

**SERIOUS INCIDENT**

<b>Aircraft Type and Registration:</b>	AW109SP, G-TAAS	
<b>No &amp; Type of Engines:</b>	2 Pratt & Whitney Canada PW207C turboshaft engines	
<b>Year of Manufacture:</b>	2013 (Serial no: 22305)	
<b>Date &amp; Time (UTC):</b>	12 August 2022 at 1051 hrs	
<b>Location:</b>	Cardiff	
<b>Type of Flight:</b>	Commercial Air Transport	
<b>Persons on Board:</b>	Crew - 1	Passengers - 4
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	None reported	
<b>Commander's Licence:</b>	Airline Transport Pilot's Licence	
<b>Commander's Age:</b>	59 years	
<b>Commander's Flying Experience:</b>	13,700 hours (of which 40 were on type) Last 90 days - 46 hours Last 28 days - 6 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot	

**Synopsis**

The helicopter landed at a hospital elevated helipad that was not prepared with fire cover and traffic management because the hospital was not aware of its imminent arrival. The message reporting the departure was sent too late and using an unreliable communication method. The method for pilots to visually confirm the helipad was ready during the approach was not emphasised in the site-specific procedures provided by the hospital and the operator. The operator has taken action to improve communications and review the procedures for all elevated hospital helipads it uses.

**History of the flight**

The purpose of the flight was to position medical personnel from a Bristol hospital to one in Cardiff, to collect a patient for transfer to a hospital in Plymouth.

A staffed 'airdesk' facility managed task requests, flight following and operational booking for the helicopter. The pilot was required to communicate with the airdesk staff who would then coordinate with the hospitals involved. The Cardiff hospital was aware of the planned transfer and an estimated time of arrival of the helicopter, and the procedure required the airdesk to inform them when it was enroute.

At Bristol, the medical personnel were ready quicker than expected and the flight departed earlier than planned, at 1039 hrs. Shortly after the helicopter took off, one of the passengers

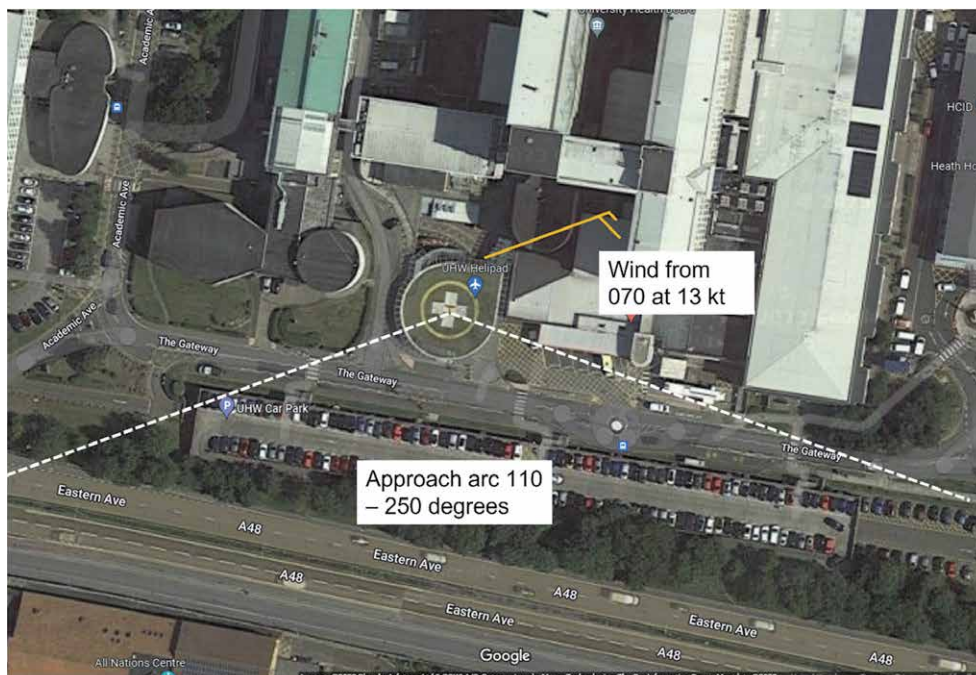
used a messaging app to inform the airdesk of the departure. The message was not received until 1052 hrs, after the helicopter had landed, so the airdesk did not inform the hospital that the helicopter was en route.

The flight was conducted in bright sunlight with good visibility and no cloud. The wind was from 070° at 13 kt. The pilot approached from the south-west and reported that from this direction a building obscured the view of the helipad until the landing decision point, but the site was observed to be clear during the pre-landing recce.

The helicopter arrived at 1051 hrs, nine minutes before the initial estimated time of arrival. As it reached a hover over the helipad one of the passengers noticed the pad lights were off and the required two firefighting personnel were not present. The pilot judged that it was safer to land from the stable hover than to go around, so proceeded with the landing.

### Aerodrome information

The helipad at the Cardiff hospital is 30 m in diameter and 30 ft above ground level. It is an elevated site that requires firefighting personnel to be present during landings. The hospital procedure also requires pedestrian and traffic management during helicopter movements. At this site, the presence of lights turned on at the helipad is the primary cue for pilots to confirm that the site is available and prepared for a landing.



**Figure 1**

Aerial view of the Cardiff hospital helicopter landing site

### Other information

Neither the hospital procedure nor the operator's survey document for the site explicitly instructed pilots to confirm the landing site was prepared with the appropriate fire cover or

what cues to use to confirm this. However, the operator's Flying Staff Instruction for the use of elevated Final Approach and Take Off areas (FATOs) did state that pilots must ensure, on arrival by air, that the site is either clearly manned or has its lights turned on. The operator commented that pilots require specific training and assessment to land at elevated helipads, and looking for lights or firefighters' helmets is standard procedure for any such landing.

The hospital's representative commented that there was close liaison between the hospital and the local air ambulance operator, but that the hospital did not have a relationship with other operators outside Wales who might use the helipad. The hospital's representative was not aware how hospital procedures could be disseminated to all potential operators.

The operator's expectation was that the pilot or passengers would communicate with the airdesk verbally by mobile phone. However, use of the messaging app was described as common practice.

## Analysis

The communication method used was not reliable for use in the air, resulting in the departure message not being received until after the helicopter had landed. This degraded safety, because no firefighting service was available at the helipad, and vehicle and pedestrian movements in the vicinity were not controlled as required by the procedure.

During the recce and approach, the pilot did not confirm the landing site was ready as required for an elevated helipad. This requirement and the method for doing so was specified in the operator's Flying Staff Instruction for elevated FATOs but was not emphasised in the hospital or operator's site-specific procedures. The pilot did not realise the helipad was not ready until in a stable hover ready to land, and decided to continue with the landing because he considered this was safer than going around.

The event shows the importance of effective collaboration between hospital trusts and operators to ensure that the specific safety requirements and procedures for each hospital landing site are clearly communicated to pilots. However, there is currently no convenient mechanism for this and it requires each operator to engage with the owner of each potential landing site and each landing site owner to identify and engage with each potential operator.

## Conclusion

The hospital elevated helipad was not prepared because the message informing the airdesk of the departure was sent too late and using an unreliable communication method. The pilot did not confirm the site was prepared during the approach and the requirement to do so was not emphasised in site-specific procedures.

## Safety actions

Following the occurrence, the operator reviewed all elevated FATO surveys and stated that it intends to reissue them with specific guidance for each site, subject to communication with the hospitals.