

AIRSPACE CO-ORDINATION NOTICE

Safety and Airspace Regulation Group



ACN Reference:	Version:	Date:	Date of Original
AR-2024-3917	2.0	19/07/2024	26/06/2024

BELFAST (BEL) DVOR/DME CALIBRATION**NDS****Subject to NOTAM:** No**Date(s) of activity/Validity:**

10 Jul 24 – 31 Jan 25

Times (ALL TIMES UTC)

0800-1700Z

Vertical Limits:

4000FT AMSL – FL200

Allocated Mode 3A (SSR):

TBA

Aircraft Details:

PA31

NDS Approved:

Yes

See Section 2

Event Sponsor(s):**Mr Richard Handford**

NATS Systems Engineer

4000 Parkway, Whiteley

Fareham, Hants, PO15 7FL.

Tel: 01489 615365

Richard.Handford@nats.co.uk

Aircraft Operator(s):

Chris Tutt

Flight Calibration Services

Calibration House

17-19 Cecil Pashley Way

Shoreham Airport

Shoreham-by-Sea

West Sussex

BN43 5FF

01243 538245

operations@flight-cal.com

ATS Units/**Controlling Agencies:**

Prestwick ATCC - 01294 655300

Belfast (Belfast City) 028 9093 5122

Aldergrove – 028 94484313

Aldergrove – 07920 877721 (ATC Support Mobile No.)

Isle of Man – 01624 827548

Shannon – 00 353 61 472284

Dublin (Duty Station Manager) +353 1 806 7301

Geographical Limits:**Airspace Reservations:**

Nil

Departure/Destination Aerodrome(s)

EGAA

ACN Issued by:

AS5

Civil Aviation Authority, Aviation House, Gatwick

Direct Dial: 01293 983880

Email: AROps@caa.co.uk

SECTION 1: CO-ORDINATION ARRANGEMENTS (GENERAL)

1. The pilot/operator is requested to telephone the ATC authorities on the cover prior to departure in order to notify or update the sortie details including area(s) of operation and planned levels (quoting the ACN Reference). A minimum of 24 hours' notice should be given unless specified in Section 2.
2. There may be other aircraft and/or activities outside Controlled/Regulated Airspace unknown to ATC.
3. The carriage and operation of a serviceable transponder (including Mode 'C') has been specified.
4. The pilot will be responsible for obtaining all necessary ATC clearances and for maintaining R/T contact with appropriate ATC authorities.
5. The pilot/operator will be responsible for obtaining prior clearances to enter any UK Danger Areas affected by the flight profile from the appropriate Range Control Authority unless this is specifically detailed in Section 2.
6. Other Unusual Aerial Activities (UAAs) may be notified to the CAA Safety and Airspace Regulation Group (SARG) and may take place within the airspace encompassed by this flight. The pilot/operator is to ensure that UK Daily NOTAM Nav Warnings are consulted prior to each flight.
7. All flights within Controlled Airspace are subject to the requirements of a Flight Plan in accordance with UK AIP ENR1.10. The ACN Reference should be entered into Field 18 of the Flight Plan together with any relevant 'special handling' codes.
8. Flight prioritisation and Non-Deviating Status is in accordance with the information specified on the ACN Cover. Such status may be afforded to part or all of the flight – see Section 2.
9. Availability of an ATS from Plymouth Military, Swanwick Military (78 Sqn) or Western Radar is subject to unit capacity, priorities and limitations of radar and radio coverage. Minimum pre-flight notification as per UK AIP ENR 1.6 unless otherwise specified in Section 2 of this ACN.
10. The CAA actively encourages the use of Moving map technology in the planning and flying phases of flights to reduce the risk of airspace infringements.

PUBLICATIONS AND CHANGES

11. The activity area may lie within Controlled and Uncontrolled Airspace as well as airspace reserved for military use. Aircrew are to thoroughly familiarise themselves with UK airspace structures and procedures, in particular those laid down within the UK Aeronautical Information Publication (UK AIP), ENR 1.1 and be fully conversant with UK Flight Information Services in accordance with UK CAP 493 (MATS Pt 1).
12. The CAA VFR 1:500,000 and 1:250,000 charts and the UK AIP ENR 5 depict some, but not all aviation activity sites and amendments should also be checked. Please refer to <http://www.nats-uk.ead-it.com>
13. This ACN details specific coordination essential to the activity taking place and does not remove the need for aircraft operators to comply with national flight planning and notification procedures. Pilots and ANSPs are required to ensure that all related aviation sites are aware of this planned activity and of subsequent changes not captured within this document.
14. The Sponsor or Event Organiser should co-ordinate any changes to this ACN with SARG quoting the ACN Reference at the top of the page.

Airspace Regulation (Utilisation) – AU3
Email: AROps@caa.co.uk
Tel: 01293 983880

SECTION 2: CO-ORDINATION ARRANGEMENTS (SPECIFIC)

15. This ACN details flight profiles to complete the Belfast VOR DME Calibration.

16. This ACN replaces ACN 2022-02-0241.

17. The sponsor is responsible for obtaining any required permits to fly within UK airspace; this ACN does not constitute approval to fly in UK airspace, but only outlines the coordination process/contacts to facilitate the flight.

18. **Notification of Calibration Flight.** The sponsor is to notify the agencies listed on page one of this ACN at least 1 week prior to the planned calibration. In addition, the pilot is to contact the appropriate agencies at least 24 hours prior to confirm that the flight will still take place and again at least 1 hours prior to departure to provide final details, agree a start time and confirm availability of an Air Traffic Service (ATS).

