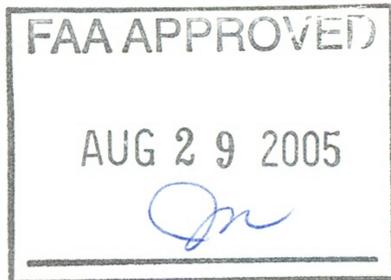


# APPENDIX 3

## BUSH INTERCONTINENTAL AIRPORT

### OPERATING INSTRUCTIONS

#### TENANTS



O. I. No: 88-6

Original Date: July 25, 1988

Revision Date: March 2, 2001

### GROUND VEHICLE OPERATIONS

Purpose: To provide procedures and guidance for the operation of Ground Vehicles on Bush Intercontinental Airport (IAH) Air Operations Area (AOA) and Aircraft Movement Areas.

Definitions: Air Operations Area: Airside areas other than Movement Areas, including but not limited to aircraft aprons, ramps, parking, and other airside areas where Tower approval is not required before entering.

Ground Vehicle: Any device, motorized or otherwise, used to carry transport, or convey persons or property.

Movement Area: The runways, taxiways, and other airside areas at IAH that are utilized for taxiing, hover taxiing, air taxiing, takeoff and landing of aircraft, including runway and taxiway safety areas, where Tower approval is required before entering.

Non-Movement Area: Aircraft movement areas where Tower approval is not required before entering.

ILS Critical Area: A keyhole-shaped, cleared area, designed to protect the ILS localizer radiated signal which begins in the extended runway safety area and overlies a portion of the runway.

Safety Area: A designated rectangular area abutting the edge of a runway or taxiway intended to reduce the risk of damage to an aircraft inadvertently leaving the runway or taxiway.

Procedure: The following procedures will govern the use of Ground Vehicles operating on Air Operations Areas, Movement, and Non-Movement Areas at IAH.

#### A. AIRPORT SECURITY

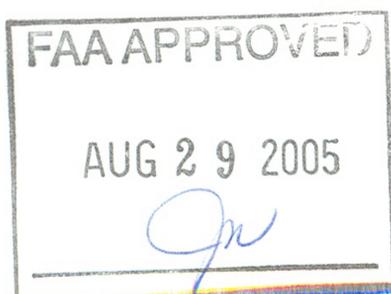
The entire AOA, together with the Movement area, is surrounded by fencing and controlled-entry access gates. Only badged personnel authorized by the

Airport Manager with properly identified vehicles, or escorted persons and Ground Vehicles are authorized entry to the Air Operation and Movement Areas. In the event a report is received of unauthorized vehicles or persons on the Movement or the Air Operations Areas, a City of Houston Airport System (HAS) vehicle will be dispatched to intercept and escort the violator from the area. Additionally, a security violation citation may be issued to the offender.

1. The following Ground Vehicles are authorized on the Movement Area:
  - a. Airport Rescue and Fire-Fighting Equipment (ARFF).
  - b. HAS vehicles, e.g. Management, Maintenance, Operations, etc.
  - c. Houston Police Department - Airport Division.
  - d. FAA Maintenance.
  - e. Contractors who have been authorized.
  - f. Ground Vehicles under authorized escort.
2. The following Ground Vehicles authorized on the Non-Movement Area:
  - a. Tenant owned and operated vehicles.
  - b. Fueling and service vehicles.
  - c. Authorized vendor vehicles.
  - d. Aircraft service vehicles.
  - e. Ground Vehicles described in (1) above.

## B. GROUND VEHICLE REQUIREMENTS

1. Identification:
  - a. All Ground Vehicles that are authorized for access on the AOA must be identified in a permanent and distinctive manner. Identification marking shall include the operating organization's name/or logo so that such Ground Vehicles may be identified from a distance of at least 200 feet. Identification markings shall be affixed to the vehicle in a permanent manner on each side of the vehicle, preferably on each front door, if so equipped. Permanent identification markings might be paint, decal, or magnetic sign. Distinctive color schemes are also desired, but will be at the operator's option.



- b. Aircraft ground service, baggage, and cargo Ground Vehicles shall display highly visible mounted reflectors or reflective tape on all four sides of the Vehicle and shall be identified as described in (B) (1) (a) above, subject to approved exceptions because of Ground Vehicle surface size.

2. Safety Equipment:

- a. All safety equipment, such as vehicle brakes, horns, lights, beacons, radios, fire extinguishers, etc., shall be maintained in a safe and operable condition at all times.
- b. Motorized Ground Vehicles shall at all times be equipped with two operating headlights, and two operating taillights. Headlights shall be of sufficient brilliance to assure safe visibility at night and shall be lighted during hours of darkness (sunset to sunrise) or during adverse weather conditions whenever the Ground Vehicle is operating on the AOA or Movement Area.

