Safety Catch is intended purely for the advancement of learning. It is designed to stimulate thinking around safety issues, highlight scenarios which may not have occurred before and encourage discussion. It is not intended to apportion blame or liability on the part of any individual or team. Our aim is to share learning from safety occurrences in a manner that is responsible, neutral in tone, and accessible to all colleagues. Staff should always refer to the latest procedures, instructions and training which takes precedence over safety promotion material.

Did you know?
All safety promotion material, investigations and lesson learning content is available on the Aerodrome Safety SharePoint site.

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If you have any ideas for future editions, or perhaps a safety event you think others could learn from, please get in touch.

Contact us:
airside_safety@heathrow.com
Heathrow.com/airside
COVID-19 Update

Due to the ongoing social distancing measures in place, the Aerodrome Safety & Assurance Team are currently working from home along with all other non-operational / non-front line colleagues. During this time, we remain fully contactable via email, phone or Microsoft Teams and can support you with any safety related issue or query. The functionality on Teams is extensive – for example through sharing screens we can assist you with the submission of AIR reports. The easiest way to get in touch with the team is to set this up via our shared inbox (airside_safety@heathrow.com) in case individual email accounts aren’t being monitored.

Thank You and Wellbeing

Thank you for continuing to submit safety reports during this period. Even with significantly reduced operations, it’s important we keep a watchful eye and keep our operation and colleagues as safe as possible. There are likely to be new safety issues emerging from changes to procedures and practices so keep up the good work!

The coming weeks and months are likely to be uncertain and unsettling. Anxiety and stress are normal at a time like this. Some of us may be facing worrying or upsetting situations with family and loved ones or concerns about their own health and wellbeing. In previous editions of Safety Catch we have looked at how human factors can affect decision making and alertness during safety critical tasks. We know during this time colleagues across Operations will be looking out for each other and will continue to do this.
COVID-19 Update

We wanted to take this opportunity to signpost the additional support that’s available. More information can be found within emails from Operations Communications and on The Hub+, but as a reminder, here are some of the ways you can access support:

Employee Assistance Programme
Available 24/7/365, the Employee Assistance Programme provides confidential support for a number of practical and emotional issues. The team of counsellors, money advisers and legal advisers are on hand to help. Just call 0330 0220 567, option 2. Don’t forget that your partner, and children (between 16 and 24 in full-time education) are entitled to use the counselling service too.

Babylon – your online GP
In response to the current coronavirus outbreak, Babylon have introduced a COVID-19 specific symptom checker which can be accessed from the home page of the app. They can also provide a full service to colleagues for non-coronavirus related medical issues. Their GPs are available 24/7 for appointments where they can provide advice and prescribe medication. If you haven’t signed up for Babylon yet, just download the app and use Heathrow’s code ‘Health2018’ to be given free access.

Sustaining Resilience at Work (StRaW)
StRaW Buddies are there to listen, provide guidance and signpost professional support where appropriate. If you’d like to chat, just email yourstrawbuddy@heathrow.com and the team will allocate a Buddy to call you. There are StRaW Buddies available right across the business, so there will always be someone independent from your team to talk to.

Occupational Health service
Please be advised that the Medical Centre in D’Albiac House has been temporarily closed, but the team from Duradiamond are still able to provide a full service over the telephone. Just ask your manager to refer you as normal through the Duradiamond portal and the team will call you at an agreed time.
Everyone in Airfield Operations understands the importance of runway safety. Over the course of the year, the runway is accessed correctly several hundred times uneventfully. However, during the past six months, there have been four runway incursions involving Airfield Operations vehicles and a number of runway safety events, which are often pre-cursors to a runway incursion.

These have involved a range of colleagues, both experienced and less experienced, carrying out a range of different tasks in different parts of the airfield.

You should have received a verbal briefing from your AfDM during a watch briefing on key points to remember when it comes to runway safety. The good news is that all of these runway incursions were self-reported immediately, and were genuine mistakes during the course of routine duties on the airfield.

Whilst nobody has intended to cause a runway incursion, we must use these events to focus our attention on prevention of further occurrences and conscious following of procedures and best practice.
Runway Safety

Here are some general tips on runway safety:

**Lookout**
Always check the approach and runway threshold for aircraft when you enter the runway, even with a positive ATC clearance.

