

Runway Safety from the Perspective of ACI

**APRAST/9, Runway Safety Workshop
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Airports Council International**



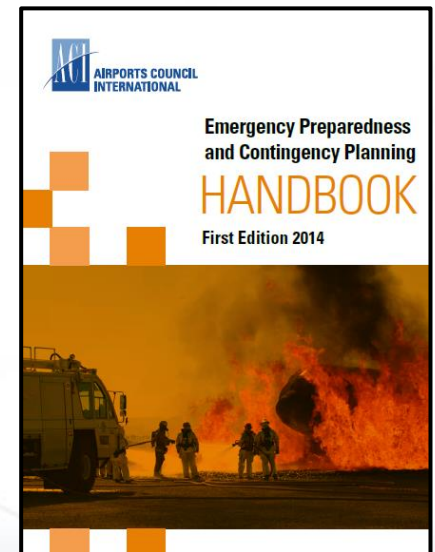
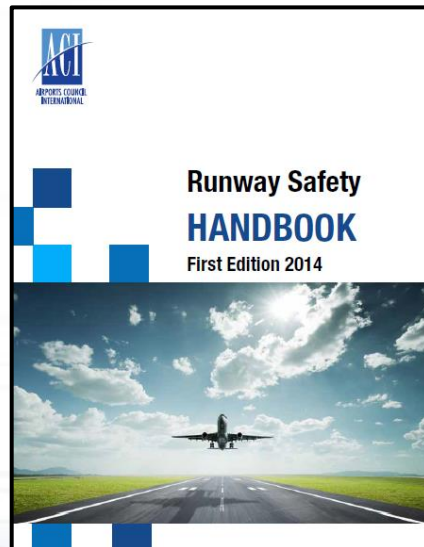
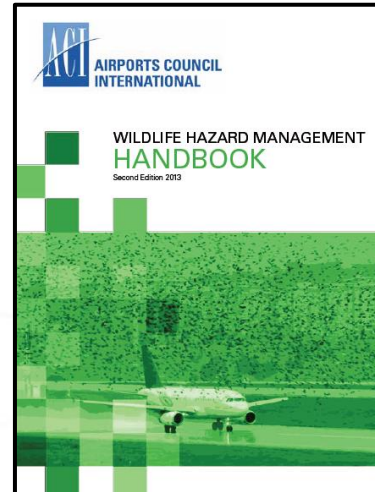
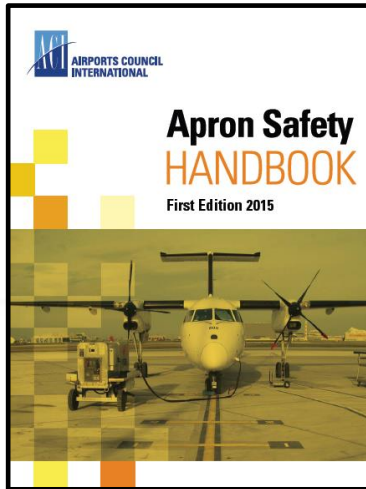


ACI's Approach to Runway Safety

- Guidance Material
- Training
- APEX in Safety



ACI's Guidance Materials for Aerodrome Safety





New Handbooks 2016 - 2017

- Rescue and Firefighting
- Aerodrome SMS
- Winter/Adverse Weather/ Low Visibility Ops
- Managing Ops During Construction



