SERIOUS INCIDENT

Aircraft Type and Registration:	Piper PA-28-161 Cherokee Warrior II, G-BTAW	
No & Type of Engines:	1 Lycoming O-320-D3G piston engine	
Year of Manufacture:	1986 (Serial no: 28-8616031)	
Date & Time (UTC):	13 March 2018 at 1215 hrs	
Location:	Castle Kennedy Airfield, Dumfries and Galloway	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	None	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	40 years	
Commander's Flying Experience:	256 hours (of which 236 were on type) Last 90 days - 1 hour Last 28 days - 1 hour	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

Having changed the route of his flight due to weather, the pilot did not check NOTAMs or gain PPR[1] for the new destination. As a result, the aircraft landed on the closed runway at Castle Kennedy Airfield.

The airfield

Castle Kennedy Airfield is unlicensed and all operations are PPR except for aircraft based at the airfield. The owner of the airfield was, at the time of this incident, working with a company in developing technology for the generation of power from large tethered kites. As a result of this the airfield had an active NOTAM which stated that the runway would be closed during kite flying operations. A full size kite has a wing span of 10 m, with a mass of 30 kg. It can travel at speeds up to 100 kt and is connected by a tether to a winch on the runway. The tether has a breaking strain of 6,500 kg and this kite would present a significant hazard to any aircraft. The kite operates up to 1,100 ft aal. Although the NOTAM in effect on the date of the incident did not specifically state that the runway was closed during kite flying operations, the owner of the airfield required pilots to obtain prior permission before flying there, which the owner and the kite company felt was sufficient. The NOTAM was updated on 18 March 2018 to reflect that the runway would be closed during kite flying operations.

Footnote

[1] Prior permission required: a system whereby pilots are required to contact an airfield before taking off to obtain permission to fly there and to be given pertinent information.

History of the flight

The pilot and a fellow member of the flying group had left their home base with the intention of flying to several different airfields during a day trip. Their routing initially took them to Kirkbride Airfield where they swopped seats. They were intending to fly from Kirkbride to Prestwick Airport for the second leg of their route but, due to a lower than expected cloud base over the high ground, they decided instead to route along the coast before stopping at Castle Kennedy. Both pilots were familiar with Castle Kennedy. Concern over the weather conditions and a possible maintenance issue at Kirkbride meant neither pilot consulted the NOTAMs for the new route or telephoned Castle Kennedy to gain PPR.

During the flight, the pilot spoke with Scottish Information before transferring to the SAFETYCOM frequency (135.475 MHz) when the aircraft was approximately 10 nm from Castle Kennedy. This allows pilots to broadcast their intentions when there is no frequency allocated to an airfield or landing site, and several broadcasts were made by the pilot before landing at the airfield.

As the pilot approached the runway he noticed there was something just short of the threshold but he was unable to make out what it was until he was in the flare. At this point he saw that the object was a cross which he thought was on a flag placed flat on the tarmac. He saw no further obstacles on the runway and considered that the safest course of action was to continue to land. After the aircraft was shut down, the pilot was approached by members of the kite company who pointed out that the runway was closed and a NOTAM was in effect.

The kite company was working at the airfield although they were not flying the full-size kite at the time. There were six members of staff around the airfield with some working close to the runway. A member of the staff was monitoring SAFETYCOM and was alerted to the imminent arrival of the aircraft. He was able to radio the staff working on the airfield so they could move away from the runway. It was estimated that it was only 3.5 minutes from the first transmission on SAFTYCOM until the aircraft landed. The kite staff commented that if they had been flying the full-size kite, this would have been insufficient time to lower the kite and move the equipment clear of the runway.

The kite company had placed a large cross at the threshold of the runway which was yellow on a red background. This measured 3 m by 3.2 m. It was lying flat on the runway and, although large, would possibly not have been visible to the pilot due to the approach angle. The kite company expected the aircraft to fly over the airfield before making an approach, in which case the cross would have been clearly visible. Following the incident, the kite company decided to review the runway closed marking and its placement on the runway.

The pilot was surprised that Scottish Information did not inform him that the runway was closed at Castle Kennedy but it was not the responsibility of ATC to do so and the controllers were unlikely to have been aware of the runway state.

Conclusion

On arrival in Kirkbride the pilot found that the weather was unsuitable for the planned route to Prestwick. An alternative plan was agreed but the pilot did not check the NOTAMs for the new route or gain PPR. As a result the aircraft landed on the closed runway at Castle Kennedy. The use of SAFETCOM meant that the kite staff were able to clear the runway for the approaching aircraft but that was only possible as they were not flying the full-size kite.

Pre-flight planning is vital for ensuring the safety of a flight even when there is a late change of plan. The use of a checklist of items to be completed might be helpful to pilots to ensure nothing is missed.

AAIB Note: During conversation, the pilot commented that there was a poor mobile data signal at Kirkbride. It is worth noting, therefore, that it might not always be possible to use mobile data for pre-flight planning or re-planning and an alternative means of checking aeronautical information may be needed.