**Aviation Base – Large Airtanker and SEAT (2023)**

**Checklist #11**

| **Location:** |       |
| --- | --- |
| **Date:**MM/DD/YY |       |
| **Respondent:**First, Last |       |
| **Reviewed by:**First, Last |       |

**For the National Preparedness Review, you will need to have the following items available for review:**

| **CHECKLIST ITEM #** | **DOCUMENTATION** |
| --- | --- |
| 11, 12 | Documents, reference materials and operational guides and policy documents |
| 19 | Airtanker Base Operations Plan (ABOP) for appropriate base type (SEAT, LATB, Temporary Base) |
| 20, 36, 43 | *Storm Water Management Plan* or *Storm Water Pollution Prevention Plan* (SWMP/SWPPP) for base, Fire Leadership Team Best Management Practices (BMPs) checklists |
| 45 | Hot loading, and simultaneous fueling and loading supplements (if required) |
| 48 | BLM Assessment and Security Plan  |
| 50 | Facility safety inspection documentation |
| 52 | Risk assessments and risk management workbooks |
| 57 | Retardant reordering procedures |

**ADMINISTRATIVE**

***Key Code: E = Exceeds Standard, M = Meets Standard, NI = Needs Improvement, NR = Not Reviewed***

| **ITEM** | **DESCRIPTION** | **CODE****(E/M/NI/NR)** | **REMARKS** |
| --- | --- | --- | --- |
| 1 | Assigned personnel are qualified per the *NWCG Standards for Wildland Fire Position Qualifications* (*PMS 310-1*) to perform the positions they fulfill at the airbase.*[NWCG Standards for Airtanker Base Operations (SABO) Ch 2; PMS 310-1]* |       |       |
| 2 | Adequate personnel are available to meet the requirements of base staffing, including 7-day coverage when required.*[SABO Ch 2, Appendix. I; ABOP]* |       |       |
| 3 | Administrative forms such as Aircraft/Airtanker Daily Operations Log, Retardant Use Record, Pilot Flight Time/Duty Day Cumulative Log, and payment documents are completed and kept on file per policy, local plan, or contract. *[SABO Ch 7, 9, Appendix I; BLM Manual 9400]* |       |       |
| 4 | Information regarding the air base is accurately reflected in the *NWCG Airtanker Base Directory*.*[SABO Ch 4]* |       |       |
| 5 | Formal written agreement or MOU identifies and grants permission for airtanker operations at the airport.*[SABO Ch 1]* |       |       |
|  | 1. Identify person/position responsible for document and where it resides.
 |       |       |

**BASE FACILITIES AND COMMUNICATION**

***Key Code: E = Exceeds Standard, M = Meets Standard, NI = Needs Improvement, NR = Not Reviewed***

| **ITEM** | **DESCRIPTION** | **CODE****(E/M/NI/NR)** | **REMARKS** |
| --- | --- | --- | --- |
| 6 | The base operations facility is adequate for the number of personnel assigned and for intended operations.*[SABO Ch 1]* |       |       |
| 7 | Backup power system available and operational for base/office and retardant plant operations.*[SABO Ch 3, Appendix J, M]* |  |  |
|  | 1. Backup power for operations office
 |       |       |
|  | 1. Backup power for retardant plant operations
 |       |       |
| 8 | Communications plan shall be readily available at each airtanker base.*[SABO Ch 4]* |       |       |
|  | 1. Include important phone numbers for the airtanker base and local agencies.
 |       |       |
|  | 1. Plan includes commonly used frequencies.
 |       |       |
| 9 | The base has VHF-AM and VHF-FM equipment. Frequencies being used are appropriately authorized and assigned.*[SABO Ch 3, 4]* |       |       |
| 10 | Adequate standby facilities for aircrews and airtanker base personnel must be provided. Consider heating, cooling, potable water, restrooms, adequate furnishings, etc. **(Reference SABO for specific requirements.)***[SABO Ch 3, Appendix. A, C]* |       |       |

**PLANNING AND ADMINISTRATION**

***Key Code: E = Exceeds Standard, M = Meets Standard, NI = Needs Improvement, NR = Not Reviewed***

| **ITEM** | **DESCRIPTION** | **CODE****(E/M/NI/NR)** | **REMARKS** |
| --- | --- | --- | --- |
| 11 | The following reference materials are available at the base and easily accessible (offline) for review by incoming resources. *[NAP; SABO Ch 9, Appendix N]*  |  |  |
|  | 1. Airtanker Base Emergency Response Plan
 |       |       |
|  | 1. Local airtanker base operations plan (ABOP)
 |       |       |
|  | 1. Hot loading and/or simultaneous fueling and loading plan(s)
 |       |        |
|  | 1. All current and relevant airtanker, SEAT and long-term retardant contracts
 |       |       |
|  | 1. Daily risk assessment

