



# WYCOMBE AIR PARK CONSULTATION DOCUMENT

## CHANGES TO THE WAY AIRCRAFT APPROACH THE AERODROME

1<sup>st</sup> MARCH 2017 - 7<sup>th</sup> JUNE 2017



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## 1. Foreword

We are very proud of our relationship with the local community and stakeholders, and are committed to being a responsible neighbour. The purpose of this document is to ensure you have an opportunity to participate in this important consultation about the introduction of new Global Navigation Satellite System (GNSS) procedures at Wycombe Air Park. These procedures provide satellite guidance to runway 24 increasing safety in reduced visibility weather conditions, but have a minimal effect on the path that aircraft on the proposed approach will follow compared with aircraft using the current visual procedures. 3.4% of aircraft that currently make an approach to runway 24, approximately 500 per year, are expected to utilise the GNSS approach rather than the visual approach. This percentage is based on 2016 data.

In October 2016 Airways Aero Associations Limited signed a new 50 year lease with Wycombe District Council. The implementation of these procedures is part of an investment programme that aims to safeguard the infrastructure of Wycombe Air Park as an ideal General Aviation destination to the north of London. The investment programme includes the reinforcement of the grass taxiway for winter operations, improvement of on-site catering, allocation of additional visitor parking as well as long term plans for new airfield facility buildings. In the short term the introduction of this procedure is not expected to attract new business.

We have explained in detail what this document is about and what we are consulting on further on in this document.

Your opinions regarding the proposals set out within this document and your general feedback are very important to us, and we encourage you to respond.

The stakeholder consultation runs from 1<sup>st</sup> March 2017 to 7<sup>th</sup> June 2017 and details of how to respond are within Section 10

Sean Brown  
Managing Director  
Airways Aero Associations Ltd

## 2. Context

Wycombe Air Park is a General Aviation aerodrome 2.8 miles south-west of the town of High Wycombe. The aerodrome is owned by Wycombe District Council who has leased it to the current licensee and operator Airways Aero Associations Ltd. An aerial map of the aerodrome's location is shown in Appendix A.

Wycombe Air Park is classed as a general aviation airfield because it does not have any scheduled commercial services, two helicopter operators do currently conduct commercial charter flights on an ad-hoc basis alongside training. The airfield is primarily used for recreational flying with a large percentage (around 70%) of flights being training flights in both fixed-wing aircraft and helicopters. There is also a large gliding community with Booker Gliding Club based at the airfield.

Airways Aero Associations Ltd also operates the main flight training organisation, Booker Aviation, they deliver flight training throughout the year and hold contracts with two local universities (Brunel and Buckinghamshire New). These contracts saw 80 student pilots commence flight training in September 2016 many of who will go on to train as commercial pilots. As anticipated the number of students enrolling on the course with Buckinghamshire New University has been steadily increasing year-on-year, however, these first year students will only be flying the existing visual approaches as part of their training.

Wycombe Air Park provides employment for some 180 people from the local community in various roles, such as Management, Pilots, Air Traffic Control, Airfield Services and Engineers.

The majority of the aircraft operated from Wycombe Air Park are small single engine light aircraft. There are several twin engine propeller driven aircraft also based at the airfield. Please see Appendix B for visual representation of some of these aircraft types. The short runway lengths mean that it is not possible to operate large aircraft from the aerodrome and the Operator has accepted a clause in the recently signed 50 year lease to "not knowingly allow the operation of Very Light Jet (VLJ) jet aircraft at the airfield".

The main purpose of the instrument approach procedure is to allow approaches to the airfield during marginal weather conditions. When the weather is poor (e.g. low cloud), aircraft making an attempt to approach the airfield to land are likely to have to abort their approach and divert to another airfield if they are unable to see the runway. This means that during the winter, instrument training flights in particular, as well as some private flights are often cancelled because they would be unable to safely return to the airfield.

The training delivered at the airfield includes instrument flying, this involves training pilots to fly GNSS approaches. The new procedures may therefore also be used during good weather for training purposes when traffic permits.

The volume of these good weather training approaches will vary depending on the intensity of other traffic and has been included in the expected annual approaches of 500. The overall

use of the proposed procedure will therefore not be evenly spread throughout the year with more approaches likely during periods of poor weather (e.g. low cloud) and less approaches likely in good weather. This is because when the visual traffic pattern is busy Wycombe Air Traffic Control will restrict the use of the GNSS approach.

### 3. Executive Summary

Wycombe Air Park is proposing to introduce a GNSS procedure for aircraft making an approach to runway 24 only. This will be used in conjunction with the existing visual approaches to runways 06, 24 and 35.

The proposed approach has been designed by a Civil Aviation Authority (CAA) approved Instrument Approach Procedure (IAP) Designer in accordance with International Civil Aviation Organisation (ICAO) document 8168, CAA policy and guidelines, and are in line with CAA best practices and standards in the UK. The proposed change is also in line with the existing Wycombe Air Park Noise Action Plan (2013), a copy of which is available at: <http://www.wycombeairpark.co.uk/nap>.

Wycombe Air Park handled a total of 41,493 movements in 2016. This is the total movements made to/from runways (i.e. arrivals and departures). Helicopter and Glider movements are not included as their operations are different and not part of this consultation. See Appendix C for a breakdown of the 2016 movement data. 14,523 of these movements have been westerly approaches to Runway 24. It is expected that the new proposed GNSS approaches will make up 500 of these movements. This is equivalent to less than 2 per day. In practice, the volume of approaches will not be evenly spread throughout the year as their use will vary depending on prevailing weather conditions and visual traffic density. There is likely to be more approaches during the winter, when the weather is typically worse, than in the summer for example. All remaining movements will continue to use the existing visual procedures.

This means that 3.4% of arriving flights to runway 24 will be using the GNSS approach, and 96.6% will be continuing to use the conventional visual approach.

