

# NWCG Standards for Airtanker Base Operations (SABO)

## Summary of Changes

May 2023

1. Throughout the SABO
  - Changed dates to 2023
  - Updated hyperlinks
2. Moved the Airtanker Identification Information from the NWCG Airtanker Base Directory to a new Appendix of the SABO
3. Added dimensions of airtankers and light fixed wing aircraft as a new Appendix to the SABO.
4. Chapter 1, Introduction, Base Considerations
  - Previous verbiage:
    - Lease agreement(s).
      - o Land use
      - o Water use
      - o Facilities
  - New verbiage:
    - Agreement(s).
      - o Land use
      - o Water use
      - o Facilities
      - o Washdown Procedures
5. Chapter 1, Introduction, Airtanker Bases
  - Previous verbiage: Such approvals, when applied to **host** cooperator airtankers will require coordination with the cooperator's Airtanker Program Manager.
  - New verbiage: Such approvals, when applied to cooperator airtankers will require coordination with the cooperator's Airtanker Program Manager.
6. Chapter 1, Introduction, Airtanker Bases
  - Previous verbiage: All airtanker bases (permanent and temporary) that need overweight authorizations or waivers will have current authorizations or waivers for airtankers that exceed the airport's published weight-bearing capacity.
  - New verbiage: All airtanker bases (permanent and temporary) will have current overweight authorizations or waivers for airtankers that exceed the airport's published weight-bearing capacity.
7. Chapter 1, Hot Loading Plan
  - Removed: A documented pre-operational briefing shall occur between the aircrew and airtanker base personnel and will include a review of the local hot loading procedures and airtanker loading procedures.
8. Chapter 4, Communications, Frequencies
  - Previous verbiage: A dedicated authorized frequency shall be established for ramp operations at each airtanker base. The frequencies for each airtanker base and agency dispatch can be found in the NWCG Airtanker Base Directory, PMS 507, <https://www.nwcg.gov/publications/507>.

- New verbiage: **A dedicated authorized frequency has been established nationally for permanent airtanker bases.** The new frequency will be published in the NWCG Airtanker Base Directory, PMS 507, which is available by logging in at <https://egp.nwcg.gov/egp/>. An account is required.
9. Chapter 6, Dispatch Procedures, Aircraft Dispatch Information:
    - Previous verbiage: This information will be verified by the base manager and a **hard copy** of the dispatch form should be given to the aircrews.
    - New verbiage: This information will be verified by the base manager and a **copy** of the dispatch form should be given to the aircrews.
  10. Chapter 6, Dispatch Procedures, Aircraft Dispatch Information:
    - Previous verbiage: A copy of the resource order is unacceptable as a dispatch form but can accompany the dispatch form as needed.
    - New verbiage: A copy of the resource order is unacceptable as a dispatch **form for tactical missions** but can accompany the dispatch form as needed.
  11. Chapter 6, Dispatch Procedures, Aircraft Dispatch Information
    - Previous verbiage: In the event a **hard** copy is not immediately available, the minimum dispatch information can be relayed via the radio.
    - New verbiage: In the event a copy of the dispatch form is not immediately available, the minimum dispatch information can be relayed via the radio.
  12. Chapter 6, Dispatch Procedures, Aircraft Dispatch Information
    - Original verbiage: Aircraft **ordered** on pre-position or relocation point-to-point flights may do so with the information contained on aircraft resource order form generated from the official resource ordering system.
    - New verbiage: Aircraft **dispatched** on preposition or relocation point-to-point flights may do so with the information contained on aircraft resource order form generated from the official resource ordering system.
  13. Chapter 6, Dispatch Procedures, Pilot Duties Relative to Dispatching
    - Original verbiage: There may be times where the incident the aircraft are responding to is within **15-30 minutes** flight time
    - New verbiage: There may be times where the incident the aircraft are responding to is within **close proximity** to an airbase.
  14. Chapter 6, Dispatch Procedures, Communications, Frequencies
    - Removed: Frequencies vary by location.
  15. Chapter 6, Dispatch Procedures, Communications, Frequencies
    - Previous verbiage: A **CTCSS** tone of 110.9 must be placed on the transmitter and receiver of the National Flight Following Frequency.
    - New verbiage: A tone of 110.9 must be placed on the transmitter and receiver of the National Flight Following Frequency.
  16. Chapter 6, Dispatch Procedures, Sterile Cockpit Procedures
    - Previous verbiage: Fire dispatching or reload instructions are not related to the safe flight of the aircraft.
    - New verbiage: Fire dispatching, **cancelled orders**, or reload instructions are not related to the safe flight of the aircraft.
  17. Chapter 7, Operations, Ramp Safety Awareness
    - Added: No smoking or vaping.
  18. Chapter 7, Operations, Wing Walking

