

WELCOME TO FLYING IN THE CARDIFF AREA

INTRODUCTION

The object of this guide is to assist with flying into Cardiff Airport VFR and transiting safely. It also gives guidance for avoiding an airspace infringement when you are transiting underneath or close to the Cardiff airspace CLASS D. Hints and tips are also given for avoiding N864 and L9 airways which are class A.

We will endeavour to accommodate your requests as much as we can, but sometimes that will not be possible without a delay so it may be better to have a plan B to go around or below. It may save you time and money. However, if you are having any weather or navigation problems please do not be frightened to say so, we want to help.

Irrespective of the challenges posed by the airspace there are many additional hazards in the Cardiff area:

Marked Hazards

Bird Reserves
Small Airfields
Danger Areas and Restricted Areas
High Ground all around Cardiff
Tall masts to the northeast
and northwest of Cardiff
St Athan Local flying Zone (LFZ)

Unmarked Hazards

Gliders
Hanggliders
Farm Strips
Fast Military Jets
Microlights

GENERAL INFORMATION

Due to the close proximity of other air traffic control units in the Cardiff area e.g. Bristol, Yeovilton, Exeter, it is likely that you will be talking to them first and held on their frequency until very close to Cardiff controlled airspace; however it is **your responsibility to remain outside controlled airspace until a clearance has been issued for entry.**

If you are having difficulty contacting Cardiff Radar on 119.150 try 125.850 as a back-up or 251.375 If you have UHF

Transition Altitude

The transition altitude for all flights within Cardiff controlled airspace is:

6000ft Altitude – CARDIFF QNH

Outside controlled airspace it is 3000 feet.

The QNH can be obtained from the ATIS (132.475) or from the controller

The bases of the controlled airspace are shown as altitudes up to 6000 feet (using Cardiff QNH not the regional pressure) and flight levels above

Visual Reference Points (VRPs)

The following VRPs have been established to assist your navigation in the vicinity of Cardiff controlled airspace. Please check latest information in UKAIP. Cardiff DME is available 110.70(CWA/CDF) Brecon DME 117.45 (BCN)

VRP	NDB/DME	VOR/DME FIX
Cardiff Docks ‡ 512724N 0030906W	CDF 064° MAG †CWA/CDF DME 7 nm	BCN 171°/17 nm
Clatworthy Reservoir 510423N 0032209W	CDF 187° MAG †CWA/CDF DME 19 nm	BCN 189°/39 nm
Flat Holm Lighthouse 512232N 0030707W	CDF 100° MAG †CWA/CDF DME 8 nm	BCN 169°/22 nm
Lavernock Point 512423N 0031014W	CDF 086° MAG †CWA/CDF DME 6 nm	BCN 173°/20 nm
Llandegfedd Reservoir 514130N 0025815W	CDF 041° MAG †CWA/CDF DME 22 nm	BCN 104°/11 nm
M4 Junction 24 513607N 0025532W	CDF 055° MAG †CWA/CDF DME 20 nm	BCN 124°/15 nm
M4 Junction 36 (Services) (North of Bridgend) 513156N 0033424W	CDF 317° MAG †CWA/CDF DME 11 nm	BCN 228°/16 nm
Minehead 511221N 0032830W	CDF 207° MAG †CWA/CDF DME 12 nm	BCN 198°/32 nm
Nash Point Lighthouse 512403N 0033308W	CDF 277° MAG †CWA/CDF DME 7 nm	BCN 213°/22 nm
Nash South (On St Athan C/L, 1 nm South of Nash Point) 512253N 0033327W	CDF 269° MAG †CWA/CDF DME 8 nm	BCN 212°/23 nm
Old Severn Bridge (M48) 513640N 0023837W	CDF 067° MAG †CWA/CDF DME 29 nm	BCN 110°/24 nm
St Hilary TV Mast (Note 2) 512727N 0032411W	CDF 330° MAG †CWA/CDF DME 4 nm	BCN 201°/17 nm
Taff Ely Wind Farm 513403N 0032816W	CDF 338° MAG †CWA/CDF DME 11 nm	BCN 223°/12 nm
Wenvoe TV Mast (Note 3) 512734N 0031654W	CDF 031° MAG †CWA/CDF DME 5 nm	BCN 186°/16 nm

Note 1: † DME frequency-paired with ILS gives zero range indication with respect to the threshold of the runway with which it is associated.

Note 2: Pilots are advised to use caution when routeing via this VRP due to the nature of this lighted Air Navigation Obstacle of height 754 ft agl, 1161 ft amsl.

