



# Local Runway Safety Team - Experience at Dubai Airports

Colin Mulligan – Airside Compliance Manager

## Dubai from 2004 to 2013 (Google Earth)



## Dubai Growth 2004 to 2013.



- Passenger numbers 2004 - 21,711,883
- Passenger numbers 2013 - 66,431,533



- Aircraft movements 2004 – 168,511
  - Aircraft movements 2013 – 369,953
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## Background

- Re-launched – Feb 2012.
- Frequency – Meet every 3 months or as required.
- Implemented in line with DA SMS policy (Aerodrome manual part 6)



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## Terms of Reference

Terms of Reference – Runway Safety Team		
<p><b>Frequency:</b> Quarterly</p> <p><b>Location:</b> Compliance Assurance meeting room AOCC DIA.</p> <p><b>Time:</b> As Diary</p>	<p><b>Attendees:</b></p> <p>ACM-Chair ARFFS HOAO HOCA DANS-MS&amp;S SMS Manager Engineering Services ATC Manager</p> <p>DANS-SMATC Airline Representation DCAA DNATA Ramp Services Manager</p>	
<p><b>Purpose:</b></p> <p>To ensure safe and efficient runway operations at DXB.</p> <p><b>Objective:</b></p> <ul style="list-style-type: none"> <li>- ATS Safety Oversight</li> <li>- Runway incursion prevention</li> <li>- Review of operational working practices</li> <li>- Joint risk management</li> <li>- Capacity management</li> </ul>	<p><b>Agenda:</b></p> <p>Review last action log Review KPI's - Runway Incursions - FOD - Bird Strikes</p> <p>Airside Operations and ATC procedures</p> <p>Assessment of ATC control systems and aerodrome infrastructure Projects/events updates</p> <p>Regulation changes</p> <p>AOB</p>	
<p><b>Inputs:</b></p> <ul style="list-style-type: none"> <li>- GCAA Audit/inspection</li> <li>- Operational reports/investigations</li> <li>- Runway incursion (internal/external)</li> <li>- Flow rates</li> <li>- ROSI/ near miss reports</li> </ul>	<p><b>Outputs:</b></p> <ul style="list-style-type: none"> <li>- Safety initiatives</li> <li>- Improvements to working practices</li> <li>- Compliance</li> <li>- Conduct Annual LVO Tabletop exercise</li> </ul>	<p><b>Ground Rules:</b></p> <ul style="list-style-type: none"> <li>- Joint accountability</li> <li>- Constructive approach</li> <li>- Start/finish on time</li> <li>- Prompt close out of actions</li> </ul>

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## Participants

- Key personnel required:

- Airside Operations



- DANS (ATC Ops & Safety)



- ARFFS



- Engineering services



- Airlines



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### Key Issues for Review

- Runway Incursions –
- FOD on the runway –
- Bird strikes. -



Note: Joint investigations with ATC are undertaken for all Runway incidents and fed back with recommendations to the RST.

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Success Runway Incursions.

Runway Incursions	2010	2013
Per 10,000 movements	0.55	0.13

- Due to several safety campaigns and targeted driver training programs at DXB, there has been a massive reduction in Runway incursions.
- In addition infrastructure upgrades include - signage, paint markings (runway ahead signs), lighting review to name a few.
- Actual improvement significant from when records began in 2010 to the end of 2013.

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### Success FOD

FOD	2010	2013
Per 10,000 movements	1.14	0.51

- With targeted safety campaigns at Dubai significant reduction in instances of FOD reports on the runway have been witnessed at Dubai.
  - Initiatives such as marking engineering tools to ensure sign out/in logs are maintained during maintenance has been introduced.
  - Habitat management audits and maintenance plans have been introduced.
  - Like Runway incursions significant improvement can be seen from the 2010 records.
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### Success Bird Strikes