**During Active Bird Dispersal**
Be particularly careful. Look down as well as up if operating close to the runway. Use the Digi scare from a stationary position.

**Maximising Alertness**
Are there any distractions that you can minimise? Non-essential conversations should be paused and a ‘sterile cockpit’ adopted.

**Vehicle Positioning**
By always positioning the vehicle so that you easily see the runway guard bar means you are less likely to forget to check it has been suppressed. Where possible position the vehicle so that you have maximum visibility of the runway. Reassess your position before moving off if stopped.

**Listen Out**
The radio might be on and selected on the right frequency, but are you actively listening as you prepare to request access or operate close to the runway?

**ATC Clearances & Readbacks**
Readback all instructions and clearances - check if you’re unsure.

**Team Working**
Do you and your colleagues have the same mental picture? Encourage constructive challenge between one another.

**Situational Awareness**
Signage and paint markings are there to help vehicles as well as aircraft. They can be especially helpful at night or during low visibility - just to confirm you’re where you thought you were if nothing else.
Worksite Set-up

Last year, a period of process confirmation was undertaken on a variety of airfield operations tasks, including worksite set-up. The selection of colleagues that were observed was random and took place across all five watches. Some excellent practices were observed which we felt we should share:

1. Detailed face to face briefings from AfCR staff to the Airside Operations Officer setting up the worksite. Whilst this isn’t always possible, for more complex closures this really helps minimise any confusion. The SAO took the time to explain some additional considerations and checked understanding with the AOO.

2. Building rapport with the contractor is key to ensuring a safe and compliant set-up. The AOO decided to gather all of the colleagues from the contractor into a group to ensure they all received the information. The AOO used the Night Works Map to brief the staff members which was very clear about the order and sequence of the set-up.

3. During one worksite set-up, the contractor elected to drive off in the opposite direction and start placing cones on a different stop bar. The AOO challenged this behaviour and explained that they would be leading the contractor from one stop bar to the next and that they were under escort from the leader vehicle.

4. A contractor was seen placing cones over the red AGL fittings. These LED lights are far brighter than the glims on the cones and should be used in conjunction with each other. The contractor was asked to ensure the red AGL fittings remained uncovered by cones. The AOO also ensured ATC did not leave a green route running through a closed area.

5. Several of the cones being used by the contractor were missing reflective strips and the glims were very dim. The contractor was unable to rectify this immediately as the vehicle with the spares was elsewhere. The AOO asked where this vehicle and the contact details for the driver was and collected additional equipment instead of leaving the worksite safeguarded to a poor standard.
Airside Safety Catch

Deep Dive – Damage to Grass Area 13B

Often what didn’t go well is what’s reviewed in most detail – but good safety management should also recognise and reflect on what went well within a safety event. Driving on the grass to avoid an aircraft is always undesirable and every effort should be taken to avoid it. Alternatives such as a radio call to ATC are always preferable and the safest course of action. Whilst aware of that, this Checker Team found themselves in an unusual situation where they felt this was not possible in the time available. Whilst this is not to advocate driving on the grass, there were some positives within this event which we felt worthy of highlighting.

Incident Summary

Whilst returning to the Airfield Operations Facility (AOF) driving eastbound on ALPHA (South) the Checker Team noticed a plastic bag blowing towards the departure runway (27L) and retrieved the FOD. An outbound A320 holding position abeam N3 meant the Checker Team were unable to vacate northbound onto taxiway LIMA. The driver positioned the vehicle to route westbound and noticed an A330 taxiing towards them. The driver assessed the taxi speed as being faster than normal and believed there would be insufficient separation.

The driver was aware that routing westbound onto KILO (South) would mean driving at speed towards an oncoming aircraft.

