Airport Safety

5th Annual
AirTAP Fall Forum

10/15/08

Jesse Carriger
Assistant Manager,
Minneapolis ADO
Airport Safety

• Comprehensive Self Inspection Program
• Construction Safety
Airport Self Inspections

- A successful self-inspection program will consist of...
  - Regularly Scheduled Inspections (daily).
  - Continuous Surveillance.
  - Periodic Condition Evaluation.
  - Special Inspections.
# Inspection Checklist

![Inspection Checklist](image.png)

**AIRPORT DAILY SELF-INSPECTION CHECKLIST**

<table>
<thead>
<tr>
<th>DATE</th>
<th>AM CHECK</th>
<th>PM CHECK</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
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</table>

**PAVEMENT AREAS**
- Pavement Lip Over 3"
- Holes 1" Diam. 1" Deep
- Cracks/Spalling
- DD-Gravel/Debris/Etc.
- Rubble Deposits
- Pot holes

**SAFETY AREAS**
- Runway/Ramp/End
- Drainage Problem
- Obstacles/Fragile Mounted
- I.F. 3" Frangible Point

**MARKING**
- Dead Man
- Obstructed/Dirty/failed
- Damage/missing
- Inoperative
- Faulty Aim/Adjustment

**LIGHTING & GUIDANCE SIGNS**
- Runway/Centerline
- Flashing/Drone
- Obstruction Lights
- N.P.H.G.
- N.T.P.H.G.
- N.T.F.G.

**FINDING**
- Pit/Runway

**WILDLIFE**
- Bird/Animals

**CONSTRUCTION**
- Barriers/Boxes
- Current NOTAM

**SNOW/ICE**
- Surface Condition
- Snowbank Clearances
- Lights/Sign Obscured
- N.T.A.M.

**INSPECTOR:**
- Corrective Action Team

*Airfield Map on Reverse Side*
Maintain Safety Areas

RSA surfaces need to be level and graded
Maintain Safety Areas
Maintain Markings

In accordance with Advisory Circular 150/5340-1J.
Maintain Lighting
Sign Standards

In accordance with Advisory Circular 150/5340-18E.
Special Inspections

- Conduct **Special Inspections** and Initiate Corrective Actions.
  - Construction Activity
  - Meteorological Activity
  - Accident or Incident
  - Other Activity
Construction

The presence and movement of personnel, equipment and materials in any location which could infringe upon the movement of aircraft.
Construction...Challenges and Risks

- Airside construction is clearly one of the most challenging aspects of Airport Operations.
- Airside construction carries a great amount of risk and exposure to the airport operator.
- It is for these very reasons that the airport maintain the highest level of safety during construction.
Construction Safety Plan

• Required at each federally funded airfield construction project.
• Tailored to the individual project and airport.
• Comprehensive plan which outlines how an airport operator will maintain a safe operation while the airport remains open to aircraft operations. Intended to allow aircraft operations without derogation to safety.
• This plan should be submitted to the FAA Airports District Office for a in-depth review…usually no later than 60 days prior to start of project.
• All affected operating divisions within the FAA (Air Traffic, Flight Procedures, Airports Division, Technical Operations) will comment and ultimately approve the plan.
Construction Safety Phasing Plans

• Address such items as:
  - Scheduling
  - Advanced notices to airfield personnel.
  - Location of material stockpiles.
  - Access routes to the site.
  - Height restriction and setback distances for man and equipment from aircraft movement areas.
Runway Ends – An RSA must be maintained equal to that which existed before construction.
Proximity to Navigation Aids

- Construction activity in the vicinity of navigational aids requires special consideration, particularly stockpiles of materials and movement or parking of equipment that may interfere with electronic emissions and transmissions.
- The effect of the activity will be evaluated by the FAA through the airspace review process. Recommend coordinating with local Tech Ops for input prior to submission of Safety Phasing Plan.
Delineate construction areas from aircraft operating areas
SAFETY PHASING PLAN SUBMITTALS
Identify types of barricades
Separate construction activities from movement areas
SAFETY PHASING PLAN SUBMITTALS

Identify types and height of equipment to be used
SAFETY PHASING PLAN SUBMITTALS

Coordinates of critical points of the airfield
(batch plant, stock piles, parking, access
roads etc.)