Bird Strikes	2010	2013
Per 10,000 movements	1.4	0.35

- With the introduction of a 24/7 bird dispersal and recording resource through the LRST significant improvement on bird strike figures have been seen.
  - Improved wildlife habitat management within the airport boundary has aided the improvements.
  - Introduction on wildlife safeguarding requirements on new developments has also shown significant impact.
  - Like Runway incursions and FOD significant improvement can be seen from the 2010 records.
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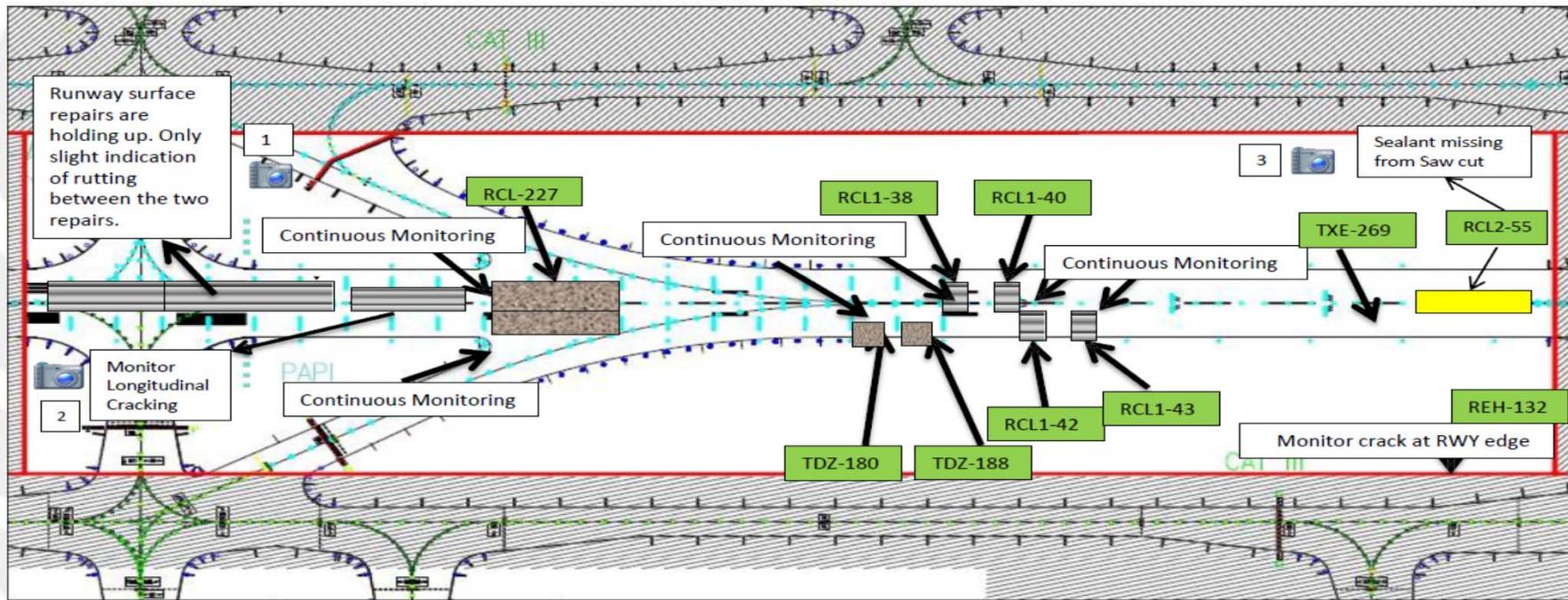
Detailed runway walks

- The Local Runway safety team are invited to participate in the detailed 6 monthly inspection of the RWY's for both airports.



# Detailed Level 3 Report

## AREA 2 (12L-30R)



1. 15m wide central section of runway showing general signs of aggregate loss. Specific areas where surface integrity is of concern. **Monitoring of area required leading up to Runway resurfacing.**
2. 15m wide central section of runway showing general signs of longitudinal cracking. Specific areas where surface integrity is of concern. **Monitoring of area required leading up to Runway resurfacing.**
3. Heavy rubber deposits on taxiway lights at lead on/off. **Ongoing removal taking place during weekly RWY closures.**
4. Remove general vegetation.

### Key

- A- Aggregate loss
- B- Longitudinal cracking
- C- General fault noted in area
- D- Approx fault location (Light fitting refs generally used to locate faults)
- E- Photo reference in Appendix A



# DWC Statistics

## Runway Incursions DWC

Year	2010	2011	2012	2013
Per 10,000 movements.	-	-	2.56	1.63

## FOD on the Runway DWC

Year	2010	2011	2012	2013
Per 10,000 movements.	-	2.4	13.44	1.63

## Bird Strikes DWC

Year	2010	2011	2012	2013
Per 10,000 movements.	101.1	9.7	9.6	2.04

# Local Runway Safety Team - Experience at Dubai Airports

The Future

- FOD Radar
- Follow the Greens
- Airside Operations Go Teams
- Safety Campaigns
- Project Interaction