NORTH CAROLINA
Department of Transportation

NC AirTAP Airport Maintenance & Safety Workshop

Shelby-Cleveland County Regional Airport

Jimmy Capps, Airport Inspector

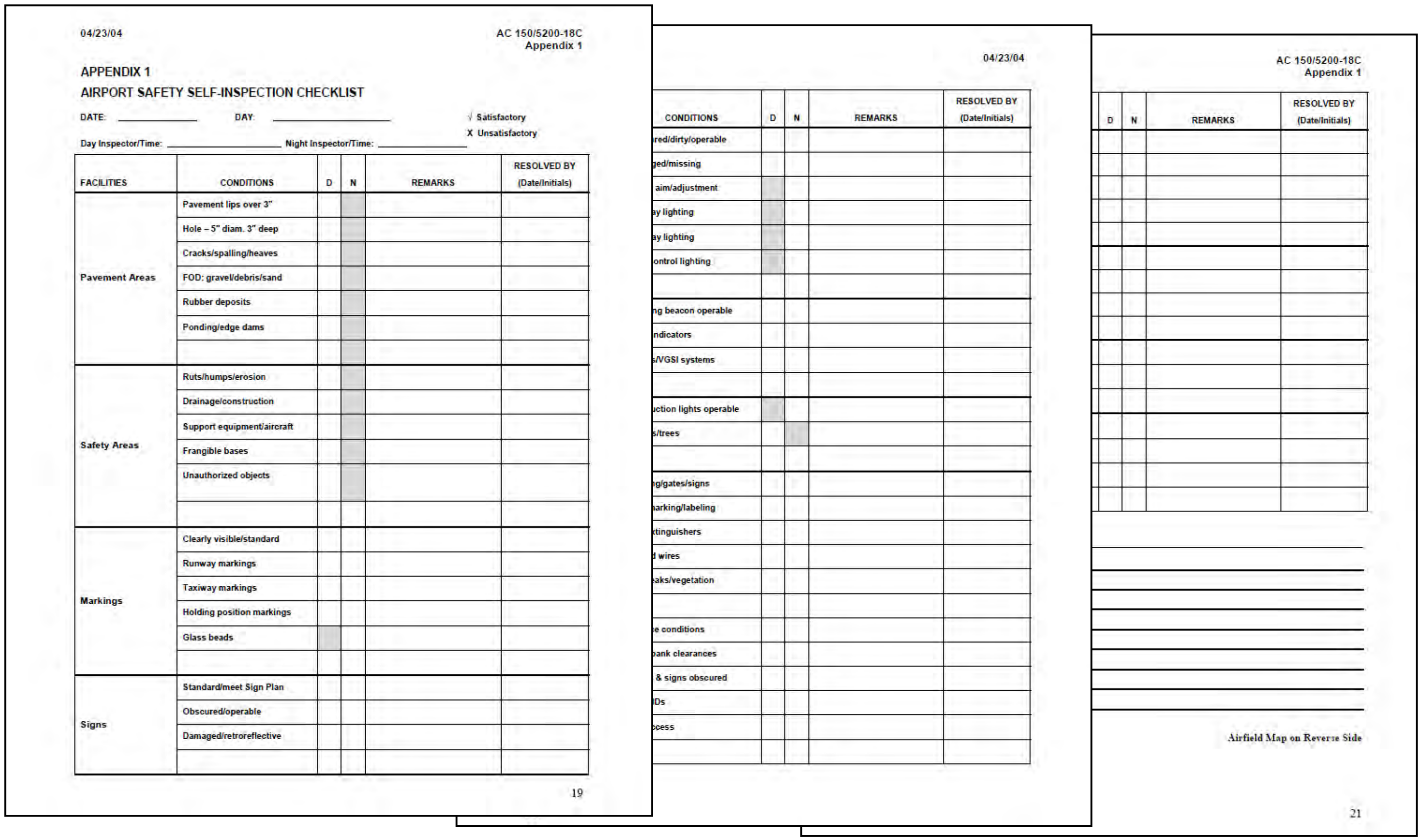
Airport Safety Self-Inspections 101

- Purpose of an Airport Safety Self-Inspection:
  - While some hazardous airport conditions develop virtually instantaneously, others are gradual. It is important that the airport operator have an airport safety self-inspection program that monitors specific airport conditions in order to identify unsatisfactory conditions for prompt corrective actions.
- Objective of the Airport Safety Self-Inspection:
  - Encourage airport safety through Regularly scheduled, Continuous surveillance, Periodic condition, and Special inspections.

