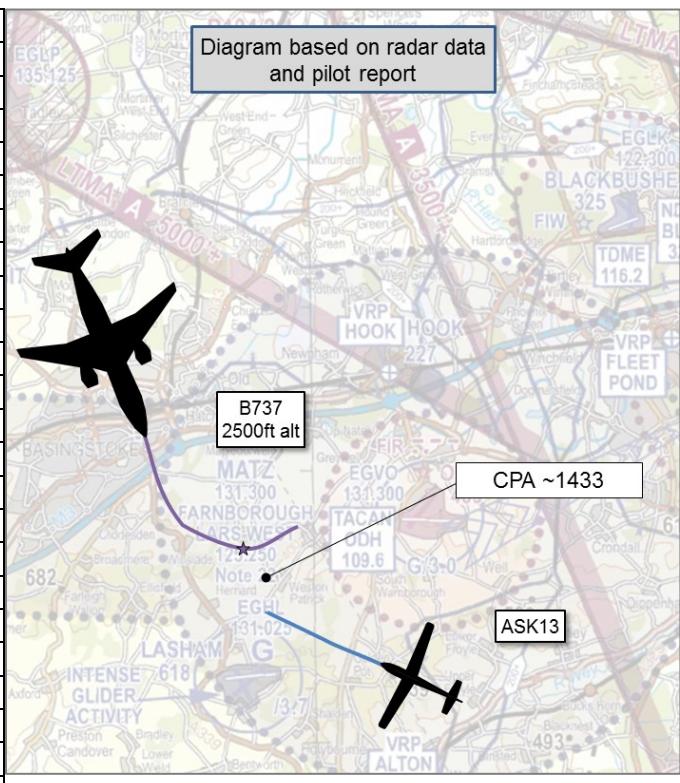


AIRPROX REPORT No 2018162

Date: 27 Jun 2018 Time: ~1433Z Position: 5112N 00100W Location: 1nm NE Lasham

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	ASK13	B737
Operator	Civ Gld	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	IFR
Service	Listening Out	Deconfliction
Provider	Lasham	Farnborough
Altitude/FL	NK	2500ft
Transponder	Not fitted	A, C, S
Reported		
Colours	Red, White	White
Lighting	None	Landing, Nav
Conditions	VMC	VMC
Visibility	>10km	NK
Altitude/FL	2000ft	NK
Altimeter	QFE	QNH (1025hPa)
Heading	300°	060°
Speed	45kt	150kt
ACAS/TAS	FLARM	TCAS II
Alert	None	None
Separation		
Reported	500ft V/1nm H	Not seen
Recorded	NK V/~1nm H	



THE ASK13 PILOT reports that he was turning left when the jet came into his view from the left; he maintained the turn and straightened to fly away from the jet's heading. He had seen a similar aircraft shortly after coming off the tow, estimated 3nm distant and heading easterly. At the time of this sighting his aircraft was in a left turn and he saw the jet passing from left to right heading east or south-eastwards and much closer to him. He made a note of where he was from the ground features.

He assessed the risk of collision as 'Low'.

THE B737 PILOT did not see the glider.

Factual Background

The weather at Farnborough was recorded as follows:

METAR EGLF 271420Z 06012KT 030V100 CAVOK 26/06 Q1025

Analysis and Investigation

UKAB Secretariat

The ASK13 and B737 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. If the incident geometry is

¹ SERA.3205 Proximity.

considered as head-on or nearly so then both pilots were required to turn to the right². If the incident geometry is considered as converging then the B737 pilot was required to give way to the ASK13³.

The ASK13 was not visible on any radar replay available to UKAB, which is not uncommon due to the composition of some gliders and the ASK13 not having a transponder fitted. Whilst the B737 is clearly seen positioning to land at Farnborough, due to the B737 pilot not seeing the ASK13 the B737 pilot did not report an Airprox. This, and the time between the event and the Farnborough controller being asked to submit a report, meant that there was no recollection from the controllers of the incident.

Utilising a combination of the B737 on the NATS radar replay and the ASK13's gps track file, it was possible to determine the location of both aircraft when the Airprox occurred. Shortly before CPA, the Farnborough controller instructs the B737 pilot to turn onto a north-easterly heading as avoiding action against an unknown contact, "possibly a glider". The B737 pilot reports that he has the traffic on TCAS, to which the Farnborough controller repeats that it is possibly a glider and won't be visible on TCAS. When the B737 is clear of the unknown traffic, the Farnborough controller instructs the B737 pilot to turn right and continue with the approach.

