

RNAV Hold Coding Tables

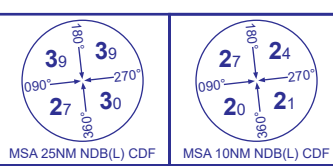
CARDIFF CDF Hold

Designator	Sequence Number	Path Terminator	Waypoint Name	Co-ordinates	Fly-over	Course/Track °M (°T)	Magnetic Variation	Time (MIN)	Turn Direction	Level Constraint	Speed Constraint	Navigation Performance
CDF	-	-	CDF	512336.16N 0032016.47W	Y	297° (296.8°)	-0.6	1 MIN	LEFT	-FL100 +3000	-200* -220**	RNAV1/ RNAV5

*below FL070
**FL070 and above

INSTRUMENT APPROACH CHART - ICAO

CARDIFF ILS/DME/NDB(L) RWY 12 (ACFT CAT A,B,C,D)



APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 205
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1094) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

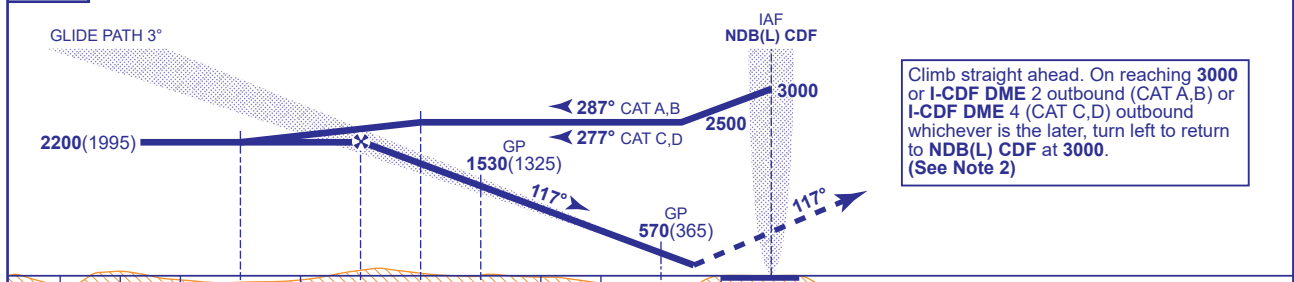
TRANSITION ALTITUDE 6000



RECOMMENDED PROFILE GLIDE PATH 3°, 320FT/NM

DME I-CDF	5	4	3	2	1
ALT(HGT)	1850(1645)	1530(1325)	1210(1005)	890(685)	570(365)

RDH 50



Climb straight ahead. On reaching 3000 or I-CDF DME 2 outbound (CAT A,B) or I-CDF DME 4 (CAT C,D) outbound whichever is the later, turn left to return to NDB(L) CDF at 3000. (See Note 2)

DME I-CDF zero ranged to THR RWY 12

Aircraft Category	A	B	C	D	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	CAT I	350(145)	360(155)	373(168)		386(181)	FT/MIN	850	740	640	530
VM(C)OCA (OCH AAL)	Total Area	680(460)	820(600)	1560(1340)	1690(1470)						
	SW of RWY 12/30	680(460)	820(600)	920(700)	920(700)						

AIRCRAFT UNABLE TO RECEIVE DME I-CDF
Advise ATC. Radar ranges will be provided at 5NM and 8NM outbound and at 6NM and 4NM inbound.

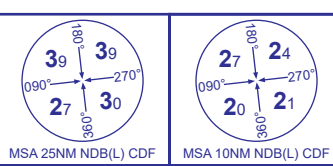
NOTE 1 Subject to ATC approval, aircraft inbound to NDB(L) CDF and receiving DME I-CDF may descend to 3000 after passing I-CDF DME 10.
NOTE 2 Aircraft to remain within I-CDF DME 10 during the missed approach turn in order to be contained within Cardiff controlled airspace. If unable to comply, notify ATC.

CHANGE (8/23): I-CDF DME ELEVATION REVISED.

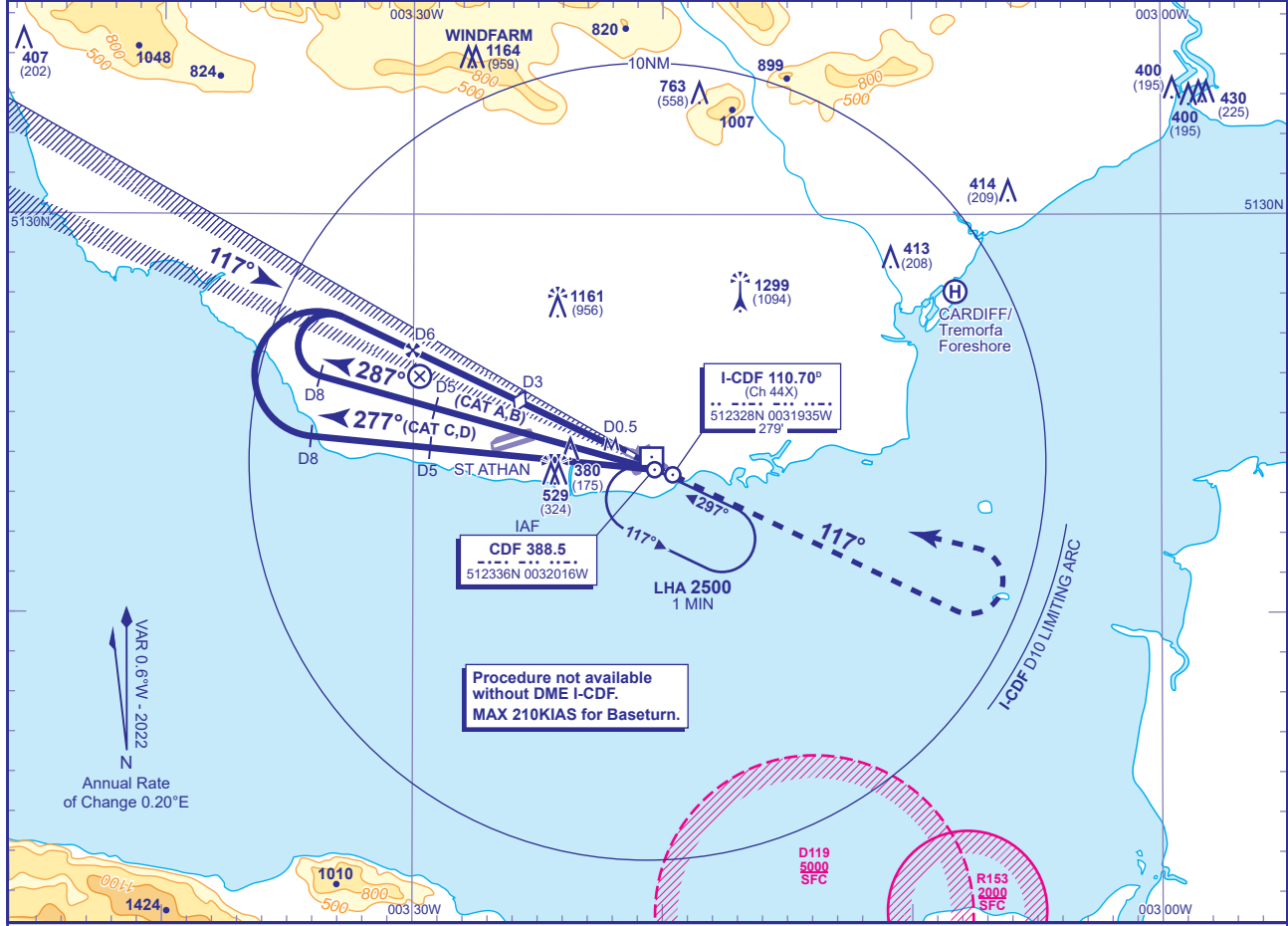
INSTRUMENT APPROACH CHART - ICAO

CARDIFF

LOC/DME/NDB(L) RWY 12
(ACFT CAT A,B,C,D)



