountain Region Aviation Manager.

E. Short-Haul Orders and Operations

Unique to the National Park Service, short-haul operations require specialized training and resources not available at the monument. In the event that a short-haul operation is required, the Regional Aviation Manager should be contacted regarding availability of their personnel and equipment. A short-haul operation may be considered if the situation meets the following guidelines:

- A short-haul rescue may be considered when a technical rescue operation is required to effect a ground-based evacuation. A technical rescue often places more personnel in potential jeopardy and can be more dangerous than a short haul evolution.
- Short-haul techniques may be utilized if the “totality of the circumstances” indicates that a short haul would be the most reasonable way to proceed. Factors such as duration and difficulty of a conventional evacuation, patient safety and possible medical considerations, transport time to a definitive care facility, weather, incident location and personnel available for a ground-based transport should be evaluated.

F. Law Enforcement

A monument employee contacting a vendor for a law enforcement mission must inform both vendor and pilot of the expected nature of the mission. Final arrangements for such missions will be made directly by the Chief, Division of Visitor and Resource Protection or designee. It will be the responsibility of the Chief Ranger, or designee, to notify dispatch of the flight mission. Unless there is a need for confidentiality these flights should be subject to wilderness, sound-scape, endangered species considerations through the monument’s NEPA process.

If flights are conducted into areas with anticipated hostile fire, NPS will protect the pilot to the same degree as employees or passengers with a flak jacket, body armor, etc.

If flight following cannot be accomplished by clear text during the flight, the use of coded transmissions, Automated Flight Following, or the IC will pre-establish check-in locations by use of a grid system.

Ammunition will not be chambered in weapons carried in any aircraft without required notification and approval by the monument Superintendent and pilot. The helicopter manager or pilot will visually inspect, with the law enforcement officer, firearms as needed. Weapons will not be fired from aircraft.

Only the Chief, Division of Visitor and Resource Protection or designee may request air support from the Colorado and Utah National Guard for drug law enforcement missions, subject to conditions in the Memorandum of Understanding with Department of the Interior. The designated contact for the guard is the NPS Chief Law Enforcement Officer (WASO). Form AMD-23 will be completed to document such use and a copy provided to the monument Fire and Aviation Management Officer and the Regional Aviation Manager.

G. Cooperator Aircraft

Cooperator aircraft can be one of the following: branch of the military, another public agency, a private entity. All aircraft and pilots must meet DOI standards and must receive permission from OAS to perform missions for the NPS. For procedures on how to order aircraft see DO 60. 13. If aircraft have not been approved by OAS the aircraft may be used but NPS personnel cannot fly in the aircraft.

Memoranda of Understanding between the NPS and other entities that allow for their aircraft’s use are found in Appendix L. Tracking of cooperator resources and documentation of use will occur as any other aircraft.

H. Aerial Ignition

Aerial ignition operations will follow the Interagency Aerial Ignitions Guidelines. Aerial ignition for the purpose of wildland fire suppression operations is allowed under the exemptions outlined

in the Wilderness Act of 1964. Proposals of aerial ignition for prescribed fires will be submitted to the IDT as one of the ignition methods outlined in the project burn plan. The purpose of the IDT involvement is to ensure a minimum requirement/minimum tool analysis is completed, and to minimize adverse effects to wilderness values through adequate planning and development of mitigation procedures for potential impacts. If wilderness values or sensitive resource impacts (such as threatened/endangered species) cannot be mitigated, a NEPA analysis will be conducted in accordance with Directors Orders' 12 and 41. Once approved, only agency approved aircraft and pilots will be used, and operations will be conducted in accord with the Interagency Aerial Ignition Guide.

V. EMERGENCY PROCEDURES

Appendix A of this Plan contains the Interagency Aviation Mishap Response Guide. It will be reviewed and updated yearly. A copy will be kept in both fire dispatch centers. Updating may be required more often if important notification information changes. Copies of this plan will also be given to the Superintendent, each of the Division Chiefs, and Fire Duty Officer. A copy will also be posted on the shared drive and copies may be kept with Ranger staff and fire resources.

A. Overdue Aircraft

An aircraft is considered "overdue" when the pilot fails to check-in within 30 minutes past the ETA and cannot be located. An aircraft is considered "missing" when it has been reported to the FAA Flight Service Station at 1-800-992-7433 as being "overdue", the fuel duration on board the aircraft has been exhausted, and the FAA has completed an administrative search for the aircraft without success. Procedures for overdue aircraft are listed in the Interagency Aviation Mishap Response Guide, which includes phone numbers for appropriate contacts.

B. Search and Rescue Operations

Responsibility will rest with the Chief, Division of Visitor and Resource Protection to initiate search and rescue operations. Management of SAR will be under control of the Chief Ranger. If the mishap occurred on a fire, the fire will remain under management of the FMO.

Procedures for initiating SAR are described in the Aviation Mishap Guide.

The Superintendent as well as the monument Aviation Officer will be notified, if possible, prior to launching the search aircraft. In no case will SAR be delayed pending notification of the monument Fire and Aviation Management Officer, Superintendent, or Regional Aviation Manager. The benefiting activity may be responsible for costs incurred for search and rescue operations generated by a failure to follow check-in procedure.

The majority of the SAR operations that occur in the monument are centered on river operations. It is not uncommon for river rafters to use satellite phones to call (life flight services from either Vernal, UT, Grand Junction, Colorado or Salt Lake City, Utah) for emergencies on the river. It is imperative that all SAR operations using life flight services be coordinated with the appropriate interagency dispatch center and the Fire and Aviation Management Officer.

VI. PROGRAM COORDINATION AND EVALUATION

This plan will be reviewed and updated by June 1 each year. The plan will be prepared by the Aviation Manager; other fire staff with aviation background may assist. Reviewers shall include the Regional Aviation Manager and Chief of Resource Stewardship and Science. The Superintendent will sign as approver of the plan.

An aviation program review will occur every 5 years by the Regional Aviation Manager. Usually this is held in conjunction with the fire program review.

If changes are needed in the plan before the yearly update, an addendum may be added after signature by the superintendent. Those changes will then be included in the update the following year.

Appendix

- A. Aviation Mishap Response Guide
- B. DOI Aircraft Flight Request/Schedule
- C. Project Aviation Safety Plan
- D. Helispot Locations Map
- E. Helispot Lat/Longs
- F. Dinosaur NM Aerial Hazard Map
- G. Nesting Area Map
- H. Sunrise/Sunset Times
- I. Contact list for River Outfitters
- J. IAT Requirements Matrix
- K. Policy References
- L. Website References
- M. Terms and Definitions
- N. MOUs

APPENDIX A

Interagency Aviation Mishap Response Guide 2016

Craig Interagency Dispatch Center



Bureau of Land Management, US Forest Service, National Park Service, Fish and Wildlife Service, Colorado Division of Prevention & Control,
Moffat, Routt, Rio Blanco, Jackson and Grand Counties

INTERAGENCY AVIATION MISHAP RESPONSE GUIDE 2016

Craig Interagency Dispatch Center

Prepared by: James Michels 04/12/ 2016: /s/ James Michels
Unit Aviation Manager, NWCFMU

Reviewed by: James Michels, 04/12/2016: /s/ James Michels
Unit Aviation Manager, NWCFMU

Reviewed by: Jay Miller, 04/2016: /s/ Jay Miller
Unit Aviation Manager, Med-Bow Routt NF

Approved by William Mortenson, 4/2016: /s/ William Colt Mortenson
NWCFMU FMO

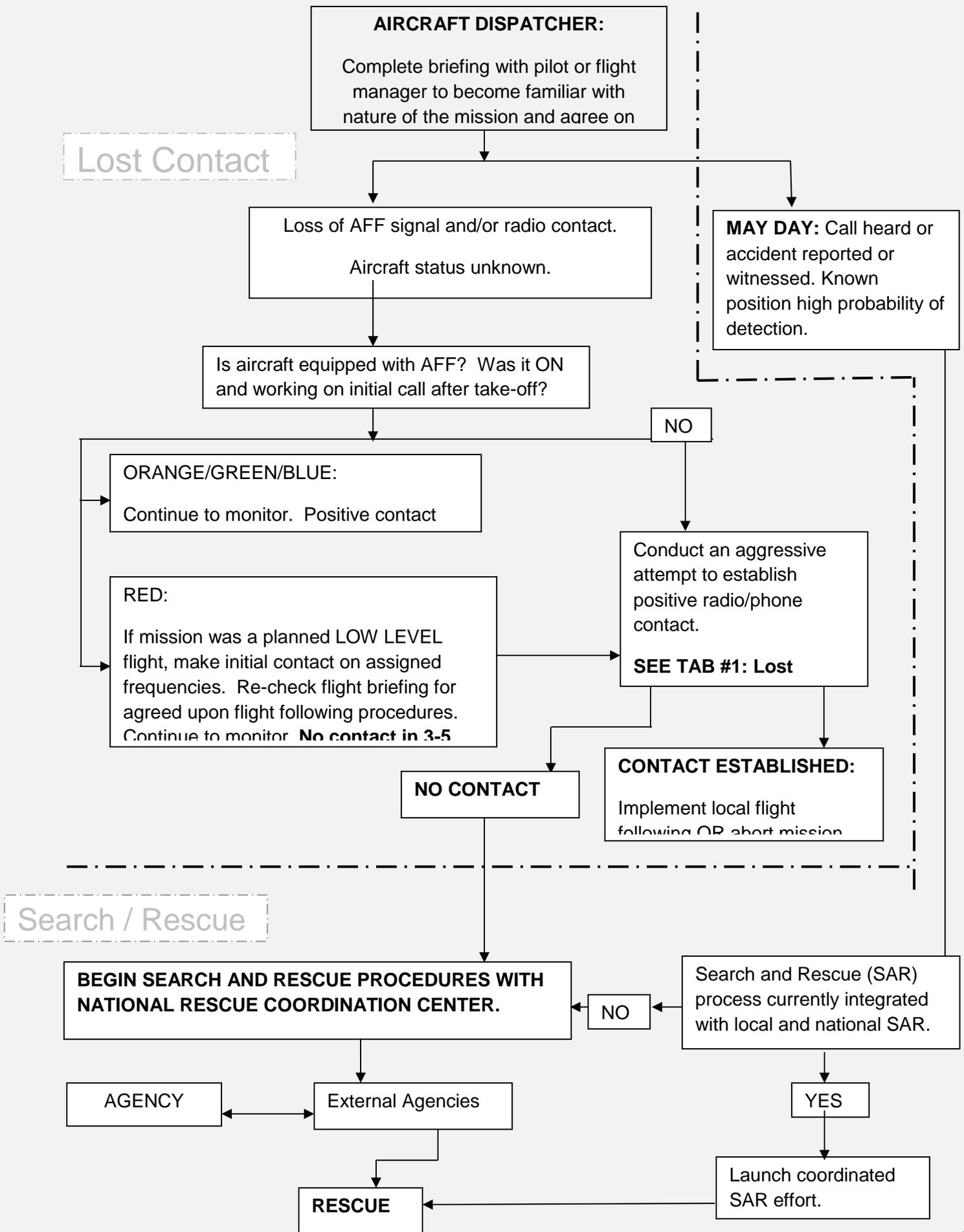
Approved by Vern Bentley, 4/2016: /s/ Vern Bentley
FMO, Medicine-Bow/Routt National Forest

Approved by Andrew Bundshuh, 04/12/2016: /s/ Andrew J. Bundshuh
FMO, Dinosaur National Monument

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AIRCRAFT LOST CONTACT AND SEARCH AND RESCUE FLOWCHART



TAB #1 - LOST CONTACT

Initial

- ____ Attempt contact on all available frequencies:
- Local frequencies
 - Air Guard
 - National Flight Following
 - Other Radio Contacts:
 - Aircraft in area attempt to make verbal contact with aircraft
 - Aircraft in area check 121.50 for ELT signal - If YES, proceed to search
 - Ground units in area: Attempt to contact aircraft
- ____ Contact all available phone numbers:
- Local Base Managers (ATB, RAB)
 - Flight Manager
 - Originating Dispatch
 - Pilot/PAX cell phone
 - Vendor
 - Air Route Traffic Control Center
 - Other (i.e. Local Airport FBOs)

Instruct all to contact dispatch if they reach the A/C by radio/phone or acquire information on status of A/C.