Part of ICAO Runway Safety iKit http://cfapp.icao.int/tools/RSP_ikit/story.html



Content Outline

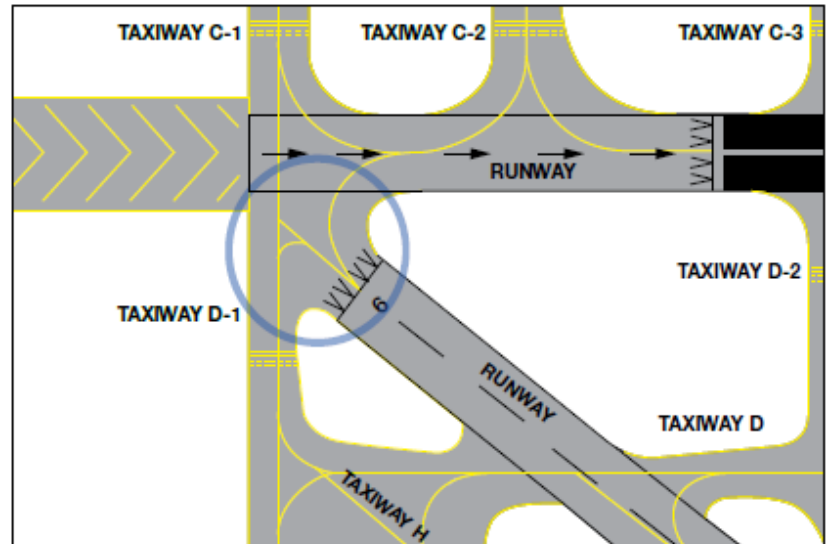
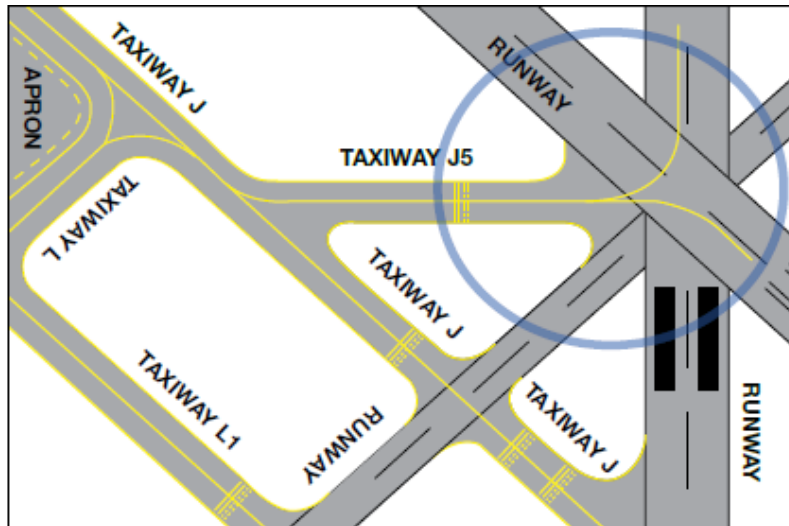
- Runway Safety Team
- Planning & Design
- Operations
- Maintenance



- Forum to discuss runway safety issues
- Equal partners
- Trust
- Hot spots (incursion, collision)
- Issues (design, marks/sign, sop, wildlife, fod, incursions)
- ACI training on runway safety (online and classroom)
- Change mgt (construction)

Planning and design

- Avoid cross or converging runways, closely spaced runways, complicated taxiway layout



Layout simplification at LHR





Operations

- One runway, one frequency
- Inspection
- FOD Management
- Obstacle Control
- Vehicle Licensing & Driver Training
- Hot spot chart



