

ENR 4 — RADIO NAVIGATION AIDS/SYSTEMS						
ENR 4.1 — RADIO NAVIGATION AIDS — EN-ROUTE						
Name of Station MAG Var VOR Declination	IDENT	Frequency (Channel)	Hours of Operation (Winter/Summer)	Co-ordinates	DME Aerial Elevation	Remarks
1	2	3	4	5	6	7
→ Aberdeen VOR/DME Var 4.2°W - 2006 VOR 4.60°W - 2001	ADN	114.30 MHz (Ch 90X)	H24	AD Purpose: 571837.62N 0021601.95W ENR Purpose: 571838N 0021602W	600 ft amsl	APCH Aid to Aberdeen/Dyce. VOR/DME DOC: 90 nm/50000 ft (200 nm/50000 ft in Sector RDL 050°-140°).
→ Barkway VOR/DME Var 2.2°W - 2006 VOR 2.66°W - 2002	BKY	116.25 MHz (Ch 109Y)	H24	515923N 0000343E	486 ft amsl	VOR/DME DOC: 40 nm/25000 ft.
→ Belfast VOR/DME Var 5.3°W - 2006 VOR 5.65°W - 2002	BEL	117.20 MHz (Ch 119X)	H24	AD Purpose: 543940.12N 0061347.66W ENR Purpose: 543940N 0061348W	194 ft amsl	APCH Aid to Belfast/Aldergrove. On Belfast/Aldergrove AD. VOR/DME DOC: 40 nm/50000 ft (200 nm/50000 ft in Sector RDL 231°-351°).
→ Benbecula VOR/DME Var 6.6°W - 2006 VOR 6.66°W - 2003	BEN	113.95 MHz (Ch 86Y)	H24	AD Purpose: 572840.57N 0072155.08W ENR Purpose: 572841N 0072155W	36 ft amsl	APCH Aid to Benbecula. On Benbecula AD. VOR/DME DOC: 150 nm/50000 ft (200 nm/50000 ft in Sector RDL 202°-007°).
→ Berry Head VOR/DME Var 3.3°W - 2006 VOR 3.28°W - 2003	BHD	112.05 MHz (Ch 57Y)	H24	502355N 0032937W	215 ft amsl	VOR DOC: 85 nm/50000 ft. DME DOC: 85 nm/50000 ft (160 nm in Sector RDL 213°- 018°).
→ Biggin VOR/DME Var 2.1°W - 2006 VOR 2.1°W - 2005	BIG	115.10 MHz (Ch 98X)	H24	AD Purpose: 511951.15N 0000205.32E ENR Purpose: 511951N 0000205E	590 ft amsl	APCH Aid to Biggin Hill. On Biggin Hill AD. VOR/DME DOC: 60 nm/50000 ft (125 nm/50000 ft in Sector RDL 287°-047° and 100 nm/ 50000 ft in Sector RDL 047°- 137°). Due to terrain, coverage at low level is reduced in Sector RDL 117°-222°. In addition DME unlocks may occur in Sector RDL 017°-042° at ranges between 15 nm and 25 nm.
→ Bovingdon VOR/DME Var 2.4°W - 2006 VOR 2.61°W - 2002	BNN	113.75 MHz (Ch 84Y)	H24	514334N 0003259W	500 ft amsl	VOR/DME DOC: 60 nm/50000 ft.
→ Brecon VOR/DME Var 3.5°W - 2006 VOR 3.4°W - 2004	BCN	117.45 MHz (Ch 121Y)	H24	514332N 0031547W	1450 ft amsl	VOR DOC: 65 nm/50000 ft. DME DOC: 65 nm/50000 ft (125 nm/50000 ft in Sector RDL 138°-003°).
→ Brookmans Park VOR/DME Var 2.3°W - 2006 VOR 2.40°W - 2002	BPK	117.50 MHz (Ch 122X)	H24	514459N 0000624W	382 ft amsl	VOR/DME DOC: 40 nm/50000 ft (80 nm/50000 ft in Sector RDL 287°-002°).

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Burnham NDB Var 2.4°W - 2006	BUR	421.0 kHz	H24	513108N 0004038W	—	DOC: 15 nm except for Sector 340°-020° where DOC is 30 nm.
Chiltern NDB Var 2.4°W - 2006	CHT	277.0 kHz	H24	513723N 0003107W	—	Range 25 nm.