Per FAA AC 150/5200-18C

Inspection Checklist

It all begins with the Checklist…



04/23/04 AC 150/5200-18C
Appendix 1

APPENDIX 1
AIRPORT SAFETY SELF-INSPECTION CHECKLIST

DATE: ____________ DAY: ____________ √ Satisfactory
X Unsatisfactory

Day Inspector/Time: ____________ Night Inspector/Time: ____________

FACILITIES	CONDITIONS	D	N	REMARKS	RESOLVED BY (Date/Initials)
Pavement Areas	Pavement lips over 3"				
	Hole – 5" diam. 3" deep				
	Cracks/spalling/heaves				
	FOD: gravel/debris/sand				
	Rubber deposits				
	Ponding/edge dams				
Safety Areas	Ruts/humps/erosion				
	Drainage/construction				
	Support equipment/aircraft				
	Frangible bases				
	Unauthorized objects				
Markings	Clearly visible/standard				
	Runway markings				
	Taxiway markings				
	Holding position markings				
	Glass beads				
Signs	Standard/meet Sign Plan				
	Obscured/operable				
	Damaged/retroreflective				

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Pavement

It all begins with the Checklist…

AIRPORT SAFETY SELF-INSPECTION CHECKLIST

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√ Satisfactory

X Unsatisfactory

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	Ruts/humps/erosion				
	Drainage/construction				
	Support equipment/aircraft				

Be Part of the Action

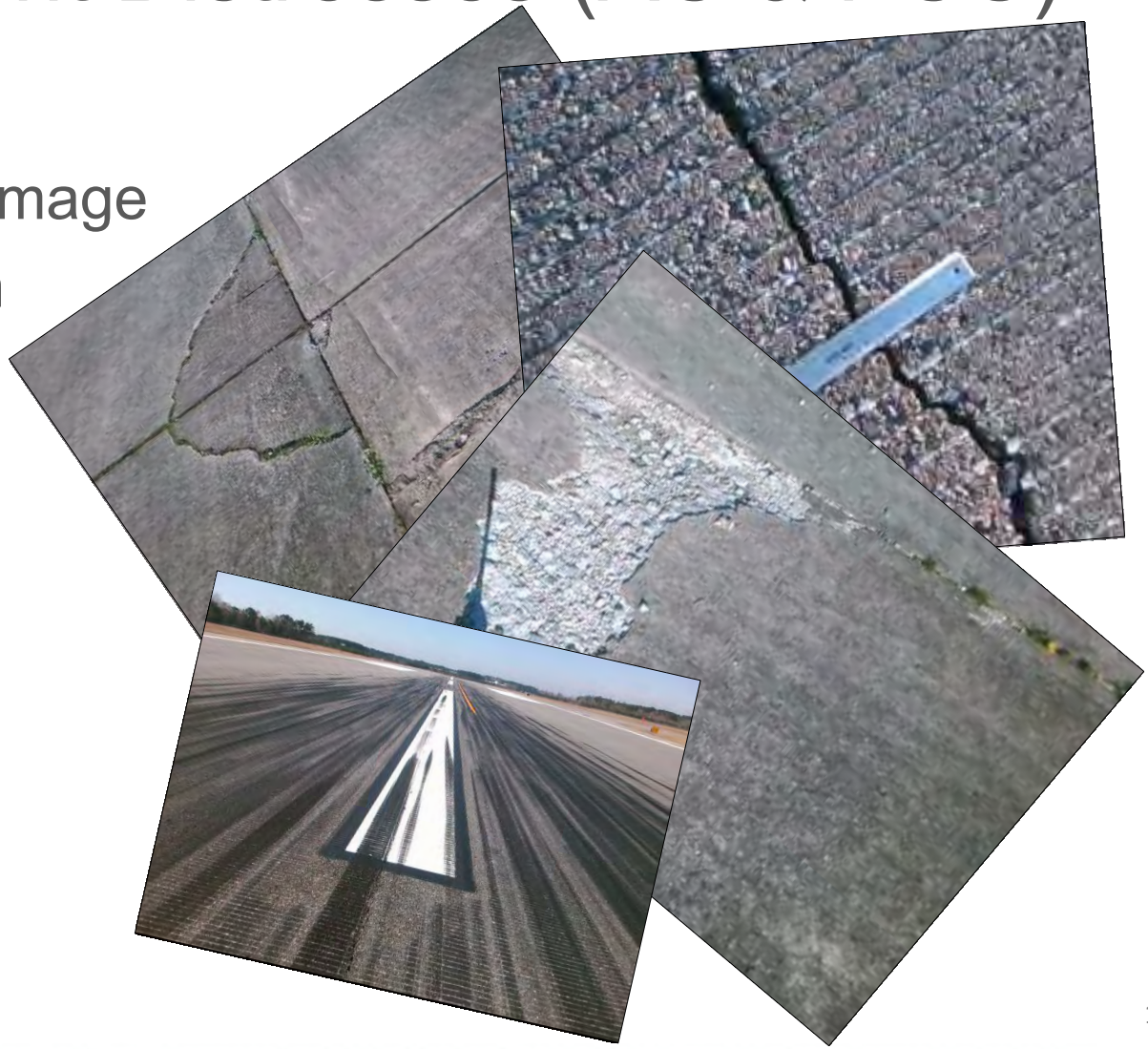
Be Part of the Action
U.S. COAST GUARD
1 800 GET USCG

