

**BY ORDER OF THE  
SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 32-1043**

**4 MARCH 2015**

**Civil Engineering**



**MANAGING, OPERATING, AND  
MAINTAINING AIRCRAFT ARRESTING  
SYSTEMS**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements Air Force Policy Directive (AFPD) 32-10, *Installations and Facilities*. It gives procedures for managing, installing, maintaining, and operating United States Air Force (USAF) aircraft arresting systems (AAS). This publication applies to all USAF, Air Force Reserve Command (AFRC), and the Air National Guard (ANG) units and personnel. This publication may be supplemented at any level, but all direct Supplements must be routed to the Office of Primary Responsibility (OPR) of this publication for coordination prior to certification approval. The authorities to waive wing/unit level requirement in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for nontiered compliance items. Refer recommended changes and questions about this publication to the OPR using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

***SUMMARY OF CHANGES***

This document has been substantially revised and must be completely reviewed. Major changes include the addition of Tier waiver authority requirements, updated office symbols, and updated references.

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## Chapter 1

### RESPONSIBILITIES

#### 1.1. Headquarters USAF and Field Operating Agencies.

1.1.1. The Directorate of Civil Engineers (AF/A4C) develops maintenance policy and oversees execution of the USAF aircraft arresting system (AAS) program. See AFPD 32-10.

1.1.2. The Air Force Civil Engineer Center, Engineer Division (AFCEC/COSC), provides technical guidance for all phases of AAS programs. It also validates requirements for new systems and helps resolve technical issues.

1.1.3. The Deputy Chief of Staff for Operations, Plans and Requirements (AF/A3/5) develops operational policy and oversees execution.

1.1.4. The Air Force Flight Standards Agency (AFFSA) provides technical support to the Air Staff on operational issues relating to installation, maintenance, and use of these systems. It also helps plan, develop, review, and recommend standards for siting, installing, operating, and maintaining AAS.

**1.2. MAJCOM.** The MAJCOM AAS Manager will manage AAS programs and enforce Air Force policy and guidance. The manager must also perform the following tasks.

1.2.1. Submit (or ensure that each installation submits) an *Aircraft Arrestment Report* (Report Control Symbol - Headquarters Air Force - Civil Engineer [M&AR] 8403) as soon as possible after an engagement or missed engagement. The report must be filed at <https://tyndall.eim.acc.af.mil/apps/afcec/AAS/default.aspx>.

**Note:** Do not submit the report during periods of inactivity or emergency. The report must be submitted for each engagement or attempted engagement (see Attachment 1 for the definition of a missed engagement). In the event the website is down for any reason, contact AFCEC/CO for further guidance.

1.2.2. Include the absorber serial numbers (if applicable) in the "remarks" section of the report. **Note:** Do not submit classified information. Discontinue reporting during emergency conditions but maintain records for later submission.

1.2.3. The MAJCOM Directorate of Installations and Mission Support (MAJCOM/A7) ensures Base Civil Engineers (BCEs) comply with the designation and certification of personnel as tasked in paragraph 1.3, that all personnel engaged in AAS activities meet the same minimum requirements for the tasks assigned them, and that Air Force contracts for the performance of maintenance operations duties include similar standards of competency for support employees through reference to this instruction and other appropriate Air Force guidance within the support contracts.

1.2.4. Submit waiver requests to Air Force Life Cycle Management Center (AFLCMC) at Robins AFB if deviation from the 35E8-series technical orders (T.O.) is required at installation level. Send T.O. waiver requests to:

Support Equipment and Vehicles Division  
ATTN: AFLCMC/WNZEC  
235 Byron Street, Suite 19A  
Bldg 300WW South End  
Bay D, Door 27A  
Robins AFB, GA 31098-1813  
642CBSG.Workflow@us.af.mil (E-mail waiver requests are encouraged.)

1.2.5. Establish a record of dates when all arresting systems under the MAJCOM authority last underwent an overhaul that included a brake change.

1.2.6. Develop an overhaul plan and schedule that prevents unnecessary runway closures and waiver requests and provide a copy of the schedule to the Ground Support Equipment Division at AFLCMC (642 CBSG/GBEB) so they have indicators of the need for spares. Include all systems within the MAJCOM, even those designated as war reserve materiel, such as the mobile aircraft arresting system (MAAS).

1.2.6.1. If the plan requires the depot to perform overhauls, send the depot a copy of a proposed schedule at least two years before the anticipated due date.

