

**GLASGOW AIRPORT
FLIGHT SAFETY COMMITTEE MEETING
WEDNESDAY 4th September 2019**

Attendees

██████████ (Chair)	NATS
██████████	GAL
██████████████████	GAL
██████████	EZY
██████████	UGSAS
██████████	Thomas Cook
	Police Scotland

Apologies

██████████	GAL
██████████	NATS
██████████████	NATS (PC)
██████████	TUI

1. Actions from previous Meetings

Summary on the status of the actions is documented in a table later in the notes.

2. Runway Incursions

No further runway incursions reported since the 3 reported in February and March 2019.

As reported in the previous minutes, the introduction of H24 stopbars has greatly reduced the overall risk of runway incursion relating to runway holding points protected by stop bars. The RAT C incursion in February 2019 is seen as an example of an event that would have been prevented by H24 stop bars.

The NATS Glasgow Runway Safety Initiative will be concluded by the end of September 2019. The response to the questionnaire, from most local operators, has been excellent. A couple of responses are still awaited. But the intention is to have the report completed by the end of September 2019 and provide feedback to all shortly after that.

New timed-stop bar functionality is planned to be installed during the November airport night closures. These will initially operate at A1/A2 and G1/G2, but will be progressively rolled-out to all of the runway entry points during future infrastructure projects.

██████ was asked whether ATC would continue to use the current phraseology when LVPs/Safeguarding were in force and the new timed-stop bar functionality:

"Caution, the stop bar will be off for the aircraft ahead only, hold short of A2/G2."

■ would report back, via the Flt Ops collective, with a definitive response. Initial thoughts that the phraseology would be maintained, but be reviewed after the introduction of the timed-stop bars.

3. Bird Update

Birdstrike statistics have spiked in line with seasonal expectations.

The airport continue to work with an independent wildlife management specialist to assist the airport with their bird control measures, as well as ECOLAB clearing nests etc.

A massive increase in gull activity is being observed and there is a specific problem with transient gulls routing to/from their roosting sites and their feeding areas. Many of those routes involve either crossing the immediate runway area or across the arrival and departure paths close to the airport perimeter.

Safeguarding aviation was the priority of the airport operator and new measures have been introduced to tackle the increasing bird numbers, including increased bird patrols, both on and off airport. A semi-automatic shotgun had been acquired, training carried out and the weapon was now in use around the immediate airport area and with some degree of success.

Additionally, larger bird-scaring rockets had been purchased and these were proving to be extremely effective over a very wide-area around the airport. Given the extremely loud sound emitted by the exploding rocket, and the resultant large increase in number of birds being dispersed, Ops were actively planning windows of opportunity, in between arrivals/departures to carry out the activity with the permission of ATC.

The commencement of ground-breaking operations associated with the new Glasgow Airport Investment Area, has also generated an increase in bird activity. Close liaison has taken place between the airport and the contractor carrying out the work on the site at Netherton Farm. The contractor voluntarily commenced its own bird dispersal measures and this has been highly successful.

Funding is available to carry out bird control measures, particularly in the Inchinnan Business Park. Large numbers of geese have also been spotted locally as these are largely non-migratory in nature and thus becoming permanently resident in the farm areas close to the airport.

Work with SNH remains ongoing and is very constructive. SNH are aware of the need to protect the safety of flight and are happy with the work of the airport to minimize disturbance and worrying of the local swan population.

4. Lasers and Drones

17 Laser reports for the 3 months since the last meeting. 2 in June, 3 in July and 12 in August. 15 of the reports were declared crimes by Police Scotland, but no perpetrators had been apprehended in relation to the spate of reports in August. Those appeared to emanate from a similar area of the city and were being actively investigated by Police Scotland.

However, given the urban area, it was very difficult to detect the perpetrators.

There were 3 drone reports over the preceding 3 months. 2 in June and 1 in August. Only one report resulted in an Airprox being declared. On the 13th of June a flyBe aircraft reported an Airprox with a drone when 1.5nm from touchdown on RW23. No subsequent aircraft saw any activity.

5. Level Busts

Only one Level Bust reported during the period June to August. An inbound VFR light aircraft reported above their cleared altitude of 2000ft.

■ provided the meeting with data on the number of prevented level busts, since the last meeting, where ATC had intervened. 4 instances of Mode S-derived information prevented level busts and 1 instance of incorrect readback being detected by the controller.

