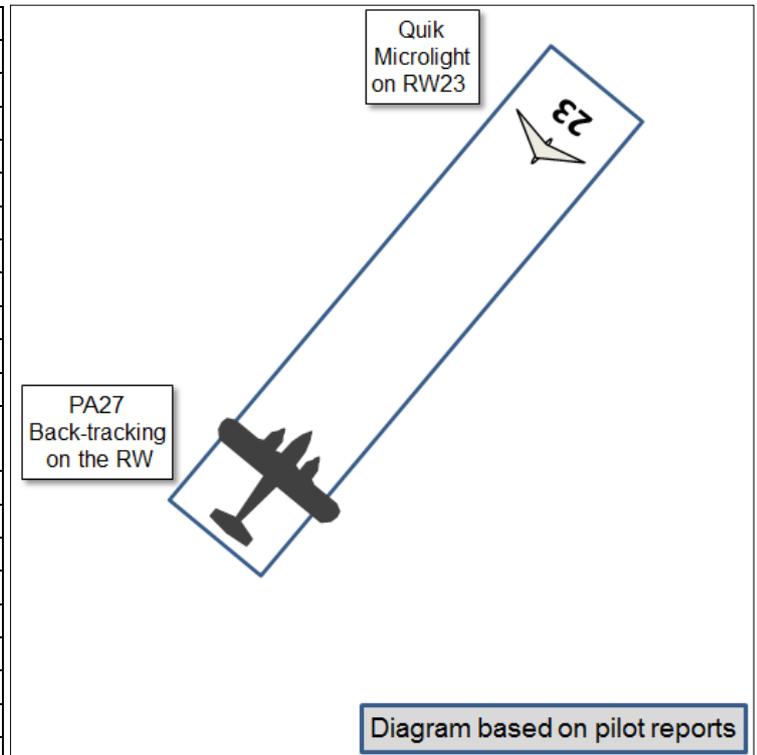


AIRPROX REPORT No 2017226

Date: 26 Aug 2017 Time: 1500Z Position: 5039N 00110W Location: Sandown

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	PA27	Quik 912
Operator	Civ Pte	Civ Pte
Airspace	Sandown RW	Sandown RW
Class	G	G
Rules	VFR	VFR
Service	AGCS	AGCS
Provider	Sandown	Sandown
Altitude/FL		
Transponder	A, C, S	Not fitted
Reported		
Colours	White, Red, Blue	Red, White
Lighting	Strobes, Beacon, Landing, Taxi	
Conditions	VMC	VMC
Visibility		
Altitude/FL	On Runway	On Runway
Altimeter		
Heading	230°	
Speed	5kt	
ACAS/TAS	Not fitted	Not fitted
Separation		
Reported	100ft V/40ft H	Not seen
Recorded	NK	



THE PA27 PILOT reports that RW23 was in use at Sandown. Due to the taxiway conditions, he had to backtrack on the runway from his parking location at the 05 end of the runway. They alerted the A/G operator to this when they started up, and they in turn alerted all other stations that an aircraft was about to backtrack on the runway. The PA27 pilot made the appropriate call as he entered the active at the 05 end for a full length backtrack, this was acknowledged by the A/G operator, who again informed all other aircraft. When he was about halfway down, the pilot saw an aircraft on the northern taxiway heading towards the 23 hold. Without any pause, or radio call, the aircraft entered the runway and proceeded to take-off, heading straight towards the PA27. Fortunately, there was an exit point nearby and he was able to rapidly pull off the runway. The microlight passed very close, and answered when asked for their callsign, suggesting that their radio was working.

He assessed the risk of collision as 'High'.

THE QUIK PILOT reports that she was not aware of the incident at the time. She was taking off from RW23 and noted that it is on a slope so that anyone entering the runway is dependent upon listening out on the frequency to ensure the runway is clear. She was sure that she called 'ready for departure' and would have expected the tower to have told her if something was on the runway. Certainly she was unaware that anything was back-tracking and, given that there are two good taxiways, was surprised that anyone was. She was concerned that she may have missed something but she noted that the Quik did not need much space to take-off and she would have been at 400ft by the end of the runway.