- Previous verbiage: Wing walking is a duty, not a position but should be performed by FWPTs, **the aircraft's ground support personnel**, or other ramp personnel involved in the movement of aircraft.
- New verbiage: Wing walking is a duty, not a position, but should be performed by FWPTs or other ramp personnel involved in the movement of aircraft.

19. Chapter 7, Operations, Retardant Loading

- Added: Airtanker bases shall not allow the mixing/comingling of dissimilar WFC products. Do not intermix products from same or different manufacturers, other than minimal residual product remaining in airtanker tanks after dropping. Comingling of same or different manufacturers' products may create a product that is not on the QPL and may first require cleaning or wash down of affected systems prior to mixing/loading. Refer to [National Technology Development Program \(NTDP\)](#) for more information.

20. Chapter 7, Operations, Retardant Offloading and Reloading

- Care should be taken when loading airtankers which exceed the base's offload capacity. If operating airtankers whose tanks are larger in capacity than the offload tank, consider alternatives or contingencies in the event the entire load needs to be offloaded.
- Added: Airtanker bases shall not offload an airtanker with a different product than the airtanker base provides, in order to prevent mixing of dissimilar WFC products within the offload tank.

21. Chapter 7, Operations, Fueling

- Previous verbiage: For aircraft not currently authorized for DLA use, work with **the local RAO** to obtain permissions. (i.e., aircraft from Canada, and Alaska).
- New verbiage: For aircraft not currently authorized for DLA use, work with the **National Airtanker Program Manager** to obtain permissions. (i.e., aircraft from Canada, **Australia**, and Alaska). DOI contracted aircraft are not part of the DLA Program.

22. Chapter 7, Operations, Fueling

- Added: Be aware of location and use of emergency fuel shutoff valve.

23. Chapter 7, Operations, Hot Loading, Applicability

- Previous verbiage: Cooperator airtankers will have been evaluated and approved by the appropriate **RAO** in a Cooperator Letter for this purpose.
- New verbiage: Cooperator airtankers will have been evaluated and approved by the appropriate **RAO/SAM for this purpose**.

24. Chapter 7, Operations, Hot Loading, Applicability

- Removed: Some states may have restrictions on hot loading, refer to agency policy for further guidance.

25. Chapter 7, Operations, Hot Loading, Procedures

- Added: Airtankers are not chocked during hot loading unless the pilot requests it or the local ABOP dictates the procedures along with a risk assessment.

26. Chapter 7, Operations, Simultaneous Fueling and Loading

- Previous verbiage: SEATs and MAFFS are not authorized to simultaneously fuel and load.
- New verbiage: SEATs, **S-2T's**, and MAFFS are not authorized to simultaneously fuel and load.

27. Chapter 7, Operations, Simultaneous Fueling and Loading

- Previous verbiage: Cooperator airtankers will have been evaluated and approved by the appropriate RAO in a Cooperator Letter for this purpose.
- New verbiage: Cooperator airtankers will have been evaluated and approved by the appropriate **RAO/SAM** for this purpose.

