## **AIRPROX REPORT No 2013169**

Date/Time: 23 Nov 2013 1247Z (Saturday)

Position: 5049N 00112W

(Lee on Solent

- elevation 32ft)

Airspace: Fleetlands ATZ<sup>1</sup> (Class: G)

<u>Aircraft 1</u> <u>Aircraft 2</u>

*Type*: ASK21 Robin HR200

Operator. Civ Club Civ Comm

Alt/FL: 1200ft 1500ft

QFE (NK hPa) QFE (NK hPa)

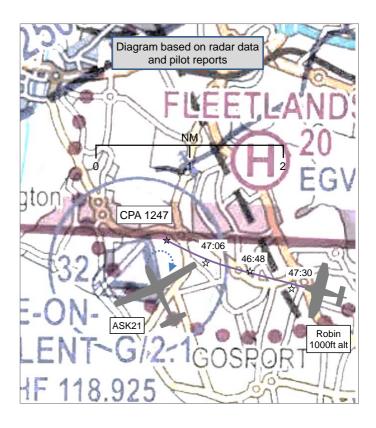
<u>Conditions</u>: VMC VMC Visibility: >40km 25nm

Reported Separation:

50ft V/350ft H Not Seen

Recorded Separation:

NK



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE ASK21 PILOT reports descending above the high-key area for a right-hand circuit for RW05. The white glider did not have external lighting, an SSR transponder or a TAS or ACAS fitted. The pilot was operating under VFR in VMC, in receipt of an A/G Service from Lee Radio. The pilot stated that he was circling to the right, above the start of the downwind leg for a RH circuit for RW05, descending slowly through 1200ft agl. Another glider was 'circling in fairly close proximity' at the same height and just upwind of the winch. The ASK21 pilot made a late visual contact with a low-wing single-engine aircraft which passed 'very close', between him and the airfield, at an estimated height of 1500ft, and heading 'at right angles' to the upwind end of RW05. The powered aircraft passed between the second glider and the winch, within a few hundred feet of the winch, which was launching to 1500ft. He considered that the powered aircraft pilot did not follow published joining procedures.

He assessed the risk of collision as 'Medium'.

THE ROBIN PILOT reports joining the circuit at Lee on Solent. The white and green aircraft had strobe lights selected on, as was the SSR Transponder with Modes A and C. The aircraft was not fitted with a TAS or ACAS. The pilot was operating under VFR in VMC, in receipt of an A/G Service from Lee Radio. He had been given 'downwind joining instructions' and, approached from an easterly direction, 1nm north of the airfield, heading 270° at 100kt and 1500ft QFE, he avoided crosswind conflict by 'approaching from the northeast' and 'maintaining cruise altitude before descending after upwind to the circuit height of 1000ft QFE'. When established on the downwind leg he heard an RT call of a glider cable launch. In his lookout for other glider traffic, he saw one glider turning well below him. He noted that after landing he heard someone make a comment about an aircraft in confliction with a cable but as the only cable launch was when he was established downwind, he did not consider that he was the subject of the comment.

He did not see another aircraft in proximity.

<sup>&</sup>lt;sup>1</sup> The Airprox occurred outside the promulgated operating hours of the Fleetlands Helicopter Landing Site. Consequently, the Fleetlands ATZ was not active.

## **Factual Background**

The weather at Southampton was recorded as follows:

METAR EGHI 231250Z 01012KT 9999 FEW030 07/01 Q1024

Lee on Solent has a promulgated glider site, winch launching and aero-towing up to altitude 2100ft. The airfield has mixed power and glider circuit traffic with powered aircraft operating northwest of RW05/23 and glider traffic southeast. The airfield is partially overlain by the MoD Fleetlands heliport ATZ, and a LoA exists between the 2 operating authorities. The LoA from Revision 8 of the Lee on Solent Aerodrome Manual is reproduced at Annex A.

The Lee on Solent Aerodrome Manual, Revision 8 dated 17<sup>th</sup> April 2013, section 5.14 states:

'Powered aircraft and glider operations integration (Including motor gilders)

When the PNGC is active on the aerodrome and the circuit is divided into two distinct sections. Powered flying and glider flying operate opposing circuits during this phase.

The circuit divider lies along the eastern limit of the main runway and extends to the outer limits of the circuit pattern.

### Circuit directions and heights

Powered aircraft circuits are 23 right hand and 05 left hand.