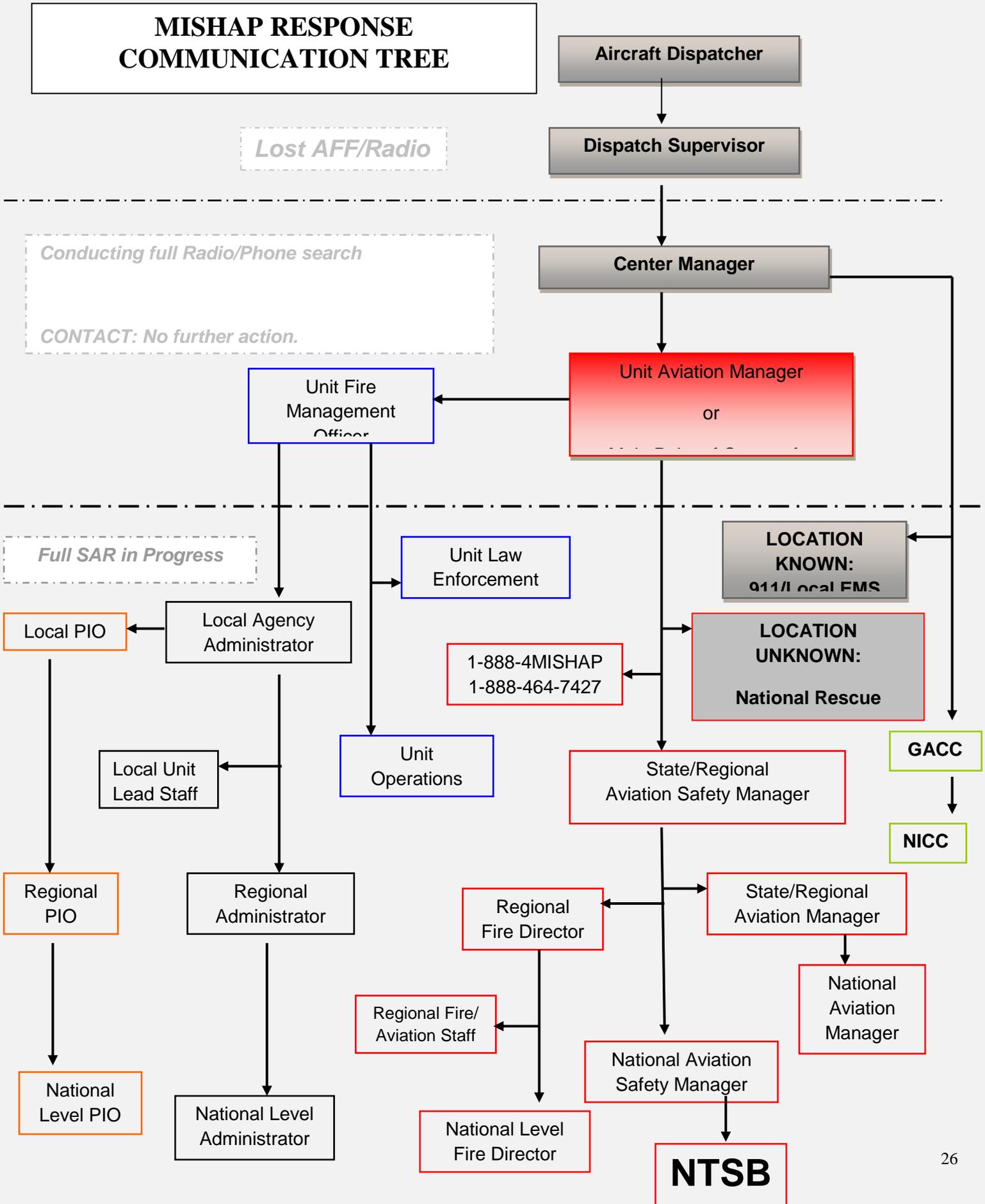
CONTINUED ON NEXT PAGE

- ____ Continue to monitor AFF
- ____ Plot last known position of aircraft
- ____ Print out AFF last known position if available
- ____ Supervisor: Contact Unit Aviation Manager / Fire Management Officer
- ____ Fill out Aircraft Information Sheet
- ____ Document using Dispatch standard protocol, all contacts and actions
- ____ Delegate duties as needed

If unsuccessful, continue to pursue Lost Contact checks and move to Search and Rescue.

LOST CONTACT DOCUMENTATION

MISHAP RESPONSE COMMUNICATION TREE



MISHAP RESPONSE COMMUNICATION TREE UNIT CALL LIST		
DISPATCH CENTER MANAGER WILL CONTACT:		
Unit Aviation Manager - BLM	Jim Michels	970-826-5012 970-620-3846c
Unit Aviation Manager - USFS	Jay Miller	307-745-2415 307-399-1422c
Unit Aviation Manager / Fire Management Officer – NPS	Andy Bundshuh	970-374-3014 720-879-3322c
Aviation Branch Cheif – DFPC	???	970-491-8624 970-980-7877c 303-279-8855 (24 hr line)
Unit Public Affairs Officer – BLM	Chris Joyner	970-244-3097 970-210-2126c
LOCATION KNOWN: Local Rescue Response - Ensure most accurate SOB is given		911
RMCC Coordination Center		303-445-4300
UNIT AVIATION MANAGER WILL CONTACT: OR MAIN POINT OF CONTACT FOR EVENT		
Unit Fire Management Officer-NWCFMU	Colt Mortenson	970-826-5036 970-367-6233c
Zone Fire Management Officer - Medicine Bow-Routt NF	???	970-638-4170 970-819-6223c
Fire Management Officer-MBR NF	Vern Bentley	307-745-2365 307-760-0284c
LOCATION UNKNOWN: Rescue Coordination Center (RCC will initiate the search with the FAA and other appropriate agencies.) Information for Rescue Coordination Center (RCC): - Inform the RCC an aircraft has not checked in, location is unknown - Give information from the Aircraft Information Sheet - Ensure a contact name and call back phone number is given to the RCC		800-851-3051
Aircraft Accident Reporting Hotline	888-4MISHAP	888-464-7427
Regional Aviation Safety Manager	Kent Hamilton	303-275-5711 303-882-3740c
USFS Region 2 Aviation Officer	Sandra LaFarr	303-275-5740 303-886-2124c
UAM CHECKLIST CONTINUED ON NEXT PAGE		

BLM State Aviation Officer	Clark Hammond	303-239-3809 702-305-8841
NPS Regional Aviation Officer	Steve Sorenson	303-969-2957 720-626-0738c
FWS Regional Aviation Officer	Doug Powell	406-535-2800 (#18) 406-366-1062c
DFPC Aviation Branch Chief	???	970-491-8624 970-279-7877c

UNIT FIRE MANAGEMENT OFFICER-NWCFMU WILL CONTACT:

LSD Law Enforcement	Jubal	970-826-5006
WRD Law Enforcement	Don Miller	970-878-3177 970-274-8320c
KRD Law Enforcement	Darren Entrican	970-724-3029 970-531-2858c
NW Colorado District Manager BLM, Grand Junction	Joe Meyer	970-244-3066 970-712-8945
NW Colorado Associate District Manager BLM, Grand Junction	Alicia Austin Johnson	970-224-3015
Field Office Manager BLM, Little Snake	Hunter Siem	970-826-5089 970-756-2204c
Field Office Manager BLM, White River	Kent Walter	970-878-3802 970-683-0377c
Field Office Manager BLM, Kremmling	Stephanie Odell	970-724-3001 970-531-3507c
FWS, FMO Rocky Basin FMO	Tracy Swenson	435-734-6449 435-740-0572c
Refuge Manager FWS, Browns Park	Steve Barclay	970-365-3613 970-756-0811c
Refuge Manager FWS, Arapaho	Ann Timberman	970-723-8202 970-819-0541c

UNIT FIRE MANAGEMENT OFFICER-MEDICINE BOW-ROUTT USFS WILL CONTACT:

Forest Supervisor, USFS, Medicine-Bow Routt TBNG	Dennis Jaeger	307-745-2400 307-399-1404c
District Ranger USFS, Hahn's Peak/Bears Ears	Chad Stewart	970-870-2149 575-802-5775

UNIT FMO CHECKLIST CONTINUED ON NEXT PAGE

District Ranger USFS, Yampa	Jason McImteer	970-638-4516 480-244-9908c
District Ranger USFS, Parks	Jason Brey	970-723-8204
MBRTB Patrol Captain	Shawn Graef	307-745-2300 303-501-3132c
MBRTB Law Enforcement Officer	Nick Walters	970-870-2227 720-325-3375c

UNIT FIRE MANAGEMENT OFFICER – DINOSAUR NM WILL CONTACT:		
Superintendent NPS, Dinosaur	Mark Foust	970-374-3001 970-629-5439
NPS Chief Ranger	Lee Buschkowsky	435-781-7731 970-629-8683
NPS Supervisory Ranger	Zach Parkes	970-374-3022 970-629-2707

UNIT AVIATION MANAGER OR DESIGNATED MAIN POINT OF CONTACT FOR EVENT PROCEDURES CHECKLIST

LOST CONTACT: Aggressively trying to make contact

Initial

- _____ Maintain contact with the Dispatch Center Manager
- _____ Document all actions and conversations
- _____ Obtain copy of Aircraft Information Sheet

CONTACT MADE

- Document events and outcome
- If requested by dispatch, help determine if mission should continue or aborted

NO CONTACT

- Transition to Search and Rescue procedures

SEARCH AND RESCUE:

- _____ Put the **Mishap Response Communications Tree** into action
- _____ **LOCATION KNOWN:** Confirm that local 911/EMS has been contacted
- _____ **LOCATION UNKNOWN:** Contact appropriate Rescue Coordination Center
- _____ Ensure that 1-888-MISHAP has been called
- _____ State/Regional Aviation Safety Manager has been contacted

Local Unit Coordination in conjunction with the Rescue Coordination Center (RCC) Efforts

- After initial coordination request, and if an agency aircraft is available, request an RCC assigned search number, search radio frequency, and approval to conduct a route search or a grid search. If Agency Aircraft are not available request an aerial search by the responsible SAR agency
- Continue coordination in-house and with other SAR agencies

Document all actions and conversations.

AIRCRAFT INFORMATION SHEET

Fill out as much as possible; obtain the following information on the aircraft.

CAUTION: Do NOT announce over the radio the names of individuals involved in a missing aircraft.

1. Name of pilot(s):

2. Name of passenger(s) and agency affiliation. How many?

3. Aircraft registration "N" number:

4. Type of aircraft:

5. Color of aircraft:

6. Type of mission:

7. Last known location: time, latitude, and longitude

8. Point of takeoff and time:

9. Destination and ETA:

10. Was flight plan filed with FAA and/or Agency?

11. Fuel duration in hours and minutes as reported on initial contact:

12. Last reported course heading and speed:

ACCIDENT SITE PRESERVATION

Establish Inner and Outer Perimeter

- Protect property utilizing law enforcement agencies to guard site access.
- Prevent the disturbance of wreckage and debris except to preserve life, rescue the injured, or protect the wreckage from further damage
- Protect and preserve ground scars and marks made by the aircraft
- Admit Public Safety personnel access to the wreckage to the extent necessary to preserve life, and/or stabilize HAZMAT
- Maintain a record of personnel who enter the accident site

BIOHAZARD/HAZMAT

- Potentially dangerous materials that might be present may include but are not limited to: Chemicals-Explosives-Biological-Radioactive materials, fuel, pressure vessels, compressed air, hydraulics, batteries, accumulators, igniters, oxygen systems, oxygen bottles, fire extinguishers, evacuation chutes, flares, composite materials, ballistic parachute systems, tires

Wreckage Documentation (if possible)

Use best judgment to obtain these goals

- Obtain aircraft registration number (N number)
- Obtain number of casualties
- Photograph or video the overall wreckage including cockpit starting at the initial point of impact if possible
- Photograph or video any ground scars or marks made by the aircraft

Injured/Fatalities

- Coordinate with the NTSB prior to the removal of fatalities. If unable, document that part of the scene to be disturbed, including switch/control positions, and instrument/gauge readings

Prior to Investigation Team Arrival on Scene, Restrict Access only to Authorized Personnel

- Land Management Agency personnel
- FAA
- Police/Fire/EMS
- Medical Examiner/Coroner

Witness Documentation

- Obtain name / address / phone numbers (home & work)
- Obtain their location relative to the accident site
- Obtain description of what they observed or heard
- Obtain name of person reporting accident (911 Tapes)

ACCIDENT SITE INFORMATION

1. Unit/Agency:	2. Unit/Agency Contact and Number:
3. Number of souls involved:	4. Time of Mishap:
5. Incident Site Radio frequency: Air to Air _____ Air to Ground _____	6. Other Aircraft In Area:
7. Location of mishap: Latitude _____ Longitude _____ Township _____ Range _____ Section _____ VOR _____ Distance _____ Bearing _____ Prominent Landmark _____	
8. Site Contact:	
9. Special information, flight hazards, nearest Av Gas/Jet A fuel etc.	
10. Landing site(s) and conditions:	11. Distance Landing to Site:
12. Conditions at the mishap site: Wind direction and Speed _____ / _____, Ceiling and visibility _____ / _____, Temperature Degrees (F or C) _____, Elevation _____, Sunrise _____, Sunset _____, Description of Terrain _____	
Other significant information, conditions/extent of injury:	

