A publication of the National Wildfire Coordinating Group



## NWCG Incident Position Standards for Airtanker Base Manager

PMS 350-121

#### JULY 2025



## NWCG Incident Position Standards for Airtanker Base Manager

July 2025 PMS 350-121

The *NWCG Incident Position Standards for Airtanker Base Manager* establishes national interagency standards for operating as an Airtanker Base Manager (ATBM) 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 Airtanker Base Manager Position Page, <u>https://www.nwcg.gov/positions/airtanker-base-manager</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 an Airtanker Base Manager.

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.

### **Table of Contents**

General References	1
Agency-Specific References	2
*Leadership Level 3, Leader of People (Develop Intent)	3
Description	3
Behaviors	3
Knowledge	3
Prepare and Mobilize	5
Ensure individual readiness.	5
Gather critical information pertinent to the assignment.	6
Travel to and check in at assignment.	
*Obtain briefing from previous shift/assignment position as necessary.	
Build the Team	9
*Brief assigned personnel	9
Supervise and Direct Work Assignments	
*Establish and communicate objectives, priorities, work assignments, and performance	
expectations.	11
*Monitor performance and provide immediate and regular feedback to assigned personnel	
Perform Airtanker Base Manager-Specific Duties	
*Ensure adequate airtanker base staffing.	
*Receive and coordinate aircraft dispatch orders	
*Oversee delivery of retardant/suppressant products	
*Oversee airtanker retardant/suppressant mixing, quality assurance, and loading operations	
*Monitor airtanker fueling operations	14
*Ensure adequate space for ramp operations.	14
*Provide contract administration and contractor oversight	
*Provide for all logistical needs of the base, personnel, and contractors	
*Ensure completion of end-of-day closure for base facilities.	
Communicate and Coordinate	17
*Establish communications and exchange necessary information with the following: support	
resources, adjacent resources, supervisor, other Incident Command System (ICS) functional	
areas	17
*Submit aviation incident/accident reports with pertinent forms (e.g., SAFECOM, agency-specific	
forms) through established chain of command.	
*Conduct After Action Reviews (AARs)	
Manage Risk	
*Ensure base security and manage risk.	
*Account for location, health, safety, and welfare of assigned personnel	
Document	
*Manage administrative tasks and documentation	22

Demobilize	23
Prepare for and implement demobilization.	23

### **General References**

- *NWCG Aircraft Dispatch Form*, PMS 250, <u>https://www.nwcg.gov/publications/pms250</u>
- NWCG Incident Response Pocket Guide (IRPG), PMS 461, <u>https://www.nwcg.gov/publications/pms461/2025-nwcg-incident-response-pocket-guide-irpg</u>
- NWCG Aviation Mishap Response Guide and Checklist, PMS 503, <u>https://www.nwcg.gov/publications/pms503</u>
- *NWCG Standards for Aerial Supervision*, PMS 505, <u>https://www.nwcg.gov/publications/pms505</u>
- NWCG Airtanker Base Directory, PMS 507, <u>https://www.nwcg.gov/publications/pms507</u>
- NWCG Standards for Airtanker Base Operations (SABO), PMS 508, https://www.nwcg.gov/publications/pms508
- *NWCG Standards for Airtanker Base Operations (SABO) Appendices*, PMS 508a, <u>https://www.nwcg.gov/publications/pms508</u>
- NWCG Standards for Helicopter Operations, PMS 510, https://www.nwcg.gov/publications/pms510
- NWCG Standards for Aviation Transport of Hazardous Materials, PMS 513, https://www.nwcg.gov/publications/pms513
- *NWCG Standards for Airtanker Operations*, PMS 514, <u>https://www.nwcg.gov/publications/pms514</u>
- 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 Behavior Form, PMS 935-1, <u>https://www.nwcg.gov/publications/pms935-1</u>
- Incident Command System (ICS) Forms, <u>https://www.nwcg.gov/ics-forms</u>
   O Incident 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
  - o Incident Time Report, OF 288
  - Emergency Equipment Shift Ticket, OF 297
- Job Aids, <u>https://www.nwcg.gov/training/job-aids</u>
  - PSM-001, How to Correctly Fill Out the Crew Time Report (CTR), SF 261, J-001
  - *PSM-004, How to Correctly Fill Out the Emergency Equipment Shift Ticket*, OF 297, J-004
  - Packing List for Wildland Fire Support Staff, J-102
- Automated Flight Following (AFF), <u>https://www.aff.gov/</u>
- Emergency Response Guidebook (ERG), https://www.phmsa.dot.gov/training/hazmat/erg/emergency-response-guidebook-erg
- Federal Aviation Administration (FAA), <u>https://www.faa.gov/</u>
- FAA Temporary Flight Restrictions (TFRs), <u>https://tfr.faa.gov/tfr3/?page=list</u>
- FireNet, <u>https://www.firenet.gov/</u>
- ForeFlight, <u>https://foreflight.com/</u>
- Geographic Area Coordination Centers (GACC) National Website Portal, <u>https://gacc.nifc.gov/</u>
- Interagency SAFECOM System, <u>https://www.safecom.gov/</u>

