2012 Coast Survey Echosounders

Geographic Region	Water Depths	Vessel (NOAA and contractor)	Echosounder Model	Echosounder Type	Frequency	Peak Source Level	Ping Rate (duty cycle)	Max Pulse Width (duration)	Max Swath Width (directionality)
Alaska	4 – 444 meters	*Fairweather* (231'), *Rainier* (231'), *Pacific Star* (162'), *Dream Catcher* (85'), and up to twelve 28' small vessels	L3 Klein 5000	Side Scan	455 kHz	249 dB	15 Hz	200 µsec	80°
			Reson Seabat 7111	Multibeam	100 kHz	233 dB	20 Hz	304 µsec	150°
			Reson Seabat 7125	Multibeam	200/400 kHz	223 dB	50 Hz	300 µsec	128°
			Reson Seabat 8101	Multibeam	240 kHz	224 dB	40 Hz	225 µsec	150°
			Reson Seabat 8125	Multibeam	455 kHz	224 dB	40 Hz	300 µsec	120°
			Reson Seabat 8160	Multibeam	50 kHz	223 dB	15 Hz	1 ms	130°
			Kongsberg Simrad EM710	Multibeam	70-100 kHz	231 dB	30 Hz	2 ms	140°
			Odom Echotrac CVM	Single Beam	24-340 kHz	203 dB	20 Hz	5 ms	8°
			Odom Echotrac CV200	Single Beam	24-340 kHz	203 dB	20 Hz	5 ms	8°
Pacific Coast	4 – 270 meters	*Rainier* (231') and six 28' small vessels	Reson Seabat 7125	Multibeam	200/400 kHz	223 dB	50 Hz	300 µsec	128°
			Reson Seabat 8125	Multibeam	455 kHz	224 dB	40 Hz	300 µsec	120°
			Kongsberg Simrad EM710	Multibeam	70-100 kHz	231 dB	30 Hz	2 ms	140°
			Odom Echotrac CV200	Single Beam	24-340 kHz	203 dB	20 Hz	5 ms	8°
Atlantic Coast	4 – 95 meters	*Thomas Jefferson* (208'), *Ferdinand Hassler* (120'), *Bay Hydro II* (54'), *Atlantic Surveyor* (110'), *R&R* (48'), and two 28' small vessels	L3 Klein 3000	Side Scan	100/500 kHz	237 dB	30 Hz	400 µsec	80°
			L3 Klein 5000	Side Scan	455 kHz	249 dB	15 Hz	200 µsec	80°
			Reson Seabat 7111	Multibeam	100 kHz	233 dB	20 Hz	304 µsec	150°
			Reson Seabat 7125	Multibeam	200/400 kHz	223 dB	50 Hz	300 µsec	128°
			Kongsberg Simrad EM1002	Multibeam	95 kHz	228 dB	10 Hz	2 ms	150°
			Kongsberg Simrad EM3002D	Multibeam	300 kHz	219 dB	40 Hz	150 µsec	130°
			Odom Echotrac CV200	Single Beam	24-340 kHz	203 dB	20 Hz	5 ms	8°
			Knudsen 320B	Single Beam	12 kHz	222 dB	20 Hz	120 µsec	15°
Gulf of Mexico	4 – 58 meters	*Sea Scout* (108'), *Ferrel* (146'), *Westerly* (43'), and *Chinook* (28')	L3 Klein 5000	Side Scan	455 kHz	249 dB	15 Hz	200 µsec	80°
			EdgeTech 4200	Side Scan	100-600 kHz	213 dB	30 Hz	1.6 ms	100°
			Reson Seabat 7125	Multibeam	200/400 kHz	223 dB	50 Hz	300 µsec	128°
			Reson Seabat 8101	Multibeam	240 kHz	224 dB	40 Hz	225 µsec	150°
			Reson Seabat 8125	Multibeam	455 kHz	224 dB	40 Hz	300 µsec	120°
			Kongsberg Simrad EM3002D	Multibeam	300 kHz	219 dB	40 Hz	150 µsec	130°
			Odom Echotrac MKIII	Single Beam	10-1000 kHz	203 dB	20 Hz	5 ms	8°
Nationwide	4 – 78	Navigation Response Teams (up	L3 Klein 3000	Side Scan	100/500 kHz	237 dB	30 Hz	400 µsec	80°

	meters	to six 28' small vessels)	Edgetech 4125	Side Scan	400/900 kHz	215 dB	75 Hz	2.8 ms	100°
			Reson Seabat 8125	Multibeam	455 kHz	224 dB	40 Hz	300 µsec	120°
			Kongsberg Simrad EM3000	Multibeam	300 kHz	221 dB	40 Hz	200 µsec	114°
			Kongsberg Simrad EM3002D	Multibeam	300 kHz	219 dB	40 Hz	150 µsec	130°
			R2Sonic 2024	Multibeam	200-400 kHz	221 dB	60 Hz	500 µsec	160°
			Odom Echotrac CV200	Single Beam	24-340 kHz	203 dB	20 Hz	5 ms	8°