19. **Priority.** This flight has been afforded Non-Deviating Status (NDS) whilst established on a measured run only and within Controlled Airspace (CAS), (*UK AIP ENR 1.1 (4.2) & CAP 493 – Section 1, Ch4, Para 17 refers*). Outside CAS and in between runs, the aircraft is categorised as CAT Z, (*CAP 493 – Section 1, Ch4, Para 10c refers*) and attracts no priority. In order to reduce the impact to other airspace users, the controlling authority may request that the pilot hold, or accept radar vectors in order to make best use of the airspace, or to reduce overall delays.

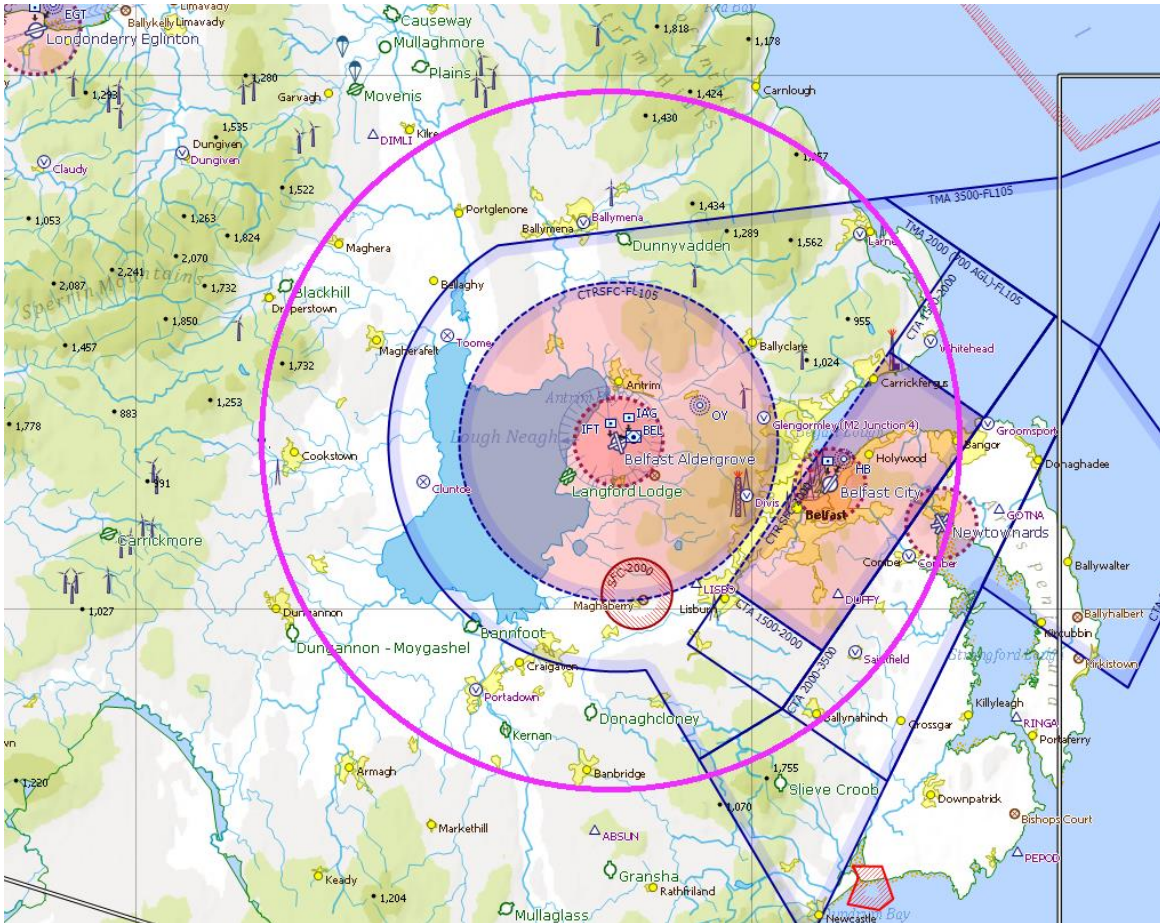
20. Measured runs will require careful management around airport movements as NDS is difficult to negotiate at such low levels. If this presents an issue the orbits may need to be conducted at 4000ft.

