

CHAPTER 2: PERSONNEL.

I. Introduction.

This chapter establishes common duties and responsibilities for individuals functioning in helicopter or helibase management positions. Position descriptions cover both incident and project operations. Minimum daily staffing requirements for fire helicopters are also established.

II. Qualifications, Certification, Currency and Experience.

To meet minimum qualification standards, an individual must be trained, experienced, current and certified. Many types of helicopter and helibase management positions exist, for incident and project applications. Training, experience and currency requirements for various positions are found in a variety of documents.

A. Incident (Fire and All-Risk) Helicopter and Helibase Management Positions.

Minimum qualification standards for individuals serving in helicopter and helibase management positions on wildland and prescribed fire are established by the National Wildfire Coordinating Group (NWCG) in the PMS 310-1, Wildland and Prescribed Fire Qualification System Guide. Each agency may require additional training, experience and currency standards of their employees, as long as they meet the 310-1 minimum standards. Certification in these positions utilizes the Incident Qualifications System (Red-card) and is normally authorized by the local unit Fire Management Officer.

B. Non-Incident (Resource) Helicopter and Helibase Management Positions.

Qualification and training standards for Project (non-fire) Helicopter and Helibase Management Standards are displayed in Charts 2-1, 2-2, 2-3 of this chapter. The local unit Aviation Manager has primary responsibility for certification in these positions. State or Regional aviation staff shall provide oversight, guidance and review for certification.

C. Specialized Helicopter Positions.

Minimum position qualification standards for many specialized helicopter positions are established in various interagency guides and handbooks. Examples of these include the Interagency Aerial Ignition Guide, Interagency Helicopter Rappel Guide, Shorthaul Handbook, Aerial Capture Eradication and Tagging of Animals (ACETA) Handbook, etc. State or Regional aviation staff shall provide oversight, guidance and certification.

Chart 2-1 –Resource Helicopter Manager Position Training, Qualifications and Experience Requirements

POSITION	PREREQUISITES	TRAINING REQUIREMENTS ⁺	CURRENCY
Resource Helicopter Manager¹	Successful training assignment(s) under the supervision of a Helicopter Manager	S-271 ² S-372 ²	Required attendance at RT-372, Experience in the position, either on project or incident, every three years
Project Helicopter Crew member	None	S-271	

Chart - 2-2 Helicopter Flight Manager Position Training, Qualifications and Experience Requirements

POSITION	PREREQUISITES	TRAINING REQUIREMENTS	CURRENCY
Helicopter Flight Manager³	Refer to the Interagency Aviation Use and Management Qualification Guide	Refer to the Interagency Aviation Use and Management Qualification Guide	Refer to the Interagency Aviation Use and Management Qualification Guide
Helicopter Passenger	None	Helicopter Safety Briefing	None

¹Position supervises operations involving transport of groups of personnel or cargo from/to unimproved landing sites, external load operations, or other complex special-use project operations.

²For Resource missions¹, the S-271 and/or S-372 courses should be tailored to the type of operation being conducted. However, the course must be maintained to meet the NWCG course length requirement.

³Individual supervises **non-recurring** missions limited to point to point transport of personnel from one helibase/airport to another helibase /airport, low and high level reconnaissance, and landings or takeoffs at unimproved sites; The Helicopter Flight Manager is **not** expected to fulfill all the duties of a qualified Resource Helicopter Manager. Rather, he/she is the government representative who coordinates with the pilot regarding the safety and efficiency of the flight.

Chart 2-3: Resource Helibase Position Training, Qualifications and Experience Requirements

POSITION	PREREQUISITES	TRAINING REQUIREMENTS	CURRENCY
For all positions below, prerequisites include successful training assignments on incidents or projects and the completion of a National Interagency Incident Management System (NIIMS) Position Task Book. If no Resource Training/Currency and a Resource Task Book exists for the position then Agency prescribed documentation should be established.			Experience in the position, either on project or incident, every three years.
Helibase Manager Type I	Helibase Manager Type II		
Helibase Manager Type II	Helicopter Manager	S-371, S-372	
Deck Coordinator	Helicopter Crew member, Parking Tender, Loadmaster, ABRO	S-271	
Takeoff and Landing Coordinator	Helicopter Crew member ABRO	S-271	
Aircraft Base Radio Operator (ABRO)	Helicopter Crew member	S-271	
Helispot Manager*	Helicopter Crew member,	S-271	
Loadmaster*	Helicopter Crew member	S-271	
Aircraft Timekeeper*	Helicopter Crew member	S-271	
Parking Tender*	Helicopter Crew member	S-271	

* NIIMS Position task books are not currently available for the noted positions.

III. Helicopter Management.

Chart 2-4 contains minimum staffing requirements for fire helicopters. Recommend that Exclusive Use staffing for off Unit Dispatch include the complete exclusive use crew.⁴

Chart 2-4: Minimum Daily Staffing Requirements for Fire Helicopters

TYPE HELICOPTER	FAA STANDARD / TRANSPORT CATEGORY	FAA Standard Category Temporarily Designated for Limited Use	FAA Standard Category Permanently Designated for Limited Use* or FAA Restricted Category
1	Manager plus Four (4) Helicopter Crew members	Manager only	Manager only
2	Manager plus Three (3) Helicopter Crew members	Manager only	Manager only
3	Manager plus Two (2) Helicopter Crew members	Manager only	Manager only

CWN Helicopter and Module must marry up away from Incident(s) or Fire Operations. The minimum required staffing levels must be filled with fully qualified personnel. Trainees may be ordered in addition to the standard module configuration.

Limited Use Designation: This is an agency term used to denote a helicopter that can only be utilized in a limited role (not for passenger transport). Use would typically include external cargo transport or water/retardant dropping missions. This may be a temporary designation as described above, or it may be a permanent designation dictated by the contract or agency policy. During the period that a Type 1 or Type 2 helicopter is temporarily designated as "limited use," the assigned Helicopter Manager/Module Members are the only government employees authorized to function as aircrew and only when necessary (examples: ferry flight, initial attack size-up and bucket deployment or other non-external load missions).