- Modular Airborne Firefighting System (MAFFS), <u>https://www.fs.usda.gov/managing-land/fire/planes/maffs</u>
- National Fire Protection Association (NFPA) 407, Standard for Aircraft Fuel Servicing, https://www.nfpa.org/codes-and-standards/nfpa-407-standard-development/407
- National Interagency Fire Center (NIFC) Incident Management Situation Report (IMSR), https://www.nifc.gov/nicc/incident-information/imsr
- National Weather Service (NWS) Fire Weather Forecast, <u>https://www.weather.gov/fire/</u>
- NWCG Incident Business Committee (IBC), <u>https://www.nwcg.gov/committee/incident-business-committee</u>
- Occupational Safety and Health Administration (OSHA) Standards, <u>https://www.osha.gov/laws-regs</u>
- Airtanker Program QR Code Menu, <u>https://www.nwcg.gov/committee/airtanker-base-operations-unit</u>
- Wildland Fire Application Portal FAMAuth, <u>https://famauth.wildfire.gov/</u>

   FLIGHT Application
- Wildland Fire Chemical Systems (WFCS), <u>https://www.fs.usda.gov/rm/fire/wfcs/</u>
- Wildland Fire Chemical Systems (WFCS) and Aerial Delivery Tanker Base Quick Links, <u>https://www.fs.usda.gov/rm/fire/wfcs/tanker\_links.php</u>
- Qualified Products List (QPL), <u>https://www.fs.usda.gov/rm/fire/wfcs/qualified\_products.php</u>

#### **Agency-Specific References**

- \*\**Airtanker Overfilling or Overloading Direction*, <u>https://www.nwcg.gov/committee/airtanker-base-operations-unit</u>
- \*\*FC-106, California Interagency Aircraft Dispatch Tactical Air Operations, <u>https://gacc.nifc.gov/oscc/</u>
- \*\*How to Read Mass Flow Meter Printouts, <u>https://www.nwcg.gov/committee/airtanker-base-operations-unit</u>
- \*\*Interagency Standards for Fire and Fire Aviation Operations (Red Book), https://www.nifc.gov/standards/guides/red-book
- \*\*National Interagency Standards for Resource Mobilization, https://www.nifc.gov/nicc/logistics/reference-documents
- \*\*OAS-103, Five Steps to a Safe Flight (Orange Card), https://www.doi.gov/aviation/library/guides
- \*\*OAS-161, Twelve Standard Aviation Questions that Shout "Watch Out" (Light Blue Card) <u>https://www.doi.gov/aviation/library/guides</u>

## \*Leadership Level 3, Leader of People (Develop Intent)

Leaders of people have increasing challenges. They accept responsibility, not only for their own actions, but for those of their team. Leaders of people act to develop credibility as leaders: placing the team ahead of themselves, demonstrating trustworthiness, mastering essential technical skills, and instilling the values of the organization in their teams <a href="https://www.nwcg.gov/committee/leadership-committee/leadership-levels">https://www.nwcg.gov/committee/leadership-levels</a>.

#### Description

- Lead a large group or unit of people.
- Quickly assemble and lead a cohesive team to accomplish mission objectives.
- Provide an inclusive environment that fosters the development of others, facilitates cooperation and teamwork, and supports constructive resolutions of conflict.
- Continue to build personal leadership skills, and lead by example.

#### Behaviors

- Demonstrates expertise in job skills to provide guidance and training to team members.
- Develops credibility and reputation to increase one's personal sphere of influence.
- Uses experience and training to develop novel solutions to tactical problems.
- Directly mentors new leaders to develop counseling skills and ensure the organization has a leadership pipeline.
- Demonstrates an appropriate response and aftercare of a traumatic event involving a team member.
- Utilizes a risk-refusal process to ensure team safety while considering options for mission accomplishment.
- Conducts an effective briefing to ensure mission accomplishment and unity of action.
- Practices effective debriefing facilitation techniques to improve team performance and increase team cohesion.
- Demonstrates direct statements, active listening, and message confirmation, and allows effective feedback.
- Effectively demonstrates the five communication responsibilities and adapts to the unique needs of people and situations.
- Demonstrates risk management and recognition-primed decision-making.
- Demonstrates the appropriate leadership styles to accomplish the mission and build the team.
- Identifies and manages acute and chronic fatigue to improve health and performance.
- Exercises appropriate sources of influence to ensure mission accomplishment and maintain team cohesion.
- Applies an appropriate leadership style (directing, delegating, or participatory) for a given team and situation to develop team members and increase team cohesion.

#### Knowledge

- Describe how core values, principles, and traits guide tactical and ethical decisions.
- Understand a leader's role in influencing decisions up and down the chain of command and knowing when to lead up.

- Understand application of various leadership styles to ensure high team performance and cohesion.
- Describe the traits and principles which guide a leader's role to ensure team performance and a positive work environment when responding to harassment, substance abuse, conflict resolution, and hazing.
- Identify the consequences and understand the positive use of position power and authority.
- Describe human stress reactions to understand the impact of stress on team performance and individual decision-making.
- Define the leader's role in each phase of teambuilding to enhance cohesion, effectiveness, and trust.
- Establish or validate crew standards (standard operating procedures [SOP] or standard operation guide [SOG]) to ensure a common operating picture.
- Ensure a positive and healthy work environment, and promote team cohesion by dealing with conflict, harassment, and substance abuse.
- Understand various techniques for counseling and mentoring subordinates to ensure trust and open communication within the team.
- Define techniques for rapid teambuilding.
- Define characteristics of high-performing teams.
- Understand how to use the situation awareness cycle and how to evaluate whether a leader's perception matches the reality of the situation.
- Recognize and exercise the ability to control operational tempo.
- Analyze barriers to communication to establish and maintain open lines of communication.
- Develop and communicate leader's intent.
- Understand the error chain (i.e., Swiss Cheese Model) to promote a safety-conscious team.
- Understand how to integrate contingency planning into operations and anticipate upstream or systematic errors.
- Evaluate and update one's leadership individual development plan using peer feedback and self-assessment.
- Explain how building a positive command climate relates to team cohesion.
- Understand the importance of command and control.