06 09 2001
Identify all construction access & egress routes on the airfield
COORDINATION

• Construction projects and activities on an airport should be coordinated with FAA and airport users starting from the earliest stages of project formulation.
• Minimum disruption to airport operations is an important goal in any airside construction project. It is imperative that construction activities do not create a hazard to aircraft operations.
Communicate Expectations

• Pre-design and pre-construction meetings are the best time to begin discussing safety during construction.

• Responsibilities should be clearly established for continuous monitoring and compliance with safety phasing plan.
SAFETY CONSIDERATIONS

• Initiation, maintenance, & cancellation of Notices to Airmen (NOTAMs).
• It may be necessary to suspend or restrict aircraft on airport operations areas.
• Threshold displacement or partial closure may be required.
• Identify and have a clear outline of the required notification and authority to change safety aspects of construction plans.
• Installation and maintenance of temporary lighting and marking.
• Location of utilities, and provisions for temporary utilities and immediate repairs in the event of disruption.
SAFETY CONSIDERATIONS

• Marking and lighting of construction equipment and construction areas.
• Identify location of construction equipment and materials.
  • When in use and during non-use times or times of storage
• Project representatives must be properly identified and their availability must be known.
• Where are construction personnel going to park?
  • Identify logistic needs for transportation to and from the work site.
SPECIAL SAFETY REQUIREMENTS

Taxiways and Aprons – Construction activity set-back lines should be located at a distance of 10 feet plus .7 times the wingspan of the largest aircraft.

- Construction activity may be permitted up to the edge of active taxiways and aprons, provided the activity is first coordinated with airport operator, FAA, and users, and:
  - NOTAMs are issued and
  - Marking / lighting provisions implemented.
  - A method is established that provides adequate clearance is maintained between aircraft and construction equipment. Monitor wing tip clearance at all times.
TEMPORARY CLOSED RUNWAYS
TEMPORARY CLOSED RUNWAYS

Preferred visual aid to depict a temporary runway closure
TEMPORARY CLOSED RUNWAYS
**Master Record**

**(5010)**

**Construction may require updates**

### Airport Master Record

<table>
<thead>
<tr>
<th>Record</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Airport Name:</strong> Aurora Nuni</td>
</tr>
<tr>
<td>2</td>
<td><strong>County:</strong> Kane, IL</td>
</tr>
<tr>
<td>3</td>
<td><strong>State:</strong> IL</td>
</tr>
<tr>
<td>4</td>
<td><strong>City:</strong> Chicago/Aurora</td>
</tr>
</tbody>
</table>

#### General

- **Owner:** City of Aurora
- **Runway:** 4<br>**Location:** 4<br>**Runway End:** SW<br>**Ends:** 22<br>**Landing:** 326<br>**Takeoff:** 326<br>**Length:** 10,000 ft.<br>**Weight:** 100,000 lbs.<br>**Visibility:** 3,000 ft.<br>**Winds:** 0/0<br>**Runway Grade:** 0/0<br>**Runway Dimensions:** 326 x 10,000 ft.
- **Directions:** NO<br>**Operational Time:** 00:00-24:00<br>**Runway Lights:** Y/Y/Y/Y

#### Master Record

- **Airport Safety:**
  - **Type:** Construction may require updates
  - **Effective Date:** 03/07/2006
  - **Expiry Date:** 06/30/2007
  - **Last Rating:** 11/20/2007

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**Federal Aviation Administration**

**Airport Safety**

**U.S. Department of Transportation**

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**Superceded Previous Edition**
SPECIAL SAFETY REQUIREMENTS
Hazardous Area Lighting and Marking

• Use barricades with alternate orange and white markings. Supplement barricades with orange flags at least 20 x 20 inches (50 x 50 cm) square.
  • Flags are made and installed so they are always in the extended position and properly oriented.
Questions?

Jesse Carriger
Assistant Manager
Minneapolis Airports District Office
612-713-4355