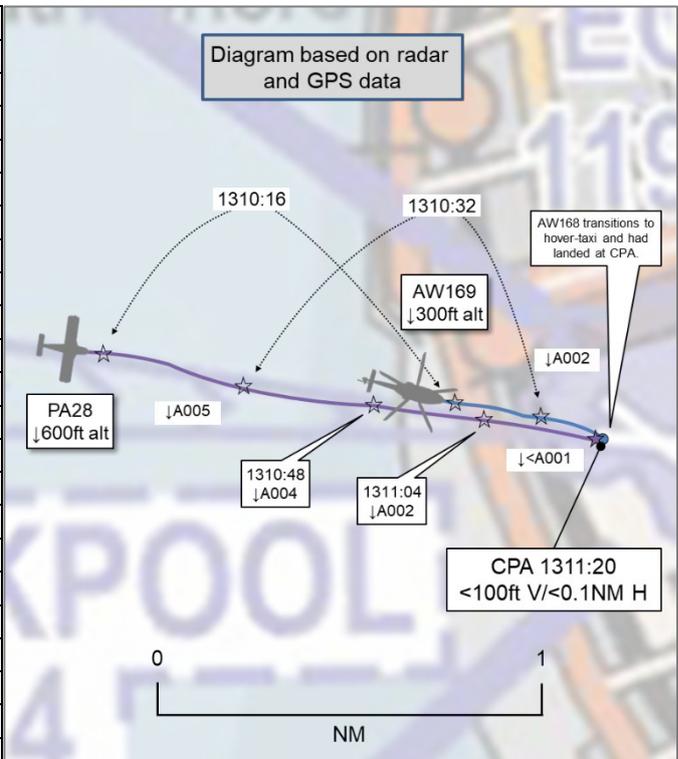


**2022AIRPROX REPORT No 2022005**

Date: 18 Jan 2022 Time: 1311Z Position: 5346N 00303W Location: Blackpool RW10

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

Recorded	Aircraft 1	Aircraft 2
Aircraft	AW169	PA28
Operator	Civ Comm	Civ FW
Airspace	Blackpool ATZ	Blackpool ATZ
Class	G	G
Rules	VFR	VFR
Service	ACS	ACS
Provider	Blackpool Tower	Blackpool Tower
Altitude/FL	On ground	<100ft
Transponder	A, C, S	A, C, S
<b>Reported</b>		
Colours	Yellow	White, Blue
Lighting	"All on"	Nav, Strobe
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	NR	1000ft
Altimeter	QNH (NK hPa)	QFE (1036hPa)
Heading	100°	100°
Speed	Reducing to hover	75kt
ACAS/TAS	Other	TCAS I
Alert	N/A	None <sup>1</sup>
<b>Separation at CPA</b>		
Reported	30ft V/300m H	300ft V/0.5NM H
Recorded	<100ft V/<0.1NM H	



**THE AW169 PILOT** reports that, in VMC, [they were] approaching Blackpool from the west and were at 550ft for a straight in approach to RW10. A private, small, piston aircraft (Cherokee?), was close behind, turning right base to final. [They opined that] the private aircraft pilot seemed to give them no space for slowing down to land. When wheels touched on the ground, pilot monitoring looked around to see proximity of aircraft and saw it was at about 30ft from touch-down and a range of 300m. Pilot monitoring would have called on radio for fixed wing to go-around but ATC got there first and instructed the aeroplane to go-around. At the time, the airfield was fairly busy and they think there were 4 aircraft in the circuit.

The pilot assessed the risk of collision as 'High'.