The meeting were of the opinion that the full details of every instance should be made available to the meeting and that would be done initially via the minutes to this meeting and then included in the slide pack of future meetings. It was agreed that the use of aircraft/airline ident should be included in that data.

Furthermore, ■ would investigate whether any safety reporting would be necessary from the controllers concerned, as flight deck crew would submit an ASR in the event of a level bust being prevented by ATC.

6. Missed Approaches, Runway Service Rate & Operational Performance

Missed approach stats were provided for June and July 2019. Missed approaches remained relatively low with unstable approaches, aircraft technical and departure too slow accounting for the majority of missed approaches in those months – overall numbers remain low and are included in the slide pack.

Runway usage/movement stats for July were also included and showed a peak of arrivals and departures during hours 1200-1600. An hourly rate of up to 30 movements per hour at peak times on some days during July.

Overall stats for July show a 7% decrease with comparable traffic in 2018, but peak traffic remained broadly similar.

7. GAL Update

Projects

No significant airfield projects of note since last meeting.

2019 Night Closure Works

The winter night closures would commence at 2300 local on Sunday the 3rd of November and be completed on Friday the 8th of November at 0600 local.

AGL works would be the main focus of the closures, together with some ongoing maintenance to the airfield surfaces. As previously minuted, the works to introduce timed stop bars at A1, A2, G1 and G2 would go ahead, including a timed-centerline lighting interlock.

Future Planned Works

A list of areas of the airport surfaces to be rehabilitated had been compiled in order of priority. Kilo and Lima were both planned for rehabilitation and those would likely be carried out during either the spring or autumn night closures in 2020 subject to financial approval.

Runway rehabilitation was also being planned, as briefed previously, and would need to be de-conflicted with both Aberdeen and Edinburgh. Both airports have similar plans along similar timescales.

Ongoing repairs to Alpha and Golf would continue outwith the night closures and causing minimal disruption.

Taxiway Zulu would be re-opened, once some obstructions had been removed from the vicinity of the taxiway. The taxiway would be unlit, available for Code C and below, with all aircraft subject to a follow-me vehicle during the hours of darkness.

Other Areas of Note

The industrial action that had previously affected the airport operation had now been brought to a close. No further action was expected as agreement had been reached on all fronts.

Thanks given by [REDACTED] on behalf of a retiring TCX captain. The airport arranged for the captain to be given a 'water arch', provided by the Airport Fire Service, on arrival back at Glasgow on his last sector. Not only that, but the involvement of his son (a fellow airline pilot), was a particular highlight at the end of a long flying career.

Winter Ops Planning

Airport planning and training already well-underway. Additional snow clearing equipment had been hired and an airport staff roster created.

A reserve list of fully trained, non-airport staff, had also been procured and they would be used in the event of staff shortages or major snow events.

Stands 30L/30R Operations

Issues with lighting on Stands 30L and 30R had now been resolved. Feedback was requested on revised lighting and paint markings – particularly in wet conditions.

Stand 30L guidance remained out of service and would be resolved as soon as was practicable.

Feedback received from meeting attendees was that vehicle parking on Stand 30L was tight, with minimal space to manoeuvre or park. Equipment left on stand by handling agents was not helping matters. A

suggestion was to park smaller aircraft 'short' in order to free-up space for vehicles at the head of stand.

8. Glasgow Airspace Change Briefing

██████████ provided a briefing on behalf of ██████████ on the planned Airspace Change Proposal for Glasgow Airport.

The timetable for delivery of the ACP was outlined and the whole process was scheduled to be completed in late 2022 or early 2023.

The first steps along the CAP1616 process were already underway and the aviation community would be involved from the outset and were included in the forthcoming design principle workshops to be held on the 9th and 10th of September in Glasgow. ██████████ would all be attending, as well as other airlines and aviation organisations with a vested interest in the Glasgow ACP process.

No issues raised by the meeting attendees.

A briefing pack for the ACP process was circulated and is attached to the email copy of these minutes.

9. UK DVOR RATIONALISATION & IMPACT ON PRESTWICK CENTRE PROCEDURES

██████████ then briefed the meeting on the removal of the En-route Dependencies relating to the TRN and GOW DVOR's, as a result of the UK DVOR rationalization. For Glasgow, this will see 13 GOW-based arrival procedures reduced down to 7 and become fully RNAV'd.

Changes also impact on both Prestwick and Edinburgh airports and the plan is to introduce them as part of AIRAC 03/2020 on the 27th of February 2020.

██████████ took the meeting through the slide pack - attached to the email copy of these minutes.

