A publication of the National Wildfire Coordinating Group



NWCG Incident Position Standards for Helicopter Crewmember

PMS 350-22 DRAFT 2023



NWCG Incident Position Standards for Helicopter Crewmember

DRAFT 2023 PMS 350-22

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, https://www.nwcg.gov/positions/hecm, in the NWCG Position Catalog, includes the Incident Position Description (IPD) and Position Qualifications, as well as links to standards and references needed to perform the duties of a Helicopter Crewmember.

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)

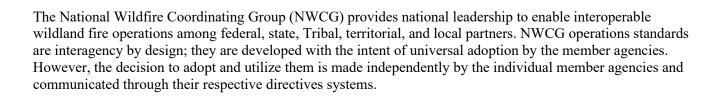


Table of Contents

General References	1
Agency-Specific References	2
Leadership Level 1, Follower (Provide Action)	3
Prepare and Mobilize	4
Ensure individual readiness.	
Gather critical information pertinent to the assignment	
Travel to and check-in at assignment.	
Obtain briefing from previous shift/assignment as necessary.	
Build the Team	8
Conduct self in a professional manner.	
Identify and participate in a common operating picture.	
Apply Incident Command System (ICS), organization, and command structure	
Model leadership values and principles.	9
Supervise and Direct Work Assignments	10
Implement objectives, priorities, work assignments, and performance expectations	
Communicate and Coordinate	11
Demonstrate strong verbal communication skills.	
Ensure proper use of radios.	11
Conduct and/or participate in After Action Reviews (AAR)	
Manage Risk	13
Apply the Risk Management Process.	13
Ensure Lookouts, Communications, Escape Routes, and Safety Zones (LCES) are established and	
known as stated in the IRPG.	13
Plan for and respond to medical emergencies as stated in the IRPG and/or IAP.	13
Participate in safety sessions and critiques.	
Ensure own and others' safety and welfare in all aspects of the job as stated in IRPG	
Perform Helicopter Crewmember-Specific Duties	15
Use personal protective equipment (PPE) properly.	15
Manage Cargo.	
Prepare Manifests	
Manage and/or brief personnel for passenger transport	
Facilitate helicopter logistics.	
Identify in-flight helicopter emergency procedures and demonstrate proper crash rescue actions	
Ensure familiarity with helicopter configurations.	
Ensure in-flight discipline.	
Construct and/or manage helispot.	
Manage dipsite.	
Communicate with helicopters Be familiar with Safety Management System (SMS)	
Recognize and practice Crew Resource Management (CRM).	
Perform Fireline Duties	
1 VI IVI III T II VIIIIV DUUVS	····· 4 1

Perform firefighter duties.	21
Document	
Complete all administrative tasks and documentation in an accurate and timely manner	
Demobilize	
Prepare and implement demobilization.	