### **Prepare and Mobilize**

#### Ensure individual readiness.

#### When to start task: Prior to assignment.

**Resources to complete task:** *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508; *NWCG Standards for Airtanker Operations*, PMS 514; *A Preparedness Guide for Wildland Firefighters and Their Families*, PMS 600; *NWCG Standards for Interagency Incident Business Management*, PMS 902; *Packing List for Wildland Fire Support Staff*, J-102; AFF; aviation and retardant contracts; FireNet; FLIGHT application; resource order; Wildland Fire Application Portal — FAMAuth; \*\*Interagency *Standards for Fire and Fire Aviation Operations* (Red Book); \*\*National Interagency Standards for *Resource Mobilization*.

- Obtain assignment approval from the supervisor.
- Verify your status and availability with dispatch.
- Build a kit (either electronic access or hardcopy).
  - Kit contents
    - *NWCG Position Task Book for Airtanker Base Manager (ATBM)*, PMS 311-121
    - NWCG Standards for Airtanker Base Operations (SABO), PMS 508
    - *NWCG Standards for Airtanker Operations*, PMS 514
    - *NWCG Standards for Interagency Incident Business Management*, PMS 902
    - Relevant aviation and retardant contracts
    - Valid Incident Qualifications Card (Red Card)
    - \*\*Interagency Standards for Fire and Fire Aviation Operations (Red Book)
    - \*\*National Interagency Standards for Resource Mobilization
    - Documentation forms
      - Resource order
      - Rental/National Emergency Rental Vehicle (NERV)/Agency-Owned Vehicle (AOV)/Privately Owned Vehicle (POV) documentation
        - ✤ Travel log (if applicable)
        - ✤ Accident forms
      - Agency-specific forms (e.g., Injury and Workers' Compensation)
    - Suggested items
      - Cell phone with chargers
      - Laptop
      - Portable radio (VHF)
      - Headset
      - Safety vest
      - Contact list
      - Credit card with sufficient credit limit
      - Pocket calendar/notepad
      - Identification/government ID (if applicable)
- Prepare for 14-21 days of travel.

- Prepare to be absent from home/family.
  - Refer to A Preparedness Guide for Wildland Firefighters and Their Families, PMS 600 and Packing List for Wildland Fire Support Staff, J-102.
- Ensure/gain access to the following programs: AFF, email(s), FAMAuth, FireNet, and the FLIGHT application.

#### Gather critical information pertinent to the assignment.

When to start task: Upon receipt of resource order.

**Resources to complete task:** *NWCG Airtanker Base Directory*, PMS 507; agency-specific guidelines; agency-specific travel system; geographic area supplements; Incident Action Plan (IAP); local Airtanker Base Operations Plan (ABOP); local SOPs; regional mobilization guides; resource order; \*\**Interagency Standards for Fire and Fire Aviation Operations* (Red Book); \*\**National Interagency Standards for Resource Mobilization*.

- Access and review the resource order.
  - Coordinate with home dispatch to fill the resource order.
  - Ensure the resource order contains the following information as a baseline and request updates from the incident supervisor, if needed:
    - Incident/project name
    - Incident/project order number
    - Financial codes
    - Descriptive location/response area
    - Coordinates (latitude and longitude)
    - Local base frequency
    - Incident radio frequency (if available)
    - Incident base/phone number
    - Request number
    - Reporting date/time and location
    - Transportation arrangements and routes
    - Special instructions (authorized equipment such as laptop, cell phone, etc.)
  - Ensure the resource order has the correct spelling, home unit, phone numbers, and all other information.
- Obtain a travel itinerary.
  - Access agency-specific travel portal or coordinate with dispatch.
    - Mode of travel
    - Estimated time of departure (ETD) and location of departure
    - Estimated time of arrival (ETA) and location destination
    - Location for rest overnight (RON) if unable to make end destination within that operational shift
  - Gather incident-specific references.
  - Agency-specific guidelines
    - Geographic area supplements
      - Obtain these supplements from your incident supervisor, the incident agency, or the website for each GACC or NWCG IBC.
- Gather situational awareness.
  - Obtain the IAP, if available.

- Review the local ABOP.
- Gather predictive services and intelligence information.
- Contact the Airtanker Base Manager (ATBM).
  - Obtain work location and base access.
  - Obtain SOPs electronically and review them.
  - Obtain situational awareness on the status of base operations.
  - Verify local dress code policy.
  - Advise when you will be in place.

#### 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; *Incident Behavior Form*, PMS 935-1; agency-specific travel program; *\*\*National Interagency Standards for Resource Mobilization*.

#### How to accomplish task:

- Confirm travel arrangements and expected time of arrival with dispatch.
- Follow air and ground travel guidelines.
  - o Air travel considerations
    - Follow agency policy for commercial air travel.
  - Ground travel considerations
    - Follow time limitations/driver duty day limitations.
    - Ensure your rental/NERV/AOV/POV is on the resource order, if applicable.
    - Reference U.S. General Services Administration (GSA) website for per diem and lodging rates.
    - Follow agency procedures for exceeding per diem allowance.
- Model professionalism for both internal and external customers.
- Notify resource order point of contact upon arrival.
- Follow required check-in procedures.

#### \*Obtain briefing from previous shift/assignment position as necessary.

When to start task: Upon arrival at assignment.

**Resources to complete task:** *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508; *NWCG Standards for Airtanker Operations*, PMS 514; contact list; current aviation and retardant contracts; FireNet; FLIGHT application; local ABOP; local SOPs; MAFFS Operating Plan; *\*\*Interagency Standards for Fire and Fire Aviation Operations* (Red Book); *\*\*National Interagency Standards for Resource Mobilization*.