Whilst these figures are based on 2016 data it is important to bear in mind that the overall total of all movements, including helicopters and gliders, has shown a rising trend, increasing from 70,365 in 2011 to 77,184 in 2016. The main reason for the increase in movements is the gain of a contract to deliver Private Pilot Licence training to first year students at Buckinghamshire New University. In the future it is possible that movements may increase slightly as a result of fewer flights, and therefore approaches, needing to be cancelled due to marginal weather conditions.

#### **Why the aerodrome is proposing these changes:**

- To further increase the safety of operations in marginal conditions
- To enable operations to continue in poorer weather
- To reduce the likelihood of diversions to other airfields
- To provide the capability for Booker Aviation to conduct instrument approach training at the airfield
- Provision of Instrument Approach Procedures with vertical guidance is aligned with Global, European and national safety objectives

## Why the aerodrome is consulting on this:

The aerodrome is consulting with the local community and stakeholders in line with its commitment to being a responsible neighbour. It is also consistent with existing UK Civil Aviation Authority published guidance on Airspace Change Proposals (CAP725) to consult with stakeholders where changes are proposed to existing approach operations. Wycombe Air Park is following the framework laid down in this guidance. CAP725 is available at: [www.caa.co.uk/cap725](http://www.caa.co.uk/cap725)

What this consultation is NOT about:

- The routing or height of departing aircraft
- The routing or height of existing visual approaches
- Aerodrome operating hours
- Aircraft approaches to runways 06 and 35
- Existing helicopter and glider operations
- Types of aircraft operating at the aerodrome
- Increased runway length
- Changes to any existing noise abatement procedures
- Changes to any airspace around the aerodrome

Wycombe Air Park is consulting on two possible options and these are explained in detail in Section 7. These are:

- Option A (preferred option)      Introduce the GNSS approach
- Option B                                      Do nothing (with no operational or safety benefits)

On 8th July 2014, Wycombe Air Park commenced engagement with the CAA to discuss the viability of the proposal and formally commenced the Airspace Change Proposal with a Framework Briefing at CAA London on 25<sup>th</sup> October 2016. It has been agreed that the consultation period will be 12 weeks, commencing on 1<sup>st</sup> March 2017. Notes of the formal Framework Briefing can be found at <http://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Decisions/Wycombe-Air-Park-GNSS-IAP-Rwy-24/>

This consultation is aimed at the aviation community, local authorities and environmental organisations. However, we would also welcome comments from individuals and other relevant stakeholders. Details of how to respond are contained within Section 10.

## 4. Runway Operations

Wycombe Air Park has 3 runways, 1 asphalt and 2 grass. The runway configuration is illustrated in Appendix D. Two of the runways are parallel and are operated for landing and taking off in two directions (southwest and northeast). The north/south runway is only operated for landing and taking off in a northerly direction. For performance reasons aircraft have to take off and land into wind. Runway selection is therefore primarily governed by the wind direction at the airfield.

This consultation is only concerned with approach procedures to the asphalt runway (runway direction 24). This runway is aligned on a heading of 062 / 242 and therefore is designated as Runway 06/24.

In the UK westerly winds are prevailing around 70% of the time and easterly winds around 30%. Operations to Runway 06/24 from the north-east over the town of High Wycombe account for approximately 70% of the approaches to the aerodrome. At Wycombe Air Park runway 06/24 is the preferred runway. It is for this reason, combined with the proximity and location of airspace to the west (RAF Benson) and south (London Heathrow) of the airfield, that GNSS approaches are not being proposed to Runway 06 or Runway 35.

## 5. Approach Operations

### **Visual Approaches**

A visual approach is where pilots position the aircraft to land using a visual reference to the aerodrome. The pilot will manually fly the aircraft to align with the runway using a combination of visual referencing from local landmarks and features and various lighting systems that are on the ground at the aerodrome. A visual approach can only be flown when visibility is good and the clouds are above a certain height. The flightpath over the ground for a visual approach can vary as different pilots may use different techniques and landmarks.

Wycombe Air Park currently operates only visual approaches to all runways and in the future the majority of aircraft will continue to use them.

### ***Runway 24***

Aircraft arriving at the Aerodrome to land on Runway 24 will normally join the visual traffic pattern depending on the direction from which they are approaching. The type of join is determined by the Air Traffic Controller who is responsible for integrating the traffic. From the north, aircraft usually report at Princes Risborough and fly towards West Wycombe Church (“the Golden Ball”) before overflying Sands and turning over Cressex Industrial Estate to position on final approach to the runway.

Aircraft arriving from the east will normally report 10nm east (Amersham) to join, from here they fly a straight in approach following the extended runway centreline.

These visual tracks are interpreted by the pilot rather than navigation aids, such as GPS, and therefore there is a natural spread in the tracks flown. When a track is flown using a navigation aid the traffic is more concentrated on the correct track. This is even more so for GPS procedures due to the accuracy of the equipment. Appendix E shows the sections of the existing visual traffic pattern for runway 24 compared to the proposed procedure.

### **Instrument Approaches**

An instrument approach is where pilots utilise a system of navigation aids which help guide the aircraft into land during low visibility conditions and/or when the clouds are low. Navigation aids communicate with the on-board systems of the aircraft, which assists the pilot with navigation and helps them align with the runway. An instrument approach may also be used during good weather conditions.

Wycombe Air Park does not currently have any published instrument approaches. Appendix E shows the routing of the proposed instrument approach. It is estimated based on current operations that 80% (400) of the proposed approaches will commence from the northern joining point and 20% (100) from the eastern joining point.

As part of the approach design it is necessary to provide a missed approach procedure in case the pilot has to abort the approach. This takes the aircraft away from the airfield to the west before turning to the north. The pilot will then choose to make a further attempt or divert to another airfield. This procedure has been designed to route aircraft outside of existing Noise Abatement Zones (NAZ). The proposed routing in relation to existing Noise Abatement Zones for Runway 24 is shown in Appendix F.