General References

- NWCG Standards for Helicopter Operations (NSHO), PMS 510, https://nwcg.gov/sites/default/files/publications/pms510.pdf
- NWCG Standards for Aviation Transport of Hazardous Materials, PMS 513, https://www.nwcg.gov/sites/default/files/publications/pms513.pdf
- NWCG Standards for Aviation Risk Management, PMS 530, https://www.nwcg.gov/sites/default/files/publications/pms530.pdf
- *NWCG Aviation Risk Management* Workbook, PMS 530-1, https://www.nwcg.gov/publications/pms530-1
- NWCG Passenger/Crew and Cargo Manifest, PMS 245, https://www.nwcg.gov/sites/default/files/publications/pms245.pdf
- NWCG Aviation Mishap Response Guide, PMS 503, https://www.nwcg.gov/sites/default/files/publications/pms503.pdf
- *NWCG Task Book for the Position of Helicopter Crewmember*, PMS 311-22, https://www.nwcg.gov/sites/default/files/products/training-products/pms-311-22.pdf
- Air Operations Summary (ICS 220), https://training.fema.gov/emiweb/is/icsresource/assets/ics%20forms/ics%20form%20220,%20air%20operations%20summary%20(v3).pdf
- NWCG Incident Response Pocket Guide (IRPG), PMS 461, https://www.nwcg.gov/sites/default/files/publications/pms461.pdf
- Incident Action Plan (IAP)
- Fitness and Work Capacity, PMS 304-2, https://www.nwcg.gov/sites/default/files/publications/pms304-2.pdf
- A Preparedness Guide for Wildland Firefighters and Their Families, PMS 600, https://www.nwcg.gov/sites/default/files/publications/pms600.pdf
- NWCG Standards for Interagency Business Management, PMS 902, https://www.nwcg.gov/sites/default/files/publications/pms902.pdf
- Leading in the Wildland Fire Service, PMS 494-2, https://www.nwcg.gov/sites/default/files/publications/pms494-2.pdf
- NWCG Standards for Wildland Fire First Aid, PMS 560, https://www.nwcg.gov/sites/default/files/publications/pms560.pdf
- WFSTAR *Radios of Fire*, https://www.nwcg.gov/publications/training-courses/rt-130/communications/com301
- 10 Standard Firefighting Orders, PMS 110, https://www.nwcg.gov/publications/pms110
- 18 Watchout Situations, PMS 118, https://www.nwcg.gov/publications/pms118
- Incident Personnel Performance Rating (ICS 225), https://training.fema.gov/emiweb/is/icsresource/assets/ics%20forms/ics%20form%20225,%20incident%20personnel%20performance%20rating%20(v3).pdf
- Incident Personnel Performance Rating Form (ICS 225 WF), https://www.nwcg.gov/sites/default/files/products/ics-forms/ics_225_wf.pdf
- Activity Log (ICS 214), https://training.fema.gov/emiweb/is/icsresource/assets/ics%20forms/ics%20form%20214,%20act

- ivity%20log%20(v3.1).pdf
- Incident Organization Chart (ICS 207), https://training.fema.gov/emiweb/is/icsresource/assets/ics%20forms/ics%20form%20207,%20in cident%20organization%20chart%20(v3).pdf
- Medical Plan and Medical Incident Report (ICS 206 WF), https://www.nwcg.gov/sites/default/files/products/ics-forms/ics 206 wf.pdf
- Incident Radio Communications Plan (ICS 205), https://training.fema.gov/emiweb/is/icsresource/assets/ics%20forms/ics%20form%20205,%20in cident%20radio%20communications%20plan%20(v3.1).pdf
- Aviation Summary (ICS 220), https://training.fema.gov/emiweb/is/icsresource/assets/ics%20forms/ics%20form%20220,%20air%20operations%20summary%20(v3).pdf
- General Message (ICS 213), https://training.fema.gov/emiweb/is/icsresource/assets/ics%20forms/ics%20form%20213,%20ge neral%20message%20(v3).pdf
- 14 CFR Part 133 Rotorcraft External-Load Operations, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-G/part-133
- FAA Rotorcraft External-Load Operations Advisory Circular 133-1B, https://www.faa.gov/documentLibrary/media/Advisory Circular/AC 133-1B.pdf

Agency-Specific References

- **Interagency Aviation Life Support Equipment (IALSE), https://www.doi.gov/sites/doi.gov/files/interagency-aviation-life-support-equiment-handbook-guide-v3.0.pdf
- **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
- Helibase Communication Plan form (HBM-8), https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fgacc.nifc.gov%2Fnrcc%2Fdc%2Fmtmdc%2FForms%2FAviation%2520Forms%2FHelibase%2520forms.xls&wdOrigin=BROWSELINK
- **Interagency Helicopter/passenger/cargo Manifest (HCM-9),
 <a href="https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fftp.wildfire.gov%2Fpublicom/2Fincident_specific_data%2Fn_rockies%2FIncidentAviationManagers%2FHelo%2520Mgr%2520Forms%2520and%2520Checklists%2FHCM-9.xls&wdOrigin=BROWSELINK
- Helicopter Passenger Briefing Card (OAS-84), https://www.iat.gov/docs/oas-84.pdf
- **Interagency Standards for Fire and Fire Aviation Operations (Red Book), https://www.nifc.gov/standards/guides/red-book
- **National Interagency Mobilization Guide, https://www.nifc.gov/sites/default/files/NICC/3-Logistics/Reference%20Documents/Mob%20Guide/Mobilization_Guide.pdf

