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NWCG Incident Position Standards for Helicopter Crewmember

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The *NWCG Incident Position Standards for Helicopter Crewmember* establishes national interagency standards for operating as a Helicopter Crewmember (HECM) on wildland fires. These standards are meant to ensure safe, efficient, and effective operations in support of interagency goals and objectives and should serve as a guide to promote effective and consistent on-incident training. By definition, NWCG standards encompass guidelines, procedures, processes, best practices, specifications, techniques, and methods.

The Helicopter Crewmember Position Page, <u>https://www.nwcg.gov/positions/helicopter-crewmember</u>, in the NWCG position catalog, includes the Incident Position Description (IPD) and Position Qualification Requirements, as well as links to standards and references needed to perform the duties of a Helicopter Crewmember.

Tasks that are identified by a (*) are those tasks included for evaluation in the Position Task Book (PTB). Tasks not identified for evaluation in the PTB still represent standards for successful performance in the position and should be included in a comprehensive training assignment.

Where references are identified by a (**), refer to your home unit, agency, or organization for specific guidance and policy documentation. For example:

**Interagency Standards for Fire and Fire Aviation Operations (Red Book)

The National Wildfire Coordinating Group (NWCG) provides national leadership to enable interoperable wildland fire operations among federal, state, Tribal, territorial, and local partners. NWCG operations standards are interagency by design; they are developed with the intent of universal adoption by the member agencies. However, the decision to adopt and utilize them is made independently by the individual member agencies and communicated through their respective directives systems.

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General References

- *NWCG Position Task Book for Helicopter Crewmember (HECM)*, PMS 311-22, <u>https://www.nwcg.gov/publications/position-taskbooks/pms311-22</u>
- NWCG Incident Response Pocket Guide (IRPG), PMS 461, https://www.nwcg.gov/publications/pms461
- Leading in the Wildland Fire Service, PMS 494-2, <u>https://www.nwcg.gov/publications/pms494-2</u>
- *NWCG Aviation Mishap Response Guide and Checklist*, PMS 503, <u>https://www.nwcg.gov/publications/pms503</u>
- NWCG Standards for Helicopter Operations (NSHO), PMS 510, https://www.nwcg.gov/publications/pms510
 - Allowable Payload Chart (HBM-4)
 - Helibase Communications Plan (HBM-8)
 - Interagency Helicopter Passenger/Cargo Manifest (HCM-9)
- NWCG Standards for Aviation Transport of Hazardous Materials, PMS 513, https://www.nwcg.gov/publications/pms513
- NWCG Standards for Aviation Risk Management, PMS 530, <u>https://www.nwcg.gov/publications/pms530</u>
- NWCG Aviation Risk Management Workbook, PMS 530-1, https://www.nwcg.gov/publications/pms530-1
- *NWCG Standards for Wildland Fire First Aid*, PMS 560, https://www.nwcg.gov/publications/pms560
- A Preparedness Guide for Wildland Firefighters and Their Families, PMS 600, https://www.nwcg.gov/publications/pms600
- NWCG Standards for Interagency Incident Business Management, PMS 902, https://www.nwcg.gov/publications/pms902
- Incident Command System (ICS) Forms, <u>https://www.nwcg.gov/ics-forms</u>
 - o Incident Radio Communications Plan (ICS 205)
 - o Medical Plan and Medical Incident Report (ICS 206 WF)
 - Incident Organization Chart (ICS 207)
 - General Message (ICS 213)
 - Activity Log (ICS 214)
 - Air Operations Summary (ICS 220)
 - Incident Personnel Performance Rating (ICS 225 or ICS 225 WF)
- Standard (SF) and Optional (OF) Forms, <u>https://www.nwcg.gov/publications/pms902</u>
 - Crew Time Report (CTR), SF 261
 - Incident Time Report, OF 288
- 14 CFR Part 133 Rotorcraft External-Load Operations, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-G/part-133
- 14 CFR Part 135.100 Flight crewmember duties, <u>https://www.ecfr.gov/current/title-14/chapter-I/subchapter-G/part-135/subpart-B/section-135.100</u>
- FAA Rotorcraft External-Load Operations Advisory Circular 133-1B, <u>https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_133-1B.pdf</u>
- Helicopter Passenger Briefing Card (OAS-84), <u>https://www.iat.gov/docs/oas-84.pdf</u>

- RT-130, Wildland Fire Safety Training Annual Refresher (WFSTAR): Radios of Fire, <u>https://www.nwcg.gov/publications/training-courses/rt-130/communications/com301</u>
- U.S. General Services Administration (GSA) Travel Page, <u>https://www.gsa.gov/travel</u>