1.2.6.2. Provide AFLCMC with updates at least once a year but no more than once every six months.

1.2.7. Review all new AAS project installation drawings for functional and technical correctness before contract award (or start of the project if accomplished in-house). All projects must comply with siting criteria in this instruction, Unified Facilities Criteria (UFC) 3-260-01, *Airfield and Heliport Planning and Design*, the applicable 35E8-series T.O.s, and the typical installation drawings for the specific system. In cases where criteria cannot be met, a waiver must be established according to UFC 3-260-01 and/or the applicable T.O., as appropriate.

1.2.8. Coordinate Air Force Equipment Management System (AFEMS) requests (formerly AF Form 601, *Equipment Action Request*), which authorize new systems, with the directorate of operations.

1.2.9. The MAJCOM AAS Manager will follow instructions in Attachment 3 regarding decommissioning an AAS.

1.2.10. Coordinate with the MAJCOM Director of Operations (MAJCOM/A3) and flying units to ensure certification engagements are conducted according to paragraph 2.1.

1.2.11. Ensure that systems that do not comply with the requirements of this instruction or the applicable T.O. are programmed for corrective action or replacement.

### 1.3. Base Civil Engineers.

1.3.1. The BCE must ensure that personnel engaged in AAS operation and maintenance (O&M) activities meet the minimum requirements shown below for the associated tasks. This includes personnel under contract to perform maintenance. **(T-2)**

1.3.1.1. To perform an after-arrestment inspection and certify an AAS back in service after arrestment, personnel must be task-certified power production 5-level (or higher skill level) journeyman, or the civilian Wage Grade (WG)-5378 equivalent. **(T-2)**

1.3.1.2. To perform maintenance on an AAS, personnel must be task-certified power production 3-level (or higher skill level) apprentice or the civilian WG-5378 equivalent. **(T-2)**

1.3.1.3. Personnel other than power production (AFSC 3E0X2) or civilian equivalent (WG-5378) that augment power production personnel to perform daily inspections or assist during engagements must be specifically designated by the BCE in writing, and must be certified annually by the designated lead power production technician or the civilian equivalent. **(T-2)**

1.3.1.4. For new installations or for cases where major civil works have been accomplished that may affect system alignment, a task-certified power production 7-level technician or the civilian WG-5378 equivalent must certify the system ready for use. **(T-2)**

1.3.2. BCEs also approve AFEMS requests and work with representatives from operations (A3) and safety (SE) to: **(T-2)**

1.3.2.1. Recommend that additional systems be installed to meet new or revised mission requirements (see Chapter 4).

1.3.2.2. Recommend to the MAJCOM to decommission systems no longer needed to support the mission (see Chapter 4).

1.3.2.3. Request that airfield management issue the appropriate Notice to Airman (NOTAM) and update the appropriate Department of Defense (DOD) Flight Information Publications (FLIP) before removing any system from service.

1.3.2.4. Determine siting requirements for new systems and obtain MAJCOM/A7, A3 and SE coordination for nonstandard and midfield installations. Ensure that airfield management reviews and coordinates on the proposed siting of any new systems.

1.3.2.5. Determine annually if nonstandard arresting system installations can continue in use without compromising operational efficiency and safety. Nonstandard installations are installations that do not comply with the siting and grading requirements given in this instruction and UFC 3-260-01.

1.3.2.6. Initiate projects to replace two-roller edge sheaves and two-roller fairlead beams with three-roller edge sheaves or fairlead beams to eliminate the longitudinal wheel abutment these devices create along the runway shoulder. Also initiate projects to correct shoulder grades that do not meet the 1V:30H or flatter requirement (paragraph 3.3.2.2 and UFC 3-260-01, Table 3.2, Item 5, "Longitudinal Shoulder Grades").

1.3.2.7. Comply with all other provisions within this instruction.

1.3.3. The BCE's representative (power production AAS maintenance section supervisor) must accomplish the following items:

1.3.3.1. Request and obtain waivers from AFLCMC through the MAJCOM AAS Manager when compliance with the 35E8-series T.O.s is not practical and before making any modifications to the equipment that do not comply with the T.O. configuration. **(T-2)**

1.3.3.2. Submit AFEMS requests through appropriate channels to obtain authorization for new arresting systems. **(T-2)**

1.3.3.3. Ensure that installation, operation, and maintenance actions comply with all criteria listed in this instruction, the typical installation drawings, MAJCOM and local instructions, and the appropriate 35E8-series T.O. **(T-2)**

