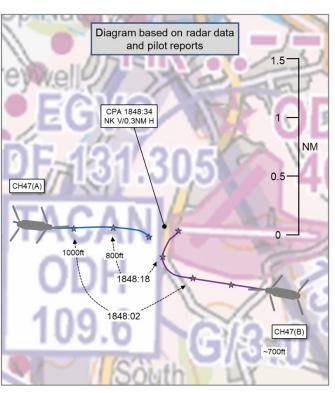
### **AIRPROX REPORT No 2025069**

Date: 29 Apr 2025 Time: 1849Z Position: 5114N 00058W Location: Odiham ATZ

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

Recorded	Aircraft 1	Aircraft 2		
Aircraft	CH47(A)	CH47(B)		
Operator	HQ JAC	HQ JAC		
Airspace	Odiham ATZ Odiham ATZ			
Class	G	G		
Rules	IFR VFR			
Service	Traffic ACS			
Provider	Odiham Approach	n Approach Odiham Tower		
Altitude/FL	700ft ~700ft			
Transponder	A, C, S A			
Reported				
Colours	Green	Green		
Lighting	HISL, navigation HISL, navigation			
Conditions	VMC VMC			
Visibility	>10km >10km			
Altitude/FL	700ft	700ft		
Altimeter	QNH (1023hPa)	NR		
Heading	090°	Turning		
Speed	120kt NR			
ACAS/TAS	TAS Not reported			
Alert	TA	N/A		
Separation at CPA				
Reported	NR NR			
Recorded	NK V/0.3NM H			



THE CH47(A) PILOT reports that during an IF transit they had coordinated their approach requirements at Odiham via Swanwick Mil who reported that an approach to 650ft was approved but the runway was closed so the aircraft should land on the southern grass. Once two-way communication had been established with Odiham Approach, the Captain confirmed their intent to break off at 650ft and position for the southern grass. This was acknowledged by the Approach controller with no perceived amendment and they were passed to Talkdown. A 'Cleared to land, RW09' call was issued by ATC during the descent but was not received particularly clearly by the CH47(A) crew. The Captain read back the clearance, noting that the runway had been approved. This was unexpected and prompted a decision to change to Tower early to clarify the landing surface. Post-flight it became clear that the Talkdown controller had also said 'one in south side' as part of the clearance. No member of the 5 person crew, nor the aircrew passenger on intercom heard that part. At approximately 750-850ft QNH the Captain began to switch to Tower but, before the change was made, the HP looked up from their instruments and reacted with surprise, concurrent with a TAS audio alert. A second CH47 had appeared above the horizon to the right of the nose at about half a mile separation. It had appeared to be heading north, straight and level, on a course perpendicular to theirs, co-altitude, not moving with reference to the backdrop. Knowing the aircraft was likely on Tower, so no situational awareness of its intentions could be gained fast enough from Talkdown, the CH47(A)'s Captain took control, decelerated and turned right off the RW09 centreline to pass behind the other CH47. The concern had been that the other aircraft may have been continuing on track from the southern circuit to the NW Gate, in which case a collision was visually assessed to be highly likely. During the manoeuvre, the No.1 crewman of CH47(A) saw the other aircraft pass at what they assessed to be well within half a mile. The other CH47 then recommenced a turn into the airfield so the CH47(A) pilot followed. The crew immediately switched to Tower to build SA and asked for confirmation that they were to land on the southern grass. The Tower controller instructed the pilot of CH47(A) to go to the runway. Conversations afterwards confirmed it had just reopened. CH47(A) had not been manoeuvred off the RW09 centreline at any stage until the apparent collision risk.

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

**THE CH47(B) PILOT** reports that the crew was conducting an AFCS-out circuit to the compass base as part of the mandatory requirements for the Day Dual Competency Check being conducted. On the downwind leg of the RW09 orientation, ATC called that there was another CH47 at 3NM finals for RW09, at which point the crew became visual with that traffic. On turning finals and being cleared to land at the compass base, the aircraft's rate of turn (handled by the pilot being checked) slowed in part due to the AFCS-out configuration. Still visual with the other CH47 traffic and to prevent encroaching RW09, on which the other aircraft had been to cleared to land, the Captain took control and increased the rate of turn and descended to remain clear of both the runway and the other traffic. During the turn the other CH47 was seen turning behind their aircraft. With the knowledge that they were sufficiently separated (provided by the No1 crewman) from the other CH47 which was behind, the Captain continued to land at the compass base.