Importance of Airfield Pavement Maintenance

- Safety
- Operational Efficiency
- Pro-active not Re-active
- Methodology
- Pavements are the most common source of FOD

Identification of Critical Airfield Pavement Distresses (AC & PCC)

- Cracking
- Joint Seal Damage
- Disintegration
- Distortion
- Loss of Skid Resistance



Maintenance and Repair

- What is my level of involvement?
  - Routine maintenance (Good Housekeeping)
    - Weed control
    - Cleaning out cracks
    - Monitoring progression distresses and severities
  - Emergency repairs
    - Safety procedures / plan
    - Patching

Safety Areas

Safety Areas	Ruts/humps/erosion				
	Drainage/construction				
	Support equipment/aircraft				
	Frangible bases				
	Unauthorized objects				

Runway Markings

Markings	Clearly visible/standard				
	Runway markings				
	Taxiway markings				
	Holding position markings				
	Glass beads				

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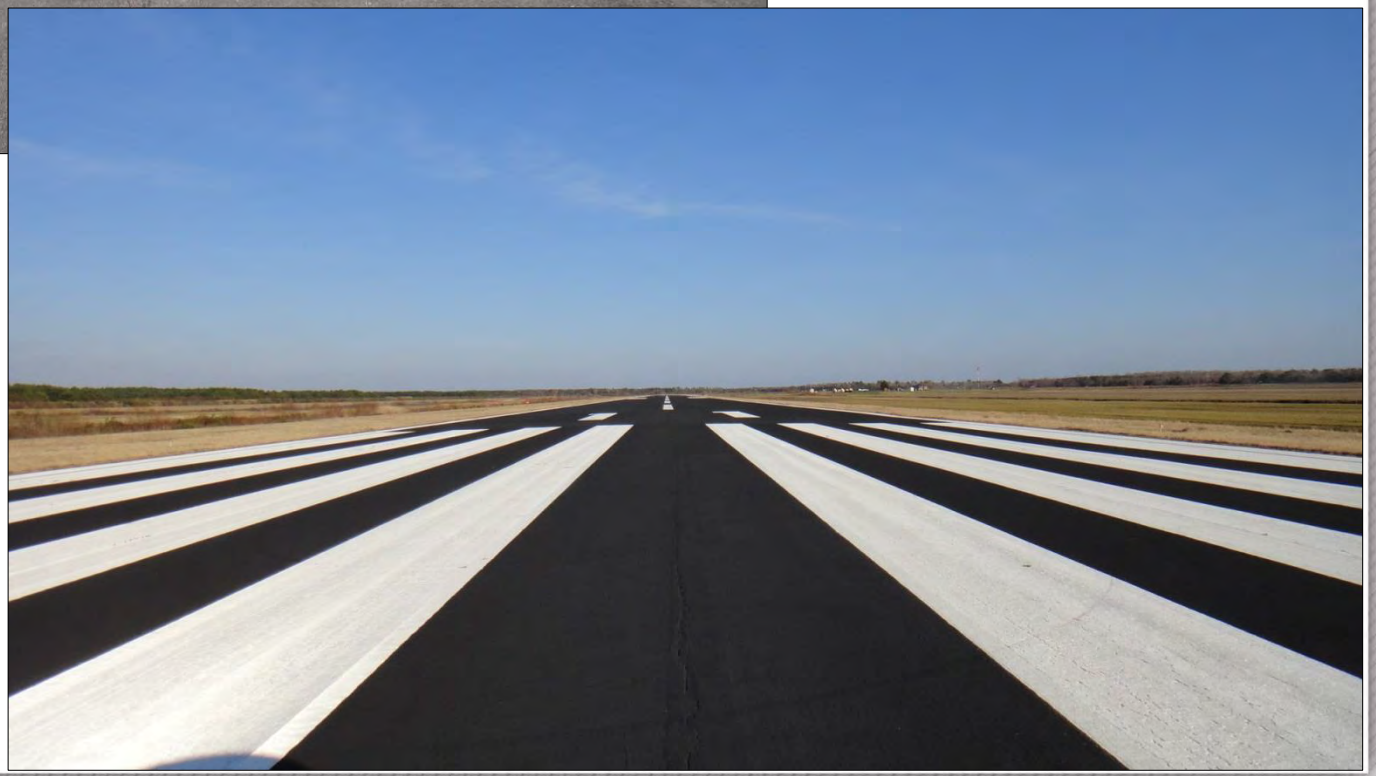
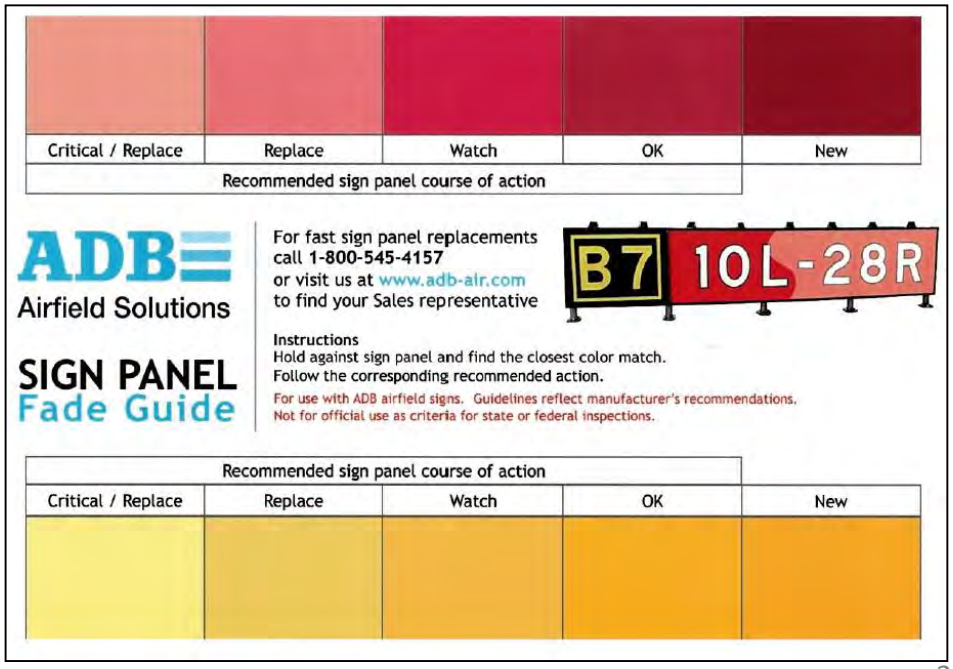