IMPORTANT NOTE: The appropriate agency Aviation Manager at the State or Regional level must grant approval any time a Standard Category helicopter is temporarily designated for Limited Use missions or re-designated to perform standard (personnel transport) missions. Any helicopter performing standard use missions requires full staffing of Helicopter Manager and Module.

⁴ Exclusive use crew members are used to fill critical helibase management positions.

IMPORTANT NOTE: Two (2) Type I or Type II helicopters designated as “limited use” or FAA “Restricted Category” helicopters may be managed by one qualified Helicopter Manager only when the following conditions are met:

- An order for another Helicopter Manager for the second helicopter has been placed and is actively trying to be filled.
- Both helicopters are working out of the same helibase and are physically located side-by-side.
- A Helibase Manager is assigned.
- The appropriate agency Aviation Manager at the State, Area, or Regional level must grant approval on a case-by-case basis.

The management of two helicopters by one Helicopter Manager, as described above, should not be a standard operating procedure.

➔ Limited Use Type III Helicopter designation: Standard category Type III Helicopters may be temporarily designated and used as “limited use”, thus not requiring a standard module. A Helicopter Manager is all that is required. The following missions are authorized for Limited Use Type III Helicopters:

- ATGS- Air Attack Group Supervisor
- HLCO-Helicopter Coordinator
- PSD- Plastic Sphere dispenser
- Infrared and aerial mapping
- Bucket Operations
- Cargo Operations

The appropriate agency Aviation Manager at the State, Area, or Regional level must grant approval on a case-by-case basis.

Limited Use Type III Helicopters are not included in the option of managing two helicopters with one Helicopter Manager.

➔ State and Local agencies may have other minimum requirements for personnel and aircraft. Alaska agencies such as the Alaska Fire Service (AFS) have different staffing requirements when operating in Alaska. However, at a minimum, a Manager must be ordered and assigned to all Exclusive Use and Call When Needed Helicopters in Alaska.

A. Helicopter Manager.

The position of Helicopter Manager applies to the following:

- Exclusive-use Contract Fire Helicopter Manager (to include Helicopter Managers assigned to agency-owned aircraft);
- Call-When-Needed Fire Helicopter Manager;
- Exclusive-use Contract Helicopter Flight Manager
- ➔ Resource Helicopter Manager for complex, special-use projects.

Non-complex project missions need only be supervised by a Helicopter Flight Manager who has been trained and qualified to conduct simple helicopter missions (see Charts 2-1 and 2-2). Non-complex missions are defined as:

- Point-to-point transport of personnel from one developed heliport/helibase or airport to another developed heliport/helibase or airport;
- Low- and high-level reconnaissance;
- Landings at or takeoffs from improved or unimproved sites; no extensive transport of groups of personnel or cargo from one site to another.

Helicopter Flight Manager duties and responsibilities are addressed later in this chapter.

The duties and responsibilities of the Helicopter Manager are as follows. References to other chapters that provide guidance on accomplishing the duty are included in parentheses.

1. Coordinates with scheduling office, Pilot, and users on flight planning (see Chapter 3), including but not limited to:
 - Identification of specific project requirements;
 - Completion and review of Aircraft Flight Request/Schedule and, if special use, Hazard Analysis; (this is applicable to project flights only; fire missions are initiated on a Resource Order, with job hazard analyses incorporated into operational procedures, helibase checklist and briefing formats, etc.);
 - Review of aircraft selection;
 - Assurance that necessary equipment is available;
 - Obtaining required approvals and authorizations for the flight.
2. Establishes work schedule and coordinates with users and the scheduling office for use of helicopter;
3. Completes required administrative and operational forms specified in Appendix A and optional forms as required by local aviation management; completes required forms as outlined in Appendix B and optional forms as required by the Helibase Manager;
4. Ensures that the vendor completes records and reports as required by the procurement document (see Appendix A); these usually include:
 - Vendor Service Truck Fuel Quality Control Log
 - Helicopter Power Check Turbine Engine and Helicopter Turbine Engine Performance Analysis Chart
 - Helicopter Load Calculation

5. Ensures required personal protective equipment is available and utilized correctly (see Chapter 9);
6. Performs preflight briefing and ensures a preflight passenger briefing by the Pilot is accomplished prior to the flight (see Chapter 10); verification that the aircraft and Pilot are approved and authorized for the type operation to be conducted by checking Pilot Qualification Card and Aircraft Data Card (see Chapter 5);
7. Ensures that flight following and, if applicable, resource tracking is performed; performs a preflight radio check (see Chapter 4);
8. Reviews and signs helicopter load calculations; completes, or delegates the completion of helicopter passenger/cargo manifests; may complete the Single Helicopter Load Capability Planning Summary - Multiple Helispots and Fuel Loads for planning purposes (see Chapter 7 and Appendix A);
9. Directs personnel in the conduct of helicopter operations (helispot location and construction, manifesting, loading and unloading of cargo and personnel, marshaling helicopters, rigging of external loads, etc.) (See Chapters 8-11);
10. Ensures that, except in an emergency, there is no deviation from established flight plan or type of intended use unless such deviation is relayed and/or approved through identified procedures and that any requirements of such a deviation are met;
11. Assists the Pilot in aerial hazard identification; ensures a high-level reconnaissance is made prior to low-level flight (see Chapters 3 and 8).
12. Reports any deviations from planned flight or normal operations immediately utilizing agency incident/hazard report (see Appendix C);
13. Performs daily inventory checks and ensures that tool, equipment, and vehicle maintenance and refurbishment are performed (see Chapter 9); responsible for overall readiness of the helicopter crew (see Appendix E);
14. Leads and participates in safety sessions and critiques; presents safety topics to crew; maintains awareness of changes in aviation policy, regulations, and procedures; responsible for crew's and other users' welfare and safety in all aspects of job;
15. For helicopter fueling facilities for which the government is responsible, or for those operated by the vendor but which are located on government land, completes Aircraft Fuel Facility Inspection Log (see Chapter 13 and Appendix A);
16. Monitors vendor personnel for compliance with flight time, driving time, and duty day limitations as contained in the procurement document; completes cumulative logs for vendor personnel as specified in Appendix A;

17. Completes flight payment documents and submits to the Contracting Officer's Representative (COR), Contracting Officer (CO), or other individual designated by the CO (see Appendix D);
18. Functions as the COR or Project Inspector (PI) (see Appendix D); monitors and ensures contract compliance by the vendor and vendor personnel, utilizing the Aircraft Contract Daily Diary to document discrepancies (see Appendix A); refers conflicts beyond immediate resolution to the COR if functioning as PI, or to the CO if functioning as COR.

