AIRPROX REPORT No 2012041

Date/Time: 21 Mar 2012 1335Z

Position: 5407N 00034W (31/2nm

W of Eddsfield A/D -

elev: 525ft

Airspace: Vale of York AIAA (Class: G)

Reporting Ac Reported Ac

Type: Hawk TMk1 Ikarus C42 ML

<u>Operator</u>: HQ Air (Ops) Civ Trg <u>Alt/FL</u>: 2000ft 2300ft

RPS (1030hPa) QNH

Weather: VMC CLBC VMC In Haze

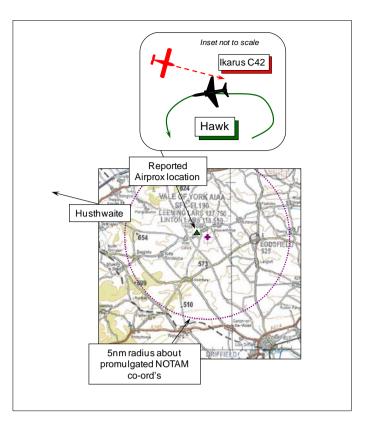
Visibility: 10km 7km

Reported Separation:

50ft V/500ft H 200ft V/500m H

Recorded Separation:

Not recorded



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE BAe HAWK T Mk1 PILOT reports he was flying a dual training sortie for the Joint Forward Air Control (FAC) Training Support Unit (JFACTSU) under VFR in VMC, clear of cloud with an in-flight visibility of 10km. He was not in receipt of an ATS, but in communication with the FAC on 280-725MHz and 137-600MHz.

Flying level at 2000ft BARNSLEY RPS (1030hPa), in a 60° AOB L turn through 250° at 300kt whilst receiving an RT briefing from the ground team for a close air support task, a light ac – the C42 ML - was spotted 500ft away in the RH quarterlight at a similar altitude. The PF immediately rolled wings level as the other ac passed about 50ft above and slightly behind the Hawk with a 'medium' Risk of collision. He estimated the closest horizontal separation was 500ft.

A NOTAM had been issued for the Exercise (Y0964/12), which included contact frequencies for the FAC - C/S JACKPOT CONTROL – on VHF of 137·600MHz and for UHF 335·700MHz. The FAC had not received any calls from the C42 ML pilot and the Airprox occurred towards the centre of the 5nm diameter NOTAM'd airspace. An information RT call was made to the nearby Eddsfield A/D at the start of the sortie, but with no response. A further call was made to Eddsfield after the Airprox without response. The C42 ML was observed departing the area to the E, but it did not appear to make an approach to Eddsfield A/D.

UKAB Note (1): Eddsfield is an unlicensed A/D situated 2%nm E of the notified NOTAM co-ordinates at an elevation of 525ft amsl. The Eddsfield website indicates that an 800m x 20m grass strip is orientated RW09LH/27RH with an A/G Station – C/S Eddsfield RADIO - operating on 134-00MHz.

THE IKARUS C42 MICROLIGHT (C42 ML) PILOT reports he was flying his 2nd solo NAVEX as a student ML pilot with a total of 7 hours solo flying time at that point. Departing from Husthwaite he was inbound to Eddsfield whilst in communication with Husthwaite RADIO on 118-600MHz. The ML is coloured white and the tail mounted strobe was on; no SSR is fitted.

Heading 105°, flying straight and level at about 2300ft amsl and 65kt some 15min into the flight he noticed a Hawk ac in his 11o'clock position >500m away, which crossed his flight path from his

11o'clock to 2o'clock as it banked to port and descended, passing about >500m in front of his ML at the closest point. No avoiding action was necessary on his part, as the Hawk pilot had already taken the necessary action so he carried on and landed at Eddsfield.

