AIRPROX REPORT No 2010035

Date/Time: 8 Apr 1410

Position: 5318N 00046W (6nm

E Gamston)

Airspace: Lon FIR (Class: G)

Reporting Ac Reported Ac

Type: Typhoon ASW 28 Glider

Operator: HQ AIR (OPS) Civ Pte

<u>Alt/FL</u>: 2300ft [2300ft]

(RPS 1025mb) [datalogger]

Weather: VMC (CLBL) VMC CLBC

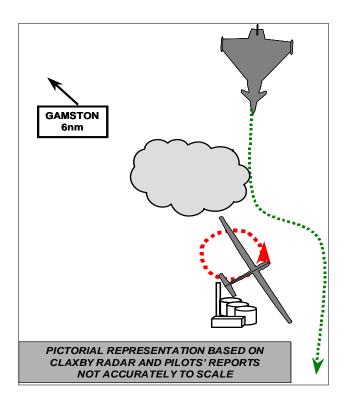
Visibility: 40km 20km

Reported Separation:

0 V/500ft H ~100ft V/~200m H

Recorded Separation:

NR (See UKAB Note: (1))



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE TYPHOON PILOT reports flying a grey ac with HISLs and nav lights switched on, on a dual training flight from Coningsby, squawking 7001 with Mode C but not in receipt of an ATS; TCAS was not fitted. While heading 180° at 360kt and at 2300ft on the RPS, a mid wing, unpowered glider was seen about 2nm ahead in a left turn, at the same alt, but to the right of the nose. Initially he did not consider it necessary to take avoiding action, as the glider appeared to be moving away to the right, so his unaltered flight path would take him safely behind the glider without alarming its pilot. As they closed however, he observed that the glider's high turn rate and low turn radius was such that it had performed a level left hand turn through about 120° and was then converging from right to left and significantly reducing the separation distance. He therefore broke left to give the greatest spacing possible and generated a lateral miss-distance of about 500ft thus ensuring that there was no risk of collision.

THE GLIDER PILOT provided a comprehensive report with several datalogger traces enabling a thorough investigation. He reported that he was flying a white glider, listening out on a glider common frequency, but with no SSR fitted, on a day of strong thermic activity. He was on a cross-country flight from Saltby and was climbing in a left hand turn in strong lift over Tuxford Power Station. Just after passing through an Easterly heading he saw a Typhoon ac directly in front of him 200m away banking steeply to the left; it then rolled back onto its original heading and he could see the rear of the ac. From this he deduced that the Typhoon had originally been heading directly towards him. The height was difficult to confirm but his logger trace shows a very strong climb from 2080ft at 1409:00 to 2700ft at 1410:00. He considered that transiting a fast jet through and the choke point between Scampton/Doncaster, at between 2000ft and 4000ft on a thermic day and over a major thermal trigger such as the power station had significantly increased the level of risk of encountering gliders. He could not evade the Typhoon due to the relative speed differences but, fortunately, the other pilot saw him or had technology to enable him see his ac.

UKAB Note (1): Although the Typhoon is seen on the recordings of several radars, throughout the period, the glider is not seen at any time. The recording of the Claxby radar at 1408:30 shows the Typhoon tracking 230° and indicating FL020 (2550ft amsl); at 1409:04 it turns left onto 180°, remaining at the same alt. At 1409:34 the Typhoon, having descended to an alt of 2350ft amsl,

commences a hard left turn at position 5318.5N 00046.2W (Tuxford Power Station) and then reverses back onto 180° generating a track displacement of 0.4nm. At that time the glider datalogger shows it to be at 2300ft amsl climbing in a left hand orbit in the position reported by the Typhoon pilot; it does not show on radar although there is a slow moving contact, squawking an RAF Waddington conspicuity code (no Mode C), tracking S, 1nm NW of the position.

HQ AIR (OPS) comments that both ac were operating legitimately in Class G airspace. Neither ac was under a radar service or TCAS equipped so the 'see and avoid principle' pertained and in this case it worked and the Typhoon avoided the glider.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar recordings and reports from the Typhoon operating authority.

The Board noted the comprehensive report and data-logger information provided by the glider pilot, which had allowed a comprehensive investigation, despite the glider not showing on recorded radar.

The GA Member opined that the Typhoon pilot did well to see the small cross-section, white glider early enough to assess its flightpath and avoid it when it made an unexpected turn towards him. The HQ Air Member noted the glider pilot's comment regarding thermals over power-stations and the increased probability of encountering gliders there, but thought that many military aircrew would not be aware of this; he thought it most informative and worthy of publicising.

Since both ac had been operating legitimately in Class G airspace and the Typhoon pilot saw the glider early enough to avoid it, albeit perhaps by a smaller margin than desirable, there had been no risk of collision.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: Conflict in Class G airspace resolved by the Typhoon pilot.

Degree of Risk: C.