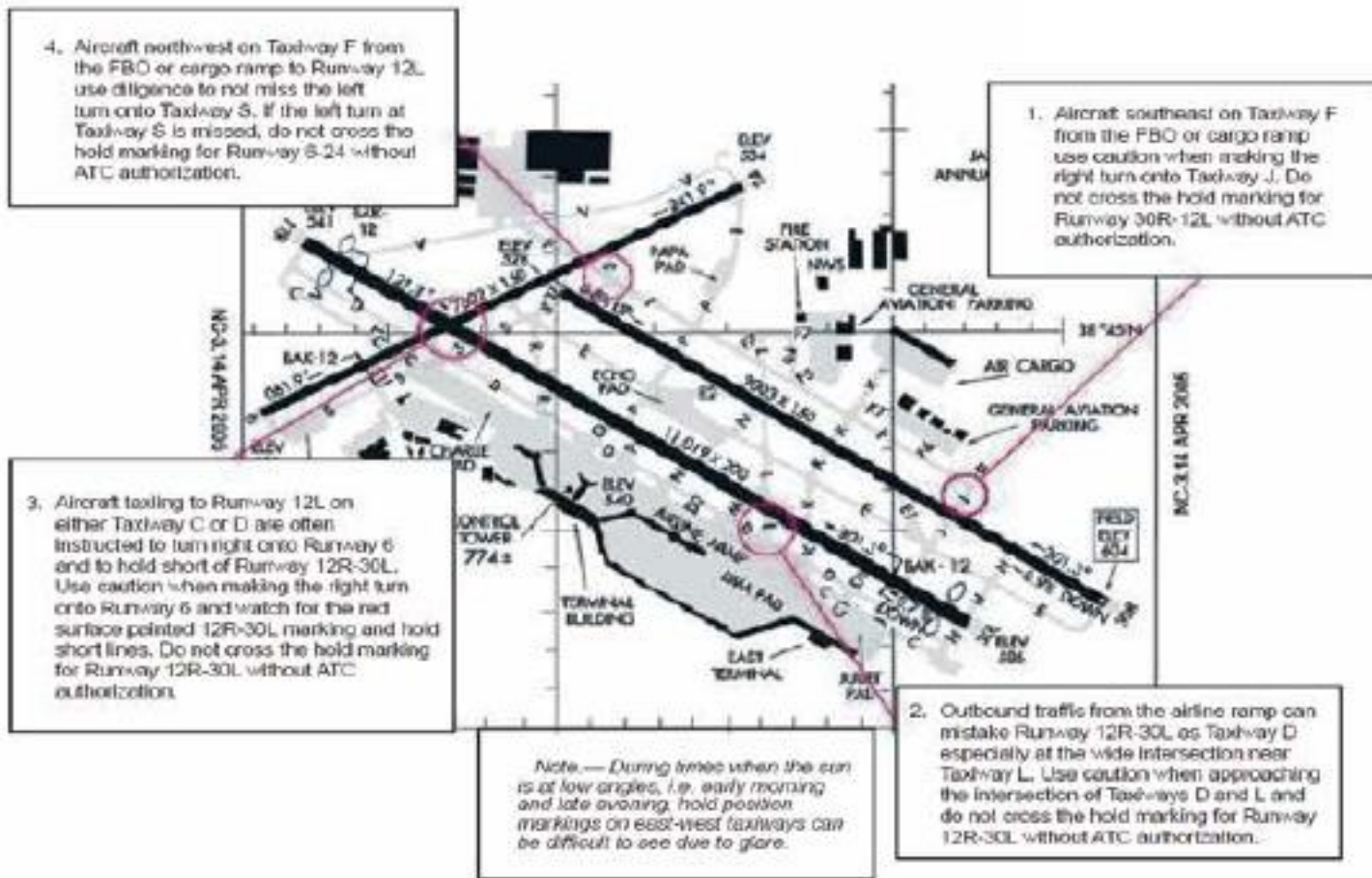
Check List

Table 1 Example of Movement Area Daily Check List

DATE : _____					
Inspection Areas	Dawn	Morning	Afternoon	Dusk	Remarks
Inspector:					
Paved areas					
1. Existence of foreign objects					
2. Cracks or damage					
3. Condition of surface drainage					
4. Condition of markings on TDZ					
5. Existence of any abandoned obstacles in the safety zone at the end of the runway					
Unpaved areas (Runway Strip/Taxiway Strip)					
1. Wheel tracks					
2. Condition of surface drainage					
3. Condition of surface/turfed areas					
4. Difference (over 7.5cm) between levels of paved areas					
5. Obstacles, whether retained or not					
Visual Aids					
1. Difficulty of identification of lights, signs and markers					
2. Runway markings					
3. Taxiway markings					
4. Runway/taxiway signs					
5. Runway lights					
6. Taxiway lights					
7. Lights of wind direction indicator					
8. Markers					
9. Markers for obstacles					
Others					
1. Others					



