

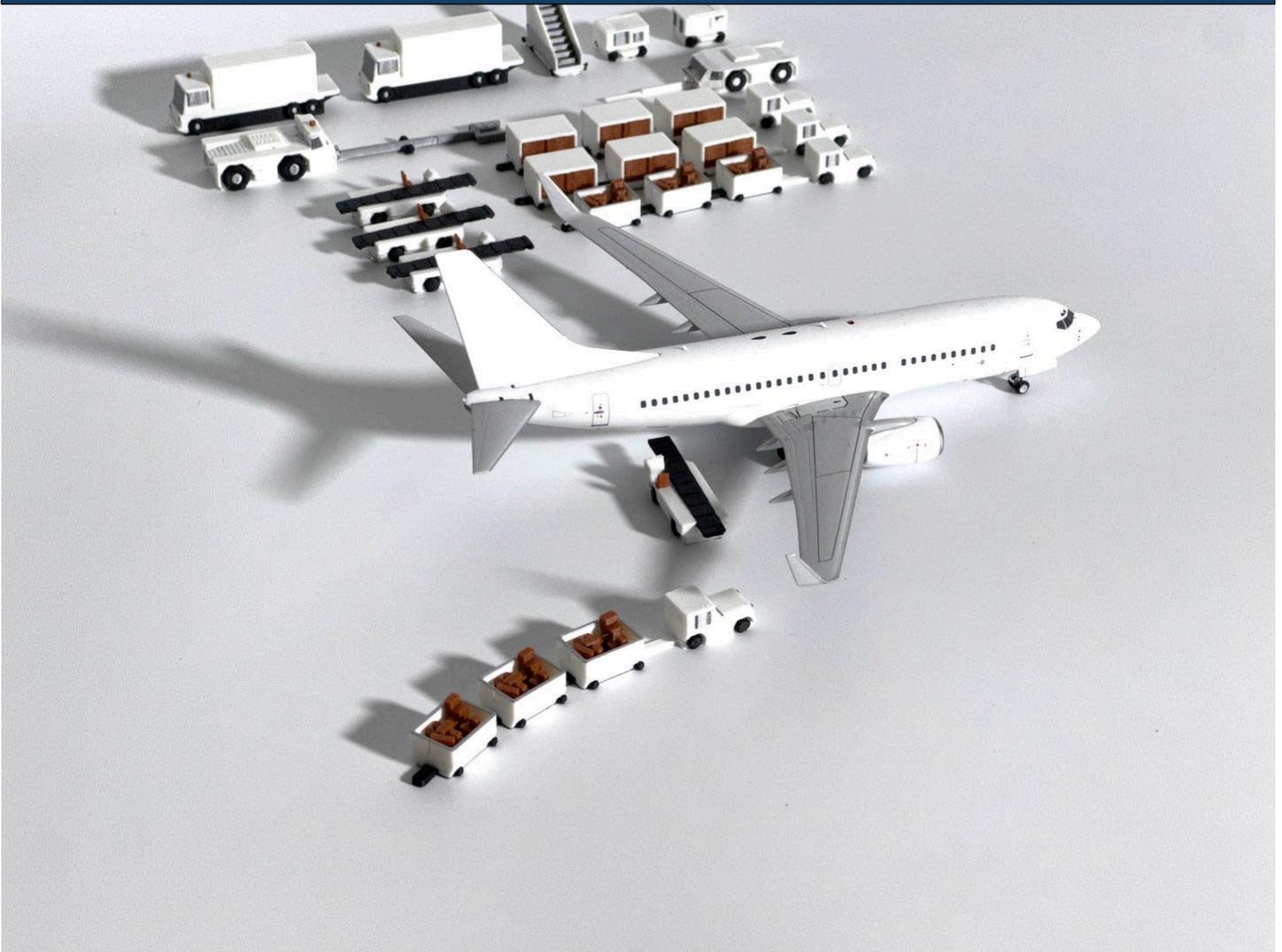


# RICHMOND

INTERNATIONAL AIRPORT®

## Ground Support Equipment Safety Inspection Program (GSESIP)

Operations & Security  
Version 1.0



# Table of Contents

Executive Summary.....3

Policy.....5

Purpose.....8

GSE Inspection Process.....10

## Living the Values Everyday

### VISION

To be the region's preferred gateway to the world.

### MISSION

Propelling regional prosperity by delivering world-class customer experience and operational excellence.

## S-T-R-I-V-E Values



### Safety-Focused

We ensure that safe operations and a safe environment are priority #1.



### Innovate With Purpose

We pursue and embrace the smartest and best solutions in everything we do.



### Trust and Integrity

We do what is right, even when it is difficult, by being honest, trustworthy, and transparent.



### Versatility

We remain agile and willing to change.



### Respectful Service

We serve everyone with respect, empathy, and professionalism.



### Empower Teamwork

We succeed together by empowering teamwork and communication, challenging the status quo, and pursuing shared goals.

3



# Executive Summary

Ground support equipment (GSE) is the "backbone" of aviation ground operations. Regular inspections and maintenance are not just operational tasks; they are critical safety requirements that protect personnel, passengers, and multi-million-dollar aircraft.

