

AIRPROX REPORT No 2011110

Date/Time: 22 Aug 2011 1518Z

Position: 5410N 00059W (12nm
NE Linton-On-Ouse -
elev 53ft)

Airspace: Vale of York AIAA (Class: G)

Type: Tucano T Mk1 Untraced Glider

Operator: HQ Air (Trg) NK

Alt/FL: 5000ft NK
QFE (1017hPa) NK

Weather: VMC CLOC NK

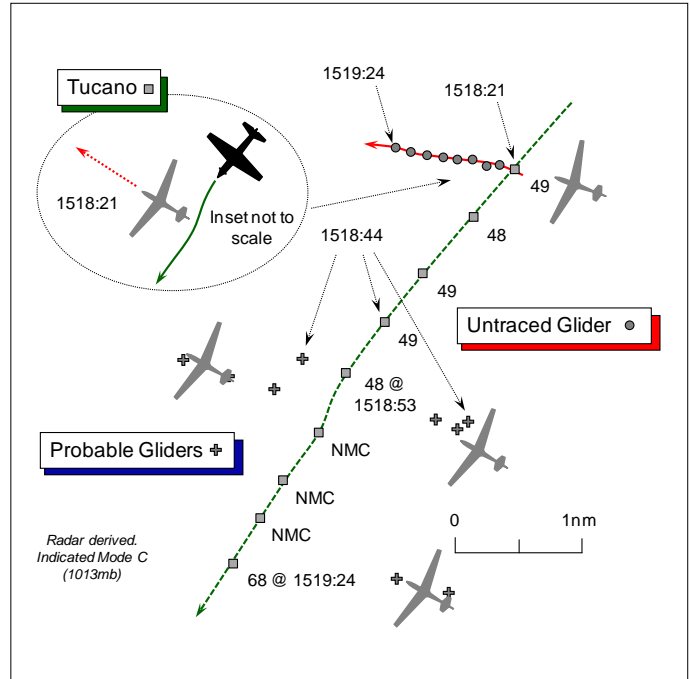
Visibility: 40km NK

Reported Separation:

Nil V/50yd H NK

Recorded Separation:

Not recorded



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE TUCANO T Mk1 PILOT, a QFI, reports he was conducting an advanced training sortie from Linton-on-Ouse (L-o-O) performing aerobatics and general handling (GH). They were not in receipt of an ATS, but a squawk of A4576 [L-o-O conspicuity] was selected with Mode C; TCAS I is fitted without Mode S.

To avoid cloud and other known ac, the exercise was conducted in a large gap in the SCT cloud 15nm NE of L-o-O. On completion of this element of the sortie the ac was positioned for recovery to L-o-O and the ATIS channel selected. The weather was fine, with the cumulus cloud base at 6000ft. Numerous gliders had been observed operating from Sutton Bank and a gliding competition involving up to 45 gliders was known to be taking place from Pocklington aerodrome (NOTAM H3848/11 refers).

As the ac tracked towards Linton at 5000ft, L-o-O QFE (1017hPa) the crew increased their lookout due to the number of gliders in the area. The radio was tuned to the ATIS briefly, before contacting L-o-O APPROACH. Approaching a position 040° L-o-O 11nm, heading 210° at 210kt the crew's attention was drawn to two gliders at a similar height about 2nm away – one at 10 o'clock and the other at 2 o'clock. Two sec later the PF observed a white single-seat glider – possibly a Discus - immediately on the nose, at the same height, less than 100yd away, crossing straight and level from L to R. To avoid this glider he instinctively banked hard L and the glider passed about 50yd down the starboard side with a 'very high' Risk of collision. No traffic was indicated on the TCAS I. Subsequently, the PF climbed above the cloud base as he assessed that the danger posed by the gliders was too great. Linton APPROACH was then contacted for recovery and an Airprox declared on the RT. The ac was recovered to L-o-O without further incident.

RADAR ANALYSIS CELL LATCC (MIL) reports that despite extensive tracing action, the reported glider could not be identified and the pilot remains unknown.

UKAB Note (1): NOTAM H3848/11 promulgated the following activity, sunrise to sunset, between 21 Aug and 28 Aug from the surface to 5000ft amsl:

'MAJOR GLIDING COMPETITION INC X-COUNTRY ROUTES. INTENSE ACTIVITY WI 5NM RADIUS 5356N 00048W (WOLDS GC, POCKLINGTON AD). UP TO 45 GLIDERS AND 7 TUG ACFT MAY PARTICIPATE. GLIDERS WILL NORMALLY OPR BLW THE INVERSION LVL OR BTN TOPS OF ANY CU CLOUDS AND 500FT AGL. FOR INFO ON ROUTES FOR THE DAY CTC GLIDER CONTEST CTL TEL 01759 303579 OR 07769141024. RTF 130.100MHZ.'

THE LINTON-ON-OUSE APPROACH CONTROLLER (APP) reports the Tucano crew reported an Airprox on the APP frequency at 1518UTC, but the flight was not on the controller's frequency at the time of the Airprox. The Tucano crew requested a visual recovery and reported having an Airprox a couple of minutes earlier. The pilot reported he had come within 50m of a glider at 5000ft S of Sutton Bank.

A glider competition had been notified for that day and there were a large number of primary contacts on the screen for most of the afternoon. The gliders routed from Pocklington - Pontefract - Thirsk - Pocklington. They passed within 5nm W of L-o-O and on their return passed within 5 miles E of the aerodrome. At the time of the Airprox there were a large number of gliders transiting to the E of the aerodrome between Full Sutton and Pocklington.