- National Incident Radio Support Cache Guide, https://www.nifc.gov/sites/default/files/NIICD/docs/2022%20NIRSC%20Radio%20Program%2
 OGuides.pdf
- NIRSC Radio Program Guides, https://www.nifc.gov/sites/default/files/NIICD/docs/2022%20NIRSC%20Radio%20Program%2

 OGuides.pdf
- Incident Time Report (OF-288), https://gacc.nifc.gov/eacc/dispatch_centers/NECC/dispatch/overhead_teams/OF288.pdf

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 <u>Level 1</u> description, expected behaviors and knowledge, suggested development goals, and self-study opportunities.



Prepare and Mobilize

Ensure individual readiness.

When to start task: Prior to assignment.

Resources to complete task: **Interagency Standards for Fire and Fire Aviation Operations (Red Book); Fitness and Work Capacity, PMS 304-2; **National Interagency Mobilization Guide or regional guide; National Incident Radio Support Cache Guide; Preparedness Guide for Wildland Firefighters and Their Families, PMS 600; NWCG Standards for Interagency Business Management, PMS 902; NWCG Incident Response Pocket Guide (IRPG), PMS 461; NWCG Standards for Aviation Transport of Hazardous Materials, PMS 513; Passenger Briefing Card, OAS-84 or relevant job aids; and agency-specific guidelines.

- Build a HECM kit. The kit will contain critical items needed to function during the first 48
 hours. The kit will be easily transportable and within agency weight limitations. Include in your
 kit the following:
 - Location or incident-specific information
 - o Kit Contents:
 - Incident Qualifications Card (Red Card)
 - NWCG Task Book for the Position of Helicopter Crewmember, PMS 311-22
 - NWCG Incident Response Pocket Guide (IRPG), PMS 461
 - NWCG Standards for Aviation Transport of Hazardous Materials, PMS 513
 - Helicopter Passenger Briefing Card (OAS-84) (or relevant job aids)
 - NWCG Incident Position Standards for Helicopter Crewmember, PMS 350-22
 - Documentation Forms:
 - Crew Time Report (SF-261) and/or Incident Time Report (OF-288)
 - NWCG Passenger/Crew and Cargo Manifest, PMS 245
 - Travel log
 - Casual Hire (Administratively Determined [AD]/Emergency Firefighter ([EFF])
 Forms as applicable
 - Agency-specific forms (e.g., Injury and Workers' Compensation)
 - Accident forms
 - Suggested Items:
 - Handheld radio (If unavailable, obtain at incident.)
 - Fireline handtool (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
- Refer to the NWCG Preparation and Packing for Incidents List located at https://training.nwcg.gov/dl/s248/s-248-ho-packing-list.pdf.
- Be familiar with NWCG Standards for Helicopter Operations (NSHO), PMS 510 and **Interagency Standards for Fire and Aviation Operations (Red Book)
- Demonstrate proficiency in radio programming per the *National Incident Radio Support Cache (NIRSC) Guide*.
- Contact dispatch and verify your data/status is current in the Interagency Resource Ordering Capability (IROC).
- Maintain physical fitness.
 - Work capacity test
- Pack 14-21 days of clothes.
- Prepare to be absent from 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.

- Acquire resource order or TARO.
 - o 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.)
 - Ensure the manifest has correct spelling, home unit, phone numbers, and all other information.
 - o Coordinate with dispatch to fulfill resource order:
 - Mode of travel
 - Estimated Time of Departure (ETD)
 - Destination Estimated Time of Arrival (ETA) and place
 - Location for rest overnight (RON) if unable to make end destination within that operational shift
- Gather situational awareness.
 - o Get the Incident Action Plan (IAP) if available.