**THE PA28 PILOT** reports that they were told to report final which they did. They had extended to a 3.5NM final to give some space from the helicopter and they told ATC that they were on final with the helicopter in sight. They were told to continue their approach and expect a late [landing] clearance. They continued and, at about 1.5NM, another pilot came over the radio with excessive RT. The helicopter was over the runway hovering, it turned left as if it was going to vacate on to RW31 then it did a 180° turn to the right to face the approach. By this time they were at 1/2NM and at 300ft. They opted to go-around, selecting full power. They moved to the right and got rid of their drag flap and as they did this the controller asked them to go-around. They replied [that they were going-around], started climbing away and selected gear up then cleaned their aircraft up. They took up orbits at the start of the downwind leg as instructed. Upon landing they rang ATC to speak to the controller who was happy with their actions.

The pilot assessed the risk of collision as 'None'.

<sup>1</sup> An alert had not been generated however the system had been displaying the AW169.

**THE BLACKPOOL AERODROME CONTROLLER** reports that they were operating as the combined Aerodrome and Approach controller during the time of the incident. The [AW169] helicopter pilot was on a straight-in approach RW10, number 1, they were VFR. The PA28 pilot, also VFR, was transferred to them by Warton LARS in the vicinity of St Anne's Pier. They told the PA28 pilot they were number 2 to the helicopter. [The PA28 pilot] told them that they couldn't see the helicopter it but did have it on their TCAS and were widening out. They asked the helicopter pilot their range and gave the PA28 pilot further Traffic Information. [The PA28 pilot] again stated that they couldn't see the helicopter but were widening out. They advised the helicopter pilot that there was traffic joining from the south that would be positioning behind them. They were continually visual with both aircraft and happy that there was good separation between them. They cleared the helicopter to land and asked them to vacate at Delta to hold D1, which they read back. They believe that they then asked the PA28 pilot for a position report. [The PA28 pilot] reported turning onto final and [the controller] asked them if they were visual with the helicopter, they stated that they were. The PA28 pilot then called on final. They told them to continue approach and expect a late landing clearance. The helicopter was on, or very close to, the ground but had not vacated. They turned around to look at their circuit traffic (the circuit is behind the controller at Blackpool). When they looked back, the PA28 was over the houses, which are outside the airfield boundary. The helicopter was still on the runway and appeared to have turned right and the nose was pointing to the southwest. They were concerned by this because their instructions were to vacate to the left. They instructed the PA28 pilot to go-around and observed them initiating this well before the threshold. They also observed [the PA28] making a good rate of climb above the traffic on the ground. The PA28 pilot advised on the RT that they were going-around well before they had issued the instruction. [The PA28 pilot] later phoned the Tower to state that their turbo engine has about a 15sec lag once power is applied and to restate that they were going-around over the sand dunes which are before the houses outside the airfield boundary. This statement was corroborated by ATC staff who were out on the airfield, who stated that prior to the go around instruction the PA28 pilot had their gear up and was initiating the go-around well before the threshold. The staff on the airfield also informed them that they saw the helicopter turn right rather than left and face to the southwest. At no time did they consider that safety was impacted. The distance between the Delta intersection, where the helicopter was on the ground, and the RW10 threshold is in excess of 500m.

## Factual Background

The weather at Blackpool was recorded as follows:

METAR EGNH 181250Z 17005KT 9999 FEW026 05/04 Q1035

METAR EGNH 181320Z 15006KT 9999 FEW026 05/04 Q1034

## Analysis and Investigation

### CAA ATSI

The AW169 was inbound to Blackpool from the west and the PA28 was inbound to Blackpool from the south. Both pilots were operating VFR and in receipt of an Aerodrome Control Service from Blackpool ATC.

The Blackpool controller was operating in a combined Aerodrome and Approach non-radar configuration. The RTF loading was relatively low when the AW169 made their initial inbound call, however the RTF loading increased substantially in the lead-up to the Airprox, and from **1307:00** onward was almost continuous, with the controller having to repeat several instructions to illicit responses from some pilots, and some pilots stepping on each other's transmissions. In the interests of brevity only the RTF from the two aircraft involved has been included in this report.