Glider and motor glider circuits are 23 left hand and 05 right hand.

The only exception to this rule would be in the case of a motor glider due to dual type of flying of a motor glider the pilot of such craft can decide to use either the glider or powered circuits.

Neither type of aircraft should enter the opposite sector below 1500ft QFE within the confines of the airfield ...'

The Lee on Solent Airfield Visitors Guide, dated August 2013, is reproduced at Annex B.

Fleetlands operating hours are promulgated in the 1 AIDU Flight Information Publication 'Helicopter Landing Sites United Kingdom', effective 5<sup>th</sup> September 2013 to 19<sup>th</sup> February 2014, as follows:

'Op Hrs (L) 0830 - 1600 Mon - Thurs, 0830 - 1200 Fri.'

## **Analysis and Investigation**

## **UKAB Secretariat**

The Robin pilot was required to conform to the pattern of traffic intending to land at Lee–on-Solent<sup>2</sup>, in this case both the glider traffic operating a RH circuit to RW05 and any powered traffic that may have been in the LH circuit for RW05. The Robin pilot was operating outside the published hours of operation of MoD Fleetlands and was permitted to transit the Fleetlands ATZ without informing Fleetlands ATC. The Lee on Solent Airfield Visitors Guide recommends that powered pilots joining the (powered) circuit avoid the deadside due to intense gliding activity. The Robin indicated a constant Mode C derived altitude of 1000ft throughout the join and on the downwind leg.

<sup>&</sup>lt;sup>2</sup> Rules of the Air 2007 (as amended), Rule 12 (Flight in the vicinity of an aerodrome)

## **Summary**

An Airprox was reported when an ASK21 and a Robin HR200 flew into proximity at about 1247 on Saturday 23<sup>rd</sup> November 2013, at Lee on Solent Airfield. Both pilots were operating under VFR in VMC and were in receipt of an A/G Service from Lee Radio.

## PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both aircraft and radar video recordings.

Board members first considered the actions of the HR400 pilot. Notwithstanding his, and the glider pilot's, report that he was at about 1500ft altitude, it was evident from the radar replay that his aircraft's Mode C output remained constant, at altitude 1000ft, during the join. Given the downwind height of 1000ft, the Board surmised that the HR400 pilot had therefore most probably been at this altitude during his transit across the glider circuit area. The Lee on Solent Aerodrome Manual states that powered aircraft should not enter the glider 'sector' below height 1500ft 'within the confines of the airfield'. The ASK21 pilot reported that the HR400 was 'very close', although the HR400 pilot reported not seeing a glider in close proximity. In either case, it was clear that the HR400 pilot did fly into proximity with the winch, which was launching to a height of 1500ft, and the Board reiterated the dangers of flying in proximity to winch operations and especially winch cables. Notwithstanding any potential issues with the accuracy of the radar picture, the Board decided that the HR400 pilot would have been better advised either to transit to the south for a left-base arrival, or to remain at 1500ft until clear of the 'glider sector'. In the event, he did not comply with the Lee on Solent arrival procedure, and flew close enough to the ASK21 (and the winch) to cause its pilot concern. Nevertheless, the Board decided that although safety margins had been reduced, they had not been 'much reduced' and therefore agreed a degree of risk of C.

During the Board's deliberations, it became clear that there was a lack of sufficient detail in the Lee on Solent joining instructions to provide enough guidance for easterly (and westerly) arrivals by powered aircraft. Specifically, only arrivals from the north and south were explicitly covered. The Board therefore resolved to recommend that Lee on Solent considers reviewing their arrival procedures to mitigate easterly and westerly joining traffic.

## PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: The Robin pilot did not comply with the Lee-on-Solent arrival procedure and

flew close enough to the ASK21 to cause its pilot concern.

Degree of Risk: C.

ERC Score<sup>3</sup>: 4

Recommendation: Lee-on-Solent considers reviewing their arrival procedures to mitigate

easterly and westerly joining traffic.

<sup>&</sup>lt;sup>3</sup> 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.



## 6. Letters of Agreement

6.1 Letter of Agreement on Flight Operations within the MOD Fleetlands Heliport Aerodrome Traffic Zone

## **Purpose of the Agreement**

The purpose of this agreement is to promote the safety of flights using MOD
Fleetlands heliport and Daedalus Lee-on-Solent aerodrome when operating
within the Fleetlands Aerodrome Traffic Zone (ATZ). This agreement
supersedes all previous written agreements regarding the operation of the
aforementioned flights, and is to be reviewed not more than 12 months from
the date of signing.