HELICOPTER AMBULANCE SERVICE NEAR YOUR AREA

Facility/ Heliport ID	Call Sign	Type A/C	Phone Number	Lat/Long	Comments/Fixed Wing
Ashley Valley Medical Vernal, UT Classic Lifeguard	Lifeguard 7 (Moab, UT) Lifeguard 8 (Vernal, UT)	Bell 407 Bell 407	Dispatch: 800-444-9223 Non-em: 928-645-2950	38 32.01 x 109 30.62 40 27.5 x 109 31.86	Lifeguard 23 (Page, UT; Pilatus)
Yampa Valley Medical Center Steamboat Springs, CO	Lifeguard 6	Bell 407	See Above	40 30.97 x 106 51.98	Lifeguard 24 (Craig, CO; Pilatus)
St. Mary's Hospital Grand Junction 29CO	Careflight 3 (Grand Junction, CO) Careflight 4 (Montrose, CO)	AS-350 B-3 AS-350 B-3	800-332-4923	39 05.4 x 108 33.6 38 28.8 x 107 51.9	Careflight 2 (King Air 200) VHF 155.340
St. Anthony's Hospital Systems Denver North CO37	Lifeguard1	AS-350 B-3	Dispatch: 800-332-3123 Non-em: 720-321-3900	39 42.77 x 105 07.62	Can provide 1 ground unit and fixed wing EMS capabilities to any hospital upon request. 3 King Air and 1 Lear Jet throughout the region
Summit Co. Medical Center Frisco, CO 91CO	Lifeguard 2	AS-350 B-3	See Above	39 34.16 x 106 04.72	
St. Francis Medical Center Colorado Springs, CO CO23	Lifeguard 3	AS-350 B-3	See Above	38 56.37 x 104 43.08	
St. Mary's Corwin Pueblo, CO	Lifeguard 4	AS-350 B-3	See Above	38 14.31 x 104 37.76	
Mercy Regional Medical Durango, CO	Lifeguard 5	AS-350 B-3	See Above	37 14.16 x 107 49.65	
Aurora North Hospital Aurora, CO CO05	Air Life 72 (Frederick Firestone, CO) Air Life 73 (Hugo, CO) Air Life 74 (Lonetree, CO) Air Life 75 (Cheyenne, WY)	Bell 407 Bell 407 Bell 407 Bell 407	Dispatch: 877-243-8247 Non-em: 303-360-3400	40 07.33 x 104 58.96 39 43.58 x 104 49.57 39 31.70 x 104 52.22 41 15.05 x 104 81.80	2 Critical care ground unit 2 Lear Jets at Centennial airport
University Hospital & Burn Center Salt Lake City, UT	Air Med 2 (Park City, UT) Air Med 3 (Nephi, UT) Air Med 4 (Salt Lake City, UT) Air Med 6 (Rock Springs, WY) Air Med 20 (Layton, UT) Air Med 21 (Tooele, UT)	Bell 407 Bell 407 EC 145 Bell 407 Bell 407 Bell 407	Dispatch: 800-453-0120 Non-em: 801-581-2500	40 43.83 x 111 29.06 40 02.65 x 111 42.92 40 46.34 x 111 50.24 41 35.65 x 109 03.91 41 09.80 x 111 58.20 40 33.08 x 112 17.70	Air Med 33 (Rock Springs, WY; Pilatus) 41 35.65 x 109 03.91 Air Med 32 (SLC Int'l airport; Pilatus) 40 47.01 x 111 57.50
Wyoming Medical Center Casper, WY	WYO Life Flight 1	Bell 407	Dispatch: 800-806-9158 Hospital: 800-822-7201	42 50.86 x 106 18.50	WYO Life Flight 3 (King Air 90) 155.340 (zmed 28-Federal) 155.295 (800mhz) 154.875 (state mutual aid)

TRANSPORTING INJURED PERSONNEL BY HELICOPTER

USING "HEAR" (Hospital Emergency Administrative Radio) SYSTEM

When transporting injured personnel by helicopter under Agency Contract, the local Dispatch Center will telephone the appropriate hospital and request they monitor their "HEAR" system radio. The aircraft pilot or manager will tune in the "HEAR" Frequency (normally 155.340 as primary) on the aircraft multi-channel radio and establish direct communication with the hospital staff. Helicopter will verify frequency through the Dispatch Center.

Local Police will be requested to secure landing area when needed.

This procedure is to be used only for emergencies that warrant immediate hospital service.

TIPS FOR DISPATCH: PREPARING FOR AN AGENCY INVESTIGATION TEAM

Please see agency handbooks for additional requirements.

- Statements from the witnesses and personnel remotely (distance) involved (i.e. dispatchers, comm unit trailer, ATGS, HLCO, other pilots, etc.). Their statements are very important when it comes to what they heard or saw
- Weather at the time of accident. What was the weather at the time of the event? Temperature, wind direction, approximate visibility, sunny, cloudy, what was predicted?
- Forest/Unit designate a point of contact for the incoming team (usually a line officer)
- If involved on a fire incident, a point of contact from the IMT would be very helpful
- Radio/dispatch logs and tapes
- Secure the fuel truck that the aircraft was last fueled from (If from a Airport's FBO, inform the airport manager in case he needs to alert other aircraft/operators that had been fueled from the same fueling vehicle)
- Please have witnesses and personnel involved with the incident stay in the local area in case the NTSB needs to ask some additional information

MEDIA RELATIONS

The following information and guidelines will assist you in responding to media inquiries regarding a mishap, accident or incident.

- Many media outlets have radio scanners and may call at the first mention of an accident or incident. Also, in today's digital age and media environment, with people having access to cell phones, iPods, and other digital capabilities, virtually anyone can be an instant reporter. Staff at dispatch, coordination centers and home units must be prepared to respond immediately and before an NTSB investigation team is set up and prepared to respond.
- It's important to be responsive to the media, but it's critical that you do not release any detailed information, particularly in the early stages of an accident or incident.
 - You can acknowledge that you have an initial report, but explain there are no other details available.

- It's especially important that you not release any information about names of individuals known or presumed to have been on board the aircraft.
 - Similarly, it's important to not release preliminary information about aircraft type, location, or specific mission, as many family members could be affected without confirmation.
 - Never say "no comment," in response to a question as that indicates you are hiding something or otherwise purposely keeping information from them. Instead, politely explain that you don't have the necessary information to respond further.
- Responding to media calls can be an unsettling experience for many, but realize that reporters are people, too, and only doing their job, just as you are. Treat them with respect – remember, they can be a great ally or your worst enemy – and be polite and responsive but don't speculate or provide detailed information. Leave any responses beyond explaining that you don't have the necessary information to professional information officers.
 - Every dispatch office or coordination center should maintain a current list of public affairs or information officers to contact in the event of an emergency. This contact should be made as early in the process as possible to relieve dispatch or coordination center personnel of dealing directly with media calls so they can focus on needs associated with the incident or accident.
 - Once an information or public affairs officer has been notified, calls can simply be referred to him or her. This person also should be in contact with the NTSB investigator or information officer and can handle media inquiries as requested by the investigation team.
 - Once an NTSB investigation team is in place, and if the local information officer is not available, obtain the name and phone number of the lead investigator or the team's incident information officer, contact them and ask how they would like media calls to be directed.
 - **Remember, the sooner a public information officer or public affairs officer is contacted; the sooner media calls can be diverted from the work of the dispatch or coordination center.**
 - **CRC Local Public Information Officer: Lynn Barclay
(O) 970-826-5096; (C) 970-326-8481; (PC) 970-620-1949**

DEFINITIONS

A/C	Aircraft
AFB	Air Force Base
AFF	Automated Flight Following
ATGS	Air Tactical Group Supervisor
ELT	Emergency Locator Transmitter
ETA	Estimated Time of Arrival
EMS	Emergency Medical Service
FAA	Federal Aviation Administration
FBO	Fixed Base Operations
HLCO	Helicopter Coordinator
IMT	Incident Management Team
NTSB	National Transportation Safety Board
PAX	Passengers
RCC	Rescue Coordination Center
SAR	Search and Rescue
SEAT	Single Engine Airtanker

IMPORTANT NUMBERS	COMMERCIAL	HOME / CELL / PAGER
BLM UNIT AVIATION MANAGER – Jim Michels	(970) 826-5012	(970) 620-3846 c
MBRTB UNIT AVIATION MANAGER- Jay Miller	(307) 745-2415	(307) 399-1422 c
NPS UNIT AVIATION MANAGER – Andy Bundshuh	(970) 374-3014	(720) 879-3322 c
FWS UNIT AVIATION MANAGER – Doug Powell	(406) 535-2800 x18	(406) 366-1062 c
DFPC UNIT AVIATION BRANCH CHEIF – Jane Lopez	(970) 491-8437	(970) 980-7877 c (303) 279-8855
CRAIG INTERAGENCY DISPATCH CENTER	(970) 826-5037	
CRC Center Manager, Pat Butler	(970) 826-5037	(970) 620-1004 c
CRC Asst. Center Manager, Tracey Kern	(970) 826-5037	(307) 399-5321 c
LITTLE SNAKE BLM		
NW Dist. Safety & Occupation Health Spc, Matthew Ringer	(970) 244-3054	(970) 210-4291 c
Field Manager, Wendy Reynolds	(970) 826-5089	(970) 629-5134 c or (208) 670-0227
OWCP, Patricia Garcia	(303) 239-3959	(970) 250-0744 c
BLM LEO, Vacant	(970) 826-5006	
Public Affairs Officer NWCO, David Boyd	(970) 876-9008	(970) 319-4130 c
Public Affairs Specialist NWCO, Chris Joyner	(970) 244-3097	(970) 210-2126 c
WHITE RIVER BLM		
NW Dist. Safety & Occupation Health Spc, Matthew Ringer	(970) 244-3054	(970) 210-4291 c
Field Office, Kent Walter	(970) 878-3802	(970) 683-0377
OWCP, Patricia Garcia	(303) 239-3959	(970) 250-0744 c
BLM LEO, Don Miller	(970) 878-3177	(970) 274-8320
Public Affairs Officer NWCO, David Boyd	(970) 876-9008	(970) 319-4130 c
Public Affairs Specialist NWCO, Chris Joyner	(970) 244-3097	(970) 210-2126 c
KREMMLING BLM		
NW Dist. Safety & Occupation Health Spc, Matthew Ringer	(970) 244-3054	(970) 210-4291 c
Field Office, Stephanie Odell	(970) 724-3001	(970) 531-3507 c
OWCP, Patricia Garcia	(303) 239-3959	(970) 250-0744 c
BLM LEO, Darren Entrican	(970) 724-3029	(970) 531-2858
Public Affairs Officer NWCO, David Boyd	(970) 876-9008	(970) 319-4130 c
Public Affairs Specialist NWCO, Chris Joyner	(970) 244-3097	(970) 210-2126 c
MEDICINE BOW-ROUTT NF/TBNG		
Forest Supervisor, Dennis Jaeger	(307) 745-2400	(307) 399-1404
Deputy Forest Supervisor, Carolyn Upton	(307) 745-2440	(307) 760-0502c
MBR Public Information Officer, Aaron Voos	(307) 745-2323	(307) 760-7763c
MBR Patrol Captain, Shawn Graef	(307) 745-2300	(303) 501-3132c
MBR Human Resources, Lila Coca	(307) 745-2333	(307) 760-3819c
HAHNS PEAK/BEARS EARS RD USFS		
Hahn's Peak/Bears Ears District Ranger, Chad Stewart	(970) 870-2149	(575) 802-5775 c