ATSI had access to reports from the pilots of both aircraft and from the Blackpool controller. The Area radar recording, and the Blackpool RTF were reviewed for the relevant period. Screenshots in this report have been taken from the Area radar recording. No investigation report has been received from Blackpool Unit Management; however, they have provided a video of the event, taken from a stationary vehicle, on the Airfield at the time of the event.

At **1304:10** the AW169 pilot made their initial call to Blackpool Tower and requested join, with 9NM to run. The controller instructed the pilot to make a straight-in approach to RW10 and report 5NM to run, the pilot was advised that the circuit was active left-hand with a fixed-wing aircraft.

At **1306:50** the AW169 pilot reported approaching 5NM and was instructed to continue approach.

At **1307:20** the AW169 pilot was passed the surface wind and instructed, *“RW10 cleared to land, and after landing vacate left at Delta, hold at Delta one.”* The pilot readback, which was slightly muffled, was incorrect, the pilot read back, *“cleared to land 10, and vacate right, to hold at Delta one.”* The incorrect readback was not picked up by the controller. (Figure 1)

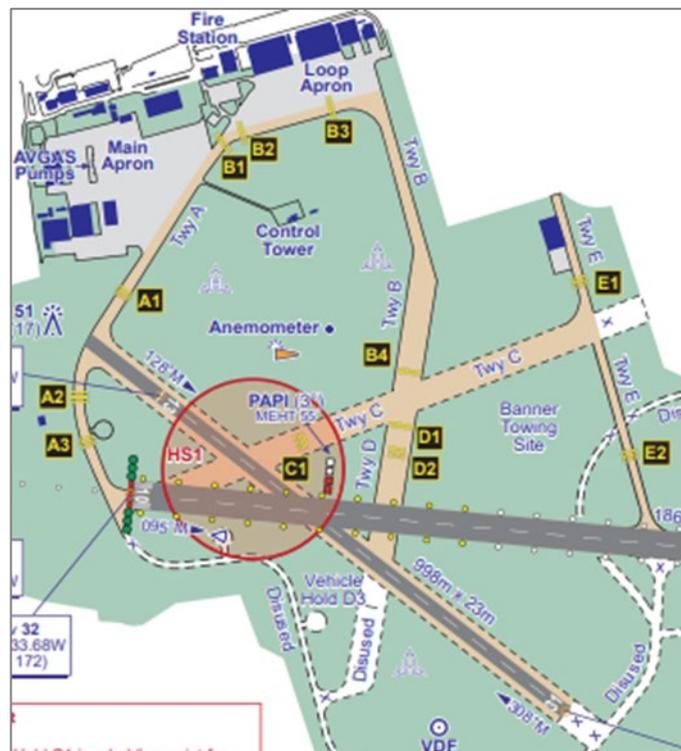


Figure 1 - RW10 exits and holding points

At **1307:30** the PA28 pilot made their initial call to the Blackpool controller and advised that they were at St Anne's Pier inbound. The QNH was passed, transponder code 0450 was allocated, and the pilot was advised that they would be number 2, following an AW169 on a 3NM final. The controller asked the pilot if they had the AW169 traffic in sight. The pilot responded, *“no, I have it on TCAS, I'll go wide.”* The pilot was instructed to report final number 2. This was read back correctly by the pilot.

At **1308:10** Traffic Information was then passed to the AW169 pilot, *“traffic approaching St Anne's Pier is going to position behind you, it's a Cherokee.”* The AW169 pilot advised that they were looking for the traffic. The controller asked the AW169 pilot for their range and the pilot responded with 3NM. The controller turned their attention to the PA28 pilot and said *“[PA28 c/s] you should be able to see that traffic now, out to the west it's got its light on, it's quite clear, just approaching 3 miles.”* The pilot responded, *“not visual but we do have it on TCAS.”* (Figure 2).