## Core Importance of GSE Inspections & Maintenance

**Accident Prevention:** Well-maintained equipment, such as tow tractors and service vehicles, significantly reduces the risk of tarmac incidents. Failure to inspect items like jacks or towbars can lead to equipment failure that puts lives at risk.

**Aircraft Integrity:** GSE often comes into direct contact with aircraft. Proper maintenance of sensors and buffers on belt loaders and passenger bridges prevents costly frame damage.

**Regulatory Compliance:** Adherence to standards set by the FAA and ICAO is mandatory. Programs like the RIC GSE Safety Inspection Program use random audits and recommend "red tagging" to remove unsafe equipment from service.

**Operational Reliability:** Routine checks minimize "unplanned downtime," ensuring that emergency equipment (like fire and rescue vehicles) is always mission ready.

## Key Maintenance Strategies for Safety

1. **Preventive Maintenance:** Scheduled tasks like lubrication and pressure tests on hydraulic systems prevent the sudden failures that cause workplace injuries.
2. **Daily Service Checks:** Visual inspections of tires, brakes, and fire extinguishers before every shift allow teams to spot hazards early.

3. **Predictive Analytics:** Modern GSE uses IoT technology to monitor performance in real-time, identifying potential failures before they occur.
4. **Staff Training:** Safety is only as effective as the operators. Programs must include certification for personnel to ensure they can identify and report equipment defects.

## Financial Impact

While maintenance requires investment, it avoids the "catastrophic" costs of an Aircraft on Ground (AOG) situation, where one delayed flight can have direct and indirect costs in the millions of dollars.

## Personnel Health & Safety

Safe and well-maintained equipment is the primary line of defense for ground crews working in the high-risk environment of the ramp. When Ground Support Equipment (GSE) is kept in peak condition, it eliminates the "hidden hazards" that lead to workplace injuries—such as sudden hydraulic failures, unresponsive braking systems, or structural collapses. Beyond physical safety, reliable equipment significantly reduces **operational stress** and cognitive fatigue; operators who trust their tools can focus entirely on the precision of the task at hand rather than compensating for faulty machinery. Ultimately, a rigorous maintenance culture fosters a **sense of professional value** and security among the workforce, leading to higher morale, lower turnover, and a drastic reduction in human-error accidents.

# Policy

## **RULES AND REGULATIONS REGARDING CONDUCT AND ACTIVITIES ON THE PROPERTY OF THE CAPITAL REGION AIRPORT COMMISSION**

The Capital Region Airport Commission, wishing to encourage and foster all aviation activities within its participating subdivisions and the broader Airport service area of the Richmond Metropolitan Region, while recognizing the necessity of protecting the public health, safety and welfare, hereby promulgates and adopts the following Rules and Regulations regarding conduct and activities at its Airports, now owned or hereafter acquired and/or operated.

### **Section VIII. GROUND OPERATIONS IN AOA/SIDA**

#### **F. Vehicle Operations in AOA/SIDA**

(1) Authorized Vehicles – No motor vehicle shall be permitted within the AOA/SIDA unless authorized under the terms of this Section F. Except as otherwise provided in these Rules and Regulations, vehicles shall be permitted to enter the AOA/SIDA without such authorization but only if (1) such vehicle is guided by an escort vehicle authorized hereunder and **(2) such vehicle is operated in compliance with all motor vehicle safety and security requirements approved by the President and CEO.**

(5) Vehicle Lighting and Marking – Motor vehicles shall have their headlights on and employ designated markings under the following conditions: (a) While operating within the AOA/SIDA from 30 minutes before sunset until 30 minutes after sunrise, or when limited visibility conditions exist, all vehicles must have their lights switched on. **All headlights, taillights, turn signal lights and running/clearance lights on a vehicle shall be in proper working order.**

(6) Vehicle Identification - (a) Except as provided in paragraph (b) below or except with respect to motor vehicles escorted as provided herein, all motor vehicles within the SIDA must be assigned and display a valid SIDA vehicle permit. **(b) Except as otherwise provided in these Rules and Regulations, airline and tenant ground service equipment in the SIDA need not display a SIDA vehicle permit if the company name and/or logo is prominently displayed on the vehicle.**

(7) Vehicles Prohibited in AOA/SIDA - The following motor vehicles are prohibited in the AOA/SIDA:

(a) Motorcycles, bicycles and two-wheeled motor scooters.

(b) Privately owned motor vehicles unless escorted, permitted or marked as provided herein.

**(c) Motor vehicles that are not in sound mechanical order with adequate lights, horns, brakes and with clear vision from the driver's seat.**

(d) Trailers and semi-trailers not equipped with proper brakes so that when disengaged from a towing vehicle, neither aircraft engine blast nor wind will cause them to become free-rolling and vehicles not possessing positive couplings for all towed equipment.

(e) Vehicles which have been prohibited from operation in the AOA/SIDA by reason of violation of other provisions of these Rules and Regulations.