The driver assessed that a transit of Grass Area 13B onto BRAVO (South) – the access route running along the southern edge of Block 717 - was the only option available. The vehicle transited the Grass Area in sufficient time to give way to the A330 but left wheel tracks in the grass area. The driver inspected the grass area for damage on foot using a torch once the vehicle was in a safe position. The SAO reported that taxing aircraft and the lighting available precluded a more detailed inspection. The SAO reported the event and damage to the Airfield Duty Manager (AfDM) on returning to the AOF. A report was submitted on AIR by the SAO at the earliest opportunity the following day with a description of what happened.
The Checker Team consisted of a Senior Airfield Officer (SAO) and an Airfield Operations Officer (AOO), both of which were experienced in role. The SAO explained that prior to the FOD being spotted, they were returning to the AOF from the Terminal 5 area at the end of their shift. The A320 on ALPHA (South) was seen from a distance away, but the Checker Team were unable to determine whether the aircraft was stationary or moving forwards. After the FOD was retrieved, it became apparent that the A320 was stationary. The Checker Team judged that there was insufficient space to drive behind the aircraft.

They were concerned about the risk of jetblast should the aircraft apply breakaway thrust as they drove behind the number 1 engine. Whilst performing a ‘U turn’ manoeuvre, the Checker Team observed an outbound A330 taxiing towards them on ALPHA (South). They assessed the taxi speed as being faster than normal. Rather than put the vehicle in conflict with the opposite direction aircraft, they elected to transit Grass Area 13B. The SAO explained that upon entering the Grass Area, the vehicle didn’t have good traction and was starting to struggle. To prevent the vehicle becoming stuck a 4-wheel drive (4WD) was selected.

During the follow-up meeting, the SAO was asked whether they considered contacting ATC to facilitate an exit route. The SAO explained that even if the frequency happened to be clear at that moment in time, by the time the message had been received by ATC and transmitted to the A330, it would most likely have been too late to prevent the aircraft from needing to slow down or stop. An additional consideration was that the aircraft may have been about to change to the runway frequency or have already done so (the GMC frequency was selected in the vehicle). As neither of the Checker Team could recall hearing any transmission from the A330, they could not be sure what frequency it was on. For these reasons, this option was discounted. The SAO recognised that a call to ATC in this type of scenario would usually be the most appropriate action, however it would not have been appropriate in this case and would not have prevented a conflict with the aircraft. Cabin crew have sustained injuries in the past when unexpected sharp braking has been applied prior to the cabin being secured.

Using the Baines Simmons FAiR® tool, the incident was categorised as a Mistake.
Deep Dive – Damage to Grass Area 13B

How will we stop it from reoccurring?

The Checker Team consisted of two experienced colleagues, neither of which had been involved in any previous occurrences of this nature. There was no evidence of reckless behaviour or a wilful violation. During the follow-up meeting between the Senior Airfield Officer (SAO) and the Aerodrome Safety & Assurance Team, contributory factors and learning points were discussed. During the hours of darkness, accurately judging the speed of taxiing aircraft in the distance can be difficult, even for experienced drivers. This is particularly the case if the aircraft is approaching from behind and attention has been focused elsewhere (in this case a FOD retrieval ahead). In this occurrence, a combination of unfavourable factors came together which resulted in the Checker Team being left with what they believed was the only option available.

What went well?

The event serves to highlight how quickly the traffic situation on the manoeuvring area can develop, particularly during busy periods on the airfield. Experienced drivers may find themselves in tricky situations as much as inexperienced drivers. Whilst the damage to the grass area was undesirable, there are a number of positive learning points from this occurrence which are worth highlighting:

- The Checker Team recognised the conflict situation developing and took decisive action (during the debrief, some alternative options were discussed)
- The occurrence was self-reported to the AfDM straight away
- The vehicle’s full capability was used by selecting the 4-wheel drive function in good time (whilst the vehicle still had traction). This reduced damage to the grass area and reduced the likelihood of the vehicle becoming stuck.
- An inspection of the grass area took place after it had been transversed to assess the damage.
- The AOO monitored wingtip clearance throughout, confirming to the SAO that they were clear of the A330 at all times.
- On return to the AOF, a debrief between the AOO and SAO took place, during which the SAO confirmed that they would take responsibility for reporting the event and follow-up. A debrief after an occurrence is an effective way to reflect on what’s happened and capture any learning points. Also, a plan was agreed for the reporting and follow-up.
- Collectively, these actions show effective crew resource management between the Checker Team. (Note: Crew resource management techniques for Airfield Operations personnel has been covered in Edition 4 of Safety Catch).
Safety Improvements

What happens to your reports?