MBR LEO, Nick Walters

(970) 870-2227

(720) 325-3375 c

MBR Public Affairs Officer, Aaron Voos

(307) 745-2323

(307) 760-7763c

PARKS RD USFS		
Parks District Ranger, Jason Brey	(970) 723-8204	
MBR LEO, Nick Walters	(970) 870-2227	(720) 325-3375 c
MBR Public Affairs Officer, Aaron Voos	(307) 745-2323	(307) 760-7763c
YAMPA RD USFS		
Yampa District Ranger, Jason McImteer	(970) 638-4176	(480) 244-9908 c
MBR LEO, Nick Walters	(970) 870-2227	(720) 325-3375 c
MBR Public Affairs Officer, Aaron Voos	(307) 745-2323	(307) 760-7763c
DINOSAUR NM		
Dinosaur Superintendent, Mark Foust	(970) 374-3001	(970) 629-5439 c
Dinosaur Chief Ranger, Lee Buschkowsky	(970) 374-3004	(970) 629-8683 c
Dinosaur Public Affairs Officer, Dan Johnson	(435) 781-7702	(970) 629-3813 c
BUREAU OF LAND MANAGEMENT - COLORADO		
State Director, Ruth Welch	(303) 239-3700	
Associate State Director, Gregory Shoop	(303) 239-3700	
DSD-Resource & Fire, Brian St. George	(303) 239-3768	(303) 250-6617 c
State Aviation Officer, Clark Hammond	(303) 239-3809	(720) 305-8841 c
State FMO, Todd Richardson	(303) 239-3879	(303) 968-7358 c
Deputy State FMO, Brian Achziger	(303) 239-3687	(720) 587-9544 c
Emergency Management Coordinator, Barry Oelrich	(303) 239-3922	(303) 241-5727 c
State Public Information Officer, Deanna Masterson	(303) 239-3671	
Public Affairs Specialist, Vanessa Delgado	(303) 239-3681	(303) 808-2004 c
BUREAU OF LAND MANAGEMENT - NATIONAL OFFICE		
Aviation Safety/Training Advisor, Kirk Rothwell	(208) 387-5879	(208) 914-8483
Chief, Division of Aviation, John Gould	(208) 387-5448	(208) 258-0130 c
Deputy Chief Division of Aviation, Brad Gibbs	(208) 387-5182	(208) 863-6219
Fire Safety Manager, Michelle Ryerson	(208) 387-5175	(208) 484-6012 c
DOI AVIATION MANAGEMENT		
Boise, Aviation Safety, Keith Raley	(208) 433-5071	1-888-464-7427
Boise, Technical Services, Ralph Getchell	(208) 433-5077	(208) 841-1280
West Region Director, Gary Kunz	(208) 334-9310	
USFS REGION 2 - REGIONAL OFFICE		
Regional Aviation Safety Officer – Kent Hamilton	(303) 275-5711	(303) 882-3740
Regional Aviation Officer, Sandra LaFarr	(303) 275-5740	(303) 886-2124
Regional Director – Fire & Aviation, Willie Thompson	(303) 275-5736	
Regional Forester, Daniel Jiron	(303) 275-5450	(415) 847-2630
Helicopter Operations Specialist, Jim Lawson	(303) 275-5756	(719) 338-3918
Regional Health & Safety Manager, Mark McFall	(303) 275-5197	(303) 619-5617
Director of External Affairs, Valerie Baca	(303) 275-5118	(720) 440-1072
Regional Contracting Officer, Kay Steffey	(208) 387-5757	
Regional Special Agent (LEO), Laura Marks	(303) 275-5253	(303) 242-1097

RMACC Coordinator, Scott Sendsen	(303) 445-4302	(501) 303-9444
USFS WASHINGTON OFFICE		
National Aviation Safety Manager, Vacant	(208) 387-5607	
FAA - FEDERAL AVIATION ADMINISTRATION		
AFRCC Denver Air Route Traffic Control Center (ARTCC): Regional Control Center Walker Field: Tower – GJT Crash / Rescue – GJT Central Mountain Regional Office	1-800-851-3051 (303) 651-4248 (425) 227-1389 Public/Media (970) 628-2000 (970) 260-7164 (303) 373-3500	(425) 227-1999 Reporting Fax
COLORADO DEPARTMENT OF AERONAUTICS - CDOT		
	(303) 512-5250	
MILITARY CONTACTS		
Military Training Routes (MTR's) Military Operations Area (MOA's) Restricted Areas (RA's), Warning Areas (WA's), Alert Areas (AA's)	(303) 651-4100 Denver ARTCC	
COLORADO OFFICE OF EMERGENCY MANAGEMENT		
	(720) 852-6600	
CO ARMY NATIONAL GUARD HAATS		
	(720) 250-5300	
HOSPITALS		
The Memorial Hospital (Craig) Yampa Valley Medical Center (Steamboat) Rangely District Hospital (Rangely) Pioneers Hospital (Meeker) Grand River Medical Center (Rifle) Community Hospital (Grand Junction) St. Mary's Hospital (Grand Junction) Ashley Valley Medical Center (Vernal, UT) Ivenson Memorial (Laramie, WY) Summit Medical Center (Frisco) Vail Valley Medical Center (Vail) Valley View Hospital (Glenwood Springs) Colorado Mountain Medical (Eagle) Poudre Valley Hospital (Fort Collins) Middle Park Medical Center (Kremmling)	(970) 824-9411 (970) 879-1322 (970) 675-5011 (970) 878-5047 (970) 625-1510 (970) 242-0290 (970) 298-2273 (435) 789-3342 (307) 742-2141 (970) 668-3300 (970) 476-2451 (970) 945-6535 (970) 328-1650 (970) 495-7000 (970) 724-3442	
BURN CENTERS		
University of Colorado Hospital Burn Center – Aurora Western States Burn Center – Greeley	(720) 848-7583 (866) 806-6262	

University Hospital's Burn Center - Salt Lake City	(801) 581-2700	
POISON CENTER		
U.S. Poison Control	(800) 222-1222	

COUNTY SHERIFF'S OFFICES		
COLORADO (West of the Continental Divide)		County
Archuleta (Pagosa Springs)	(970) 264-8430	Communication
Delta (Delta)	(970) 874-2000	Centers
Dolores (Dove Creek)	(970) 677-2257	
Eagle (Eagle) / Vail	(970) 325-8500	(970) 328-8600
Garfield (Glenwood Springs)	(970) 945-0453	(970) 625-8095
Grand (Hot Sulphur Springs)	(970) 725-3344	(970) 725-3311
Gunnison (Gunnison)	(970) 641-1113	(970) 641-8000
Hinsdale (Lake City)	(970) 944-2291	
Jackson (Walden)	(970) 723-4242	(970) 723-8427
La Plata (Durango)	(970) 247-1161	(970) 385-2900
Mesa (Grand Junction)	(970) 242-6707	(970) 241-3500
Mineral (Creede)	(719) 658-2600	
Moffat (Craig)	(970) 824-4495	(970) 824-6501
Montezuma (Cortez)	(970) 565-8452	
Montrose (Montrose)	(970) 252-4023	(970) 249-6606
Ouray (Ouray)	(970) 325-7272	
Pitkin (Aspen)	(970) 920-5200	(970) 920-5200
Rio Blanco (Meeker)	(970) 878-9620	(970) 878-5023
Routt (Steamboat Springs)	(970) 870-5501	(970) 879-1090
Saguache (Saguache)	(719) 655-2544	
San Juan (Silverton)	(970) 387-5531	
Summit (Breckenridge)	(970) 453-2232	(970) 668-8600
UTAH (Bordering Western Colorado)		
Daggett (Manila)	(435) 784-3255	(435) 789-4222
Grand (Moab)	(435) 259-8115	
San Juan (Monticello)	(435) 587-2237	
Uintah (Vernal)	(435) 789-2511	(435) 789-4222
STATE PATROL		
COLORADO	Dispatch	
District 1: Metro (Denver)	(303) 239-4501	
District 2: Southeast Colorado (Pueblo)	(719) 544-2424	
District 3: Northeast Colorado (Denver)	(303) 239-4501	
District 4: Northwest Colorado (Craig & Montrose)	(970) 824-6501 (970) 249-4392	
District 5: Southwest Colorado (Montrose & Alamosa)	(970) 249-4392 (719) 589-5807	
District 6: North Central Colorado (Denver)	(303) 239-4501	
UTAH		
Moab	(435) 259-5441	
Vernal	(435) 789-4222	

NEW MEXICO		
Farmington	(505) 325-7547	
WYOMING		
Cheyenne	(307) 777-4321	
COORDINATION CENTERS		
Rocky Mountain Area Coordination Center	(303) 445-4300	
Eastern Great Basin Area Coordination Center	(801) 531-5320	
Southwest Area Coordination Center	(505) 842-3473	
National Interagency Coordination Center	(208) 387-5400	
INTERAGENCY DISPATCH CENTERS		
Colorado		
Grand Junction Dispatch Center	(970) 257-4800	
Durango Dispatch Center	(970) 385-1324	970-394-4323
Ft. Collins Dispatch Center	(970) 295-6800	
Montrose Dispatch Center	(970) 249-1010	
Pueblo Dispatch Center	(719) 553-1600	
South Dakota		
Northern Great Plains Dispatch Center	(605) 399-3160	
Utah		
Moab Interagency Fire Center	(435) 259-1850	
Vernal - Uintah Basin Interagency Fire	(435) 789-7021	
Wyoming		
Casper Dispatch Center	(307) 261-7691	
Cody Dispatch Center	(307) 578-5740	
Rawlins Dispatch Center	(307) 328-4393	(800) 295-9953

AIRPORTS / FIXED BASE OPERATORS

DESIGNATOR / LOCATION	FIXED BASE OPERATOR	COMMERCIAL
COLORADO		
ASE - Aspen-Pitkin County / Sardy Field	Atlantic Aviation	970-920-2016
CEZ - Cortez / Municipal	Cortez Flying Service	970-565-3721
CAG - Craig / Moffat	Mountain Air Spray	970-824-6335
AJZ - Delta / Blake Field	Smiling Aviation	970-874-5181
DRO - Durango / La Plata County	Avflight Durango	970-259-7400
EGE - Eagle / Eagle County Regional	Vail Valley Jet Center	970-524-7700
GWS - Glenwood Springs / Municipal	No FBO (Call Manager)	970-618-0778 (C)
GJT - Grand Junction Regional	West Star Aviation	800-255-4193 970-243-7500
GUC - Gunnison / Gunnison County	Gunnison Valley Aviation	970-641-0526
AIB - Nucla / Hopkins Field	Montrose County	970-864-7111
20V - Kremmling / McElroy Airfield	Alpine Wings	970-724-0611
LXV - Leadville / Lake County	Leadville Airport	719-486-0307
EEO - Meeker	Coulter Aviation	970-878-5045
MTJ - Montrose / Regional	Black Canyon Jet CTR	800-833-7099 970-249-7111
PSO - Pagosa Springs / Stevens Field	AVJET Corporation	970-731-2127 970-731-2179
4V0 - Rangely	Rangely Airport	970-675-2316

RIL – Rifle / Garfield County Regional	Atlantic Aviation	970-625-4833
TEX - Telluride / Regional	Telluride Regional Airport	970-728-5051 970-728-8603
33V - Walden / Jackson County	North Park Aviation	970-723-4660 970-846-6971
HDN - Hayden / Yampa Valley	Galaxy Aviation	877-276-3743 970-273-3743
UTAH		
BDG - Blanding / Municipal	Publicly owned	435-678-2791
CNY - Moab / Canyonlands Field	Redtail Aviation	435-259-7421
U69 - Duchesne / Municipal	City of Duchesne	435-738-2464
33U - Dutch John	Green River Flying Services	435-880-7991 435-880-7054
U34 - Green River / Municipal	Green River Aviation	435-637-9556
HVE - Hanksville	UT Division of Aeronautics	801-715-2260
PUC - Price / Carbon County	Redtail Aviation	435-637-9556
U64 - Monticello	City of Monticello	435-587-2271
74V - Roosevelt / Municipal	Integrity Air Services	435-722-4741
VEL - Vernal	Dinaland Aviation	435-789-4612
NEW MEXICO		
FMN - Farmington / Four Corners Regional	Atlantic Aviation	505-325-2867
WYOMING		
RWL - Rawlins Municipal/ Harvey Field	France Flying Service	307-324-2361 or 307-321-2273
RKS - Rock Springs / Sweetwater County	Sweetwater County Airport	307-352-6880
LAR – Laramie Regional Airport	Cowboy Aviation	307-742-4164

Appendix B
Department of the Interior
Aircraft Flight Request/Schedule

United States
Department of the Interior

AIRCRAFT FLIGHT REQUEST/SCHEDULE

1. Initial request information

Initial Date/Time:	To/From:	Phone Number:	Cost-Accounting Management Code(s):
Change #:		Billie Code (OAS A/C only):	Flight Schedule No.
6. Aircraft Info		FAA N#:	Pax Seats
Color:		Make/Model:	

Check one: Point-to-Point Mission Flight Desired A/C Type: Helicopter Airplane

Mission Objective/Special Needs:

Phone No.:

Pilot(s):

2. Passenger/Cargo Information – Indicate Chief of Party with an asterisk (*)

Name/Type of Cargo (last name, initial)	LBS or CU ft	Project Order/Request No.	Dept Arpt	Dest Arpt	Return to	Name/Type of Cargo (last name, initial)	LBS or CU ft	Project Order/Request No.	Dept Arpt	Dest Arpt	Return to

3. Flight Itinerary (For Mission-Type Flights, Provide Points of Departure/Arrival and Attach Map with Detailed Flight Route and Known Hazards Indicated)

Date	DEPART WITH		DEPART FROM		ARRIVE AT		DROP OFF		Key Points				
	No. PAX	Lbs	Airport/Place	ETD	ATD	Enroute ETE	Airport/Place	ETA	ATA	No. PAX	Lbs	Drop-Off Points, Refueling Stops, Flight Check-ins, Pickup Points	Info Relayed To/From