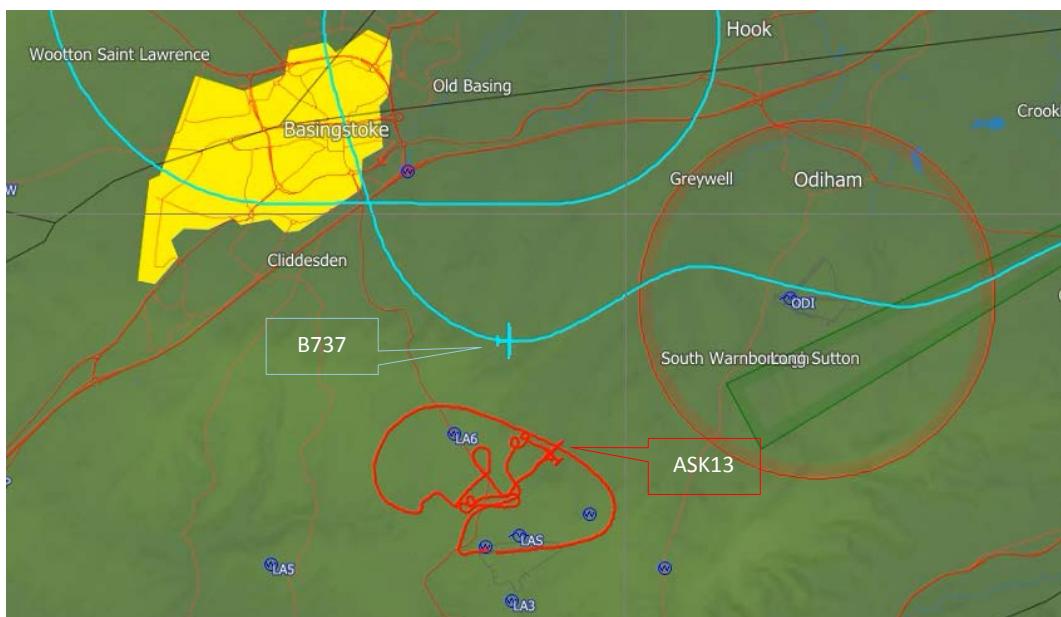


Figure 1: ASK13's track and B737's track

It is not possible to determine whether the unknown conflict was the ASK13, but the conclusion derived from the available information means that it is a high probability that it was the ASK13 that the B737 pilot was instructed to turn to avoid by the Farnborough controller.

Comments

BGA

It is surprising that the 737 was vectored this close to Lasham. This is busy shared airspace that requires vigilance from all parties.

Summary

An Airprox was reported when an ASK13 and a B737 flew into proximity at about 1433hrs on Wednesday 27th June 2018. The VFR ASK13 pilot was listening out on the Lasham frequency, and the IFR B737 pilot was in receipt of a Deconfliction Service from Farnborough.

² SERA.3210 Right-of-way (c)(1) Approaching head-on.

³ SERA.3210 Right-of-way (c)(2) Converging.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, and reports from the appropriate ATC and operating authorities.

The Board began by looking at the actions of the ASK13 pilot. The BGA members commented that the ASK13 pilot was used to seeing aircraft vectored into Farnborough however, in this instance, he may have expected the B737 to be further north-east than it was. Ultimately, the Board noted that the ASK13 pilot had seen the B737 in good time and had manoeuvred to ensure adequate separation was maintained.

The Board then turned to the actions of the B737 pilot. When Farnborough had passed Traffic Information to the B737 pilot he had reported that he had that traffic on TCAS although it was determined that because the ASK13 was not transponding, the B737 pilot had likely mistakenly believed that a different transponding aircraft was the ASK13. Regardless, the controller gave the B737 pilot a turn to avoid the pop-up contact on the radar and this resulted in the B737 turning away from the ASK13 before a conflict ensued.

The Board then looked at the actions of the Farnborough controller. The NATS member said that controllers have the facility to highlight a 3nm area around Lasham on the radar display to assist with situational awareness. He said that the normal route for aircraft inbound to Farnborough that are leaving the airways system is via PEPIS, however most aircraft leave controlled airspace closer to Farnborough to minimise the time spent outside controlled airspace, this generally results in the aircraft requiring vectors to enable them to reduce their height and establish on the ILS for an instrument approach. The GA member wondered why the Farnborough controller had not routed the B737 to the hold to allow the aircraft to lose the height for positioning onto the ILS; the NATS member said that the controller is required to ensure the best route for the aircraft based on a number of factors; noise abatement, fuel efficiency, conflicting traffic. During the debate, some members wondered whether there could be better communications between Lasham and Farnborough so that they could gain mutual awareness of each other's day-to-day operations. The gliding members agreed, and commented that if an aircraft is likely to be vectored for operational reasons outside of the expected route it would be prudent for the Farnborough and Lasham personnel to liaise with each other to ensure that pilots were aware of the possibility of a conflict. Noting the difficulties associated with achieving timely coordination, and with whom, the Board nevertheless resolved to recommend that Lasham and Farnborough liaise to discuss their mutual operations.