## 6. Consultation Proposal

Wycombe Air Park is proposing to introduce a Global Navigation Satellite System (GNSS) instrument approach to Runway 24 only. This will be used in conjunction with the existing visual approaches to runway 24.

The proposed GNSS approach will involve aircraft following Global Positioning Satellite (GPS) waypoints that are programmed into the flight management computer on board the aircraft. They work on the same concept as a car “sat-nav”, but provide vertical as well as horizontal guidance. GNSS approaches do not rely on ground based infrastructure. The two main characteristics of this type of approach are:

1. the approach will be a “straight-in” instrument approach. In other words, the approach will follow an extended centre-line of the landing runway as compared to a proportion of visual approaches that involve the aircraft positioning within the visual circuit. This ‘straight-in’ design is optimal for both flight operations and safety and is established preferred practice for instrument approaches, as set out in CAA policy. CAA document CAP 1122, Appendix 1, clearly states that approach designs should be kept as simple and standard as possible, e.g. whenever possible no off-set approaches (approaches to be kept to the centre line of the runway).
2. Aircraft will follow a set path over the ground, leading to greater consistency of flight paths.

If you would like further information on GNSS approaches please visit:  
[www.caa.co.uk/cap773](http://www.caa.co.uk/cap773)

## 7. Consultation Options

### **Option A – Introduce a GNSS approach to Runway 24**

Introduce a GNSS instrument approach to runway 24 as described in Section 6. This is the aerodrome's preferred option.

### **Option B – Do Nothing**

Doing nothing would mean that we remain with the current operation and are unable to improve the safety or efficiency of operations.

### **Discounted Alternative Types of Instrument Approaches**

1. Instrument Landing System (ILS)  
As well as considerable investment in ground-based equipment, an ILS requires an extensive flat area on the aerodrome before the runway in which to site the aeriels and equipment. Due to the proximity of the M40 motorway to the end of the runway this alternative was not a viable option.
2. Conventional non-precision approach  
Conventional ground based aids involve considerable investment and space on the ground, neither of which are available. They are also not as accurate as the newer GNSS procedures and do not provide vertical guidance. At a time when this type of approach are being replaced across Europe by GNSS procedures it was discounted as a viable option.
3. Lateral Navigation (LNAV) Global Navigation Satellite System approach  
LNAV approaches provide lateral guidance only. Whilst this would provide guidance to the runway, the absence of vertical guidance results in higher pilot workload and does not provide the safety benefits by enabling a stabilised approach. Therefore, this option was discounted.

### **Mitigations included in the proposed design to minimise the impact:**

1. Avoid flights over Chesham/Amersham wherever possible.  
Several designs have been amended in order to avoid overflight of built-up areas wherever possible, particularly concerning the overflight of Chesham and Amersham on the initial flight track from the north
2. Separation of the proposed Denham and Wycombe IAPs  
The design process has seen cooperation between Denham and Wycombe to ensure that both aerodromes proposed procedures do not conflict
3. Redesign for avoidance of existing Noise Abatement Zones  
The design process has included an iterative process including several rounds of flight trials to ensure that the tracks are outside the published noise abatement zones. It

must be noted that whilst the tracks are outside the NAZ's this does not guarantee that the aircraft will not be heard from within them as this will depend on the prevailing wind conditions.

## 8. Environmental Impacts

The airfield has considered the environmental impact of this proposed change in relation to the following four areas:

- Air Quality
- Tranquillity and Visual Intrusion
- CO<sub>2</sub> Emissions
- Noise

Analysis of each area reflects the fact that GNSS approaches will only apply to 3.4% (500) of all arrivals to runway 24 at Wycombe Air Park.

The aircraft types based at the airfield are a mix including some of the more efficient aircraft in terms of noise, emissions, fuel consumption and CO<sub>2</sub>. Due to the equipment required on board the aircraft to fly the approach it is most likely to be utilised by the newer and more efficient aircraft. This also means that as older aircraft are replaced with newer variants, more aircraft will be able to make use of the proposed procedure.

Although some growth is expected during the life cycle of the approach as a result of better aircraft equipage any increase would be limited by the requirements for pilots to hold the relevant qualifications as well as the density of other visual traffic. Some growth has been accounted for in the estimated annual approaches of 500.

### **Air Quality**

The airfield has considered the effects the proposed change may have on local air quality and in particular the effect on local air quality in the area surrounding the aerodrome below 1,000 ft.

The airfield has concluded that there is no net change in air quality as there is no increase in aircraft movements as a direct result of this proposal. The number of individual aircraft movements under the new GNSS proposals by small, light aircraft is so small in absolute terms that the impact is believed to be negligible.

### **Tranquillity and Visual Intrusion**

The area in which the GNSS approach will be introduced is within current airspace above the South East used extensively for Wycombe Air Park flights, together with flights to and from other airports. Therefore, the current area will not see an increase in flights to or from Wycombe Air Park.

Wycombe Air Park is situated outside of controlled airspace (in Class G airspace). The aerodrome is surrounded by an Aerodrome Traffic Zone (ATZ) to a radius of 2nm and a height of 2000ft above the aerodrome. Aircraft must obtain permission from Wycombe Tower to

enter the ATZ. Within Class G airspace and outside of the ATZ, aircraft can operate without restriction and therefore, in the absence of prescribed tracks, traffic patterns tend to be random.

As there will be no net gain or loss of flying activity resulting from the new approach procedure, the aerodrome does not believe that there will be any significant positive or negative impact on tranquillity and visual intrusion as a result of the proposal. The height of aircraft arriving onto runway 24 will not change as the GNSS approach is aligned with the current visual approach route, although the GNSS approach does extend to a greater distance from the airfield, although the aircraft are at a greater height. Appendix E shows the proposed GNSS approach in relation to local features on the ground.