Agency-Specific References

- **Aviation Life Support Equipment (ALSE) Handbook, <u>https://www.doi.gov/sites/doi.gov/files/interagency-aviation-life-support-equiment-handbook-guide-v3.0.pdf</u>
- **Interagency Helicopter Load Calculation (NFES 1064), https://www.doi.gov/sites/doi.gov/files/migrated/aviation/library/upload/OAS-67-Interagency-Helicopter-Load-Calculation.pdf#:~:text=not%20present%20%20%20INTERAGENCY%20HELICOPTER%20 %20,%20%20TIME%20%2011%20more%20rows%20
- **Interagency Standards for Fire and Fire Aviation Operations (Red Book), https://www.nifc.gov/standards/guides/red-book
- **National Incident Radio Support Cache (NIRSC) User's Guide, https://www.nifc.gov/resources/NIICD/niicd-documents
- **National Interagency Standards for Resource Mobilization, https://www.nifc.gov/nicc/logistics/reference-documents
- **NIRSC Radio Programming Guides, <u>https://www.nifc.gov/sites/default/files/NIICD/docs/2022%20NIRSC%20Radio%20Program%2</u> <u>0Guides.pdf</u>

*Leadership Level 1, Follower (Provide Action)

Followers have several responsibilities: to become competent in basic job skills, take initiative, learn from others, ask questions, and develop communication skills. For additional information, review the Level 1 description, expected behaviors and knowledge, suggested development goals, and self-study opportunities <u>https://www.nwcg.gov/committee/leadership-committee/leadership-levels</u>.

Description

- Leadership development starts the first day of the job.
- Followers function as a team member.
- Part of being a leader is exercising good followership and understanding human dynamics.
- Followership begins the journey of becoming a student of fire.

Behaviors

- Performs entry-level incident management tasks, contributing to team mission accomplishment and performance.
- Takes responsibility for personal actions and decisions, demonstrating the core value of integrity.
- Takes initiative to ensure the mission is accomplished and team performance is improved.
- Practices the five communication responsibilities to develop skill and ensure individual contribution to risk management.
- Interacts with team members, in a positive and constructive manner, to build team cohesion.
- Acts with humility and learns from others to improve technical and leadership skills.
- Asks questions to increase individual knowledge and improve the safety of self and team members.

Knowledge

- Knowledge of the wildland fire leadership values, principles, and traits to inform expectations of their behaviors as a team member.
- Knowledge of leadership concepts including courage, compassion, authenticity, humility, and empathy to inform expectations of their behavior as a team member.
- Knowledge of the risk management process to understand their role in accident prevention and decision-making.
- Knowledge of the decision-making process to inform their role in an effective decision process.
- Knowledge of the impacts of cumulative and traumatic stress to assist in ensuring resilience and mental and emotional health.
- Knowledge of the elements of human factors and barriers to situational awareness to understand how human elements can contribute to team performance and fireline safety.
- Knowledge of the value diversity of thought and perspective bring to team performance to ensure respectful interactions with team members and to contribute to a positive team culture/command climate.

Prepare and Mobilize

Ensure individual readiness.

When to start task: Prior to assignment.

Resources to complete task: A Preparedness Guide for Wildland Firefighters and Their Families, PMS 600; NWCG Standards for Interagency Incident Business Management, PMS 902; IRPG; NWCG Standards for Aviation Transport of Hazardous Materials, PMS 513; Helicopter Passenger Briefing Card, OAS-84 or relevant job aids; agency-specific guidelines; **Interagency Standards for Fire and Fire Aviation Operations (Red Book); **NIRSC User's Guide; **National Interagency Standards for Resource Mobilization or regional guide.

- Build a HECM kit that includes the following items:
 - Kit contents
 - Incident Qualifications Card (Red Card)
 - NWCG Position Task Book for Helicopter Crewmember (HECM), PMS 311-22
 - NWCG Incident Position Standards for Helicopter Crewmember, PMS 350-22
 - IRPG
 - *NWCG Standards for Aviation Transport of Hazardous Materials*, PMS 513
 - Helicopter Passenger Briefing Card (OAS-84)
 - Documentation forms
 - Crew Time Report (CTR), SF 261 and/or Incident Time Report, OF 288
 - Interagency Helicopter Passenger/Cargo Manifest (HCM-9)
 - Travel log
 - Casual Hire (Administratively Determined [AD]/Emergency Firefighter ([EFF]) forms as applicable
 - Agency-specific forms (e.g., Injury and Workers' Compensation)
 - Accident forms
 - o Suggested items
 - Handheld radio if unavailable, obtain at incident.
 - Fireline hand tool if unavailable, obtain at incident.
 - Flight helmet if unavailable, obtain at incident.
 - Nomex gloves.
 - Compass and signal mirror, strobe, panel, etc.
 - Anemometer.
 - Global Positioning System (GPS) unit.
 - Cell phone with chargers.
 - Phone list.
 - Credit card with a sufficient credit limit.
 - Pocket calendar.
 - Pocket notepad.
 - Assorted pens, pencils, highlighters.
 - Maps and/or atlas.
 - Flagging.
 - Calculator.
 - Headlamp/flashlight with extra batteries.