1.3.3.4. Conduct inspections according to 35E8-series T.O. work cards and maintain an accurate historical log and maintenance records for each assigned AAS. Locally developed forms and logs are authorized. **(T-2)**

1.3.3.5. Develop and implement local procedures and instructions in writing to clearly delineate responsibilities of all personnel engaged in AAS activities during and after normal duty hours. **(T-2)** These instructions must clearly define the different responsibilities of power production and firefighters involved during emergencies, and should address coordination with other work centers involved during operations, such as snow and ice control. They must include procedures to clear aircraft from the runway and inspect and reset the system immediately after each engagement. **(T-2)** The BCE must approve the operating instruction. A signed copy must be forwarded to the MAJCOM AAS Manager and another maintained in the power production section. **(T-2)** These instructions must be reviewed annually for needed changes and updates. When updated, a copy must be provided to the MAJCOM AAS Manager within 10 days of approval and publication. **(T-2)**

1.3.3.6. Submit aircraft engagement information at <https://tyndall.eim.acc.af.mil/apps/afcec/AAS/default.aspx>. **(T-1)** Include supplemental information as directed by the MAJCOM. Also file reports for all missed engagement attempts (see attachment 1 for the definition of a missed engagement). Reports should be sent as soon as possible after the engagement. Electronic submittals are authorized and encouraged. **Note:** Do not submit the report during periods of inactivity or emergency. The report must be submitted for each engagement or attempted engagement. In the event the website is down for any reason, contact AFCEC/CO for further guidance.

1.3.3.7. Develop local procedures and lesson plans to thoroughly train all civil engineer personnel (including non-power production personnel) who use, operate, or maintain an AAS to the appropriate task level in the 3E0X2 career field education and training plan (CFETP), and ensure that all personnel are task-certified for their assigned duties. **(T-2)** Document training and certification of civilian employees on AF Form 971, *Supervisor's Employee Brief*, and other training records, as appropriate.

1.3.3.7.1. Provide training for non-power production personnel at not less than quarterly intervals to ensure all personnel are trained on their duties at least once every 12 months. **(T-3)** Maintain a record for each training class that identifies the instructor and all trainees in attendance.

1.3.3.7.2. Provide a copy of the record to the trainee's regular duty section for their use. **(T-2)**

1.3.3.8. Report all deficiencies discovered with AAS and components to base supply according to T.O. 00-35D-54, *USAF Material Deficiency Reporting, Investigation, and Resolution*. **(T-2)**

1.3.3.9. Establish and maintain a record of the effective pendant height (EPH) for each hook-cable arresting system installed on the runway or in a displaced threshold area

(except retractable cable systems such as BAK-14 or Type H). (T-2) EPH records are not required for emergency systems installed in overruns. Notify the Airfield Manager if the EPH falls to less than 38 millimeters (1.5 inches).

1.3.3.10. Ensure systems that do not comply with the requirements of this instruction or the applicable T.O. are programmed for corrective action or replacement. (T-1)

1.3.3.11. Ensure copies of applicable AAS T.O.s and work cards, Air Force instructions, MAJCOM supplements or instructions, and local instructions are maintained in the work center and are available for all personnel engaged in arresting systems activities.

1.3.3.12. Ensure all non-power production personnel engaged in daily AAS activities are certified in their training record and the qualification level is documented. Qualifications must be reviewed and updated on an annual basis. (T-2) Document each individual's AF Form 623, *Individual Training Record Folder*.

1.3.3.13. Establish and maintain a "special level" (on-hand supply) of critical replacement items for AAS. Examples of items that should be maintained at special levels include (but are not limited to) purchase tapes, tape connectors, pendants, control valves, shuttle valves, special fittings, brake sets or kits, and replacement modules for textile brake arresting systems. (T-3)

1.3.3.14. Ensure personnel engaged in AAS operations use appropriate personal protective equipment (PPE) per AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*.

**1.4. HQ Air Force Materiel Command (AFMC).** AFMC manages engineering development of new requirements and oversees initial production. Once the initial production quantity is complete, responsibility for item management, engineering, and procurement support is consigned to the appropriate AFLCMC, presently at Robins AFB.

1.4.1. AFLCMC provides logistic and engineering support and item management for these systems and components. AFLCMC is also responsible for the following:

1.4.1.1. Procure systems and provide oversight of spare parts standards.

1.4.1.2. Provide technical assistance, configuration control, and consultation on maintenance, product improvement, modifications, testing, inspections, and installation of all AAS in the Air Force inventory.