Comment was made regarding the existing LANAK waypoint, incorporating a new MAX 210KIAS speed limit and at FL70, and the impact that may have on CDO performance, if airlines were expected to adhere to the speed limit. ██████████ and ██████████ would take those comments back to the procedure designers and on to the CAA for comment. ██████████ would report back to the Flt Ops collective, when a response was received.

10.AOB

A380/Weather Event – 11th August 2019

██████████ from TUI had passed on reports from a TUI crew regarding operational delays on the 11th of August. The outbound A380, having reached the holding point for departure from RW23, overheard a report of a tailwind of 15kts at 500ft on departure, from a departing A330. As a result of that report, the crew of the A380 requested to depart from RW05.

Given the late notice and the position of the A380 at the time, a decision was taken to commence airborne holding whilst a plan was decided upon

to incorporate the request by the A380 for a departure from RW05. The request coincided with a period of poor weather affecting both the airport and surrounding airspace and it was that weather that caused swift variations in both the surface winds and the upper winds. The prevailing weather and traffic conditions resulted in a number of aircraft experiencing delays, but the aircraft affected the most was the A380.

In order to provide complete clarity, the email correspondence is copied in below. ■■■'s questions in bold **black** and PB's responses in **red**:

What communications exist to Scottish for these delays? There was an initial estimate given by Scottish of less than 10mins. This would have become over 35 mins once transferred to Gla. An earlier speed reduction or maintaining a higher level will always help with holding fuel. It has been noted on several occasions recently of Scottish giving high speed descents to sequence traffic, only to be sent to the hold on transfer to Gla. The timing of the runway change request from the A380, together with the prevailing weather and traffic situation, caused a variation in the estimated holding times given – hence there was an understandable difference in timings between that provided by Scottish and on subsequent transfer to Glasgow. The original plan, communicated through Scottish, aimed to minimise delays, but given the tactical situation at the time, a further delay was then likely. However the duty Watch Manager intervened at around the time that your crew were suggesting a similar resolution and thus the diversion was prevented.

Can you clarify the A380 procedures and restrictions. I assume the runway change at such a busy time had been requested by the Emirates for performance reasons? Were other aircraft allowed to depart from intersections E or F ahead of the Emirates to alleviate some of the pressure? The A380 had already reached the holding point at the time that they decided to ask for the other runway for departure – it was based upon an airborne report, of a tailwind at 500', from another aircraft on the frequency. Because of the aircraft type, there are procedures in place that mandate how a request for a runway change or a return to stand should be handled – that is the same for other wide-body operations at Glasgow. There will inevitably be some delays, as a result of a request for a runway change, and these were exacerbated by the prevailing weather conditions and traffic dynamics. We have experienced similar delays on a number of occasions in the recent past, when the Blue Air B737 could not accept RW05 for departure due to take-off performance calculations that prevented them from accepting RW05 in certain benign wind conditions. Those requests have resulted in delays to the arrival and departure sequence and are obviously not just limited to the A380. The A380 was the subject of the greatest delay on the day.

Is there an intention to publish times of A380 or identify significant pinch points with appropriate comms to operators? Not aware of any plans to do so.

The occasional disruption obviously cannot be helped. We would rather not have the cost implications of carrying extra fuel on all of our inbound flights, however I don't see this being required if we have information available to allow crews to make informed decisions. The information provided on the day was done with the intention of keeping all of those informed at the time. It is unfortunate

that the request for a different departure runway came when it did. But every effort was made to keep all operators informed at the time. The delays were not just as a result of the decision of the A380 crew to request the other runway for departure. The prevailing weather conditions, dominated by CBs, generated a degree of weather avoiding by Edinburgh, Scottish Centre and ourselves. That also created a very dynamic and challenging ATC environment that added to the particular complexity on the 11th.

Ground Congestion

The point was made that, on occasion, the Ground controller was issuing potentially complex conditional push-back instructions during busy cul-de-sac operations. Consideration should be given to minimising complex instructions during these busy periods. ■■■ to issue an ATC Operational Notice to alert controllers of the need to keep instructions clear, concise and easily understood.





Loganair E145 Engineering Procedures

Loganair informed ■■■ that there were plans, already underway, to enable Loganair engineering staff to undertake Engine Ground Runs on the E145 fleet, much in the same way that the SAAB 340 engineers currently do. Still work to be done, but it is expected that approval may be granted in the early part of 2020 and Loganair would keep the airport authority informed.