B. Helicopter Flight Manager.

Refer to Section III.A for a discussion of the differences between a Helicopter Manager and a Helicopter Flight Manager relative to the type of missions supervised.

Duties and responsibilities of the Helicopter Flight Manager are as follows:

1. Coordinates with scheduling office, Pilot, and users on flight planning (see Chapter 3), including but not limited to:
 - Identification of specific project requirements;
 - Completion and review of Aircraft Flight Request/Schedule and, if special use, Hazard Analysis;
 - Review of aircraft selection;
 - Assurance that necessary equipment is available;
 - Obtaining required approvals and authorizations for the flight.
2. Completes required administrative and operational forms specified in Appendix A and optional forms as required by local aviation management;
3. Ensures required personal protective equipment is available and utilized correctly (see Chapter 9);
4. Performs preflight briefing and ensures a preflight passenger briefing by the Pilot is accomplished prior to the flight (see Chapter 10); verification that the aircraft and Pilot are approved and authorized for the type operation to be conducted by checking Pilot Qualification Card and Aircraft Data Card (see Chapter 5);
5. Ensures that flight following and, if applicable, resource tracking is performed; performs a preflight radio check (see Chapter 4);
6. Ensures that load calculation and manifests are completed correctly (see Chapter 7 and Appendix A);

7. Ensures that, except in an emergency, there is no deviation from established flight plan or type of intended use unless such deviation is relayed and/or approved through identified procedures and that any requirements of such a deviation are met;
8. Assists the Pilot in aerial hazard identification; ensures a high-level reconnaissance is made prior to low-level flight (see Chapters 3 and 8).
9. Reports any deviations from planned flight or normal operations immediately utilizing agency incident/hazard report (see Appendix C);
10. When requested, assists Pilot in loading and unloading passengers and cargo.
11. In conjunction with Pilot, completes agency flight payment document (see Appendix D);

C. Assistant Fire Helicopter Manager.

All exclusive-use fire helicopter contracts require alternate supervision of the helicopter program in the Helicopter Manager's absence. No Assistant Helicopter Manager position is required for exclusive-use project helicopter, CWN fire helicopter, and CWN Resource helicopter procurements.

In the Helicopter Manager's absence, the Assistant Helicopter Manager on exclusive-use fire helicopter contracts performs the same operational duties and responsibilities as the Manager. Local units may wish to limit contract administration duties and responsibilities.

D. Lead Helicopter Crew member.

It is recommended that all exclusive-use fire helicopter crews be staffed with this position to fulfill the duties and responsibilities of the Assistant Manager in his or her absence, or when the Helicopter Manager is absent and the Assistant assumes the Manager position. No Lead Crew member position is required for exclusive-use project, CWN fire, and CWN Resource helicopters.

This individual performs the duties and responsibilities of the Assistant Manager when the latter is functioning as the Helicopter Manager in the Manager's absence, or performs the duties and responsibilities of the Assistant Manager when the Assistant is absent.

When both the Helicopter Manager and Assistant are present, the Lead Helicopter Crew member fulfills the duties and responsibilities of a Crew member, often in a supervisory role (for example, Squad Boss) for the other Crew members.

E. Helicopter Crew member (Both Fire and Resource Exclusive-Use and Call-When-Needed) (HECM).

The Helicopter Crew member serves as a trained member of a helicopter crew, assisting the Manager in the performance and completion of helicopter missions.

Duties and responsibilities of the Helicopter Crew member are as follows:

1. Constructs helispots, manifests, loads, and unloads cargo and personnel, marshals helicopters, rigs external loads, etc. (See Chapters 8 and 10-11);
2. Assists Manager in performing daily inventory checks and in ensuring operational readiness of helicopter unit; performs tool, equipment, and vehicle maintenance and refurbishment; performs facility and cache maintenance (see Chapter 9);
3. Participates in proficiency checks and drills (see Appendix E);
4. Participates in safety sessions and critiques; provides preflight safety briefings to passengers; ensures own and others' safety and welfare in all aspects of job;
5. Completes aviation forms, vehicle reports, and requisitions as required.

F. Pilot.

The Pilot is an essential part of any aviation mission and must be made an integral part of a team effort whose objective is flight safety and efficiency. The Pilot is in command of the aircraft and has ultimate responsibility, under both Federal Aviation Administration (FAA) and agency regulations, for the safety of the aircraft and its occupants.

IMPORTANT NOTE: The pilot's decisions and judgment are final. No agency employee shall explicitly or implicitly ask or require a pilot to perform any mission or flight maneuver which compromises flight safety.