1.4.1.3. Compile and document all information from the aircraft arrestment reports to ensure availability of the data for analysis of specific system performance and use.

## Chapter 2

### CERTIFICATION AND OPERATION

#### 2.1. System Certification.

2.1.1. All Air Force arresting gear (excluding MA-1A, E-5, BAK-15, textile brake, and soft ground arrestor systems) that have not been engaged at a speed sufficient to exercise the hydraulic system within the past 12 months must be certified by an aircraft engagement. **(T-2)** The recommended minimum speed for certification engagement is 75 knots regardless of aircraft weight. For BAK-12 and MAAS, aircraft speeds reported at less than 75 knots are also acceptable as long as the hydraulic system is exercised. To qualify as a valid certification engagement, each hydraulic selector valve must shuttle from static pressure to pump pressure. Certification engagements will be made toward the center of the runway. This may require the aircraft starting position to be in the overrun area. Note: Validate overrun pavement is constructed to withstand aircraft load. This requirement also applies to initial system installations and after a brake change or absorber overhaul. It does not apply to War Reserve Materiel systems in storage.

2.1.2. If extenuating circumstances prevent certification by engagement, a certification inspection must be performed or the system must be removed from service. The certification inspection must be performed by the MAJCOM AAS Manager. **(T-2)** For annual certification requirements, the inspection must be accomplished on or before the anniversary of the last system engagement. The inspection must include (but is not limited to) all requirements in Section 5 of the applicable 35E8-series T.O. The period between aircraft engagements must not exceed 24 months. Assigned installation maintenance personnel may not perform the inspection. Certification inspections cannot be substituted for initial installation certification engagements. **Note:** The installation commander has the authority to direct that new system installations are placed in service or those overdue for certification or overhaul are kept in service for critical missions. **(T-2)** If such an order is given, it must be documented in the maintenance records and the MAJCOM AAS manager notified immediately. Overdue systems may only remain in service for one additional year beyond the original date of required certification or overhaul. **(T-1)**

#### 2.2. Operation.

2.2.1. Disconnect and remove unidirectional barrier nets and pendant cables located in overruns on the approach end of the runway. **(T-3)** Also disconnect and remove BAK-9 cables located on the runway on the approach end. **(T-3)** Full-size net systems such as the BAK-15 may remain in place in the overrun in the down position; however, the energy absorbers must be disconnected and the BCE's designated representative must inform the Airfield Manager and the MAJCOM/A3 and SE when the net will be left in place. **(T-2)** Do this to publicize the potential hazard to aircrew.

2.2.1.1. If environmental conditions require frequent system configuration changes (runway changes) for MA-1A or MA-1A modified net systems, E-5, BAK-9, or textile brake systems, the nets and cables may be left in place on the approach end of the runway to avoid excessive runway downtime and/or excessive wear from abrasion; however, the



nonstandard configuration must first be recommended by the installation commander coordinated by the MAJCOM/A7 and SE, and approved by the MAJCOM/A3. **(T-2)**

2.2.1.2. Additionally, for all unidirectional systems (MA-1A, E-5, BAK-15, and MB 60.9.9.C), the energy absorbers must be disconnected from the engaging device(s) before operations commence in the opposite direction (toward the unidirectional system). **(T-3)**

2.2.1.3. For MB 60.9.9.C textile brake systems, after the cable is disconnected from the yoke on both ends, the 31.75-millimeter (1.25-inch) -diameter cable should be secured to the eye-loop of each Tirfor anchor plate or to an added anchor point to prevent movement due to jet blast. Use standard 10-millimeter (0.375-inch) -diameter, three-strand nylon rope (NSN 4020-00-968-1356) like that used for cable tie-downs.

## Chapter 3

### OBTAINING NEW SYSTEMS AND INSTALLATION REQUIREMENTS

#### 3.1. Obtaining New Systems.

3.1.1. Identify new system requirements to the MAJCOM and AFCEC, in turn, at least two years in advance, or as soon as new requirements are known, to allow sufficient lead-time for budgeting, contracting actions, manufacturing, and delivery.