- o Collect maps and frequencies if available.
- o Get directions to the incident.
 - The resource order provides the address/reporting location.
- o Gather weather information.

Travel to and check-in at assignment.

When to start task: Upon receipt of resource order.

Resources to complete task: **Interagency Standards for Fire and Fire Aviation Operations (Red Book) or NWCG Standards for Interagency Business Management, PMS 902; check-in sheet; some method of navigation (GPS, maps); phone numbers; contacts at the incident; hiring paperwork if applicable.

How to accomplish task:

- Follow agency-specific air and ground travel guidelines.
 - o Air Travel Considerations
 - Comply with weight limitations.
 - Baggage may exceed airline limitations and additional fees may apply.
 - Check bags for hazardous materials.
 - Ensure flight helmet is 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 General Services Administration (GSA) for per diem and lodging rates.
 - Check with Supervisor/Fire Management Officer (FMO/Fire Business Office) to learn how to provide justification when the rate exceeds per diem allowances.
- Model professionalism and a professional attitude.
 - o Wear attire that reflects positively on the agency you represent.
 - o Consider normal daily working uniform.
- Ensure check-in procedures are complete.
 - O Upon incident arrival, complete the check-in process as described in the IAP or provided by the Status/Check-In Recorder (SCKN) or person designated on the resource order. Be prepared with resource order, Incident Qualifications Card (Red Card), and agencyspecific agreement sheet.
 - o Clone your radio.
 - Download maps.
- If 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.

How to accomplish task:

• Locate and contact incident supervisor.



- Ensure the leader's intent and boundaries are understood.
 - Obtain incident objectives.
 - o Identify roles and responsibilities.
 - o Confirm specific assignments.
- Obtain and review incoming briefing packet, base operations plan, or IAP.
 - o Organizational chart and contact information/numbers
 - Local resources and hazards
 - Maps and coordinates
 - o Frequencies
- Marry up with assigned helicopter and crew/Helibase Manager (HEBM), if applicable.
- Obtain helicopter briefing from pilot or crew members.
 - o Receive fuel service vehicle (FSV) briefing.





Build the Team

Conduct self in a professional manner.

When to start task: Ongoing from receiving an order through return travel following demobilization.

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.
 - o Assume goodwill and best intentions.
- Be punctual.
- Maintain a state of readiness.
 - o Ensure gear is prepared.
 - o Be ready to respond in a timely manner.
 - o Remain focused and mentally prepared.
 - Perform regular mental self-check for readiness.
 - Recognize and communicate lack of mental and/or physical preparedness.
- Wear appropriate attire.
 - o Refer to general and location-specific lists describing required attire.
 - o 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 marrying up with assigned helicopter and crew or Helibase Manager.

Resources to complete task: Operational Leadership section of *IRPG*.

How to accomplish task:

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

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

When to start task: Upon receiving a resource order.

Resources to complete task: *Incident Command System Organizational Chart*, PMS 207; IAP; inbriefing packet; and phone numbers.



How to accomplish task:

- Identify immediate supervisors, peers, and subordinates.
 - o Recognize changes in your role within the command structure.
- Distinguish between 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: At the beginning of and throughout the assignment.

Resources to complete task: IAP, TARO.

- Identify, analyze, and use evolving situational awareness to make informed decisions, take appropriate actions, and communicate changes to appropriate personnel.
 - o 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 leader's intent (task, purpose, and end state) are identified.
 - o Receive briefing from supervisor and ensure instructions and assignments are clear.
 - o 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.
 - o Communicate any changes to the plan.
 - o Communicate immediately any safety concerns and actions needed to mitigate them.
 - o 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 areas needing improvement.
 - O Stick to the facts and don't add your opinions.
- Recognize and maintain span of control.



Communicate and Coordinate

Demonstrate strong verbal communication skills.

When to start task: Throughout the assignment.

Resources to complete task: *IRPG* aviation briefing and OAS passenger briefing card.

