

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE PA42 PILOT reports conducting a transit flight, the majority of which he was aware was covered by a NOTAM for gliding activity. The white, blue and red ac had navigation, strobe lights and HISLs selected on, as was the SSR transponder with Modes A and C. The ac was not fitted with an ACAS. The pilot was operating under VFR in VMC and was not in receipt of an ATS. He concentrated on an effective lookout to mitigate the risk due to the increased glider activity, and had already seen and avoided several gliders. He noted that, although there was no cloud and that visibility was 'good', conditions were hazy with no horizon. Whilst in straight-and-level cruise, heading 065° at 220kt and 3000ft, he saw a glider just right of the nose, at an estimated range of 200m, head-on and co-altitude. He broke left immediately to avoid collision. He stated the glider pilot did not appear to manoeuvre.

He assessed the risk of collision as 'High'.

THE NIMBUS PILOT reports conducting a competition flight¹. The white and red ac was not fitted with external lighting or an SSR transponder but was fitted with FLARM². The pilot was operating under VFR in VMC, without an ATS, and was listening out on the BGA RTF of 130.125MHz³, he thought. Whilst in 'level cruise', heading 235° at 60kt, he saw a white, low-wing, twin-engine ac just to the right of the nose, at an estimated range of less than 100ft and co-altitude, in a 'well banked' left turn. He stated that 'all the avoiding action was taken by the twin' and that if it had not been taken, they would have collided. He noted that, at the time, his lookout was compromised due to his concentrating on finding 'signs of lift'.

He assessed the risk of collision as 'High'.

¹ The competition ACN is reproduced at Annex A.

² Flight Alarm (FLARM) is the name given to a low power, weight and cost electronic device designed to alert pilots to potential collision. It responds to other FLARM equipped aircraft with an effective range of 3-5km and is therefore optimised for low speed aircraft.

³ British Gliding Association (BGA) members are assigned 5 RT frequencies by the CAA with which to facilitate intra-glider and Aeronautical Ground Station communication. The frequency 130.125MHz has the promulgated primary use of 'Training (lead and follow)' and secondary uses of 'Other cross-country location messages ' and 'Local and other flying Competition start and finish lines'.

Factual Background

The Cranfield weather was recorded as follows:

METAR EGTC 131450Z 03006KT 350V070 9999 FEW049 29/15 Q1024 METAR EGTC 131550Z 02006KT 350V070 CAVOK 28/16 Q1024

A NOTAM was issued for the gliding competition, as follows:

(H2472/13 NOTAMN Q) EGTT/QWGLW/IV/M /W /000/100/5208N00151W010 A) EGTT B) 1307130402 C) 1307212014 D) SR-SS E) MAJOR GLIDING COMPETITION INCLUDING CROSS-COUNTRY RTE. INTENSE ACT WI 10NM RADIUS 520803N 0015103W (BIDFORD AD, WARWICKSHIRE). UP TO 30 GLIDERS AND 5 TUG ACFT MAY PARTICIPATE. GLIDERS WILL NORMALLY OPR BLW THE INVERSION LVL OR BTN THE TOPS OF ANY CU CLOUDS AND 500FT AGL. RTF 129.975MHZ. FOR INFO ON DAILY TASK RTES CTC GLIDER COMP CTL TEL 01789 778807 OR 07803 299773 OR VIEW WWW.BGALADDER.CO.UK/SHOWTASK.ASP FOR BIDFORD. 13-07-0095/AS3. F) SFC G) FL100)

Analysis and Investigation

UKAB Secretariat

Both pilots were operating under VFR in VMC. They had equal responsibility for collision avoidance⁴ and, as they were approaching head-on, were required to alter their course to the right if there was a danger of collision⁵. Neither pilot had right of way⁶ and neither was in receipt of an ATS.

Summary

A PA42 and a Nimbus 2C came into conflict at 1514 on 17th July 2013, at a position 5nm NE of Silverstone. The PA42 pilot took avoiding action by turning left; the Nimbus pilot saw the PA42 too late to take avoiding action.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, radar video recordings and a GPS logger file.