3.1.2. The BCE's representative processes new requirements received from the operations group commander or air expeditionary group commander by first coordinating with the MAJCOM AAS Manager. The MAJCOM AAS Manager coordinates the new requirement with the MAJCOM Operations Division (A3O), Flight Safety Division (SEF), and Civil Engineer Operations Division (A7O), and responds to the installation's request. Once MAJCOM endorsement is received, the installation representative submits an AFEMS request to the base equipment management office (BEMO). (T-2)

3.1.3. The MAJCOM AAS Manager must identify all new requirements to AFCEC/CO during the call for new requirements.

3.1.4. AFCEC/CO validates the new requirements with AFLCMC for budgeting and procurement.

3.1.5. Upon approval of the AFEMS request, installation-level personnel should requisition the system and any other components not included in the government-supplied equipment (GSE) kit, such as the pendant.

#### 3.2. Project Installation Requirements.

3.2.1. The BCE's AAS representative will review the construction drawings and contract specifications at the 35 percent and 65 percent completion stages and approve at the 90 percent design completion phase. MAJCOM AAS managers will also provide technical reviews at design milestones. (T-2) Other entities with a stake in the project, such as SE and A3 at base and MAJCOM levels, should also be asked to review the project drawings and contract specifications. The BCE's representative also ensures that installation contracts stipulate:

3.2.1.1. The construction superintendent, project engineer, or other authority experienced in installing AAS is onsite during construction and installation of each system.

3.2.1.2. The contractor corrects any deficiencies in the installation until at least two pullouts of the purchase tape are accomplished in each direction of intended operation, with the BCE's AAS representative present, and the contracting officer officially accepts the system.

**3.3. Grandfathered Systems.** On-grade BAK-12 systems installed before 1 July 1977, that are sited at least 76.2 meters (250 feet) from the runway centerline do not have to be relocated to meet the minimum setback requirement of 84 meters (275 feet) from the runway centerline; however, all systems equipped with 2-roller edge sheaves or 2-roller fairlead beams must be programmed for retrofit with 3-roller fairlead beams or edge sheaves to eliminate the longitudinal wheel abutment along the runway shoulder. (T-2)

### **3.4. Installing Systems at Jointly Used Airports.**

3.4.1. The FAA acts for and on behalf of the DOD Service component in operating arresting systems installed at jointly used civil airports for the primary use of US military aircraft.

3.4.2. Site arresting systems on civil airports jointly used by civil and military aircraft according to FAA Advisory Circular (AC) 150/5220-9, *Aircraft Arresting Systems on Civil Airports*. **(T-0)**

3.4.3. To install an arresting system at a jointly used civil airport, the installation commander must first notify the airport manager (or authority) of the need. **(T-1)** If the airport manager agrees, the installation commander submits the plan with sketches or drawings to the Air Force liaison officer at the FAA regional office. **(T-1)** Refer any disagreement between the responsible officials to the next higher level within the chain of command.

3.4.4. If construction involves a lease agreement that does not allow placing additional structures on the leased premises, contact the MAJCOM.

3.4.5. Third-party claims presented for damage, injury, or death resulting from FAA operation of the system for military aircraft or from the Air Force or Air National Guard maintenance of the system may be the responsibility of the Air Force. Process such claims under the appropriate Air Force regulatory guidance (AFI 51-502, *Personnel and Government Recovery Claims*).

3.4.6. The FAA is responsible for claims presented for damage resulting from FAA operation of the system for civil aircraft; therefore, separate agreements between DOD and FAA concerning liability for such damage are not necessary.

3.4.7. The MAJCOM negotiates the operational agreement with FAA for a jointly used civil airport. The MAJCOM may delegate this authority to the installation commander. The agreement describes FAA functions and responsibilities concerning the remote-control operation of arresting systems by FAA air traffic controllers.

### **3.5. Military Rights Agreements for Foreign Locations and Use by Non-US Government Aircraft.**

3.5.1. Install these systems under the military rights agreement with the host government. The installation commander coordinates any separate agreements required with the local US diplomatic representative and negotiates the agreement with the host nation. If the parties are unable to agree, refer the issue to the MAJCOM.

3.5.2. In an emergency, the pilot of a non-US Government aircraft may request and use arresting systems at Air Force bases and jointly used airports within the continental US and overseas.

## Chapter 4

### TYPICAL ARRESTING SYSTEM AND BARRIER CONFIGURATIONS, AND DECOMMISSIONING

**4.1. Configurations.** The primary mission aircraft dictates the total number, type, and location of AAS required. The MAJCOM owning the tailhook-equipped aircraft (or aircraft compatible with net barrier systems) can determine through operational risk management (ORM), runway configuration, proximity to other airfields, and other factors, that the typical configuration of both a runway and overrun system may not be required. Use the following examples for guidance.