The pilot perceived the severity of the incident as 'Negligible'.

**THE ODIHAM PAR CONTROLLER** reports that they had been the PAR controller doing routine tasking. They had been doing a talkdown for CH47(A) for RW09. They had been informed their minima of 640ft with intentions to land. The talkdown had gone smoothly with the aircraft on the centreline and glidepath by 3.5NM to touchdown. At 3NM the controller had been given a clearance from TWR of "Clear to land, 1 in Southside" which they had relayed to the aircraft and that crew acknowledged the clearance. At 2NM the pilot called visual to continue with Tower and the controller sent them [to that channel] and then the CH47(A) pilot came back stating that they had a CH47 crossing them at about 0.5NM and the controller informed them that they would go to the VCR to see what had occurred.

The controller perceived the severity of the incident as 'Low'.

**THE ODIHAM AERODROME CONTROLLER** reports that they had been in ADC at the time and on RW09. They had one aircraft conducting southern circuits to the compass base and another IFR inbound on a PAR. They had cleared the IFR traffic to land at 3 miles and subsequently cleared the visual circuit traffic to land on the compass base. When CH47(A) was approximately 1 mile out, the PAR controller came upstairs to inform them that the IFR traffic had traffic crossing on the nose 0.5 miles away. When the aircraft came over to the ADC's frequency, the pilot stated that they were to land on the southern grass. The controller then offered the runway to which the pilot agreed, they gave the clearance and the aircraft landed on the runway. There were no further incidents.

The controller perceived the severity of the incident as 'Low'.

THE ODIHAM AERODROME CONTROL SUPERVISOR reports that they had received a phone call from Swanwick Mil about an aircraft recovering asking about the runway closure. The ACS [recalls that] they had been briefed at handover that the grass-cutters were going to the runway edge, so all IFR approaches were to be not below 650ft to low approach join and then offered another surface to the southside of the airfield. This was passed onto Swanwick as to what they should expect. Subsequent to the phone call, the grass-cutting finished and the full runway made available. This was published on ATIS and TATCC(S) was informed. The ACS had been upstairs monitoring the visual circuit traffic when they were told the pre-note came for this recovery (as there are no supervisor comms upstairs) and the ACS then proceeded downstairs to get the details. Everything remained standard until the point the CH47(A) pilot called that there had been another aircraft crossing them closely at 2 miles finals as the ACS had been sending them to Tower. The ACS had immediately gone upstairs to find out what the situation was. They could see the first aircraft (CH47(B)) had been making an approach to the compass base and the second (CH47(A)), coming from Talkdown, had been trying to get an approach to the southern grass. The Tower controller reaffirmed the approach to the runway as they had just come from PAR and it is where they had been expecting the aircraft to make an approach and had prepared. Once the aircraft had landed safely it had then gone to the load park and subsequently back to dispersal.

# **Factual Background**

The weather at Odiham was recorded as follows:

METAR EGVO 291820Z 05008KT CAVOK 20/09 Q1023 NOSIG RMK BLU BLU=

### **Analysis and Investigation**

### **Military ATM**

Utilising occurrence reports and information from the local investigations, outlined below are the key events that preceded the Airprox.

Due to airfield grass cutting activity on the northern runway edge, for a significant period of the afternoon the runway had been temporarily closed to routine movements. All IFR approaches were recovering to the runway but approaching not below 650ft as per local orders, before then transitioning to another landing surface dependent upon their further intentions and grass cutting location at the time.

### Sequence of Events

At 1759:47, Swanwick Military contacted Odiham to inform them that CH47(A) had been expecting to return to Odiham at 1845. In recognition of the airfield grass cutting activity the Odiham Tower Supervisor passed to the Swanwick Military controller that the CH47(A) pilot should expect "a low approach not below 650ft ... and the southern area to land on". The Swanwick Military controller passed this information to the pilot of CH47(A).

During the intervening period, the airfield grass cutting activity was completed and the restrictions on runway use were removed.

At 1837:19, the Odiham Approach controller received CH47(A) from Swanwick Military. On providing the procedure minima, the CH47(A) pilot had responded with their intentions "it will be 640 to land, on southside and then hover taxi to the load park".

At 1840:35, the Odiham Approach controller contacted the Odiham Talkdown controller to pre-note the CH47(A) pilot's decision altitude and intentions for the instrument approach; 640ft to land.