*[Appendix L]* |       |       |
| 12  | All applicable agency and operational policy and procedural plans and guides are easily available for operational reference. **(See SABO Appendix N for comprehensive list).***[NAP; SABO Ch 9, Appendix N]* |       |       |
| 13 | Base and local procurement personnel are aware of national policy concerning provision of food and drink to contract crews by the government.*[SABO Ch 5; Airtanker Contracts]* |       |       |
| 14 | Sunrise/sunset chart is posted, and times documented on appropriate forms.*[SABO Ch 7]* |       |       |
| 15 | Personnel are following local policy concerning transportation of aircrews to and from lodging and eating facilities. Base provides adequately for transportation of aircrews to and from lodging/eating facilities where needed. *[SABO Ch 5; ABOP]* |       |       |
| 16 | Aircraft timekeeping procedures are established and reviewed with base personnel and aircrews.*[SEAT, LAT, VLAT contracts; SABO Ch 7; ABOP]* |       |       |
| 17 | Local response area map of known flight hazards is posted and accessible to dispatch, aircrews, and tanker base personnel. Map is updated annually.*[SABO Ch 8; RB Ch 16]* |       |       |
| 18 | Briefings are held with all aircrews and includes local known hazards, dispatching procedures, etc.*[SABO Ch 1, 6, 7; Appendix D, K; RB Ch 16]* |       |       |
|  | 1. Incoming resources, daily operations, mission briefing, debriefing/AARs
 |       |       |
| 19 | The local ABOP has been reviewed and has all the required information. [*SABO Ch 1; Appendix A, C]* * Plan should be reviewed for content per SABO appendices. Deficiencies, recommendations, or commendations should be identified here.
* Please provide base plan to review team prior to arrival to expedite on-site review.
 |       |       |
| 20 | Wash-down, spill recovery and waste disposal procedures are documented and in place. A hazmat coordinator contact has been identified.*[SWPPP, BMPs; SABO Ch 10; ABOP]* |       |       |
|  | 1. Training on local SWMP/SWPPP is conducted annually and documented. Incoming resources are briefed on procedures and requirements.
 |       |       |

**RAMP OPERATIONS**

***Key Code: E = Exceeds Standard, M = Meets Standard, NI = Needs Improvement, NR = Not Reviewed***

| **ITEM** | **DESCRIPTION** | **CODE****(E/M/NI/NR)** | **REMARKS** |
| --- | --- | --- | --- |
| 21 | Ramp surface is in good condition.*[9400.53 Facilities]* |       |       |
| 22 | Taxi lanes and ramp area is adequately marked and visible.*[9400.53 Facilities; Interagency Retardant Base Planning Guide]* |       |       |
| 23 | Wind indicator(s) are properly placed.*[Interagency Retardant Base Planning Guide; FAA AC150/5300-13B]* |       |       |
| 24 | Foreign object damage avoidance/dust control measures are in place.*[SABO Ch 7; ABOP; Interagency Retardant Base Planning Guide]* |       |       |
| 25 | The following warning signs are posted appropriately.*[SABO Ch 8; Interagency Retardant Base Planning Guide]* |  |  |
|  | 1. No smoking
 |       |       |
|  | 1. Hazardous areas
 |       |       |
|  | 1. Authorized parking signs
 |       |       |
|  | 1. Signing and marking for ramp security
 |       |       |
|  | 1. No Entry/Vehicle control signs identifying restricted areas
 |       |       |
| 26 | Identify security measures for ramp and operations areas.*[352 DM 5; SABO Ch 11]* |       |       |
| 27 | Appropriately sized and number of aircraft-type fire extinguishers are located on the ramp and indicate inspection is current.*[SABO Ch 8, OSHA 29 CFR 1910.157; NFPA 10, 407, 408 and 410]* |  |  |
|  | 1. Number
 |       |       |
|  | 1. Type
 |       |       |
|  | 1. Capacity
 |       |       |
|  | 1. Condition
 |       |       |
|  | 1. Dates of last inspection
 |       |       |
| 28 | Primary base personnel are trained and current in the use of fire extinguishers. *[SABO Ch 8; OSHA 29 CFR 1910.157; DM 485 13.3C]* |       |       |
| 29 | Base emergency response plan/crash-rescue plan is posted, up-to-date and complete. Personnel at the base and the responsible dispatch center are knowledgeable of the emergency response plan/crash-rescue plan requirements.*[SABO Ch 1, 8; Appendix A, C, D; ABOP; DM 485 13.3C]* |       |       |
| 30 | Sufficient tie-downs for SEATs and light aircraft are available, and a sufficient number of chock blocks are available for all types of aircraft hosted at the base.*[SABO Ch 7; Appendix. M; ABOP]* |       |       |
| 31 | Ramp lighting or night lighting kit is sufficient for night-time ramp operations.*[SABO Ch 3]*  |       |       |
| 32 | Aircraft fueling procedures are being followed.*[SABO Ch 7, Appendix F; 9400.48]* |       |       |
|  | 1. Procedures for hot fueling operations (if allowed) are identified and known by base personnel.