THE LINTON-ON-OUSE ATC SUPERVISOR (SUP) reports the controller's workload was 'low' and that of the unit 'medium to low' at the time of the Airprox, which was simply a case of high intensity glider activity within close proximity to an active military aerodrome. In excess of 40 gliders had been NOTAM'd and monitored on radar as they transited around the North York Moors and Vale of York. Unfortunately the Tucano experienced this Airprox as he commenced his recovery to L-o-O and before he had established two-way RT contact with APP. Had the Tucano crew made contact earlier then this incident may have been avoided by the use of radar; the APP controller fulfilled his obligations to the flight during the visual recovery. Information regarding the notified route of the glider competition had been disseminated to flying units at L-o-O.

LINTON-ON-OUSE ATC commented that Linton crews were aware of the NOTAM for the glider competitions and on such occasions they should be in RT contact with ATC earlier than usual, especially when operating in the vicinity of known glider activity. ATC have also agreed to inform crews when taxiing out about glider contacts observed on radar, that might help the pilot determine an alternative route in advance before take-off.

BM SAFETY MANAGEMENT reports that the investigation conducted by Linton-on-Ouse confirmed that the Tucano pilot was not in receipt of an ATS when the Airprox occurred. Consequently, there are no ATM-related issues.

UKAB Note (2): The LAC radar recording does not illustrate this Airprox clearly. The Tucano is shown approaching the reported Airprox location from 1518:00, and a multitude of intermittent primary radar contacts are evident in the vicinity that are probably gliders. The Airprox occurs at about 1518:21, when the Tucano was 12nm NE of L-o-O tracking 210° in a level cruise indicating 4900ft (1013hPa). At that point the untraced glider is not shown at all. Nonetheless, successive sweeps reveal a primary contact in the exact position the Tucano has just vacated maintaining a steady track of about 280°, which seems to have been crossing from the Tucano's L - R as reported, thereby giving credence to the Tucano pilot's reported separation. However, no avoiding action is apparent from the Tucano at that point. The gliders reported by the Tucano pilot in his 10 o'clock and 2 o'clock positions might be those shown later at 1518:44, and on the next sweep a slight descent and jink to the L are evident that accord with the reported avoiding action L turn. Thereafter, no Mode C is evident from the Tucano until 1519:24, when it indicates 6800ft (1013hPa) evincing the Tucano pilot's reported climb to higher levels above the cloud base to avoid the glider traffic.

HQ AIR (TRG) comments that the absence of an ATS was a factor in this incident, and the limited effectiveness of TCAS in an environment where non-transponding traffic proliferates is also noted.

Liaison between RAF Linton and the local gliding community has increased over the last few months but there is still room for improvement in the reaction of operators to a warning of intense gliding activity. Balancing the risk of a mid-air collision with non-transponding traffic against the need to achieve a busy training task is an ongoing challenge for the Station.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included a report from the Tucano pilot, radar video recordings, reports from the air traffic controllers and appropriate ATC and operating authorities.

It was evident that the Tucano crew were aware of the potential for encountering the Pocklington Competition gliders as a result of the NOTAM. However, Members were somewhat disappointed that this Airprox should have occurred, following the considerable effort undertaken to improve liaison between RAF Linton-on-Ouse and local gliding clubs. The Board was also aware of the commendable steps to familiarise Unit pilots with gliding activities and how glider pilots operate in different weather conditions. On a thermalling day (with Cu cloud), it would have been wiser if the Tucano crew had remained above the base of the cloud for as long as possible to minimise their exposure to the gliders operating below. However, each pilot was operating legitimately within Class G airspace and Members were well aware that gliders might be encountered throughout the FIR at any point. Moreover, it was possible that the untraced glider pilot was not a competition participant, none of whom had been identified during tracing action as flying the reported glider. Despite the very positive stance already taken by individual aircrews from this Station to ameliorate the potential for airborne conflict between gliders and military training ac, the HQ Air Trg Member believed it was now appropriate for the Station to prescribe additional measures, if necessary mandating more positive deconfliction procedures. The steps taken by ATC to inform ac taxiing out about gliders observed in the locality was noted and should be effective. Moreover, it was suggested that high-level recoveries via the overhead might also reduce the amount of time that aircrews were operating in the same airspace as that used regularly by the competing gliders, thereby reducing their exposure to the potential for conflict.

The Tucano crew had acquired two gliders - one to port and one to starboard - at a similar height about 2nm away, alerting them to the presence of gliders in the immediate vicinity. The PF then observed the subject untraced glider less than 100yd directly ahead at the same height, crossing from L to R. Accepting that white gliders flying straight at the same level are difficult to spot, pilot Members agreed that at this short range, the late sighting by the Tucano crew was part of the Cause. It was unfortunate that the glider pilot could not be traced, but if the glider pilot had been aware of the Tucano passing this close it seemed inconceivable that he would not have responded with an Airprox report. This suggested to the Board that the glider pilot had probably not seen the Tucano as it passed astern, and this was the other part of the Cause. The Board agreed unanimously that this Airprox had resulted from a probable non-sighting by the glider pilot and a late sighting by the Tucano crew.

It was indeed fortunate that the Tucano crew spotted the glider when they did. Pilot Members noted that the avoiding action taken by the Tucano pilot was instinctive. Nevertheless, this avoiding action hard L turn, whilst robust and effective, only achieved 50yd separation on the glider as it passed down the starboard side. This was just sufficient to avert a collision, which led the Board to conclude unanimously that the safety of the ac involved had been compromised.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: A probable non-sighting by the glider pilot and a late sighting by the Tucano crew.

Degree of Risk: B.