4. Flight Following:

<ul style="list-style-type: none"> <input type="checkbox"/> FAA IFR <input type="checkbox"/> Satellite <input type="checkbox"/> FAA VFR w/ check-in every <input type="checkbox"/> Minutes to <input type="checkbox"/> FAA or <input type="checkbox"/> Agency <input type="checkbox"/> Agency VFT with check-in via radio every <input type="checkbox"/> Minutes <p>Frequencies: _____</p>	<p>5. Method of Resource Tracking:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Phone <input type="checkbox"/> To Scheduling Dispatcher@ <input type="checkbox"/> Prior to Takeoff <input type="checkbox"/> Each Stop Enroute <input type="checkbox"/> Arrival at Destination <input type="checkbox"/> To: <input type="checkbox"/> @ <input type="checkbox"/> (Other Office) (Phone Number)
<p>7. Administrative Type of Payment Document:</p> <ul style="list-style-type: none"> <input type="checkbox"/> OAS-23 or OAS 2 <input type="checkbox"/> FS 6500-122 <input type="checkbox"/> Other: <p>Route Document To: _____</p> <p>9. Close-out Closed by: _____</p>	<p>8. Review (if applicable)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Hazard Analysis Performed <input type="checkbox"/> Dispatch/Aviation Mgr. Checklist <input type="checkbox"/> Other: <p>Date/Time: _____ / _____</p>

HAZARD ANALYSIS AND DISPATCH/AVIATION MANAGER CHECKLIST

<p>I. MISSION FLIGHT HAZARD ANALYSIS (fire flights exempt provided a pre-approved plan is in place). The following potential hazards in the area of operations have been checked, have been identified on flight itinerary map, and will be reviewed with Pilot and Chief-of-Party prior to flight:</p>	
<p><input type="checkbox"/> Military Training Routes (MTRs) or Special-Use Airspace (MOAs, Restricted Areas, etc.)</p> <p><input type="checkbox"/> Areas of high-density air traffic (airports); Commercial or other aircraft</p> <p><input type="checkbox"/> Wires/transmission lines; wires along rivers or streams or across canyons</p> <p><input type="checkbox"/> Weather factors: wind, thunderstorms, etc.</p>	<p><input type="checkbox"/> Towers and bridges</p> <p><input type="checkbox"/> Other aerial obstructions:</p> <p><input type="checkbox"/> Pilot flight time/duty day limitations and daylight/darkness factors</p> <p>SUNRISE: _____</p> <p>SUNSET: _____</p> <p><input type="checkbox"/> Limited flight following communications</p>
<p><input type="checkbox"/> High elevations, temperatures, and weights:</p> <p>MAX LANDING ELEV (MSL): _____</p> <p>MIN. FLIGHT ALTITUDE AGL: _____</p> <p><input type="checkbox"/> Transport of hazardous materials</p> <p><input type="checkbox"/> Other: _____</p>	
<p>II. DISPATCHER/AVIATION MANAGEMENT CHECKLIST</p>	
<p><input type="checkbox"/> Pilot and aircraft carding checked with source list and vendor; carding meets requirements;</p> <p><input type="checkbox"/> <u>OR</u>, Necessary approvals have been obtained for use of uncarded cooperators, military, or other-government agency aircraft and pilots</p> <p><input type="checkbox"/> Check with vendor that an aircraft with sufficient capability to perform mission safely has been scheduled</p> <p><input type="checkbox"/> Qualified Aircraft Chief-of-Party has been assigned to the flight (noted on reverse)</p> <p><input type="checkbox"/> All DOI passengers have received required aircraft safety training;</p> <p><input type="checkbox"/> <u>OR</u>, Aviation manager will present detailed safety briefing prior to departure;</p> <p><input type="checkbox"/> Bureau Aircraft Chief-of-Party will be furnished with a Chief-of-Party/Pilot checklist and is aware of its use</p>	
<p>III. APPROVALS</p>	
<p>Note: Reference Handbook 9420 for approval(s) required.</p>	
<p>A. MISSION FLIGHT: HAZARD ANALYSIS PERFORMED BY: _____</p> <p style="text-align: center; font-size: small;">Chief-of-Party Signature</p>	
<p>B. MISSION FLIGHT: HAZARD ANALYSIS REVIEWED BY: _____</p> <p style="text-align: center; font-size: small;">Dispatcher Or Aviation Manager Signature Required</p>	
<p>C. IF NON-FIRE, ONE-TIME (NON-RECURRING), SPECIAL-USE MISSION, SIGNATURE OF LINE MANAGER IS REQUIRED **:</p> <p>_____ DATE: _____</p>	
<p>D. THIS FLIGHT IS APPROVED BY (Authorized Signature): _____</p> <p style="text-align: right;">DATE: _____</p>	
<p style="font-size: small;">** For recurring Special-Use Missions, signature is required on Special-Use Air Safety Plan, and not required here.</p>	

Appendix C

Project Aviation Safety Plan



***Project Aviation Safety Plan
U.S Department of the Interior
National Park Service***

This Project Aviation Safety Plan (PASP) is specific to _____
Procedures outlined within this document follow standards set forth in the Park Aviation Management Plan, NPS RM-60, DM350-354 and, the Interagency Helicopter Operations Guide (IHOG). This plan will be reviewed with all individuals participating in this mission prior to commencing operations.

Requested by Project Manager: _____ Date: _____

Reviewed by Park Aviation Manager: _____ Date: _____

Reviewed by Flight Manager: _____ Date: _____

Approved by: _____ Date: _____

National Park – Project Aviation Safety Plan

Section 1 – Project Manager Completion

Project Manager:
Job Title:
Unit:
Phone Number:

Project Name and Objectives:

Justification:

Project Dates: *(List specific dates or time frames if flexible)*

Project Location: *(Provide a latitude and longitude and geographic reference; attach map for large geographic operational area)*

Personnel Participant Requirements

Projected Cost of Aviation Resources:

Charge Code:

Aircraft: *(if known)*

Pilot: *(if known)*

Refueling

Aircraft security

Materials to be transported: *(Type, size, quantity, weight and special needs of the material to be transported)*

Flight Manager Assigned to this project:

The GAR model is used during planning to identify risk and present mitigation recommendations to the Park Aviation Manager.

Category	Description	Risk 1-10	Mitigation(s)
Supervision	Presence, accessibility and effectiveness of leadership for all teams and personnel. Clear chain of command.		
Planning	Current SOP/Operational Guidelines, team trained in accordance with same. Adequate mission planning time. Required equipment and associated training is provided. Briefs/debriefs planned, team input solicited.		
Contingency Resources	MOUs in place with participating cooperators. Planning accomplished with cooperators. Shared communications plan and frequencies.		
Communication	Infrastructure: radio communications possible throughout area of operations (presence of portable repeaters). Communication plan established/rehearsed.		
Team Selection	Level of individual training and experience. Cohesiveness and atmosphere that values input/self critique.		
Team Fitness	Level of overall physical fitness of team. Level of crew rest/fatigue and overall morale. Team members with major life events/distractions.		
Environment	Extreme temperatures, elevation, difficulty of terrain (aspect, foliage, slope, etc.), long approach, remoteness.		
Incident Complexity	Severity and probability of mishap. Potential for incident that would tax the current staffing levels.		
TOTAL			

Mitigations should be considered for any category rated higher than 5.

Overall Mission risk:

Green (1-35)	Amber (36-60)	Red (61-80)
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CHARACTERISTICS OF A SAFE OPERATION

- ✓ Well briefed
- ✓ Clear desired results
- ✓ Clear team expectations
- ✓ Clear responsibilities
- ✓ Identification of available resources
- ✓ Established climate for learning
- ✓ Climate that values input
- ✓ Positive attitude/High morale
- ✓ High degree of accountability at all levels
- ✓ Atmosphere of self-critique

BRIEFING FORMAT FOR EMERGENCIES:

- ✓ Here's what I think we face;
- ✓ Here's what I think we should do;
- ✓ Here's why;
- ✓ Here's what we should keep an eye on
- ✓ Now, talk to me.

AFTER ACTION REVIEW

- ✓ What was planned?
 - Incident objectives and expected actions
- ✓ What actually happened?
 - Identify effective and non-effective performance
 - Review any non SOP actions or safety concerns
- ✓ Why did it happen?
 - Discuss reasons for ineffective or unsafe performance
 - Concentrate on WHAT, not WHO, is right
- ✓ What can we do next time?
 - Determine how to apply lessons learned next time

National Park – Project Aviation Safety Plan Section 2 – Flight Manager

Flight Manager Assigned:
Job Title:
Unit:
Phone Number:

Existing Memorandum of Understanding and Standard Operating Procedures

Operational Environment Considerations

(Environmental conditions are those conditions over which there is no human control. Forecast or known environmental conditions are not mishap cause factors. For example, structural damage caused by flying into forecast severe turbulence is NOT a mishap causal factor. A pilot's decision to fly into forecast or known severe turbulence is a causal factor. Cause factors are normally under human control and can be eliminated. Managers must be aware that their actions may encourage pilots to operate beyond existing capability. Pilots must be ever cognizant of environmental conditions in which they are expected to operate safely and are the final authority relative to a GO/NO-GO decision based upon environmental and safety considerations)

* Get a current weather brief and check weather forecasts before every flight. Be alert for weather deterioration. Do not attempt VFR flight when there is a probability of weather being below FAA minimums at your destination, or in the intended operating area.

* Study and become familiar with unique geographical conditions in the area in which you intend to operate. Know your aircraft's performance capability. If you are flying in mountainous terrain, be aware of standing lenticular or mountain wave conditions. Exercise caution when winds are greater than 20 knots or when wind gust spread exceeds 10 knots. Stop flight operations when winds are greater than 30 knots or when wind gust spread exceeds 15 knots.

* Know your own capability. It is the pilot's responsibility to ensure that he or she is qualified for the flight, that the aircraft is properly equipped for the flight, and that the flight is flown according to the appropriate regulations and aircraft operating limitations.

* Conduct a brief operational risk assessment prior to each flight. Aircraft equipment, standard operating procedures, charts, detailed checklists, or recommended avoidance techniques will not prevent CFIT if flight crews are not adequately prepared with risk mitigations.

Pilot and Duty Day Limitations

Flight Following:

(As a potential lifesaving condition, each bureau should include a flight following requirement in the aircraft mishap prevention plan. This plan should specify the method or procedure to be used that will accommodate communications from mission personnel (or the pilot) to the flight following facility at predetermined intervals. Additional information concerning flight following is contained in 351 DM 1)

During flight operations, flight following will be performed by the Helicopter Manager as the primary individual responsible. The helicopter manager will update Dispatch on a regular basis regarding the status of the air operations. If communications cannot be maintained, Dispatch will assume flight following duties for that time that the aircraft cannot communicate with the Helicopter Manager. The following frequencies will be utilized:

Aircraft should enter the Park using Fire Direct (172.775) and make contact with Yosemite Emergency Communications Center (ECC) for local flight following. The ECC can be contacted by phone at 209-379-1998. Aircraft should contact the ECC for flight following when entering or exiting the park for refueling flights.

Our authorized and assigned frequency for air to ground contacts is NPS Air to Ground (168.5625). NPS Air to Ground should not be used as an operational frequency.

Function	Primary Frequency	Purpose
Flight Following		
Air-to-Ground		
Air-to-Air	N/A – only one aircraft committed to the mission	Used when several air assets are flying in the same general area
Tactical Ground		
Air Guard		

*The operational/tactical frequency will be determined and confirmed on the day of the actual mission

Emergency Search and Rescue:

Ground personnel assigned to the project will be utilized for Emergency Search and Rescue. These personnel will be equipped with radios and will be briefed prior to the aviation operation. The briefing will include the following: safety approaching downed aircraft, location of battery and fuel shut-off switches, location of fire extinguishers and ELT, radio procedures, the Medical Plan located in the Project Plan, procedures to follow in case of fire, and other pertinent information related to emergency management. The helicopter manager will conduct this briefing. All ground personnel will be in position prior to the start of the project. The pilot will be thoroughly briefed upon arrival at the project helispot/helibase. The Helicopter Manager in the event of a mishap will contact Yosemite ECC and request to activate the Aviation Mishap Response Guide and Checklist.

Aerial Hazard Analysis:

A review of the Park's Aviation Hazard Map will become part of the pilot briefing.

Protective Clothing/Equipment:

NPS ground personnel at the LZ and working in the field underneath a hovering helicopter will wear PPE including hard hat/helmet, eye protection, ear protection, nomex clothing, gloves, and full leather boots.

All PPE associated with helicopter operations will be utilized by all personnel participating in the project. The helispot/helibase will be equipped with fire extinguishers, extrication kit, crash kit, response vehicle, radios, and trauma kit.

Load Calculations and Weight-and-Balance:

(It is imperative that proper consideration and planning be given to the aircraft weight and balance computation and subsequent loading. The actual weight of personnel and/or cargo must be considered relative to environmental and aircraft performance capabilities. This will be accomplished for each takeoff and landing for all aircraft)

The pilot will complete an agency approved load calculation from the aircraft flight manual charts to include HIGE, HOGE, and jett. The helicopter manager will review the load calculation and the allowable payload discussed with project participants. Copies of these load calculations will be retained for the permanent record and submitted to the flight manager for filing. Permanent records will be kept on file with the Park Aviation Manager.

Risk and Hazard Analysis

Complete Part 1 Hazard Assessment

Complete Part 2 Risk Assessment

Complete Part 3 Final Determination for Risk and Hazard Analysis

National Park – Project Aviation Safety Plan

Section 3 – Park Aviation Manager Completion

Park Aviation Manager:

Job Title:

Unit:

Phone Number:

PART 1 HAZARD ASSESSMENT: The following potential hazards in the area of operations have been checked by the flight manager, have been identified on flight itinerary map, and will be reviewed with Pilot prior to flight.