Note 3: Pilots should exercise caution when routeing via this VRP due to the nature of this lighted Air Navigation Obstacle of height 878 ft agl, 1294 ft amsl.

Note 4: ‡ Pilots are advised to use caution when routing via this VRP due to it's proximity to Cardiff Heliport.

Lower Airspace Radar Service (LARS)

LARS is available in the area from:

CARDIFF Radar – Frequency 119.150 and you are encouraged to contact us for a service.

Cardiff offers the following types of service to VFR & IFR:

- Deconfliction Service (IFR and above 4000 feet only)
- Traffic Service
- Basic Service

Cardiff squawks all start with 36..

Arrival Procedures

Where possible listen to the ATIS (132.475) before contacting Cardiff Radar on 119.150. Plan your route to head towards the appropriate Published VFR entry point but remain outside controlled airspace until you have received your clearance. Note all clearances are not above altitude 1500 feet Cardiff QNH. When advised by the radar controller contact Cardiff Tower on 133.1 and continue to join as further instructed. Cardiff Tower will give you the QFE with the circuit instructions but remember you must still not be above altitude 1500 QNH. Either use a second altimeter if you have one or fly not above height 1200 QFE.

119.150 is sometimes combined with other frequencies, so be aware that the controller may ask you to standby while he is dealing with other traffic. Cardiff Radar frequencies can get very busy and it helps if you can be clear and concise with your call. We suggest using TRPACER (don't know what this is see later) for passing your details. The radar controller will get back to you, but you must remain outside controlled airspace until you have received your clearance. If you have not received a service from the controller after a while just give another call to prompt him, when to do this is open to debate we suggest you call again after a short time when the frequency is quieter.

Controlled Airspace

There are a number of different airspace bases within the Cardiff area, always refer to the current Southern England 1/2 mil or 1/4 mil aeronautical chart and plan your route thoroughly.

D119 and R153

D119 is not always active but when it is it is usually up to 5000. D119 is usually NOTAMed and Cardiff always have details of the status of D119.

R153 is always active up to 2000 feet around the Hinkley Point Power station.

Published VFR arrivals

ATC will usually clear you in via the “Published VFR” routes not above 1500 on the Cardiff QNH. Please check the UKAIP for the latest routes.

Route Designator	Entry Point	RWY	Route	Maximum Altitude	Remarks
VFR St Hilary	Bridgend	30/12	Enter CAS via Bridgend and route north of St Hilary TV Mast, then as directed by Cardiff ATC.	1500 ft	
VFR North	North	30/12	Enter Cardiff CAS from the north between the St Hilary and Wenvoe TV Masts, then as directed by Cardiff ATC.	1500 ft	
VFR Wenvoe	W Cardiff Docks	30/12	Enter Cardiff CAS via the Wenvoe TV mast, then as directed by Cardiff ATC.	1500 ft	Not usually used for inbounds to Cardiff
VFR Cardiff Docks	Cardiff Docks	30/12	Enter Cardiff CAS via Cardiff Docks, then as directed by Cardiff ATC.	1500 ft	
VFR Flat Holm	N of Flat Holm Lighthouse	30/12	Enter Cardiff CAS via Weston aerodrome, route north of Flat Holm Lighthouse towards Lavernock Point, then as directed by Cardiff ATC.	1500 ft	Don't stray south of the route as it could put you into conflict with passenger aircraft.
VFR South	Minehead	30	Enter Cardiff CAS to the south, then as directed by Cardiff ATC.	1500 ft	If you want to remain high over the sea request this with ATC
VFR South	Minehead	12	Enter Cardiff CAS from the south, remaining east of the quarry (1 nm west of Cardiff airport) then as directed by Cardiff ATC.	1500 ft	If you want to remain high over the sea request this with ATC
VFR Nash Point	Nash Point	30	Enter Cardiff CAS via Nash Point, route along the coast, remaining over water, then as directed by Cardiff ATC.	1500 ft	Not usually available when St Athan is active.
VFR Nash Point	Nash Point	12	Enter Cardiff CAS via Nash Point, route along the coast, remaining over water and east of the quarry (1 nm west Cardiff airport), then as directed by Cardiff ATC.	1500 ft	Not usually available when St Athan is active.

The radar controller will always refer to these routes as the “published” and pass them on the RTF as “Published VFR Cardiff Docks arrival not above altitude 1500 QNH...” This is so he knows you are familiar with the published routings and are not just routing in via a particular VFRP. It may seem pedantic but he will insist on a correct read back including the words published, if that is not received he will give you a full clearance with the routing.

