

ENR 4 RADIO NAVIGATION AIDS/SYSTEMS



ENR 4.1 RADIO NAVIGATION AIDS - EN-ROUTE

Name of Station/ MAG Var/ VOR Declination	Id	Frequency (CH)	Hours of operation	Co-ordinates	ELEV DME antenna	FRA Relevance	Remark / Usage
1	2	3	4	5	6	7	8
ABERDEEN VOR/DME 0.95°W (2022) 0.37°W (2022)	ADN	114.300 MHz 90X	H24 Hours of operation for aerodrome purposes: HO	571837.62N 0021601.95W	600 FT	IAD	FRA (A): EGPC, EGPE, EGPB, EGPT, EGQL, EGPF, EGPH, EGPJ, EGPK FRA (D): EGPC, EGPE, EGPB, EGPT, EGQL APCH Aid to Aberdeen/Dyce. VOR/DME DOC: 90 NM/50000 FT (200 NM/50000 FT in Sector R045- 135).
BARKWAY DME 0.55°E (2022)	BKY	109Y 116.250 MHz	H24	515923.17N 0000342.87E	486 FT		No associated En-route VOR. DME DOC: 120 NM/50000 FT.
BELFAST VOR/DME 2.16°W (2022) 2.40°W (2020)	BEL	117.200 MHz 119X	H24	543940.27N 0061347.66W	225 FT		APCH Aid to Belfast Aldergrove. On Belfast Aldergrove AD. VOR/DME DOC: 40 NM/50000 FT (200 NM/50000 FT in Sector R227- 347).
BENBECULA DME 3.17°W (2022)	BEN	86Y 113.950 MHz	H24 Hours of operation for aerodrome purposes: Refer to EGPL AD 2.3 Operational hours.	572840.57N 0072155.08W	46 FT		No associated En-route VOR. APCH Aid to Benbecula. On Benbecula AD. DME DOC: 150 NM/50000 FT (200 NM/50000 FT in Sector R197-002).
BERRY HEAD VOR/DME 0.52°W (2022) 0.40°W (2020)	BHD	112.050 MHz 57Y	H24	502354.98N 0032937.46W	215 FT	IAD	FRA (A): EGHH FRA (D): EGFF, EGGD VOR DOC: 85 NM/50000 FT. DME DOC: 85 NM/50000 FT (160 NM in Sector R210-015). Due to terrain effects significant bearing errors may occur below 3000 FT in Sector R010-025 at ranges between 14 NM and 19 NM.
BIGGIN DME 0.59°E (2022)	BIG	98X 115.100 MHz	H24	511951.15N 0000205.32E	589 FT		No associated En-route VOR. APCH Aid to Biggin Hill. On Biggin Hill AD. DME DOC: 60 NM/50000 FT (125 NM/50000 FT in Sector R285-045 and 100 NM/50000 FT in Sector R045-135). Due to terrain, coverage at low level is reduced in Sector R115-220. In addition DME unlocks may occur in Sector R005-040 at ranges up to 25 NM. ENR Purpose: 511951N 0000205E
BOVINGDON DME 0.36°E (2022)	BNN	84Y 113.750 MHz	H24	514334.19N 0003259.10W	500 FT		No associated En-route VOR. DME DOC: 60 NM/50000 FT.
BRECON DME 0.59°W (2022)	BCN	121Y 117.450 MHz	H24	514331.89N 0031546.92W	1450 FT	D	FRA (D): EGTE No associated En-route VOR. DME DOC: 65 NM/50000 FT (125 NM/50000 FT in Sector R136-001).
BROOKMANS PARK DME 0.51°E (2022)	BPK	122X 117.500 MHz	H24	514459.05N 0000624.25W	382 FT		No associated En-route VOR. DME DOC: 40 NM/50000 FT (80 NM/50000 FT in Sector R285-000).
CLACTON VOR/DME 0.93°E (2022) 1.30°E (2022)	CLN	114.550 MHz 92Y	H24	515054.50N 0010851.32E	100 FT		VOR/DME DOC: 100 NM/50000 FT (150 NM/50000 FT in Sector R314-044).
COMPTON VOR/DME 0.15°E (2022) 0.40°E (2021)	CPT	114.350 MHz 90Y	H24	512929.66N 0011310.89W	498 FT		VOR/DME DOC: 80 NM/50000 FT (150 NM/50000 FT in Sector R225- 045 and 130 NM/ 50000 FT in Sector R045-135).
DAVENTRY DME 0.12°E (2022)	DTY	111X 116.400 MHz	H24	521048.51N 0010649.64W	600 FT		No associated En-route VOR. DME DOC: 60 NM/50000 FT (75 NM/50000 FT in Sector R285-345).