The Board first considered the pilots' actions. Both pilots were equally responsible for collision avoidance and the PA42 pilot had reported a heightened awareness of increased gliding activity, with a commensurate increase in his lookout activity. The Nimbus pilot reported that his lookout may have been compromised by his increased concentration on finding 'signs of lift'. In the event, the PA 42 pilot saw the glider at what the Board considered to be near to his last opportunity to achieve effective collision avoidance. He broke left and the glider pilot, with less rapid manoeuvering capability (and who the Board opined had seen the PA42 a few seconds later), stated that a collision would have occurred otherwise. The Board considered that the PA42 pilot's avoiding actions were entirely appropriate and, not having had the time or separation to turn to the right iaw Rule 10 (Approaching head-on), he fully discharged his collision avoidance responsibility under Rule 8 (Avoiding aerial collisions). Pilot members opined that powered-aircraft pilots could mitigate glider collision risk vertically by either transiting above an inversion layer or cloud base or by staying low, or horizontally

⁴ Rules of the Air 2007 (as amended), Rule 8 (Avoiding aerial collisions).

⁵ ibid., Rule 10 (Approaching head-on).

⁶ ibid., Rule 9 (Converging) states that 'flying machines shall give way to airships, gliders and balloons', however, Rule 9 is subject to Rule 10, in which a right of way or requirement to give way is not asserted.

by applying as wide a berth as possible from known gliding activities. However, it was acknowledged that these strategies could create problems of their own due to airspace constraints or confliction with low-flying military traffic for example: any plan very much depended on the specific route and conditions of the day but the point to be made was that both powered-aircraft and glider pilots should actively consider all mitigations possible, especially when planning to operate through or near to NOTAM'd activities.

The Board also considered the effectiveness of notification procedures associated with glider competitions and opined that there was potential for improvement. The current NOTAM information did not directly include intended competition task routes or general routeing areas; it relied on other affected airspace users, who could be up to hundreds of kilometres from the NOTAM glider site, taking further action to check for more comprehensive routeing information. Recognising the late stage at which daily tasks might be decided (sometimes only a few hours before launch), the Board opined that, nevertheless, more effective and timely promulgation of tasks and routes was required such that affected airspace users could easily acquire up-to-date and pertinent information without having to check through a number of diverse sources of information (which might not be readily available depending on the facilities at the departure airfield or strip). The Board resolved to recommend to the BGA Competition Committee that it review the content of glider competition NOTAMs and promulgation of daily task notification, such that affected airspace users could more readily obtain information on glider flights that could affect their operations. In this respect, it was noted that a number of electronic planning aids were available that could be used by the aviation community to provide more dynamic awareness of planned tasks.

The Board considered that the PA42 pilot had seen the Nimbus glider at or near his last opportunity to effect collision avoidance and that there was a high probability that the aircraft would have collided had he not done so. His break manoeuvre resolved the confliction, thereby improving matters, but the Board opined that, in this instance, safety margins had been much reduced below the normal.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: A conflict of flight-paths resolved by the PA42 pilot.

Degree of Risk: B.

ERC Score⁷: 20

<u>Recommendation</u>: The BGA Competition Committee reviews content of glider competition NOTAMs and promulgation of daily task notification.

⁷ Although the Event Risk Classification (ERC) trial had been formally terminated for future development at the time of the Board, for data continuity and consistency purposes, Director UKAB and the UKAB Secretariat provided a shadow assessment of ERC.



Directorate of Airspace Policy AIRSPACE UTILISATION

ACTIVITY NO: 2013-07-0095

21 Jun 2013

See Distribution

AIRSPACE CO-ORDINATION NOTICE

BGA BIDFORD REGIONALS GLIDING COMPETITION BIDFORD AIRFIELD 13-21 JUL 2013

Reference:

A. British Gliding Association Notification (Mr C Rule). E-mail dated 03 Jun 13 (BGA Comps 2013).

ALL TIMES UTC

INTRODUCTION

 As requested/notified at Reference A, the following measures have been agreed by AU with the organiser and airspace controlling authorities to accommodate the title subject Unusual Aerial Activity.