Signs

Signs	Standard/meet Sign Plan				
	Obscured/operable				
	Damaged/retroreflective				



A3
A

E

C
24-6

D
23-5

STOP
STOP
LOOK
FOR
AIRCRAFT
STOP

A

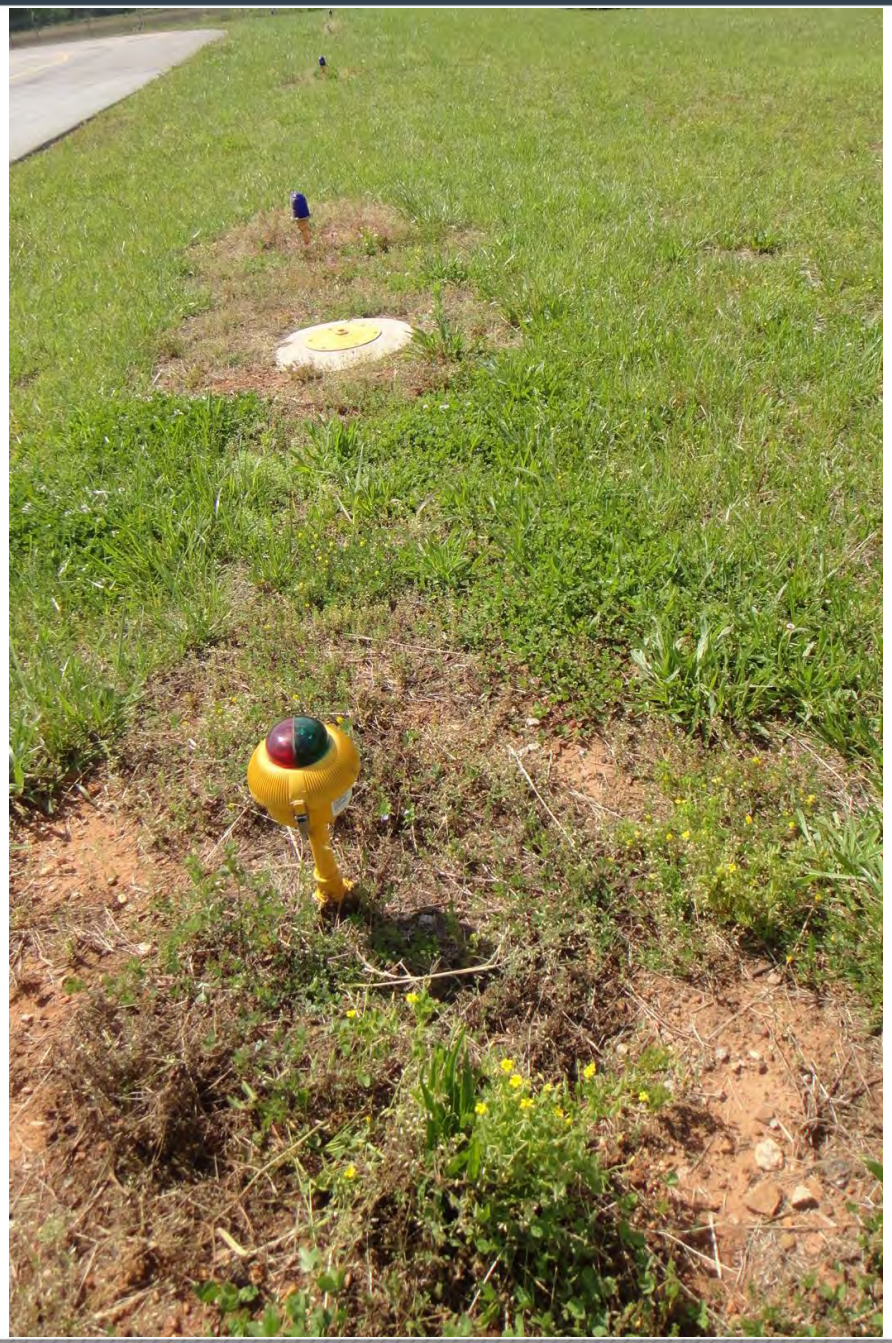
← A →

6-24

6-24

Lighting

Lighting	Obscured/dirty/operable				