- Introduce yourself to the appropriate personnel.
- Assess your organization, assemble additional personnel, and confirm infrastructure adequacy (computers, internet, communication, etc.).
- Read and review the base operations plan to check for currency, accuracy, and local operations.

- Obtain an initial in-briefing from the previous ATBM, Fixed Wing Base Manager (FWBM), or Single Engine Airtanker Manager (SEMG).
  - Gather intelligence on the current status of incidents, including the following:
    - Number of incidents and complexities
    - Prioritizations
    - Critical needs
  - Confirm and/or obtain SOPs for the following:
    - Dispatch procedures
    - Ramp operations
    - Procurement procedures
  - Obtain the MAFFS Operating Plan if the base is MAFFS approved.
  - Obtain operating plans for other cooperating aircraft (e.g., international aircraft, state aircraft).
  - Identify the chain of command and agency contacts, including the following:
    - o Fire Management Officer (FMO)
    - Aviation officer
    - o Dispatch
    - Incident contact or Air Operations Branch Director (AOBD)
    - Procurement personnel
    - Safety Officer (SOF)
  - Identify other local contacts, including the following:
    - Local on-site vendors (e.g., Fixed-Base Operator [FBO])
    - Airport manager
    - Airport security
    - Airside managers
    - Flight personnel
    - o Retardant manager
  - Identify possible issues with orders, personnel, or incidents.
  - Ensure you have access to FireNet, emails, and the FLIGHT application.
  - Gather and review additional information pertinent to the assignment, such as the following:
    - Organizational charts
    - Local and regional communication plans
    - Aerial hazard maps
    - Phone contacts list
  - Check the status and schedule of assigned resources.
  - Review contracts.

### **Build the Team**

#### \*Brief assigned personnel.

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

**Resources to complete task:** Aviation Tactical Report; Daily General Assessment of Risk (GAR); FLIGHT application; IAP; local ABOP; local aviation in-briefing package; local aviation plan; NIFC IMSR; Notice to Airmen (NOTAMs); NWS fire weather forecast; ramp management plan; Retardant Hot Loading Plan; Simultaneous Fueling and Loading Plan; Stormwater Pollution Prevention Plan (SWPPP); TFRs; weather and flight data application (e.g., ForeFlight).

- Obtain and distribute IAPs, other relevant plans, maps, and local area information.
- Brief assigned personnel using local ABOP, Simultaneous Fueling and Loading Plan, Retardant Hot Loading Plan, ramp management plan, local aviation plan, and SWPPP if applicable.
- Prepare for the daily morning briefing.
  - Gather information to communicate in the briefing, including the following:
    - Mission priorities
    - Weather forecasts
    - Current and predicted fire weather forecasts
    - Sunrise/sunset times
    - Aviation resources
    - TFRs
    - Situation report
    - Cut-off time
    - SAFECOMs
    - NOTAMs
    - Rotation lineup
    - Local and neighboring available resources
    - Special circumstances (e.g. tours, executive visits)
  - Relay information regarding any new incidents or new activity requests from ongoing incidents.
  - Input information in the computer so it is pre-populated for the morning briefing.
- Deliver the daily morning briefing to all aviation and airtanker base personnel (e.g., pilots, contract personnel, agency employees, cooperator personnel).
- Include retardant crews and aircraft dispatchers when practical.
  - o If GAR is high, discuss any concerns and how they will be addressed.
  - Document briefing attendance.
  - Ensure all briefing materials are available to participants.
- Ensure important operational information such as roll times, aircraft availability, days off, and rotation is communicated with base personnel, local management, dispatch, and other bases as appropriate.
- Proactively update the FLIGHT application throughout the operational shift.



- Conduct initial in-briefings with new aviation resources.
  - Work with the aviation manager to conduct aviation in-briefings for any new aviation resources.
    - Review base operations plan and local SOPs for the following information:
      - Ramp operations
      - ✤ Facilities
      - ✤ Logistical needs (e.g., maintenance, crew swaps, tie downs, transportation)
    - Review local aerial hazard maps and frequencies.
    - Give aircrews a copy of the briefing package.
  - Collect contact information for new aviation assets and display information.



## **Supervise and Direct Work Assignments**

## \*Establish and communicate objectives, priorities, work assignments, and performance expectations.

When to start task: Throughout the assignment.

**Resources to complete task:** *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508; AFF; daily checklists; FAA website; local ABOP; NOTAMs; TFRs; weather and flight data application (e.g., ForeFlight).

#### How to accomplish task:

- Utilize agency policies and guidance such as the *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508 in decision making and planning.
- Provide supervision and oversight to assigned base and ramp personnel.
  - Assign daily work projects, tasks, and specific duties to base personnel.
  - Itemize daily work by priority but dictated by fire activity.
  - Post daily ramp position assignments.
- Ensure appropriate information is displayed in office areas on available screens (e.g., AFF, weather status board).
  - Request and post updated aerial hazard maps.
  - Post TFRs and NOTAMs.
- Maintain and update the base reference library.

## \*Monitor performance and provide immediate and regular feedback to assigned personnel.

When to start task: Throughout the assignment.

Resources to complete task: Job Hazard Analysis (JHA); position descriptions; risk assessments.

- Ensure all tasks are being completed accurately, efficiently, and safely.
  - Identify, analyze, and use relevant situational information to make more informed decisions and take appropriate actions.
  - Adjust actions based on changing information and evolving situational awareness.
  - Develop and implement contingency plans.
  - Communicate changing conditions to assigned resources and supervisor.
  - Ensure personnel meet daily operational objectives and performance standards.
- Provide additional guidance to personnel, as needed.