DEAN CROSS DME 1.02°W (2022)	DCS	99X 115.200 MHz	H24	544318.88N 0032026.30W	700 FT		No associated VOR. Any VOR indications should be ignored. DME DOC: 100 NM/50000 FT. Due to terrain, coverage at low level is reduced in Sector R093-163.
DETLING DME 0.78°E (2022)	DET	120X 117.300 MHz	H24	511814.41N 0003550.19E	645 FT		No associated En-route VOR. DME DOC: 60 NM/50000 FT.
DOVER DME 1.04°E (2022)	DVR	96Y 114.950 MHz	H24	510945.44N 0012132.72E	315 FT		No associated En-route VOR. DME DOC: 80 NM/50000 FT (200 NM/50000 FT in Sector R013°-073°).
DUNDONALD DME 1.65°W (2022)	DUD	101Y 115.450 MHz	H24	553331.70N 0043605.54W	506 FT		No associated En-route VOR. DME DOC: 160 NM/50000 FT. Coverage is reduced in the sector R115°-145°.
GAMSTON DME 0.07°E (2022)	GAM	75X 112.800 MHz	H24	531653.28N 0005649.79W	115 FT		No associated En-route VOR. DME DOC: 80 NM/25000 FT.

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GLASGOW DME 1.63°W (2022)	GOW	101X 115.400 MHz	H24 Hours of operation for aerodrome purposes: HO	555213.81N 0042644.60W	46 FT	IAD	FRA (A): EGPI, EGPU FRA (D): EGPI, EGPV, EGPT, EGPU, EGQL No associated En-route VOR. DME DOC: 70 NM/50000 FT (200 NM/50000 FT in Sector R241-001). Due to terrain, coverage at low level is reduced in Sectors R346-026 and R181-201.
GOODWOOD DME 0.37°E (2022)	GWC	94Y 114.750 MHz	H24	505118.79N 0004524.25W	122 FT		No associated En-route VOR. DME DOC: 80 NM/50000 FT. Due to terrain, coverage at low level is reduced in Sector R300°-045°.
GREAT DUN FELL DME 0.66°W (2022)	DUF	99Y 115.250 MHz	H24	544100.60N 0022703.66W	2803 FT		No associated En-route VOR. DME DOC: 160 NM/50000 FT. Due to terrain, coverage at low level is reduced in Sector R300°-020°.
GREEN LOWTHER DME 1.27°W (2022)	GLO	33Y 109.650 MHz	H24	552324.44N 0034411.52W	2408 FT		No associated En-route VOR. DME DOC: 160 NM/50000 FT. Coverage is reduced in the sectors R010°-020° and R235°-270°.
HENTON NDB 0.28°E (2022)	HEN	433.500 kHz	H24	514535.07N 0004725.05W			No associated En-route navigational dependency. Range 30 NM.
HONILEY VOR/DME 0.09°W (2022) 0.80°W (2018)	HON	113.650 MHz 83Y	H24	522124.04N 0013949.41W	435 FT		VOR/DME DOC: 60 NM/50000 FT (85 NM/50000 FT in Sector R181°-241° and 100 NM/50000 FT in Sector R316°-001°).
ISLE OF MAN VOR/DME 1.48°W (2022) 0.80°W (2022)	IOM	112.200 MHz 59X	H24	540400.72N 0044548.51W	573 FT	I	APCH Aid to Isle of Man. VOR DOC: 60 NM/50000 FT (75 NM/50000 FT in Sector R271°-211°). DME DOC: 60 NM/50000 FT (160 NM/50000 FT in Sector R271°-211°).
JERSEY VOR/DME 0.09°E (2022) 0.65°W (2020)	JSY	112.200 MHz 59X	H24 Hours of operation for aerodrome purposes: HO	491315.97N 0020246.15W	264 FT		APCH Aid to Jersey. DOC: 60 NM/50000 FT (40 NM/50000 FT in Sector 048-183M). Due to terrain effects DME coverage is reduced in Sector R180-360 and unlocks occur. DME unlocks may occur on the 08 Approach Procedure. ENR Purpose: 491316N 0020246W
LAMBOURNE DME 0.61°E (2022)	LAM	103X 115.600 MHz	H24	513845.69N 0000906.13E	200 FT		No associated En-route VOR. DME DOC: 40 NM/50000 FT (110 NM/50000 FT in Sector R314-134).