4.1.1. A runway intended primarily for operating tactical or training tailhook-equipped aircraft should typically have an emergency system in each overrun and an operational system at each end of the runway for redundant capability. However, for some locations at forward operating bases or where snow and ice accumulation warrants, two operational systems may be necessary for each runway end and a midfield installation may also be needed.

4.1.2. Runways that are prime divert facilities for bases operating tactical or training tailhook-equipped aircraft should have an emergency system in each overrun and an operational system on each end of the primary runway.

4.1.3. Bases that are occasional hosts to arrestment-capable transient aircraft should have an emergency system installed in each overrun of the primary runway or an operational system on each end of the primary runway.

**4.2. Decommissioning.** If the mission or mission aircraft assigned to an installation does not require an AAS complex and removal will not have an impact on other Air Force activities, consider decommissioning. Decommissioning procedures are as follows:

4.2.1. Upon notification of a proposed AAS decommissioning, the owning MAJCOM/A7 will notify AF/A4CS and AFCEC/COSC of the intent to decommission. AF/A4CS will notify AF/A3/5, requesting they solicit comments on impact of decommissioning to overall Air Force aviation operations. AF/A3/5 will task ACC/A3, as the Combat Air Forces (CAF) lead command, through AF/A3O to provide a recommendation on the proposed decommissioning (see paragraph 1.1.3).

4.2.2. In developing the recommendation, ACC will solicit inputs from its A3, A5, and A7 functional areas. ACC Flight Operations Division (ACC/A3T) will be the OPR for this review.

4.2.3. ACC/A3T will solicit inputs from ACC and other MAJCOMs' and Services' staffs on impact to their operations by the AAS decommissioning.

4.2.4. ACC, as the CAF lead command, will determine if suitable and sufficient alternate landing locations for tailhook-equipped aircraft are available if the AAS is decommissioned.

4.2.5. After a thorough review, ACC/A3T, through the ACC/A3, will provide a recommendation with supporting data to AF/A3O.

4.2.6. AF/A3O will review the recommendations in coordination with AF/A4C and provide a consolidated recommendation to AF/A3/5 and AF/A4.

**4.3. Decommissioning Considerations.** As a minimum, the following areas/subjects shall be considered by Headquarters Air Force decommissioning:

4.3.1. Review operation plans (OPLAN), memorandums of understanding (MOU), memorandums of agreement (MOA), letters of agreement (LOA), and contingency plans to identify, then coordinate AAS decommissioning with all flying units (e.g., active duty, ANG, AFRC, other Services) that currently use the airfield for emergency divers, routine local training, en route stop for deployments, hurricane evacuation (HURREVAC) base, daily operations, etc.

4.3.2. The focus of the review should be the effect on CAF tailhook-equipped aircraft using the base.

4.3.3. Coordinate with the pertinent MAJCOM strategic basing division/branch (A5 or A8) to determine impact on known basing initiatives.

4.3.4. Determine any funding constraints in keeping the AAS operational.

4.3.5. Determine sourcing for funds to keep the AAS operational, if necessary.

4.3.6. ACC/A3T (or equivalent) will contact all CAF operations groups within 150 nautical miles (NM) of the closing AAS to determine any expected impact to base flight operations.

4.3.7. Coordinate with the pertinent MAJCOM/A3 to determine impact on higher headquarters missions.

4.3.8. If located on a joint-use field, coordinate with local airfield management and/or the FAA.

**4.4. Decommissioning Actions.** If decommissioning is approved then:

4.4.1. ACC/A3T (or equivalent) will notify the host Airfield Manager, who will in turn submit the appropriate NOTAM and FLIP revision.

4.4.2. The responsible MAJCOM and base will program, prioritize, and fund a project to remove all AAS structures (such as barrier shacks) and other supporting infrastructure (including abandoned concrete foundations no longer serving an operational requirement, any ultra-high-molecular-weight [UHMW] polyethylene panels, and any subsurface BAK-14 and Type H hook cable systems). Additionally, the project must restore the area to grading standards to meet criteria in UFC 3-260-01, *Airfield and Heliport Planning and Design*, in the runway mandatory frangibility zone (Airfield Obstruction Reduction Initiative [AORI] Priority Area 1) to eliminate any hazardous violations. The BCE shall ensure the real property records are updated when the AAS has been removed. **(T-1)**.