### **Perform Airtanker Base Manager-Specific Duties**

#### \*Ensure adequate airtanker base staffing.

When to start task: Throughout the assignment.

**Resources to complete task:** Staffing matrix, Appendix I of *NWCG Standards for Airtanker Base Operations (SABO) – Appendices*, PMS 508a; daily GAR; local ABOP.

#### How to accomplish task:

- Evaluate base activity levels and number of aircraft on the ramp to determine if more resources are needed or resources need to be demobilized or reassigned.
  - Create a schedule to ensure staffing levels are sufficient for current and expected aircraft on ramp, in region, and potential fire activity.
  - If additional staffing is required, work with the dispatch center to place resource orders.
    - Place order in advance to ensure appropriate coverage is achieved.
  - Provide support to resources as they demobilize.
- Assign and supervise ramp personnel to coordinate all aircraft movement.
- If needed, assign ATBM to perform unfilled roles.

#### \*Receive and coordinate aircraft dispatch orders.

When to start task: Upon receiving an aircraft dispatch order.

**Resources to complete task:** *NWCG Aircraft Dispatch Form*, PMS 250; *NWCG Standards for Aerial Supervision*, PMS 505; *NWCG Airtanker Base Directory*, PMS 507; *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508; AFF; aircraft flight request/flight schedule; FLIGHT application; local ABOP; National Airtanker Rotation Policy; National Interagency Standards for Resource Mobilization; weather and flight data application (e.g., ForeFlight); \*\*FC-106, California Interagency Aircraft Dispatch-Tactical Air Operations; \*\**Interagency Standards for Fire and Fire Aviation Operations* (Red Book); \*\*OAS-103, 5 Steps to a Safe Flight (Orange Card); \*\*OAS-161, Twelve Standard Aviation Questions That Shout "Watch Out!" (Light Blue Card).

- Establish communications so there is a flow of information between the base, aircraft, and dispatch office.
- Anticipate and remain prepared to respond to any requests for aircraft.
- Print and review kneeboard/aircraft dispatch form.
  - Confirm all pertinent information is included and ensure the dispatch form information is accurate, including the following:
    - Airtanker base/ramp frequency
    - Incident frequencies
    - Flight hazards
    - Other aircraft assigned to incident
    - Reload base
    - Latitude/longitude
    - Bearing and distance
  - Verify information with pilots.

Perform Airtanker Base Manager-Specific Duties

- Verify the appropriate aviation resources are being ordered and coordinate with dispatch to meet policy requirements.
- Check current weather at the base, route, and fire location. Utilize appropriate applications to access weather and flight data (e.g., ForeFlight).
- Notify flight crews, airtanker base personnel, and retardant crew of aircraft orders.
- Provide flight crews with aircraft dispatch form.
- Brief flight crews on the mission and have a go/no-go conversation.
- Load airtankers, if needed.
- Ensure flight strip is provided to dispatch when necessary (e.g., point-to-point).
- Monitor and maintain continued load and return operations.
  - Ensure the National Airtanker Rotation Policy is being followed.
  - Coordinate with dispatch regarding any additional incoming resources.
- Plan for potential extended operations or additional aircraft.
- Contact receiving airtanker base to alert its personnel of potential incoming aircraft.

#### **\*Oversee delivery of retardant/suppressant products.**

When to start task: Upon receipt of retardant product delivery.

**Resources to complete task:** *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508; WFCS and Aerial Delivery – Tanker Base Quick Links; National Retardant Contract; QPL; safety data aheets (SDS); WFCS.

#### How to accomplish task:

- Gain and maintain familiarity with retardant and suppressant chemicals.
- Maintain lot acceptance and quality control standards during retardant delivery.
  - Ensure delivery samples are routed to the National Technology and Development Program (NTDP) in Missoula, MT in a timely manner.
- Review the National Retardant Contract and agency-specific payment procedures.
  - Sign and retain a copy of the bill of lading.

## \*Oversee airtanker retardant/suppressant mixing, quality assurance, and loading operations.

When to start task: Upon receiving aircraft dispatch order for a loaded airtanker.

**Resources to complete task:** *NWCG Airtanker Base Directory*, PMS 507; Large Airtanker (LAT)/Very Large Airtanker (VLAT)/Single Engine Airtanker (SEAT) contracts; WFCS and Aerial Delivery – Tanker Base Quick Links; local ABOP; Local Retardant Hot Loading Plan; Local Simultaneous Fueling and Loading Plan; National Retardant Contract; QPL; SDS; Airtanker Program – QR Code Menu; WFCS; \*\**Airtanker Overfilling or Overloading Direction;* \*\**How to Read Mass Flow Meter Printouts*.

- Ensure basic knowledge and understanding of the mass flow meter being utilized.
- Verify retardant product has been mixed properly, test to specifications, and conduct periodic assurance checks prior to loading aircraft.
  - Conduct a retardant quality assurance check using a refractometer to ensure the mixed product meets required specifications.
  - Verify refract and Marsh funnel readings are within proper range.
  - o Document assurance checks and maintain associated files.



