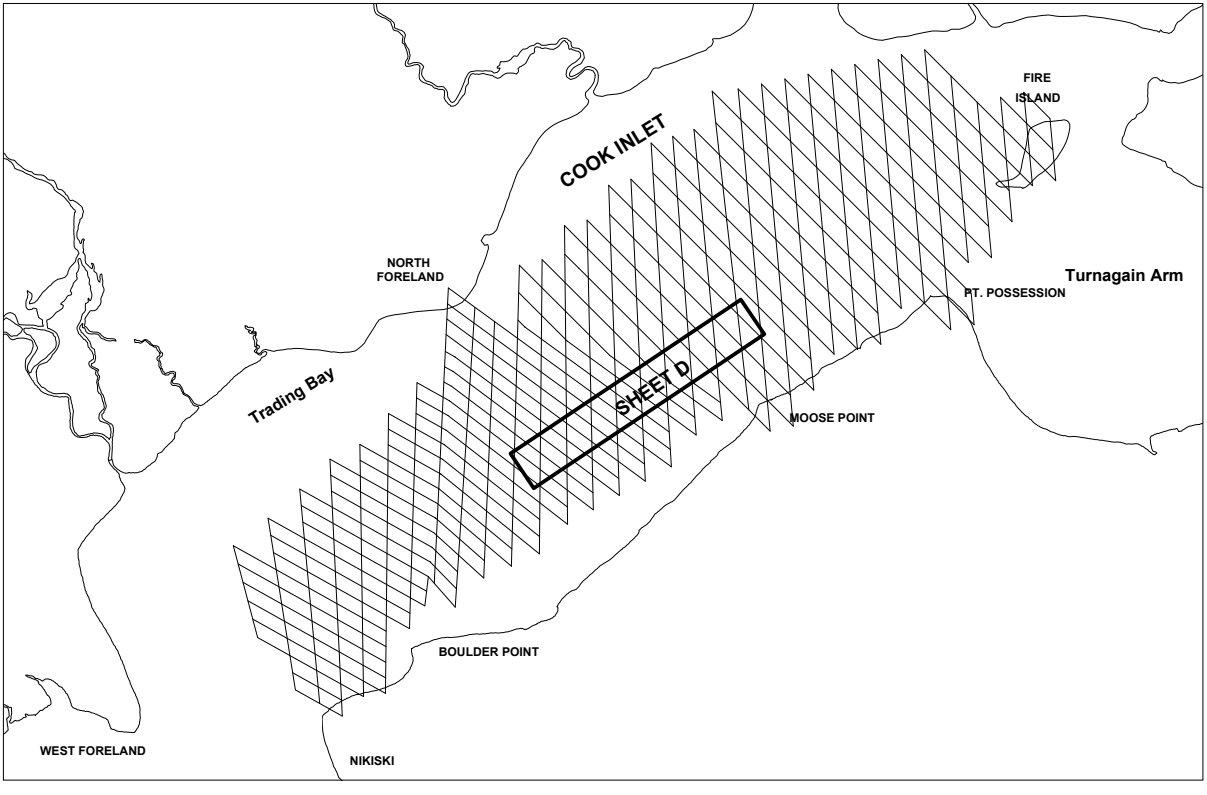
TIDES [5]

During processing, sounding were reduced to MLLW using data from 3 tide gauges. These gauges were operated by a sub-contractor, LCMF, and the data was delivered to the processing ship at the end of every Julian day.

Gauge	Location	Latitude	Longitude
9455869	North Foreland	61.0425	150.1636
9455912	Fire Island	61.1731	150.2061
9455821	Moose Point	60.9564	150.6833
9455781	Boulder Point	60.7761	151.2450