Duties and responsibilities are as follows:

1. Adheres to Federal Aviation Regulations (FAR's), agency regulations (for agency pilots), and the requirements of the procurement document (vendor pilots);
2. As applicable, coordinates with dispatcher, helicopter manager, and/or helibase manager on project or incident planning and logistics; reviews manifests and intended loads to ensure aircraft is capable of performing the mission; is responsible for knowledge of hazards in area of operations (see Chapter 3);
3. Ensures that all aircraft and communications equipment is in good condition and operable; performs flight following as required by the agency (see Chapter 4);
4. Carries a current Interagency Pilot Qualification Card; ensures the Aircraft Data Card is physically present in the aircraft; presents the card upon request (Exception: Military, Cooperator and Other-Government Agency aircraft may have non-carded aircraft and/or pilots but a copy of the approving document must be available) (see Chapter 5);
5. Performs preflight aircraft checklist and preflight safety briefing of passengers, or delegates the briefing responsibility to qualified personnel (see Chapter 10);

6. Completes Helicopter Load Calculation using applicable aircraft Flight Manual Performance Chart(s); ensures that payload does not exceed allowable payload (see Chapter 7);
7. Meets contract requirements for fueling using approved static bonding procedures (see Chapter 13);
8. Is responsible for the security of the aircraft;
9. Except in an emergency, does not deviate from flight plan without relaying change to appropriate dispatch office or other flight following facility; does not descend below 500' AGL unless such flight has been authorized in advance or an in-flight deviation is approved; makes no descent below 500' AGL without first performing a high-level reconnaissance of the operations area to identify hazards (see Chapter 3);
10. Wears personal protective equipment as required by agency directive (agency pilots) or the procurement document) (vendor pilots) (see Chapter 9);
11. Completes Pilot's portion of flight payment documents or agency aircraft use reports (see Appendix D).

IV. Helibase/Helispot Management.

(Refer to the Glossary for definitions of helibase, helispot, and unimproved landing sites.) Helibases and helispots must be staffed appropriate to the level of activity and complexity. Further information on specific requirements for helibase and helispot management can be found in Chapter 15, or in other appropriate chapter(s) of this guide.

Unless otherwise specified, the following job descriptions apply to both incident and resource operations.

Subject to the processes and procedures contained in this guide, the duties and responsibilities contained in the Fireline Handbook 410-1 have been expanded upon and incorporated into the following helibase organization job descriptions.

A. Helibase Manager (HEB1 or HEB2).

The Helibase Manager has primary responsibility for managing all activities at the assigned helibase. Within the ICS system, the Helibase Manager is supervised by the Air Support Group Supervisor. On projects, the Helibase Manager may report to an Air Support Group Supervisor or Air Operations Branch Director if these positions are assigned. Otherwise, the Helibase Manager usually reports to the Project Aviation Manager.

Helibase Managers are qualified at two levels: Type I Helibase Manager (4 or more helicopters) and Type II Helibase Manager (3 or less helicopters).

Training, qualifications, currency, and experience requirements for this position are listed in PMS 310-1 and Chart 2-3.

The Daily Helicopter Operations Briefing/Debriefing Checklist (see Appendix F) and the Helibase Manager's Reminders List (see Appendix H) are the primary management tools of the Helibase Manager.

A complete review of all items on the Reminders List prior to the establishment of a helibase, and a daily or more frequent review of the List thereafter, will significantly enhance the safety and efficiency of helibase operations.

Most of the following duties and responsibilities will be fulfilled through completion of the Daily Checklist.

A complete discussion of helibase management and operations can be found in Chapters 8 and 15.

The duties and responsibilities of the Helibase Manager are as follows (refer to Appendix B for instructions on completion of referenced forms):

1. Obtain briefing from supervisor; obtain Incident Action or Project Aviation Safety Plan, including ICS Form 220, Air Operations Summary if available; plan helicopter missions accordingly; enter missions to the Helibase Mission Request Log.
2. Obtain a flight hazard map of the area of operations from supervisor or from the local unit; incorporate hazards into both the Helibase Facilities, Hazard, and Flight Route Map and the Incident or Project Map.
3. Check the status of any Temporary Flight Restriction that has been planned or implemented by the local unit under Federal Aviation Regulation (FAR) 91.137; request and implement restrictions if necessary; ensure air traffic control procedures are followed and that requirements for arriving and departing helicopters and procedures for deconfliction of airspace are in effect (see Interagency Airspace Coordination Guide for guidance and requirements);
4. Participate in helibase and helispot site selection, or, if already established, evaluate appropriateness of site(s); take necessary action in coordination with supervisor, including any relocation or adjustment; establish helibase facilities and layout (see Chapter 8);
5. Establish a helibase display board and a communications/operations area;
6. Participate in incident or project aviation planning activities; coordinate frequently with supervisor concerning priorities and conflicts;
7. Ensure that missions are accomplished effectively and according to tactical and logistical priorities; receive and respond to special requests for logistical or tactical support;

8. Submit personnel, aircraft, equipment, and supply needs to supervisor; establish an internal tracking system to track status and delivery of ordered resources (see Appendix K);
9. Provide for signing and security of helibase;
10. Manage special operations such as aerial ignition, retardant, seeding, or spraying, mixing, and loading operations.
11. Ensure load calculations, manifesting, and loading/unloading of personnel and cargo are performed correctly;
12. Provide for helicopter fueling and maintenance services and areas (see Chapter 13);
13. Ensure dust abatement measures are provided and used; if chemical means are utilized, ensure environmental concerns are addressed (see Chapter 8);
14. Establish crash-rescue procedures and manage appropriate services for the helibase and helispots (see Chapter 12);
15. Establish flight following procedures utilizing the Helibase Flight Following Log (see Chapter 4);
16. Manage resources (personnel, equipment, supplies and aircraft) assigned to the helibase, to include:
 - Ensuring the safety and welfare of personnel, both agency and contract, assigned to the helibase;
 - Assigning trained and qualified personnel utilizing the Helicopter Crew Information Sheet or other sources of information; ensuring each individual understands his/her responsibility and authority; Individual knowledge and skill levels vary, every effort should be made to assign the most capable person based on the complexity and nature of the assignment.
 - Keeping an up-to-date record utilizing, as needed, the Helibase Aircraft Information Summary;
 - Ensuring required personal protective equipment (PPE) is worn according to requirements (see Chapter 9);
 - Meeting timekeeping, eating, sleeping, and transportation needs;
 - Conducting briefings for helibase/helispot personnel and pilots utilizing the Daily Helicopter Operations Briefing/Debriefing Checklist (see Appendix F);
 - Monitoring and managing operations utilizing the Helibase Manager's Reminders List (see Appendix H);

17. Maintain agency records and reports of helibase activities; complete required forms and checklists relating to helibase management as required and outlined in Appendix B; utilize optional forms outlined in Appendix B if necessary or as required by supervisor;
18. Ensure the completion and maintenance of agency records and reports of helicopter activities by ensuring that Helicopter Managers of assigned aircraft complete required helicopter management forms as outlined in Appendix A;
19. Conducts a debriefing at the end of each day's operation and obtains feedback on day's operations; takes timely corrective action concerning problems identified.
20. Completes performance evaluations of personnel and crews supervised.