21. Flight Profiles:

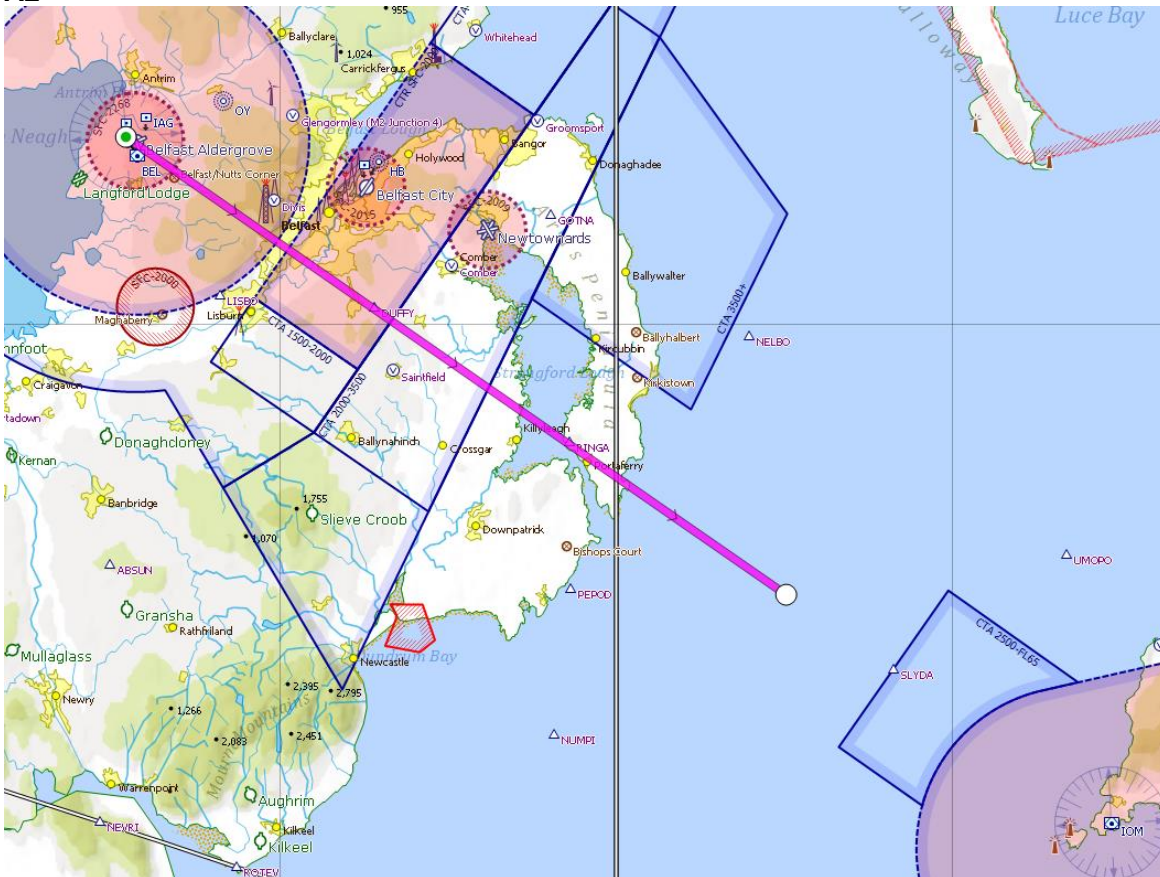
Serial No	Description	Altitude/FL	Notes
A1	Position 20NM from BEL VOR/DME to commence 20NM anti-clockwise Orbit	5,000ft AMSL	2 x 360° Orbits
A2	R127 from BEL to 41D (Lower ATS Route L10 BEL-IOM)	FL50	
A3	R222 from BEL to 37D (Non-AIP Route BEL-DEGOS)	FL50	
A4	R327 from BEL to 100D (Non-AIP Route BEL-GINGA)	FL120-150	
A5	VOR/DME Instrument Approach Procedure for Belfast/Aldergrove Rwy 07 as per AIP AD 2.EGAA-8-3	4,000ft AMSL	Full procedure required
A6	VOR/DME Instrument Approach Procedure for Belfast/Aldergrove Rwy 17 as per AIP AD 2.EGAA-8-7	4,000ft AMSL	Full procedure required
A7	VOR/DME Instrument Approach Procedure for Belfast/Aldergrove Rwy 25 as per AIP AD 2.EGAA-8-11	4,000ft AMSL	Full procedure required
A8	VOR/DME Instrument Approach Procedure for Belfast/Aldergrove Rwy 35 as per AIP AD 2.EGAA-8-13	4,000ft AMSL	Full procedure required

22. **ATS Provision – Controlled Airspace (CAS).** Access to controlled airspace is subject to the prevailing traffic situation and controller workload. The pilot is responsible for obtaining a clearance to enter controlled airspace prior to penetration.
23. Availability of an ATS from a unit is not guaranteed, is subject to controller availability, unit workload and possible reduced hours of operations. Amendments to the published hours of availability, as listed in the UK AIP ENR 1.6 – Para 4.1, AD2 or UK Military AIP, shall be notified via NOTAM.
24. **ATS Provision above FL100.** This service is available to all aircraft flying outside Controlled Airspace in the UK FIRs between FL 100 and FL 190, and within active TRAs and is subject to Unit capacity. The Units providing this service together with their boundaries are depicted within the UK AIP on the chart ENR 6-12. ENR 1.6 (4.2) lists their hours of operation, the RTF operating frequency on which this service is normally provided and a telephone number for pre-flight contact. A FPL should be filed and include the following addresses:
- a. EGZYOATT Swanwick Mil (78 Sqn)
 - b. EGTTFZC Western Radar
25. Amendments to the published hours of availability, as listed in the UK AIP ENR 1.6 – Para 4.2, shall be notified via NOTAM.
26. Between the hours of 18:00 to 08:00 (local time) on a weekday, at any time on a weekend or during a UK public holiday, Swanwick Mil (78 Sqn) require at least two weeks prior notice in order to obtain an ATS in support of this task.
27. **Air-to-Air Refuelling Areas (AARAs).** For details of the AARAs see the UK AIP – ENR 5.2. Activation is by NOTAM, and when active, information can be obtained from Swanwick Mil.
28. **Danger Areas (DAs).** Access to any DA is subject to range requirements and access is not guaranteed. The sponsor is to engage with the DA Authority at the earliest opportunity to coordinate access, noting that access may only be possible outside notified operating hours.
29. **Non-SSR Gliding Areas.** The sponsor should exercise caution when operating in these areas, as gliders without transponders may be encountered up to FL195. For info see the UK AIP: *ENR 1.1 (Para 1.12), ENR 5.2 (NSGA) and ENR6-63.*
30. **Temporary Reserved Areas (TRA).** The sponsor is responsible for complying with the requirements for access to any TRA iaw the UK AIP – ENR 1.1 (Para 5.1.5).