28. Chapter 7, Operations, Simultaneous Fueling and Loading

- Removed: Some states may have restrictions on simultaneous fueling and loading, refer to agency policy for further guidance.
29. Chapter 7, SEAT Operations
- Removed: Minimum Drop Height. All airtankers will adhere to the minimum drop height listed in the NWCG Standards for Aerial Supervision, PMS 505, <https://www.nwcg.gov/publications/505>, and refer to agency aircraft contracts.
30. Chapter 7, Operations, Other Ramp Activities, Visitors
- Removed: Visitors will be provided with appropriate safety equipment, including hearing protection.
31. Chapter 7, Operations, Other Ramp Activities, Visitors
- Previous verbiage: Visitors and the public shall be directed to and confined to a secure designated public viewing area while visiting the airtanker base camp to observe operations.
  - New verbiage: Members of the public shall be directed to and confined to a secure designated public viewing area while visiting the airtanker base to observe operations.
32. Chapter 7, Operations, Retardant Jettison Areas
- Added: Some units may require jettison load tracking. Each base should have some form of documentation identifying location, product, and quantity.
33. Chapter 8, Safety, Airspace Coordination
- Added: Potential reasons to order: (added after third bullet): Benefits of a temporary control tower are aircraft separation, coordination within the airspace, enhanced aviation safety, and coordination of approach and departure for aircraft.
34. Chapter 8, Airtanker Base Retardant Plant Safety Requirements
- Previous verbiage: Airtanker base requirements should be covered extensively during the inspection process.
  - New verbiage: Airtanker base **retardant plant safety** requirements should be covered extensively during the **annual** inspection process.
35. Chapter 9, Administration, Airport Fees
- Previous verbiage: Airport utilization fees may include landing, parking, and tie-down fees.
  - New verbiage: Airport utilization fees may include landing, parking, **fuel flow fees**, and tie-down fees.
36. Chapter 9, Administration, Roles & Responsibilities, Aviation Maintenance Inspector
- Replaced previous language with: An Aviation Maintenance Inspector (AMI) is responsible for managing the inspection and approval of fleet and contract aircraft and related equipment, including ensuring compliance with contractual and FAA requirements.

Every contract for aircraft other than point-to-point requires the vendor to contact the AMI before being returned to contract availability. This is because an aircraft that is removed from contract availability due to maintenance is not in compliance with the contract specifications for an airworthy aircraft. Under policy, the only individuals that have the authority to assess the aircraft's airworthiness under the contract are AMIs.

RTCA: When an aircraft is removed from contract use and declared “out of service” for aircraft maintenance purposes, the process for returning the aircraft to contract availability by the agency is as follows:

1. USFS Maintenance “Approval for Return to Service.”

- When Forest Service contracted aircraft go “unavailable” due to a maintenance issue, the contractor must contact the USFS Aircraft Maintenance Inspector (AMI), coordinated with / through the Agency COR/Base Manager, before being returned to contract availability. This is a collaborative process between the COR/ Base Manager, AMI, and the Contractor. Proactive communication is the key.
- The following Forest Service Policy and Guide establishes the requirement for this process:
- FSH 5709.16, 42.11 – Aircraft Return to Use after Maintenance:
  - Contracted Aircraft
  - Contractor authorized aircraft maintenance personnel must approve for “return to service” for all contracted or leased aircraft with mechanical or equipment deficiencies.
  - A Forest Service approved aviation inspector (AMI) must approve the aircraft for “Return to Contract Availability”.
  - Depending on the complexity of the maintenance or repair, “Return to Contract Availability” approval may be given verbally with an electronic follow-up.

The Forest Service [Aircraft Inspector Guide \(AIG\)](#) describes the process in Chapter 11, “Return to Contract Availability (RTCA).”

“The appropriate Agency AMI should be contacted for approval for return to contract availability for any unscheduled maintenance. Most of the time inspectors will be able to do this over the phone. The normal practice under these circumstances is to either have the contractor send copies of the log entries for inspector review, or have the manager retain the copies with their daily diary. Some inspectors want copies of all repairs, while others only keep them for major items. It is a judgement call on the inspector’s part which way to handle it, and whether they need to re-inspect an aircraft. As a minimum, copies of the logs for these type repairs should be retained by the COR or base/aircraft manager with their diaries.”

The above policy and guide requirements are the basis for the contract requirement for Return to Contract Availability. For Airtanker RTCA, single points of contact for each make/model of airtanker have been assigned. The current list is available at <https://www.nwcg.gov/committees/interagency-airtanker-base-subcommittee>.

The agency COR/base manager must notify the appropriate AMI before the aircraft is returned to contract use.

Use the following form to report an airtanker out of service: <https://www.nwcg.gov/sites/default/files/committee/docs/iabs-airtanker-out-of-service-gr-codes.pdf>

37. Chapter 9, Administration, RTCA under USFS Contracted SEATs

- Added: State Contracted Aircraft: Follow State-specific policies for return to contract availability.

38. Chapter 9, Administration, Contract Administration, Roles & Responsibilities, Operating Base Manager

- Previous verbiage: Administration of the contract is a joint responsibility of the host airtanker base **and the office with contracting authority**, with the ultimate responsibility vested in the CO.
- New verbiage: Administration of the contract is a joint responsibility of the host airtanker base and the COR, with the ultimate responsibility vested in the CO.