- Watch.
- Electrical tape.
- Fiber tape.
- Be familiar with the *NSHO* and your agency's policy, such as the ***Interagency Standards for Fire and Aviation Operations* (Red Book).
- Demonstrate proficiency in radio programming per the **NIRSC User's Guide.
- Contact dispatch and verify your data and status are current in your agency's resource ordering application (e.g., Interagency Resource Ordering Capability [IROC]).
- Maintain physical fitness.
- Pack 14–21 days of clothes.
- Prepare to be absent from your home/family.

Gather critical information pertinent to the assignment.

When to start task: Upon receipt of resource order or Tactical Aircraft Resource Order (TARO).

Resources to complete task: Resource order or TARO.

How to accomplish task:

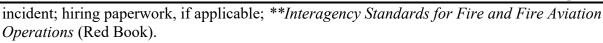
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- Acquire the resource order or TARO.
 - Review the contents:
 - Incident/project name
 - Incident/project order number
 - Financial codes
 - Descriptive location
 - Legal location (township, range, section)
 - Incident radio frequency (if available)
 - Incident base/phone number
 - Request number
 - Reporting date/time and location
 - Special instructions (authorized equipment such as laptop, cell phone, etc.)
 - Coordinate with dispatch to fulfill the resource order:
 - Mode of travel
 - Estimated time of departure (ETD) and location of departure
 - Estimated time of arrival (ETA) and location of destination
 - Location for rest overnight (RON) if you are unable to make end destination within that operational shift
- Gather situational awareness.
 - Get the Incident Action Plan (IAP), if available.
 - Collect maps and frequencies, if available.
 - Get directions to the incident.
 - The resource order provides the address/reporting location.
 - Gather weather information.

*Travel to and check in at assignment.

When to start task: Upon receipt of resource order.

Resources to complete task: *NWCG Standards for Interagency Incident Business Management*, PMS 902; check-in sheet; some method of navigation (e.g., GPS, maps); phone numbers; contacts at the



How to accomplish task:

- Follow agency-specific air and ground travel guidelines.
 - Air travel considerations
 - Comply with weight limitations.
 - ◆ If your baggage exceeds airline limitations, additional fees may apply.
 - Check bags for hazardous materials.
 - Bring your flight helmet as a carry-on item.
 - Ground travel considerations
 - Follow time limitations/driver duty day limitations.
 - Consider logistical needs, such as restrooms, restaurants, etc.
 - Ensure your rental, National Emergency Rental Vehicle (NERV), or personal vehicle is on the resource order, if applicable.
 - Reference GSA for per diem and lodging rates.
 - Check with the supervisor, Fire Management Officer (FMO), or Fire Business Office to learn how to provide justification when the rate exceeds per diem allowances.
- Model professionalism and a professional attitude.
 - Wear attire that reflects positively on the agency you represent.
 - Consider a normal daily working uniform.
- Ensure check-in procedures are complete.
 - Upon incident arrival, complete the check-in process as described in the IAP or as provided by the Status/Check-In Recorder (SCKN) or person designated on the resource order. Be prepared with the resource order, Incident Qualifications Card (Red Card), and agency-specific agreement sheet.
 - Clone your radio.
 - \circ Download maps.
- If you are a trainer or trainee, check in with the Incident Training Specialist (TNSP), if available.

Obtain briefing from previous shift/assignment, as necessary.

When to start task: When check-in is complete and supervisor has been located.

Resources to complete task: Briefing Checklist in the IRPG; IAP.

- Locate and contact the incident supervisor.
- Ensure the leader's intent and boundaries are understood.
 - Obtain incident objectives.
 - Identify roles and responsibilities.
 - Confirm specific assignments.
- Obtain and review the in-briefing packet, base operations plan, or IAP:
 - o Organizational chart and contact information/numbers
 - Local resources and hazards
 - Maps and coordinates
 - Frequencies
- Join the assigned helicopter and crew/Helibase Manager (HEBM), if applicable.



- Obtain a helicopter briefing from the pilot or crew members.
 - Receive the fuel service vehicle (FSV) brief.



Conduct self in a professional manner.

When to start task: Throughout the incident.

Resources to complete task: *IRPG*; agency-specific standard operating procedures (SOPs).

How to accomplish task:

- Demonstrate professional behavior on and off duty.
- Demonstrate respect for others.
 - Assume goodwill and best intentions.
- Be punctual.
- Maintain a state of readiness.
 - Ensure your gear is prepared.
 - Be ready to respond in a timely manner.
 - Remain focused and mentally prepared.
 - Perform regular mental self-checks for readiness.
 - Recognize and communicate a lack of mental and/or physical preparedness.
- Wear appropriate attire.
 - Refer to general and location-specific lists describing required attire.
 - Do not wear attire with personal, political, or graphic statements or images.