 *[SABO Ch 7]* |       |       |
| 33 | Appropriate personal protective equipment is provided, and base personnel trained in its use.*[SABO Ch 8]* |       |       |
| 34 | Base has parking tender-to-aircraft radio communications (VHF-AM handheld radios w/push-to-talk headsets or other).*[SABO Ch 3]* |       |       |

**RETARDANT OPERATIONS**

***Key Code: E = Exceeds Standard, M = Meets Standard, NI = Needs Improvement, NR = Not Reviewed***

| **ITEM** | **DESCRIPTION** | **CODE****(E/M/NI/NR)** | **REMARKS** |
| --- | --- | --- | --- |
| 35 | Ownership of the retardant mixing and storage equipment is accurately reflected in the current retardant contract.*[Long-term retardant contract: C-5 Contractor-Furnished Equipment and Exhibit J-1]* |       |       |
| 36 | Retardant storage tanks must meet the following minimum specifications:*[SWPPP BMPs]*  |  |  |
|  | 1. Capability to recirculate entire contents of each retardant tank
 |       |       |
|  | 1. Minimum retardant storage capability (5,000 gal.)
 |       |       |
| 37 | Secondary containment is in place and able to hold, at a minimum, 110% of the largest tank within the containment system. *[SWPPP; BMPs]* |       |        |
| 38 | Type of fire chemical(s) used at the base is posted, retardant testing equipment and charts are available, and personnel are knowledgeable in their use.*[National Retardant Contracts; SABO Ch 7; WFCS LAQA Program]* |       |       |
| 39 | Retardant reordering procedures are documented, and personnel are aware of the reordering process.*[Local/state guidance; ABOP; Retardant Contract]* |       |       |
| 40 | Mass flow meter is in use and is being used and maintained properly. Has been calibrated within the past 24 months, and calibration records are available.*\*Not applicable for some SEAT or temporary bases. See SABO Ch 7 for requirements.**[SABO Ch 7]* |       |       |
| 41 | Base has an adequate water supply for the level of activity for base zone of influence. *[SABO Appendix A]* |       |       |
|  | 1. ABOP provides detailed information on the water supply system including valves and flow control; source and supply; metering, recording, and ordering procedures where necessary.
 |       |       |
| 42 | Back flow prevention/air gap device installed on water systems if connected to public water system.*[OSHA 29 CFR 1910.141(b)(2)(ii)]* |       |       |
|  | 1. Backflow device is tested annually by a certified technician.
 |       |       |
|  | 1. Backflow device is removed or otherwise protected from freezing seasonally.
 |       |       |
| 43 | Retardant spills and washdown areas are properly drained and/or approved mitigation methods and procedures are in place.*[SABO Ch 10; ABOP; SWPPP BMPs]* |       |       |
|  | 1. Container is available to capture spillage when retardant hose is disconnected from aircraft.
 |       |       |
| 44 | Pumping system (hoses, caps, lines, and pumps) are in good condition and meet delivery requirements (GPM) of tanker types being serviced. [*SABO Ch 7, Appendix A, C; SEAT, LAT, VLAT Contracts]* |       |       |
|  | 1. Number of pumps
 |  |       |
|  | 1. Size and GPM of each pump
 |  |       |
| 45 | Loading procedures are established and documented. All personnel authorized for loading operations are fully qualified. *[SABO Ch 7; ABOP]* |       |       |
|  | 1. Approved hot loading plan in place, with training and procedures identified. Training documented for all participating personnel.