UKAB Note (2): The Y series NOTAM Y0964/12 referred to by the reporting Hawk pilot was issued by LF Ops for the benefit of military aircrew. NOTAM H0726/12 was issued by the UK NOTAM Office promulgating the following warning for civilian aviators:

EGTT/QWELW/IV/BO /W /000/190/5407N00032W005

A) EGTT B) 1203210905 C) 1203211635

E) FORWARD AIR CONTROL EXER. A 2 FAST JET ACFT WILL CONDUCT HIGH ENERGY MANOEUVRES WI 5NM RADIUS OF 5407N 00032W (YORK WOLDS, N YORKSHIRE). ACFT MAY OPR OUTSIDE THE GIVEN AREA. MAJORITY OF ACTIVITY 5000FT AGL AND BLW. CREWS WISHING TO TRANSIT THE AREA SHOULD CTC JACKPOT CONTROL 335.700MHZ OR 137.600MHZ. CTC 01677 456161 OR 07785992496 AND 07770855367. 12-03-0332/AS 3 F) SFC G) 19000FT AMSL).

UKAB Note (3): The LATCC (Mil) radar recording does not illustrate this Airprox. The Hawk is shown squawking A7001 and established in a LH orbit within the NOTAM'd airspace. At 1333:12. the Hawk is shown at 1500ft unverified Mode C (1013hPa) - about 2000ft (1030hPa) - turning L through 250° before descending further and tightening the orbit. The Ikarus C42 ML is not shown at all. The reported Airprox location lies on a direct track from Husthwaite to Eddsfield about 3/4nm WNW of the promulgated NOTAM co-ordinates.

UKAB Note (4): A subsequent telephone conversation with the C42 ML pilot's instructor revealed that he and his student had reviewed applicable NOTAMs before the flight and were aware of the NOTAM promulgating the FAC training exercise with the contact frequency/telephone number. The Instructor stated that he preferred to maintain continuous contact with his student on the Husthwaite frequency, rather than brief the student to switch to JACKPOT.

UKAB Note (5): Further discussions with the Hawk PIC revealed that the VHF frequency assigned to the Unit to permit air-to-ground co-ordination by non-exercise players is at the very extremity of the air VHF spectrum. Frequency 137.600MHz cannot be accessed by 760 channel VHF sets nor older 720 channel equipments, which has been a continuing source of difficulty for the Unit. Requests for a lower frequency allocation accessible by all commonly used VHF DSB AM radio sets has so far proved fruitless. It was also revealed that there is no formal routine procedure for contacting A/Ds in the vicinity of their notified Exercises - in this case Eddsfield - prior to operating there other than the publishing of a NOTAM, which contains telephone contact numbers and frequencies. However some of the FAC instructors do telephone the A/D on the day of the activity using the contact details on websites etc. and also using the A/D's published frequency. The Hawk pilot advises that other than his own two attempts to contact Eddsfield from the air by VHF during the sortie on 21 Mar, he believes no other attempt to contact them was made on this day. However, subsequent to this Airprox, when using this location the Unit has elected to implement a formal procedure to contact Eddsfield by telephone on the day before and on the actual day of the Exercise.

HQ AIR (OPS) comments that the Hawk crew saw in time to assess any collision risk and take appropriate action, although none appears to have been required in this case. The NOTAM process serves two purposes; primarily, it highlights to other users of the specific airspace the high likelihood of encountering military flying activity in the hope that their awareness is increased and to allow them to minimise their risk by focussing lookout or avoiding the area; secondly it mitigates the slight loss in lookout effectiveness necessitated by the close air support tasking. The ML pilot does not mention any consideration of the NOTAM and does not report attempting to contact the FAC on the frequency provided. Had he done so, a degree of coordination would have been possible in order to reduce the risk of collision.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar video recordings and comment from the appropriate military operating authority.