LAND'S END VOR/DME 1.25°W (2022) 1.00°W (2020)	LND	114.200 MHz 89X	H24	500810.62N 0053812.96W	800 FT	IAD	FRA (A): EGHQ FRA (D): EGTE, EGHQ VOR/DME DOC: 200 NM/50000 FT
LONDON DME 0.41°E (2022)	LON	83X	H24	512914.09N 0002759.54W	110 FT		No associated En-route VOR. DME DOC: 40 NM/50000 FT (100 NM/50000 FT in Sector R180°-255° and 80 NM/50000 FT in Sector R255°-315°). DME unlocks may occur in the Sector R180°-250° at ranges greater than 50 NM.
LYDD DME 0.90°E (2022)	LYD	87Y 114.050 MHz	H24	505958.87N 0005243.18E	30 FT		No associated En-route VOR. DME DOC: 80 NM/50000 FT (100 NM/50000 FT in Sector R194°-254°).
MACHRIHANISH DME 2.05°W (2022)	MAC	107X 116.000 MHz	H24	552548.08N 0053901.49W	122 FT	IAD	FRA (A): EGAA, EGAC, EGEO, EGNC, EGPF, EGPG, EGPH, EGPU, EIDL FRA (D): EGAA, EGAC, EGEO, EGNC, EGPF, EGPG, EGPU, EIDL No associated En-route VOR. DME DOC: 150 NM/50000 FT (200 NM/50000 FT in Sector R227°-347°). Due to terrain, coverage at low level is reduced in Sectors R122°-162°, R207°-237° and R347°-082°.
MANCHESTER DME 0.42°W (2022)	MCT	82Y 113.550 MHz	H24 Hours of operation for aerodrome purposes: HO	532125.29N 0021544.24W	280 FT		On Manchester AD. No associated En-route VOR. DME DOC: 90 NM/50000 FT.
MAYFIELD DME 0.65°E (2022)	MAY	126X 117.900 MHz	H24	510101.86N 0000658.04E	360 FT		No associated En-route VOR. DME DOC: 40 NM/25000 FT (60 NM/25000 FT in Sector R104-164). Due to terrain, coverage at low level is reduced in Sector R314-039.
MIDHURST DME 0.40°E (2022)	MID	87X 114.000 MHz	H24	510314.23N 0003730.01W	200 FT		No associated En-route VOR. DME DOC: 60 NM/50000 FT (100 NM/50000 FT in Sector R241-001).
NEWCASTLE DME 0.42°W (2022)	NEW	89Y 114.250 MHz	H24	550218.41N 0014154.14W	287 FT		On Newcastle AD. No associated VOR. Any VOR indications should be ignored. DME DOC: 200 NM/50000 FT. ENR Purpose: 550218N 0014154W

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OCKHAM DME 0.43°E (2022)	OCK	100X 115.300 MHz	H24	511818.17N 0002649.86W	200 FT		No associated En-route VOR. DME DOC: 70 NM/25,000 FT (90 NM/25,000 FT in Sector R059°-089°).
OTTRINGHAM VOR/DME 0.33°E (2022) 1.00°W (2014)	OTR	113.900 MHz 86X	H24	534153.57N 0000613.45W	0 FT		VOR/DME DOC: 100 NM/60000 FT (200 NM/60000 FT in Sector R016-076 and 150 NM/60000 FT in Sector R076-136).
PERTH VOR 1.28°W (2022) 1.80°W (2018)	PTH	110.400 MHz	H24	562632.63N 0032206.96W		IAD	FRA (A): EGEO, EGNC FRA (D): EGPD, EGPK, EGEO, EGNC No associated En-route navigational dependency. No associated DME. Any DME indications should be ignored.
POLE HILL VOR/DME 0.41°W (2022) 0.80°W (2018)	POL	112.100 MHz 58X	H24	534437.56N 0020611.98W	1400 FT		VOR/DME DOC: 115 NM/50000 FT (150 NM/50000 FT in Sector R076°-016°). Due to terrain, coverage at low level is reduced in Sector R281°-336°.
SAINT ABBS VOR/DME 0.73°W (2022) 0.20°W (2021)	SAB	112.500 MHz 72X	H24	555427.04N 0021222.81W	760 FT	IA	FRA (A): EGPF VOR DOC: 50 NM/50000 FT (200 NM/50000 FT in Sector R045-135 and 100 NM/50000 FT in Sector R240-285). DME DOC: 90 NM/50000 FT (200 NM/50000 FT in Sector R045-135 and 100 NM/50000 FT in Sector R240-285).
SEAFORD VOR/DME 0.67°E (2022) 1.00°E (2021)	SFD	117.000 MHz 117X	H24	504538.49N 0000718.89E	300 FT		VOR/DME DOC: 75 NM/50000 FT (120 NM/50000 FT in Sector R254-299).