Clacton VOR/DME Var 1.8°W - 2006 VOR 1.6°W - 2005	CLN	114.55 MHz (Ch 92Y)	H24	515055N 0010851E	100 ft amsl	VOR/DME DOC: 100 nm/50000 ft (150 nm/50000 ft in Sector RDL 317°-047°).
Compton VOR/DME Var 2.6°W - 2006 VOR 3.32°W - 2001	CPT	114.35 MHz (Ch 90Y)	H24	512930N 0011311W	498 ft amsl	VOR/DME DOC: 80 nm/50000 ft (150 nm/50000 ft in Sector RDL 228°-048° and 130 nm/50000 ft in Sector RDL 048°-138°).
Cranfield VOR Var 2.5°W - 2006 VOR 2.54°W - 2002	CFD	116.50 MHz	H24	AD Purpose: 520427.18N 0003638.85W ENR Purpose: 520427N 0003639W	—	APCH Aid to Cranfield. VOR DOC: 50 nm/25000 ft. No associated DME. Any DME indications should be ignored.
Daventry VOR/DME Var 2.7°W - 2006 VOR 2.4°W - 2006	DTY	116.40 MHz (Ch 111X)	H24	521049N 0010650W	600 ft amsl	VOR/DME DOC: 60 nm/50000 ft (75 nm/50000 ft in Sector RDL 287°-347°).
Dean Cross VOR/DME Var 4.1°W - 2006 VOR 4.21°W - 2003	DCS	115.20 MHz (Ch 99X)	H24	544319N 0032026W	700 ft amsl	VOR DOC: 60 nm/50000 ft (100 nm/50000 ft in Sector RDL 289°-349°). DME DOC: 100 nm/50000 ft. Due to terrain effects bearing errors of greater than 4° may occur in Sector RDL 284° - 019°. In addition coverage at low level is reduced in Sector RDL 094° - 164°.
Detling VOR/DME Var 1.9°W - 2006 VOR 2.08°W - 2003	DET	117.30 MHz (Ch 120X)	H24	511814N 0003550E	645 ft amsl	VOR/DME DOC: 60 nm/50000 ft.
Dover VOR/DME Var 1.6°W - 2006 VOR 1.91°W - 2002	DVR	114.95 MHz (Ch 96Y)	H24	510945N 0012133E	315 ft amsl	VOR/DME DOC: 80 nm/50000 ft (200 nm/50000 ft in Sector RDL 017°-077°).
Epsom NDB Var 2.3°W - 2006	EPM	316.0 kHz	H24	511910N 0002219W	—	Range 25 nm.



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Gamston VOR/DME Var 2.8°W - 2006 VOR 2.8°W - 2006	GAM	112.80 MHz (Ch 75X)	H24	531653N 0005650W	121 ft amsl	VOR/DME DOC: 80 nm/25000 ft.
Glasgow VOR/DME Var 4.8°W - 2006 VOR 5.08°W - 2002	GOW	115.40 MHz (Ch 101X)	H24	AD Purpose: 555213.81N 0042644.61W ENR Purpose: 555214N 0042645W	37 ft amsl	APCH Aid to Glasgow. On Glasgow AD. VOR/DME DOC: 70 nm/50000 ft (300 nm/70000 ft in Sector RDL 245°-005°). Due to terrain, coverage at low level is reduced in Sectors RDL 350° - 030° and RDL 185° - 205°.
Goodwood VOR/DME Var 2.4°W - 2006 VOR 2.47°W - 2003	GWC	114.75 MHz (Ch 94Y)	H24	AD Purpose: 505118.78N 0004524.25W ENR Purpose: 505119N 0004524W	113 ft amsl	APCH Aid to Chichester/ Goodwood. On Chichester/Goodwood AD. VOR/DME DOC: 80 nm/50000 ft. Due to terrain, coverage at low level is reduced in Sector RDL 302° - 047°.
Henton NDB Var 2.5°W - 2006	HEN	433.5 kHz	H24	514535N 0004725W	—	Range 30 nm.
Honiley VOR/DME Var 2.9°W - 2006 VOR 2.82°W - 2003	HON	113.65 MHz (Ch 83Y)	H24	522124N 0013949W	435 ft amsl	VOR/DME DOC: 60 nm/50000 ft (85 nm/50000 ft in Sector RDL 183°-243° and 100 nm/50000 ft in Sector RDL 318°-003°).