Approaching From Southeast and East of Cardiff

Joining from the southeast we suggest you contact Yeovilton first on 127.350 - generally open Monday - Fri. They will provide a LARS and a handover to Bristol Radar (125.650), who will in turn hand you over to Cardiff. An area to watch out is the Yeovilton AIAA (Area of Intense Aerial Activity) it is notified from surface to altitude 6000ft (Portland regional QNH).

Ideally you will head towards Weston VFRP under Bristol's controlled airspace and expect a published VFR Flat Holm arrival. Watch the base of Bristol's airspace it is 1500 feet overhead Weston. Not a very clear picture but Weston Airfield is here (the VFRP)





There are two islands to the southeast. Flat Holm, as its name suggests, is the flatter and the Northerly of the two islands be aware both islands have a light house on them.

Flat Holm Island

Next head towards Lavernock Point and then along the coast for a rightbase runway 30 or towards the airfield for a downwind left hand join on runway 12. When approaching for runway 12 sometimes it is easier to head westbound along the coast after Lavernock point until overhead Barry docks then turn downwind left-hand. Don't overfly the chemical works to the east of the airfield.

Approaching From South of Cardiff



You will usually be in communication with Exeter (128.975) and subject to workload they will pass your details to Cardiff. However you should be in contact with Cardiff by at least 10 nm south of Minehead.

The inbound route starts at Minehead VRP. You can request to remain high over the sea, which the controller may allow subject to other traffic.

Minehead VRP showing the white tents of Butlins

There is a slightly different join for 12 in that you have to remain east of the Quarry to the southwest, this is easy to see just keep to the east of the power station chimney and you will then pick up the quarry. This procedure will keep you clear of the fast jets in the circuit at RAF St Athan. If you would prefer a normal circuit (not so tight) request to route overhead for a downwind left hand join. Runway 30 is much easier as you join onto a standard leftbase.

Approaching From West of Cardiff



Contact Cardiff Radar before passing abeam Port Talbot. The ATIS will state whether St Athan is active and hence if a Nash point arrival is available or just a St Hilary arrival.

This is Nash point looking northwest.



If St Athan is active and hence only a VFR St Hilary route is available, then the route is via Junction 36 as shown in the picture, this is easy to pick up as there are a group of tents at the junction on the M4 motorway.

Transfer to the tower (133.1) is usually just before the junction.



After junction 36 route direct to just north of St Hilary television mast. If it is hazy you might not see the mast until you are close so be aware that it is 1161 feet QNH. Also note outbound aircraft may be opposite direction at the same level on this route.

After the mast turn towards the airfield and join as instructed. If you are using runway 12 ensure that you don't mistake St Athan runway 26/08 for Cardiff's runway.

Approaching From North of Cardiff

After listening to the ATIS contact Cardiff radar about 10nm north of the Brecon VOR. Be careful of the base in the area of the Brecon VOR as it is 5500 feet Cardiff QNH. Head to join between St Hilary and Wenvoe keeping under the dropping base of controlled airspace before finally entering the control zone not above altitude 1500 QNH. Transfer to the tower is usually at the M4. You may request a Cardiff Docks arrival.

Approaching From Northeast

Contact Cardiff Radar before the Severn Bridges, keeping outside Bristol's airspace. Expect a published Cardiff Docks arrival, A Wenvoe VFR join is not normally available as it is usually used for outbounds only. Be aware that it is easier to see RAF St Athan's runway to the west of Cardiff before you see Cardiff's runway.



Cardiff Docks from the Northeast

Radar Vektored Approaches

Cardiff radar may be able to vector you on to a straight in ILS approach subject to traffic at the time under VFR. However, you should plan your entry via one of the VFR routes in case the controller is too busy.

Published VFR Departure Routes

Please ensure that you are fully briefed on the published VFR departure routes. They are a reverse of the arrival routes with the exception of the routing to the northeast where the published Wenvoe departure will be used instead.

