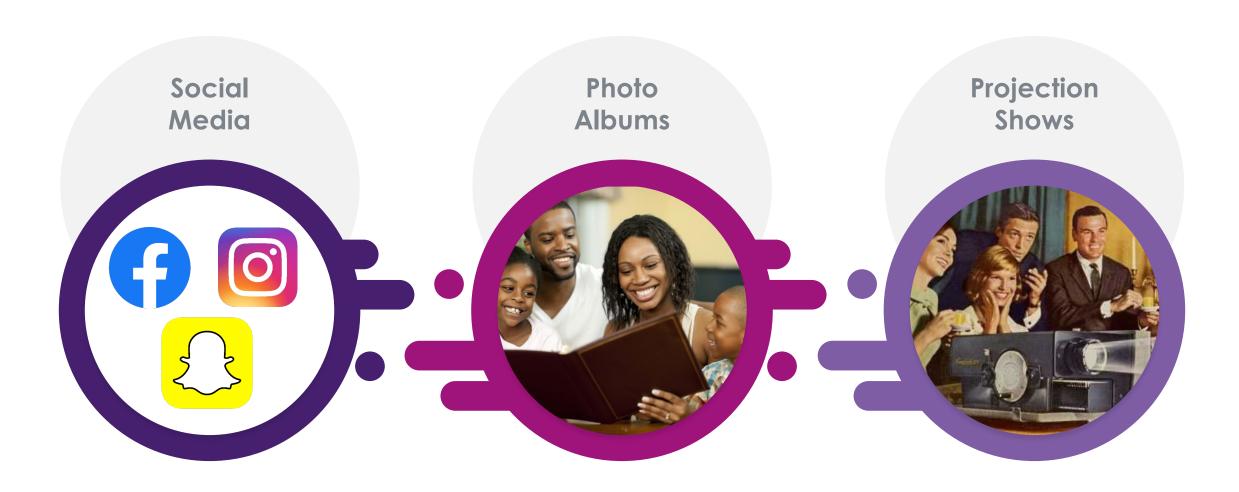


Sharing stories and memories





Social Media Users







How many people recognise this?

I



We all remember the incident that really highlighted the requirement to do more with **FOD Monitoring and procedures?**





82 seconds after Columbia left the ground, a piece of foam fell from a "bipod ramp" that was part of a structure that attached the external tank to the shuttle and struck the wing.

FOD or Not



AGL fitting

Heathrow

Need to change?





Tyre FOD on runway 15 December 2005





Aborted Take off 2005

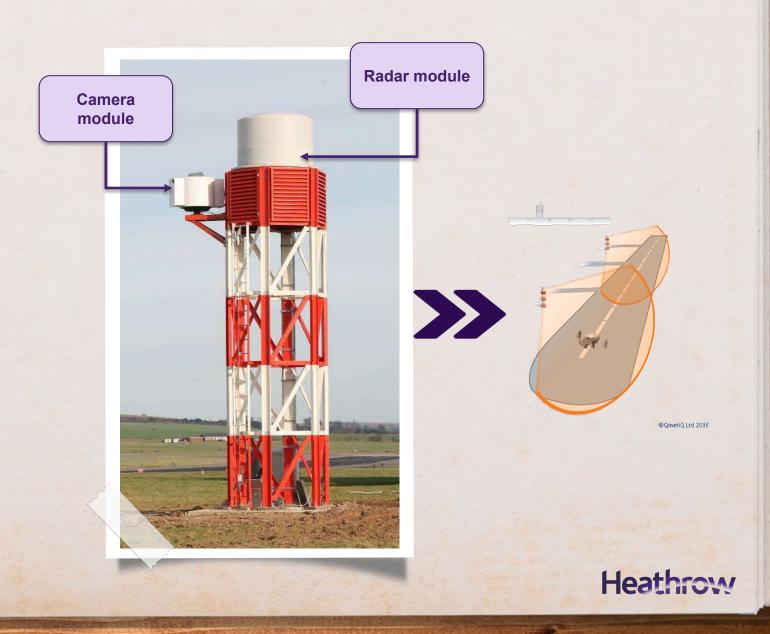




B747 panel on runway 08 June 2006

Tarsier System Overview

- Two Camera's radars, for each runway.
- Sensitivity configurable
- HMI to review alerts in Airfield operations
- Defined process to respond to FOD alerts



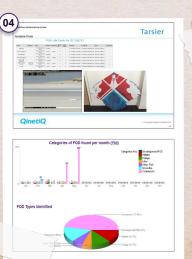
The partnership with Tarsier system at Heathrow has developed over 15 years

2005 - 2006 2011 - 2013 2006-2007 2008-2009 2010 2016 - Now 2018 - Now Northern **Tarsier CBT & Process** toolbox runway radar Significant FOD finds **Assessment Improvement** & camera's **EOL Upgrade** Southern Site design & runway radar **AGL Lamp Analytic tools** implementation Camera **System** for reporting Site design, **Burst Tyre** for southern upgrades enhancement Hardware and installation and Northern software Screw driver proving upgrade runway. Introduction Aircraft Panel **Touch screen Future** Camera's for Strategy HMI categorisation each radar.