11.Action Summary

TOPIC	ACTION	ACTIONEE
Carried over actions		
Loganair parking plans.	<p>Previous action to review Loganair start-up checks now changed to a review of Loganair operations. This, in light of the changing nature of the Loganair fleet and the parking options that could now be available as a result of those changes.</p> <p>Loganair had been contacted. Contact stands were not being used. Stands 81 & 82 to park Loganair a/c not currently in use and thereby creating additional parking, for other operators, on the Kilo cul-de-sac stands.</p> <p>CLOSED</p>	■■■/Loganair
CCD/CDA	<p>To produce a draft dashboard on airline performance to share with the members for feedback.</p> <p>Training expected on "noise desk" in June with a proposal to be offered</p>	■■■■■

	<p>after that.</p> <p>Trial report on CDAs for Jet2, FlyBe, EZY and TCX to be provided before next meeting for review.</p> <p>Airlines provided with CCD/CDA stats and good feedback received. Consideration to be given to include an AIP entry as per some of the London airports regarding best practice.</p> <p>CAA Aerodrome Inspector, [REDACTED] would be consulted regarding appropriate AIP entry.</p> <p>TUI to also be included in distribution of CCD/CDA airline-specific stats.</p> <p>TUI now have airline-specific stats.</p> <p>[REDACTED] to engage [REDACTED] at CAA regarding the need for an appropriate AIP entry.</p> <p>[REDACTED] to consider filtering Loganair turboprops from collective CCD/CDA stats because of the nature of their operation and the impact on the overall stats.</p> <p>ONGOING</p>	
CLEAR-UP OF EXCESS DE-ICING FLUID AROUND AIRCRAFT ON STAND	<p>Clarify the divisions of responsibility and options for clear-up of excess de-icing fluid on stands. To do through AOA.</p> <p>50/50 split between airports regarding divisions of responsibility between airports and airlines. Either it's mandated or via best efforts.</p> <p>No further update from last meeting.</p> <p>ONGOING</p>	[REDACTED]
AIRLINES ANTI-ICING/DE-ICING POLICY	<p>Airlines to send Anti-Icing/De-Icing policies.</p> <p>Majority received, but some remain to be sent in. Airport to chase.</p> <p>All relevant data now received.</p> <p>CLOSED</p>	ALL

DRONE UPDATE	<p>Provide an update on drones at next meeting.</p> <p>CPNI/DfT recommendations received. Table-top exercise completed involving all appropriate business partners. Important to liaise with Police Scotland and in accordance with overall National Response Plan. Technology also continues to be assessed but it's benefits are not currently proven.</p> <p>Drone signage erected around perimeter with contact details for those observing any drone activity.</p> <p>No specific threat identified from climate activists.</p> <p>ONGOING</p>	
FEEDBACK TO/FROM LOCAL AVIATION ENTHUSIASTS	<p>Ongoing dialogue and feedback with local aviation enthusiasts.</p> <p>Work already carried out by airport with local aviation enthusiasts including a request to report any unusual activity. In return for their greater levels of involvement, access has been granted to areas of the airport campus, previously inaccessible to the enthusiasts. This was all part of building a relationship with the local enthusiasts community and engaging their help and co-operation.</p> <p>Signage considered around the perimeter fence as well, but not drone-specific and more generalized information/reporting request.</p> <p>Engagement with local enthusiasts continues and comms remain very good and worthwhile. Social media involvement with the enthusiasts is proving to be productive and will continue.</p> <p>ONGOING</p>	
NEW ACTIONS		
STOP BAR PHRASEOLOGY IN SAFEGUARDING AND LVPs	<p> to report back to the Flt Ops collective regarding the retention of the current stop bar phraseology.</p>	

LEVEL BUST PREVENTION	<p>■ to provide Level Bust Prevention stats to the Flt Ops collective.</p> <p>■ to investigate possibility of ATCOs submitting safety reports in the event of a prevented level bust, in order to align with airline procedures. NATS central safety team to be consulted for a corporate response.</p>	■
GLASGOW ACP	ACP slide pack to be included in email containing Flt Ops minutes.	■
DVOR RATIONALISATION PRESENTATION	Slide pack to be included in email containing Flt Ops minutes.	■
LOGANAIR	Loganair to keep the airport operator informed regarding current plans for Loganair engineers to carry out E145 engine ground runs.	Loganair
GROUND CONGESTION	■ to issue Operational Notice to controllers regarding minimizing complex conditional pushback instructions during busy cul-de-sac operations.	■