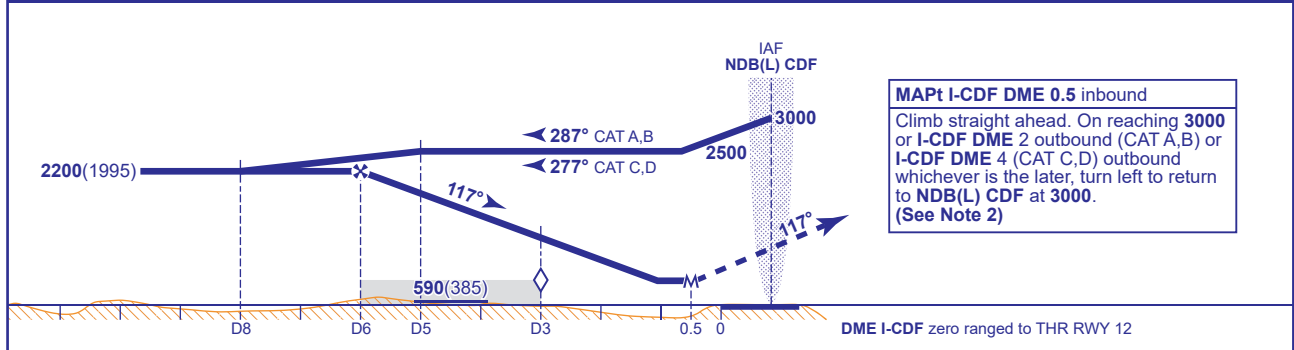
APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220	TRANSITION ALTITUDE 6000
TWR 133.105	CARDIFF TOWER	THR ELEVATION 205	
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1094) (ABOVE THR)	
119.155 (LARS)			
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC	



Procedure not available without DME I-CDF.
MAX 210KIAS for Baseturn.

RECOMMENDED PROFILE Gradient 5.2%, 320FT/NM

DME I-CDF	5	4	3 (SDF)	2	1
ALT(HGT)	1850(1645)	1530(1325)	1210(1005)	890(685)	570(365)



MAPt I-CDF DME 0.5 inbound
Climb straight ahead. On reaching 3000 or I-CDF DME 2 outbound (CAT A,B) or I-CDF DME 4 (CAT C,D) outbound whichever is the later, turn left to return to NDB(L) CDF at 3000.
(See Note 2)

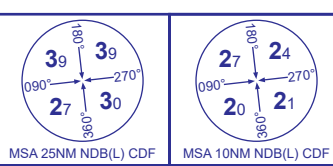
Aircraft Category		A	B	C	D	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	Procedure	470(265)	470(265)	510(305)	510(305)		FT/MIN	850	740	640	530	420
VM(C)OCA (OCH AAL)	Total Area	680(460)	820(600)	1560(1340)	1690(1470)							
	SW of RWY 12/30	680(460)	820(600)	920(700)	920(700)							

NOTE 1 Subject to ATC approval, aircraft inbound to NDB(L) CDF and receiving DME I-CDF may descend to 3000 after passing I-CDF DME 10.
NOTE 2 Aircraft to remain within I-CDF DME 10 during the missed approach turn in order to be contained within Cardiff controlled airspace. If unable to comply, notify ATC.

CHANGE (8/23): I-CDF DME ELEVATION REVISED.

INSTRUMENT APPROACH CHART - ICAO

CARDIFF SRA RTR 2NM RWY 12 (ACFT CAT A,B,C,D)



APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 205
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1094) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

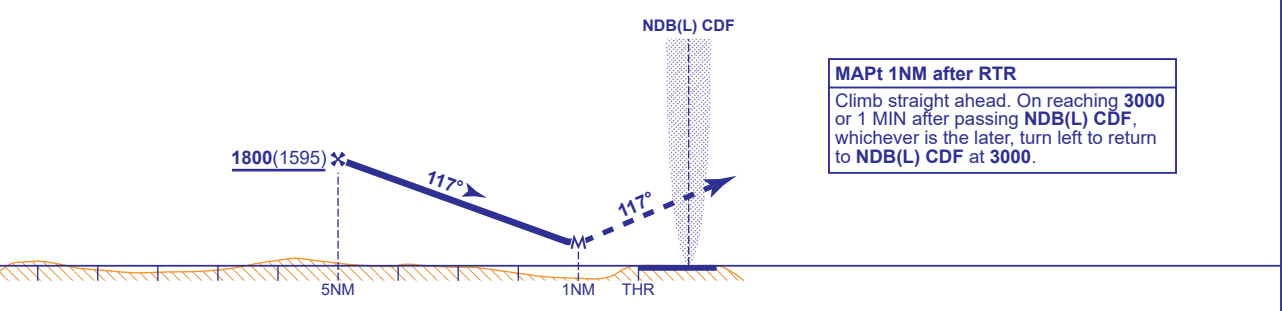
TRANSITION ALTITUDE 6000



RADAR ADVISORY HEIGHTS Gradient 5.2%, 320FT/NM

NM	5.0	4.0	3.0	2.0
ALT(HGT)	1800(1595)	1480(1275)	1160(955)	840(635)

Initial and intermediate approach as directed by radar.



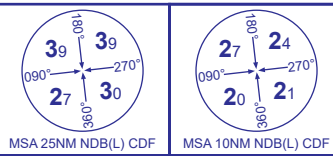
Aircraft Category	A	B	C	D	Rate of descent	G/S KT	160	140	120	100	80	
OCA (OCH) Procedure	770(565)	770(565)	770(565)	770(565)		FT/MIN	850	740	640	530	430	
VM(C)OCA (OCH AAL)	Total Area	680(460)	820(600)	1560(1340)	1690(1470)	RTR to MAPT	MIN:SEC	0:22	0:25	0:30	0:36	0:45
	SW of RWY 12/30	680(460)	820(600)	920(700)	920(700)							

NOTE Radar Ranges measured to touchdown.

CHANGE (8/21): APP, TWR, RAD FREQUENCIES REVISED.

