AIRPROX REPORT No 2018141

Date: 17 Jun 2018 Time: 1059Z Position: 5517N 00142W Location: Eshott Airfield

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Foxbat	Jabiru
Operator	Civ FW	Civ FW
Airspace	Scottish FIR	Scottish FIR
Class	G	G
Rules	VFR	VFR
Service	None	None
Altitude/FL	NK	NK
Transponder	A, C, S	A, C, S
Reported		
Colours	Blue	White, Blue
Lighting	Strobes, Nav	Anti-Cols, Strobes, Nav, Landing light
Conditions	VMC	VMC
Visibility	>10km	10km
Altitude/FL	20ft	
Altimeter	QNH (1003hPa)	QNH (1004hPa)
Heading	260°	260°
Speed	50kt	70-75kt
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	10ft V/7m H	Not seen
Recorded	NK	

THE FOXBAT PILOT reports that he called on the RT as he approached Eshott airfield, the radio was unmanned, but he was passed the airfield information by another pilot. He was therefore very careful to make sure he made all radio calls at each stage of arrival. He made each call with his callsign, and called final RW26. He heard another pilot also make an initial call and then call downwind and final after him, but he didn't hear the other pilot include 'visual one ahead' or 'number 2' as he would have expected. When on final approach and about to round-out over the numbers, a Jabiru appeared above and slightly ahead of him. It was about 10kts faster and was only about 15ft away when it first came into view. He considered that there was an immediate threat of direct collision and was also concerned about wake turbulence, so he made a gentle turn to the left and, once clear of the threat of clipping the wing-tips, initiated a go-around with full-power climb into the circuit. He then flew another circuit and landed without incident. On taxying in to the parking area another pilot approached his aircraft and offered his details as a witness, some other Foxbat pilots had also arrived just before him and could verify the RT calls, although were parking when the incident occurred. After go-around and climbing into the crosswind leg, he had stated on the radio that he considered an Airprox had taken place. However, as he taxied into the parking area the Jabiru pilot was moving his aircraft into the hangar and quickly locked up and drove off.

He assessed the risk of collision as 'Very High'.

THE JABIRU PILOT reports that he was receiving a service from Newcastle radar and switched the radio to dual-watch function to listen in to Eshott radio and noted there was traffic present. On leaving the Newcastle zone, they informed him that there appeared to be traffic in the Eshott area and he switched frequency to Eshott Radio. With approximately 8nm to run he called and requested airfield information and received no reply. He listened to the circuit traffic, believed that there were two pilots making blind radio calls, and established that RW26 was in use. At 5nm he made a blind call that he was inbound and noted transmissions from other pilots in the final stages of the circuit and landing; the radio then went silent with no further transmissions received until after landing. He approached the

overhead and noted several aircraft movements on the ground but believed he was the only aircraft in the circuit, so he decided to fly a tight circuit to monitor ground movement and avoid the noise-sensitive areas and the live-shooting site. He descended deadside, reduced speed and altitude, and turned crosswind (avoiding the live-shooting site), then turned downwind, made the downwind call and completed checks. He turned final and made an uneventful landing. During taxying he heard a transmission 'going around' and something along the lines of 'that was an Airprox'. During all stages of the circuit he had maintained lookout in all directions and at no point did he see or hear another aircraft in the circuit. He noted that he had a new 8.33 EASA approved radio fitted in Oct 2017, that it had no history of malfunction, and that he was very familiar with Eshott and its noise-avoidance and live-shooting areas.

Factual Background

The weather at Newcastle was recorded as follows:

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METAR EGNT 171050Z 26012KT 9999 SCT028 16/08 Q1010=
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Analysis and Investigation

UKAB Secretariat

The following screenshots were taken from the NATS radars. At Figure 1, the Jabiru is joining the circuit from the south; two aircraft appear to be in the circuit, the Foxbat is crosswind and another aircraft is on finals. By 1058:11, Figure 2, the Foxbat is turning onto base and the Jabiru is turning crosswind. At 1059:42 (Figure 3), the Foxbat is on finals and the Jabiru is turning base. Shortly afterwards, the Foxbat disappears from radar cover, but the Jabiru can be seen at 400ft on finals.