THE A/G Operator reports that the PA27 was backtracking the runway due to weight restrictions and so they had requested that all aircraft hold until the PA27 had finished; however, the microlight pilot took-off as the PA27 was about halfway along the runway. The PA27 pilot asked the microlight pilot

their intentions, but got no reply. The PA27 pilot was able to vacate the active via an access point to the northern taxiway.

THE SANDOWN MANAGER reports that it had been a busy weekend due to a microlight rally, with approx. 300 visiting microlights, as well as other visiting GA. They would normally expect to have some non-radio aircraft, but there was even more than normal during the event. The hold point at RW23 is on a downward slope which makes it difficult to see aircraft lining up from the other end of the airfield, therefore back-tracking is something that should be carefully considered, and both taxiways were open on this day. However, the PA27 crew are long-standing residents with full awareness of the airfields blind-spots and traffic events. The runway is 40m wide, which gives a large safety margin when compared with standard 23m runways. Sandown radio is AGCS only and therefore the A/G Operators are not able to give instructions.



Factual Background

The weather at Southampton was recorded as follows:

METAR EGGH 261450Z 23004KT 190V280 9999 FEW040 23/11 Q1016

Analysis and Investigation

UKAB Secretariat

The PA27 and Quik pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹.

Summary

An Airprox was reported when a PA27 and a Quik came into proximity at 1500 on Saturday 26th August 2017. Both pilots were on the ground, the PA27 backtracking on the runway and the Quik taking off from RW23.

¹ SERA.3205 Proximity.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from the pilots of both aircraft and reports from the A/G Operator involved.

The Board first looked at the actions of the PA27 pilot. He had decided to back-track along the runway, had told the A/G Operator of his intentions, and heard the A/G Operator broadcast it to the circuit. Noting that it was a busy weekend at Sandown with a microlight fly-in (some of which might well be non-radio), some members wondered whether the decision to back-track was the best option but, without knowing the actual airfield conditions, it was difficult to come to any conclusion. Notwithstanding, members agreed that the PA27 pilot was entitled to do so, had made all the correct calls, was listening out on the frequency, had heard the broadcast to other pilots, and had obviously continued to look-out for other aircraft because he saw the Quik pilot rolling despite not hearing its pilot call for departure. By good fortune, the PA27 pilot was close enough to a runway exit to be able to clear the runway. The Board concluded that it was undoubtedly his actions that stopped the encounter from being much more serious than it actually was.

For her part, the Quik pilot thought she had called ready for departure and hadn't been aware of the A/G operator's calls about the PA27 backtracking. Without an R/T transcript it was not possible for the Board to comment, but it seemed that either her radio was not functioning at the time, or the A/G transmissions and her calls were blocked for some reason (the PA27 pilot, who could hear the A/G operator, did not hear her call). Members who were familiar with Sandown confirmed that it was difficult to see the far end of the runway from the 23 threshold due to the downward slope of the runway, and so she might not have seen the PA27 backtracking. Notwithstanding, the onus was on her to make sure the runway was clear before taking off. Noting her comments that she would have expected 'the tower' to inform her if anything was on the runway, members were keen to point out that Sandown has only an A/G Operator, not ATC. A/G operators are not required to monitor the airfield (indeed, some may be located in positions without a view of the airfield), cannot give instructions, and pass information based primarily on reports made by other pilots. The pilots remain responsible for the safe conduct of their flights.² In this case, the A/G operator had already made a broadcast about the back-tracking PA27, (which was heard by the PA27 pilot) and, in the absence of receiving a 'taxy' or 'ready for departure' call from the Quik pilot to make him aware of the Quik pilot's intentions, had therefore discharged their duty. Notwithstanding, some members noted that in this case the A/G operator was positioned in a ATC tower, and they thought that he might have seen the Quik lining-up on the runway and been able to make a call. However, they conceded that this was predicated on him actually seeing the Quik in what was clearly a busy ground environment.