- Monitor retardant loading procedures.
  - Ensure federally contracted aircraft are only loaded with fire chemicals on the QPL.
  - Verify density and pound readings are within proper range.
  - Monitor the volume and weight of the retardant load placed on the airtanker.
    - Review load tickets from mass flow meter to ensure it does not exceed the approved amount according to the contract of the aircraft with which you are working.
  - Ensure base personnel and contractors adhere to proper procedures for retardant hot loading and simultaneous fueling and loading.
  - If an airtanker is overfilled, ensure offloading procedures are followed.
  - Document and report all information.
- If the base is using suppressants, review the QPL for mixing and loading requirements for that product.
- If an aircraft will utilize a reload base outside of your own base, notify the base of the expected aircraft.
- Maintain adequate supplies of water and retardants/suppressants at the operating base by securing a local water source and scheduling retardant/suppressant deliveries in a timely manner.
- Understand each airtanker's offloading process and the base's capabilities and systems.
- Maintain situational awareness of predicted weather, fire behavior, and IAPs to ensure an adequate supply of wildland fire chemicals.

#### \*Monitor airtanker fueling operations.

When to start task: Upon request from aircrews.

**Resources to complete task:** Local ABOP; Local Simultaneous Fueling and Loading Plan; NFPA 407, Standard for Aircraft Fuel Servicing.

#### How to accomplish task:

- Maintain close communication with the FBO to make them aware of anticipated/current fire activity and ensure there is adequate fuel for the operation.
  - Provide the number of aircraft assigned.
  - Determine whether there are any fuel limitations.
  - When possible, provide information to the FBO to help them staff operations appropriately.
- If there are fuel supply limitations, develop and maintain a contingency plan should the fuel supply run low.
  - Communicate and coordinate with local dispatch to send airtankers to a different fuel source if needed.
- Apply knowledge of fuel spill containment and clean up procedures as needed.
- Review agency policy and NFPA 407, Standards for Aircraft Fuel Servicing with fuelers and airtanker base personnel.

#### \*Ensure adequate space for ramp operations.

When to start task: Throughout the incident.

**Resources to complete task:** *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508; *ERG*; local ABOP; Ramp Operations Plan; ramp risk assessment plan.



#### How to accomplish task:

- Assess current ramp status and potential for any incoming aircraft.
- Create or review Ramp Operations Plan.
  - Establish layout of base operations area that includes loading pit, fueling area, aircraft parking, vehicle parking, storage, and applicable expansion space.
  - Designate safe zones for ground support equipment (GSE).
    - Ensure all airtanker base personnel are trained in identifying properly secured GSE.
  - Identify staging areas for personnel, crews, and cargo.

#### \*Provide contract administration and contractor oversight.

When to start task: Throughout the assignment.

**Resources to complete task:** Agency-specific airtanker contracts; agency-specific payment procedures; WFCS and Aerial Delivery – Tanker Base Quick Links; National Retardant Contract; Airtanker Program – QR Code Menu.

#### How to accomplish task:

- Administer airtanker contracts and agreements.
  - Determine if the aircraft is on an Exclusive Use, Call When Needed, On-Call, or State/Cooperator contract.
    - Ensure proper payment documentation is completed per contracting agency.
    - Review pilot cards and aircraft data cards, as needed.
    - Maintain contact with Aviation Maintenance Inspectors (AMI) and follow Return to Contract Availability (RTCA) or relevant agency approval procedures.
- Administer retardant contracts and agreements.
  - Ensure proper payment document is completed per contracting agency.
  - Review the National Retardant Contract and agency-specific payment procedures.
  - Manage quality control within the Lot Acceptance and Quality Assurance (LAQA) program.
- Maintain contact with the contracting officer's representative (COR) or project inspector (PI) for the aircraft and retardant contract.
  - Provide related information on daily operational status or changes.
- Ensure contract compliance.
  - Document and report deficiencies and facilitate corrective actions, per policy or contract requirements.
  - Ensure pilots, aircraft, and retardant operations meet contractual requirements.
  - Ensure contractors and the agency maintain a professional level of cooperation and integrity.

#### \*Provide for all logistical needs of the base, personnel, and contractors.

When to start task: Throughout the assignment.

**Resources to complete task:** *NWCG Standards for Interagency Incident Business Management*, PMS 902; local ABOP; local procurement and documentation procedures.



#### How to accomplish task:

- Order and secure all necessary facilities, supplies, equipment, and services required at the operating base, following local procurement and documentation procedures.
  - Ensure proper demobilization of all acquired temporary facilities, supplies, or services as needed.
- Assist with maintenance and repairs of equipment and facility as appropriate.
- Per government discretion and local policy, provide food and beverages for base personnel, aircrews, and other contractor personnel if fire activity deems necessary.
  - Follow local procurement and documentation procedures for purchasing food and beverages.
- Communicate and coordinate aircrew and base personnel needs.
- Assist aircrews in arranging for transportation and lodging as appropriate.

#### \*Ensure completion of end-of-day closure for base facilities.

When to start task: Throughout the assignment.

Resources to complete task: Local ABOP; security plan.

- Ensure all end-of-day duties have been accomplished, such as cleaning, security, and operational closure.
- Turn on ramp lights, if available.
- Perform a security walkthrough before leaving the base.

## **Communicate and Coordinate**

# \*Establish communications and exchange necessary information with the following: support resources, adjacent resources, supervisor, other Incident Command System (ICS) functional areas.

When to start task: Throughout the incident.

**Resources to complete task:** *NWCG Aviation Mishap Response Guide and Checklist*, PMS 503; contacts list; communications plan; IAP; local ABOP; \*\**Interagency Standards for Fire and Fire Aviation Operations* (Red Book).