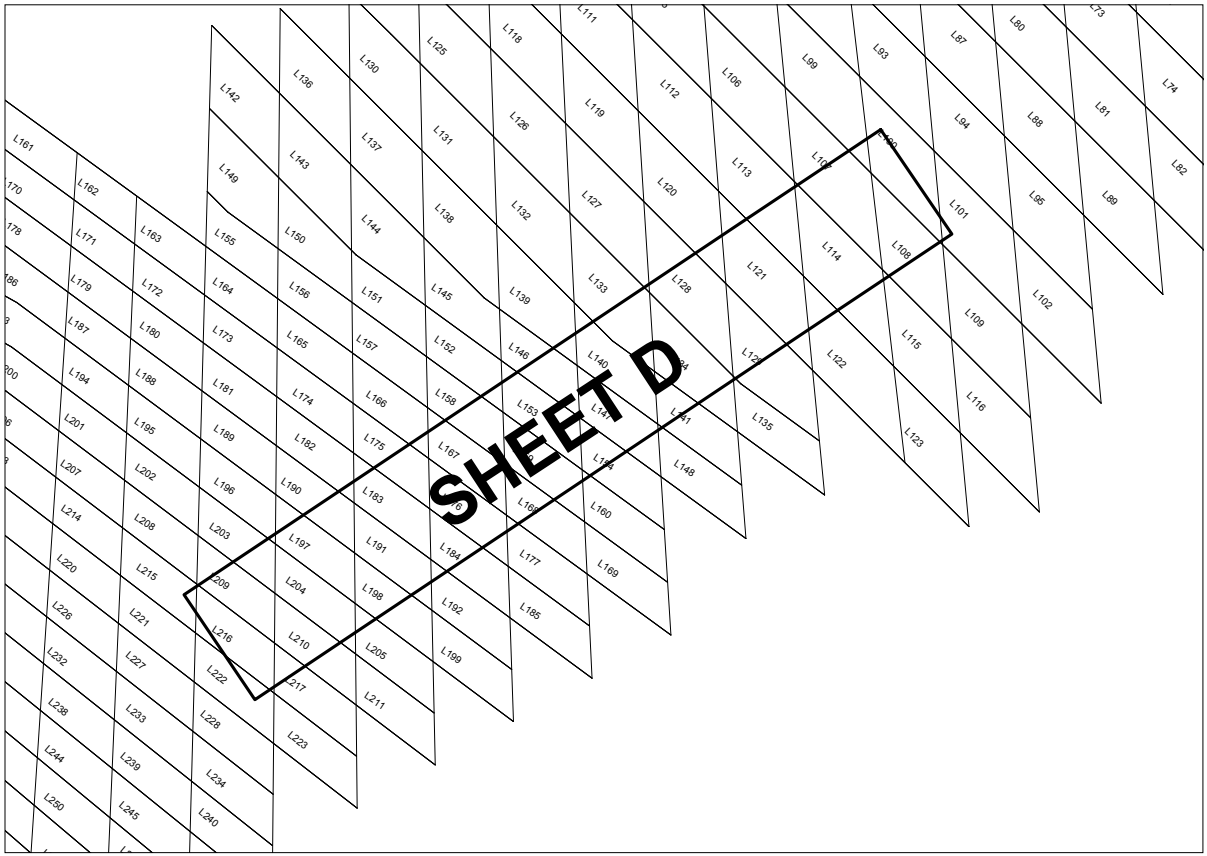
Tidal zones for this survey were defined after preliminary survey work in the fall of 1998 (SOL 52-DGNC-8-90028, Task Order #1). The zones used have generally the same shape as the NOAA preliminary zones in the survey area but form a finer mesh. The maximum time difference across any zone boundary in the new scheme was 2 minutes. The following plot shows the area around Sheet D and the tide zone layout.