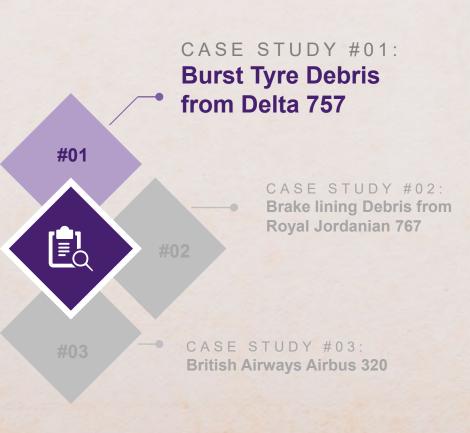






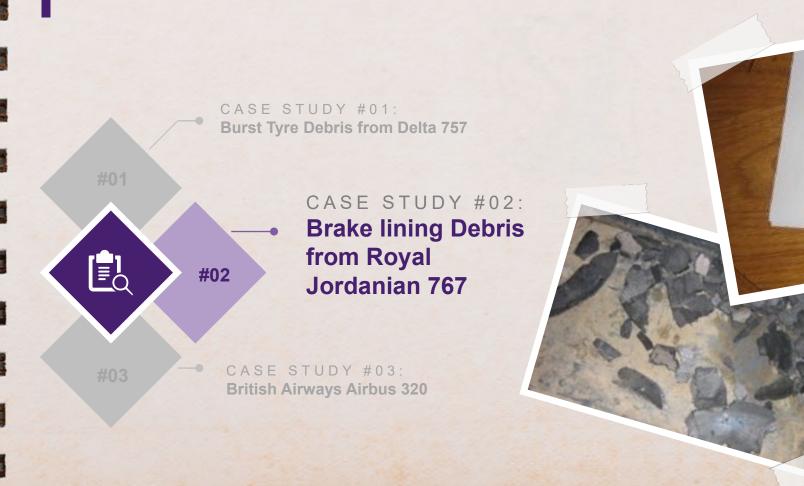


Picking Up ALL the Bits & Pieces: 3 Case Studies



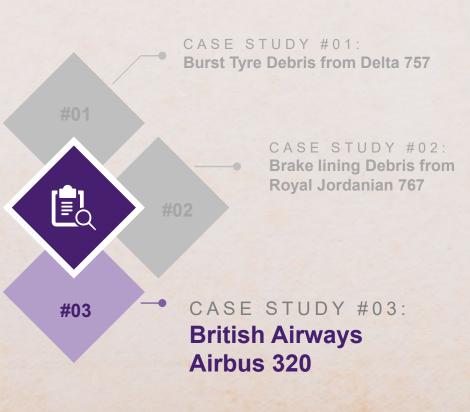


Picking Up ALL the Bits & Pieces: 3 Case Studies



98 Activations

Picking Up ALL the Bits & Pieces: 3 Case Studies





Managing FOD is a real can of worm! Is it FOD or Fault?



'FOD' finds can help us manage habitat and wildlife







FOD or Flying FOD?















No one wants to see the wheels or other parts to fall off!









FOD really is nothing to celebrate!







FOD isn't just rubbish!







During its lifetime the system has made early identification of items that pose a threat to aviation safety



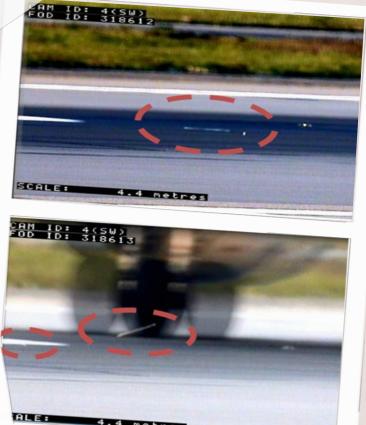


Man and Machine? Need to improve processes

CASE STUDY #01:
Paint Tin Lids

The Grease gun
(The one where it didn't stay still)





Case Study #02

When Maintenance become FOD... What do you do....













When Maintenance become FOD...

What do you do....

Dig it out! / And put it back



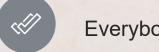




The Mud Flap Case Study

What is the Learning?





Everybody has FOD



FOD isn't just rubbish



Interdependency with Wildlife, Habitat Management and all Safety management practice—Drones, Avian



Technology will enhance (not replace) capability and FOD programme



Effective Asset Monitoring can prevent pavement being future FOD



Focus on continuous improvement with Data and Process is essential.



FOD management plans will mitigate FOD during maintenance and construction



Man or machine - Complacency with any practices, siloed decisions will lead to failure!