Sometimes it’s not always apparent that outcomes from safety reports have happened. Whilst in some cases, no follow-up is required as the matter’s been dealt with at the time, in other cases there’s a need to get something done. Below is a small selection of examples to show what’s taken place as a result of a safety report.

Airfield Signage

It was noted that the LINK 56 sign (that faces north situated in Grass Area 6N) has incomplete information as the right hand facing arrow is missing. It’s not known what happened to it or whether it was ever there to begin with, but a very good spot. The sign has now had the arrow added by Airside Engineering.
A number of reports were submitted regarding an aircraft entering the stand without the SEG activated. This is likely to endanger ground staff and could result in a collision between the aircraft half on the stand and a taxiing aircraft behind. As these reports related to one operator, the Aerodrome Safety & Assurance Team contacted the airline with whom we’ve developed a good relationship with.

The events were reviewed jointly, and the airline implemented a number of changes to raise awareness of correct procedure at Heathrow, including updating the content in their commercial chart provider at our request with the same text from the AIP and Safety Alert.

Additionally, the airline has added a note in the ‘Special Advisories’ section of the airline’s ‘London Heathrow Field Report’ and briefed ground personnel on the need to remind flight crew of the procedure if they witness it happening and submit a safety report.
Safety Improvements

Safety Observation during Turnaround Audit

An Airfield Operations Officer noticed that a B767-300 parked on stand 248 had the airbridge attached but no chocks in place. The AOO spoke to the tug crew who stated that he had his foot on the brake so the chocks weren’t required. The AOO asked the ground crew to apply chocks as this was a requirement of the OSI. The AOO submitted an AIR report with the details so the airline could be contacted by the Airside Operations Standards Team. The airline confirmed that the company procedure does require chocks and that the ground personnel have all received refresher training. This proactive intervention by the AOO demonstrates the important and worthwhile role of Airside Operations in monitoring ground handling standards and safety.

Damage Signage and Rubber Strips North of Stand 414

A report was received regarding the damaged signage and poor state rubber strips in this location, which were presenting a trip hazard left in the road. The faults were escalated and by working with the Engineering Help Centre and Heathrow Signs Department repairs were made.
Questions and Answers

**Question:**
“During busy periods, when there’s a need for an aircraft leader escort across the runway, can we meet the tug crew at the runway and do the R/T for them across the runway? They only need us for the runway crossing and can manage without a leader for the rest of their journey”

**Answer:**
Whilst it is recognised leader duties can take some time, the aircraft leader escort ALOP is written in the way that it is to protect runway safety. Tug crews without ‘R’ ADPs have been instructed not to request pushback until the leader vehicle has arrived. There have been occurrences whereby the leader vehicle has not reached the aircraft in time and ATC have instructed the aircraft to cross the runway.

ATC were unaware the tug crew did not hold ‘R’ ADPs and the tug crew either felt compelled to follow the instruction or were unsure if Airfield Operations were still intending to send a leader vehicle. The AOO should be providing a briefing to the tug crew prior to the leader escort and checking the destination stand is suitable. Ultimately, runway safety is the main reason the leader escort is being provided, so if the manner in which they’re conducted increases it to some extent defeats the object of providing them in the first place.

**Question:**
“If I’m doing a ‘watch-on’ and the parking aides fail on an error message, can I just get on with marshalling the aircraft? It’s obvious to the pilots the aides aren’t working”

**Answer:**
If for any reason the stand entry guidance is no longer working normally it’s important that all attempts are made to switch it off prior to marshalling. There are a few reasons for this. Whilst it may seem obvious to you that the SEG has failed, it may begin functioning again (as is sometimes the case following a WAIT message) and the flight crew may follow the SEG instead of the marshaller’s signals. The marshaller would likely be unaware that this was happening.

In the worst case scenario the marshaller may wish to stop the aircraft and it continued moving forwards. Additionally, some airlines have contacted Heathrow to say their standard operating procedures do not allow flight crew to continue taxiing the aircraft when a STOP instruction is displayed. We’ve been told by some of these airlines that they have implemented this instruction following incidents of aircraft colliding with buildings/airbridges at overseas airports. In some very unusual cases, it may not be possible to deactivate the emergency stop on the SEG unit. In these cases, an advisory call to ATC or the aircraft itself on the frequency is best practice and strongly advised.
Questions and Answers

Question:
“After a bird run or other runway inspection outside of normal hours, should I remain on the runway until the first aircraft calls up to deter bird activity?”