Inverness VOR/DME Var 5.0°W - 2006 VOR 5.71°W - 2001	INS	109.20 MHz (Ch 29X)	H24	AD Purpose: 573233.45N 0040229.55W ENR Purpose: 573233N 0040230W	58 ft amsl	APCH Aid to Inverness. On Inverness AD. VOR DOC: 60 nm/25000 ft. Due to terrain, VOR coverage at low level is reduced in Sector RDL 145° - 185°. DME co-located and freq paired with VOR and unmonitored outside Inverness ATC hours of operation. Available for approach and landing purposes only during the hours of APP. Due to terrain effects the DME may unlock in Sector RDL 154° to RDL 194° when aircraft are at ranges in excess of 12 nm and below 7000 ft.
Isle of Man VOR/DME Var 4.6°W - 2006 VOR 4.2°W - 2004	IOM	112.20 MHz (Ch 59X)	H24	AD Purpose: 540400.72N 0044548.51W ENR Purpose: 540401N 0044549W	573 ft amsl	APCH Aid to Isle of Man. VOR/DME DOC: 60 nm/50000 ft.

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Jersey VOR/DME Var 2.6°W - 2006 VOR 2.7°W - 2003	JSY	112.20 MHz (Ch 59X)	H24	AD Purpose: 491315.97N 0020246.15W ENR Purpose: 491316N 0020246W	276 ft amsl	APCH Aid to Jersey. DOC: 60 nm/50000 ft (40 nm/ 50000 ft in Sector 048°-183°M).
Lambourne VOR/DME Var 2.1°W - 2006 VOR 2.55°W - 2001	LAM	115.60 MHz (Ch 103X)	H24	513846N 0000906E	200 ft amsl	VOR/DME DOC: 40 nm/50000 ft (110 nm/50000 ft in Sector RDL 318°-138°).
Lands End VOR/DME Var 4.1°W - 2006 VOR 4.85°W - 2001	LND	114.20 MHz (Ch 89X)	H24	500811N 0053813W	800 ft amsl	VOR/DME DOC: 200 nm/50000 ft
Leeds Bradford NDB(L) Var 3.2°W - 2006	LBA	402.5 kHz	Winter: Mon-Fri 0700-2245 Sat, Sun 0700-2200 Summer: 0600-2200 2200-0600 (PPR)	AD Purpose: 535153.97N 0013910.38W ENR Purpose: 535154N 0013910W	—	APCH Aid to Leeds Bradford. On Leeds Bradford AD. Range 25 nm.
Lichfield NDB Var 3.0°W - 2006	LIC	545.0 kHz	H24	524448N 0014310W	—	Range 50 nm.
London VOR/DME Var 2.3°W - 2006 VOR 2.15°W - 2003	LON	113.60 MHz (Ch 83X)	H24	512914N 0002800W	110 ft amsl	VOR/DME DOC: 40 nm/50000 ft (100 nm/50000 ft in Sector RDL 182°-257° and 80 nm/ 50000 ft in Sector RDL 257°- 317°). DME unlocks may occur in the Sector RDL 182°-252° at ranges greater than 50 nm.
Lydd VOR/DME Var 1.8°W - 2006 VOR 1.62°W - 2002	LYD	114.05 MHz (Ch 87Y)	H24	505959N 0005243E	30 ft amsl	VOR/DME DOC: 80 nm/50000 ft (100 nm/50000 ft in Sector RDL 197°-257°).
Machrihanish VOR/DME Var 5.3°W - 2006 VOR 5.64°W - 2004	MAC	116.00 MHz (Ch 107X)	H24	AD Purpose: 552548.08N 0053901.49W ENR Purpose: 552548N 0053901W	95 ft amsl	APCH Aid to Campbeltown. VOR/DME DOC: 150 nm/50000 ft (200 nm/50000 ft in Sector RDL 231°-351°). Due to terrain, coverage at low level is reduced in Sectors RDL 126° - 166°, RDL 211° - 241° and RDL 351° - 086°.
Manchester VOR/DME Var 3.4°W - 2006 VOR 3.39°W - 2002	MCT	113.55 MHz (Ch 82Y)	H24	AD Purpose: 532125.29N 0021544.24W ENR Purpose: 532125N 0021544W	282 ft amsl	APCH Aid to Manchester. On Manchester AD. VOR/DME DOC: 90 nm/50000 ft.