It is important to note that The Chilterns Area of Outstanding Natural Beauty (AONB) is located close to the aerodrome. The airfield is a well established feature within this AONB. Therefore, as explained above, this area already sees flights into and out of Wycombe Air Park, as well as transiting flights to or from other airports and overflights. Whilst the northern joining point is situated within the AONB, traffic joining via this point would have flown over the AONB had they been flying on a visual approach, therefore there is no net effect as a direct result of these procedures.

### **CO<sub>2</sub> emissions**

Following engagement with the Aerodrome's key aviation stakeholders, (i.e. pilots, air traffic controllers, other airspace users and airport operations staff,) there is a consensus that the GNSS approach will allow aircraft to fly an optimal approach with lower engine power settings.

The current approach that is used for arrivals onto runways requires pilots to follow a visual approach into the aerodrome as previously explained in Section 5. Once the pilot has the airfield in sight, they will be required to make a turn to align with the runway. When an aircraft begins to turn, a higher engine setting maybe required to maintain airspeed and thus increase CO<sub>2</sub> emissions, fuel burn and noise. The GNSS approach proposed will allow aircraft to fly in a straight line over the ground to land with minimal alterations to their direction of travel and engine settings. This type of approach will allow pilots to configure the aircraft more efficiently and potentially minimise fuel burn, CO<sub>2</sub> and noise during the approach.

### **Noise**

As there are no extra movements or change in aircraft types should this proposal be implemented, the aerodrome and its key aviation stakeholders believe there will be no net increase in noise from aircraft operations. However, noise may be distributed differently when the Instrument Approach is used (for each Instrument Approach flown there will be less noise on the corresponding visual approach track and additional noise on the Instrument Approach track).

Wycombe Air Park has a published Noise Management and Action Plan, 2013-2018 which contains noise contours which have been produced by the CAA's ERCD and are the current up to date published noise data for the airfield. Wycombe Air Park does not believe the introduction of GNSS will change the contours as they are dominated by departing aircraft on higher power settings.

Proposed missed approach routing has been matched as closely as possible to existing Noise Abatement Procedures. Further details are available in Section 5 and Appendix F.

The Aerodrome believes that CO<sub>2</sub> emissions, fuel burn and noise will not increase as a direct result from the implementation of this proposed airspace change.

## 9. Consultation Process

The purpose of this consultation is to provide you with the chance to express your opinion and to comment on the airspace change proposal, and for the aerodrome to share information with you.

The 'change sponsor' for this proposal is Wycombe Air Park, and this requires the aerodrome to be responsible for the proposal, including the consultation process, whilst the CAA's Safety & Airspace Regulation Group (SARG) is responsible for the process.

This proposal and stakeholder consultation has been developed in line with the CAA's 'Guidance on the Application of the Airspace Change Proposal' document, 'CAP725'.

Our proposal will be subject to a 12-week stakeholder consultation commencing on the 1<sup>st</sup> March 2017 and finishing on 7<sup>th</sup> June 2017. This includes additional time to allow for Easter.

All feedback received will be given appropriate consideration and included in the aerodrome's consultation summary report to be published before the formal proposal is prepared for submission to the CAA, which is likely to take place in June 2017.

A full list of consultees to this proposal can be found in Appendix G.

### Planned ACP Timetable

Date	Action
1 <sup>st</sup> March 2017	Commencement of consultation period
25 <sup>th</sup> March 2017 – 11am to 2pm	Aerodrome 'drop-in' session
25 <sup>th</sup> April 2017 - 4pm to 6:30pm	Aerodrome 'drop-in' session
7 <sup>th</sup> June 2017	End of consultation period
23 <sup>rd</sup> June 2017	Issue of Consultation Summary Report
30 <sup>th</sup> June 2017	Submission of full ACP to CAA
October 2017	CAA Regulatory Decision
March 2018	Implementation of GNSS

All information regarding the airspace change proposal can be found on Wycombe Air Park's website at [www.wycombeairpark.co.uk/gnssconsultation](http://www.wycombeairpark.co.uk/gnssconsultation) and a hard copy of the consultation document is available at High Wycombe Library, 5 Eden Place, High Wycombe HP11 2DH.

If you would like to request a hard copy of this consultation document, please contact the aerodrome using any of the options below:

Email: [gnsconsultation@wycombeairpark.co.uk](mailto:gnsconsultation@wycombeairpark.co.uk)

Telephone: 01494 443737

Letter:           Airspace Change Consultation  
                  Airways Aero Associations Ltd  
                  Wycombe Air Park  
                  Booker  
                  Marlow  
                  SL7 3DP

### **Aerodrome ‘drop-in’ sessions**

As part of the consultation the aerodrome will be holding two informal ‘drop-in’ sessions where members of the public and interested stakeholders can discuss the proposal in more depth with the consultation team and ask any questions that they may have, refreshments will be available. The sessions will be held on the following dates and will be signposted from the Main Car Park:

Saturday 25<sup>th</sup> March 2017 – 11am to 2pm

Tuesday 25<sup>th</sup> April 2017 – 4pm to 6:30pm

Please register your attendance on the Website at  
[www.wycombeairpark.co.uk/gnsconsultation](http://www.wycombeairpark.co.uk/gnsconsultation)

## 10. How Can Stakeholders Respond?

Wycombe Air Park welcomes all comments about the airspace change proposal and would like to invite you to submit your feedback by any of the following methods:

Via our website: [www.wycombeairpark.co.uk/gnssconsultation](http://www.wycombeairpark.co.uk/gnssconsultation)

Email: [gnssconsultation@wycombeairpark.co.uk](mailto:gnssconsultation@wycombeairpark.co.uk)

Letter:                   Airspace Change Consultation  
                              Airways Aero Associations Ltd  
                              Wycombe Air Park  
                              Booker  
                              Marlow  
                              SL7 3DP

All feedback received will be analysed and be part of the aerodrome's considerations. A summary report will be made publicly available on the Aerodrome's website, [www.wycombeairpark.co.uk/gnssconsultation](http://www.wycombeairpark.co.uk/gnssconsultation) as well as in High Wycombe Library.