B. Helispot Manager

When assigned, HECM manage helispots and are under the supervision of the Helibase Manager. Helicopter crew members when functioning as a helispot manager are responsible for providing safe and efficient management of all activities at the assigned helispot. A complete discussion of helispot management and operations can be found in Chapters 8 and 15.

Management of the helispot involves the following duties and responsibilities. (Refer to Appendix B for instructions on completion of referenced forms):

1. Obtain briefing from Helibase Manager; obtain Incident Action or Project Aviation Safety Plan, including ICS Form 220, Air Operations Summary and Communications Plan, if available;
2. Ensure that qualified helicopter crew members are assigned to assist in helispot management, providing on-the-job training as necessary; conduct regular briefings with helispot crew; ensure all assigned personnel understand their responsibilities and authority; manage resources/supplies dispatched to helispot;
3. Obtain necessary equipment and supplies for the operation of the helispot (tools, fire extinguishers, wind indicators, etc.) (see Chapter 9);
4. On incidents, ensure that all helispot personnel are capable of and prepared to perform fire suppression duties in and around the helispot; ensure that helispot crew is equipped to remain overnight, even in adverse weather conditions;
5. Obtain allowable payload information for the helispot for each assigned helicopter, utilizing forms outlined in Appendices A and B;

³Environmental considerations may affect the construction of a helispot. However, at no time will aircraft or personnel safety be compromised. Significant helispot improvements such as the cutting of numerous trees should be cleared by the Helibase Manager with a higher-level authority (for example, the Air Operations Branch Director or Project Aviation Manager in consultation with the Resource Advisor)

6. Obtain transportation and report to the assigned helispot; establish radio communications with the helibase; provide the Helibase Manager with initial or additional information for the Helispot Information Summary;
7. Ensure that all helispot personnel and personnel to be transported wear required personal protective equipment (see Chapter 9);
8. Ensure the helispot and landing pad is constructed and prepared properly to ensure safe use of the highest gross weight helicopter and/or helicopter with the largest diameter rotor blades; construct the helispot according to safety standards (see Chapter 8); if required, obtain approval prior to making improvements;
9. Install wind indicators and sign the area perimeter as necessary; perform any necessary aerial and ground hazard reduction and safety improvements⁵; anticipate dust abatement needs and provide or request as necessary; make crash-rescue equipment such as fire extinguishers available; number and map the helispot in coordination with the Helibase Manager;
10. Ensure helispot air traffic control procedures (safe flight patterns inbound and outbound) are in place; ensure that flight routes and area hazards are made known to all pilots; ensure communications and parking tender(s) are in place;
11. Complete load calculations and manifests accurately for all flights originating from assigned helispot (see Chapter 7); perform manifesting, briefing, and loading of personnel and cargo (see Chapters 10 and 11);
12. Return external load equipment (nets, leadlines, swivels) and excess firefighting equipment to the helibase promptly;
13. Inform Helibase Manager of helispot activities; coordinate activities and requests for air support with the Helibase Manager;
14. If applicable, supervise or perform water or retardant loading at helispot;
15. Maintain records and reports of helicopter activities for later inclusion in the Helicopter Daily Use and Cost Summary (see Appendix A);
16. If returned to the helibase, attend the nightly debriefing and provide feedback on day's operations; otherwise, provide by radio.

C. Deck Coordinator (DECK).

The Deck Coordinator is supervised by the Helibase Manager and is responsible for providing coordination at the helibase for personnel and cargo movement. The Deck Coordinator supervises the Parking Tenders and Loadmasters.

The Deck Coordinator's duties and responsibilities are as follows (refer to Chapter 15 and Appendix B for specific information on completion of referenced forms):

1. Obtain briefing from the Helibase Manager; obtain Incident Action or Project Aviation Safety Plan, including ICS Form 220, Air Operations Summary and Communications Plan, if available;
2. Provide input to and assist the Helibase Manager in completing the Helibase Facilities, Hazard, And Flight Route Map; review with all personnel involved, including pilots;
3. Obtain sufficient trained and qualified personnel to manage the deck safely and efficiently; supervise personnel assigned to the deck, to include:
 - Ensuring the safety and welfare of personnel (both agency and contract) assigned; ensuring all personnel understand their responsibility and authority; monitoring their actions to ensure duties and responsibilities are correctly performed;
 - Conducting briefings of subordinates;
 - Ensuring personal protective equipment is worn by both personnel assigned to the deck and by personnel being transported (see Chapter 9);
 - Meeting timekeeping, eating, sleeping, and transportation needs.
4. Assist the Helibase Manager in completing the Daily Helicopter Operations Briefing/Debriefing Checklist (see Appendix F) by ensuring that all requirements of the Checklist for the deck are met prior to commencement of operations; review the parts of the Helibase Manager's Reminders List (see Appendix H) applicable to the deck;
5. Establish, number, and mark touchdown pads and emergency landing areas. Ensure separation of landing areas for cargo, personnel, fueling and other specialized operations (eg, retardant, helitorch, etc.) (See Chapter 8);
6. Ensure the separation of ground vehicle traffic and parking areas from flight operations and overflight by departing or arriving helicopters;
7. Ensure deck access is restricted to personnel and vehicles by posting of warning signs, flagging, etc.; establish staging areas, ground traffic routes, and cargo and personnel manifesting and weighing areas utilizing flagging or other means;
8. Ensure crash-rescue requirements are understood by deck personnel and that personnel are trained and qualified in the use of extinguishers, crash-rescue, and evacuation kits; conduct on-the-job training sessions as necessary (see Chapter 12);
9. Ensure hand signals are mutually understood by Parking Tenders and pilots; conduct on-the-job training sessions as necessary (see Chapter 11);
10. Anticipate dust abatement needs and provide or request as necessary (see Chapter 8);