Notwithstanding the existence of a NOTAM promulgating the Hawk pilot's Exercise, Members understood that each of the pilots involved here was flying legitimately in Class G airspace where 'see and avoid' prevailed. Evidently the Hawk pilot had played his part in trying to contact Eddsfield at the commencement of the sortie; however, Members were concerned that the Exercise had been planned to operate only 3nm to the W of another A/D without prior co-ordination being effected by the directing staff beforehand. Irrespective of whether it is a small unlicensed A/D or not, Members perceived that a courtesy telephone call to the A/D operator to ascertain the activity at the A/D before the Exercise took place was a helpful prerequisite to mutually safe operations in the Vale of York AIAA. Consequently, the Board was reassured to learn that as a result of this Airprox improvements have subsequently been made to the co-ordination arrangements for FAC training exercises.

It was apparent that, despite the NOTAM advising pilots to contact the FAC on the RT whilst in transit, the Ikarus C42 pilot's instructor wished to maintain RT contact with his inexperienced student throughout the latter's transit to Eddsfield. Some Members understood the instructor's desire to monitor the C42 student pilot closely, which would allow the student to communicate quickly if he encountered any difficulty, although it seemed that the student pilot would have to leave the frequency anyway and switch to Eddsfield RADIO prior to landing. Whilst encountering military ac at low-level in the Vale of York AIAA might be commonplace, and indeed the C42 pilot's base at Husthwaite is close to Topcliffe and Linton-on-Ouse, the Board considered that the instructor could have heeded the advice contained in the NOTAM more conscientiously. However, Members recognised that the NOTAM was advisory in nature and did not compel the instructor to take any action, or that the C42 Student pilot need remain outside the promulgated airspace, so this was entirely a matter of airmanship. Experienced pilot Members were more concerned that the instructor had tasked his student to fly through an area where potentially two fast-jet ac might be encountered conducting high-energy manoeuvres, albeit that only one flew this day. Clearly the 5nm radius around the published co-ordinates had to be penetrated in order to arrive at Eddsfield, but some Members wondered if it might not have been more sensible to dispatch the Student to another A/D this day, where there was not such a high probability of encountering an unpredictable, manoeuvring fast-jet. Alternatively it would have been advisable to liaise with the JFACTSU on the telephone number given in the NOTAM before the flight to determine whether there were suitable periods during the day when the Hawks would not be airborne and/or to alert the FAC and the Hawk pilots to the planned timing of the Ikarus' flight.

It had not been possible to ascertain if the radio available to the C42 student pilot was capable of selecting JACKPOT CONTROL's frequency, but Members recognised that a student pilot of very limited experience might find calling a FAC a daunting prospect and shy away from it. Furthermore, the Board was concerned that the Unit's allocated VHF frequency was not the most suitable if it was deemed desirable for civilian pilots to have the facility to call JACKPOT CONTROL; the ability of civilian pilot's to contact the FAC was severely impaired by this high frequency outwith the selectable range of a significant proportion of civilian GA transmitter/receivers. The Board was briefed that the JFACTSU supported by HQ AIR Cmd had requested the allocation of a lower VHF frequency to facilitate deconfliction with civil traffic. The DAP Advisor explained to the Board the difficulties of VHF frequency allocation in the UK and that there was a chronic shortage of any spare frequencies within the VHF 'air' band. Therefore this was not an easy problem to solve, but advised that work was continuing with the aim of finding an alternative frequency for use by the Unit.

The Student C42 pilot reports seeing the Hawk manoeuvring – banking to port and descending - at a range in excess of 500m. However, in the Board's view he might well have seen the jet a little later than he estimates as he also states that no avoiding action was necessary on his part as the Hawk crew was already taking action. As the Hawk PIC reports the PF saw the smaller C42 ML 500ft away, pilot Members agreed this was less than ideal and the Board concluded that the Cause of this Airprox was a late sighting by the pilots of both ac. Despite the late sighting by the Hawk PF, he saw

the C42 in time to assess the situation and was prepared to take robust action should it have been needed. However, this was not necessary in this case as he rolled wings level whilst the C42 passed above and astern. The Board concluded, therefore, that no Risk of a collision had existed in these circumstances.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: Late sightings by the pilots of both aircraft.

Degree of Risk: C.