Identify and participate in a common operating picture.

When to start task: Upon joining an assigned helicopter and crew or HEBM.

Resources to complete task: *IRPG*.

How to accomplish task:

- Establish and maintain positive interpersonal working relationships.
 - Learn names and exchange contact information.
 - Promote community through team activities.
- Build personal awareness of the common operating picture.
 - Obtain daily or more frequent briefings from the supervisor.
 - Confirm roles and responsibilities.
 - Promote the leader's intent.
 - Identify strengths of team members.
 - Recognize coworkers' past assignments and experience.
 - Discuss qualification training needs for team members.
- Develop relationships and collaborate with interagency partners.
 - Build awareness and respect for a variety of SOPs.

Apply Incident Command System (ICS) terminology, organization, and command structure.

When to start task: Upon receipt of resource order.

Resources to complete task: Incident Organization Chart (ICS 207); IAP; in-briefing packet; phone numbers.

How to accomplish task:

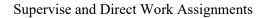
- Identify immediate supervisors, peers, and subordinates.
 - Recognize changes in your role within the command structure.
- Distinguish between the roles of aviation positions.

Model leadership values and principles.

When to start task: Throughout the incident.

Resources to complete task: Operational Leadership section of the *IRPG*; *Leading in the Wildland Fire Service*, PMS 494-2.

- Refer to the Operational Leadership section of the *IRPG*.
- Refer to Leading in the Wildland Fire Service, PMS 494-2.





Supervise and Direct Work Assignments

Implement objectives, priorities, work assignments, and performance expectations.

When to start task: Throughout the incident.

Resources to complete task: IAP; TARO; IRPG.

- Identify, analyze, and use evolving situational awareness to make informed decisions, take appropriate actions, and communicate changes to appropriate personnel.
 - Constantly evaluate and re-evaluate the situation.
 - Utilize lookouts, line scouts, adjoining resources, and your radio to collect pertinent information.
- Develop and implement contingency plans.
- Ensure incident objectives and the leader's intent (task, purpose, and end state) are identified.
 - Receive a briefing from the supervisor and ensure instructions and assignments are clear.
 - Brief personnel and give a clear leader's intent.
 - Continuously review personnel's work to ensure objectives are being met and adjust as needed to complete the assignment.
- Identify safety issues.
 - Communicate any changes to the plan.
 - o Communicate immediately any safety concerns and actions needed to mitigate them.
 - Provide open communication through the chain of command.
- Establish, monitor, and communicate daily performance expectations and provide feedback as soon as possible.
 - o Give positive feedback and feedback about areas needing improvement.
 - Stick to the facts and do not add your opinions.
- Recognize and maintain your span of control.

Perform Helicopter Crewmember-Specific Duties

*Use personal protective equipment (PPE) properly.

When to start task: Prior to check-in and throughout the incident.

Resources to complete task: *NSHO*; passenger briefing card; ***ALSE Handbook*.

How to accomplish task:

- Ensure PPE is clean and serviceable.
 - Gloves and/or flight gloves
 - Nomex (shirt, pants, and/or flight suit)
 - o Boots
 - o Safety eyewear
 - Hearing protection
 - o Hard hat
 - Chin strap
- Follow flight helmet care and use guidelines.
 - Ensure the helmet fits correctly and is the proper size.
 - Ensure avionics work properly.
 - Ensure the visor is clean and serviceable.
 - Follow the manufacturer's maintenance and inspection guidelines.
 - Ensure proper storage and treatment of the helmet.
 - Store it in an in-flight bag or the original packaging.
- Adhere to agency-specific policies for mission-specific PPE requirements.

*Prepare and manage cargo.

When to start task: Upon assignment to a logistics/cargo mission by the supervisor.

Resources to complete task: Interagency Helicopter Passenger/Cargo Manifest (HCM-9) or agencyspecific form; *IRPG*; Chapter 11 of the *NSHO*; General Message (ICS 213); Allowable Payload Chart (HBM-4); ***Interagency Helicopter Load Calculation* (NFES 1064).