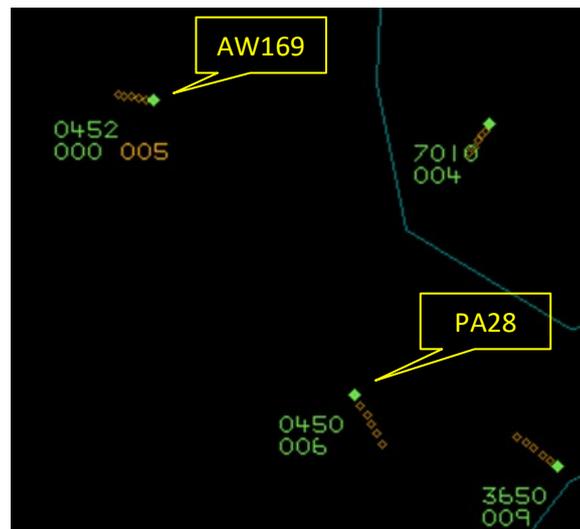


Figure 2 – 1308:10

The controller turned their attention to other aircraft, pilots were stepping on each other's transmissions at this point and the controller spent some time obtaining the required information from all of the relevant pilots.

At **1309:30** the controller advised the PA28 pilot that they had them in sight and asked if the pilot was visual with the helicopter. The pilot responded with "affirm". The pilot was instructed to report final number 2. This was read back correctly by the pilot. (Figure 3)

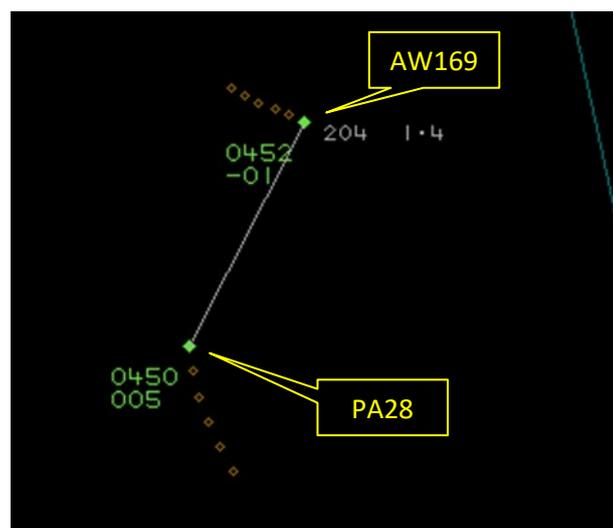


Figure 3 – 1309:30

The controller turned their attention to other aircraft.

At **1310:30** The PA28 pilot reported "final, visual with the helicopter" and was instructed to "continue approach, it will be a late landing clearance." The pilot read back, "continue approach."

The controller turned their attention to other aircraft.

At **1310:44** the radar replay indicated distances of 0.6NM horizontally and 200ft vertically between the two aircraft. The AW169 radar contact faded from the radar immediately after this screenshot was taken (Figure 4).

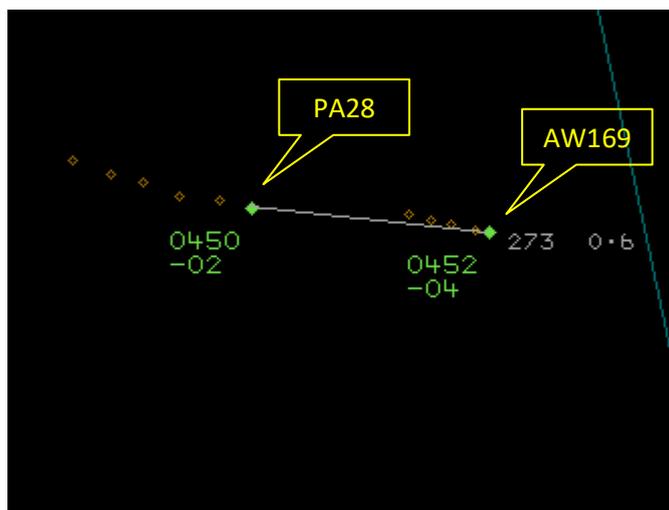


Figure 4 - 1310.44

At **1311:20** the controller issued go around instructions to the PA28 pilot, *“go-around, I say again go-around acknowledge.”* The pilot acknowledged with their callsign.