3. License and Inspection Sticker:

- a. All motorized Ground Vehicles shall display a current license tag and inspection sticker if licensed for public roadway operations.

4. Operator Requirements:

- a. All Motorized Ground Vehicle operators shall have in their possession a Valid Texas operator's license or permit.
- b. Airline, tenants, contractors, and vendors authorized by the Airport Manager to operate on the AOA and Movement Areas shall ensure that their Ground Vehicle operators have read and understood this O.I. and other airport operating procedures, and that they are qualified to operate Ground Vehicles and associated equipment.
- c. All Ground Vehicle operators must complete Airport Driver Training program and receive "D" designation on their HAS identification badge prior to operating Ground Vehicles on the AOA.
- d. Ground Vehicle operators shall ensure that entry gate(s) are closed. Immediately after ingressing or egressing the Air Operating Areas.



5. Insurance Requirements:

- a. Automobile Liability coverage:  
Combined single limit of \$1,000,000
- b. The City of Houston shall be named as an additional insured on the certificate of insurance.

6. Speed Limits:

- a. It shall be unlawful for any operator to drive a Ground Vehicle on the AOA of IAH at a speed greater than is reasonable, consistent with Existing traffic, light, and weather conditions, and in no event in excess of the following limits:

Air Operations Area: 15 mph

Baggage Tunnels: 6 mph

Service Roads: 20 mph unless there is a posted speed limit to the contrary, in which case the posted speed limit shall control.

7. Service Roads:

- a. Unless otherwise authorized by the Airport Manager, all Ground Vehicles shall remain on designated service roads at all times. Service roads are marked and designated by white lines. Ground Vehicles proceeding to ramp gates or satellite locations shall use designated service road entry and exit points closest to their destination. Operators shall obey all stop, yield, and/or give-way signs as posted on service roads and/or taxiways.

8. Right-Of-Way:

- a. Ground Vehicles shall yield to all aircraft within 500 feet of the Ground Vehicles position. Aircraft have the right-of-way over Ground Vehicles at all times. Ground Vehicles shall not overtake or pass aircraft without prior authorization from Ground Control.

9. Unauthorized Operations:

- a. Except for Ground Vehicles that are servicing a parked aircraft, driving under any portion of an aircraft (parked or moving) is prohibited.
- b. Ground Vehicles and motorized equipment shall not be operated between an aircraft and a loading gate when passengers are embarking or disembarking an aircraft.



- c. Ground Vehicles, equipment, and pedestrians shall give way to emergency equipment. Ground Vehicles or equipment shall not park in a manner, which would obstruct the access routes of emergency equipment.
- d. Ground Vehicles or equipment shall not be operated, parked, or left unattended in a manner or place that would constitute a hazard or threat to aircraft, persons, or property.
- e. Ground Vehicles or equipment shall not be stored, parked, or repaired anywhere on the AOA except in areas so designated by the Airport Manager, or as may be designated in a properly executed lease between the City (or an airline tenant of the City if so authorized under its use and lease agreement with the City) and the operator.
- f. Tractors, tugs, and other motorized Ground Vehicles shall not be operated in any hanger or building without adequate screens or baffles to prevent the escape of sparks and propagation of flames.
- g. Ground Vehicles and associated equipment shall not be operated behind aircraft engines that are operating at high power settings, such as maintenance runs, taxiing, or takeoff runs. Caution should be exercised when pedestrians, vehicles, or equipment are in front of aircraft during the execution of power-back operations from loading gates.
- h. In-flight service Ground Vehicle doors including front, rear, and overhead loading doors shall remain closed at all times except when servicing aircraft.
- i. Scissor type Ground Vehicles shall not be moved with scissors extended nor shall scissors be extended behind running aircraft engines.
- j. The use of motorcycles, bicycles, (H.P.D. Bicycle Patrol exempted), motor scooter, and motor bikes on the AOA are prohibited at all times.
- k. Cleaning and maintenance of ground equipment and Ground Vehicles at aircraft terminal gates is prohibited at all times.
- l. No persons shall operate Ground Vehicles or associated equipment while under the influence of alcohol or drugs.



- m. Disabled and/or junked Ground Vehicles, carts, or ground equipment shall not be abandoned or otherwise stored on the AOA, and shall be immediately removed from IAH by operator.

10. Baggage Carts and Trains:

- a. Unless otherwise authorized by the Airport Manager, the maximum number of carts, dollies, or igloo, pallets, or any combination thereof, shall not exceed five in a single train.
- b. Cart trains are limited to three in tug tunnels at Terminals A and B at any one time, and five at Terminal C at any one time.
- c. Unattended carts and dollies shall be parked in designated and marked locations as authorized by the Airport Manager.