SOUTHAMPTON DME 0.16°E (2022)	SAM	80Y 113.350 MHz	H24 Hours of operation for aerodrome purposes: HO	505718.90N 0012042.20W	64 FT		No associated En-route VOR. DME DOC: 100 NM/50000 FT (150 NM/50000 FT in Sector R225°-315°). DME unlocks may be experienced at ranges exceeding 30 NM below 8000 FT.
STORNOWAY VOR/DME 2.79°W (2022) 2.20°W (2022)	STN	115.100 MHz 98X	H24	581225.02N 0061058.97W	299 FT	IAD	FRA (A): EGPE, EGPL, EGPU, EGEO, EGQS FRA (D): EGPE, EGPL, EGPU, EGEO APCH Aid to Stornoway. VOR/DME DOC: 105 NM/50000 FT (200 NM/50000 FT in Sector R167-107). ENR Purpose: 581225N 0061059W
STRUMBLE VOR/DME 1.28°W (2022) 0.70°W (2022)	STU	113.100 MHz 78X	H24	515940.88N 0050224.69W	600 FT		VOR DOC: 85 NM/50000 FT (200 NM/50000 FT in Sector R211-331 and 120 NM/50000 FT in Sector R331-016). DME DOC: 85 NM/50000 FT (170 NM/50000 FT in Sector R136-211, 200 NM/50000 FT in Sector R211-331 and 120 NM/50000 FT in Sector R331-016).
SUMBURGH VOR/DME 0.87°W (2022) 1.40°W (2018)	SUM	117.350 MHz 120Y	H24	595243.34N 0011711.49W	83 FT		APCH Aid to Sumburgh. On Sumburgh AD. VOR/DME DOC: 200 NM/50000 FT. Due to terrain, coverage at low level is reduced in Sectors R141°-161°, R286°-306° and R346°-006°.
TALLA VOR/DME 1.13°W (2022) 0.90°W (2021)	TLA	113.800 MHz 85X	H24	552956.92N 0032110.20W	2786 FT	EXAD	FRA (X): ODD FL FRA (A): EGNT, EGNV FRA (D): EGNT, EGNV VOR/DME DOC: 100 NM/50000 FT (120 NM/50000 FT in Sector R316-016).
TIREE VOR/DME 2.76°W (2022) 2.10°W (2023)	TIR	117.700 MHz 124X	H24	562935.57N 0065232.12W	55 FT	IAD	FRA (AD): EGAE, EGEC, EGEO APCH Aid to Tiree. On Tiree AD. VOR/DME DOC: 90 NM/50000 FT (200 NM/50000 FT in Sector R227-317).
TRENT DME 0.17°W (2022)	TNT	104X 115.700 MHz	H24	530314.23N 0014011.89W	968 FT		No associated En-route VOR. DME DOC: 80 NM/50000 FT (100 NM/50000 FT in Sector R300-000).
TURNBERRY DME 1.68°W (2022)	TRN	122X 117.500 MHz	H24	551848.28N 0044701.89W	600 FT	IAD	FRA (A): EGAA, EGAC, EGAE, EGNS, EGNV, EGPT, EGQL FRA (D): EGAA, EGAC, EGAE, EGNS, EGNV No associated En-route VOR. DME DOC: 100 NM/50000 FT (60 NM/50000 FT in Sector R076-226 and 200 NM/50000 FT in Sector R271-001). In addition coverage at low level is reduced in Sector R066-106.
WALLASEY	WAL	114.100 MHz	H24	532330.97N	55 FT		VOR/DME DOC: 120 NM/50000 FT.

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1	2	3	4	5	6	7	8
VOR/DME 0.75°W (2022) 0.20°W (2022)		88X		0030804.06W			
WICK VOR/DME 1.47°W (2022) 0.80°W (2022)	WIK	113.600 MHz 83X	H24	582731.74N 0030601.34W	145 FT	IAD	FRA (AD): EGPD, EGPE, EGPO APCH Aid to Wick. On Wick AD. VOR/DME DOC: 100 NM/50000 FT (160 NM/50000 FT in Sector R331- 001). ENR Purpose: 582732N 0030601W
WINSTONE DME 0.33°E (2024)	WIN	104Y 115.750 MHz	H24	514726.30N 0020300.77W	863 FT		No associated En-route VOR. DME DOC: 160 NM/50000 FT.
WOODLEY NDB 0.27°E (2022)	WOD	352.000 kHz	H24	512710.02N 0005243.68W			No associated En-route navigational dependency. Range 25 NM.