11. Ensure that load calculations for all helispots to be used are properly completed, updated, and posted; ensure that proper manifesting procedures are used at the helibase (see Chapter 7);
12. Ensure helicopter fueling is performed according to requirements and that Parking Tenders provide fire extinguisher protection during refueling (see Chapters 12 and 13);
13. Coordinate with the Takeoff and Landing Coordinator (TOLC) to ensure air traffic coordination; assumes the TOLC position if unassigned;
14. Maintain records required for the deck coordination function, including procedures for completing the Helicopter Daily Use and Cost Summary and the Helibase Daily Use and Cost Summary;
15. Coordinate frequently with the Helibase Manager; attend the nightly debriefing and provide feedback on problems encountered; recommend corrective action.
16. Completes performance evaluations of personnel supervised.

D. Parking Tender

The Parking Tender is supervised by the Deck Coordinator and is responsible for ground and air traffic in and around the assigned landing pad and for the landing and parking of helicopters at that pad.

The Parking Tender's duties and responsibilities are as follows:

1. Obtain briefing from the Deck Coordinator; obtain radio frequencies and other information necessary to perform the job;
2. Whenever the assigned helicopter's engine is running, or whenever it is approaching or departing the parking spot, supervise activities at the assigned landing pad, including personnel, ground vehicle, and helicopter movement;
3. Know and understand crash-rescue procedures; ensure that extinguishers are placed at the landing pad; be responsible for extinguisher operation in the event of fire either on landing, takeoff, or refueling (see Chapters 12 and 13);
4. Ensure touchdown pad is properly prepared, numbered, and maintained (see Chapter 8);
5. Ensure there is adequate communications between the pad, Pilot, Deck Coordinator, and the Takeoff and Landing Coordinator (see Chapter 4);
6. Know and understand helicopter hand signals; provide wind advisories and other landing, takeoff, and holding directions to the Pilot; assist the Pilot as needed when the helicopter is departing, approaching, or is on the landing pad (see Chapter 11). Communication with the pilot may be done either through hand signals or by way of

radio communication. Positive communication over the radio by the Parking Tender via a patch cord and flight helmet is the preferred method.

7. Be alert for potential conflicts between inbound and/or outbound aircraft;
8. Coordinate with loadmasters on the loading and unloading of personnel and cargo; ensure that loading personnel check personnel seat belts, cargo restraints, and helicopter doors prior to departing the area;
9. Monitor the fueling of helicopters (see Chapter 13); report any problems to the Helibase Manager;
10. Coordinate frequently with the Deck Coordinator; attend the nightly debriefing and provide feedback on problems encountered; recommend corrective action.

E. Loadmaster (Personnel or Cargo)

The Loadmaster is supervised by the Deck Coordinator and is responsible for the safe loading and unloading of personnel and/or cargo.

The Loadmaster's duties and responsibilities are as follows:

1. Obtain briefing from Deck Coordinator; obtain radio frequencies and other information necessary to perform the job;
2. Ensure designation and signing of crew and cargo staging areas and of egress and ingress routes to the deck (see Chapter 8);
3. Obtain sufficient personnel resources to load personnel and cargo; supervise personnel assigned to loading positions, to include:
 - Ensuring the safety and welfare of personnel (both agency and contract) assigned; ensuring all personnel understand their responsibility and authority; monitoring their actions to ensure duties and responsibilities are correctly performed;
 - Conducting briefings of subordinates;
 - Ensuring personal protective equipment is worn by both personnel assigned to the deck and by personnel being transported (see Chapter 9);
 - Meeting timekeeping, eating, sleeping, and transportation needs.
4. Supervise the manifesting of personnel and cargo according to requirements; ensure that appropriate hazardous materials regulations are enforced as outlined in the Aviation Transport Of Hazardous Materials document³; ensure the Pilot is aware of weight and nature of all loads being transported (see Chapters 10 and 11); supervise loading and unloading crews, providing preflight briefings to all passengers;

5. Ensure external load equipment is checked for proper operation before use (see Chapters 9 and 11);
6. Know and understand crash-rescue procedures; inform personnel of helibase and helicopter crash-rescue procedures;
7. Coordinate with Takeoff and Landing Coordinator and Parking Tenders;
8. Coordinate frequently with the Deck Coordinator; attend the nightly debriefing and provide feedback on problems encountered; recommend corrective action.

F. Takeoff and Landing Coordinator (TOLC).

The Takeoff and Landing Coordinator is supervised by the Helibase Manager and is responsible for providing coordination of arriving and departing helicopters and movement around the helibase. When this position is not filled, the Deck Coordinator or Aircraft Base Radio Operator will usually assume this function.

FAA Air Traffic Control personnel may act as TOLC. Consult the geographic area Mobilization Guide and the Interagency Airspace Coordination Guide for ordering guidelines and other considerations (timekeeping, equipment needs). Their effectiveness can also be enhanced by providing them with a reconnaissance flight of the incident or project.

The Takeoff and Landing Coordinator's duties and responsibilities are as follows (refer to Chapter 15 and Appendix B for specific information on completion of referenced forms):

1. Obtain briefing from the Helibase Manager; obtain Incident Action or Project Aviation Safety Plan, including ICS Form 220, Air Operations Summary and Communications Plan, if available;
2. Assist in the completion of the Helibase Facilities, Hazard, and Flight Route Map; review with all personnel involved;
3. Coordinate with the Aircraft Base Radio Operator on helicopter flight routes and patterns; establish air traffic control procedures with pilots; ensure established flight routes and patterns in and out of the helibase are maintained; control movement of helicopters in hover lanes.
4. Establish and maintain discrete communications with all incoming and outgoing helicopters, usually on discrete VHF-AM frequency(ies); maintain constant communications with the Aircraft Base Radio Operator(s) (see Chapter 4);
5. Coordinate with Deck Coordinator and Parking Tenders on movement of aircraft when arriving at or departing from the Helibase; provide advisories (traffic, winds, etc.) to landing and departing helicopters.
6. Coordinate frequently with the Deck Coordinator and the Aircraft Base Radio Operator; attend the nightly debriefing and provide feedback on problems encountered; recommend corrective action.