Route Designator	Exit Point	RWY	Route	Maximum Altitude	Remarks
VFR St Hilary	Bridgend	30/12	Route north of St Hilary TV Mast and leave CAS to the west routing north of Bridgend at Junction 36 VRP.	1500 ft	
VFR North	North	30/12	Route between the St Hilary and Wenvoe TV masts and leave CAS to the north.	1500 ft	
VFR Wenvoe	W Cardiff Docks	30/12	Route east if the Wenvoe TV masts and leave CAS to the northeast.	1500 ft	
VFR Flat Holm	NE of Flat Holm Lighthouse	30/12	Route north of Barry then north of Flat Holm Island, and leave CAS at the east/southeast zone boundary.	1500 ft	
VFR South	North Minehead	30	Route east of the quarry (1 nm west of Cardiff airport) and leave CAS to the south towards Minehead VRP.	1500 ft	Cardiff will endeavour to remove the 1500 ft restriction for flight over water ASAP.
VFR South	North Minehead	12	Route south and leave CAS to the south towards Minehead VRP.	1500 ft	Cardiff will endeavour to remove the 1500 ft restriction for flight over water ASAP.
VFR Nash Point	Nash Point	30	Route east of the quarry (1 nm west of Cardiff airport) and leave CAS to the west along the coast, over water, via Nash Point.	1500 ft	Route normally only available when St Athan is not active.
VFR Nash Point	Nash Point	12	Leave CAS to the west along the coast, over water, via Nash Point.	1500 ft	Route normally only available when St Athan is not active.

Transiting controlled airspace

Despite Bristol and Cardiff airspace being adjoined at certain points, transit clearance through the airspace of one unit **does not give permission** to enter the controlled airspace of the other, please be specific with your request. If your routing requires entry clearance into adjacent controlled airspace and you are unsure that you have received permission **please clarify** with the controller that they are arranging it on your behalf. Due to the proximity of this airspace, there may well be a last minute frequency change.

If you are looking for a transit along the Welsh coast overhead Cardiff airport then you are more likely to be given a clearance if you are 1500 or below. If St Athan is active this level may change to 2000 feet or be refused and a higher level maybe offered.

Transits through the overhead at higher levels are possible VFR, but due to the complexity of the airspace ie holding traffic/ IFR arrivals or departures, no specifics can be given. You may be asked to route east or west of Cardiff airport overhead or be put on a heading and/or asked to fly at a specific altitude. If you are, the controller will say "cleared to transit VFR at altitude ... QHN .. advise if any time my headings or levels will take you into IMC" you will then be expected to fly the headings given or levels assigned unless you ask for an alternative to remain VFR.