All feedback received will be subject to public record and will therefore be submitted to the CAA. If you do not wish your personal information to be shared with the CAA, please ensure you notify us.

If you would like to make any comments regarding the CAA's Guidelines for Airspace Change Proposals (CAP725), please write to the Airspace Regulator (Coordination), Safety & Airspace Regulation Group, CAA House, 45-49 Kingsway, London WC2B 6TE, or email: [airspace.policy@caa.co.uk](mailto:airspace.policy@caa.co.uk)

## 11. Consultation Feedback Form

Please complete this form and return to the aerodrome, using any of the following methods:

**Email:** [gnsconsultation@wycombeairpark.co.uk](mailto:gnsconsultation@wycombeairpark.co.uk)

**Letter:** Airspace Change Consultation  
Airways Aero Associations Ltd  
Wycombe Air Park  
Booker  
Marlow  
SL7 3DP

Name:.....

Address:.....

.....

.....

E-mail:.....

### Consultation Options - (please tick which option you support)

Option A Implementation of GNSS Approaches

Option B Do Nothing (with no operational or safety benefits)

Additional Comments:

.....

.....

.....

.....

Please tick this box if you do NOT want to share your personal information with the CAA

## 12. Glossary

ACP	Airspace Change Proposal
AIP	Aeronautical Information Publication
ANO	Air Navigation Order
ATCU	Air Traffic Control Unit
ATZ	Air Traffic Zone
CAA	Civil Aviation Authority
CAP725	Airspace Change Process Guidance Document
CTA	Control Area
ERCD	Environmental Research and Consultancy Department
GNSS	Global Navigation Satellite System
GPS	Global Positioning Satellite
IAF	Initial Approach Fix
IAP	Instrument Approach Procedure
ICAO	International Civil Aviation Organisation
NATMAC	National Air Traffic Management Advisory Committee
NAZ	Noise Abatement Zone
Nm	Nautical mile
TMA	Terminal Manoeuvring Area
VMC	Visual Meteorological Conditions

## 13. Technical summary

### **Existing Approaches and Airspace**

Wycombe Air Park does not currently have any published instrument approaches. Approach operations to Runway 24 are conducted under Visual Flight Rules in reference to the ground. This results in a natural spread of tracks as pilots use different ground features and interpretations to position their aircraft.

Because Wycombe Air Park is situated in Class G airspace, pilots are responsible for their own navigation and separation from other traffic. Air Traffic Control do not have any control over the routing of visual flights outside of the Wycombe Air Park Aerodrome Traffic Zone.

### **Proposed GNSS Approach**

A GNSS approach has been designed for Runway 24. There are IAF's to allow traffic to join from the north (NUNKU) and east (ELPIM). Traffic arriving from the west should transit to the north of the ATZ to join via the northern IAF due to the proximity of the London TMA to the south.

Following consultation with Denham, the eastern IAF has been positioned in order to provide separation from traffic on their proposed IAP.

It has been decided not to include a hold within the procedure due to the local airspace restrictions.

The proposed procedure is located entirely in Class G airspace and has been designed to avoid the Luton CTA and London TMA. Following a missed approach aircraft will be able to make another attempt or divert to their alternate airfield.

The missed approach design has undergone several iterations with each being flown in VMC using GPS trackers to plot the actual track of the route. This has resulted in a design which routes aircraft on the missed approach outside of the published Noise Abatement Zones. Whilst the track is located outside the NAZ it is important to note that, as with visual operations, depending on the prevailing wind/weather conditions the aircraft noise may still be heard within the NAZ.

Further technical information is available on request via email to:

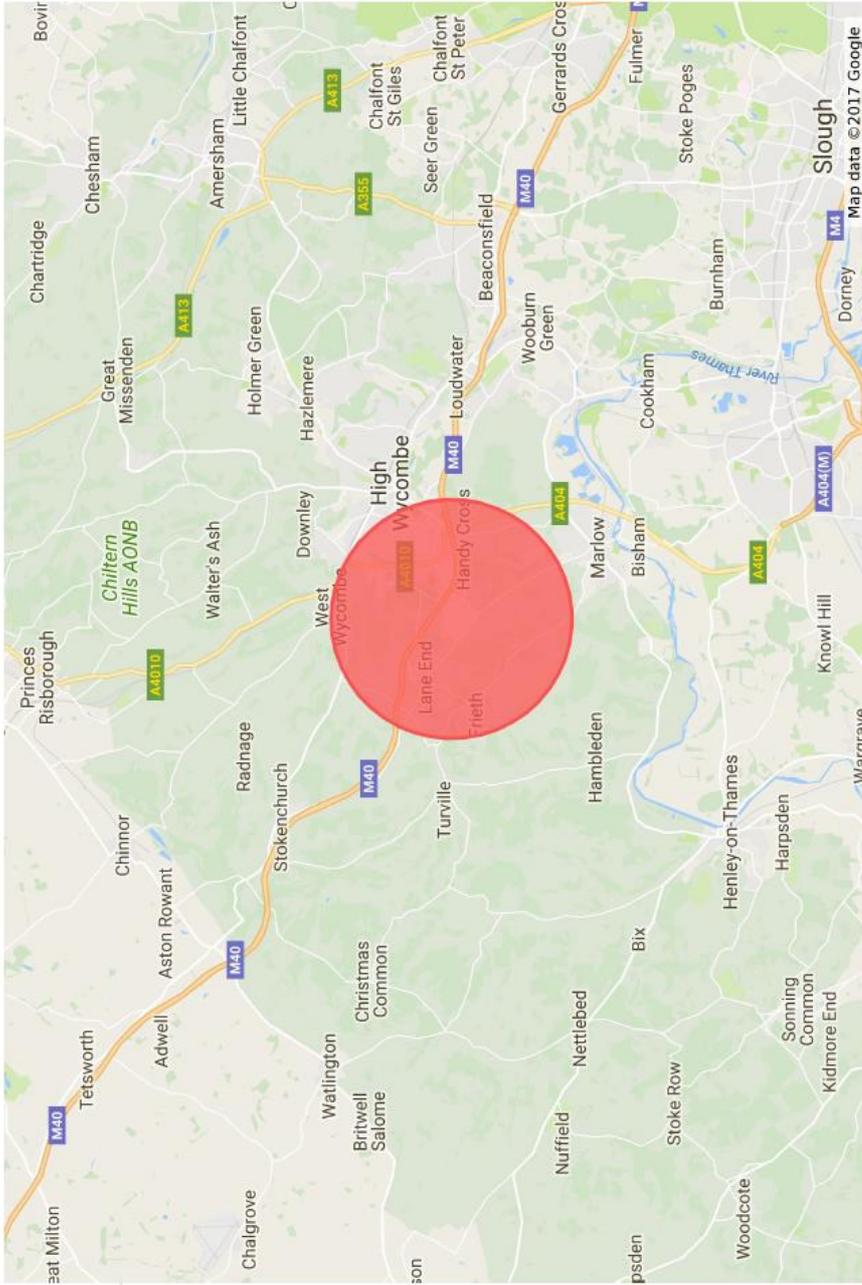
[gnssconsultation@wycombeairpark.co.uk](mailto:gnssconsultation@wycombeairpark.co.uk)