Answer:
There is no requirement or expectation that vehicles remain on the runway for any longer than is necessary to complete the task they went on the runway to carry out. Safety is likely to be improved by presenting ATC and aircraft with a ‘sterile’ runway in good time.

Safety margins are likely to be reduced if tasks that ATC need to carry out (such as updating EFPS strips and changing runway lighting settings) are left to the last minute and rushed because the vehicle remained on the runway for longer than it needed to. Suffice to say, that if there is a requirement to remain on the runway, Airfield Operations vehicles should not rush inspections or wildlife dispersal but inform ATC that more time is required.

Question:
“When the runway frequencies are bandboxed (which used to only be overnight but now more often during the day too) you can hear everything exactly the same on either frequency. I don’t understand why I need to change the frequency to the nominated runway frequency each time. Please can you explain?”

Answer:
The reason is because in the event that ATC were to split the frequencies, if the vehicle had the other frequency selected it would then be out of contact with ATC whilst on a live runway. Last year, a significant runway safety event occurred when an inbound B777-200 to 27R had to go around at less than a quarter of a mile when the Airfield Operations vehicle completing a bird run were unable to hear ATC’s instructions to vacate as the vehicle had the frequency for the southern runway selected. If the correct frequency is always selected in the vehicle this cannot happen.
And Finally

**ASD – Transport AIR Training**

During the early part of 2020 we delivered safety awareness and AIR reporting training to ASD-T colleagues. Whilst the final session which was due to take place in March had to be cancelled due to COVID-19, we were able to roll this out to the majority of colleagues.

The training was well received and using two different case studies of ‘real life’ safety occurrences some great group discussions were had focussing on root cause and contributory factors. These sessions built upon previous safety training such as the ‘Just Think!’ programme. Close call and voluntary safety reporting was the main theme with a practical session on how to use AIR included.

We’d like thank all the ASD-Transport colleagues for their active participation and engagement in these sessions and the safety reports we’ve been receiving since. Future sessions are being planned for colleagues in AFRS (who report through Airsweb) for when normal operations resume.
Airside Safety Catch

And Finally

Recent Wildlife Rescue

The spring of 2020 has seen a variety of different species at Heathrow. In all cases, they have been safely rescued by Airfield Operations or Airport Fire & Rescue Service and handed over to the Animal Reception Centre. Well done to all the teams for their efforts in safely capturing these creatures and ensuring their welfare throughout!

An exhausted swan not looking all that happy, photo courtesy of AOO Ross Denyer

Using specialist equipment, Green watch successfully rescued this Grebe from the balancing ponds north of T5A after it became stuck in the netting.

This muntjac deer was finally recovered from behind the dispatcher’s cabin on Stand 517 having been on the run and successfully evading capture for some time. The images are courtesy of AOO Jon Worley, who explained “whilst it was catching its breath, we managed to formalise a plan to capture said deer in the safest way possible. A joint effort involving ASD, ASD-T, HAL Engineering, Animal Reception Centre and even the AfDM getting his hands dirty, we finally managed to catch this young deer”
And Lastly these fox cubs were rescued just in time, as Senior Airfield Officer Steve Simmons reports:

ASD received a call from our landscaping contractor (JSA agriculture) that while clearing and removing away many years of unwanted growth from the rear of a wall that backs onto the movement area in Terminal 4, that they had come across four fox cubs sheltering under what was thick undergrowth. Myself and Airfield Operations Officer Ross Denyer were asked to attend. When we arrived, we were greeted with what looked like a scene of complete devastation.

On closer inspection, we were pointed in the direction of four small fox cubs which looked as if they were only just one or two weeks old. All four cubs were exposed to the elements and were seen to be shivering in the cold temperatures. Luckily they were spotted just in time before the machine had gone any further! We quickly rounded them up in a cat box and placed them inside our vehicle and turned up the heating to keep them as warm as possible.

After some investigation and advice from the Rescue Centre, a decision was made to remove them from the airfield and give them to a Wildlife Aid Foundation near Leatherhead. After sending the foundation some pictures and talking to them over the phone, they were more than happy to take them in. The foxes will later be released back into the wild.