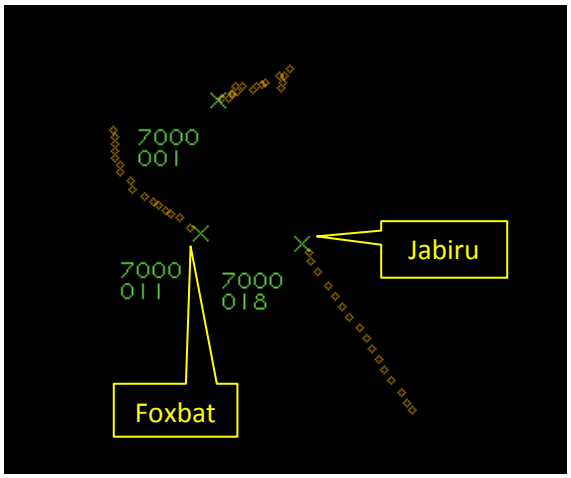


Figure 1: 1056:07

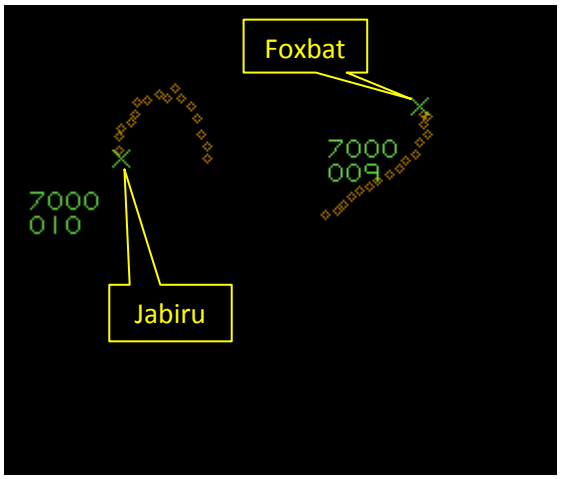


Figure 2:1058:11

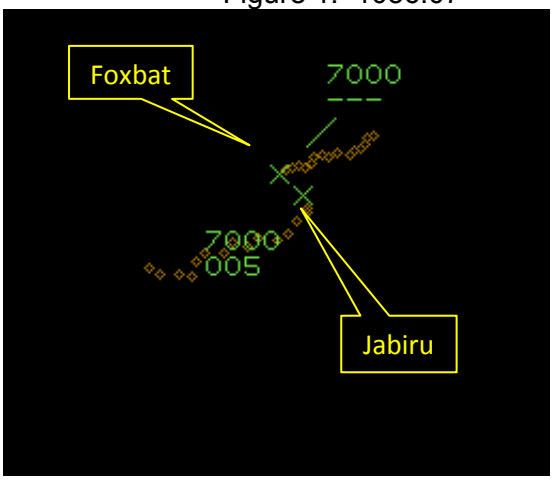


Figure 3: 1059:42

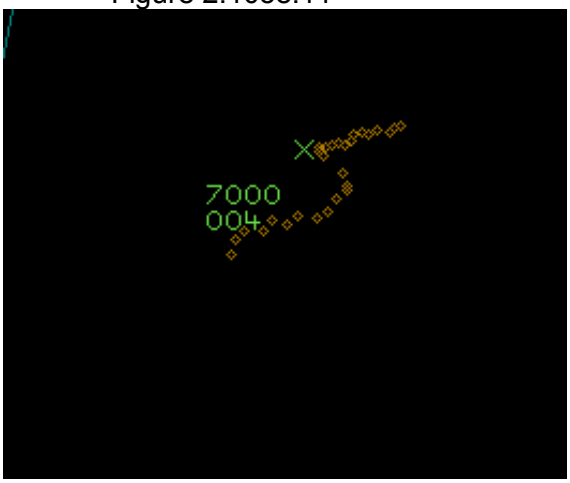


Figure 4:1059:53

The Foxbat and Jabiru pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard[1]. An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation[2]. Additionally, SERA 3210 states:

(4) Landing. An aircraft in flight, or operating on the ground or water, shall give way to aircraft landing or in the final stages of an approach to land.

(i) When two or more heavier-than-air aircraft are approaching an aerodrome or an operating site for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in front of another which is in the final stages of an approach to land, or to overtake that aircraft.

Summary

An Airprox was reported when a Foxbat and a Jabiru flew into proximity on finals in the Eshott visual circuit at 1059hrs on Sunday 17th June 2018. Both pilots were operating under VFR in VMC.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft and radar photographs/video recording.

The Board first looked at the actions of the Foxbat pilot. Members noted that he had joined the visual circuit at Eshott and had made blind information calls because the Air to Ground frequency was not manned. Although he heard the Jabiru pilot had joined the circuit, he expected that the other pilot would be able to hear his calls and continued to fly his circuit accordingly. When on finals he saw the Jabiru pass over the top of him and he executed a go-around.

For his part, it was clear to the Board that the Jabiru pilot had unfortunately not assimilated the calls made by the Foxbat pilot ahead in the visual circuit. Although he was aware that there had been other aircraft in the circuit, by the time he joined, he thought the circuit was clear. He then flew a tight visual circuit and came into conflict with the Foxbat on finals, although he did not see it. GA members commented on the dangers of flying non-standard circuits, especially tight circuits, because, as in this incident, doing so puts the aircraft in an unexpected position that may deny them, and other pilots, the opportunity to see other aircraft that they might not be aware of simply because they are not in the area normally associated with the standard circuit position; tight circuits also demand greater attention to aircraft handling, which can be to the detriment of lookout and listen-out. Even when normal circuit patterns are flown, this Airprox highlighted the need to be vigilant in the visual circuit when there is no ATC or A/G operator to pass Traffic Information, even if the circuit is believed to be clear. An absence of RT does not indicate the circuit is clear, and there is always the possibility of a non-radio aircraft (or one with a radio failure), being in the pattern, so good look-out must be maintained at all times, including looking below-ahead and up the final approach path before turning onto finals.