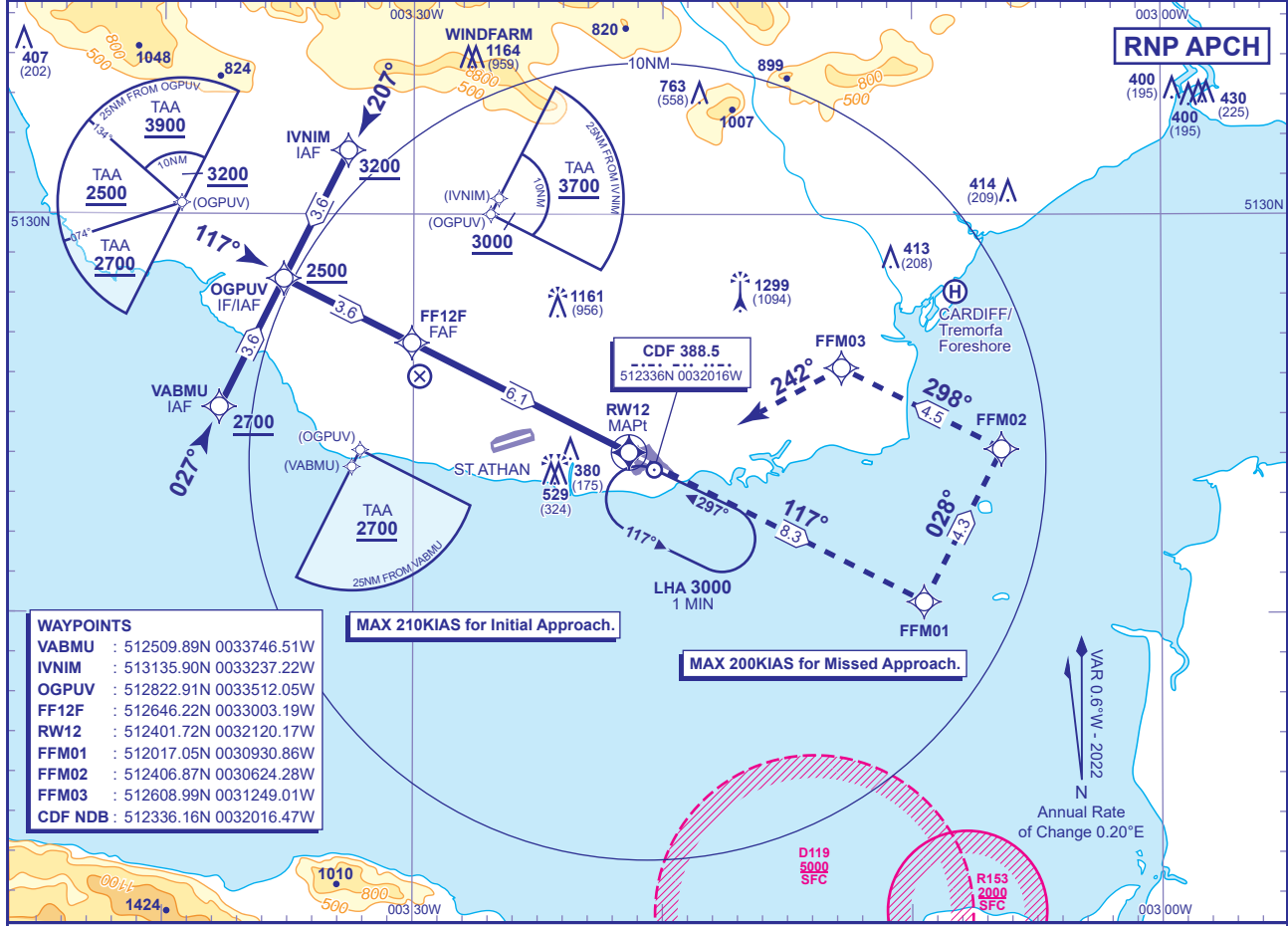
INSTRUMENT APPROACH CHART - ICAO

CARDIFF RNP RWY 12 (ACFT CAT A,B,C,D)



APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 205
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1094) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

MIN TEMP **-10°C**
TRANSITION ALTITUDE **6000**



WAYPOINTS

VABMU : 512509.89N 0033746.51W
 IVNIM : 513135.90N 0033237.22W
 OGPUV : 512822.91N 0033512.05W
 FF12F : 512646.22N 0033003.19W
 RW12 : 512401.72N 0032120.17W
 FFM01 : 512017.05N 0030930.86W
 FFM02 : 512406.87N 0030624.28W
 FFM03 : 512608.99N 0031249.01W
 CDF NDB : 512336.16N 0032016.47W

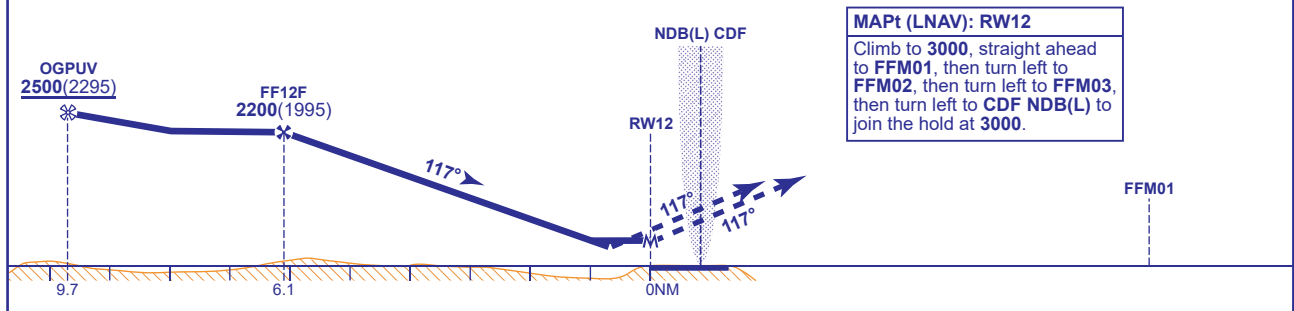
MAX 210KIAS for Initial Approach.

MAX 200KIAS for Missed Approach.

RECOMMENDED PROFILE VERTICAL PATH ANGLE 3.0° (LNAV 5.2%), 320FT/NM

NM to RW12	6	5	4	3	2	1
ALT(HGT)	2170(1965)	1850(1645)	1530(1325)	1210(1005)	890(685)	570(365)

TCH 50



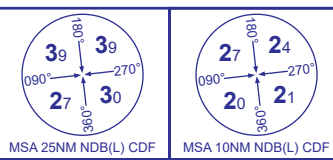
Aircraft Category	OCA (OCH)	A	B	C	D	Rate of descent	G/S KT	160	140	120	100	80
		590(385)	590(385)	590(385)	590(385)		FT/MIN	850	740	640	530	420
VM(C)OCA (OCH AAL)	Total Area	680(460)	820(600)	1560(1340)	1690(1470)							
	SW of RWY 12/30	680(460)	820(600)	920(700)	920(700)							

NOTE NDB(L) CDF required for missed approach hold.

CHANGE (12/21): EGNOS AND LPV REMOVED.

INSTRUMENT APPROACH CHART - ICAO

**CARDIFF
ILS/DME/
NDB(L) y
RWY 30
(ACFT CAT A,B)**



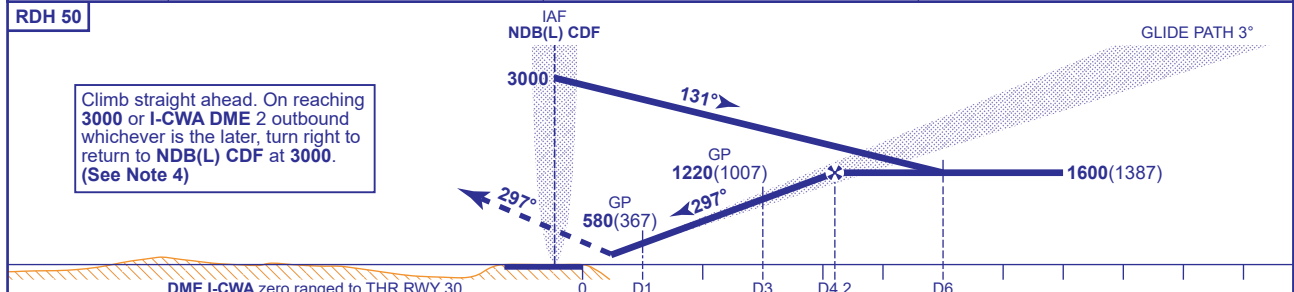
APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 213
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1086) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

TRANSITION ALTITUDE
6000



RECOMMENDED PROFILE GLIDE PATH 3°, 320FT/NM

DME I-CWA	3	2	1
ALT(HGT)	1220(1007)	900(687)	580(367)



Climb straight ahead. On reaching **3000** or **I-CWA DME 2** outbound whichever is the later, turn right to return to **NDB(L) CDF** at **3000**. (See Note 4)

Aircraft Category	A	B								
OCA (OCH)	CAT I	378(165)	388(175)	Rate of descent	G/S KT	160	140	120	100	80
				FT/MIN		850	740	640	530	420

ALTERNATIVE PROCEDURE EXTENDED HOLDING PATTERN
Extend outbound leg of the NDB(L) CDF holding pattern to I-CWA DME 5 descending to **1600(1387)** then proceed as for main procedure.