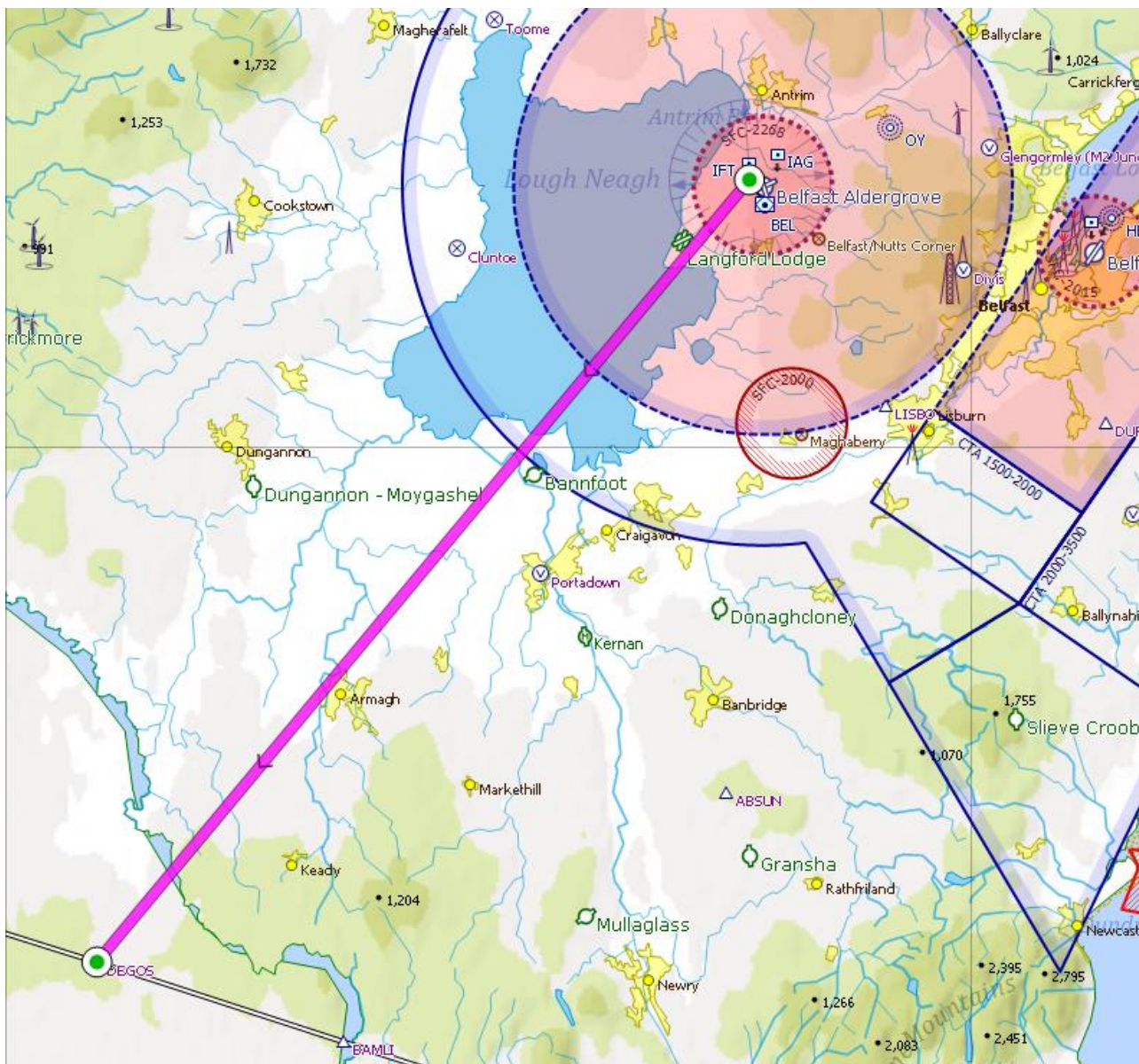
A1



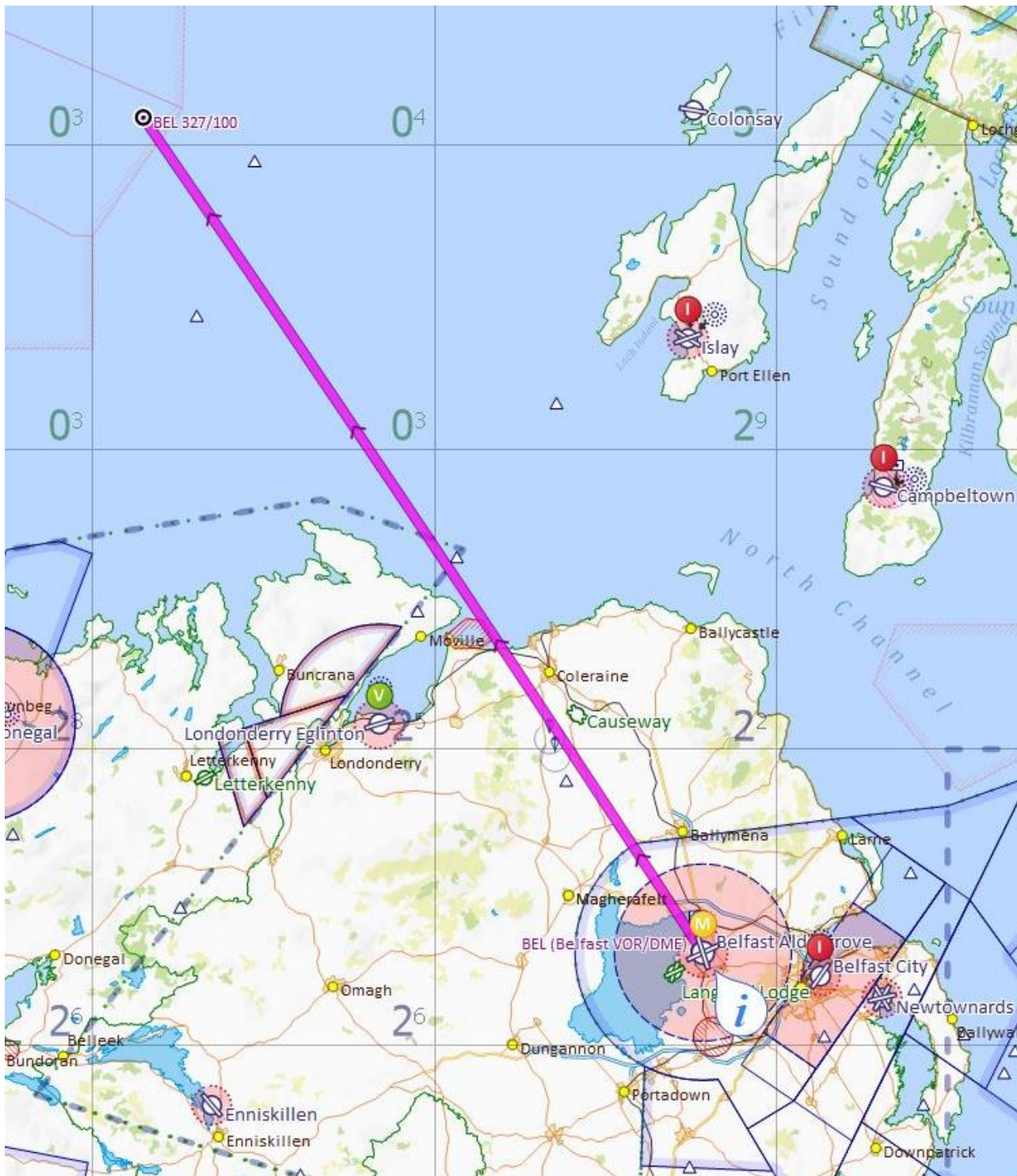
A2



A3



A4



A5

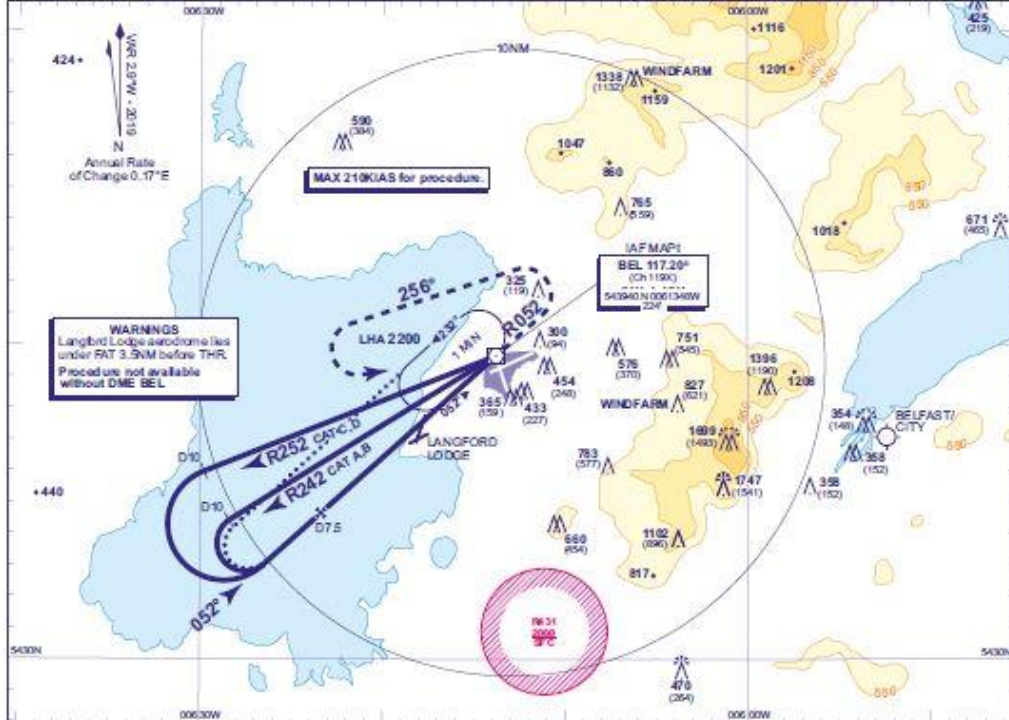
UNITED KINGDOM AIP

AD 2.EGAA-8-3
31 Jan 2019

INSTRUMENT APPROACH CHART - ICAO

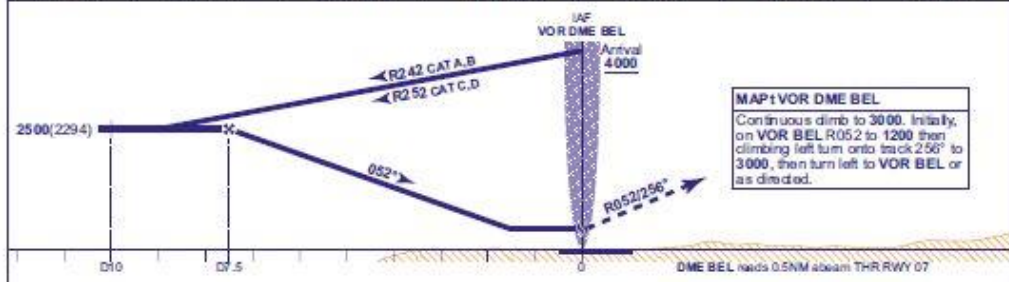
BELFAST ALDERGROVE
VOR/DME
RWY 07
(ACFT CAT A,B,C,D)

<p>MSA 25NM VOR BEL</p>	APP 128.500	ALDERGROVE APPROACH	AD ELEVATION 268
	TWR 118.300	ALDERGROVE TOWER	THR ELEVATION 206
	RAD 120.905	ALDERGROVE DIRECTOR	OBSTACLE ELEVATION 1747 AMSL (0.541) (ABOVE THR)
	ATIS 126.130	ALDERGROVE INFORMATION	BEARINGS ARE MAGNETIC
			TRANSITION ALTITUDE 6000



RECOMMENDED PROFILE Gradient 5.28%, 321FT/NM

DME BEL	7	6	5	4	3	2
ALT@HGT	2340(2134)	2020(1814)	1700(1494)	1380(1174)	1060(854)	740(534)



Aircraft Category	A	B	C	D	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	Procedure	610(404)	620(414)	640(434)	660(454)	FT/MIN	860	750	640	540	430
VM(C)OCA (OCH(AAL))	Total Area	750(482)	840(572)	1180(912)	1290(1022)						

ALTERNATIVE PROCEDURE EXTENDED HOLDING PATTERN
Overhead VOR BEL (IAF) extend outbound leg of holding pattern descending to 2500(2294). At BEL DME 10 turn left to intercept extended FAT, then as for main procedure.