The Board then turned to the cause and risk of the Airprox. They agreed that the ASK13 pilot was visual with the B737 at some range, and that the Farnborough controller had appropriately instructed the B737 pilot to turn away from the pop-up traffic, which had effectively increased the separation between the aircraft. The Board therefore agreed that normal safety standards had been attained, and that the incident was probably best described as a sighting report. Turning to the risk, the Board agreed that, at ~1nm separation at CPA, there had been no risk of collision and that this was a benign event; therefore, the Board concluded that the risk was Category E.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A Sighting report.

Degree of Risk: E.

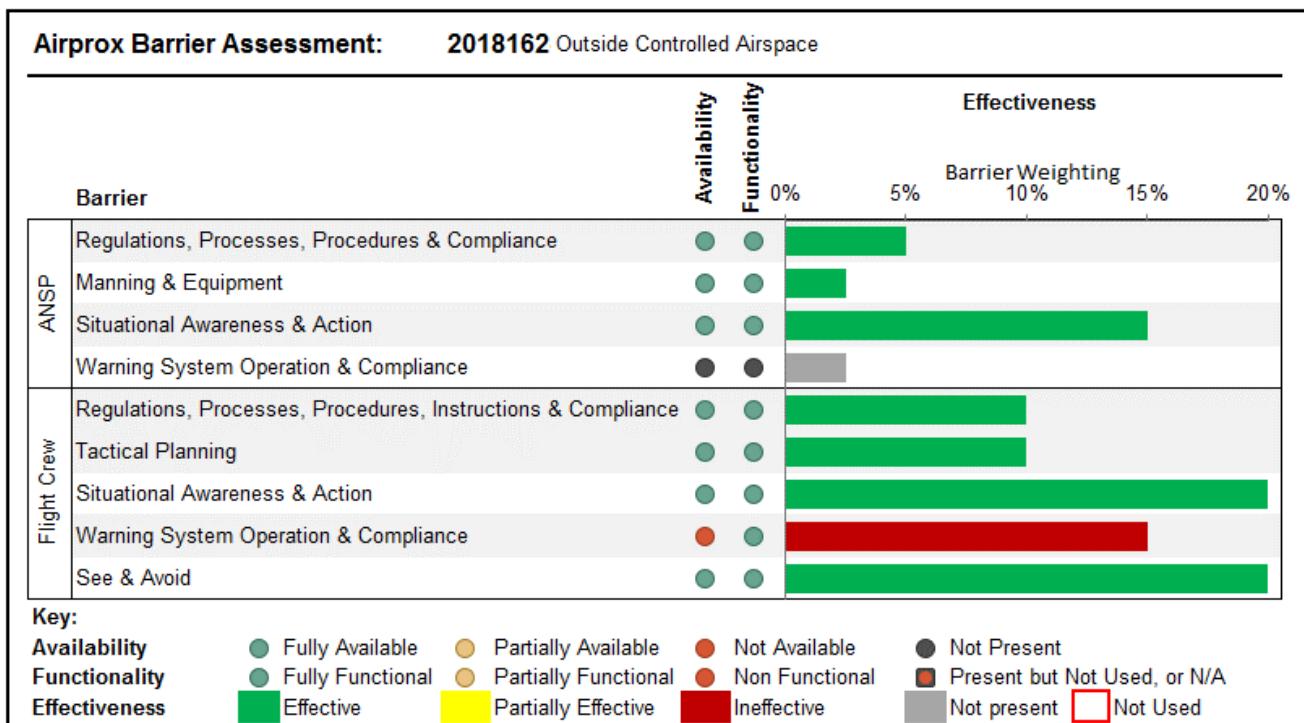
Recommendation(s): Lasham and Farnborough liaise to discuss mutual operations.

Safety Barrier Assessment⁴

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Flight Crew:

Warning System Operation and Compliance were assessed as **ineffective** because the ASK13's FLARM was not compatible with non-FLARM equipped aircraft, and the B737's TCAS II could not detect the ASK13 because it was not responding. This resulted in neither aircrafts' Collision Warning Systems being able to detect the other.



⁴ The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).