

Appendices

Appendix A - VLF Station List¹⁰

See <http://sidstation.lionelloudet.homedns.org/stations-list-en.xhtml> for a current version of this list.

Country	Location	Name	Frequency	Power (kHz)	Latitude / Longitude
USA	Cutler, ME	NAA	24.0	1000	44.65 N -67.3 W
	Jim Creek, WA	NLK	24.8	250	48.20 N -121.92 W
	Lualualei, HI	NPM	21.4	566	20.4 N -158.2 W
	LaMoure, ND	NML	25.2	500	46.35 N -98.33 W
	Aquada, Puerto Rico	NAU	40.75	100	18.40 N -67.18 W
Antarctica:	South Pole	VLF	20.0		-09 / 0
Australia	Harold E. Holt (North West Cape)	NWC	19.8	1000	-21.8 114.2 E
China¹¹:	Changde	3SA (alternates 3SB)	20.6		25.03 111.67
	Datong	3SB (alternates 3SA)	10.6		35.60 103.33
France:	Rosnay	HWU	20.9	400	40.7N 1.25E
	St. Assie	FTA ¹²	16.8		
	LeBlanc (NATO)	HWV	21.75		40.7 N, 1.25 E
Germany:	Rhauderfehn	DHO	23.4	500	53° 10' N 07° 33'E
Iceland:	Keflavik (US Navy)	NRK	37.5	100	65N -18E
	Keflavic	TFK	37.5		
India:	Katabomman	VTX3	18.2		8.47 77.40
Italy:	Tavolara	ICV	20.27	43	40.88N 9.68E
	Sicily	NSC	45.9		38N 13.5E
Japan:	Ebino	JJI	22.2		32.04 130.81
Norway¹³:	Kolsas	JXN	16.4	45	59.51N 10.52E
Russia¹⁴:	Arkhangelsk	UGE	19.7	150 input	64N24 41E32
	Batumi	UVA	14.6	100 input	
	Kaliningrad	UGKZ	30.3	100 input	
	Matotchkinchar	UFQE	18.1	100 input	
	Vladivostok	UIK	15.0	100 input	
Turkey	Bafa	TBB	26.7		37.43 27.55
United Kingdom	Anthorn	GBZ	19.6	500	52:71N -3:07W
	Anthorn (NATO)	GQD	22.1	500	52:4N -1.2W
	London	GYA	21.37	120	51 N 2 E

There is no transmitter below 18.3 kHz usable for SID monitoring in Europe.

¹⁰ Info courtesy of Bill Hopkins, Technical Representative for Pacific-Sierra Research Corp., with updates from Chris Chapman, Morris Cohen, Peter Schnoor, and Deborah Scherrer

¹¹ There is evidence of two powerful transmitters being operated by China, only on for selected periods. These are at 21.1 kHz coming from the west of China, and 24.1 kHz from the east coast of China.

¹² Out of service for a number of years

¹³ Off? Short transmitting time?

¹⁴ Most of the Russian transmitters are either pooled (like the alpha transmitters around 11-13 kHz) or tend to alternate several frequencies between several sites. Transmitting times for Russian transmitters other than 66.7 are short. More information can be found at [//www-user.uni-bremen.de/~ews2/RDF_project.html](http://www-user.uni-bremen.de/~ews2/RDF_project.html)