	Damaged/missing				
	Faulty aim/adjustment				
	Runway lighting				
	Taxiway lighting				
	Pilot control lighting				

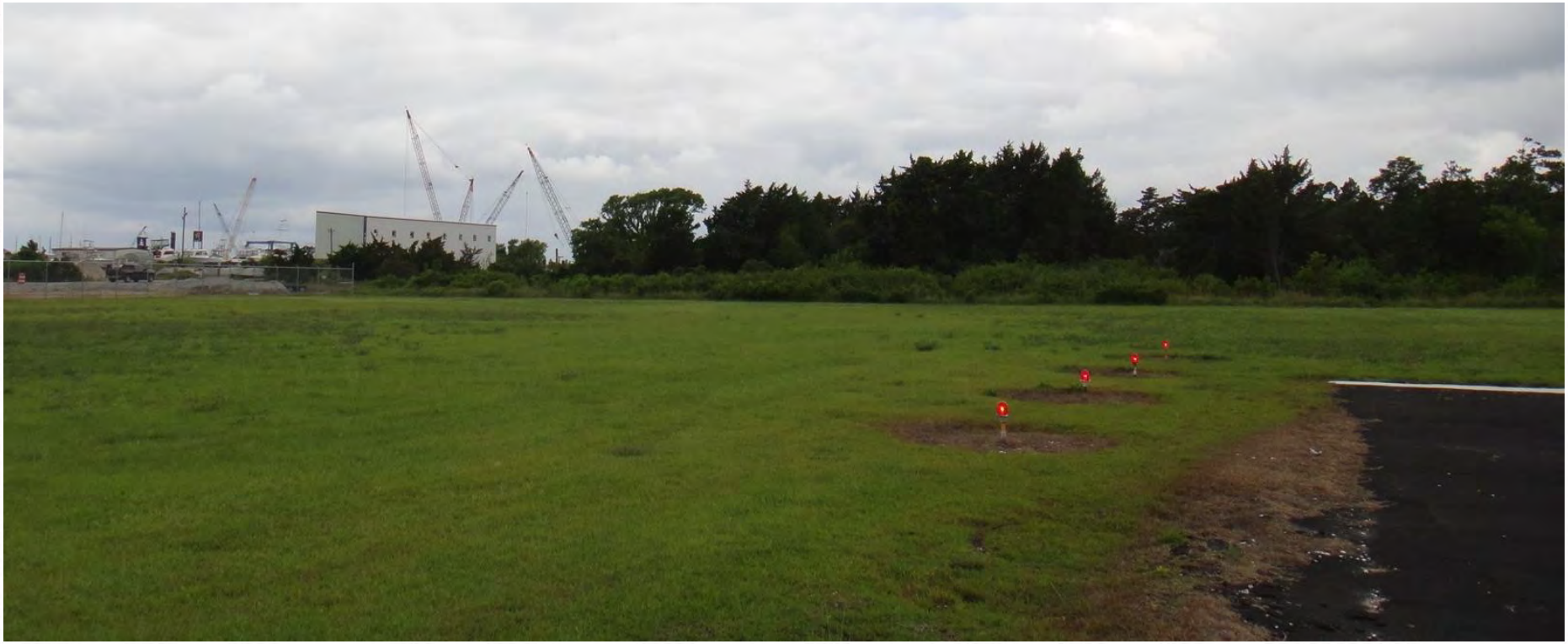


Navaids

Navigational Aids	Rotating beacon operable				
	Wind indicators				
	RENLs/VGSI systems				