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), *National Incident Radio Support Cache Guide*, *NIRSC Radio Program Guides*, WFSTAR *Radios of Fire video*, radio manufacturer 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.
 - o Receive clone for radio or accurately hand program frequencies.
 - o Perform 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).
 - o Communicate with other resources using clear text.
 - o 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: After Action Review section of the *IRPG*.

- Identify successes and opportunities to improve.
- Ensure clear dialogue and open communication.



- o Engage in active listening.
- o Facilitate an open discussion.
- Avoid interrupting.
- o Allow all voices to be heard.
- o 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 in the *IRPG*; Standard Firefighting Orders; #3 LCES Watchout Situation in the *18 Watchout Situations*, PMS 118; SAFECOM; SAFENET; *Medical Plan* (ICS 206 WF); *NWCG Standards for Aviation Risk Management*, PMS 530; *NWCG Aviation Risk Management Workbook*, PMS 530-1; ***Interagency Standards for Fire and Fire Aviation Operations* (Red Book); and agency-specific risk management tools.

How to accomplish task:

- Refer to the Risk Management Process in the *IRPG*.
- Refer to 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 IRPG.

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

Resources to complete task: Aviation User Checklist in the *IRPG*; 10 Standard Firefighting Orders, PMS 110; and 18 Watchout Situations, PMS 118.

How to accomplish task:

- Refer to the Aviation User Checklist in the *IRPG*.
- Refer to the #3 LCES Watchout Situation in the 18 Watchout Situations, PMS 118.
- Communicate a predetermined emergency plan.

Plan for and respond to medical emergencies as stated in the IRPG and/or 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); and Air Operations Summary (ICS 220).

How to accomplish task:

- Ensure that assigned resources are prepared to execute the Medical Plan (ICS 206 WF).
 - o 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 procedure and protocols.
- Manage medical emergencies based on procedures stated in the IAP, the Medical Plan, or other relevant guidelines.

Participate in safety sessions and critiques.



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

Resources to complete task: After Action Review section of the *IRPG*; Activity Log (ICS 214); *Leading in the Wildland Fire Service*, PMS 494-2; risk assessment worksheets (RAWs); informal briefings; tailgate safety sessions; SAFECOMs/SAFENETs; and agency-specific risk assessment tools.

How to accomplish task:

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

Ensure own and others' safety and welfare in all aspects of the job as stated in IRPG.

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

Resources to complete task: *IRPG*; *Standards for Aviation Risk Management*, PMS 530; *Aviation Risk Management Workbook*, PMS 530-1; Medical Plan (ICS 206 WF); General Message (ICS 213); *Standards for Wildland Fire First Aid*, PMS 560; and 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*.
 - o Offer an alternative plan to supervisor.
- Report hazards, incidents, injuries, and accidents to the incident supervisor immediately.
 - o Inform home unit supervisor of any relevant injuries or accidents.



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: **Interagency Aviation Life Support Equipment (IALSE); NWCG Standards for Helicopter Operations (NSHO), PMS 510; and passenger briefing card.

How to accomplish task:

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

Manage Cargo.

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

Resources to complete task: *NWCG Passenger/Crew and Cargo Manifest*, PMS 245 or agency-specific form; *IRPG*; Chapter 11 of *NWCG Standards for Helicopter Operations*, PMS 510; General Message (ICS 213); ***Interagency Helicopter Load Calculation*, NFES #1064; and Allowables form (HBM-4).

- Prepare internal and/or external cargo loads.
 - o Inspect cargo equipment.
 - Ensure equipment is approved and rated appropriately.
 - Remove non-serviceable equipment (nets, lead lines, swivels, etc.).
- Obtain allowables per specific aircraft.
 - o 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.
 - o Prioritize cargo loads.
 - Time



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

Prepare Manifests.

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

Resources to complete task: *NWCG Passenger/Crew and Cargo Manifest*, PMS 245; ***Interagency Helicopter Load Calculation*, NFES #1064; *NWCG Standards for Helicopter Operations (NSHO)*, PMS 510; *NWCG Standards for Aviation Transport of Hazardous Materials*, PMS 513; and Allowable form (HBM-4).