Example of Hot Spot Chart





Runway Maintenance

- Pavement maintenance program
- Rubber removal
- Vegetation control



Importance of Preventive Maintenance

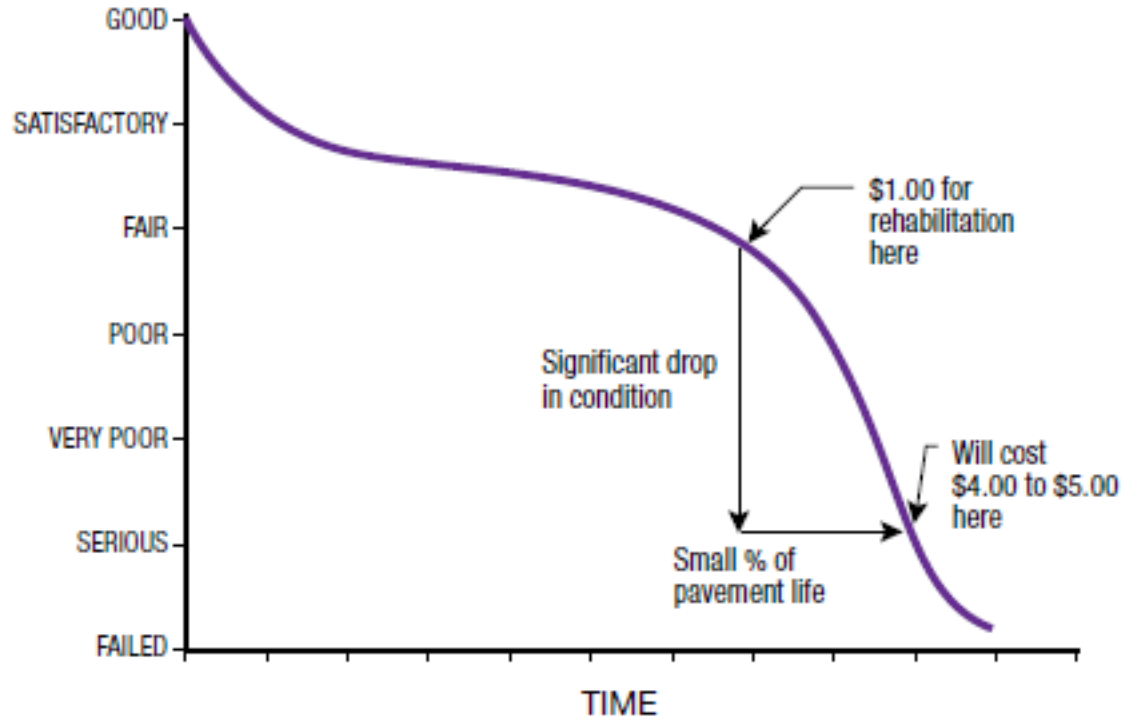


Figure 20. Typical Pavement Life Cycle Curve

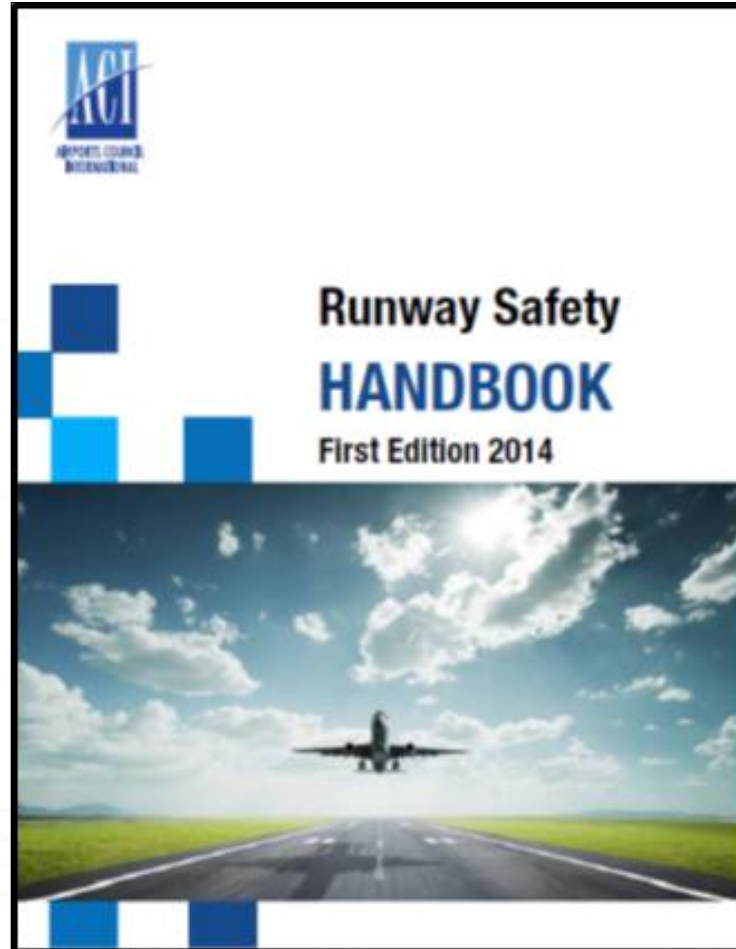
From FAA website



Visual Aids Check List

Maintenance Requirement	DAILY	WKLY	MTHLY	QTRLY	SMANLY	ANNLY	UNSCHE
Check lamps for operation.	X						
Check operation of controls.			X				
Check for damage by service vehicles or aircraft.			X				
Clean lamps and filters.			X				
Check mechanical parts for damage.			X				
Check lightning arresters.			X				
Check for water damage or insect infestation.			X				
Check for presence of rodents.			X				
Record output current and input voltage of adapter (if used).			X				
Check alignment and aiming of light boxes.			X				
Check levelling and operation of tilt switch.			X				
Check integrity of obstacle-free approach plane.				X			
Check insulation resistance of underground cables.					X		
Check resistance of grounding system.					X		

Table 2. Example of PMI for PAPI



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