4.4.3. Equipment disposition instructions should be requested from the AAS item manager (AFLCMC/WNZCA) using AFTO Form 375, *Selected Support Equipment Repair Cost Estimate*. Equipment should be removed from the base's Custody Authorization/Custody Receipt Listing (CA/CRL) and Allowance Standard (AS) after disposition instructions are provided by the item manager.

JUDITH A. FEDDER, Lt Gen, USAF  
DCS/Installations, Logistics & Mission Support

## Attachment 1

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

*References*

- Aerazur Technical Manual 256-722, *Type H45-200 Retractable Hook Cable System*
- AFI 11-218, *Aircraft Operations and Movement on the Ground*, 28 October 2011
- AFI 13-204V3, *Airfield Operations Procedures and Programs*, 1 September 2010
- AFI 13-213, *Airfield Driving*, 1 June 2011
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### ***Prescribed Forms***

None.

### ***Adopted Forms***

AF Form 601, *Equipment Action Request*

AF Form 623, *Individual Training Record Folder*

AF Form 971, *Supervisor's Employee Brief*

AFTO Form 375, *Selected Support Equipment Repair Cost Estimate*

### ***Abbreviations and Acronyms***

**404 SCMS/GUOBB**—404th Supply Chain Management Squadron

**642 CBSG/GBEB**—642d Combat Sustainment Group

**A7**—Directorate of Installations and Mission Support

**AAS**—Aircraft Arresting System

**AC**—Advisory Circular (FAA)

**ACC**—Air Combat Command

**ACC/A3**—ACC Directorate of Operations



**ACC/A3T**—ACC Flight Operations Division

**ACC/A5**—ACC Directorate of Plans and Programs

**ACC/A7**—ACC Directorate of Installations & Mission Support

**AF**—Air Force (as used on forms)

**AF/A3**—HQ USAF Deputy Chief of Staff for Operations, Plans and Requirements

**AF/A3/5**—Operations, Plans and Requirements

**AF/A3O**—Operations Division

**AF/A4**—Logistics, Installations & Mission Support

**AF/A4C**—Director of Civil Engineers

**AF/A4CS**—Chief, Sustainment Division, Directorate of Civil Engineers

**AFCEC**—Air Force Civil Engineer Center

**AFCEC/CO**—AFCEC Operations Directorate

**AFCEC/COS**—AFCEC Engineer Support Division

**AFCEC/COSC**—AFCEC Civil Branch

**AFCENT**—Air Forces Central (Command)

**AFCESA**—Air Force Civil Engineer Support Agency (AFCEC since 1 October 2012)

**AFCESA/CEO**—AFCESA Operations and Programs Support Division (AFCEC/CO since 1 October 2012)

**AFCESA/CEOA**—AFCESA Engineer Support Branch (AFCEC/COS since 1 October 2012)

**AFEMS**—Air Force Equipment Management System

**AFFSA**—Air Force Flight Standards Agency

**AFI**—Air Force Instruction

**AFLCMC**—Air Force Life Cycle Management Center

**AFMAN**—Air Force Manual

**AFMC**—Air Force Materiel Command

**AFPD**—Air Force Policy Directive

**AFRC**—Air Force Reserve Command

**AFSC**—Air Force Specialty Code

**AFTO**—Air Force Technical Order (As used on forms)

**AGM**—Arresting Gear Marker

**ALC**—Air Logistics Center

**ANG**—Air National Guard

**AOI**—Airfield Operating Instruction

**AR**—As Required (used in report control symbols)  
**ASTM**—American Society for Testing and Materials  
**ATC**—Air Traffic Control  
**BCE**—Base Civil Engineer  
**BEMO**—Base Equipment Management Office  
**CAF**—Combat Air Forces  
**CE**—Civil Engineer  
**CFETP**—Career Field Education and Training Plan  
**CFR**—Code of Federal Regulation  
**DO**—Operations  
**DOD**—Department of Defense  
**EPH**—Effective Pendant Height  
**ETL**—Engineering Technical Letter  
**FAA**—Federal Aviation Administration  
**FAR**—Federal Aviation Regulation  
**FLIP**—Flight Information Publications  
**HQ ACC**—Headquarters Air Combat Command  
**ICAO**—International Civil Aviation Organization  
**M & AR**—Monthly and As Required (used in report control symbols)  
**MAAS**—Mobile Aircraft Arresting System  
**MAJCOM**—Major Command  
**MAJCOM/A3**—Major Command Directorate of Operations  
**MAJCOM/A7**—Major Command Directorate of Installations & Mission Support  
**MAJCOM/SE**—Major Command Directorate of Safety  
**NOTAM**—Notice to Airmen  
**NSN**—National Stock Number  
**O&M**—Operation and Maintenance  
**OPR**—Office of Primary Responsibility  
**ORM**—Operational Risk Management  
**PACAF**—Pacific Air Forces  
**PPE**—Personal Protective Equipment  
**RDS**—Records Disposition Schedule