Transfer of control for CH47(A) from the Odiham Approach controller to the Odiham Talkdown controller then completed at 1844:52. With CH47(A) established on the procedure, the Odiham Talkdown controller informed the Odiham Tower controller of the approach at 1845:34, with "6NM, C/S, Land".

At 1845:36, CH47(B) requested departure from the compass base with the intention of remaining in the visual circuit. The Odiham Tower controller issued a take-off clearance in response.

At 1847:17, with CH47(A) at 3NM left to run of the approach, the Odiham Talkdown controller requested a clearance for the runway "3NM, C/S, Land". The Odiham Tower controller issued a landing clearance in response with "Cleared to Land, one in southside". CH47(A) pilot acknowledged this but incorrectly read back "Cleared to land southside". The Odiham Talkdown controller did not correct the incorrect readback and proceeded with the approach.

At 1847:27, the Odiham Tower controller broadcast the position of CH47(A) with "Chinook, 3NM land". CH47(B), then reported their position and intentions "downwind, compass base", which the Odiham Tower controller acknowledged.

At 1848:13, CH47(A) pilot reported visual and their intention to change to Odiham Tower. The Odiham Tower controller acknowledged this, and CH47(A) pilot responded by describing the position of CH47(B).

At 1848:32, CH47(B) reported final for the compass base and the Odiham Tower controller issued a clearance to land at the compass base.

At 1848:41, CH47(A) pilot contacted the Odiham Tower controller after leaving the Odiham Talkdown frequency and reported short final to south side. The Odiham Tower controller instructed CH47(A) pilot to position for RW09 instead.

### Local BM Investigation(s)

A local investigation was conducted by Odiham following the event to identify the ATS-related causal/aggravating factors. The investigation found that between all parties involved, aircrew and ATC, whilst they were following local procedures they all had a differing understanding of the situation. This was deemed to be as a result of a lack of formal procedure to govern simultaneous surface operations and ensure commonality in situational awareness. Following the investigation, the simultaneous surface operations procedure has been amended to require ATC clearance before commencing a change of operating area.

### 2 Gp BM Analysis

Whilst, on the whole, the ATC parties involved acted in accordance with policy and regulation, there were numerous points during the evolution of this occurrence where aircrew situational awareness could have been increased and even corrected:

- a. The initial information via Swanwick Military to inform CH47(A) pilot of the temporary runway restriction, whilst correct, presented an issue in that it provided in-depth knowledge that no subsequent ATC party was aware of. Therefore, it was not corrected when the airfield grass cutting had completed.
- b. The Odiham Approach controller, whilst passing the required information regarding the minima and intentions of CH47(A), [did not] include their full intention of landing on southside. This would have increased the Odiham Talkdown controller's awareness of CH47(A) pilot's expectations.
- c. The Odiham Talkdown controller, on issuing the clearance, [did not] correct the incorrect readback when the CH47(A) pilot had readback "Cleared to land southside". This failure to ensure a correct readback was the only policy non-compliant element from the ATC parties in the occurrence. Correcting the readback would have ensured that CH47(A) would have remained committed to RW09 and not their ultimate positioning to southside which decreased the separation with CH47(B). Additionally, by correcting the "southside" element of the clearance, it would have ensured CH47(A) pilot would have been aware of CH47(B) operating southside.
- d. The Odiham Tower controller followed local procedures which did not require specific Traffic Information to be passed on the instrument approach to CH47(B). However, had they considered the proximity of the aircraft and their approach profiles, a specific Traffic Information call or restriction to CH47(A) pilot's clearance such as "Land, threshold only" would have increased awareness and/or separation.

#### **UKAB Secretariat**



Figure 1: at CPA (1848:34)

Both aircraft were tracked using radar with CH47(A) displaying Mode C to determine their altitude. CH47(B) appeared as a Mode A return only. The altitude displayed on the diagram at page 1 and used for comparison at CPA was that reported by the pilot.

The CH47(A) and CH47(B) pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard. 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>2</sup>

#### Comments

#### **JAC**

An occurrence where misinformation, informal process of Simultaneous Surface Ops and unfortunate timing led to confliction between two CH47s.