## **Background**

- 2. The heliport at Fleetlands is a Government Aerodrome as defined in the Air Navigation Order (ANO) 2005 administered by Vector Aerospace International Ltd. The MOD has determined that the heliport shall retain this status independent of ownership of the other parts of the Fleetlands site. The ATZ is notified in accordance with Rule 45 of the Rules of the Air and Air Traffic Regulations for which an Air Traffic Service is provided by Aerodrome Flight Information Service Officers (AFISO) at Fleetlands heliport. The notified hours of service of the ATZ are published in the UK Aeronautical Information Publication ENR Section at paragraph 2-2-2-4 these hours may be amended by the issue of a NOTAM.
- 3. Daedalus Lee-on-Solent aerodrome lies within the Fleetlands ATZ and is designated as a civil, unlicensed aerodrome. As a civil, unlicensed aerodrome, Lee-on-Solent aerodrome is not required to establish its own ATZ and is not required to provide an Air Traffic Control Service.
- 4. Under Rule 45, pilots of aircraft wishing to enter the Fleetlands ATZ are required to obtain sufficient information to enable them to safely conduct their flight through the zone during the notified hours of service of the Zone. Rule 45 is interpreted as intending that the information source is the ATZ Air Traffic Service.

## **Operating Procedures**

5. During the nominated hours of service of the Fleetlands ATZ, pilots of aircraft departing from Lee-on-Solent aerodrome and intending to leave the Fleetlands ATZ in the western sector bounded by the disused railway line to the east of Lee-on-Solent between positions 505140N 0011152W and 504811N 0010907W (intersections with the ATZ boundary) or by climbing to a height above 2,000 feet within this sector, before setting course, are not required to contact Fleetlands, see fig 1. (The disused railway line is marked as such on air charts, and is visually identifiable as a distinct tree-lined feature).



- 6. During the nominated hours of service of the Fleetlands ATZ, pilots of aircraft approaching or landing at Lee-on-Solent aerodrome and who intend to transit the western sector of the Fleetlands ATZ bounded by the disused railway line to the east of Lee-on-Solent between positions 505140N 0011152W and 504811N 0010907W (intersection with the ATZ boundary) or at a height of not below 2,000 feet until within the sector, are not required to contact Fleetlands.
- 7. Fleetlands heliport will direct all its air traffic so as to avoid the sector nominated above. In the event that Fleetlands traffic needs to use Lee-on-Solent aerodrome or transit the nominated sector, then the pilot will contact the air-ground operator at Lee-on-Solent before entering the western sector.
- 8. During the nominated hours of service of the Fleetlands ATZ, pilots of all other aircraft departing from, approaching or landing at Lee-on-Solent aerodrome and intending to transit the ATZ outside the sector nominated above are required to contact Fleetlands Information on frequency 135.700 MHz before departing from Lee or entering the ATZ.
- Apart from the use of the Fleetlands Information frequency on 135.700 MHz for the purpose of complying with paragraph 8 above, no Lee based operator or pilot is required to use the frequency.
- 10. During the operation of Fleetlands heliport, Fleetlands Air Traffic Service staff will ascertain that a particular day's gliding period is commencing and ending at Lee-on-Solent by monitoring the Lee Radio air-ground radio frequency, 118.925 MHz. Telephone calls can be made by any party wishing to ascertain / clarify information regarding operations at either location.
- 11. The Fleetlands Air Traffic Service staff will endeavour to inform the appropriate staff at Lee-on-Solent aerodrome whenever Fleetlands heliport is operational outside the hours of service of the ATZ as published in the UK Aeronautical Publication ENR Section 2-2-2-4.
- 12. The Senior FISO at Fleetlands heliport is responsible for ensuring that all pilots operating at Fleetlands are aware of the contents of this Letter of Agreement.
- 13. The Airfield Manager is responsible for ensuring that pilots using Lee-on-Solent aerodrome under the auspices of their respective organisations are aware of the contents of this Letter of Agreement.
- 14. Recognising the status of Daedalus Lee-on-Solent aerodrome and the nature of its air traffic, the above procedures have been agreed to enhance the safety of flights within the ATZ.
- 15. The Civil Aviation Authority ATSD has confirmed that an exemption to Rule 45 paragraph 4 will be granted for pilots acting in accordance with this Agreement.