- Establish communications and exchange necessary information with the following:
  - o FWBM
  - o SEMG
  - Ramp Manager (RAMP)
  - Fixed Wing Parking Tender (FWPT)
  - o Flight crews
  - o Pilots
  - o Mixmasters (MXMS) and loaders
  - Fuelers/Fuel truck drivers
  - o FBOs
  - Dispatch
  - COR
  - o PI
  - o AMI
- Serve as a liaison to airport management; federal, state, and local officials; the military; aircraft vendors; contractors; and FBOs.
  - Establish contacts and develop working relationships with local agency, aircrew, and contractor personnel to provide safe and efficient base operations.
  - Share policies, plans, and feedback.
  - Ensure adherence to policy during operations.
- Coordinate all tactical aircraft missions with local dispatch, local GACC, aerial supervision, and/or aviation managers.
  - Obtain daily or more frequent briefings from one or all these positions regarding mission priorities.
  - Check in for updates on new or ongoing incidents.
    - Determine if there are any new activity requests from ongoing incidents.
  - Communicate aircraft and staffing status to dispatch daily.
    - Notify dispatch of any aircraft, flight crew, maintenance, or availability changes.
- Maintain communications with aviation management.
  - Check in daily to provide updates and information on any changes in aircraft or aircrews.
  - Check in more frequently during periods of high fire activity.
- Coordinate with Complex Incident Management Team (CIMT) aviation operations staff during large incidents to facilitate duty day start time, frequencies, costs, logistical needs, and safety concerns.

#### 

## \*Submit aviation incident/accident reports with pertinent forms (e.g., SAFECOM, agency-specific forms) through established chain of command.

When to start task: Upon incident, accident, mission turndown, or notable situation.

**Resources to complete task:** *NWCG Aviation Mishap Response Guide and Checklist*, PMS 503; Interagency SAFECOM system; other agency safety reporting systems, Airtanker Program – QR Code Menu.

#### How to accomplish task:

- Submit agency aviation incident/accident reports and SAFECOMs if a situation warrants reporting, per agency policy.
  - Ensure aircrew completes a SAFECOM for any aircraft that is out of service or had maintenance performed.
  - Complete a SAFECOM for events or situations that warrant reporting, either good or bad.
- Utilize Airtanker Program QR Code menu to make notifications (such as for reporting) for the following:
  - Assignment turndowns
  - Retardant issues
  - Out of service notifications
  - o Jettisons
- Ensure QR code notifications are completed in a timely manner.

#### \*Conduct After Action Reviews (AARs).

When to start task: Upon completion of operational activity.

**Resources to complete task:** *IRPG*; local ABOP.

- Facilitate AARs or debriefs at the end of an operational period with all airtanker base personnel.
  - o Review ramp, retardant, and aviation operations for efficiency, effectiveness, and safety.
  - Discuss improvement opportunities, including adjustments in operations, with appropriate personnel.
  - Gather feedback.
  - Document AAR as needed.
- If needed, continue the discussion further in the next morning's briefing.
- Follow up on any items that need attention based on the AAR.

### Manage Risk

#### \*Ensure base security and manage risk.

When to start task: Throughout the assignment.

**Resources to complete task:** Daily GAR, Appendix L of *NWCG Standards for Airtanker Base Operations (SABO) – Appendices*, PMS 508a; *NWCG Standards for Aviation Transport of Hazardous Materials*, PMS 513; ERG; local ABOP; risk assessment/JHA worksheets; Safety Management System (SMS); security plan; SWPPP.

- Develop and/or implement local ABOP providing for and enforcing accountability, safety, and security measures for personnel and resources.
  - Obtain or complete facilities security assessment for hosting agency base of operations.
  - o Identify and follow airport authority policies and guidelines.
  - Identify and follow agency policy and guidance as it relates to the security of the base facility.
  - Ensure operations adhere to agency guidelines and regulations, as well as relevant national requirements.
- Coordinate with the agency safety representative to establish and maintain airtanker base and retardant plant safety plans, as required, to be compliant with agency and OSHA regulations.
- Apply aviation safety and risk management systems to include policy, risk management, assurance, and promotion.
  - Utilize aviation safety managers to assist with the risk management process and provide input into safety of operations.
- Apply principles of operational risk management.
  - Identify and assess risks or hazards.
  - Develop controls or mitigations.
  - Make risk decisions or elevate as appropriate to the next management level.
  - Implement controls or mitigations.
  - Supervise and evaluate.
- Open up the base each morning and perform a security check.
  - Follow base checklist.
  - Report any security issues found.
- Ensure a Foreign Object Debris (FOD) walk of the ramp and aircraft parking areas is conducted daily.
- Complete the daily GAR.
  - Calculate estimated risk.
  - Encourage group participation from all personnel in completion of the daily GAR.
  - Communicate and discuss if there are any high ratings in the GAR.
    - Inform supervisor if there is a HIGH rating outcome.
  - Collaborate as a team to identify and resolve correction items.
- Ensure hazardous materials are transported in accordance with the *NWCG Standards for Aviation Transport of Hazardous Materials*, PMS 513.



- Identify and ensure spill containment, cleanup, and disposal procedures are followed by ramp and contractor personnel.
  - Coordinate efforts to ensure that all fuel and retardant spills are properly cleaned according to the established base procedures or environmental and/or hazardous materials procedures.
  - Document and report fuel and retardant spills per local policy.

#### \*Account for location, health, safety, and welfare of assigned personnel.

When to start task: Throughout the assignment.

**Resources to complete task:** *NWCG Aviation Mishap Response Guide and Checklist*, PMS 503; *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508; local ABOP; local emergency response plan; OSHA requirements; safety and security plan.