At **1311:40** the controller instructed the AW169 pilot, *“left at delta, all the way to the pad, delta bravo.”* This was read back correctly and the pilot advised the controller that they would like to raise a report. The controller responded with roger. The pilot asked for the full callsign of the Cherokee and the controller advised that they would get back to the pilot after they had sorted the rest of the traffic out.

The controller then turned their attention to other traffic.

At **1312:40** the PA28 pilot was instructed to take up orbits at the beginning of the downwind leg.

At **1312:50** the PA28 pilot advised the controller that they had already broken of the approach before receiving the instruction to go around. The controller responded that they would discuss it later and instructed the pilot to keep orbiting.

When the controller passed the first set of Traffic Information to the PA28 pilot, the pilot advised that they did not have the AW169 in sight but had it on TCAS and advised that they would go wide to accommodate the AW169. When passing reciprocal Traffic Information to the AW169 pilot the controller advised them that the PA28 would be positioning behind them. The AW169 pilot reported sighting the PA28 when it was on base leg. When the second set of Traffic Information was passed to the PA28 pilot, the pilot advised that they still did not have the AW169 in sight but still had it on TCAS. The frequency then became very busy with some pilots stepping on each other's transmissions and the controller attempting to establish who was calling and dealt with each one in turn.

At **1309:30** the PA28 pilot confirmed that they had the AW169 in sight, the AW169 was 1.4NM to the northeast of the PA28 at this point. The PA28 pilot was instructed to report final and advised that they were number 2, (Figure 2). The controller reported continuously having both aircraft in sight and being happy with the separation between them. One minute later the PA28 pilot reported final with the AW169 in sight and was instructed to continue approach and expect a late landing clearance. The PA28 was just over 0.6NM behind the AW169 at this point. The radar contact of the AW169 faded 14 seconds later and at **1311:20** the controller issued go-around instructions to the pilot of the PA28. The PA28 pilot indicated in their report that they had already commenced the go-around before receiving the instructions from the controller. This was confirmed by the staff in the vehicle, who reported that they saw the landing gear on the PA28 being retracted before the go-around instructions were issued.

The AW169 pilot had been instructed to vacate the runway left at Delta and hold at Delta 1 and the pilot readback vacate right at Delta and hold at Delta 1. The incorrect readback was not picked up by the controller. The PA28 pilot reported seeing the AW169 when they were on 0.5NM final and the AW169 was hovering over the runway in a left turn as if to vacate to the left onto Delta, but subsequently turned to the right and remained on the runway. The controller also reported this series of events.

Two sets of timely and accurate Traffic Information were passed to the PA28 pilot, and this enabled the pilot to gain visual contact on the AW169 when there was 1.4NM between the two aircraft. The Traffic Information passed to the AW169 pilot made the pilot aware that the PA28 would be following them on final approach. The AW169 pilot reported having the PA28 in sight when it was on right base.

The incorrect readback by the AW169 pilot of the instructions to vacate the runway were not picked up by the controller and the pilot initially turned in the wrong direction when attempting to vacate. This is likely to have taken the PA28 pilot and the controller by surprise and resulted in a delay in the helicopter vacating the runway. The PA28 pilot appears to have taken timely go-around action and this was followed by the controller issuing them with go around instructions. This is normal operations at busy GA Airfields.

Blackpool Unit Management is reminded of its obligations under Regulation (EU) 376/2014 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018, Article 4, paragraphs 6(d) and 7, to submit a mandatory occurrence report, within 72 hours of when they are first made aware of an occurrence, and to conduct an analysis of the occurrence, in order to identify any safety hazards, followed by submission of follow up reports, in accordance with the 30 day and 3 month timescales contained in Article 11 of the regulation.