AIRCRAFT UNABLE TO RECEIVE DME I-CWA
Advise ATC. As for main and alternative procedures except fly outbound leg for 2.5 MIN and when established descend to DH. Radar ranges will be provided at 6NM outbound and at 4NM and 2NM inbound.

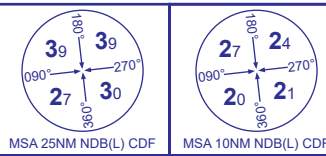
- NOTE 1** Subject to ATC approval, aircraft inbound to NDB(L) CDF and receiving DME I-CWA may descend to **3000** after passing I-CWA DME 10.
NOTE 2 ATC will authorise crossing of EG D119 before start of procedure.
NOTE 3 Timed procedure not available without radar monitoring.
NOTE 4 Aircraft to remain within I-CWA DME 11 during the missed approach turn in order to be contained within Cardiff controlled airspace. If unable to comply, notify ATC.

CHANGE (8/23): I-CWA DME ELEVATION REVISED.

INSTRUMENT APPROACH CHART - ICAO

CARDIFF
ILS/DME/
NDB(L) z
RWY 30
(ACFT CAT C,D)

APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 213
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1086) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

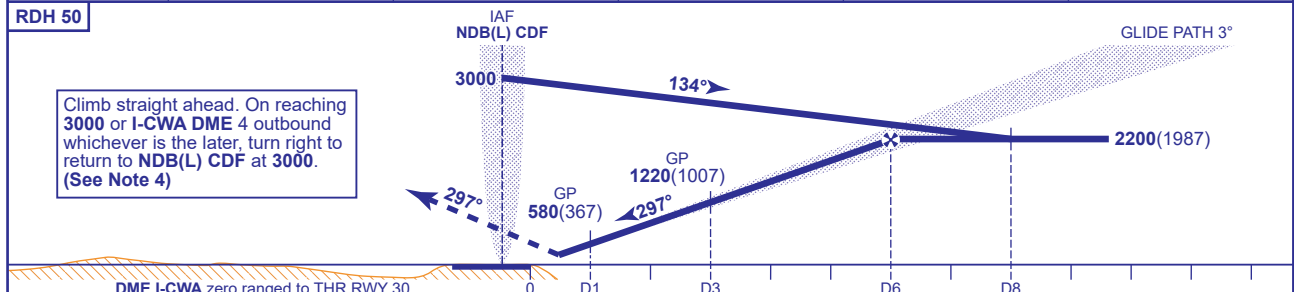


TRANSITION ALTITUDE
6000



RECOMMENDED PROFILE GLIDE PATH 3°, 320FT/NM

DME I-CWA	5	4	3	2	1
ALT(HGT)	1860(1647)	1540(1327)	1220(1007)	900(687)	580(367)



Aircraft Category	C	D	Rate of descent					
OCA(OCH)	CAT I	400(187) / 411(198)	G/S KT	160	140	120	100	80
			FT/MIN	850	740	640	530	420
VM(C)OCA (OCH AAL)	Total Area	1560(1340) / 1690(1470)						
	SW of RWY 12/30	920(700) / 920(700)						

ALTERNATIVE PROCEDURE EXTENDED HOLDING PATTERN
 Extend outbound leg of the NDB(L) CDF holding pattern to I-CWA DME 8 descending to **2200(1987)** then proceed as for main procedure.

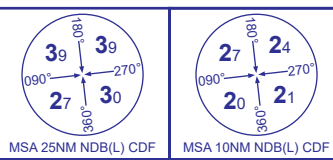
AIRCRAFT UNABLE TO RECEIVE DME I-CWA
 Advise ATC. As for main and alternative procedures except fly outbound leg for 2.5 MIN and when established descend to DH. Radar ranges will be provided at 8NM outbound and at 6NM inbound.

- NOTE 1** Subject to ATC approval, aircraft inbound to NDB(L) CDF and receiving DME I-CWA may descend to **3000** after passing I-CWA DME 10.
2 ATC will authorise crossing of EG D119 before start of procedure.
3 Timed procedure not available without radar monitoring.
4 Aircraft to remain within I-CWA DME 11 during the missed approach turn in order to be contained within Cardiff controlled airspace. If unable to comply, notify ATC.

CHANGE (8/23): I-CWA DME ELEVATION REVISED.

INSTRUMENT APPROACH CHART - ICAO

CARDIFF
LOC/DME/
NDB(L) y
RWY 30
 (ACFT CAT A,B)



APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 213
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1086) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

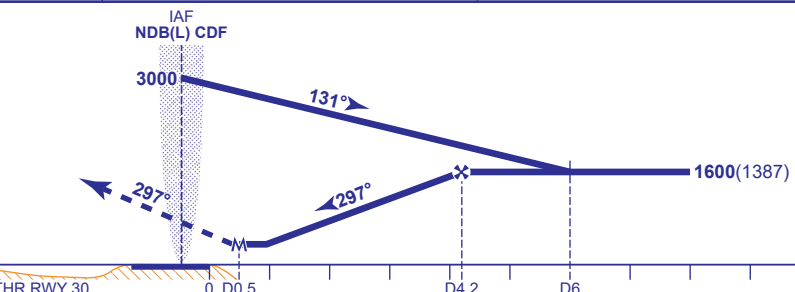
TRANSITION ALTITUDE
6000



RECOMMENDED PROFILE Gradient 5.2%, 320FT/NM

DME I-CWA	3	2	1
ALT(HGT)	1220(1007)	900(687)	580(367)

MAPt I-CWA DME 0.5
 Climb straight ahead. On reaching **3000** or **I-CWA DME 2** outbound whichever is the later, turn right to return to **NDB(L) CDF** at **3000**.
 (See Note 4)



Aircraft Category		A	B	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	Procedure	500(287)	500(287)		FT/MIN	850	740	640	530	420
VM(C)OCA (OCH AAL)	Total Area	680(460)	820(600)							

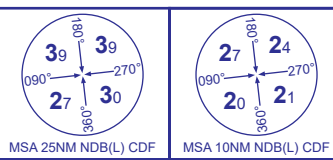
ALTERNATIVE PROCEDURE EXTENDED HOLDING PATTERN
 Extend outbound leg of the NDB(L) CDF holding pattern to I-CWA DME 5 descending to **1600(1387)** then proceed as for main procedure.