[The pilot of] CH47(A), on return from a Mountain Training sortie, had been on the understanding that Odiham RW09 was unavailable due to grass-cutting and had been informed by the Odiham Tower Supervisor via Swanwick Mil that a 'low-approach not below 650ft to join southern grass' would be expected. On final approach, a 'cleared to land RW09' was issued by ATC which led to internal cockpit confusion and a decision to switch early to Tower to confirm intentions. Concurrently, the crew became visual with circuit traffic CH47(B) – which they recall not having been informed about on the ATC clearance due to poor comms. Due to the relative profile of CH47(B) – making an approach to the compass base – and an apparent risk of collision, a decision was made to manoeuvre behind the conflicting aircraft to the southside and switch to ADC to confirm/obtain further ATC instruction.

The pilot of CH47(B), operating southside to the compass base, became visual with CH47(A) on the downwind leg. A slower turn, due to aircraft configuration, may have given the impression (to the pilot of CH47(A)) that they were going to fly through the RW09 extended centreline. An expedited turn and descent by the pilot of CH47(B) was made, to build in additional separation. Whilst

<sup>&</sup>lt;sup>1</sup> MAA RA 2307 paragraphs 1 and 2.

<sup>&</sup>lt;sup>2</sup> MAA RA 2307 paragraph 17.

maintaining visual contact with the instrument traffic, they observed CH47(A) pass behind, at which point the approach was continued to the compass base.

ATC was applying Simultaneous Surface Ops, as outlined in the Odiham Defence Aerodrome Manual (DAM). However, the DAM does not provide detailed guidance on how IFR and VFR traffic should be integrated when using parallel surfaces, nor does it specify how aircraft should transition between different operating surfaces. A recommendation from the subsequent DASOR is to include additional detail in the DAM regarding Simultaneous Surface Ops. This would ensure that both IFR and VFR traffic are fully aware of their responsibilities in similar situations, thereby reducing the risk of future confliction.

### Summary

An Airprox was reported when CH47(A) and CH47(B) flew into proximity at Odiham at 1849Z on Tuesday 29<sup>th</sup> April 2025. The CH47(A) pilot was operating under IFR in VMC in receipt of a Traffic Service from Odiham Approach and the CH47(B) pilot was operating under VFR in VMC in receipt of an Aerodrome Control Service from Odiham Tower.

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

Information available consisted of reports from both pilots, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate operating authorities. 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 firstly discussed the actions of the CH47(A) pilot. The aircraft had been on an IF transit for recovery and had coordinated their approach requirements at Odiham via Swanwick Mil, who had reported that an approach to 650ft was approved but that the runway was closed so the aircraft was to land on the southern grass. Once two-way communication had been established with Odiham Approach, the Captain had confirmed their intent to break off and position for the southern grass. This had been acknowledged by the Approach controller and they had then been passed to Talkdown. The controller had cleared the aircraft whilst they had been on their descent to land on RW09 although in accordance with local procedures, RW09 was not specifically stated given it was the duty runway. Whilst the pilot reports receiving the call it been subject to poor radio quality and had not been received particularly clearly by the CH47(A) crew and had led to an incorrect readback which had not acknowledged the instruction to land on RW09 rather than the anticipated southern grass (CF4). It had been apparent to the crew in their post-flight debrief that they had not heard reference to CH47(B) operating toward the southside. As the CH47(A) pilot had initiated their switch to the Tower frequency and, concurrently with a TAS audio alert (CF6), they had seen CH47(B) above the horizon to the right of the nose at about half a mile separation when it had appeared to be heading on a course perpendicular to their own, co-altitude, the pilot had been concerned by its proximity (CF7). The Board agreed that, as the two aircraft had been on separate frequencies and their TAS alert had been late, the CH47(A) pilot had gained no situational awareness of the proximity of the other aircraft (CF5). The CH47(A) pilot had decelerated and turned right off the RW09 centreline to pass behind CH47(B). The crew had immediately switched to the Tower frequency to seek confirmation that they were to land on the southern grass but had been told by the Tower controller to go to the runway.

Members secondly discussed the actions of the CH47(B) pilot, noting that they had been on a circuit to the compass base as part of a crew competency check. On the downwind leg for RW09, the Tower controller had called that CH47(A) had been at 3NM finals for RW09, at which point the crew had sighted CH47(A). On turning finals and being cleared to land at the compass base, CH47(A) had been toward their 7 o'clock with the CH47(B) crew maintaining visual and, to prevent encroaching RW09, on which CH47(A) had been to cleared to land and having become concerned with the potential for coming into proximity with CH47(A) (CF7), the pilot had increased the rate of turn and had descended to remain clear of both the runway and the other traffic. The CH47(B) pilot had been unaware that the CH47(A) pilot had still been aiming to land on the southern grass, leading the Board to recognise that the CH47(B) pilot had had inaccurate situational awareness (CF5). During that turn, CH47(A) was seen turning behind their aircraft. With the knowledge (provided by the No1 crewman) that they had been

sufficiently separated from the other CH47, which was behind, the Captain had continued to land at the compass base.