Obstructions

Obstructions	Obstruction lights operable				
	Cranes/trees				



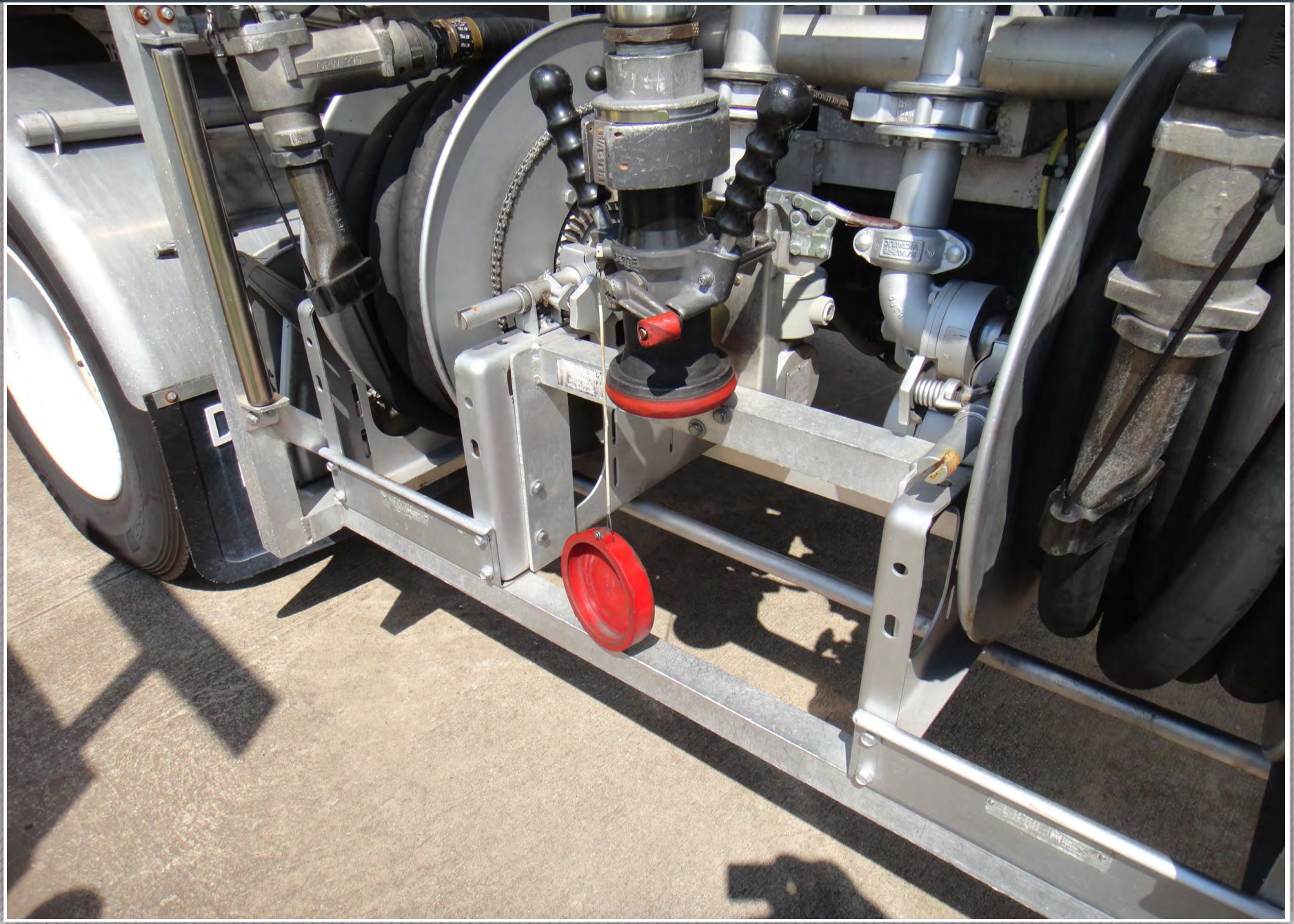
Fueling Operations

Fueling Operations	Fencing/gates/signs				
	Fuel marking/labeling				
	Fire extinguishers				
	Frayed wires				
	Fuel leaks/vegetation				