C. ACCESS TO AIR OPERATIONS AREAS

1. Contractors/Vendors:

a. Periodic Access:

Properly badged personnel of airlines or tenants may provide escort for contractors and vendors on the AOA. Such escort shall be continuous and uninterrupted for the entire period of time that such vendor or contractor is on the AOA.

b. Regular Access:

Contractors and vendors requiring AOA access on a recurring basis must be escorted by the airline or tenant consistent with the requirements of C (1a) (Periodic Access) above. Alternatively, the manager of the sponsor airline or tenant shall submit a written request to the Airport Manager requesting badges for certain personnel and stating the following information:

- i. Name of the contractor or vendor
- ii. Name of persons requiring badges
- iii. Requested gates of entry.
- iv. An acknowledgement by the Airline or Tenant Manager of assumed insurance liability for the contractor or vendor Ground Vehicles that will enter the AOA.



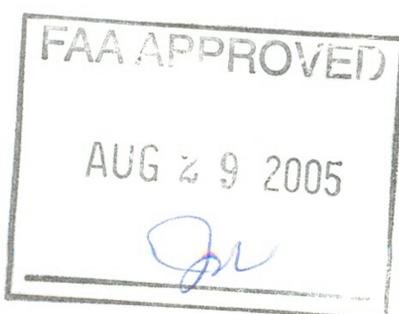
2. Buses, Large trucks, and Equipment:

- a. Athletic team buses, equipment trucks, and other large vehicles or equipment, at the request of the airline or tenant, may be authorized ramp access under escort and control of the airline or tenant only after receiving the proper authorization of Airport Operations. The airline or tenant is also responsible for providing escort of subject vehicles or equipment on and off the AOA.

D. MOVEMENT AREAS AND SAFETY AREAS

1. Communications:

- a. Ground Vehicles operating on Movement Areas or in Safety Areas shall be equipped with a functioning VHF Tower (Ground Control) radio or be under escort by a Ground Vehicle with a functioning VHF Tower (Ground Control) radio. Ground Vehicles shall not enter Movement Areas or Safety Areas without prior approval from Ground Control. Ground Vehicles will remain a minimum of 100 ft. from the edges of taxiways and 275 ft. from the edge of runways.
- b. Ground Vehicles shall not enter ILS Critical Areas without prior approval from Ground Control when the weather ceiling is 800 ft. or below and/or visibility is two (2) miles or less.
- c. Airline, tenants, contractors and vendors are required to obtain permission from Airport Operations before proceeding onto a Movement Area or Safety Area.
- d. Ground Vehicles shall hold at the yellow taxiway hold lines until authorized by Ground Control to enter or cross a runway or taxiway. Unless specifically authorized by Airport Operations Ground Vehicles shall NOT be operated on airfield grass areas.
- e. Two-way radio contact shall be maintained with the Tower/Ground Controller at all times when on Movement and Safety Areas.
- f. Ground Control shall be notified by the operator of the Ground Vehicle or its escort, when vehicle (s) are clear of runways, taxiways, and safety areas.
- g. If radio contact with Ground Control is lost, vehicles shall remain clear of the runway edge by at least 275 ft. When assistance is required, a Ground Control radio-equipped vehicle will be



dispatched. Construction Vehicles NOT equipped with a radio capable of contact with Ground Control will either be escorted by a Ground Vehicle with a functioning radio, or will have a flagman (with a radio) stationed at areas designated by the Airport Manager to convey instructions to the vehicle.

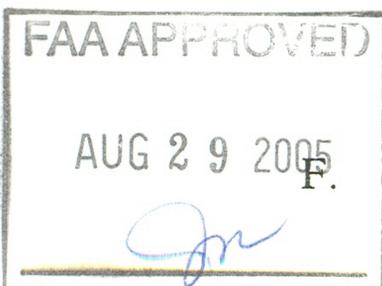
- h. All Ground Vehicle operators required to access any Movement Area or Safety Area shall be familiar with the following Tower light gun signals contained in FAA Advisory Circular 90-67, as may be amended from time to time.