- Coordinate with the local SOF to enforce compliance with all agency, local, and state health and safety requirements.
  - Report and document personnel accidents and injuries.
- Maintain responsibility for the maintenance and update of the base safety and security plan and *NWCG Aviation Mishap Response Guide and Checklist*, PMS 503.
  - Develop, update, or review a mishap response plan and ensure plan is posted.
- Plan for emergencies.
  - Ensure assigned resources are prepared to execute *the NWCG Aviation Mishap Response Guide and Checklist*, PMS 503.
  - If applicable, review local emergency response plan for special circumstances (e.g., severe weather).
  - Ensure adequate fire, medical, and emergency equipment is readily available at the airtanker base and all personnel are trained appropriately in the maintenance and use of fire extinguishers and procedures to be followed in the event of a fire emergency on the ramp.
  - Ensure familiarity with medical responders, communication procedures, and transportation plan.
  - Brief personnel on crash rescue and mishap response procedures for the base.
- Prepare and respond to emergencies as training and qualifications allow.
- Develop and implement accountability, safety, and security measures for personnel and resources.
- Enforce all safety requirements for work area.
  - Monitor ramp operations for safety and efficiency.
    - Ensure only authorized personnel and activities are allowed on the ramp.
  - Monitor ground operations for safety during loading, taxi, and fueling operations.
  - Coordinate and manage a safe flight environment that includes sterile cockpit compliance.
  - Ensure adequate quantities of required personal protective equipment (PPE) are available and order additional PPE as necessary.
  - Provide on the spot correction of safety concerns and issues.



- Resolve all safety concerns encountered in any aspect of aircraft, ramp, and/or personnel operations.
  - $\circ$   $\;$  Initiate corrective actions to mitigate and/or remove risks.
  - Discuss any concerns and possible corrective actions with local aviation management.
- Evaluate personal safety considerations and attitudes of personnel when conducting base operations.
  - Monitor personnel for fatigue, dehydration, stress, and distraction.
  - $\circ~$  Schedule and manage work to ensure flight and/or duty hours of personnel are not exceeded.

#### Document

#### \*Manage administrative tasks and documentation.

When to start task: Throughout the assignment.

**Resources to complete task:** *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508; *NWCG Standards for Interagency Incident Business Management*, PMS 902; Incident Personnel Performance Rating (ICS 225 of ICS 225 WF); Crew Time Report (CTR), SF 261; Incident Time Report, OF 288; Emergency Equipment Shift Ticket, OF 297; PSM-001, How to Correctly Fill Out the Crew Time Report (CTR), SF 261, J-001; *PSM-004, How to Correctly Fill Out the Emergency Equipment Shift Ticket, OF 297*, J-004; AFF; daily briefing; daily GAR; FLIGHT application; local ABOP; \*\*How to Read Mass Flow Meter Printouts.

- Utilize computer for daily contract documentation, spreadsheets, various websites, payment procedures, data input, and AFF.
- Ensure all required daily paperwork and documentation is accurately completed and submitted to appropriate personnel by close of business (COB) daily, including the following:
  - Daily log
  - Daily briefing and GAR
  - o FLIGHT application information, including daily flight and cost data
  - Landing fee log
  - Retardant use log and payments
  - Mass flow meter load tickets
  - o Jettison log
  - Crew Time Report (CTR), SF 261
  - o Incident Time Report, OF 288
  - Emergency Equipment Shift Ticket, OF 297 (if applicable)
- Ensure aviation cost summaries are available upon request.
- Initiate and maintain required administrative forms for Single Engine Airtankers, such as the SEAT daily operations worksheet or FLIGHT application aircraft daily use summary.
- Maintain time and use records on equipment, retardant, and personnel assigned to the airtanker base.
- Ensure the *NWCG Standards for Airtanker Base Operations (SABO)*, PMS 508, OSHA, U.S. Environmental Protection Agency (EPA) Reports, and/or agency forms and reports are completed as required.
- Ensure completion of Incident Personnel Performance Rating (ICS 225 or ICS 225 WF) for all airtanker base support personnel (qualified or trainee) on assignment.
  - Ensure completed Incident Personnel Performance Rating (ICS 225 of ICS 225 WF) are sent to home unit.

#### Demobilize

#### Prepare for and implement demobilization.

When to start task: Upon end of assignment.

**Resources to complete task:** *NWCG Standards for Interagency Incident Business Management*, PMS 902; Incident Personnel Performance Rating (ICS 225 or ICS 225 WF); agency travel system.

- Notify relevant contacts of your departure and the incoming replacement.
- Check out with appropriate agency or incident personnel prior to departure and complete closeout/briefing.
- Prepare and facilitate a comprehensive transition briefing with the incoming ATBM.
- Ensure the continuity of operations is maintained.
- Arrange and document travel to your home unit or reassignment.
- Ensure you are released from the incident by dispatch.
- Request Incident Personnel Performance Rating (ICS 225 or ICS 225 WF) from supervisor, as applicable.
- Complete agency finance and time records for approval.
  - Refer to NWCG Standards for Interagency Incident Business Management, PMS 902.
- Check in with your home dispatch center and supervisor upon arrival.

The *NWCG Incident Position Standards for Airtanker Base Manager* is developed and maintained by the Airtanker Base Operations Unit (ABOU), under the direction of the National Interagency Aviation Committee (NIAC), an entity of the National Wildfire Coordinating Group (NWCG).

Previous editions: first.

This publication is available electronically at https://www.nwcg.gov/publications/pms350-121.

Submit comments, questions, and recommendations to the appropriate agency program manager assigned to the ABOU using the NWCG Publication Review Form, <u>https://www.nwcg.gov/publications/publication-review-form</u>. View the complete roster at https://www.nwcg.gov/committee/airtanker-base-operations-unit/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. Please note that NWCG does not control and cannot guarantee the relevance, timeliness, or accuracy of these outside materials.