- NOTE 1** Subject to ATC approval, aircraft inbound to NDB(L) CDF and receiving DME I-CWA may descend to **3000** after passing I-CWA DME 10.
NOTE 2 ATC will authorise crossing of EG D119 before start of procedure.
NOTE 3 Timed procedure not available without radar monitoring.
NOTE 4 Aircraft to remain within I-CWA DME 11 during the missed approach turn in order to be contained within Cardiff controlled airspace. If unable to comply, notify ATC.

CHANGE (8/23): I-CWA DME ELEVATION REVISED.

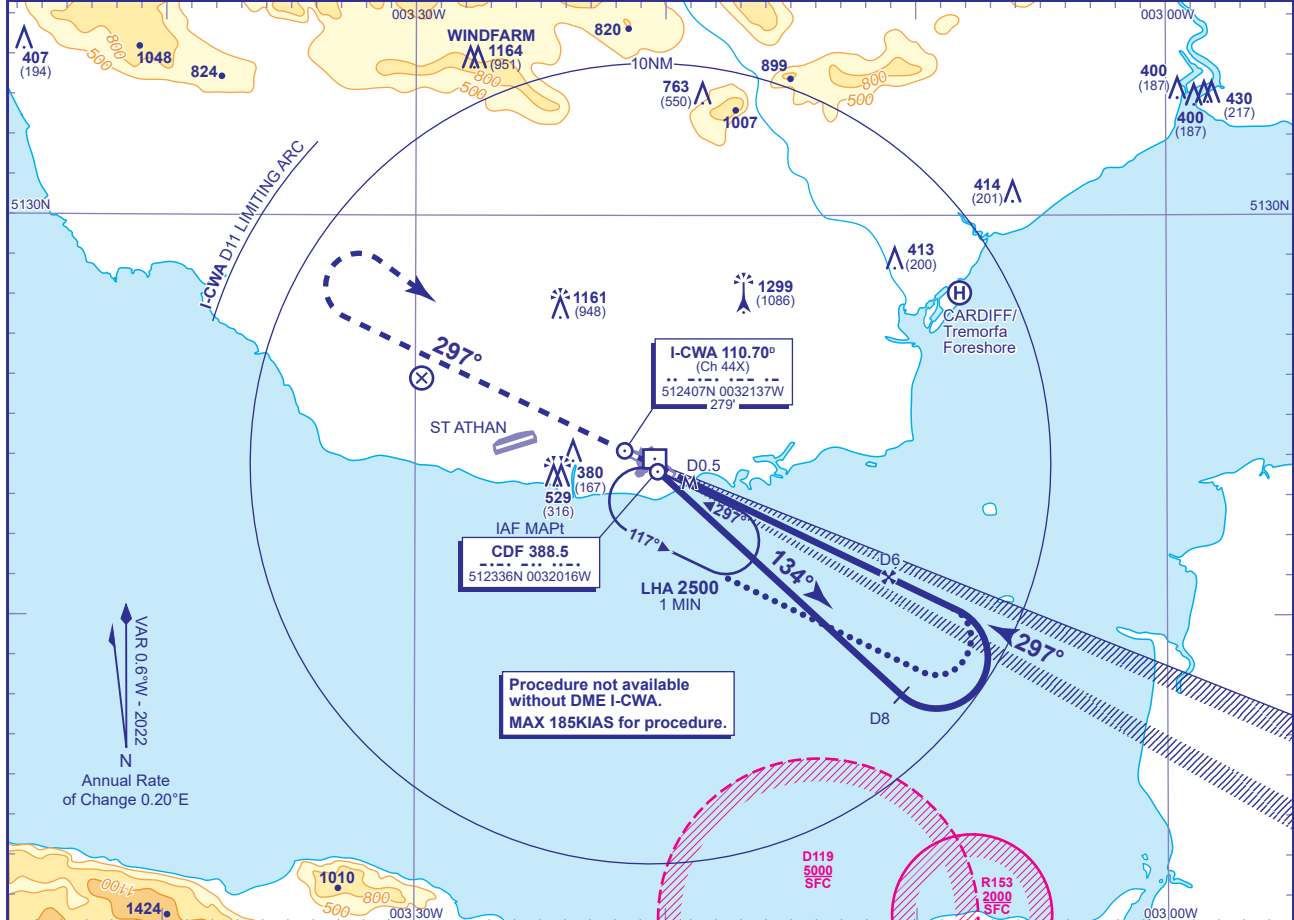
INSTRUMENT APPROACH CHART - ICAO

CARDIFF
LOC/DME/
NDB(L) z
RWY 30
(ACFT CAT C,D)



APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 213
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1086) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

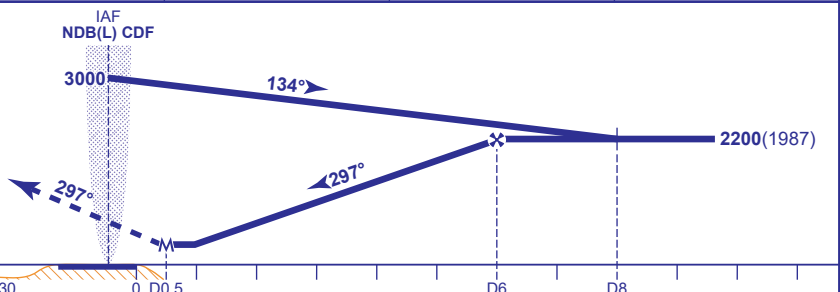
TRANSITION ALTITUDE
6000



RECOMMENDED PROFILE Gradient 5.2%, 320FT/NM

DME I-CWA	5	4	3	2	1
ALT(HGT)	1860(1647)	1540(1327)	1220(1007)	900(687)	580(367)

MAPt I-CWA DME 0.5
Climb straight ahead. On reaching 3000 or I-CWA DME 4 outbound whichever is the later, turn right to return to NDB(L) CDF at 3000. (See Note 4)



Aircraft Category		C	D	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	Procedure	500(287)	500(287)		FT/MIN	850	740	640	530	420
VM(C)OCA (OCH AAL)	Total Area	1560(1340)	1690(1470)							
	South of RWY 12/30	920(700)	920(700)							

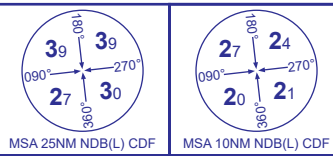
ALTERNATIVE PROCEDURE EXTENDED HOLDING PATTERN
Extend outbound leg of the NDB(L) CDF holding pattern to I-CWA DME 8 descending to 2200(1987) then proceed as for main procedure.

- NOTE 1** Subject to ATC approval, aircraft inbound to NDB(L) CDF and receiving DME I-CWA may descend to 3000 after passing I-CWA DME 10.
NOTE 2 ATC will authorise crossing of EG D119 before start of procedure.
NOTE 3 Timed procedure not available without radar monitoring.
NOTE 4 Aircraft to remain within I-CWA DME 11 during the missed approach turn in order to be contained within Cardiff controlled airspace. If unable to comply, notify ATC.

CHANGE (8/23): I-CWA DME ELEVATION REVISED.