NOTES 1 FAT is offset 16° and intercepts the RWY CAL 1.1NM from the THR (nominal BEL DME 2).
2 Aircraft will normally be required to hold not lower than 3000 at VOR BEL.

CHANGE (2/19): ATIS/RAD FREQUENCIES.
AERO INFO DATE 02 NOV 18

A6

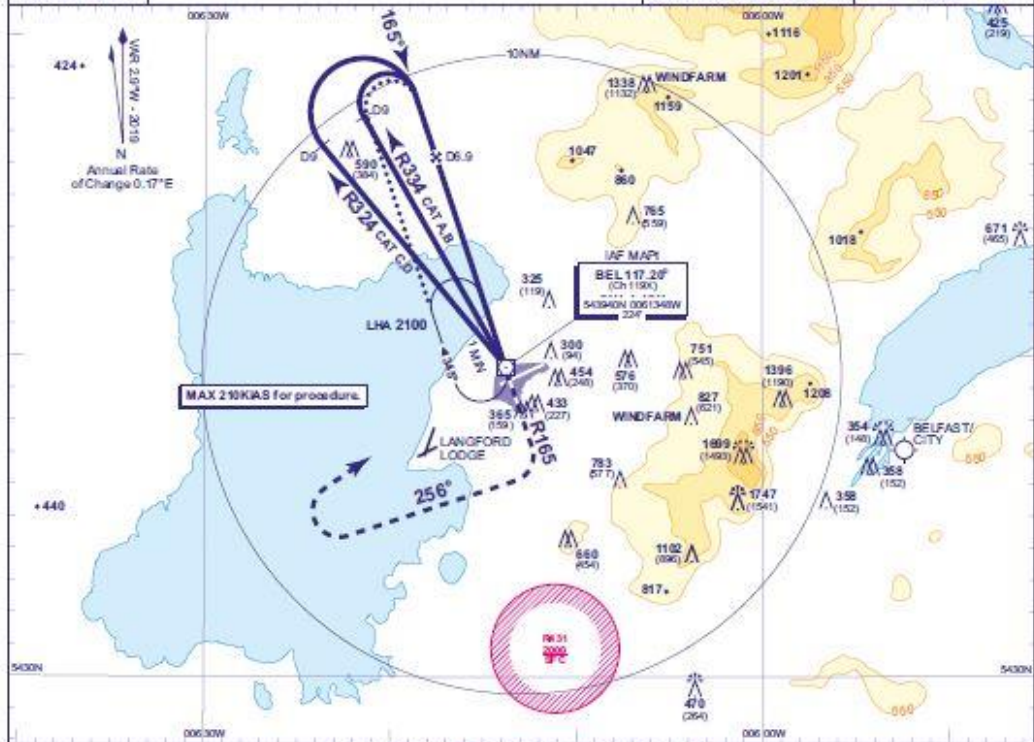
UNITED KINGDOM AIP

AD 2.EGAA-8-7
31 Jan 2019

INSTRUMENT APPROACH CHART - ICAO

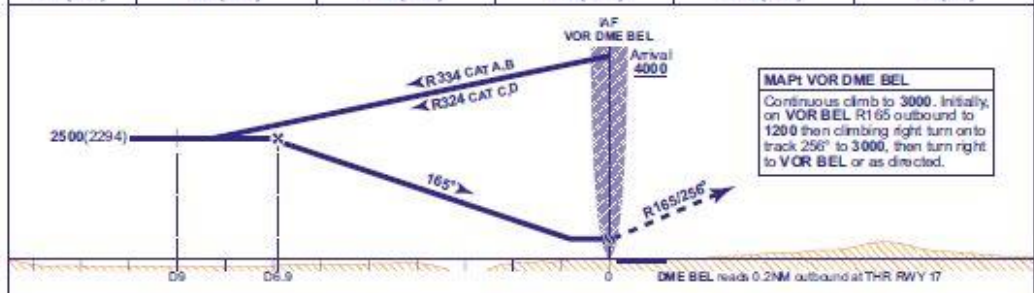
BELFAST ALDERGROVE
VOR/DME
RWY 17
(ACFT CAT A,B,C,D)

	APP 128.500	ALDERGROVE APPROACH	AD ELEVATION 268
	TWR 118.300	ALDERGROVE TOWER	THR ELEVATION 206
	RAD 120.905	ALDERGROVE DIRECTOR	OBSACLE ELEVATION 1747 AMSL (0.541) (BEHIND THR)
	ATIS 126.130	ALDERGROVE INFORMATION	BEARINGS ARE MAGNETIC
			TRANSITION ALTITUDE 6000



RECOMMENDED PROFILE Gradient 5.20%, 316FT/NM

DME BEL	6	5	4	3	2
ALT(HGT)	2220(2014)	1900(1694)	1580(1374)	1270(1064)	950(744)



Aircraft Category	A	B	C	D	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	WITH DME	560(354)	560(354)	560(354)	560(354)	FT/MIN	850	750	640	530	430
	NO DME	780(574)	780(574)	780(574)	780(574)						
VMI(C)OCA (OCH(AAL))	Total Area	750(482)	840(572)	1180(912)	1290(1022)						

ALTERNATIVE PROCEDURE EXTENDED HOLDING PATTERN
Overhead VOR BEL (IAF) extend outbound leg of holding pattern descending to 2500(2294). At BEL DME 9 turn right to intercept extended FAT, then continue as for main procedure.