The full Amended and Restated Rules and Regulations regarding conduct and activities on the property of the Capital Region Airport Commission can be found at: [WWW.FLYRICHMOND.COM](http://WWW.FLYRICHMOND.COM)

## **Derelict or Abandoned Equipment**

Equipment that has been determined to be derelict, abandoned, or irreparable is the responsibility of the owner/operator and must be removed from the AOA in a timely manner at the owner's expense. Non-compliance with this

regulation could result in fines, or other penalties as determined by the Capital Region Airport Commission.

Airport Public Safety will negotiate with the owner/operator a good faith timeline for removal of the derelict GSE factoring in logistical considerations to remove the equipment. The Commission reserves the right to remove equipment and back charge the owner/operator when timelines are not met.

# Purpose

As defined in the Airport Rules and Regulations, and for the purpose of the Ground Support Equipment Safety Inspection Program (GSESIP), GSE shall mean ground support equipment - motorized - that operate on the Air Operations Area (AOA).

Many accidents and injuries that occur on the AOA are the direct result of unsafe driving practices and/or inadequate equipment maintenance. The purpose of this GSESIP is to identify and reduce these hazards to ensure that all GSE operating on the airfield, are always maintained in a safe and operational condition. The GSESIP focuses on equipment safety and ensuring the safest possible work environment.

The Airport conducts the following inspection types to identify hazardous equipment that should not be operating on the AOA:

## → New Equipment Inspections

- Conducted with a company representative.
- Includes new GSE intended for use on the AOA at RIC.
- If the GSE requires immediate introduction into service and has been deemed safe then it may be used, however an airport inspection must be coordinated within 10 days of deployment.

## → Random Equipment Inspections

- Conducted without a company representative. Only components visible to the inspector will be checked. The equipment will not be started, operated, or physically touched by the inspector.

## → Targeted Equipment Inspections

- Inspections initiated by RIC Public Safety when an obvious safety concern has been identified either through the Hazard Reporting program at RIC, or an observation made during a patrol.

These inspections are also designed to identify derelict, abandoned, or irreparable GSE that must be removed from the AOA.

The inspections are not comprehensive mechanical inspections but rather a “walk-around” check of key safety components, functional status, and general condition. They are strictly focused on the basic condition of the motorized equipment and whether it is suitable for operation on the AOA. There will be no recommendations made on adding, removing, or replacing components.

The inspection also includes an evaluation of whether a vehicle is appropriately marked with the company name or logo prominently displayed in order to ensure compliance with RIC security requirements.

# GSE Inspection Process

1. An RIC-badged employee representing the owner or operator of the equipment will contact RIC Airport Operations at 804-226-8590 to coordinate an inspection.
2. A member of the airport's Public Safety Division will inspect components of the motorized equipment that have an impact on the safe and secure operation of said equipment.
3. Each component will be rated as; SATISFACTORY, UNSATISFACTORY, or N/A (not applicable for those components that are not required or are not a part of the construction of the vehicle)
4. A checklist will be used with results documented and provided to the owner/operator on request.
5. Checklist items
  - a. Seats, seat belts – seats installed for driver and any intended passengers, in good condition, securely attached to vehicle. Seat belts are present and in functional condition.
  - b. Brakes – operational
  - c. Emergency brake – operational
  - d. Emergency stop – operational
  - e. Tires – in good condition with acceptable tread wear
  - f. Headlights, taillights, parking lights – operational
  - g. Beacons, strobes – operational
  - h. Leaks – free of leaks
  - i. Battery – free of damage, corrosion or leaks
  - j. Gauges, warning lights – operational
  - k. Windshield – free of cracks with good visibility
  - l. Mirrors – securely attached, adjustable, and provide visibility
  - m. Hitches, couplings – operational and securely attached
  - n. Fire extinguishers – suitable for use around aircraft, securely attached

- o. Bumpers, guards, rails – in good condition
- p. Operational test – **at discretion of inspector**, that could include turning the equipment on with the owner/operator demonstrating safe operating characteristics like handling and braking (the inspector would observe only, and neither operate or ride as a passenger)
- q. Company markings – logo, decal, or company name affixed and prominently displayed on vehicle

## 6. Inspection result

- a. If all applicable checklist items are rated as “SATISFACTORY”, the inspector will issue an AOA Parking Permit (sticker), to be affixed to the rear window or bumper of the vehicle.
- b. If a checklist item/s is rated as “UNSATISFACTORY” but the inspector determines the GSE may be safely operated until the deficiency can be corrected, the vehicle may be put in service and a follow-up inspection will be scheduled at the discretion of the inspector.
- c. If a checklist item/s is rated as “UNSATISFACTORY” but the inspector determines the GSE is not compliant with RIC safety or security standards, then the owner/operator will remove the equipment from service until such time as the deficiency can be corrected. A follow-up inspection will be requested by the owner/operator within 14 days to ensure all deficiencies have been corrected.
- d. The owner/operator may challenge or contest an inspection result by appealing to the Manager of Airport Operations. The Airport Operations manager reserves the right to solicit the advice and expertise of the airport’s Manager of Automotive Services, to include inspection by said manager as a Subject Matter Expert.