**SE**—Safety

**T.O.**—Technical Order

**UFC**—Unified Facilities Criteria

**UHMW**—Ultra-High-Molecular-Weight

**UNC**—Unified National Coarse (Thread Pitch)

**US**—United States

**USAFE**—United States Air Forces in Europe

**USAF**—United States Air Force

**UV**—Ultraviolet

**WG**—Wage Grade

**WR-ALC**—Warner Robins Air Logistics Center

### *Terms*

**Active Runway**—Any runway or runways currently being used for takeoff or landing. When multiple runways are used, they are all considered active runways.

**Aircraft Arresting Barrier**—A device, not dependent on an aircraft arresting hook, used to stop an aircraft by absorbing its forward momentum in an emergency landing or aborted takeoff. (Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*)

**Aircraft Arresting Cable**—The part of an aircraft arresting system (AAS) that spans the runway surface or flight deck landing area and is engaged by the aircraft arresting hook. (Joint Publication 1-02) (Also see "Pendant.")

**Aircraft Arresting Complex**—An airfield layout comprising one or more arresting systems.

**Aircraft Arresting System (AAS)**—A series of components used to engage and absorb the forward momentum of a routine or emergency landing or an aborted takeoff. (Joint Publication 1-02)

**Arrestment-Capable Aircraft**—An aircraft whose flight manual specifies arrestment procedures.

**Cycle Time**—A measure of time between engagement of an aircraft and the point when the arresting system is certified fully operational and ready for another engagement.

**Effective Pendant Height (EPH)**—The vertical distance in inches from the underside of the pendant cable to a projected surface representing undamaged runway surface.

**Energy Absorber**—The component of the arresting system that dissipates the kinetic energy of the arrested aircraft.

**Location Identification**—A description identifying the location of arresting systems by the approach or departure end, runway designation, and position in hundreds of meters/feet from the threshold. For example, the location identification extended runout BAK-12 at +457.2 meters (+1500 feet) on approach runway 36 indicates a 365.7-meter (1200-foot) runout BAK-12 located 457.2 meters (1500 feet) beyond the threshold of runway 36.

**Missed Engagement**—Any unsuccessful attempt to engage an AAS hook cable with a successfully deployed aircraft tailhook.

**Mobile Aircraft Arresting System (MAAS)**—A self-contained, trailer-mounted BAK-12 AAS that accommodates rapid installation during contingencies.

**Movement Area (USAF/FAA)**—The runways, taxiways, and other areas of an airport/heliport used for taxiing/hover taxiing, air taxiing, take-off, and landing of aircraft, exclusive of loading ramps and parking areas. At airports/heliports with a tower, specific approval for entry onto the movement area must be obtained from ATC. For USAF, the movement area is determined by the airfield operations flight commander and defined in the installation airfield operations and airfield driving instructions in accordance with AFI 13-204V3, *Airfield Operations Procedures and Programs*, and AFI 13-213, *Airfield Driving*.

**Movement Area (ICAO)**—That part of an airport used for the take-off, landing and taxiing of aircraft, consisting of the maneuvering area and the apron(s).

**Overrun (USAF)**—An area beyond the take-off runway designated by the airport authorities as able to support an airplane during an aborted take-off. The FAA/ICAO term for this is “stopway.” UFC 3-260-01 identifies this area as one that prevents serious damage to aircraft that overrun or undershoot the runway.

**Pendant**—The part of an AAS that spans the runway surface or flight deck landing area and is engaged by the aircraft arresting hook.

**Reset Time**—The time required to ready the arresting system for another engagement after aircraft release. (This does not include time to disengage the aircraft from the arresting system but does include the time required to inspect and certify the system as fully operational.)

**Stopway (FAA/ICAO)**—An area beyond the take-off runway designated by the airport authorities as able to support an airplane during an aborted take-off. The USAF term for this is “overrun.”