G. Aircraft Base Radio Operator (ABRO).

The Aircraft Base Radio Operator is supervised by the Helibase Manager and is responsible for establishing and facilitating communications among incident- or project-assigned helicopters, helibases, helispots, air operations staff or Project Aviation Manager, and the Takeoff and Landing Coordinator. Note that on smaller incidents or projects that this position may be combined with the Aircraft Timekeeper position.

The Aircraft Base Radio Operator's duties and responsibilities are as follows (refer to Chapter 15 and Appendix B for specific information on completion of referenced forms):

1. Obtain briefing from Helibase Manager; obtain Incident Action or Project Aviation Safety Plan, or, at a minimum, ICS Form 220 Air Operations Summary, Communications Plan, Medical Unit Plan, and Incident or Project Map.
2. Receive orders for support or tactical missions, enter on the Helibase Mission Request Log, and assign these missions in consultation with the Helibase Manager (if conflicts among missions occur, the ABRO should inform the Helibase Manager who, if unable to resolve, will contact higher-level authority);
3. Notify Takeoff and Landing Coordinator of incoming aircraft;
4. If applicable, receive clearance from Air Tactical Group Supervisor or Helicopter Coordinator before clearing aircraft for takeoff;
5. Establish procedures for and maintain flight following with all assigned aircraft utilizing the Helibase Flight Following Log;
6. Establish and maintain proper radio procedures (see Chapter 4);
7. Understand crash-rescue procedures and notifications utilizing the Helibase Emergency Rescue Plan; notify supervisor immediately of any overdue, missing, or crashed aircraft; institute emergency response procedures if necessary (see Chapter 12 and Appendix C).
8. Coordinate frequently with the Helibase Manager, Deck Coordinator, and Takeoff and Landing Coordinator; attend the nightly debriefing and provide feedback on problems encountered; recommend corrective action.

H. Aircraft Timekeeper

The Aircraft Timekeeper is supervised by the Helibase Manager and is responsible for keeping time and other information concerning all helicopters assigned to the helibase. Note that on smaller incidents or projects that this position may be combined with the Aircraft Base Radio Operator position.

The Aircraft Timekeeper's duties and responsibilities are as follows (refer to Chapter 15 and Appendix B for specific information on completion of referenced forms):

1. Obtain briefing from Helibase Manager; obtain Incident Action or Project Aviation Safety Plan, or, at a minimum, ICS Form 220 Air Operations Summary and Incident or Project Map.
2. Obtain necessary timekeeping forms and record operational times of assigned helicopters; if necessary, track available time (flight and duty day) remaining utilizing the Helibase Flight Time Tracking Record; record other information, if necessary, on the Helibase Aircraft Information Summary;
3. Obtain Helicopter Daily Use and Cost Summaries from Helicopter Managers and complete the Helibase Daily Use and Cost Summary prior to the end of each shift and submit to the Helibase Manager;
4. Coordinate frequently with the Helibase Manager and Helicopter Managers; attend the nightly debriefing and provide feedback on problems encountered; recommend corrective action.

I. Mixmaster - Retardant.

The Mixmaster is supervised by the Helibase Manager and is responsible for preparing fire retardant for helicopters at the rate specified and for the expected duration of job.

IMPORTANT NOTE: Retardant operations at helibases or other off-airport locations are conducted primarily by commercial vendors using Mobile Retardant Bases (MRB's) on emergency equipment rental agreements. Most of the Mixmaster duties outlined below are fulfilled by vendor personnel, with government involvement limited to contract Administration and verification of payment documents. The duties below are provided as a guideline for what the Helibase Manager supervising an MRB operation may expect from the vendor, and the type of coordination that is required. Duties and responsibilities should be adjusted accordingly, given the vendor-government relationship.

The Mixmaster's duties and responsibilities are as follows:

1. Obtain briefing from Helibase Manager; obtain Incident Action or Project Aviation Safety Plan, or, at a minimum, ICS Form 220, Air Operations Summary, Communications Plan, and Incident or Project Map;
2. Coordinate mixing and loading activities with the Takeoff and Landing Coordinator and Deck Coordinator;
3. Determine needs and plan for necessary personnel, equipment, facilities, and supplies; ensure supply of retardant is adequate to meet demand;
4. Coordinate with the Helibase Manager or Helispot Manager to plan the retardant site layout and establish a retardant dip point and/or mixing area (this is usually performed in coordination with the retardant vendor);
5. Check accessory equipment such as valves, hoses, and storage tanks;

6. Supervise the mixing crew during setup and operations, to include:
 - Ensuring the safety and welfare of personnel (both agency and contract) assigned; assigning qualified retardant mixers and loaders and ensuring all personnel understand their responsibility and authority; monitoring their actions to ensure duties and responsibilities are correctly performed;
 - Ensuring required personal protective equipment is worn at all times (see Chapter 9);
 - Conducting briefings of subordinates;
 - Meeting timekeeping, eating, sleeping, and transportation needs.
7. Ensure that preflight inspections of drop equipment (fixed-tanks, buckets) are made prior to operation;
8. Coordinate with Helibase Manager to evaluate efficiency of the drop program:
 - Mixture correct;
 - Cost-effectiveness of the operation, to include location of mix site relative to drop points and retardant effectiveness;
 - Type of fill operation.
9. Provide for proper storage and management of supplies and equipment; ensure that all environmental concerns and requirements are met; ensure that cleanup is performed prior to departure;
10. Keep required records for water, foam, and retardant use.

V. Specialized Positions.

A. Helicopter Aerial Ignition Positions.

See Interagency Aerial Ignition Guide for additional information.