Yes No	Yes No	Yes No
<input type="checkbox"/> <input type="checkbox"/> Military Training Routes (MTRs) or Special-Use Airspace (MOAs, Restricted Areas, etc) are within the project area? If yes, has dispatch deconflicted? <input type="checkbox"/> <input type="checkbox"/> Areas of high-density air traffic (airports); Commercial or other aircraft <input type="checkbox"/> <input type="checkbox"/> Wires/transmission lines; wires along rivers or streams or across canyons <input type="checkbox"/> <input type="checkbox"/> Weather factors; wind, thunderstorms, etc:	<input type="checkbox"/> <input type="checkbox"/> Towers and bridges within flight path or project area <input type="checkbox"/> <input type="checkbox"/> Other aerial obstructions <input type="checkbox"/> <input type="checkbox"/> Pilot flight time/duty day limitations and daylight/ darkness factors – Obtain the following from Yosemite ECC SUNRISE _____ SUNSET _____ <input type="checkbox"/> <input type="checkbox"/> Limited flight following communications?	<input type="checkbox"/> <input type="checkbox"/> High elevations, temperatures, and weights: <input type="checkbox"/> <input type="checkbox"/> Transport of hazardous materials? OTHER: Current Environmental Conditions: Obtain from Yosemite ECC MAX LANDING ELEV (MSL): MIN FLIGHT ALTITUDE AGL: MAXIMUM TEMPERATURE: MINIMUM TEMPERATURE: MAXIMUM WIND SPEED: WIND DIRECTION:
<input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>		

National Park – Project Aviation Safety Plan

Section 3 – Park Aviation Manager Completion

PART 2 RISK ASSESSMENT

<p>METHOD N/A Yes No</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is there an alternative method that would accomplish the mission more safely and/or efficiently including accomplishment by ground methods? If yes, explain why the use of aviation assets is needed.</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is the method selected approved and do detailed instructions for safe accomplishment exist? If no, complete worksheet.</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Have adequate flight following and communications methods been established? If no, complete worksheet.</p>	<p>MEDIUM N/A Yes No</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Can factors of terrain, altitude, temperature, or weather that could adversely affect the mission's success be mitigated? If no, complete worksheet.</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Will the mission be conducted at low (below 500' AGL) or high altitudes- can the same objective be achieved by flying at a higher altitude AGL? If performing below 500 AGL, assess in worksheet</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> If low-level flight, have all know aerial hazards been identified during the planning process and are they know to all participants? If no, complete worksheet</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Flight hazard maps have been supplied to Flight Manager for non-fire low-level missions</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is there is a potential for an airspace conflict (military, media, or sightseeing aircraft), have mitigating measures been taken? If unresolved conflict, complete worksheet.</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Have adequate landing areas been identified and/or improved to minimum requirements? If no, complete worksheet</p>	<p>HUMAN N/A Yes No</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is the pilot properly carded for the mission to be conducted and checked with source list and vendor? If no, complete worksheet</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Have necessary approvals have been obtained for use of uncarded cooperators, military, or other government agency aircraft and pilots? If no, consult with PAM.</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Will the flight be conducted within the pilot flight time/duty day requirements and limitations? If no complete worksheet</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Have the minimum number of personnel necessary to accomplish the mission safely been assigned, and do they meet personnel qualifications and experience requirements? If no, complete worksheet</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Will adequate personnel (flight and ground) and Pilot briefings be conducted prior to the flight? If no complete worksheet</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Are users aware that the Pilot-in-command has final authority over any operations conducted involving the aircraft or its occupants? If no, provide in briefing.</p>
<p>MACHINE N/A Yes No</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is the aircraft capable of performing the mission in the environment (altitude, temperature, terrain, weather) where the operation will be conducted? If no, complete worksheet</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is the aircraft properly carded and/or approved for the intended mission? If no, complete worksheet</p>	<p>MANAGEMENT N/A Yes No</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is there a qualified Flight Manager assigned to the flight?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Best Value Determination has been completed and attached?</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Flight following has been arranged with another unit if flight crosses jurisdictional boundaries and communications cannot be maintained</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Means of flight following and resource tracking requirements have been identified</p>	<p><input checked="" type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input checked="" type="checkbox"/></p>

National Park – Project Aviation Safety Plan Section 3 – Park Aviation Manager Completion

PART 3 RISK AND HAZARD ANALYSIS WORKSHEET			
List the risk and hazards identified in the hazard assessment (part 1) and risk assessment (part 2) for the proposed mission. Use additional sheets if necessary.			
Describe the risks and hazards from the list above	Probability (A-E)	Effect (I-IV)	Risk Level

Mitigation Controls	Probability (A-E)	Effect (I-IV)	Risk Level

**NATIONAL PARK AVIATION MANAGEMENT FLIGHT PLANNING
PART 3 RISK AND HAZARD ANALYSIS**

RISK ANALYSIS MATRIX			HAZARD PROBABILITY				
			Frequent	Likely	Occasional	Seldom	Unlikely
			A	B	C	D	E
EFFECT	Catastrophic	I	Extreme		High		Medium
	Critical	II	Extreme	High		Medium	Low
	Moderate	III	High	Medium		Low	
	Negligible	IV	Medium	Low			

Pre-mitigation hazards rate out as: High to Extreme

Post-Mitigation hazards rate out as: Low to Medium

Hazard Risk Assessment Code	Risk Level	Appropriate Management Level for Go/No Go Decision
I-A, I-B, II-A	I	Park Superintendent
I-C, I-D, II-B, II-C, II, III-A	II	Chief Ranger
I-E, II-D, III-B, III-C, IV-A	III	Park Aviation Manager
II-E, III-D, III-E, IV-B, IV-C, IV-D, IV-E	IV	Flight Manager

Appropriate management level decision for go/no-go performed by:

Park Superintendent Chief Ranger Park Aviation Manager Flight Manager

Approved by: _____ Date: _____

**UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE –
AIRCRAFT FLIGHT REQUEST and NOTIFICATION**

2. AIRCRAFT INFORMATION

FAA#:

1. INITIAL REQUEST INFORMATION

Cost-Account/Management Code(s)

Billee Code (OAS A/C only)

Flight Schedule No.

PAX Seats

Initial Date/Time:

To/From:

Phone Number:

Make/Model

Color

Check one: Point-to-Point Flight

Mission Flight

Desired A/C Type: Helicopter Airplane

Vendor

Mission Objective/Special Needs:

Phone No.

Pilot(s)

3. PASSENGER/CARGO INFORMATION – INDICATE FLIGHT MANAGER WITH AN ASTERISK (*)

NAME/TYPE OF CARGO	LBS OR CU FT	PROJECT ORDER/REQUEST NO.	DEPT ARPT	DEST ARPT	RETURN TO	NAME/TYPE OF CARGO	LBS OR CU FT	PROJECT ORDER/REQUEST NO.	DEPT ARPT	DEST ARPT	RETURN TO

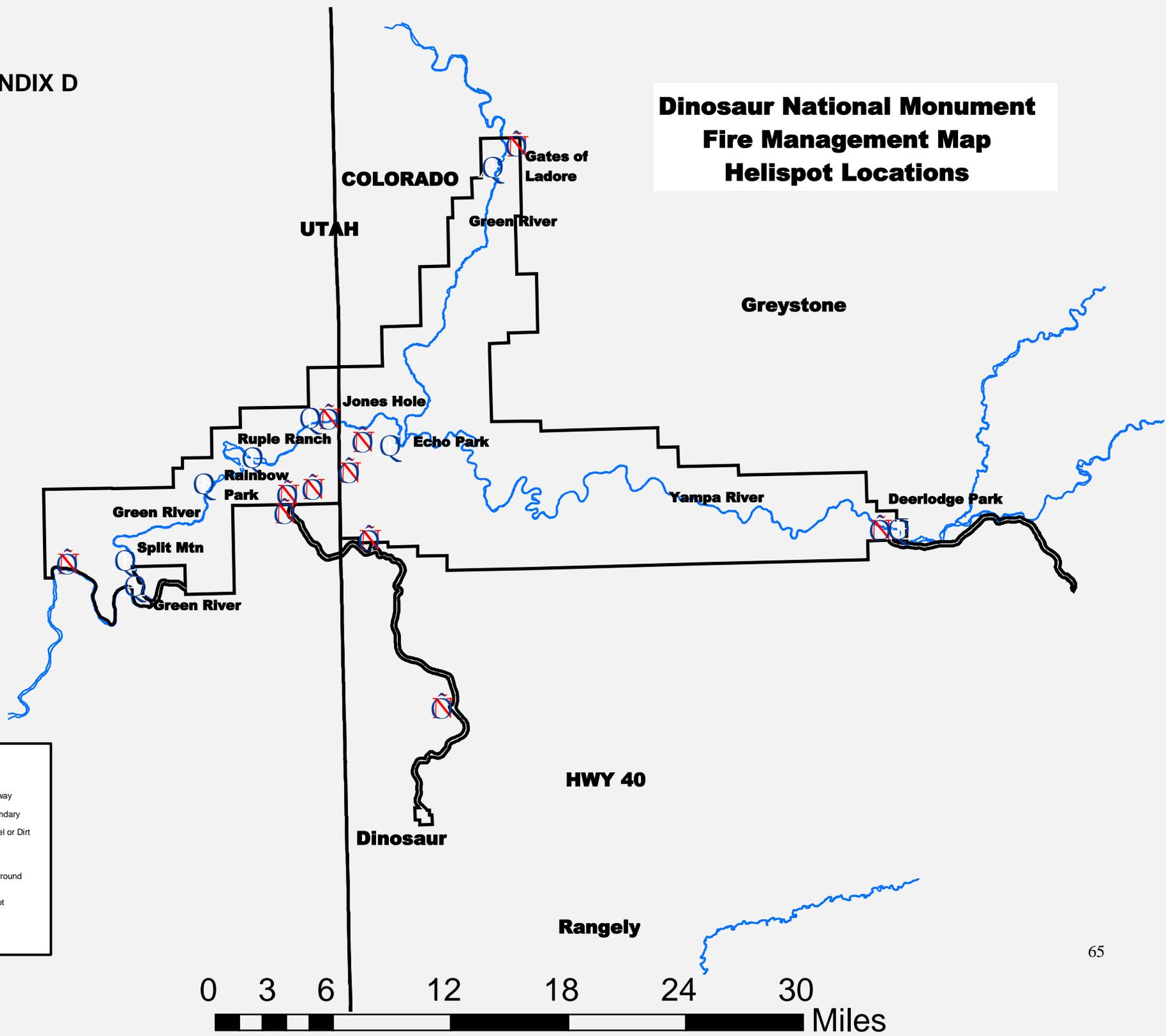
4. FLIGHT ITINERARY (FOR MISSION-TYPE FLIGHTS, PROVIDE POINTS OF DEPARTURE/ARRIVAL AND ATTACH MAP WITH DETAILED FLIGHT ROUTE AND KNOWN HAZARDS INDICATED)

DEPART WITH			DEPART FROM			ENROUTE	ARRIVE AT			DROP OFF		KEY POINTS	INFO RELAYED
Date	No. Pax	Lbs.	Airport/Place	ETD	ATD	ETE	Airport/Place	ETA	ATA	No. Pax.	Lbs.	Drop-Off Points, Refueling Stops, Flight Check-Ins, Pickup Points	To/From

Appendix D

Helispot Map

**Dinosaur National Monument
Fire Management Map
Helispot Locations**



Appendix E

Helispot Lat and Longs

Name	DEG MM,MMM	DEG.MM.SS	Surface	Elevation
Park HQ	N 40 14.604' W 108 58.404'	N 40 14' 36" W 108 58' 21"	Grass	5881
Escalante Overlook	N 40 19.517' W 108 58.700'	N 40 19' 31" W 108 56' 45"	Asphalt	7608
Canyon Overlook	N 40 27.083' W 109 00.917'	N 40 27' 5" W 109 0' 55"	Grass/Rock/Asphalt	7914
Dugway Overlook	N 40 28.350' W 109 05.800'	N 40 28' 21" W 109 5' 48"	Asphalt/Gravel	7606
Island Park Overlook	N 40 29.167' W 109 05.800'	N 40 29' 10" W 109 5' 37"	Asphalt/Gravel	7528
Iron Springs Bench Overlook	N 40 29.167' W 109 04.133'	N 40 29' 24" W 109 4' 13"	Asphalt	7623
Echo Park Overlook	N 40 30.850' W 109 01.983'	N 40 30' 51" W 109 2' 01"	Asphalt	7673
Harpers Corner Overlook	N 40 31.450' W 109 01.167'	N 40 31' 27" W 109 1' 10"	Asphalt	7591
Echo Park Ranger Station	N 40 31.250' W 108 59.500'	N 40 31' 12" W 108 59' 26"	Grass	5148
Deer Lodge Ranger Station	N 40 26.768' W 108 30.736'	N 40 26' 46" W 108 30' 42"	Grass	5626
Lodore Ranger Station	N 40 43.595' W 108 53.222'	N 40 43' 36" W 108 53' 11"	Grass	5397
Quarry Visitor Center (Utah)	N 40 26.417' W 109 18.039'	N 40 26' 25" W 109 17' 59"	Asphalt	4994