# Appendix A - Aerial Map of Wycombe Air Park Aerodrome Traffic Zone

## Wycombe Air Park Aerodrome Traffic Zone

WYCOMBE AIR PARK ATZ

 WYCOMBE:126.55



## Appendix B - Typical Aircraft Operating at Wycombe Air Park



Cessna 152  
Single Engine



Piper Warrior  
Single Engine

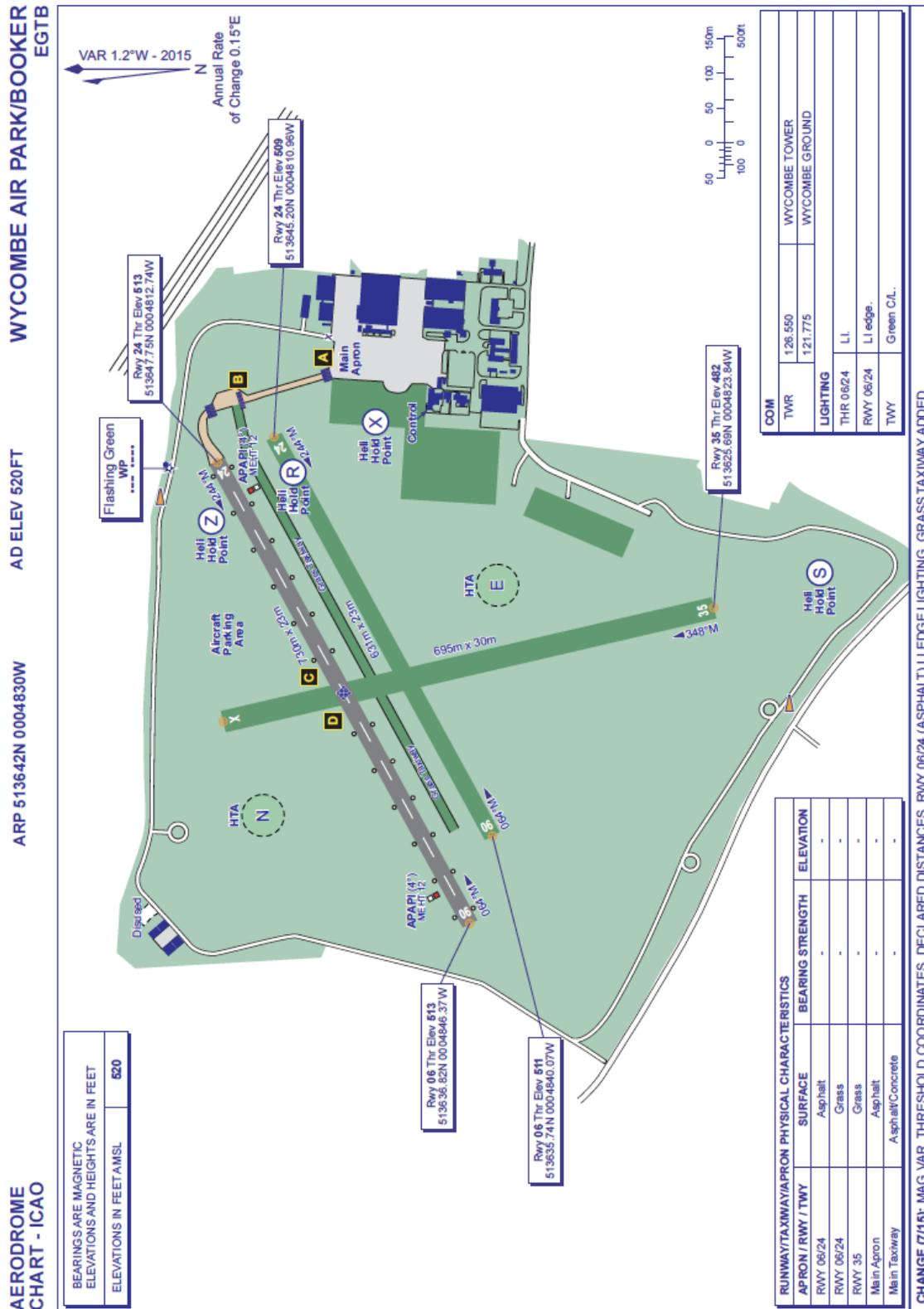


Diamond DA42  
Twin Engine

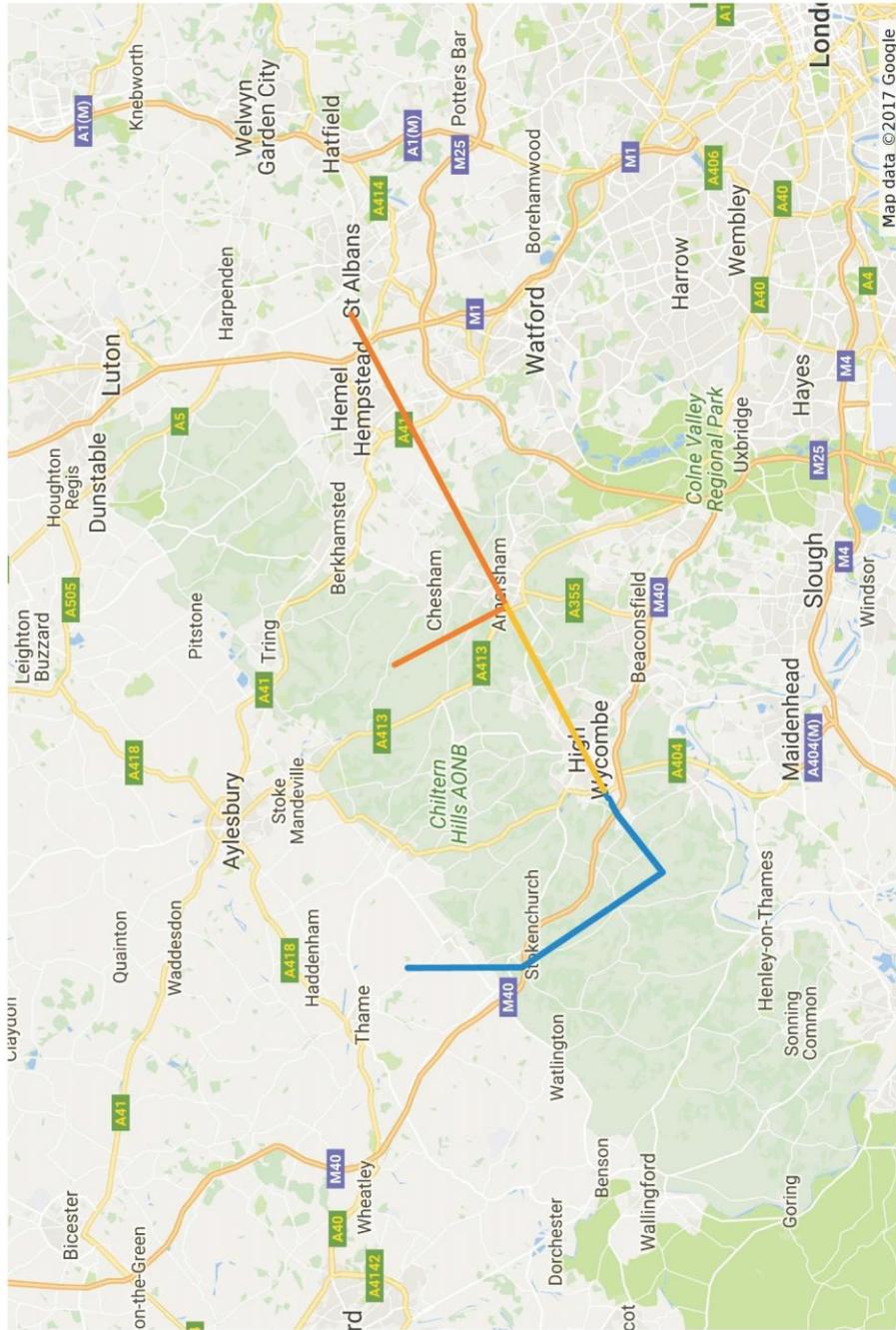
## Appendix C - 2016 Movement Data

	Quarter 1 Jan – Mar	Quarter 2 Apr – Jun	Quarter 3 Jul – Sep	Quarter 4 Oct – Dec	2016 Total
<b>Fixed Wing</b>	9,303	11,455	12,653	8,082	41,493
<b>Helicopters</b>	5,364	7,140	7,416	5,388	25,308
<b>Gliders &amp; Tugs</b>	1,095	3,780	4,302	1,206	10,383
<b>Totals</b>	15,762	22,375	24,371	14,676	<b>77,184</b>