B. Helicopter Rappel and Short-Haul Positions.

See Interagency Helicopter Rappel and Short-Haul Guides for duties and responsibilities and certification, training, and currency requirements.

C. Law Enforcement Helicopter Positions.

Sensitive mission requirements and objectives may require security clearances of personnel participating in the mission. Any individual deemed not suitable for the mission by the Law Enforcement Officer shall be removed from the operation and documentation of the action taken shall be submitted to the unit Aviation Manager.

See Chapter 16 for law enforcement operational procedures and requirements. The following are requirements for law enforcement helicopter positions.

1. All law enforcement aviation operations utilizing helicopters shall, depending on the mission profile, be conducted either by a fully-qualified Resource or Fire Helicopter Manager or by a Helicopter Flight Manager. See Charts 2-1 and 2-2 for these requirements. Section III of this chapter outlines job duties and responsibilities for these positions.

It is recommended that qualified Law Enforcement Officers fill the Helicopter Manager position.

The one exception to personnel being required to fulfill the above requirements is when the agency is utilizing other-government agency or military aircraft, and the provider of the aircraft is also providing all helicopter and/or helibase management services (for example, flight following, loading/unloading of personnel and/or cargo, external load operations, etc.).

2. Helicopter Crew member. Any law enforcement personnel participating as a Helicopter Crew member and not solely as a passenger being transported shall meet the requirements for a Project Helicopter Crew member as outlined in Chart 2-1. Section III of this chapter outlines job duties and responsibilities for this position.
3. All law enforcement personnel filling helibase positions shall meet the requirements outlined in Chart 2-3. Section IV of this chapter contains job duties and responsibilities for each helibase position.
4. Law Enforcement Pilots. Section III of this chapter outlines standard Pilot duties and responsibilities. Pilots from other law enforcement agencies, the National Guard, or Department of Defense shall be either approved through a Memorandum of Understanding or similar agreement, or shall possess a current Interagency Pilot Qualification Card requirements.

Sensitive mission requirements may require security clearances of the pilot and/or vendor to ensure mission integrity. Law Enforcement Helicopter Managers are responsible for informing the scheduling unit of any such requirements.

D. Search and Rescue Helicopter and Helibase Positions.

Refer to Chapter 17 for operational procedures. Helicopter Managers and Crew members performing search and rescue missions shall meet project requirements for helicopter or helibase management, as well as associated duties and responsibilities for each position filled.

E. Helicopter Coordinator (HLCO).

The Helicopter Coordinator is supervised by the Air Tactical Group Supervisor and is responsible for coordinating tactical or logistical helicopter missions(s) at the incident.

The Helicopter Coordinator's duties and responsibilities are as follows:

1. Obtain briefing from Air Tactical Group Supervisor.

2. Survey assigned incident area to determine situation, aircraft hazards, and other potential problems.
3. Coordinate with Air Support Group Supervisor and/or Helibase Manager in establishing locations and takeoff and landing patterns for helibase(s) and helispot(s).
4. Coordinate the use of assigned ground-to-air and air-to-air communications frequencies with the Air Tactical Group Supervisor.
5. Ensure that all assigned helicopter pilots know appropriate operating frequencies.
6. Coordinate geographical areas for helicopter operations with Air Tactical Group Supervisor and make assignments.
7. Inform Air Tactical Group Supervisor when mission is completed and reassign helicopter as directed.
8. Report incidents or accidents to Air Tactical Group Supervisor immediately.
9. Maintain records of activities;
10. Attend a debriefing and provide feedback to both the Air Tactical Group Supervisor, Air Support Group Supervisor, and Helibase Manager.

F. Military Helicopter Management.

For aviation operations utilizing Active Duty/Reserve Military helicopters, and National Guard units officially “federalized” by DoD, refer to Chapter 70 of the Military Use Handbook for specific policy and procedural information.

The use of National Guard units for federal firefighting purposes within their state must be outlined in national, regional, state or local agreements and Memorandums of Understanding (MOUs) between federal agencies and the specific National Guard units.

G. Aerial Capture, Eradication, and Tagging Of Animals (ACETA) Helicopter Positions.

Vendors who provide gunners and muggers for ACETA operations are not required to adhere to the agency personnel requirements outlined below.

1. The Helicopter Manager of an ACETA operation shall meet the requirements for a Resource Helicopter Manager as outlined in Chart 2-1. Section III of this chapter outlines basic job duties and responsibilities for this position. In addition, the Helicopter Manager participating in ACETA operations as a gunner has mission specific duties and responsibilities as follows:
 - a. Ensures that Pilot and aircraft are carded and certified for ACETA operations; ensures dual controls are removed prior to commencement of the ACETA operation;

- b. Ensures crew and passengers wear PPE as specified in Chapter 9, as well as in agency-specific manuals and handbooks;
 - c. Ensures all cargo is restrained according to requirements;
 - d. Operates appropriate weapon(s); ensures the weapon is not loaded or cocked unless the muzzle is outside and pointed away from the aircraft;
 - e. Identifies the animals(s) to target;
 - f. Ensures adequate covering for protection of control mechanism and under seat area to prevent ejected shells, etc., from interfering with controls;
2. The Helicopter Crew member participating on an ACETA operation as a mugger shall meet the requirements for a Project Helicopter Crew member as outlined in Chart 2-1. Section III of this chapter outlines basic job duties and responsibilities for this position.
 3. All agency personnel filling helibase positions on an ACETA project shall meet the requirements outlined in Chart 2-3. Section IV of this chapter contains job duties and responsibilities for each helibase position.
 4. ACETA Pilots. Section III of this chapter outlines standard Pilot duties and responsibilities. In addition, ACETA pilots must be carded for the ACETA mission. If single-skid, step-out, or toe-in landings are to be performed, an exemption must have been requested and granted by the identified level in the agency's aviation management organization.

H. Fueling Specialist.

Government-operated fuel sites (that is, where the government is providing and pumping the fuel) should be supervised by a qualified Fueling Specialist. These individuals are available through the ordering system. The individual is responsible for accomplishing the procedures outlined in Chapter 13.