In considering the role of the involved controllers, members made a number of observations. They deemed it unusual for Swanwick to have declared RW09 to be closed at such an early phase of CH47(A)'s approach. They opined that this information would normally be relayed by the appropriate airfield controller who would provide the pilot of that aircraft with their approach instructions. In this particular case, the early declaration of the RW state had added a layer of confusion to the CH47(A) pilot's differing assumption regarding the landing surface as they had neared the airfield (CF3). As the initial exchange between the CH47(A) pilot and Odiham Approach had occurred, the pilot had been told that they had been cleared to RW09 and, compounded by poor radio quality, this change to the pilot's expectation had not been picked up and their incorrect readback (reflecting their earlier understanding of the RW state) had not been corrected by the Approach controller (CF2). The post-event review by Odiham staff had additionally identified a weakness in the relevant part of the Defence Aerodrome Manual regarding interactions between VFR traffic (CH47(B) in this case) and IFR traffic (CH47(A)) (CF1). That document has subsequently been amended to bridge that gap. Members opined that this event had been magnified by non-standard RT calls both in content and point of delivery.

Concluding their discussion, members noted that, although the CH47(A) pilot had an inaccurate mental model as to their landing point, the CH47(B) pilot had maintained visual and the separation between the 2 aircraft had ensured that there had been no risk of collision. Risk Category C.

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

#### Contributory Factors:

	2025069					
CF	Factor	Description	ECCAIRS Amplification	UKAB Amplification		
	Ground Elements					
	Regulations, Processes, Procedures and Compliance					
1	Organisational	Aeronautical Information Services	An event involving the provision of Aeronautical Information	The Ground entity's regulations or procedures were inadequate		
	Situational Awareness and Action					
2	Human Factors	ATM Personnel Hear back	An event involving the hearback (listening) of ATM personnel to communications			
3	Human Factors	Expectation/Assumption	Events involving an individual or a crew/ team acting on the basis of expectation or assumptions of a situation that is different from the reality			
	Flight Elements					
	Situational Awareness of the Conflicting Aircraft and Action					
4	Human Factors	Readback Incorrect	An event involving incorrect readback			
5	Contextual	Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness		
	Electronic Warning System Operation and Compliance					
6	Contextual	Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.			
	See and Avoid					
7	Human Factors	Perception of Visual Information	Events involving flight crew incorrectly perceiving a situation visually and then taking the wrong course of action or path of movement	Pilot was concerned by the proximity of the other aircraft		

Degree of Risk: C.

# Safety Barrier Assessment<sup>3</sup>

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

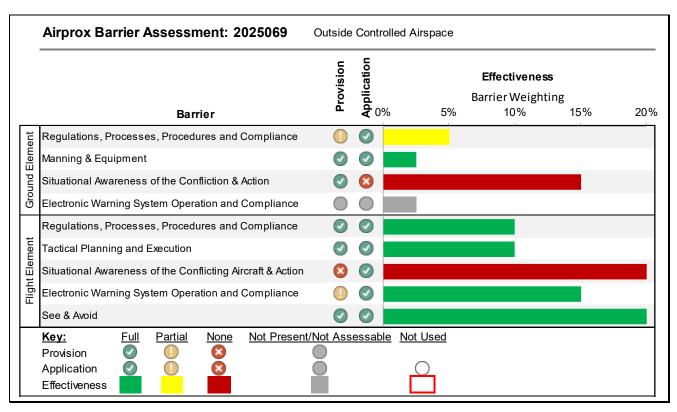
#### **Ground Elements:**

Regulations, Processes, Procedures and Compliance were assessed as partially effective because existing airfield documentation had not covered this mixed IFR/VFR traffic operating to simultaneous surfaces scenario.

**Situational Awareness of the Confliction and Action** were assessed as **ineffective** because the Talkdown controller had not corrected the CH47(A) pilot's incorrect readback to their landing clearance.

# Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as ineffective because the CH47(A) pilot had, due to poor radio quality, no situational awareness of the presence of CH47(B) and had incorrectly read back their landing clearance which had then led to inaccurate situational awareness for the CH47(B) pilot.



<sup>&</sup>lt;sup>3</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.