INSTRUMENT APPROACH CHART - ICAO

CARDIFF
SRA RTR 2NM
RWY 30
 (ACFT CAT A,B,C,D)



APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 213
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1086) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

TRANSITION ALTITUDE
6000

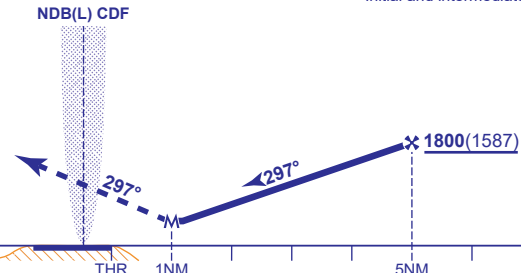


RADAR ADVISORY HEIGHTS Gradient 5.2%, 320FT/NM

NM	5.0	4.0	3.0	2.0
ALT(HGT)	1800(1587)	1480(1267)	1170(957)	850(637)

Initial and intermediate approach as directed by radar.

MAPt 1NM after RTR
 Climb straight ahead. On reaching **3000** or **1 MIN** after passing **NDB(L) CDF**, whichever is the later, turn right to return to **NDB(L) CDF** at **3000**.



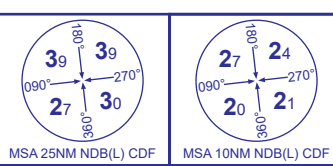
Aircraft Category	A	B	C	D	Rate of descent	G/S KT	160	140	120	100	80
OCA (OCH)	2.5% MAP	770(557)	770(557)	770(557)		770(557)	FT/MIN	850	740	630	530
	3.5% MAP	620(407)	620(407)	620(407)	620(407)	RTR to MAPt	MIN:SEC	0:22	0:25	0:30	0:36
VM(C)OCA (OCH AAL)	Total Area	680(460)	820(600)	1560(1340)	1690(1470)						
	SW of RWY 12/30	680(460)	820(600)	920(700)	920(700)						

NOTE 1 ATC will authorise crossing of EG D119 before start of procedure.
2 Radar Ranges measured to touchdown.

CHANGE (8/21): APP, TWR, RAD FREQUENCIES REVISED.

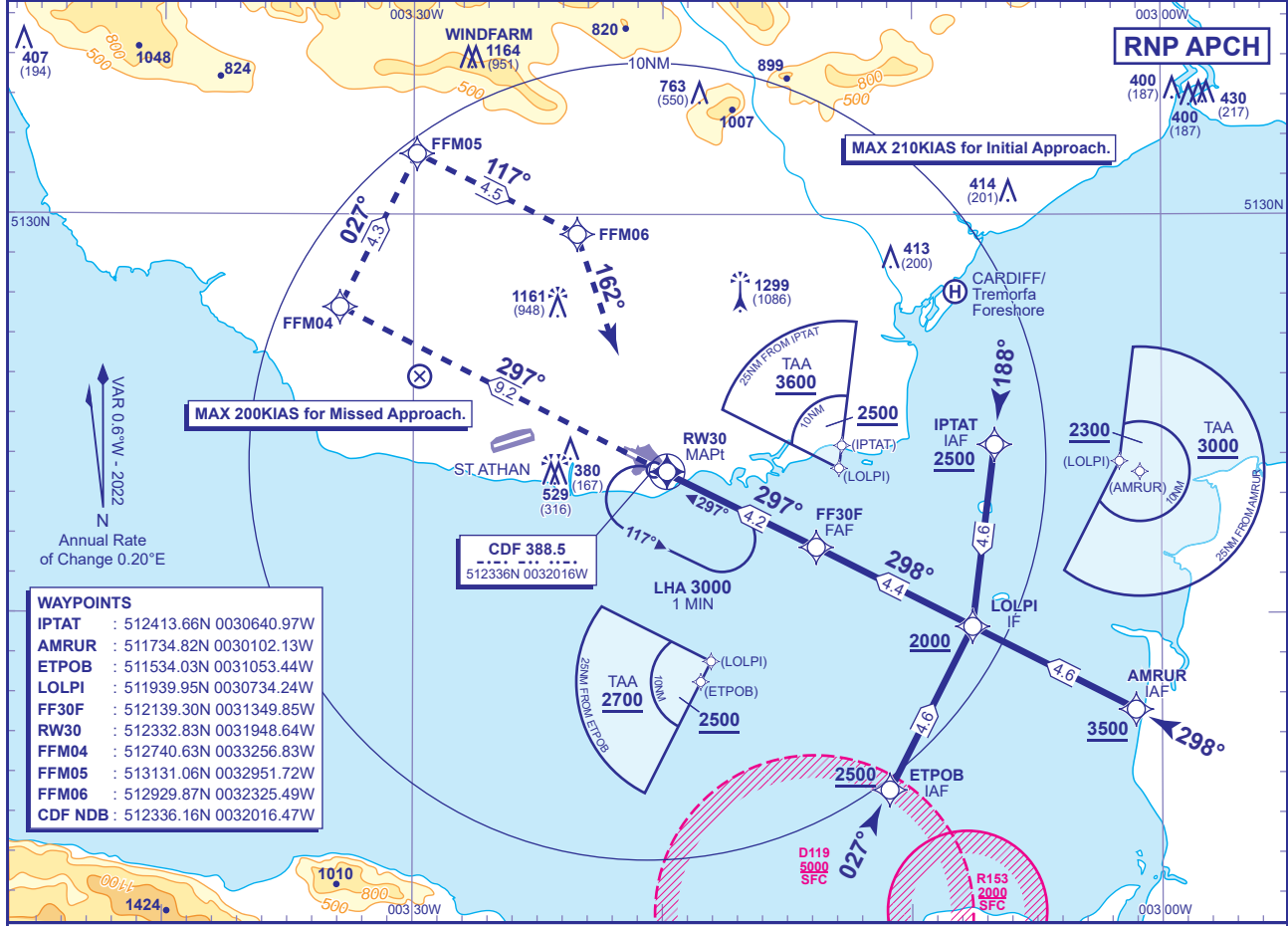
INSTRUMENT APPROACH CHART - ICAO

CARDIFF
RNP
RWY 30
 (ACFT CAT A,B,C,D)



APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 213
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1086) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

MIN TEMP **-10°C**
 TRANSITION ALTITUDE **6000**

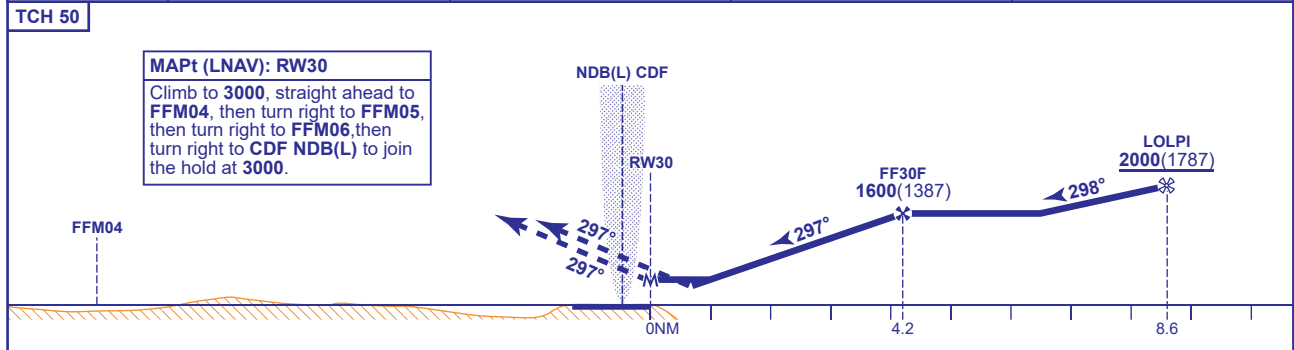


WAYPOINTS

- IPTAT : 512413.66N 003064.97W
- AMRUR : 511734.82N 0030102.13W
- ETPOB : 511534.03N 0031053.44W
- LOLPI : 511939.95N 0030734.24W
- FF30F : 512139.30N 0031349.85W
- RW30 : 512332.83N 0031948.64W
- FFM04 : 512740.63N 0033256.83W
- FFM05 : 513131.06N 0032951.72W
- FFM06 : 512929.87N 0032325.49W
- CDF NDB : 512336.16N 0032016.47W