AIRCRAFT UNABLE TO RECEIVE DME BEL
Substitute timing on the outbound leg of the main and alternative procedures: 3MIN (CAT A,B); 2.5MIN (CAT C,D). Commence descent inbound when established on FAT use increased OCH.

NOTE Aircraft will normally be required to hold not lower than 3000 at VOR BEL.

CHANGE (2/19): ATIS/RAD FREQUENCIES.

AERO INFO DATE 02 NOV 18 AD 2.EGAA-8-7

CIVIL AVIATION AUTHORITY

AMDT 02/2019

A7

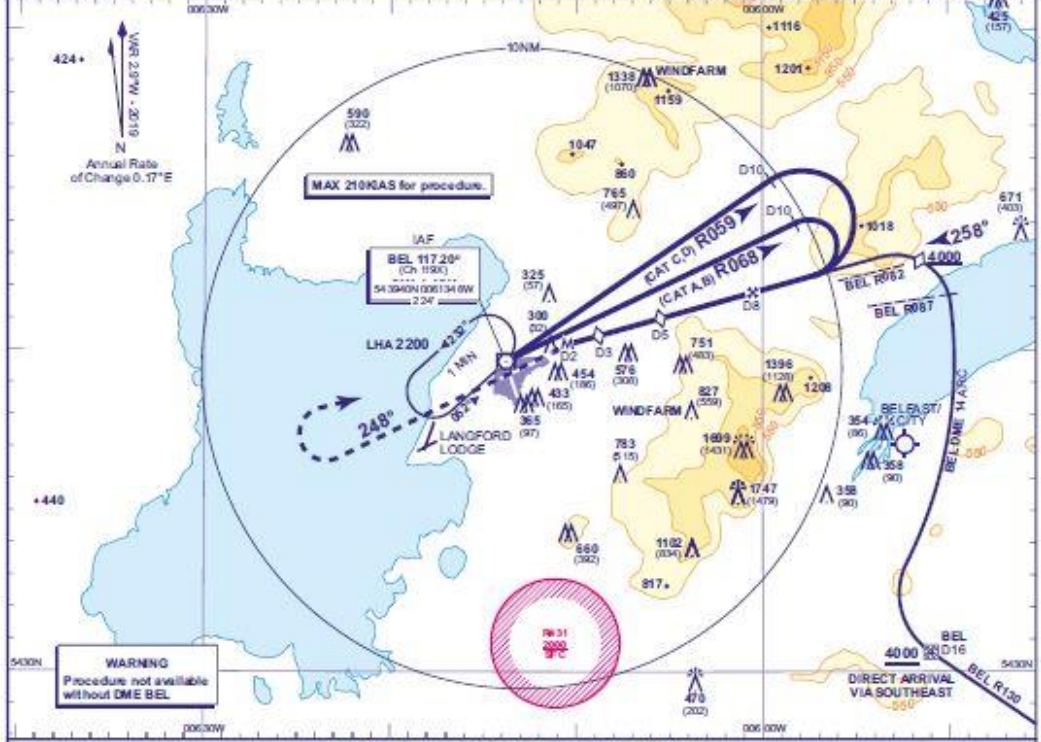
UNITED KINGDOM AIP

AD 2. EGAA-8-13
31 Jan 2019

INSTRUMENT APPROACH CHART - ICAO

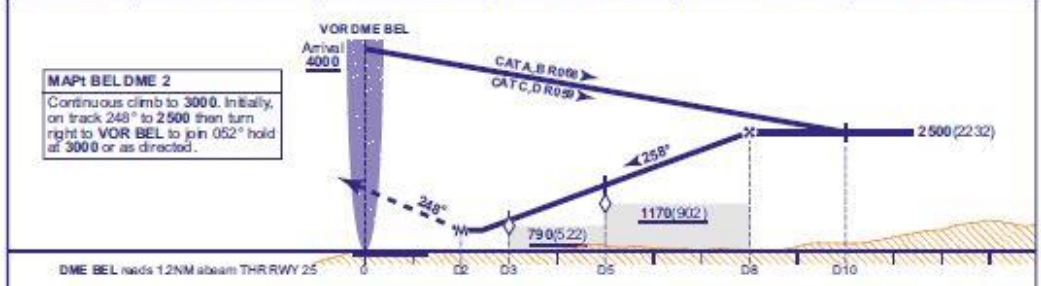
BELFAST ALDERGROVE
VOR/DME
RWY 25
(ACFT CAT A,B,C,D)

	APP 128.500	ALDERGROVE APPROACH	AD ELEVATION 268
	TWR 118.300	ALDERGROVE TOWER	THR ELEVATION 268
	RAD 120.905	ALDERGROVE DIRECTOR	OBSTACLE ELEVATION 1747 AMSL (0.479) (ABOVE THR)
	ATIS 126.130	ALDERGROVE INFORMATION	BEARINGS ARE MAGNETIC
			TRANSITION ALTITUDE 6000



RECOMMENDED PROFILE Gradient 5.26%, 320FT/NM

DME BEL	7	6	5	4	3
ALT(HGT)	2180(1912)	1860(1592)	1540(1272)	1220(952)	900(632)



Aircraft Category	OCA (OCH)	Procedure	A	B	C	D	Rate of descent FT/MIN	G/S KT	160	140	120	100	80
			700(432)	700(432)	700(432)	700(432)		850	750	640	530	430	
VM(C)OCA (OCH(AAL))	Total Area		750(482)	840(572)	1180(912)	1290(1022)							

NOTES 1 FAT is offset 9.8° and intercepts RWY 25 extended CL approximately 1.2NM before THR.
2 Aircraft will normally be required to hold not lower than 3000 at VOR BEL.

