



METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

# Objectives

- Review the Federal Aviation Regulations governing the annual certification inspection for Class 1 airports
- Review the training requirements as outlined in 14 CFR Part 139.319
- Discuss training documentation
- Discuss the annual certification pre-inspection checklist
- Discuss foam and dry chemical testing requirements
- Discuss the miscellaneous ARFF requirements that will be checked at the annual recertification inspection
- Hot topics for 2013



# References

- **14 CFR PART 139—CERTIFICATION OF AIRPORTS**
- 14 CFR § 139.315 Aircraft rescue and firefighting: Index determination.
- 14 CFR 139.319 Aircraft rescue and firefighting: Operational requirements.
- Cert Alert No. 03-01 ARFF Foam Mixture Testing Methods
- Cert Alert No. 04-12 Dry Chemical Systems Inspection and Maintenance
- AC 150/5210-17B Programs for Training of Aircraft Rescue and Firefighting (ARFF) personnel
- AC 150-5210-6D Aircraft Fire Extinguishing Agents
- AC 150/5200-31C Airport Emergency Plan
- US DOT FAA Order 5280.5C Airport Certification Program Handbook
- MIL-F-24385F, Fire Extinguishing Agent, Aqueous Film Forming Foam (AFFF) Liquid Concentrate, for Fresh and Seawater, dated January 7, 1992



# Inspection Cycle Based on Airport Class

AIRPORT TYPE	9- to15-MONTH CYCLE	18-MONTH CYCLE	24-MONTH CYCLE	INITIAL	SURVEILLANCE
Class I	X			X	X
Class II		X		X	X
Class III		X		X	X
Class IV			X	X	X
INACTIVE				X	X

# Vehicle Communications

Two-way voice radio communications that provide contact with at least:

1. All other required emergency vehicles
2. Air traffic control tower
3. Common traffic advisory frequency
4. Fire stations



# Vehicle Marking & Lighting

- ✓ Flashing or rotating beacon and
- ✓ Be painted or marked in colors to enhance contrast





# Vehicle Readiness

- ✓ ARFF vehicle and systems must be maintained and operationally ready during all air carrier operations
- ✓ Cover for vehicles in prolonged 33 degree Fahrenheit or below environment
- ✓ *North American Emergency Response Guidebook* or equivalent





# Vehicle Readiness

- ✓ Foam proportion verification
  - Records must show testing was done within the last 12 months
  - Refractometer vs. Conductivity meter
  - Foam solution testing for each vehicle
  
- ✓ Dry chemical system
  - Written documentation of testing within every 6 month

**Do you have a department policy on foam and dry chemical testing?**





# Response Drill

- ✓ Performance criteria evaluated
  1. Within 3 minutes from the time of the alarm:
    - a. 1 ARFF vehicle
    - b. Must reach midpoint of the farthest runway serving air carrier aircraft from its assigned post
    - c. Begin application of an extinguishing agent
  2. Within 4 minutes from the time of the alarm:
    - a. All other required vehicles
    - b. Reach the specified point
    - c. Begin application of an extinguishing agent

# Personnel Properly Equipped

- ✓ Equipped in a manner sufficient for their duties
  1. Protective coat and trousers or proximity suits (for fuel fires)
  2. Protective helmet
  3. Gloves
  4. Positive pressure SCBA that meets NFPA standards
  5. May also include EMS equipment



# Personnel Properly Trained

- ✓ Initial training prior to ARFF duties
- ✓ Recurrent instruction every 12 consecutive calendar months
- ✓ 12 required documented training topics





# Live-Fire Drill

- ✓ One live-fire drill in previous 12 months
  - Must include pit fire or fire with an aircraft mockup
  - Using enough fuel to provide a realistic fire intensity







# Emergency Medical Care

- ✓ At least 1 individual trained and is current in basic EMS
- ✓ Available during air carrier operations
- ✓ Minimum 40 hour course





# Sufficient Personnel

- ✓ Sufficient rescue and firefighting personnel available during all air carrier operations to:
  1. operate the vehicles
  2. meet the response times
  3. meet the minimum agent discharge rates required





# Record of Training

- ✓ 24 Consecutive calendar months of training records for each individual
- ✓ Include at a minimum, a description and date of training received
- ✓ All required training must be documented
- ✓ Audit of personnel sampling- may change to ALL
- ✓ Utilization of electronic database for record keeping such as Firehouse ®



# Water Rescue

- ✓ Airport Emergency Plan include provisions for water rescue if significant bodies of water or marsh lands are adjacent to the airport
- ✓ Airport operator must develop a water rescue plan that includes a written mutual aid agreement. Such agreements are typically signed with the local fire/rescue department, Coast Guard, Marine Police, Harbor Patrol, or National Guard.





# Full Scale Exercise

- Evaluates the operational capability of the emergency management system real time
- At least every 36 months
- Only Class 1 airports under FAR 139 required to participate

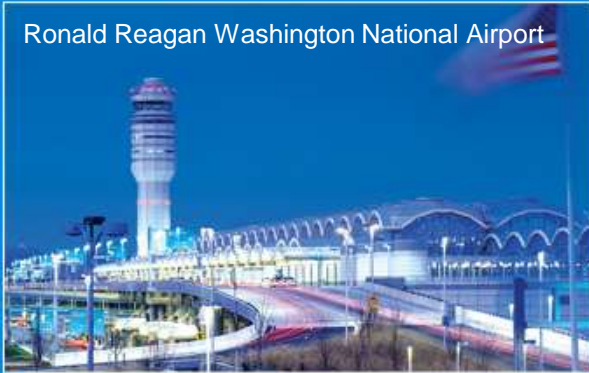
<b>Airport Index</b>	<b>Minimum # “Casualties”</b>
A	20-30
B	40-50
C	60-70
D	80-90
E	100 or more



# Why is all this important?



Ronald Reagan Washington National Airport



Washington Dulles International Airport



METROPOLITAN WASHINGTON  
AIRPORTS AUTHORITY