Mayfield VOR/DME Var 2.1°W - 2006 VOR 2.0°W - 2006	MAY	117.90 MHz (Ch 126X)	H24	510102N 0000658E	360 ft amsl	VOR/DME DOC: 40 nm/25000 ft (60 nm/25000 ft in Sector RDL 107°-167°). Due to terrain, coverage at low level is reduced in Sector RDL 317° - 042°.



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→ Midhurst VOR/DME Var 2.3°W - 2006 VOR 2.72°W - 2004	MID	114.00 MHz (Ch 87X)	H24	510314N 0003730W	200 ft amsl	VOR/DME DOC: 60 nm/50000 ft (100 nm/50000 ft in Sector RDL 243°-003°).
→ Newcastle VOR/DME Var 3.5°W - 2006 VOR 3.04°W - 2002	NEW	114.25 MHz (Ch 89Y)	H24	AD Purpose: 550218.41N 0014154.13W ENR Purpose: 550218N 0014154W	289 ft amsl	APCH Aid to Newcastle. On Newcastle AD. VOR/DME DOC: 200 nm/50000 ft.
→ New Galloway NDB Var 4.5°W - 2006	NGY	399.0 kHz	H24	551039N 0041007W	—	Range 35 nm.
→ Ockham VOR/DME Var 2.3°W - 2006 VOR 2.75°W - 2002	OCK	115.30 MHz (Ch 100X)	H24	511818N 0002650W	200 ft amsl	VOR/DME DOC: 70 nm/25000 ft (90 nm/25000 ft in Sector RDL 063°-093°).
→ Ottringham VOR/DME Var 2.6°W - 2006 VOR 2.4°W - 2005	OTR	113.90 MHz (Ch 86X)	H24	534154N 0000613W	At mean sea level	VOR/DME DOC: 100 nm/60000 ft (200 nm/60000 ft in Sector RDL 017°-077° and 150 nm/ 60000 ft in Sector RDL 077°- 137°).
→ Perth VOR Var 4.5°W - 2006 VOR 4.35°W - 2003	PTH	110.40 MHz	H24	562633N 0032207W	—	VOR DOC 80 nm/50000 ft. No associated DME. Any DME indications should be ignored.
→ Pole Hill VOR/DME Var 3.4°W - 2006 VOR 2.9°W - 2005	POL	112.10 MHz (Ch 58X)	H24	534438N 0020612W	1400 ft amsl	VOR/DME DOC: 115 nm/50000 ft (150 nm/50000 ft in Sector RDL 078°-018°). Due to terrain, coverage at low level is reduced in Sector RDL 283° - 338°.
→ Saint Abbs VOR/DME Var 3.8°W - 2006 VOR 3.3°W - 2005	SAB	112.50 MHz (Ch 72X)	H24	555427N 0021223W	760 ft amsl	VOR DOC: 50 nm/50000 ft (200 nm/50000 ft in Sector RDL 048°-138° and 100 nm/ 50000 ft in Sector RDL 243°- 288°). DME DOC: 90 nm/50000 ft (200 nm/50000 ft in Sector RDL 048°-138° and 100 nm/ 50000 ft in Sector RDL 243°- 288°).
→ Scotstown Head NDB Var 4.0°W - 2006	SHD	383.0 kHz	H24	573333N 0014902W	—	Range 80 nm (25 nm in Sector 180° to 335° MAG).
→ Seaford VOR/DME Var 2.0°W - 2006 VOR 1.89°W - 2002	SFD	117.00 MHz (Ch 117X)	H24	504538N 0000719E	300 ft amsl	VOR/DME DOC: 50 nm/50000 ft (120 nm/50000 ft in Sector RDL 257°-302°).

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Southampton VOR/DME Var 2.6°W - 2006 VOR 2.7°W - 2006	SAM	113.35 MHz (Ch 80Y)	H24	AD Purpose: 505718.90N 0012042.19W ENR Purpose: 505719N 0012042W	66 ft amsl	APCH Aid to Southampton. VOR/DME DOC: 100 nm/50000 ft (150 nm/50000 ft in Sector RDL 228°-318°). On RDL 208° VOR flag alarms and DME unlocks may be experienced at ranges exceeding 30 nm below 8000 ft.