- Refer to NWCG Standards for Helicopter Operations, PMS 510 for what is needed.
- Identify the specific aircraft being used.
- Review assigned aircraft's load calculation.
- Complete the manifest based on the mission.
 - o Ensure each flight/mission has a manifest completed.
 - o Weigh cargo and people.
 - Use full names on manifest.
 - o Identify, document, and communicate hazmat items.
 - o Ensure the manifest has an appropriate level of detail.
 - o Ensure all fields are completed.
 - o Ensure the manifest preparer's name is legible.
 - o Be sure to follow these general considerations:
 - Write legibly so that it is clear and easy to read.
 - Prioritize/plan loads.
 - If utilizing fuel burn, ensure the manifest reflects changes.
- Communicate manifest information to the pilot.



• Submit the manifest to the incident supervisor.

Manage and/or brief 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), Chapter 2 of **Interagency Aviation Life Support Equipment (IALSE); pilot briefing on specific aircraft; NWCG Standards for Helicopter Operations (NSHO), PMS 510; and/or agency-specific manifest book.

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: *NWCG Standards for Helicopter Operations (NSHO)*, PMS 510; General Message (ICS-213); *IRPG*; weight estimates; **Interagency Helicopter/passenger/cargo Manifest (HCM-9) form; *NWCG Passenger/Crew and Cargo Manifest*, PMS-245.

How to accomplish task:

- Refer to the NWCG Standards for Helicopter Operations (NSHO), PMS 510 for what is needed.
- Anticipate needs based on situational awareness.
 - o Identify priorities.
 - o Prioritize safety and consider timeliness in key evaluation criteria.
 - o Strive for efficient and effective flight legs.
- Use General Message (ICS 213) to order supplies and resources (separate forms).

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 crash rescue plan is initiated.

Resources to complete task: Chapter 12 of *NWCG Standards for Helicopter Operations (NSHO)*, PMS 510; Crash Rescue Plan posted at the helibase; *Aviation Mishap Response Guide*, 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 crash rescue equipment at the beginning of an assignment.
- Review the crash rescue plan.
 - o Know your role.
- Demonstrate knowledge of in-flight emergency procedures.
- Identify crash rescue location.
- Identify crash diagrams for assigned aircraft.
 - o NWCG Standards for Helicopter Operations (NSHO), PMS 510
 - Pilot briefing
 - Airframes and access points



- Fuel shutdown
- Inflight procedures
- Brace positions
- Fuel and battery shutdown
- 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 pilot or incident supervisor.

How to accomplish task:

- Receive briefing on helicopter-specific specialized equipment.
- Deliver 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* (OAS-84), *IRPG* aviation briefing and pilot briefing.

How to accomplish task:

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

Construct and/or manage helispot.

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

Resources to complete task: Chapters 2 and 8 of *NWCG Standards for Aviation Operations*, PMS 510; 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); and Allowables form (HBM-4).

- Establish LCES.
- Refer to Chapter 2, Dipsite Manager Duties and Responsibilities in the *NWCG Standards for Aviation Operations (NSHO)*, PMS 510.
- Refer to Chapter 8, Helicopter Landing Areas in the NWCG Standards for Aviation Operations



(NSHO), PMS 510.

Manage dipsite.

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

Resources to complete task: Chapters 2 and 8 of *NWCG Standards for Aviation Operations (NSHO)*, PMS 510; 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 *NWCG Standards for Aviation Operations (NSHO)*, PMS 510.
- Refer to the Water Sources section in Chapter 8, Helicopter Landing Areas in the *NWCG Standards for Aviation Operations (NSHO)*, PMS 510.

Communicate with helicopters.

When to start: Throughout assigned mission.

Resources to complete task: *NWCG Standards for Aviation Operations (NSHO)*, PMS 510; *IRPG;* Incident Radio Communications Plan (ICS 205); Air Operations Summary (ICS 220); Helibase Communication Plan form (HBM-8); Aircraft Base Radio Operator (ABRO) advisories to pilots; tools including radio and batteries, strobe, mirror, panel marker, and GPS.