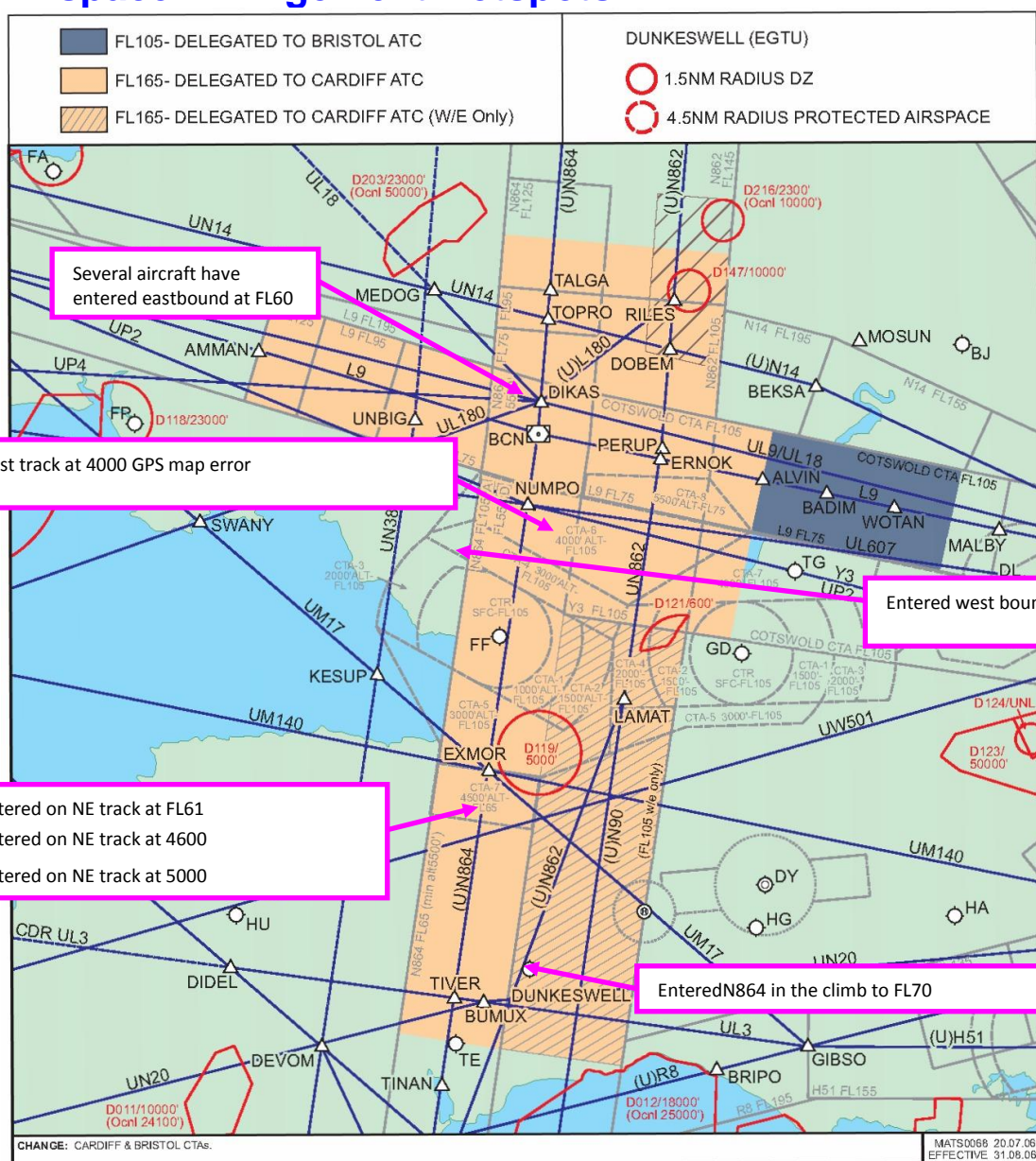
Transiting close to controlled airspace

It is best practice to contact Cardiff Radar on 119.150 and request a basic service even though you will not be entering controlled airspace.

If you are routing along the M4 east to west or vice versa make sure you check the base levels of the controlled airspace above you as these vary from altitude 2000 to 4000 feet and the route is very close to the control zone.

There have been several airspace infringements at the BCN VOR as the base drops down to 5500 feet from FL75 and in the Exmoor area where the base is 4000 feet.

Airspace Infringement Hotspots



BE ORGANISED with your navigation AND BE PROACTIVE ON THE RADIO

Arrivals to RAF St Athan

Always contact Cardiff Radar on 119.150 first. At the moment there are no published VFR routes into St Athan and the Cardiff Radar controller will issue a full clearance which will always be not above altitude 1500 Cardiff QNH. New VFR routes for St Athan are being designed at the moment so do check your Notams.

Circuit directions are always to the south of the runway ie 26 left hand and 08 right hand. Due to the proximity of Cardiff you may be held to the southwest of St Athan in a tight orbit.

Generally you can expect these routings :

1. From the west and north route in via Nash Point.
2. From the south to join directly onto baseleg but always keeping to the west of the power station chimneys.
3. From southeast route to the west of Cardiff clear of the 30 approach/12 departure lane and then as for a join from the south
4. From the northeast if 08 is in use expect to route along the coast to join downwind right hand runway 08. For runway 26 routing straight in via Wenvoe.

With the exception of Nash point you will usually be transferred to Cardiff Tower first (133.10) before St Athan Tower (118.125)

TRPACER

This is an excellent method to transmit your details and in the correct order to any controller:

T – Type

R – Route ie. from to via, but only include relevant parts of your route.

P – Present position

A – Altitude

C - Conditions ie IFR/VFR or IMC/VMC

E – ETA

R – Request ie.request basic service and/or joining instructions

But do remember when you make your initial call if the controller says standby don't go straight in with the TRPACER as the controller may have wanted that time to control other aircraft.

Visiting Cardiff ATC

We are happy to have visits to ATC and actively encourage these by PPLs and flying clubs. Any visits need to be requested at least 10 days in advance by contacting Paul.Keeble@nats.co.uk. Please note a valid ID in the form of a passport or photo ID driving licence is required by all visitors to ATC and that bags may be searched by security before a visit to the tower is permitted.

Telephone numbers

1. Cardiff ATC (useful to get a full briefing before departure) 01446712562 open H24
2. Aeros flight training – 01446 710000 (cost same price as landing fee and can handle up to 2000kg non commercial flights only) Also supply Avgas, taxi etc. Open 0830 to 1730 daily
3. Signature Flight Support open 0730 to 1830 daily (operates a call out outside these hours) Jet A1 and Avgas. A handling fee applies. 01446 712637
4. Flying club bar/restaurant – on the south side. Enjoy your stay while having a coffee or meal overlooking the runway and planning a trip home. Open generally daily 1000 to 2300 but does have occasional closures for special events.

NOTAMs and UKAIP

As usual always check your Notams and UKAIP for the latest information at:

www.ais.org.uk