NO SMOKING
FLAMMABLE

1203
FLAMMABLE
AVGAS 100LL
NO SMOKING

FLAMMABLE
AV GAS 100LL
1200
NO SMOKING
PHILLIPS
66
EMERGENCY FUEL SHUTOFF
1203
3



AMERICAN REFUELER EQUIPMENT
PIPING SCHEMATIC
OPERATING INSTRUCTIONS:
WARNING:
THIS REFUELER IS NOT INTENDED FOR OR EQUIPPED TO PERFORM DEFUELING OPERATIONS. DO NOT ATTEMPT TO USE THIS EQUIPMENT FOR DEFUELING.
FUELING:
1. SPOT FUELER NEAR AIRCRAFT; SHIFT TRANSMISSION TO NEUTRAL AND SET PARKING BRAKE. ENGINE IDLING.
2. UPON LEAVING CAB ATTACH STATIC CABLE TO GROUND AND AIRCRAFT.
3. OPEN EMERGENCY VALVE OPERATOR.
4. OPEN HOSE REEL VALVE.
5. SHIFT P.T.O. OPERATOR SWITCH ON DECK TO "ON" POSITION.
6. UNREEL HOSE AND FUEL AIRCRAFT.
7. WHEN FUELING IS COMPLETE REWIND HOSE AND STOW NOZZLE IN NOZZLE INTERLOCK HOLDER.
8. CLOSE EMERGENCY VALVE OPERATOR AND RETURN P.T.O. OPERATOR SWITCH TO "OFF" POSITION.
9. DISCONNECT AND STOW STATIC REEL CABLE.
10. UPON REENTERING CAB PROCEED WITH NORMAL DRIVE AWAY.
BOTTOM LOAD:
1. SPOT FUELER AT REQUIRED LOCATION, SET PARKING BRAKE AND TURN ENGINE OFF.
2. MAKE NECESSARY GROUNDING CONNECTIONS AND OPEN B.L. ADAPTER DOOR.
3. CONNECT FACILITY COUPLER TO FUELER BOTTOM LOADING ADAPTER AND OPEN TO FLOW.
4. WHEN FLOW STABILIZES, VERIFY HIGH LEVEL SHUT OFF OPERATION BY CLOSING THE FUELER PRECHECK VALVE HANDLE. PROPER OPERATION IS INDICATED BY A RISE IN PRESSURE ON THE FUELER PRECHECK GAUGE AND FACILITY METER STOPPAGE.
5. WHEN FUELER FILLS, AND FLOW SHUTS DOWN, CLOSE, DISCONNECT AND STOW FACILITY COUPLER AND HOSE. CLOSE BOTTOM LOADING ADAPTER INTERLOCK DOOR.
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7. STOW GROUNDING CABLES AND PROCEED WITH NORMAL DRIVE AWAY.
CAUTION: DO NOT ATTEMPT TO DRIVE VEHICLE WITH P.T.O. ENGAGED
AMERICAN REFUELER EQUIPMENT CO., INC.
BIRMINGHAM, ALABAMA

NO SMOKING
1863
JET A

Construction

FACILITIES	CONDITIONS	D	N	REMARKS	(Date/Initials)
Construction	Barricades/lights				
	Equipment parking				
	Material stockpiles				
	Confusing signs/markings				

Airport Safety Self-Inspection

Guide for Airport Safety Self-Inspection
(FAA A/C 150/5200-18C)

Identifies items that airport operators should monitor for corrective action.

Questions for the Inspector