Ground Vehicle Operations in the Movement Area

Presented to: ICAO/ FAA Aerodrome Certification Inspectors Workshop for the Caribbean Region

By: Laurie Dragonas, FAA Lead Airport Certification/Safety Inspector

Date: June, 2012
OBJECTIVE

• With references, identify the criteria and procedures for inspecting ground vehicle operations in the movement area.
ICAO VEHICLE OPERATIONS & OPERATOR REQUIREMENTS

- Review ICAO Annex 14, pgs. 6-1 thru 6-9 for vehicle marking & lighting requirements.
- Review ICAO Annex 14, pg. 9-11, sec. 9.7 for vehicle operations guidance.
ICAO Annex 14, Section 9.7
Aerodrome Vehicle Operations

A Vehicle shall be operated
- On maneuvering area only when authorized by ATCT
- On apron only when authorized by aerodrome authority

A Driver shall comply with all mandatory instructions conveyed by markings & signs
A Driver shall comply with mandatory instructions by lights
ICAO Annex 14, Section 9.7
Aerodrome Vehicle Operations

The driver shall be appropriately trained for the tasks to be performed and shall comply with the instructions issued by:

- The aerodrome control tower
- The appropriate designated authority

The driver shall establish two-way radio communication with tower before entering the maneuvering area.

The driver shall maintain a continuous listening watch on the assigned frequency when on the movement area.
Annex 14, Attachment A, Section 18  
Operators of Vehicles

Authorities are responsible to ensure that vehicle operators are properly qualified. This includes knowledge of:

- Geography of the aerodrome
- Aerodrome signs, markings, and lights
- Radio operating procedures
- Terms and phrases including ICAO alphabet
- Rules of air traffic services as they relate to ground operations
- Airport rules and procedures
- Specialist functions (such as firefighting)
Annex 14, Attachment A, Section 18
Operators of Vehicles

The operator should be able to demonstrate competency, as appropriate:

- The operation or use of vehicle transmit/receive equipment
- Understanding and complying with air traffic control and local procedures
- Vehicle navigation on the aerodrome, and
- Special skills required for the particular function

In addition, the operator should hold a State driver’s license, radio operator’s license or other licenses.
The establishment of a comprehensive pedestrian/ground vehicle training program is required at airports certificated in the U.S. under 14 CFR Part 139. It is highly recommended that General Aviation airports with an ATCT also establish a pedestrian/ground vehicle training program.
Ground Vehicle Control Inspection Criteria
FAA Regulation Part 139

SECTION 139.329 (a)

- Limit access to movement areas and safety areas to only pedestrians and vehicles necessary for airport operations.
Establish and implement procedures for safe and orderly access to and operation in movement areas and safety areas by pedestrians and vehicles.
Ensure that each pedestrian or ground vehicle is controlled by:

- Communications with the ATCT
- An escort communicating with the ATCT
- Other measures such as signs, signals or guards
If no ATCT, provide adequate pedestrian and ground vehicle control procedures in movement and safety areas through:

- Two-way radio communications
- Prearranged signs or signals
Ensure that, before personnel are allowed to move on safety or movement areas, each employee, tenant or contractor is trained on:

- Pedestrian and vehicle control procedures
- Penalties for noncompliance
Pedestrian and Vehicle Operator Training

- Airport familiarization
- Runways, taxiways and aprons
- Marking, lighting and signs
- NAVAIDs and critical areas
- ATCT functions and procedures
- Communication requirements
Pedestrian and Vehicle Operator Training

Phonetic alphabet and phraseology
Radio procedures including radio failure
Compliance with ATCT directions
Consequences for noncompliance with procedures
Vehicle Visor Placard
Maintain records for 24 months, including descriptions and dates, of:

- Training completed
- Accidents/incidents in movement or safety areas involving air carriers, pedestrians or ground vehicles
GROUND VEHICLE CONTROL INSPECTION CRITERIA

INSPECTION TECHNIQUES

• Review procedures
• Make observations
• Visit the ATCT
• Check records
• Record observations
• Recommend RSAT if necessary
Authorized vehicles must

- Be painted in contrasting and conspicuous colors
- Display a company logo or identification numbers
- Have a flashing yellow beacon
- Be in two-way communications with the ATCT or, if no ATCT, use CTAF
Example of Vehicle Markings
Example of Vehicle Markings
OBJECTS IN MIRROR ARE CLOSER THAN THEY APPEAR
RUNWAY INCURSIONS

An occurrence at an airport involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.
EXAMPLE
EXAMPLE
What can we do to reduce runway incursions and surface incidents created by vehicles & pedestrians?

- Improve education, training and awareness of those who operate on the airport surface.
• Limit the number of airport personnel authorized to operate a vehicle on the movement area to only those that have a definite need. Personnel who have only an occasional need to drive on the movement area are not going to be as proficient as regular drivers and would be better off being escorted by an authorized vehicle operator.
Runway Incursion Video
Runway Incursions are a multifaceted problem. The entire aviation community must take responsibility and everyone must do their part to solve it.
QUESTIONS