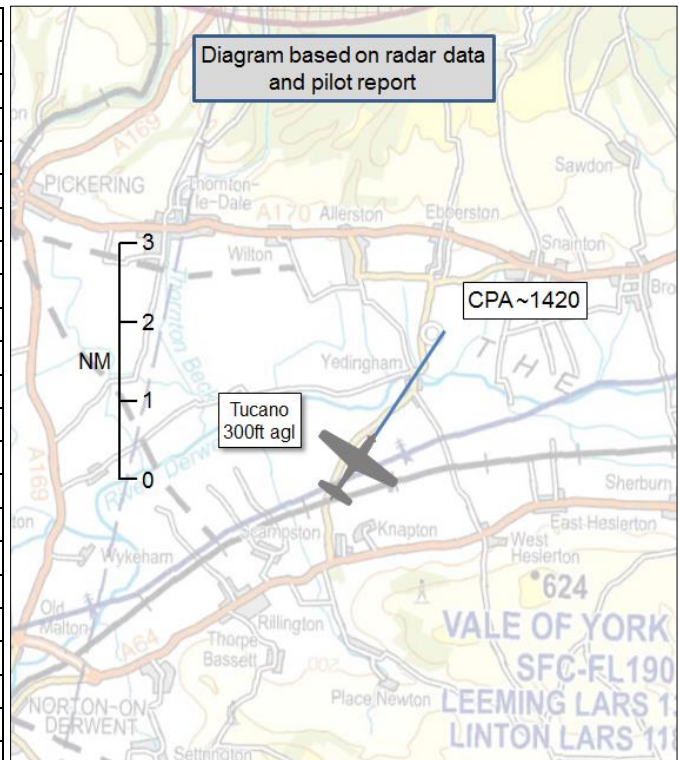


AIRPROX REPORT No 2016205

Date: 7 Sep 2016 Time: 1420Z Position: 5413N 00038W Location: 6nm ESE Pickering

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	Tucano	Model aircraft
Operator	HQ Air (Trg)	Unknown
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	
Service	None	
Provider	N/A	
Altitude/FL	300ft	
Transponder	A, C, S	
Reported		Not reported
Colours	Black	
Lighting	All on	
Conditions	VMC	
Visibility	>10km	
Altitude/FL	300ft	
Altimeter	agl	
Heading	020°	
Speed	240kt	
ACAS/TAS	TCAS I	
Alert	None	
	Separation	
Reported	0ft V/150m H	
Recorded	NK	



THE TUCANO PILOT reports flying at low level when approximately 3 model aircraft were seen to pass co-level within close proximity. The aircraft was climbed in order to identify the source and a well-established model aircraft flying site was identified with about 7 aircraft on the ground and a number of vehicles parked. The pilot noted that it was only by chance that there had not been a collision. He noted that the area was regularly used for low-level training and therefore that the site posed a hazard to aircraft.

He assessed the risk of collision as 'Medium'.

THE MODEL AIRCRAFT OPERATOR: The model aircraft operator could not be traced.

Factual Background

The weather at Linton-on-Ouse was recorded as follows:

METAR EGXU 071350Z 19006KT 9999 SCT040 24/15 Q1016 BLU NOSIG=

Analysis and Investigation

UKAB Secretariat

There are no specific ANO regulations limiting the maximum height for the operation of model aircraft that weigh 7kg or less other than if flown using FPV (with a maximum weight of 3.5kg) when 1000ft is the maximum height. Model aircraft weighing between 7kg and 20kg are limited to 400ft unless in accordance with airspace requirements. Notwithstanding, there remains a requirement to maintain direct, unaided visual contact with the aircraft sufficient to monitor its flight

path in relation to other aircraft, persons, vehicles, vessels and structures for the purpose of avoiding collisions. CAP 722 gives guidance that, within the UK, visual line of sight (VLOS) operations are normally accepted to mean a maximum distance of 500m [1640ft] horizontally and 400ft [122m] vertically from the Remote Pilot.

Notwithstanding the above, all model aircraft operators are also required to observe ANO 2016 Article 94(2) which requires that the person in charge of a small unmanned aircraft may only fly the aircraft if reasonably satisfied that the flight can safely be made, and the ANO 2016 Article 241 requirement not to recklessly or negligently cause or permit an aircraft to endanger any person or property. Allowing that the term 'endanger' might be open to interpretation, model aircraft of any size that are operated in close proximity to airfield approach, pattern of traffic or departure lanes, or above 1000ft agl (i.e. beyond VLOS (visual line of sight) and FPV (first-person-view) heights), can be considered to have endangered any aircraft that come into proximity. In such circumstances, or if other specific regulations have not been complied with as appropriate above, the drone operator will be judged to have caused the Airprox by having flown their drone into conflict with the aircraft.

Comments

HQ Air Command

This Airprox happened in Class G airspace and the only realistic barrier available against air vehicles which have no form of electronic conspicuity is 'see-and-avoid'. In this case the model aircraft were acquired too late to take any avoiding action. During a military investigation the pilot assessed that the model aircraft had wing spans of approximately 1 metre which would have made any collision quite likely to result in significant damage. The military encourage all users of the air (including model aircraft clubs) to attend local Regional Airspace User Working Groups so that all those using the airspace understand and are aware of each other's activities. The location of this club flying site has been promulgated at Linton on Ouse to ensure that all crews are aware of its presence.

Summary

An Airprox was reported when a Tucano and some model aircraft flew into proximity at 1415 on Wednesday 7th September 2016. The Tucano pilot was operating under VFR in VMC at low level. The model aircraft operator could not be traced.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of a report from the Tucano pilot, radar photographs/video recordings and a report from the appropriate operating authority.

Members noted that the model aircraft operators were entitled to use Class G airspace and that in their opinion the site did not constitute a hazard to aircraft per se. Regulation was clear in that the operators had to be reasonably satisfied that the flight could safely be made. Some members noted that the reasonable assumption that model aircraft operators would make way for manned aircraft depended on them being able to detect the aircraft and that operation of manned aircraft at low-level and relatively high speed could compromise timely detection. It was felt unfortunate that the Board did not have the model operators' perspective on events, but members agreed that this incident was a conflict in Class G airspace and, given the speed of the Tucano, that separation had been such that safety had been much reduced below the norm.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A conflict in Class G airspace.

Degree of Risk: B.