- Prepare internal and/or external cargo loads.
 - Inspect cargo equipment.
 - Ensure the equipment is approved and rated appropriately.
 - Remove non-serviceable equipment (e.g., nets, lead lines, swivels).
- Obtain the allowable payload per the specific aircraft.
 - Prepare a manifest for each load with consideration of aircraft weight and balance.
- Ensure sufficient equipment and supplies are available.
 - o Conduct regular inventory of equipment and supplies.
 - Request necessary replacements for equipment and supplies.
 - Complete a General Message (ICS 213), as requested.
 - Prioritize cargo loads.
 - Time
 - Requested supplies
 - Weight (lightest load first, then progressively heavier loads as fuel is burned)



- Follow proper procedures for cargo transportation.
 - Inspect loads (internal and external).
 - Ensure small items are secured.
 - Ensure all external loads have a swivel.
 - Tag cargo with the destination and weight.
 - Consider:
 - Pilot preference.
 - Weight and balance.
 - ✤ Hazardous materials configuration.
- Confirm the site selection is adequate.
 - Seek pilot feedback.
- Brief the pilot prior to the cargo mission.
 - Environmental advisories
 - Hazardous materials
 - o Hazards
 - Weight
 - o Contents
 - Destination
 - Ground contact, if applicable

*Prepare manifests.

When to start task: After receiving a flight mission briefing/mission request.

Resources to complete task: Interagency Helicopter Passenger/Cargo Manifest (HCM-9); *NSHO*; *NWCG Standards for Aviation Transport of Hazardous Materials*, PMS 513; Allowable Payload Chart (HBM-4); ***Interagency Helicopter Load Calculation* (NFES 1064).

- Refer to the *NSHO* for what is needed.
- Identify the specific aircraft being used.
- Review the assigned aircraft's load calculation.
- Complete the manifest based on the mission.
 - Ensure each flight/mission has a manifest completed.
 - Weigh cargo and people.
 - Use full names on the manifest.
 - o Identify, document, and communicate hazardous materials.
 - Ensure the manifest has an appropriate level of detail.
 - Ensure all fields are completed.
 - Ensure the manifest preparer's name is legible.
 - Be sure to follow these general considerations:
 - Write legibly so that the manifest is clear and easy to read.
 - Prioritize/plan loads.
 - If you are utilizing fuel burn, ensure the manifest reflects the changes.
- Communicate the manifest information to the pilot.
- Submit the manifest to the incident supervisor.

*Brief and direct personnel for passenger transport.

When to start task: Upon receipt of a mission requiring personnel transport.

Resources to complete task: Aviation section of the *IRPG*; Helicopter Passenger Briefing Card (OAS-84); pilot briefing on specific aircraft; *NSHO*; passenger/cargo manifest; Chapter 2 of the ***ALSE Handbook*.

How to accomplish task:

Follow the steps outlined in the Helicopter Passenger Briefing Card (OAS-84) or IRPG.

• Brief passengers on any aircraft-specific topics to improve situational awareness.

Facilitate helicopter logistics.

When to start task: Throughout the incident.

Resources to complete task: *NSHO*; General Message (ICS 213); *IRPG*; weight estimates; Interagency Helicopter Passenger/Cargo Manifest (HCM-9).

How to accomplish task:

- Refer to the *NSHO* for what is needed.
- Anticipate needs based on situational awareness.
 - Identify priorities.
 - Prioritize safety and consider timeliness in key evaluation criteria.
 - Strive for efficient and effective flight legs.
- Use separate General Message (ICS 213) forms to order supplies and resources.

*Identify in-flight helicopter emergency procedures and demonstrate proper crash rescue actions.

When to start task: At the start of each mission and/or when a crash rescue plan is initiated.

Resources to complete task: Chapter 12 of the *NSHO*; Crash Rescue Plan posted at the helibase; *NWCG Aviation Mishap Response Guide and Checklist*, PMS 503; Aircraft Mishap Response Actions section of the *IRPG*; Medical Plan and Medical Incident Report (ICS 206 WF); tools, including crash rescue kit, fire extinguisher, PPE, medical kit, and helicopter briefing.

- Inspect the crash rescue equipment at the beginning of an assignment.
- Review the crash rescue plan.
 - Know your role.
- Demonstrate knowledge of in-flight emergency procedures.
- Review crash diagrams for the assigned aircraft.
 - o NSHO
 - Pilot briefing
 - Airframes and access points
 - Fuel shutdown
 - In-flight procedures
 - Brace positions
 - Fuel and battery shutdown
 - Emergency Locator Transmitter (ELT) location and activation



- Fire extinguisher locations
- First aid and survival kit locations

*Ensure familiarity with helicopter configurations.

When to start task: When assigned or tasked with the helicopter and crew.

Resources to complete task: Briefing from the pilot or incident supervisor.

How to accomplish task:

- Receive a briefing on helicopter-specific specialized equipment.
- Deliver a briefing on helicopter-specific specialized equipment, as needed.
- Configure helicopter-specific specialized equipment.
- Complete helicopter-specific configuration drills and checks.
- Follow agency-specific special use guidelines and procedures.

Ensure in-flight discipline.

When to start task: When preparing for and during a flight.

Resources to complete task: Helicopter Passenger Briefing Card (OAS-84); Helicopter Passenger Briefing and PPE section of the *IRPG*.