- Communicate safety concerns immediately.
- Demonstrate proper non-verbal communications with helicopters.
 - o Utilize hand signals to marshal helicopters.
 - Use panels for target location.
 - Use strobes and signal mirrors to signal location.
- Demonstrate proper radio usage.
 - o Communicate using proper frequencies.
 - Air to ground tactics
 - Command channels
 - Deck Coordinator (DECK) and/or Aircraft Base Radio Operator (ABRO) communication and coordination
 - Support and logistics
 - Air Guard, National simplex radio frequency for emergency use only
 - o Monitor air to air tactics when able.
 - Perform handheld and/or mobile radio checks according to the NIRSC Radio Program Guides.
 - o Communicate clearly and concisely.
 - Push to talk, not push to think.
 - Only one person should communicate with the pilot.
 - Limit talking to the pilot during critical flight profiles.
- Communicate location using applicable descriptors.
 - o Absolute: Use coordinates of Degrees and Decimal Minutes (DDD° MM.MMM') or agency-specified position format.



- o HECM relative to aircraft: Use clock position, high/low ("I'm at your 3 o'clock low."), or cardinal direction (not ideal, but good for initial guidance).
- Aircraft relative to terrain: Use descriptors such as "mid-slope," "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:

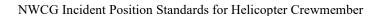
- Define SMS: Systematic approach to managing safety, including the necessary organizational structures, accountabilities, and policies and procedures to help in decision making.
- Identify the four components of SMS and what they entail.

Recognize and practice Crew Resource Management (CRM).

When to start: When assigned to an incident and throughout incident.

Resources to complete task: None.

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





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 established chain of command.
- Provide status updates on conditions affecting operations, hazardous conditions, unresolved conflicts, air operations, etc., to supervisor.
- Use maps, compass, Global Positioning System (GPS), or other tools and applications to gather information and navigate on incident.
- Collect, document, and report weather observations utilizing the Belt Weather Kit or electronic weather meter.
- Locate 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).
 - o Maintain and inspect tools, equipment, and supplies required to complete assigned task for amount, serviceability, and safety. Notify supervisor if corrective action is needed.
- Contribute to the planning process by providing accurate information and recommendations through 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.
 - o Be a student of fire. Observe interactions and operations to expand experience level.



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

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



Demobilize

Prepare 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 Mobilization Guide.

- Receive demobilization instructions from supervisor, dispatch center, IAP, or other posted communications.
- Submit 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 TNSP if applicable.
- Ensure agency-specific work/rest driving standards are followed.
- Depart from the incident.
 - Report status to home unit including reassignment or estimated time of arrival to home unit.
 - o Check in with dispatch, Duty Officer, or 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).

Previous editions: first.

While they may still contain current or useful information, previous editions are obsolete. The user of this information is responsible for confirming that they have the most up-to-date version. NWCG is the sole source for the publication.

This publication is available electronically at https://www.nwcg.gov/publications/350-22.

Submit comments, questions, and recommendations to the appropriate agency program manager assigned to IHOPS using the NWCG Publication Review Form,

https://www.nwcg.gov/publications/publication-review-form. View the complete roster at https://www.nwcg.gov/committees/interagency-helicopter-operations-subcommittee/roster.

Publications and training materials produced by NWCG are in the public domain. Use of public domain information, including copying, is permitted. Use of NWCG information within another document is permitted if NWCG information is accurately credited to NWCG. The NWCG logo may not be used except on NWCG authorized information. "National Wildfire Coordinating Group," "NWCG," and the NWCG logo are trademarks of NWCG.

The use of trade, firm, or corporation names or trademarks in NWCG products is solely for the information and convenience of the reader and does not constitute an endorsement by NWCG or its member agencies of any product or service to the exclusion of others that may be suitable.

This NWCG publication may contain links to information created and maintained by other non-federal public and/or private organizations. These organizations may have different policies from those of NWCG. Note that NWCG does not control and cannot guarantee the relevance, timeliness, or accuracy of these outside materials.