ACTIVITY

 A BGA sponsored Bidford Regionals Gliding Competition, including cross-country flights, to be mounted from the Bidford Gliding and Flying Club located at Bidford Airfield, Warwickshire [Position: 520803N 0015103W].

DATES AND TIMES

3. Sat 13 Jul – Sun 21 Jul 2013. DAILY from Sunrise to Sunset.

VERTICAL LIMITS

4. The activity will take place from surface to FL100. Glider participants can be expected at any level but will normally operate below the inversion level or between the tops of any cumulus clouds and 500ft agl. Controlled airspace will be avoided unless prior clearance has been obtained from the Airspace Controlling Authority.

OPERATING AUTHORITY OR SPONSOR

5. a. <u>Competition Director</u>: Mr Andrew Reid.

Bidford Gliding and Flying Club Bidford Airfield Bidford-on-Avon

Civil Aviation Authority, K8, 45-59 Kingsway, London, WC2B 6TE Direct Dial: 0207 453 6583 or 6599. DFTS (9) 6453 ext 6583.Fax: 020 7453 6593 Internet/Email: mandy.biggs@caa.co.uk



ACN 2013-07-0095

Warwickshire B50 4PD Mob: 07803 299773 Email: <u>andrew.q.reid@btinternet.com</u>

- <u>Glider Contest Control</u>: The contact for this competition is Glider Contest Control Tel: 01789 778807.
- c. Radio Contact: VHF 129.975Mhz.

AIRCRAFT

6. Up to 30 x gliders and 5 x powered tug aircraft may participate.

CO-ORDINATES OF AREA OR EVENT

 The activity will take place within 10nm radius of 520803N 0015103W (Bidford Airfield). After launching, most participants may be concentrated in the airspace around and just downwind of the launch site or on the first leg of the daily nominated cross-country route.

<u>Note</u>: For daily information on routes, activity and likely take off times contact Glider Contest Control Competition Director [as per Para 5 above]. In addition, the BGA web site: <u>www.bgaladder.co.uk/showtask.asp</u> may contain daily task information under the Selected Gliding Clubs tab.

CO-ORDINATION ARRANGEMENTS

8. It is essential that the Competition Director relays details of the daily flying activities at the site (inc likely cross-country routes) to RAF Wittering Low Flying Booking Cell (LFBC) on Tel: 01780 783838 Ext 5002 or Free Phone: 0800 515544 when the military low flying system is open. Ideally, this should be done by Friday 21 June, but at least 4hrs before daily launch in order that appropriate Military 'Y' Series NOTAM action can be taken if necessary. The Competition Director is also requested to notify activity details to the LATCC (Mil) West Supervisor on Tel: 01489 612417 quoting this ACN Number.

9. Should flight in controlled airspace be required, the Competition Director must contact LACC Swanwick TC SWA for coordination on Tel: 02380 401110.

 Other addressees are requested to bring this activity to the attention of their operators/club members, as appropriate, in order that the main activity area can be safely avoided.

OTHER NOTIFIED ACTIVITY

11. As per any daily NOTAM promulgated as effective in the area on the day.

AERONAUTICAL PUBLICATIONS

12. A Systems NOTAM will be issued by AU to cover the overall event.

AMENDMENT ACTION

13. The Sponsor should co-ordinate any changes to this ACN with AU on Tel: 0207 453 6599 or Fax: 0207 453 6593 quoting the Activity Number at the top of the page.

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A J BIGGS Airspace Specialist 3

Distribution: All by e-mail

Action:

BGA Bidford Airfield

LACC Swanwick LATCC (Mil) RAF Wittering BGA Competition Committee [FAO Mr C Rule] Bidford Gliding & Flying Club [For Competition Director] TC Ops West Supervisor Low Flying Ops Sqn (LFBC), OC LFS

Information:

Birmingham Airport Edgehill/Shenington Airfield Gloucestershire Airport LATCC (Mil) Long Marston Airfield RAF Brize Norton Wellesbourne Mountford Airfield Mgr ATS Shenington Gliding Club SATCO MABCC, WO Ops ATC Ops SATCO ATC Ops

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