How to accomplish task:

- Establish protocol with pilots.
 - Confirm take-off and landing procedures.
 - Comply with sterile cockpit requirements in accordance with 14 CFR Part 135.100 Flight crewmember duties.
 - Demonstrate proper etiquette.
 - Identify the radio frequencies to be monitored.
- Be an active passenger.
 - See something, say something.
 - Safety is everyone's responsibility.

*Construct and/or manage a helispot.

When to start task: When assigned a helispot to manage.

Resources to complete task: Chapters 2 and 8 of the *NSHO*; Aviation section of the *IRPG*; IAP; tools, including radio, PPE, crash rescue kit, extinguisher, hand tool, hand saw or chain saw (request or provide dust abatement as needed); ***Interagency Helicopter Load Calculation* (NFES 1064) or Allowable Payload Chart (HBM-4).

- Establish Lookouts, Communications, Escape Routes, and Safety Zones (LCES).
- Refer to Chapter 2, Helispot Manager Duties and Responsibilities in the NSHO.
- Refer to Chapter 8, Helicopter Landing Areas in the NSHO.

*Manage a dipsite.

When to start task: When assigned a dipsite to manage.

Resources to complete task: Chapters 2 and 8 of the *NSHO*; Aviation section of the *IRPG*; IAP; tools, including radio, PPE, crash rescue kit, extinguisher, medical kit (if available).

How to accomplish task:

- Establish LCES.
- Refer to Chapter 2, Dipsite Manager Duties and Responsibilities in the *NSHO*.
- Refer to the Water Sources section in Chapter 8, Helicopter Landing Areas in the NSHO.

*Communicate with helicopters.

When to start: Throughout the assigned mission.

Resources to complete task: Exhibit 4.2 – Aircraft Base Radio Operator (ABRO) Advisories to Pilots in the *NSHO*; *IRPG*; Incident Radio Communications Plan (ICS 205); Air Operations Summary (ICS 220); Helibase Communications Plan (HBM-8); tools, including radio, batteries, strobe, mirror, panel marker, and GPS.

- Communicate safety concerns immediately.
- Demonstrate proper nonverbal communications with helicopter pilots.
 - Utilize hand signals to marshal helicopters.
 - Use panels for target location.
 - Use strobes and signal mirrors to signal location.
- Demonstrate proper radio usage.
 - Communicate using identified channels, such as:
 - Air to ground (A/G).
 - Command.
 - Deck Coordinator (DECK).
 - Ground tactical (TAC).
 - Air Guard.
 - Monitor air-to-air tactics when able.
 - Perform handheld and/or mobile radio checks according to the **NIRSC User's Guide.
 - Communicate clearly and concisely.
 - Push to talk, not push to think.
 - \circ Only one person should communicate with the pilot.
 - Limit talking to the pilot during critical flight profiles.
- Communicate location using applicable descriptors.
 - Absolute: Use coordinates of degrees and decimal minutes (DDD° MM.MMM') or the agency-specified position format.
 - HECM relative to the aircraft: Use clock position, high/low (e.g., "I'm at your 3 o'clock low."), or cardinal direction (not ideal, but good for initial guidance).
 - Aircraft relative to the terrain: Use descriptors such as "midslope," "rotor width," etc. ("Move one-half rotor width to your left.")
- Provide constructive feedback on load placement, speed, and height (rotor wash).

Be familiar with Safety Management System (SMS).

When to start: Upon receipt of aviation training.

Resources to complete task: *NWCG Standards for Aviation Risk Management*, PMS 530; agency-specific SMS guidance.

How to accomplish task:

- Define SMS: A systematic approach to managing safety, including the necessary organizational structures, accountabilities, and policies and procedures to help in decision-making.
- Identify the four components of SMS and what they entail.

Recognize and practice Crew Resource Management (CRM).

When to start: Throughout the incident.

Resources to complete task: None.

How to accomplish task:

- See something, say something.
- Follow agency-specific guidance.

*Obtain and appropriately apply load calculations.

When to start: Throughout the incident.

Resources to complete task: ***Interagency Helicopter Load Calculation* (NFES 1064) or Allowable Payload Chart (HBM-4); *NSHO*; Interagency Helicopter Passenger/Cargo Manifest (HCM-9); *NWCG Standards for Aviation Transport of Hazardous Materials*, PMS 513.

- Review and complete the Interagency Helicopter Passenger/Cargo Manifest (HCM-9).
- Identify the specific aircraft to be utilized for the mission.
- Review the assigned aircraft's load calculation or the Allowable Payload Chart (HBM-4) for Hovering in Ground Effect (HIGE), Hovering Out of Ground Effect (HOGE), and Hovering Out of Ground Effect-Jettisonable (HOGE-J), or request the load calculation numbers from the Helicopter Manager, Single Resource (HMGB) or pilot.
- Accurately document the load calculation information on each manifest that is completed.
- Ensure the load calculation numbers are applicable to the mission and mission location.
 - One load calculation is valid between points of similar elevation, temperature, and fuel load.
 - Obtain new load calculation information when there is a change of:
 - +/- 5 degrees Celsius.
 - +/- 1,000 feet elevation.
 - Operating weight (either helicopter equipped weight, flight crew weight, or the addition of fuel).