In determining the cause, the Board swiftly agreed that the Quik pilot had departed on the runway already occupied by the back-tracking PA27. In assessing the risk, some members thought that, given the wide runway and the fact that the Quik would have been airborne in a relatively short space of time, safety had been degraded but there was no actual risk of collision. Others thought that two aircraft using the same runway in opposition to each other was inherently more dangerous than that whatever the circumstances, and that this was Category B risk, safety much reduced below the norm. The Chairman put it to a vote and the latter opinion prevailed.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: The Quik pilot departed on the runway already occupied by the back-tracking PA27.

Degree of Risk: B.

² CAP 413 'Radiotelephony Manual' paras 4.147 to 4.149.

Safety Barrier Assessment³

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

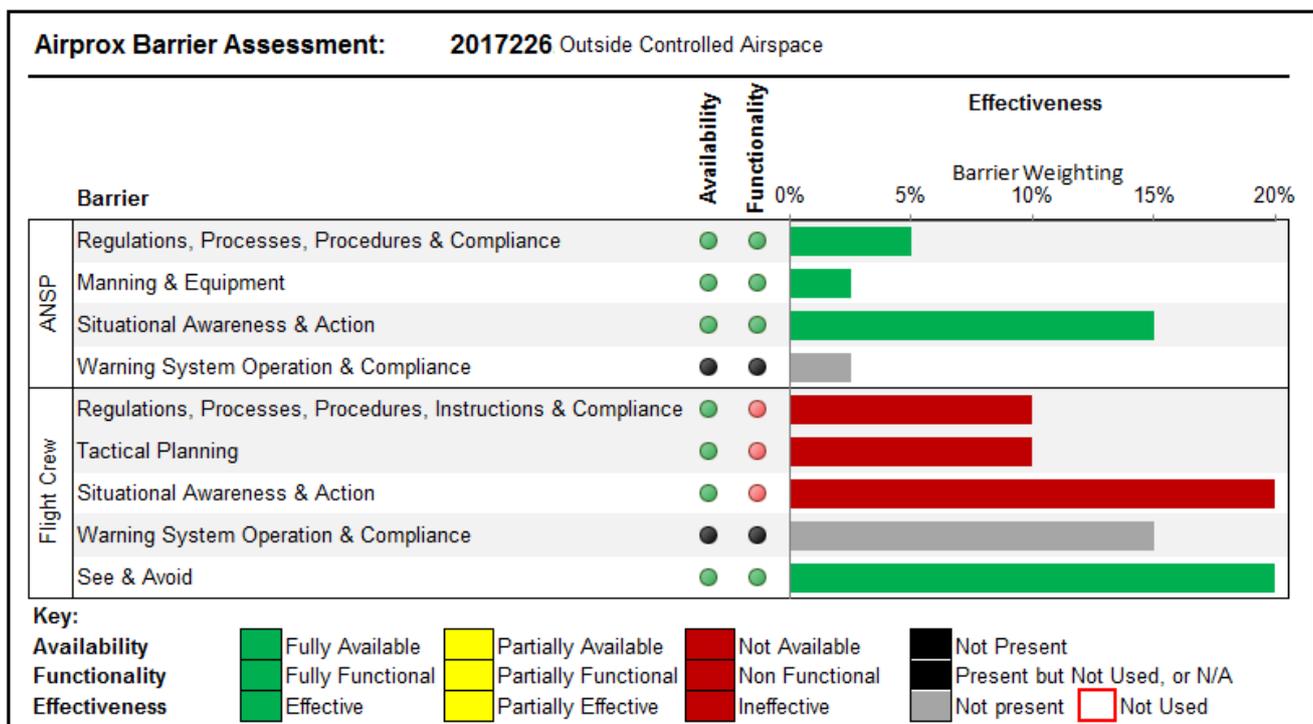
Flight Crew:

Regulations, Processes, Procedures, Instructions and Compliance were assessed as **ineffective** because the Quik pilot departed with another aircraft back-tracking on the runway.

Tactical Planning was assessed as **ineffective** because the Quik pilot did not ensure that the runway was clear before take-off.

Situational Awareness and Action were assessed as **ineffective** because the Quik pilot did not hear the blind broadcasts made by the A/G operator, and the PA27 was not aware that the Quik was going to depart until it started its take-off roll.

Warning System Operation and Compliance were not present in either aircraft.



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