RECOMMENDED PROFILE VERTICAL PATH ANGLE 3.0° (LNAV 5.2%), 320FT/NM

NM to RW30	4	3	2	1
ALT(HGT)	1540(1327)	1220(1007)	900(687)	580(367)



Aircraft Category	A	B	C	D	Rate of descent	G/S KT	160	140	120	100	80
						FT/MIN	850	740	640	530	420
OCA (OCH)	LNAV	540(327)	540(327)	540(327)	540(327)						
	LNAV/VNAV	470(257)	470(257)	470(257)	470(257)						
VM(C)OCA (OCH AAL)	Total Area	680(460)	820(600)	1560(1340)	1690(1470)						
	SW of RWY 12/30	680(460)	820(600)	920(700)	920(700)						

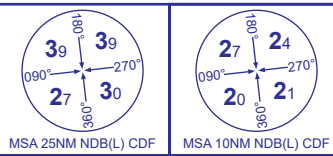
NOTE NDB(L) CDF required for missed approach.

CHANGE (12/21): EGNOS AND LPV REMOVED.

APPROACH CHART - ICAO

CARDIFF

**NDB(L)/DME y
RWY 30
(ACFT CAT A,B)**



APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 213
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1086) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

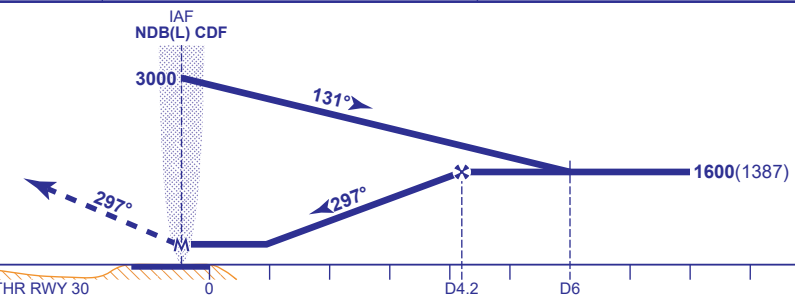
TRANSITION ALTITUDE
6000



RECOMMENDED PROFILE Gradient 5.3%, 320FT/NM

DME I-CWA	3	2	1
ALT(HGT)	1230(1017)	910(697)	590(377)

MAPt NDB(L) CDF
Climb straight ahead. On reaching **3000** or I-CWA DME 2 outbound whichever is the later, turn right to return to NDB(L) CDF at **3000**. (See Note 5)



Aircraft Category	A	B								
OCA (OCH)	WITH DME	570(357)	570(357)	Rate of descent	G/S KT	160	140	120	100	80
	NO DME	620(407)	620(407)		FT/MIN	860	750	650	540	430
VM(C)OCA (OCH AAL)	Total Area	680(460)	820(600)							

ALTERNATIVE PROCEDURE EXTENDED HOLDING PATTERN
Extend outbound leg of the NDB(L) CDF holding pattern to I-CWA DME 5 descending to **1600(1387)** then proceed as for main procedure.

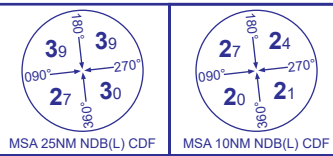
AIRCRAFT UNABLE TO RECEIVE DME I-CWA
As for main and alternative procedures except fly outbound leg for 2.5 MIN and when established descend to MDH. Radar ranges will be passed at 6NM outbound and 4NM inbound.

- NOTE 1** FAT offset 1° from RWY C/L.
2 Subject to ATC approval, aircraft inbound to NDB(L) CDF and receiving DME I-CWA may descend to **3000** after passing I-CWA DME 10.
3 ATC will authorise crossing of EG D119 before start of procedure.
4 Timed procedure not available without radar monitoring.
5 Aircraft to remain within I-CWA DME 11 during the missed approach turn in order to be contained within Cardiff controlled airspace. If unable to comply, notify ATC.

CHANGE (8/23): I-CWA DME ELEVATION REVISED.

INSTRUMENT APPROACH CHART - ICAO

CARDIFF
NDB(L)/DME z
RWY 30
 (ACFT CAT C,D)



APP 119.155, 125.855	CARDIFF APPROACH	AD ELEVATION 220
TWR 133.105	CARDIFF TOWER	THR ELEVATION 213
RAD 125.855	CARDIFF RADAR	OBSTACLE ELEVATION 1299 AMSL (1086) (ABOVE THR)
119.155 (LARS)		
ATIS 132.480	CARDIFF INFORMATION	BEARINGS ARE MAGNETIC

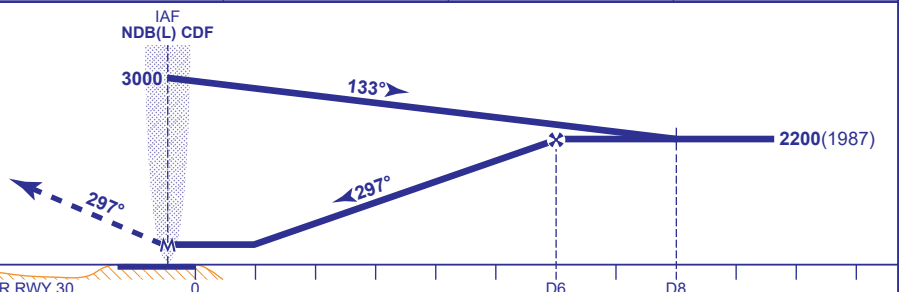
TRANSITION ALTITUDE
6000



RECOMMENDED PROFILE Gradient 5.3%, 320FT/NM

DME I-CWA	5	4	3	2	1
ALT(HGT)	1880(1667)	1550(1337)	1230(1017)	910(697)	590(377)

MAPt NDB(L) CDF
 Climb straight ahead. On reaching 3000 or I-CWA DME 4 outbound whichever is the later, turn right to return to NDB(L) CDF at 3000.
 (See Note 5)



Aircraft Category	C	D	Rate of descent	G/S KT	160	140	120	100	80
				FT/MIN	860	750	650	540	430
OCA (OCH)	WITH DME	570(357)	570(357)						
	NO DME	620(407)	620(407)						
VM(C)OCA (OCH AAL)	Total Area	1560(1340)	1690(1470)						
	SW of RWY 12/30	920(700)	920(700)						

ALTERNATIVE PROCEDURE EXTENDED HOLDING PATTERN
 Extend outbound leg of the NDB(L) CDF holding pattern to I-CWA DME 8 descending to 2200(1987) then proceed as for main procedure.

AIRCRAFT UNABLE TO RECEIVE DME I-CWA As for main and alternative procedures except substitute 2.5 MIN for distance on outbound leg and when established on I-CWA, descend to MDH. Radar ranges will be passed at 8NM outbound and 6NM inbound.