# Appendix D – UK AIP Entry Showing Runway Configuration



# Wycombe Air Park GNSS RWY24 Proposed Route



- New Tracks
  - 📍 All items

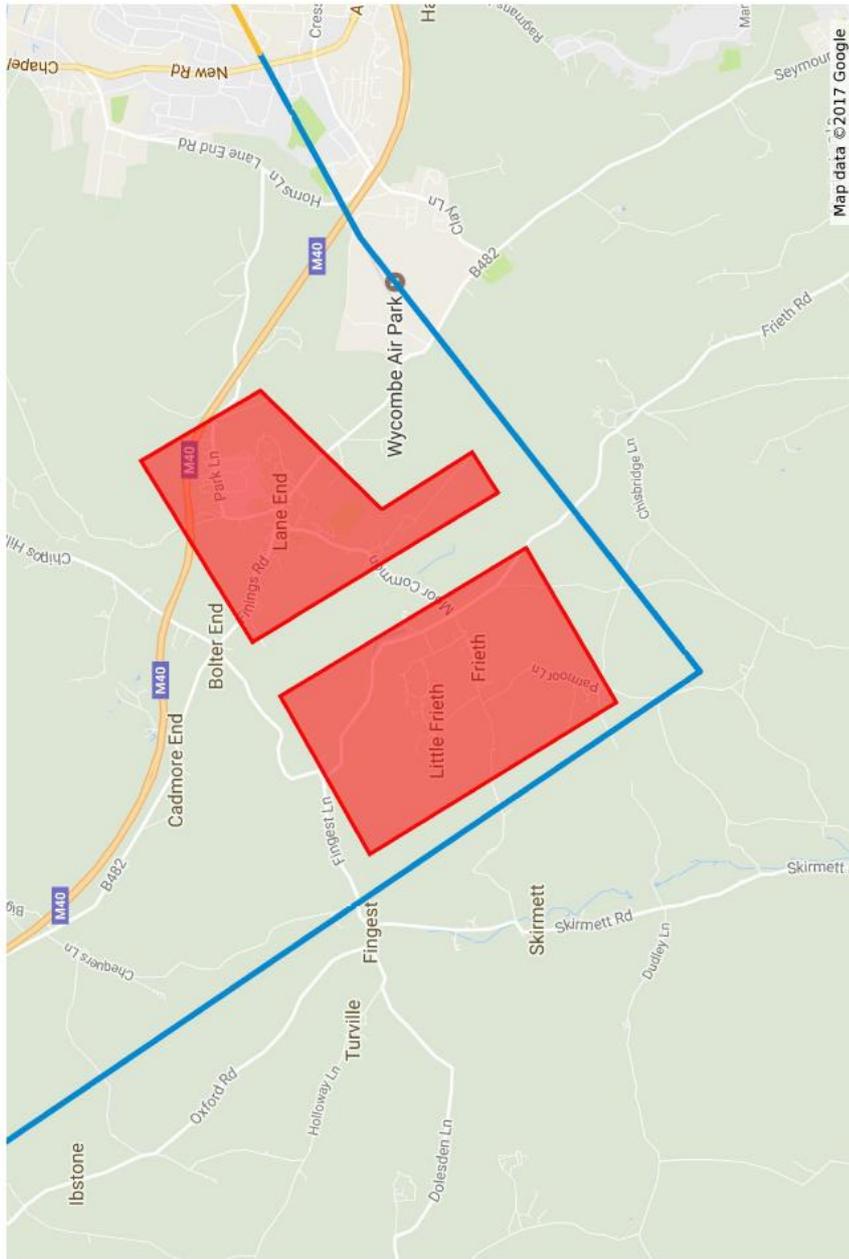
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- Existing tracks flown by visual traffic
  - 📍 All items

---

- New track, already used by a small number of visual flights
  - 📍 All items

# Wycombe Air Park GNSS RWY24 Proposed Route - Noise Abatement



- New Tracks**  
📍 All items

---

- Existing tracks flown by visual traffic**  
📍 All items

---

- New track, already used by a small number of visual flights**  
📍 All items

---

- Noise Abatement**  
📍 Lane End NAZ  
📍 Frieth NAZ

## Appendix G - List of Consultees

### **Wycombe Air Park Joint Consultative Committee**

- Booker Common & Woods Protection Society
- Booker Cressex Wycombe District Council Member
- Booker Gliding Club
- Chiltern Rise Wycombe District Council Member
- Great Marlow Parish Council
- Greater Marlow Wycombe District Council Member
- Hambleden Parish Council
- Hambleden Valley Wycombe District Council Member
- Heli Air
- Lane End Parish Council
- Marlow Bottom Parish Council
- Sands Wycombe District Council Member
- West Wycombe Parish Council
- Wycombe Air Park Action Group
- Wycombe District Council

### **Other Aerodrome Operators**

- Air Training Services
- Helicopter Services
- Light Sport Flying Club
- Personal Plane Services
- Private Aircraft Owners

### **London Regional Airspace User Working Group**

- Denham Aerodrome
- Elstree Aerodrome
- Farnborough Radar
- Heathrow Tower
- London Heathrow Airport
- London Luton Airport
- London Stansted Airport
- North Weald Aerodrome
- RAF Benson
- RAF Halton
- RAF Northolt
- White Waltham Aerodrome

### **Local Government**

- Amersham Town Council
- Buckinghamshire & Milton Keynes Association of Local Councils
- Buckinghamshire County Council
- Chiltern District Council
- Dacorum Borough Council
- Hertfordshire Association of Parish and Town Councils

- Hertfordshire County Council
- Oxfordshire Association of Local Councils
- Oxfordshire County Council
- South Oxfordshire District Council
- St Albans City & District Council
- Three Rivers District Council

**NATMAC (National Air Traffic Management Advisory Committee)**

- Aircraft Owners and Pilots Association
- Airport Operators Association
- Aviation Environment Federation
- BAE Systems
- British Air Line Pilots Association
- British Airways Plc
- British Balloon and Airship Club
- British Business and General Aviation Association
- British Gliding Association
- British Hanggliding and Paragliding Association
- British Helicopter Association
- British Microlight Aircraft Association
- British Model Flying Association
- British Parachute Association
- Civil Aviation Authority
- Future Airspace Strategy VFR Implementation Group
- General Aviation Safety Council
- Guild of Air Traffic Control Officers
- Heavy Airlines Group
- Helicopter Club Great Britain
- Honorable Company of Air Pilots
- Light Aircraft Association
- Light Airlines Group
- Low Cost Airlines Group
- Military Aviation Authority
- National Air Traffic Services
- PPL/IR (Europe)
- UK Airprox Board
- UK Flight Safety Committee
- Unmanned Aerial Vehicle Systems Association

Campaign to Protect Rural England

Chiltern Society

National Trust

Natural England – AONB Chiltern Hills