Latitude and Longitude for DINO Fire Towers

Roundtop	40 26.50	X	108 55.05
Zenobia	40 36.58	X	108 52.18

Latitude and Longitude for DINO River Campsites

Canyon of Lodore

Lodore Station	40 43.5	X	108 53.5
Wade and Curtis	40 41.7	X	108 54.3
Pot Creek	40 37.9	X	108 56.4
Kolb	40 37.4	X	108 56.4
Rippling Brook	40 35.3	X	108 59.9
Wild Mountain	40 34.4	X	108 58.7
Limestone	40 33.5	X	108 57.5
Echo Park	40 31.25	X	108 59.5

Yampa Canyon

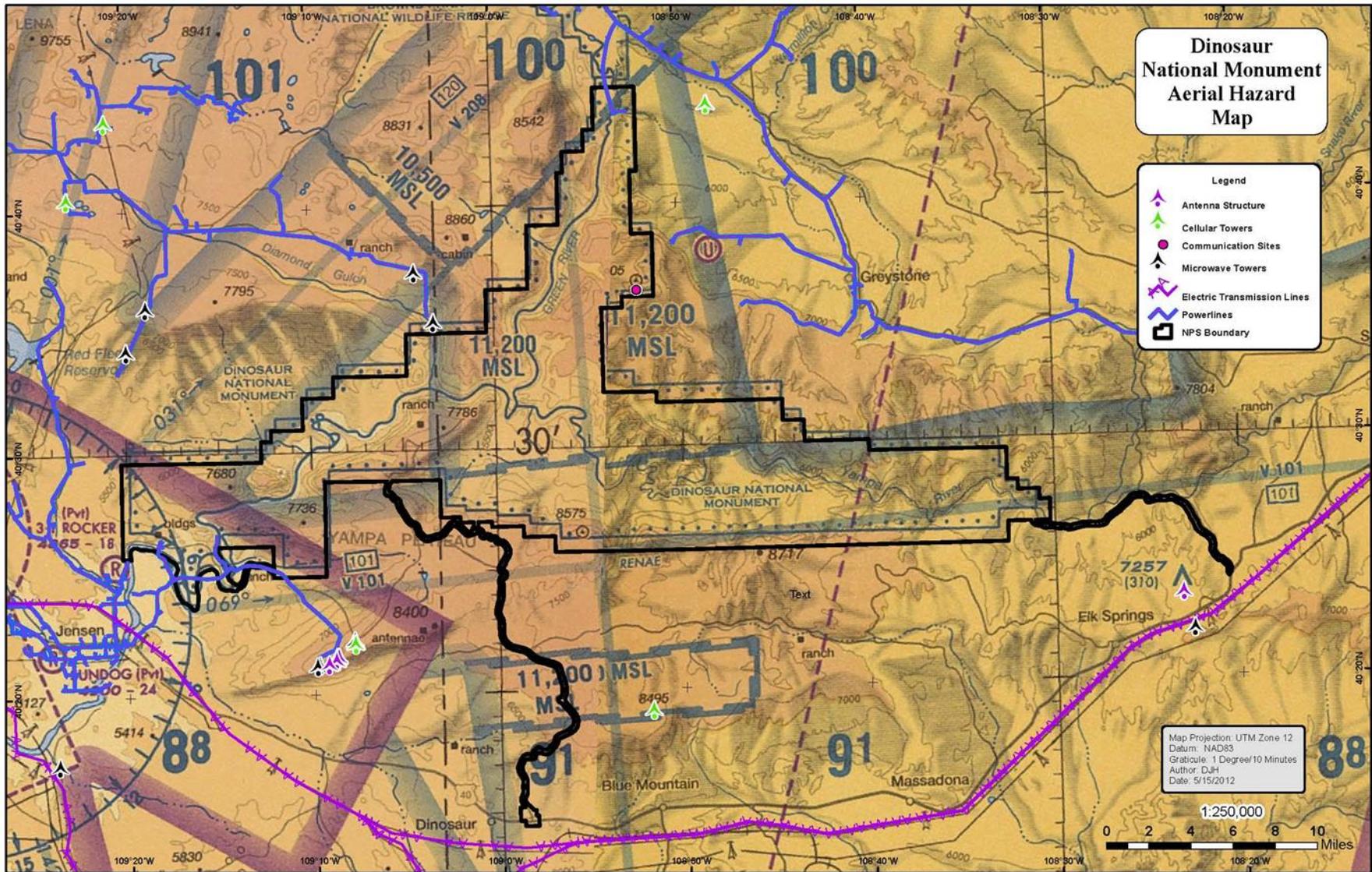
Deerlodge	40 26.83	X	108 00.51
Anderson Hole	40 28.3	X	108 34.7
Upper Tepee	40 27.4	X	108 38.5
Tepee Hole	40 28.3	X	108 38.2
Big Joe	40 30.0	X	108 48.9
Harding Hole	40 27.9	X	108 50.7
Mathers Hole	40 28.3	X	108 52.0
Laddie Park	40 28.3	X	108 54.6
Warm Springs	40 31.8	X	108 55.8
Box Elder	40 31.3	X	108 57.5

Whirlpool/Split Mountain

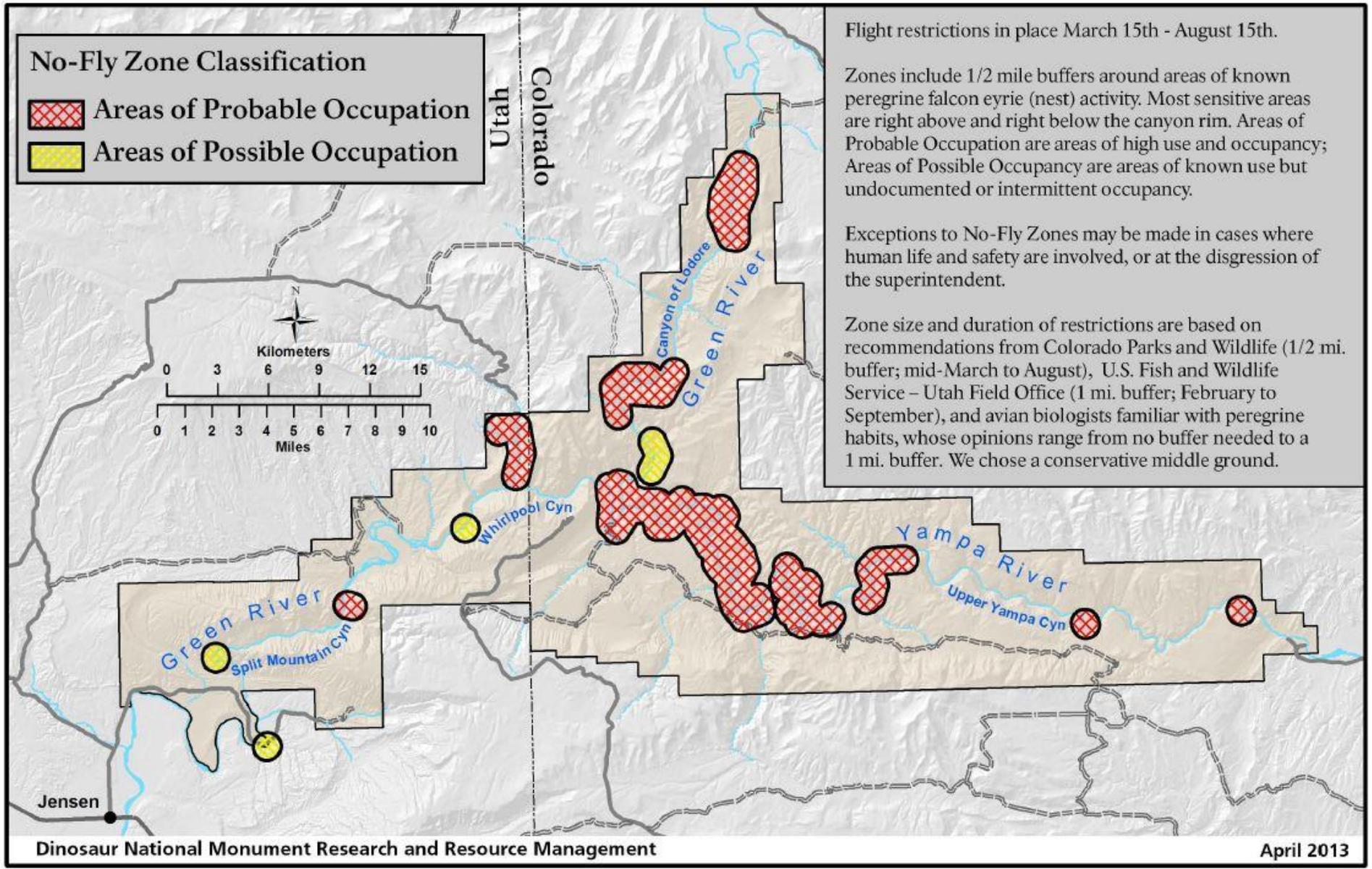
State Line	40 32.3	X	109 02.6
Jones Hole	40 32.6	X	109 03.5
Compromise	40 32.4	X	109 04.6
The Cove	40 30.7	X	109 07.5
Big Island	40 30.8	X	109 07.75
Island Park	40 31.0	X	109 09.3
Rainbow Park	40 29.75	X	109 10.33
Split Mountain	40 26.5	X	109 15.5

Appendix F

Dinosaur NM Aerial Hazard Map



Appendix G
Peregrine Nesting Flight Restriction Map



Appendix H

Sunrise/Sunset Table

Location: W109 01, N40 14

DINOSAUR, COLORADO
Rise and Set for the Sun for 2016

Astronomical Applications Dept.
U. S. Naval Observatory
Washington, DC 20392-5420

Mountain Standard Time

Day	Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.			
	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set														
	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
01	0739	1701	0725	1734	0649	1808	0559	1841	0515	1912	0448	1940	0450	1949	0514	1930	0544	1847	0613	1757	0646	1712	0720	1651		
02	0739	1701	0724	1735	0647	1809	0557	1842	0514	1913	0448	1941	0451	1949	0515	1929	0545	1845	0614	1756	0647	1711	0721	1650		
03	0739	1702	0723	1737	0646	1811	0556	1843	0512	1914	0448	1941	0452	1949	0516	1927	0546	1844	0615	1754	0649	1710	0722	1650		
04	0739	1703	0722	1738	0644	1812	0554	1844	0511	1915	0447	1942	0452	1949	0517	1926	0547	1842	0616	1752	0650	1709	0723	1650		
05	0739	1704	0721	1739	0643	1813	0553	1845	0510	1916	0447	1943	0453	1949	0518	1925	0548	1840	0617	1751	0651	1708	0724	1650		
06	0739	1705	0720	1740	0641	1814	0551	1846	0509	1917	0447	1943	0453	1948	0519	1924	0549	1839	0618	1749	0652	1707	0725	1650		
07	0739	1706	0719	1742	0639	1815	0549	1847	0508	1918	0447	1944	0454	1948	0520	1923	0550	1837	0619	1748	0653	1706	0726	1650		
08	0739	1707	0718	1743	0638	1816	0548	1848	0507	1919	0446	1944	0455	1948	0521	1921	0551	1835	0620	1746	0654	1705	0726	1650		
09	0738	1708	0717	1744	0636	1817	0546	1849	0506	1920	0446	1945	0455	1947	0522	1920	0552	1834	0621	1745	0655	1704	0727	1650		
10	0738	1709	0716	1745	0635	1818	0545	1850	0505	1921	0446	1945	0456	1947	0523	1919	0553	1832	0622	1743	0657	1703	0728	1650		
11	0738	1710	0715	1746	0633	1819	0543	1851	0504	1922	0446	1946	0457	1946	0524	1918	0554	1830	0623	1741	0658	1702	0729	1650		
12	0738	1711	0713	1748	0631	1820	0542	1852	0503	1923	0446	1946	0457	1946	0525	1916	0555	1829	0624	1740	0659	1701	0730	1650		
13	0738	1712	0712	1749	0630	1821	0540	1853	0502	1924	0446	1947	0458	1945	0526	1915	0556	1827	0625	1738	0700	1700	0730	1651		
14	0737	1713	0711	1750	0628	1822	0539	1854	0501	1925	0446	1947	0459	1945	0527	1914	0556	1825	0626	1737	0701	1700	0731	1651		
15	0737	1714	0710	1751	0627	1824	0537	1855	0500	1926	0446	1948	0500	1944	0528	1912	0557	1824	0627	1735	0702	1659	0732	1651		
16	0736	1715	0708	1752	0625	1825	0536	1856	0459	1927	0446	1948	0500	1944	0529	1911	0558	1822	0628	1734	0704	1658	0733	1651		
17	0736	1716	0707	1754	0623	1826	0534	1858	0458	1928	0446	1948	0501	1943	0530	1909	0559	1820	0630	1732	0705	1657	0733	1652		
18	0736	1718	0706	1755	0622	1827	0533	1859	0457	1928	0446	1949	0502	1942	0531	1908	0600	1819	0631	1731	0706	1657	0734	1652		
19	0735	1719	0704	1756	0620	1828	0531	1900	0456	1929	0446	1949	0503	1941	0532	1907	0601	1817	0632	1730	0707	1656	0734	1653		
20	0734	1720	0703	1757	0619	1829	0530	1901	0455	1930	0447	1949	0504	1941	0533	1905	0602	1815	0633	1728	0708	1655	0735	1653		
21	0734	1721	0702	1758	0617	1830	0528	1902	0455	1931	0447	1949	0505	1940	0534	1904	0603	1814	0634	1727	0709	1655	0735	1654		
22	0733	1722	0700	1759	0615	1831	0527	1903	0454	1932	0447	1949	0505	1939	0535	1902	0604	1812	0635	1725	0710	1654	0736	1654		
23	0733	1723	0659	1800	0614	1832	0525	1904	0453	1933	0447	1950	0506	1938	0535	1901	0605	1810	0636	1724	0711	1654	0736	1655		
24	0732	1725	0658	1802	0612	1833	0524	1905	0453	1934	0448	1950	0507	1937	0536	1859	0606	1809	0637	1723	0713	1653	0737	1655		
25	0731	1726	0656	1803	0610	1834	0523	1906	0452	1935	0448	1950	0508	1937	0537	1858	0607	1807	0638	1721	0714	1653	0737	1656		
26	0730	1727	0655	1804	0609	1835	0521	1907	0451	1935	0448	1950	0509	1936	0538	1856	0608	1805	0639	1720	0715	1652	0737	1657		
27	0730	1728	0653	1805	0607	1836	0520	1908	0451	1936	0449	1950	0510	1935	0539	1855	0609	1804	0641	1719	0716	1652	0738	1657		
28	0729	1729	0652	1806	0605	1837	0519	1909	0450	1937	0449	1950	0511	1934	0540	1853	0610	1802	0642	1717	0717	1651	0738	1658		
29	0728	1731	0650	1807	0604	1838	0517	1910	0450	1938	0450	1950	0512	1933	0541	1852	0611	1801	0643	1716	0718	1651	0738	1659		
30	0727	1732			0602	1839	0516	1911	0449	1939	0450	1950	0513	1932	0542	1850	0612	1759	0644	1715	0719	1651	0738	1700		
31	0726	1733			0601	1840			0449	1939			0513	1931	0543	1848			0645	1714			0739	1700		