- NOTE 1** FAT offset 1° from RWY C/L.
2 Subject to ATC approval, aircraft inbound to NDB(L) CDF and receiving DME I-CWA may descend to 3000 after passing I-CWA DME 10.
3 ATC will authorise crossing of EG D119 before start of procedure.
4 Timed procedure not available without radar monitoring.
5 Aircraft to remain within I-CWA DME 11 during the missed approach turn in order to be contained within Cardiff controlled airspace. If unable to comply, notify ATC.

CHANGE (8/23): I-CWA DME ELEVATION REVISED.

Instrument Approach Procedure Coding Tables

Cardiff RNP RWY 12 - Instrument Approach Procedure via VABMU

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R12R	001	IF	VABMU	N	-	-	<u>2700</u>	210	512509.89N 0033746.51W	IAF
R12R	002	TF	OGPUV	N	027° (026.55°)	RIGHT	<u>2500</u>	-	512822.91N 0033512.05W	IF / 9.7NM
R12R	003	TF	FF12F	N	117° (116.58°)	-	2200	-	512646.22N 0033003.19W	FAF / 6.1NM
R12R	004	TF	RW12	Y	117° (116.65°)	-	-	-	512401.72N 0032120.17W	MAPt
R12R	005	TF	FFM01	N	117° (116.76°)	LEFT	-	200	512017.05N 0030930.86W	-
R12R	006	TF	FFM02	N	028° (026.92°)	LEFT	-	200	512406.87N 0030624.28W	-
R12R	007	TF	FFM03	N	298° (296.96°)	LEFT	-	200	512608.99N 0031249.01W	-
R12R	008	TF	CDF NDB	N	242° (241.40°)	-	3000	200	512336.16N 0032016.47W	CONVENTIONAL HOLD

Cardiff RNP RWY 12 - Instrument Approach Procedure via OGPUV

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R12C	001	IF	OGPUV	N	-	-	<u>2500</u>	-	512822.91N 0033512.05W	IF / 9.7NM
R12C	002	TF	FF12F	N	117° (116.58°)	-	2200	-	512646.22N 0033003.19W	FAF / 6.1NM
R12C	003	TF	RW12	Y	117° (116.65°)	-	-	-	512401.72N 0032120.17W	MAPt
R12C	004	TF	FFM01	N	117° (116.76°)	LEFT	-	200	512017.05N 0030930.86W	-
R12C	005	TF	FFM02	N	028° (026.92°)	LEFT	-	200	512406.87N 0030624.28W	-
R12C	006	TF	FFM03	N	298° (296.96°)	LEFT	-	200	512608.99N 0031249.01W	-
R12C	007	TF	CDF NDB	N	242° (241.40°)	-	3000	200	512336.16N 0032016.47W	CONVENTIONAL HOLD

Cardiff RNP RWY 12 - Instrument Approach Procedure via IVNIM

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R12L	001	IF	IVNIM	N	-	-	<u>3200</u>	210	513135.90N 0033237.22W	IAF
R12L	002	TF	OGPUV	N	207° (206.62°)	LEFT	<u>2500</u>	-	512822.91N 0033512.05W	IF / 9.7NM
R12L	003	TF	FF12F	N	117° (116.58°)	-	2200	-	512646.22N 0033003.19W	FAF / 6.1NM
R12L	004	TF	RW12	Y	117° (116.65°)	-	-	-	512401.72N 0032120.17W	MAPt
R12L	005	TF	FFM01	N	117° (116.76°)	LEFT	-	200	512017.05N 0030930.86W	-
R12L	006	TF	FFM02	N	028° (026.92°)	LEFT	-	200	512406.87N 0030624.28W	-
R12L	007	TF	FFM03	N	298° (296.96°)	LEFT	-	200	512608.99N 0031249.01W	-
R12L	008	TF	CDF NDB	N	242° (241.40°)	-	3000	200	512336.16N 0032016.47W	CONVENTIONAL HOLD

Instrument Approach Procedure Coding Tables

Cardiff RNP RWY 30 - Instrument Approach Procedure via IPTAT

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R30R	001	IF	IPTAT	N	-	-	<u>2500</u>	210	512413.66N 0030640.97W	IAF
R30R	002	TF	LOLPI	N	188° (186.95°)	RIGHT	<u>2000</u>	-	511939.95N 0030734.24W	IF / 8.6NM
R30R	003	TF	FF30F	N	298° (296.94°)	-	1600	-	512139.30N 0031349.85W	FAF / 4.2NM
R30R	004	TF	RW30	Y	297° (296.86°)	-	-	-	512332.83N 0031948.64W	MAPt
R30R	005	TF	FFM04	N	297° (296.78°)	RIGHT	-	200	512740.63N 0033256.83W	-
R30R	006	TF	FFM05	N	027° (026.61°)	RIGHT	-	200	513131.06N 0032951.72W	-
R30R	007	TF	FFM06	N	117° (116.65°)	RIGHT	-	200	512929.87N 0032325.49W	-
R30R	008	TF	CDF NDB	N	162° (161.51°)	-	3000	200	512336.16N 0032016.47W	CONVENTIONAL HOLD

Cardiff RNP RWY 30 - Instrument Approach Procedure via AMRUR

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R30C	001	IF	AMRUR	N	-	-	<u>3500</u>	210	511734.82N 0030102.13W	IAF
R30C	002	TF	LOLPI	N	298° (297.03°)	-	<u>2000</u>	-	511939.95N 0030734.24W	IF / 8.6NM
R30C	003	TF	FF30F	N	298° (296.94°)	-	1600	-	512139.30N 0031349.85W	FAF / 4.2NM
R30C	004	TF	RW30	Y	297° (296.86°)	-	-	-	512332.83N 0031948.64W	MAPt
R30C	005	TF	FFM04	N	297° (296.78°)	RIGHT	-	200	512740.63N 0033256.83W	-
R30C	006	TF	FFM05	N	027° (026.61°)	RIGHT	-	200	513131.06N 0032951.72W	-
R30C	007	TF	FFM06	N	117° (116.65°)	RIGHT	-	200	512929.87N 0032325.49W	-
R30C	008	TF	CDF NDB	N	162° (161.51°)	-	3000	200	512336.16N 0032016.47W	CONVENTIONAL HOLD

Cardiff RNP RWY 30 - Instrument Approach Procedure via ETPOB

Designator	Sequence Number	Path Terminator	Waypoint Name	Fly-over	Course/Track °M (°T)	Turn Direction	Level Constraint	Speed Constraint	Co-ordinates	Remarks and Distance to MAPt
R30L	001	IF	ETPOB	N	-	-	<u>2500</u>	210	511534.03N 0031053.44W	IAF
R30L	002	TF	LOLPI	N	027° (026.90°)	LEFT	<u>2000</u>	-	511939.95N 0030734.24W	IF / 8.6NM
R30L	003	TF	FF30F	N	298° (296.94°)	-	1600	-	512139.30N 0031349.85W	FAF / 4.2NM
R30L	004	TF	RW30	Y	297° (296.86°)	-	-	-	512332.83N 0031948.64W	MAPt
R30L	005	TF	FFM04	N	297° (296.78°)	RIGHT	-	200	512740.63N 0033256.83W	-
R30L	006	TF	FFM05	N	027° (026.61°)	RIGHT	-	200	513131.06N 0032951.72W	-
R30L	007	TF	FFM06	N	117° (116.65°)	RIGHT	-	200	512929.87N 0032325.49W	-
R30L	008	TF	CDF NDB	N	162° (161.51°)	-	3000	200	512336.16N 0032016.47W	CONVENTIONAL HOLD