**LIGHT GUN SIGNALS**

<u>COLOR AND TYPE OF SIGNAL</u>	<u>MOVEMENT OF VEHICLES, EQUIPMENT AND PERSONNEL</u>
STEADY GREEN	Cleared to cross, proceed or go
STEADY RED	STOP
FLASHING RED	Clear the taxiway/runway
FLASHING WHITE	Return to starting point on airport
ALTERNATING RED AND GREEN	Exercise extreme caution

**E. VEHICLE LIGHTING**

1. Ground Vehicle authorized to operate in Movement Areas or Safety Areas shall be in marked and lighted accordance with FAA AC 150/5210-5 and in addition to the requirement of B (1) as follows:
  - a. Airfield service vehicles - flashing yellow beacon
  - b. Houston Police Department – Airport Division vehicles – flashing blue or combination of red and blue beacons.
  - c. Aircraft rescue and Fire-Fighting vehicles – flashing red or combination of red and white beacons.
  - d. Aircraft support vehicles – flashing yellow beacon.
2. Airport service vehicles, construction Ground Vehicles, and aircraft support vehicles shall be equipped with a flashing yellow beacon mounted on the highest point of the vehicle. Operators will turn on the beacon prior to entering any Movement Area or Safety Areas.



**MISCELLANEOUS**

1. Fuel Servicing Vehicles:

- a. Fuel tankers shall be parked no closer than 50 ft. from terminals, hangars, buildings, and aircraft loading bridges.
- b. Fuel tankers and hydrant trucks shall not be left unattended when loading or off-loading fuel with hoses connected to fuel pits, aircraft, or with engines running.
- c. Fuel tankers shall be parked for storage only in designated areas approved by the Airport Manager.

2. Wide Loads:

- a. Ground Vehicles transporting or pulling wide loads should display a rotating yellow beacon or be escorted by a Ground Vehicle so equipped. Airport Operations may be contacted to provide escorts under special circumstances.

3. Accidents:

- a. The Houston Police Department - Airport Division shall be notified immediately (281-230-3111) of Ground Vehicle or equipment accidents involving personal injury and/or property damage.

4. Loads:

- a. Ground Vehicle operators shall ensure baggage, cargo, and equipment loads are properly secured when driving on the AOA.
- b. Ground Vehicle operators shall immediately recover any item which may fall from a Ground Vehicle, including any debris.

G. ENFORCEMENT

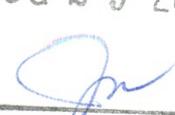
- 1. The following enforcement procedures shall apply to ALL personnel who access the AOA and who violate this O.I. 88-6.

- a. First Violation:

- i. Airport Operations will issue a Notice of Violation and give pink copy to the offender.
- ii. Airport Operations will send white copy to employer.
- iii. Airport Operations will retain card copy in the Airport Operations office.



- iv. Administrative Services will enter violation into the central compute system.
  
- b. Second Violation (Within 3 months of the first violation ):
  - i. Airport Operations will issue a Notice of Violation and give pink copy to the offender.
  - ii. Airport Operations will send white copy to the employer.
  - iii. Airport Operations will retain card copy in the Airport Operations office.
  - iv. Airport Operations will send yellow copy to Badging.
  - v. Violator shall receive recurrent training from Airport Operations. Recurrent training for the second AOA driving violation consists of viewing the HAS AOA Drivers Training Presentation, and successfully completing Driver's Training written test.
  - vi. Once the violator has received the appropriate training, Administrative Services will record the even in the IAH central computer system.
  
- c. Third Violation ( within 3 months of the second violation ):
  - i. Airport Operations will issue a Notice of Violation and give pink copy to the offender.
  - ii. Airport Operations will send white copy to the employer.
  - iii. Airport Operations will retain card copy in the Airport Operations office.
  - iv. Airport Operations will send yellow copy to Badging.
  - v. Badging will enter violation into central computer system and violator's badge will be immediately deprogrammed to prevent access to the restricted area by the violator. For the third violation, restricted area access will be denied for a minimum of five (5) business days, even if recurrent training is received sooner.
  - vi. Violator and violator's supervisor shall receive recurrent training from Airport Operations. Recurrent training for the third AOA driving violation consists of viewing the

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AOA Drivers Training Presentation, and successful completion of Driver's Training written test.

- d. Fourth Violation ( within 3 months of third violation ):
  - i. Airport Operations will issue a Notice of Violation and give pink copy to the offender.
  - ii. Airport operations will send white copy to the employer.
  - iii. Airport Operations will retain card copy in the Airport Operations office.
  - iv. Airport Operations will send yellow copy to Badging.
  - v. Badging will enter violation into central computer system and deprogram violator's badge access. Violator will not be granted AOA access privileges for a period of twelve (12) consecutive months from the date of the last violation.
  
- 2. Violator's who have three or less AOA driving violations with the Houston Airport System are eligible for their record to be cleared if the violator has no AOA driving violations for a period of twelve (12) consecutive months from the date of the last violation.
  
- 3. Notwithstanding the foregoing procedures, in those situations where a violation results in property damage, personal injury, or a hazardous condition, the violators access badge may be immediately revoked by Airport Operations or the Houston Police Department, subject to subsequent review by the Airport Manager.

  
Thomas B. Bartlett  
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Bush Intercontinental Airport