Perform Fireline Duties

Perform firefighter duties.

When to start task: When assigned to a fireline.

Resources to complete task: *IRPG*; tools, including fireline hand tools, specialized fire equipment, line gear, PPE, weather devices, food/water, and handheld radio.

- Carry the *IRPG* at all times and use it to guide actions.
- Request, direct, and provide feedback to aerial resources through the established chain of command.
- Provide status updates on conditions affecting operations, hazardous conditions, unresolved conflicts, air operations, etc., to the supervisor.
- Use maps, a compass, GPS, or other tools and applications to gather information and navigate on the incident.
- Collect, document, and report weather observations utilizing the belt weather kit or an electronic weather meter.
- Locate the fireline and use tools to implement the appropriate fireline construction methods (e.g., mineral soil scrape, cup trenching, removal of ladder fuels) necessary to stop fire spread and ensure completion to acceptable standards.
- Utilize appropriate fireline tactics, including indirect and direct attack strategies.
 - Use firing devices under supervision on a firing operation according to the ignition/firing plan (verbal or written).
 - Maintain and inspect tools, equipment, and supplies required to complete assigned tasks for amount, serviceability, and safety. Notify the supervisor if corrective action is needed.
- Contribute to the planning process by providing accurate information and recommendations through the established chain of command.
- Look, listen, and learn. Ask questions when appropriate and ensure you understand instructions when they are given.
- Ensure that instructions are clear and understood.
 - Be a student of fire. Observe interactions and operations to expand your experience level.

Communicate and Coordinate

*Demonstrate strong verbal communication skills.

When to start task: Throughout the assignment.

Resources to complete task: Helicopter Passenger Briefing and PPE section of the *IRPG*; Helicopter Passenger Briefing Card (OAS-84).

How to accomplish task:

- Clearly state expectations.
- Ensure clear dialogue and open communication among personnel.
- Use active listening skills.
- Ensure use of appropriate forms.
- Ensure written communication is clear and legible.
- Confirm understanding of information received.

*Ensure proper use of radios.

When to start task: Upon assignment or on the scene of an incident.

Resources to complete task: Local communication plan; Air Operations Summary (ICS 220); Incident Radio Communications Plan (ICS 205); ***NIRSC User's Guide*; ***NIRSC Radio Programming Guides*; RT-130, WFSTAR: Radios of Fire; radio manufacturer's user manual.

How to accomplish task:

- Obtain and verify frequencies being utilized for the incident/project.
 - Review the communications plan within the IAP/in-briefing packet and determine relevant frequencies.
 - Ask any needed questions to clarify which frequencies are pertinent to your assignment/location/work area.
 - Receive a clone for the radios or accurately hand program frequencies.
 - Perform a radio check.
- Use radios to communicate with your own and adjoining/assigned resources.
 - Use ICS terminology.
 - Contact other individuals/crews/engines/aircraft using mobile, aircraft, or handheld radios on appropriate frequencies.
 - Use proper radio etiquette (i.e., identify the unit you are calling, followed by your own identifier).
 - Communicate with other resources using clear text.
 - Be brief.

Conduct and/or participate in After Action Reviews (AAR).

When to start task: Upon completion of a significant event or at the end of the day.

Resources to complete task: AAR section of the *IRPG*.

How to accomplish task:

• Identify successes and opportunities to improve.



- Ensure clear dialogue and open communication.
 - Engage in active listening.
 - Facilitate an open discussion.
 - Avoid interrupting.
 - Allow all voices to be heard.
 - Provide and receive constructive criticism.
- Provide context and perception based on your individual experience/perspective.
- Apply lessons learned in the AAR to future work.

Manage Risk

*Apply the Risk Management Process.

When to start task: Throughout the assignment.

Resources to complete task: Risk Management Process, 10 Standard Firefighting Orders, and 18 Watch Out Situations sections in the *IRPG*; SAFECOM; SAFENET; Medical Plan and Medical Incident Report (ICS 206 WF); *NWCG Standards for Aviation Risk Management*, PMS 530; *NWCG Aviation Risk Management Workbook*, PMS 530-1; agency-specific risk management tools; ***Interagency Standards for Fire and Fire Aviation Operations* (Red Book).

How to accomplish task:

- Refer to the Risk Management Process in the *IRPG*.
- Refer to NWCG Standards for Aviation Risk Management, PMS 530 and NWCG Aviation Risk Management Workbook, PMS 530-1.

*Ensure Lookouts, Communications, Escape Routes, and Safety Zones (LCES) are established and known as stated in the *NWCG Incident Response Pocket Guide (IRPG)*, PMS 461.