This agreement is between Daedalus Lee-on-Solent Airfield and MOD Fleetlands Heliport.

Signed on behalf of: Signed on behalf of:

Fly BN Ltd MOD Fleetlands Heliport
Peter Dalby Lt Cdr Symon Johnson RN

BN-G Airfield Operations Manager Airfield Supervisor

Date Date

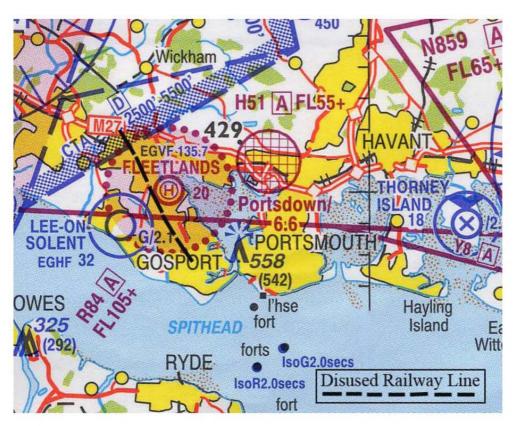


Fig. 1

#### Lee on Solent Airfield Visitors Guide - FlyBN August 2013

This guide is in addition to the Aerodrome Manual for visiting aircraft to Lee-on-Solent Airfield.



Search and Rescue Helicopters have priority over all General Aviation Movements.

Powered Aircraft must also give way to gliders.

"LEE RADIO" 118.925

#### Joining for Runway 23:

Runway 23 uses a **Right Hand** circuit. If joining from the **South**, it is advisable to join mid Solent for the downwind leg. Please avoid over flying any built up areas. When joining from the **North**, it is advisable to join on a right base. Please note the close proximity of the Fleetlands ATZ who can be contacted on 135.700.

After landing, roll to the end of the runway and vacate right, following the Western taxiway and later, signs for Sapphire Aviation.

#### Joining for Runway 05:

Runway 05 uses a <u>Left Hand</u> circuit. When joining from the <u>South</u> it is advisable to join on a left base giving way to any traffic already in the circuit. When joining from the <u>North</u>, it is advisable to join on a downwind leg avoiding any built up areas. Again, please note the close proximity of the Fleetlands ATZ.

After landing, roll to the end of the runway and vacate right following the signs for Sapphire Aviation.

Please do not join overhead the field and avoid the dead side due to intense gliding activity.

### Departing Runway 23:

Maintain Runway heading until clear of any built up areas and depart as required.

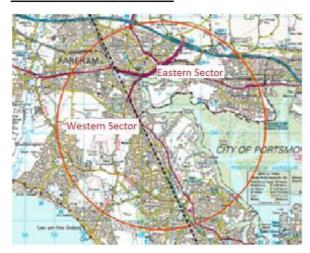
## Departing Runway 05:

If departing to the north, please contact Fleetlands Information 135.700 once airborne. Please avoid any early right turnouts towards the east due to intense gliding activity.

#### Additional Information:

On your initial call, the radio operator will state if gliding is taking place or not. If it is, this will mean that winch launching and aero tows are being conducted at the airfield. The gliders will remain on the dead side of the airfield and will not cross the extended centre line or conflict with powered aircraft using the main runway.

#### The Fleetlands Air Traffic Zone



Please Note: The tree-lined disused Fareham to Gosport railway line (black dotted line) differentiates the eastern and western sectors of the Fleetlands ATZ.

When Fleetlands information is operating, they may be contacted for information, but, it is not necessary if remaining clear of the Eastern Sector. Fleetlands monitor Lee Radio and vice versa and can advise of any traffic in the local area. Fleetlands traffic will not enter the Western Sector without coordinating with Lee Radio.



All powered aircraft circuits are flown to the west of the airfield at 1000ft, around the town of Stubbington. Please maintain the extended centreline on the upwind leg. Avoid overflying any built up areas at all times.

Glider circuits are flown to the east and powered pilots must give way to gliders.

The glider tug may fly a slightly tighter circuit to the west and will announce this when joining or when downwind.

Please maintain a good lookout at all times and give way to traffic already in the circuit.

# Please note the close proximity of the Solent CTA. A basic service is available on 120.225 if required.

## NO PPR AT LEE ON SOLENT AIRFIELD

If you have any questions or you would like to know more, please contact the tower on 02392 551714.