### **UKAB Secretariat**

Both of the aircraft had been visible on the NATS radar replay until **1110:44**, after which point the return from the AW169 had faded, however GPS data has been obtained that enabled both the AW169 and the PA28 to be tracked to the point at which the PA28 climbs following the pilot's go-around, which is coincidental with CPA. This data has been used to produce the above diagram and determine CPA.

The AW169 and PA28 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.<sup>2</sup> 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.<sup>3</sup>

### **Summary**

An Airprox was reported when a AW169 and a PA28 came into proximity at Blackpool RW10 at 1311Z on Tuesday 18<sup>th</sup> January 2022. Both pilots were operating under VFR in VMC, both pilots were in receipt of an ACS from Blackpool Tower.

### **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data and reports from the air traffic controllers involved. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

The Board discussed this event and were satisfied that there had been no risk of collision. Members' focus then turned to whether or not there had been a degradation in safety and it was agreed that it is

<sup>2</sup> (UK) SERA.3205 Proximity.

<sup>3</sup> (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

not an unusual event for aircraft at busy GA airfields to have to go around due to the runway being occupied. Members also agreed that, whilst they appreciate why the AW169 pilot had intended to ask the PA28 pilot to go around, in this instance it would have been better for the AW169 pilot to focus on vacating the runway however, members were satisfied that normal safety standards and parameters had pertained and, as such, the Board assigned Risk Category E.

Members agreed on the following contributory factors:

- CF1.** The AW169 pilot had been instructed to “*vacate left*” after landing to vacate the runway however the pilot read back “*vacate right*”, this error had not been detected by the Blackpool Tower controller.
- CF2.** The PA28 had been equipped with EC equipment which had detected the AW169 and, although it had not issued an alert, had made the PA28 pilot aware of its presence.
- CF3.** Whilst the AW169 occupied the runway the pilot of the PA28 had continued their approach toward the AW169 which had reduced the separation to an extent which had caused concern to the AW169 pilot.

### **PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK**

#### Contributory Factors:

2022005				
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification
<b>Ground Elements</b>				
<b>• Situational Awareness and Action</b>				
1	Human Factors	• ATM Personnel Hear back	An event involving the hearback (listening) of ATM personnel to communications	
<b>Flight Elements</b>				
<b>• Electronic Warning System Operation and Compliance</b>				
2	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	
<b>• See and Avoid</b>				
3	Human Factors	• Lack of Individual Risk Perception	Events involving flight crew not fully appreciating the risk of a particular course of action	Pilot flew close enough to cause concern

Degree of Risk: E

#### Safety Barrier Assessment<sup>4</sup>

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

#### **Ground Elements:**

**Situational Awareness of the Conflication and Action** were assessed as **partially effective** because the Blackpool Tower controller did not detect the incorrect readback of the AW169 pilot’s taxi instructions after landing.

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

<b>Airprox Barrier Assessment: 2022005</b>		Outside Controlled Airspace						
<b>Barrier</b>		<b>Provision</b>	<b>Application</b>	<b>Effectiveness</b>				
				Barrier Weighting				
				0%	5%	10%	15%	20%
Ground Element	Regulations, Processes, Procedures and Compliance	✓	✓					
	Manning & Equipment	✓	✓					
	Situational Awareness of the Confliction & Action	✓	⚠					
	Electronic Warning System Operation and Compliance	⊘	⊘					
Flight Element	Regulations, Processes, Procedures and Compliance	✓	✓					
	Tactical Planning and Execution	✓	✓					
	Situational Awareness of the Conflicting Aircraft & Action	✓	✓					
	Electronic Warning System Operation and Compliance	✓	✓					
	See & Avoid	✓	✓					
<b>Key:</b>		<u>Full</u>	<u>Partial</u>	<u>None</u>	<u>Not Present/Not Assessable</u>	<u>Not Used</u>		
Provision	✓	⚠	✗	⊘	⊘			
Application	✓	⚠	✗	⊘	⊘			
Effectiveness								