When to start task: Prior to engaging in assigned tasks.

Resources to complete task: LCES, Safety Zones, 10 Standard Firefighting Orders, and 18 Watch Out Situations sections in the *IRPG*.

How to accomplish task:

• Refer to the LCES, Safety Zones, 10 Standard Firefighting Orders, and 18 Watch Out Situations sections in the *IRPG*.

Plan for and respond to medical emergencies as stated in the *NWCG Incident Response Pocket Guide (IRPG)*, PMS 461 and/or Incident Action Plan (IAP).

When to start task: Prior to a medical incident or when a medical incident occurs.

Resources to complete task: Emergency Medical Care section of the *IRPG*; *NWCG Standards for Wildland Fire First Aid*, PMS 560; Medical Plan and Medical Incident Report (ICS 206 WF); IAP; Incident Radio Communications Plan (ICS 205); Air Operations Summary (ICS 220).

- Ensure that assigned resources are prepared to execute the Medical Plan and Medical Incident Report (ICS 206 WF).
 - If the project or incident does not have a formal plan, ensure awareness of communication frequencies, contacts, and protocols in case of a medical emergency.
- Train personnel ahead of time and often to prepare for real medical emergencies, keeping them current on procedures and protocols.
- Manage medical emergencies based on procedures stated in the IAP, the Medical Plan and Medical Incident Report (ICS 206 WF), or other relevant guidelines.

Participate in safety sessions and critiques.

When to start task: Before, during, and after assignments.

Resources to complete task: AAR section of the *IRPG*; Activity Log (ICS 214); *Leading in the Wildland Fire Service*, PMS 494-2; risk assessment worksheets; informal briefings; tailgate safety sessions; SAFECOM; SAFENET; agency-specific risk assessment tools.

How to accomplish task:

- Participate in tailgate safety sessions using agency-specific risk analysis.
 - Participate in pre- and post-briefing sessions.
 - Be an active participant.
 - Know yourself and seek improvement.

Ensure own and others' safety and welfare in all aspects of the job as stated in the *NWCG Incident Response Pocket Guide (IRPG)*, PMS 461.

When to start task: Upon assignment and throughout the incident.

Resources to complete task: *IRPG*; *NWCG Standards for Aviation Risk Management*, PMS 530; *NWCG Aviation Risk Management Workbook*, PMS 530-1; Medical Plan and Medical Incident Report (ICS 206 WF); General Message (ICS 213); *NWCG Standards for Wildland Fire First Aid*, PMS 560; agency-specific forms.

- Verify helibase and/or incident emergency and safety procedures.
- Consider the right to refuse an assignment based on safety or probability of success as stated in the *IRPG*.
 - Offer an alternative plan to the supervisor.
- Report hazards, incidents, injuries, and accidents to the incident supervisor immediately.
 - Inform the home unit supervisor of any relevant injuries or accidents.

Document

Complete all administrative tasks and documentation in an accurate and timely manner.

When to start task: When directed to complete, as outlined by agency policy.

Resources to complete task: Crew Time Report (CTR), SF 261 and/or Incident Time Report, OF 288; Incident Personnel Performance Rating (ICS 225 or ICS 225 WF); General Message (ICS 213); Activity Log (ICS 214); SAFECOM; SAFENET; agency/mission-specific forms; other documents as assigned.

- Follow the steps to complete the forms as outlined by the agency policy, instructions provided with the form, and/or specific instructions as provided by the Incident Management Team (IMT) or assigned supervisor for the incident.
- Retain all travel documentation and receipts per agency direction.
 - o Air
 - Rental car
 - Lodging
 - o Fuel

Demobilize

*Prepare for and implement demobilization.

When to start task: Upon notification of demobilization from the incident or prior to completion of assignment.

Resources to complete task: IAP; local SOPs; agency-specific SOPs; ***National Interagency Standards for Resource Mobilization*.

- Receive demobilization instructions from the supervisor, dispatch center, IAP, or other posted communications.
- Submit an incident-specific demobilization form to the Demobilization Unit.
- Return equipment and supplies to the appropriate unit.
- Resupply/restock property consumed on an incident. Resupply can occur from the supply unit at the incident, local cache, or from other sources at the home unit.
- Check out with the TNSP if applicable.
- Ensure agency-specific work/rest driving standards are followed.
- Depart from the incident.
 - Report your status to the home unit, including reassignment or ETA to the home unit.
 - Check in with dispatch, the duty officer, or an appropriate supervisor.

The *NWCG Incident Position Standards for Helicopter Crewmember* is developed and maintained by the Interagency Helicopter Operations Subcommittee (IHOPS), under the direction of the National Interagency Aviation Committee (NIAC), an entity of the National Wildfire Coordinating Group (NWCG).

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