 *[SABO Ch 1, 7, Appendix E]*  |       |       |
|  | 1. \*Approved simultaneous fueling & loading plan in place with training and procedures identified. Training documented for all participating personnel. *[SABO Ch 1, 7, Appendix F]*

*(\*Large Airtanker Base only)* |       |       |
| 46 | LAQA retardant samples (base opening/base closing/new shipments) are being sent to Missoula, MT, as required and on a timely basis. Fire chemical use reports sent in annually.*[SABO Ch 7; LAQA Guide; Retardant Contract]* |       |       |
| 47 | Results of LAQA samples are being received from Missoula, MT, and corrective actions are taken in a timely manner. Results are recorded and retained by the agency.*[SABO Ch 7; LAQA Guide]* |       |       |

**SAFETY AND SECURITY**

***Key Code: E = Exceeds Standard, M = Meets Standard, NI = Needs Improvement, NR = Not Reviewed***

| **ITEM** | **DESCRIPTION** | **CODE****(E/M/NI/NR)** | **REMARKS** |
| --- | --- | --- | --- |
| 48 | BLM security risk assessment, and if required, a security plan has been completed, updated annually and is on file.*[SABO Ch 11; NAP 8.7]* |       |       |
| 49 | Regular safety/security briefings are being conducted and documented.*[SABO Ch 7; ABOP]* |       |       |
|  | 1. Incoming resources, daily operations, mission specific, debriefing/AARs
 |       |       |
| 50 | Facilities safety inspections are being conducted and documented. Most recent document is available for review.*[9400.53 (A) Facilities; SABO Ch 8]* |       |       |
|  | 1. OSHA, agency facility audits, CASHE audits
 |       |       |
|  | 1. First aid kit maintained and available near ramp.

*[SABO Appendix. J; OSHA 29 CFR 1910.151(b)]* |       |       |
|  | 1. Eyewash available, maintained and meets needs/requirements of operations area.

 *[OSHA 29 CFR 1910.151(c); ANSI Z358.1;* *SABO p 35]* |       |       |
|  | 1. Flammable cabinet available and utilized.

*[SABO Appendix J; 29 CFR 1910.106]* |       |       |
|  | 1. Catwalks, pump shaft guards, electrical meets safety standards.

*[SABO Appendix J, M; OSHA 3170, OSHA 29 CFR 1910]* |       |       |
| 51 | Security-related reporting procedures (stolen aircraft, security breaches, etc.) and contact lists with phone numbers are prominently posted.*[*[*DOI Field Reference Guide for AAF, Section 2*](https://www.nifc.gov/sites/default/files/blm/aviation/BLMsecurity/AAF.pdf)*]* |       |       |
| 52 | Risk assessments are up-to-date and on file. Base has *Interagency SMS Risk Management Workbooks* and BLM aviation system safety pilot read files up-to-date and available.*[H-1112-1; RAs; NAP for read files; SABO Ch 1, 8]* <https://www.nifc.gov/about-us/our-partners/blm/aviation/safety> |       |       |
| 53 | Training documentation for base personnel (e.g., first aid, fire extinguisher, forklift) is current.*[SABO Ch 2, 8; Appendix C; H-1112-1]* |       |       |
| 54 | If the airtanker base stores over 10,000 lbs. of retardant (813 gal. of liquid concentrate or 1,115 gal. of mixed product) at any time during the year, *Community Right-to Know* reporting process is in place (Tier II reports) and being completed annually.*[EPA 40 CFR 370]* |       |       |
|  | 1. Identify person/position responsible for reporting and where reports reside.
 |       |       |

**TEMPORARY or AS-NEEDED STAFFED BASES – RECOMMENDED OR REQUIRED ITEMS**

***Key Code: E = Exceeds Standard, M = Meets Standard, NI = Needs Improvement, NR = Not Reviewed***

| **ITEM** | **DESCRIPTION** | **CODE****(E/M/NI/NR)** | **REMARKS** |
| --- | --- | --- | --- |
| 55 | Primary person designated as a contact for the base operation is identified and posted at the base and local dispatch center.*[ABOP; Recommended practice]* |       |       |
| 56 | Established base startup, shutdown and equipment storage procedures are identified, posted at base and followed. *[ABOP; Recommended practice]* |       |       |
| 57 | A description of how the SEMG/ATBM should document their request for supply/equipment orders are known and in place. This includes retardant and retardant payment process. Process for ordering, as well as retardant invoice payment identifies responsible individuals including authorized approvers. *[ABOP; National Long-term Fire Retardant Contract, FOB Origin/MRB Prompt Payment]* |       |       |
| 58 | A jettison area, with description and a lat/long, is established and posted for the base. Permission from the landowner is reflected by an MOU or agreement if applicable.*[SABO Ch 7]* |       |       |