Turning to the cause of the Airprox, the Board quickly agreed that the Jabiru pilot had been required to integrate with the traffic already in the visual circuit and had not done so. The risk was assessed as Category A, there had been a serious risk of collision because neither pilot had seen the other before the Airprox, no avoiding action had been taken and, at the reported 10-15ft separation, it was clear that providence had played a major part in collision avoidance.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Jabiru pilot did not integrate with the Foxbat, already in the visual circuit.

Degree of Risk: A.

[1] SERA.3205 Proximity.
[2] SERA.3225 Operation on and in the Vicinity of an Aerodrome.

Safety Barrier Assessment[3]

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

ANSP:

Manning and Equipment were assessed as **not used** because although Eshott sometimes provides AGCS at the time of the Airprox the radio was not being manned at the time.

Situational Awareness and Action were assessed as **not used** because there was no-one available to provide situational awareness to the pilots.

Flight Crew:

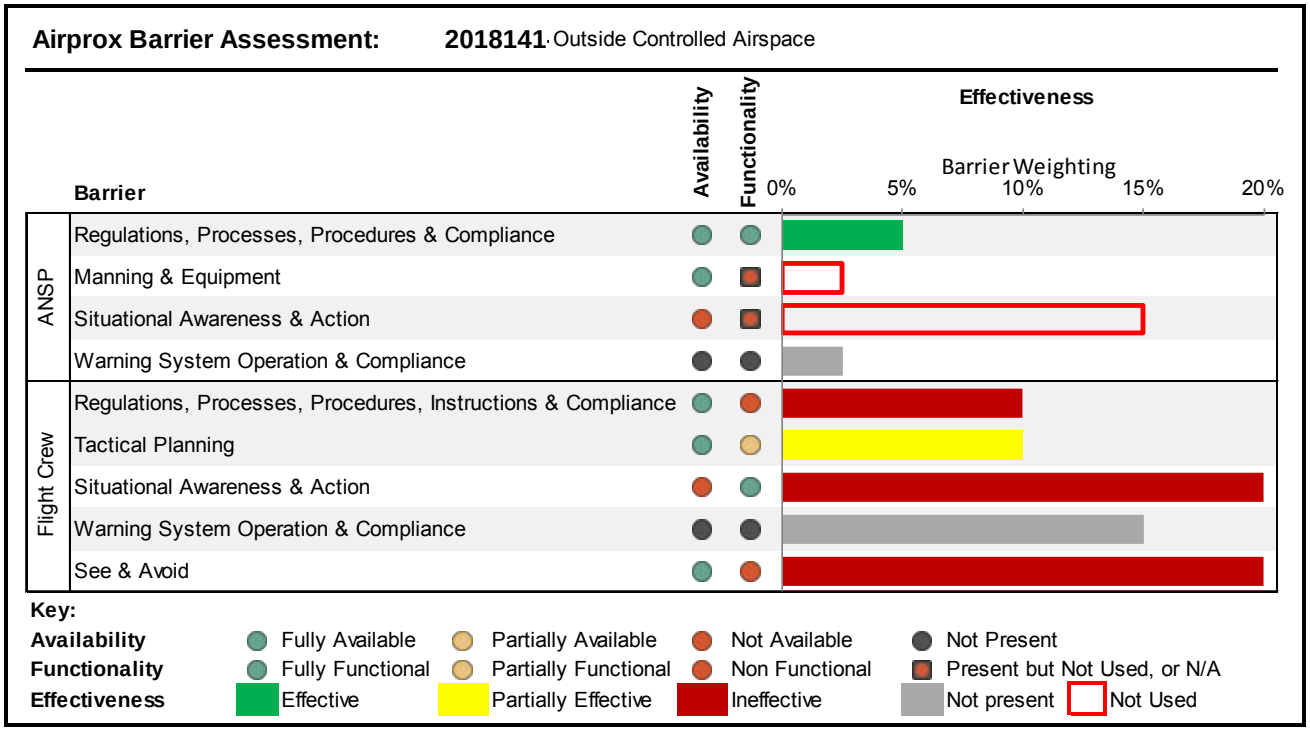
Regulations, Processes, Procedures, Instructions and Compliance were assessed as **ineffective** because the Jabiru pilot did not integrate with the Foxbat in the visual circuit.

Tactical Planning was assessed as **partially effective** because the Jabiru pilot flew a non-standard, tight visual circuit which likely sapped his capacity to also lookout effectively.

Situational Awareness and Action were assessed as **ineffective** because the Jabiru pilot was not aware of the Foxbat in the circuit.

Warning System Operation and Compliance were assessed as **not present** because neither aircraft was fitted with a CWS.

See and Avoid were assessed as **ineffective** because the Jabiru pilot did not see the Foxbat, and the Foxbat pilot could only take emergency action after CPA.



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