Add one hour for daylight time, if and when in use.

Appendix I

Contact list for River Outfitters

Adrift Adventures	24070 CR 301 Buena Vista, CO 81211	719 395-2466
	PO Box 192 9500 E 6000 S Jensen, UT 84035	435 789-3600
Adventure Bound	2392 H Rd Grand Junction, CO 81505	970 245-5428
American River Touring Ass.	24000 Casa Loma Rd Groveland, CA 95321	209 962-7873
Dinosaur River Expeditions	PO Box 295 Vernal, UT 84078	800 345-7238
Eagle Outdoors	2471 South 150 West Bountiful, UT 84010	801 916-5522
Hatch and Oars	PO Box 12 Angels Camp, CA 95222	800 342-8243
Holiday Expeditions	544 East 3900 South Salt Lake City, UT 84107	801 266-2087
NOLS	PO Box 1304 Vernal, UT 84078	435 781-0305
Colorado Outward Bound	16 Ranch Rd Moab, UT 84532	435 259-5355
Sheri Griffith	PO Box 1324 Moab, UT 84532	435 259-8229

Appendix J

Course Number	Title	Length	IAT Requirements				DOI Supervisor	Aviation Mgr
			Aircrew Member	Aircrew Member w/ Hazmat	Helicopter Mgr	Helicopter Mgr - Resources -		
A-100	Basic Aviation Safety		x	x	x	x		x
A-103	FAA NOTAM System							x
A-107	Aviation Policy and Regulations I					x		x
A-109	Aviation Radio Use				x	x		
A-110	Aviation Transportation of Hazardous Materials			x	x	x		x
A-112	Mission Planning and Flight Request Process				x	x		x
A-115	Automated Flight Following				x	x		x
A-116	General Awareness Security Training		x	x	x	x		x
A-200	Mishap Review		x	x	x	x	x	x
A-202	Interagency Aviation Organizations							x
A-203	Basic Airspace							x
A-204	Aircraft Capabilities and Limitations				x	x		x
A-205	Risk Management I				x	x		x
A-208	Aircraft and Pilot Approval							x
A-209	Helicopter Operations				x	x		
A-218	Aircraft Pre-Use Inspection					x		x
A-302	Personal Responsibility & Liability					x		x
A-303	Human Factors in Aviation					x		x
A-304	Aircraft Maintenance					x		
A-305	Risk Management II					x		x
A-306	Aviation Contract Administration I & II							x
A-307	Aviation Policy and Regulations II					x		x
A-309	Helicopter Flight Manuals					x		
A-310	Overview of Crew Resource Management					x		
A-311	Aviation Planning					x		x
M-3	DOI Aviation Management Training for Supervisors						x	

Appendix K

Policy References

The following sections of the Interior Department Manual define aviation policy:

Series Organization

- 112 DM Policy Management and Budget
 - Chapter 10 National Business Center

Series Aviation Management

- 350 DM – General Program Requirements
 - Chapter 1 General Administration
 - Chapter 2 Directive System of Office of Aircraft Services
- 351 DM – Aviation Operations
 - Chapter 1 Flight Operations Standards and Procedures
 - Chapter 2 Aircraft Equipment and Maintenance
 - Chapter 3 Flight Crewmember Policy
 - Chapter 4 Cooperator Aircraft
 - Chapter 5 Aviation Management of Service Support of for Non-Federal Government Entities
- 352 DM – Aviation Safety
 - Chapter 1 Aviation Safety Program
 - Chapter 2 Aircraft Program Evaluations
 - Chapter 3 Aircraft Mishap Notification, Investigation, and Reporting
 - Chapter 4 Aviation Awards Program
 - Chapter 5 Aircraft and Aviation Facility Security
- 353 DM Aviation Services Provided by OAS
 - Chapter 1 Aircraft Contracting
 - Chapter 2 Aircraft Acquisition and Disposition

Operational Procedure Memoranda

The Aviation Management Directorate also issues Operational Procedures Memoranda that have the effect of policy, but are in effect for defined periods of time, up to two years.

Current OPMs include:

AMD-OPM-TS	Aviation Management – 2011 OPM Transmittal Sheet
OPM11-01	Index of Department Manual (Aviation Management) Information
OPM11-02	Procedure for Completing AM Aircraft Flight/Use Reports (AMD-2) in Alaska
OPM11-03	Fleet Services Operational Procedures for Alaska Region Fixed Wing Aircraft
OPM11-04	Aviation User Training Program
OPM11-05	AM Designated Night Routes in Alaska
OPM11-06	Services Provided and Use Rates
OPM11-07	Improving the Management and Use of Government Aircraft
OPM11-07 appx 1	Circular No. A-126
OPM11-07 appx 2	Fiscal Responsibility and Reducing Perquisites
OPM11-07 appx 3	Use of Government-Owned and Operated Aircraft
OPM11-07 appx 4	Public Contract and Property Management
OPM11-07 appx 5	Flow Chart and Decision Process
OPM11-07 appx 6	Alaska Region Aircraft Maintenance System
OPM11-07 appx 7	Flow Chart and Decision Process

OPM11-07 appx 8	Instructions for SFTR Spreadsheet
OPM11-07 appx 9	Negative Report of Senior Federal Travel for the Period
OPM11-07 appx 10	Electronic Mail Addresses to Transmit Information For the Senior Federal Travel to AMD
OPM11-08	Planning, Budgeting and Acquisition of Aircraft Assets
OPM11-08 appx 1	OMB A-11 Part 7, Planning, Budgeting, Acquisition, and Management of Capital Assets
OPM11-08 appx 2	ASPMB memorandum
OPM11-08 appx 3	Capital Programming Guide
OPM11-08 appx 4	4-OMB A-11, Part 7, Exhibit-300, Aircraft & Vehicle Capital Asset Planning Desk Guide
OPM11-08 appx 5	Baseline Template – Update
OPM11-08 appx 6	Requirements Analysis Template
OPM11-08 appx 7	Business Case Analysis Template
OPM11-08 appx 8	Exhibit 300 Template
OPM11-08 appx 9	Annual Update Timeline Table #1
OPM11-08 appx 9	DOI Aircraft CPIC Process Timeline Table 2
OPM11-08 appx 9	DOI Aircraft CPIC Process
OPM11-09	Fuel Procurement Procedures
OPM11-11	DOI Use of Unmanned Aircraft Systems (UAS)
OPM11-12	Parking of Privately Owned Aircraft at Lake Hood Facility
OPM11-13	Fuel Quality Control / Fuel Site Inspection
OPM11-14	Alaska Region Aircraft Maintenance System
OPM11-15	Acquisition of Seat Fares In Alaska
OPM11-20	Drum Fuel Management
OPM11-21	Interagency Fire Helicopter Standards
OPM11-22	Pilot Qualifications and Training Program
OPM11-23	DOI Like Make and Models
OPM11-24	Pilot Review Board
OPM11-29	Special Use Activities and Revised Standards for Technical Oversight
OPM11-32	ACETA Helicopter Performance
OPM11-34	Volunteer Pilots
OPM11-35	Identification of End Product/Service and Flight Service Procurement
OPM11-36	Interagency Fire Standards for DOI Pilots
OPM11-38	Reporting of Flight Time
OPM11-39	DOI Use of Forest Service Procured Flight Services
OPM11-40	Approval for Single-Skid, Toe-in, and Hover Exit/Entry
OPM11-41	Interagency Fire Use of National Guard Helicopters
OPM11-46	Accepted Procedures for the Mixing and Loading of Retardant into SEAT Aircraft
OPM11-47	DOI Aviation Handbooks and Guides
OPM11-48	Helicopter Emergency Seating Positions
OPM11-50	Special MTGW Authority for Certain DMBM Cessna 206 Amphibious Aircraft
OPM11-54	Contract Pilots Flying Government-Owned Aircraft
OPM11-56	Grand Canyon National Park – Special Flight Rules Area

Appendix J

Websites

Office of Aviation Services

<http://oas.doi.gov/>

National Weather Service- Grand Junction Weather Forecast Office

<http://www.crh.noaa.gov/gjt/>

NPS Fire and Aviation Management

Internal: <http://inside.nps.gov/waso/waso.cfm?prg=73&lv=2>

External: <http://www.nps.gov/fire/>

USDA Forest Service Aviation Safety Center

http://www.fs.fed.us/fire/av_safety/

BLM Fire and Aviation Directorate

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

See and Avoid

<http://www.seeandavoid.org/>

National Search and Rescue Committee

<http://www.uscg.mil/hq/cg5/cg534/NSARC.asp>

Appendix K

Terms and Definitions

TERMS AND DEFINITIONS

Aircraft Accident

An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

Aircraft Incident

An occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

Airspace Conflict

A near mid-air collision, intrusion, or violation of airspace rules.

Aviation Hazard

Any condition, act, or set of circumstances that exposes an individual to unnecessary risk or harm during aviation operations.

Fatal Injury

Any injury which results in death within 30 days of the accident.

First Aid

Any medical attention that involves no medical bill. If a physician prescribes medical treatment for less than serious injury and makes a charge for this service, that injury becomes "medical attention."

Forced Landing

A landing necessitated by failure of engines, systems, or components which makes continued flight impossible, and which may or may not result in damage.

Flight Manager

Known as Chief of Party, is a passenger on a rotary or fixed wing aircraft who is in charge of the mission. If only one passenger, that person is the flight manager. Such persons must have completed Combination Helicopter/Airplane Safety (B3).

General Aviation

That portion of civil aviation that encompasses all facets of aviation except air carriers.

Incident with potential

An incident that narrowly misses being an accident and in which the circumstances indicate significant potential for substantial damage or serious injury. Final classification will be determined by the OAS Aviation Safety Manager.

Maintenance Deficiency

An equipment defect or failure which affects or could affect the safety of operations, or that causes an interruption to the services being performed.

Medical Attention

An injury, less than serious, for which a physician prescribes medical treatment and makes a charge for this service.

Non-chargeable Accidents

Those in which DOI was not exercising operation control over the aircraft at the time of the accident but in which DOI employees or DOI procured aircraft were involved.

Operator

Any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

Precautionary Landing

A landing necessitated by apparent impending failure of engines, systems, or components which makes continued flight inadvisable.

Appendix L

Memoranda of Understanding