Stornoway VOR/DME Var 6.2°W - 2006 VOR 6.75°W - 2001	STN	115.10 MHz (Ch 98X)	H24	AD Purpose: 581225.01N 0061058.97W ENR Purpose: 581225N 0061059W	250 ft amsl	APCH Aid to Stornoway. VOR/DME DOC: 105 nm/50000 ft (200 nm/50000 ft in Sector RDL 172°-112°).
Strumble VOR/DME Var 4.2°W - 2006 VOR 4.18°W - 2002	STU	113.10 MHz (Ch 78X)	H24	515941N 0050225W	600 ft amsl	VOR DOC: 85 nm/50000 ft (300 nm/70000 ft in Sector RDL 214°-334° and 120 nm/ 50000 ft in Sector RDL 334°- 019°). DME DOC: 85 nm/50000 ft (170 nm/50000 ft in Sector RDL 139°-214°, 300 nm/70000 ft in Sector RDL 214°-334° and 120 nm/50000 ft in Sector RDL 334°-019°).
Sumburgh VOR/DME Var 4.3°W - 2006 VOR 5.45°W - 2000	SUM	117.35 MHz (Ch 120Y)	H24	AD Purpose: 595243.52N 0011711.52W ENR Purpose: 595244N 0011712W	84 ft amsl	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 RDL 145° - 165°, RDL 290° - 310° and RDL 350° - 010°.
Talla VOR/DME Var 4.3°W - 2006 VOR 4.1°W - 2005	TLA	113.80 MHz (Ch 85X)	H24	552957N 0032110W	2786 ft amsl	VOR/DME DOC: 100 nm/50000 ft (120 nm/50000 ft in Sector RDL 319°-019°).
Tiree VOR/DME Var 6.1°W - 2006 VOR 6.3°W - 2005	TIR	117.70 MHz (Ch 124X)	H24	AD Purpose: 562935.56N 0065232.12W ENR Purpose: 562936N 0065232W	36 ft amsl	APCH Aid to Tiree. On Tiree AD. VOR/DME DOC: 90 nm/50000 ft (200 nm/50000 ft in Sector RDL 231°-321°).
Trent VOR/DME Var 3.1°W - 2006 VOR 3.26°W - 2001	TNT	115.70 MHz (Ch 104X)	H24	530314N 0014012W	968 ft amsl	VOR/DME DOC: 80 nm/50000 ft (100 nm/50000 ft in Sector RDL 303°-003°).
Turnberry VOR/DME Var 4.8°W - 2006 VOR 5.30°W - 2001	TRN	117.50 MHz (Ch 122X)	H24	551848N 0044702W	600 ft amsl	VOR DOC: 60 nm/50000 ft (200 nm/50000 ft in Sector RDL 275°-005°). DME DOC: 100 nm/50000 ft (60 nm/50000 ft in Sector RDL 080°-230° and 200 nm/ 50000 ft in Sector RDL 275°- 005°). Due to terrain effects bearing errors of greater than 4° may occur in Sector RDL 175° - 185°. In addition coverage at low level is reduced in Sector RDL 070° - 110°.

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→ Wallasey VOR/DME Var 3.7°W - 2006 VOR 3.94°W - 2002	WAL	114.10 MHz (Ch 88X)	H24	532331N 0030804W	55 ft amsl	VOR/DME DOC: 120 nm/50000 ft.
→ Westcott NDB Var 2.6°W - 2006	WCO	335.0 kHz	H24	515111N 0005745W	—	Range 30 nm.
→ Whitegate NDB Var 3.5°W - 2006	WHI	368.5 kHz	H24	531106N 0023723W	—	Range 25 nm.
→ Wick VOR/DME Var 4.8°W - 2006 VOR 4.85°W - 2002	WIK	113.60 MHz (Ch 83X)	H24	AD Purpose: 582731.74N 0030601.34W ENR Purpose: 582732N 0030601W	110 ft amsl	APCH Aid to Wick. On Wick AD. VOR/DME DOC: 100 nm/50000 ft (160 nm/50000 ft in Sector RDL 335°-005°).
→ Woodley NDB Var 2.5°W - 2006	WOD	352.0 kHz	H24	512710N 0005244W	—	Range 25 nm.

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