CHANGE (2/19): ATIS/RAD FREQUENCIES.
AERO INFO DATE 05 NOV 18

AD 2. EGAA-8-13

A8

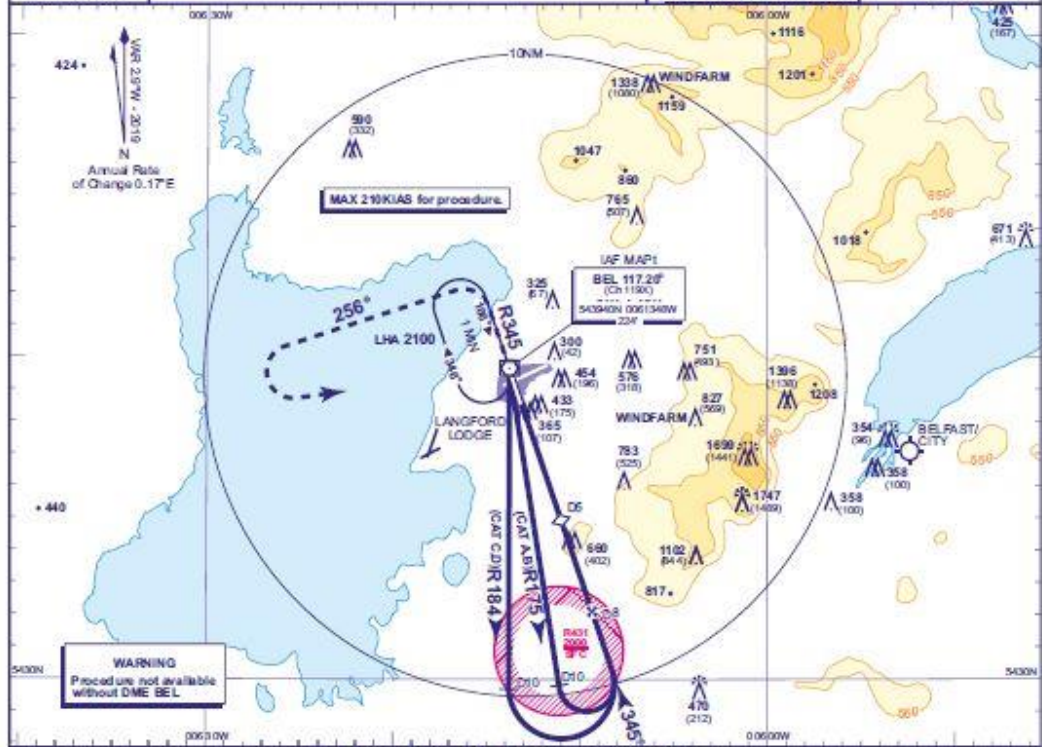
AD 2EGAA-8-16
31 Jan 2019

UNITED KINGDOM AIP

I INSTRUMENT APPROACH CHART - ICAO

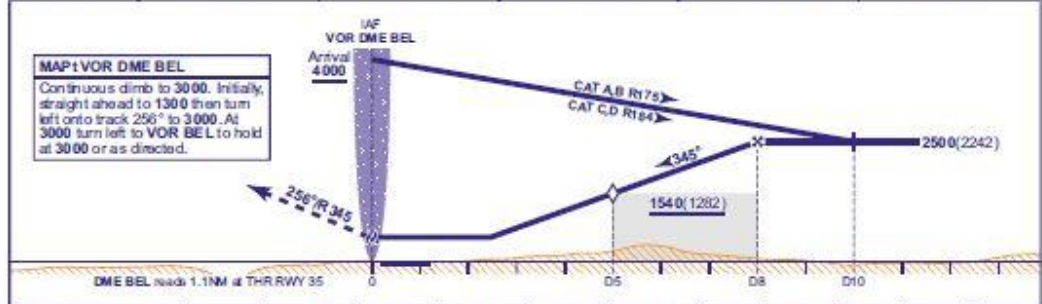
**BELFAST ALDERGROVE
VOR/DME
RWY 35
(ACFT CAT A,B,C,D)**

APP 128.500	ALDERGROVE APPROACH	AD ELEVATION 268
TWR 118.300	ALDERGROVE TOWER	THR ELEVATION 258
RAD 120.905	ALDERGROVE DIRECTOR	OBSTACLE ELEVATION 1747 AMSL (1498) (ABOVE THR)
ATIS 126.130	ALDERGROVE INFORMATION	BEARINGS ARE MAGNETIC
		TRANSITION ALTITUDE 6000



RECOMMENDED PROFILE Gradient 5.28%, 321FT/NM

DME BEL	7	6	5	4	3
ALT(HGT)	2180(1922)	1860(1602)	1540(1282)	1220(962)	900(642)



Aircraft Category	A	B	C	D	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	Procedure	760(502)	760(502)	760(502)	760(502)	FT/MIN	860	750	640	530	430
VM(COCA) (OCH AAL)	Total Area	750(482)	840(572)	1180(912)	1290(1022)						

NOTE Aircraft will normally be required to hold not lower than 3000 at VOR BEL.

CHANGE (2/19): ATIS/RAD FREQUENCIES.

AERO INFO DATE 05 NOV 18

AD 2-EGAA-8-16

AMDT 02/2019

CIVIL AVIATION AUTHORITY

A9