LCM F	Primary Reference		Time	Range		Secondary Reference		Time	Range	LCM F
Zone	Name	Number	mins	Ratio		Name	Number	mins	Ratio	Zone
99	Moose Pt	9455824	6	0.989		N. F'land	9455869	20	1.131	99
100	Moose Pt	9455824	6	1.000		N. F'land	9455869	20	1.144	100
101	Moose Pt	9455824	6	1.010		N. F'land	9455869	20	1.149	101
107	Moose Pt	9455824	4	0.989		N. F'land	9455869	18	1.131	107
108	Moose Pt	9455824	4	1.000		N. F'land	9455869	18	1.144	108
113	Moose Pt	9455824	2	0.978		N. F'land	9455869	16	1.118	113
114	Moose Pt	9455824	2	0.989		N. F'land	9455869	16	1.131	114
115	Moose Pt	9455824	2	1.000		N. F'land	9455869	16	1.144	115
120	Moose Pt	9455824	0	0.967		N. F'land	9455869	14	1.106	120
121	Moose Pt	9455824	0	0.978		N. F'land	9455869	14	1.118	121
122	Moose Pt	9455824	0	0.989		N. F'land	9455869	14	1.131	122
127	Moose Pt	9455824	-2	0.956		N. F'land	9455869	12	1.094	127
128	Moose Pt	9455824	-2	0.967		N. F'land	9455869	12	1.106	128
129	Moose Pt	9455824	-2	0.978		N. F'land	9455869	12	1.118	129
133	Moose Pt	9455824	-4	0.956		N. F'land	9455869	10	1.094	133
134	Moose Pt	9455824	-4	0.967		N. F'land	9455869	10	1.106	134
135	Moose Pt	9455824	-4	0.978		N. F'land	9455869	10	1.118	135
139	Moose Pt	9455824	-6	0.946		N. F'land	9455869	8	1.081	139
140	Moose Pt	9455824	-6	0.956		N. F'land	9455869	8	1.094	140
141	Moose Pt	9455824	-6	0.967		N. F'land	9455869	8	1.106	141
146	Moose Pt	9455824	-8	0.946		N. F'land	9455869	6	1.081	146
147	Moose Pt	9455824	-8	0.956		N. F'land	9455869	6	1.094	147
148	Moose Pt	9455824	-8	0.967		N. F'land	9455869	6	1.106	148
152	Moose Pt	9455824	-10	0.935		N. F'land	9455869	4	1.069	152
153	Moose Pt	9455824	-10	0.946		N. F'land	9455869	4	1.081	153
154	Moose Pt	9455824	-10	0.956		N. F'land	9455869	4	1.094	154
158	Moose Pt	9455824	-12	0.935		N. F'land	9455869	2	1.069	158
159	Moose Pt	9455824	-12	0.946		N. F'land	9455869	2	1.081	159
160	Moose Pt	9455824	-12	0.956		N. F'land	9455869	2	1.094	160
166	Moose Pt	9455824	-14	0.925		N. F'land	9455869	0	1.058	166
167	Moose Pt	9455824	-14	0.935		N. F'land	9455869	0	1.069	167
168	Moose Pt	9455824	-14	0.946		N. F'land	9455869	0	1.081	168
175	Moose Pt	9455824	-16	0.925		N. F'land	9455869	-2	1.058	175
176	Moose Pt	9455824	-16	0.935		N. F'land	9455869	-2	1.069	176
177	Moose Pt	9455824	-16	0.946		N. F'land	9455869	-2	1.081	177
182	N. F'land	9455869	-4	1.046		Moose Pt	9455824	-18	0.914	182
183	Moose Pt	9455824	-18	0.925		N. F'land	9455869	-4	1.058	183
184	Moose Pt	9455824	-18	0.935		N. F'land	9455869	-4	1.069	184
190	N. F'land	9455869	-6	1.046		Moose Pt	9455824	-20	0.914	190
191	Moose Pt	9455824	-20	0.925		N. F'land	9455869	-6	1.058	191
192	Moose Pt	9455824	-20	0.935		N. F'land	9455869	-6	1.069	192
196	N. F'land	9455869	-8	1.034		Moose Pt	9455824	-22	0.904	196
197	N. F'land	9455869	-8	1.046		Moose Pt	9455824	-22	0.914	197
198	Moose Pt	9455824	-22	0.925		N. F'land	9455869	-8	1.058	198
203	N. F'land	9455869	-10	1.034		Boulder	9455781	36	1.046	203
204	N. F'land	9455869	-10	1.046		Moose Pt	9455824	-24	0.914	204
205	Moose Pt	9455824	-24	0.925		N. F'land	9455869	-10	1.058	205
208	N. F'land	9455869	-12	1.023		Boulder	9455781	34	1.034	208

209	N. F'land	9455869	-12	1.034		Boulder	9455781	34	1.046	209
210	N. F'land	9455869	-12	1.046		Boulder	9455781	34	1.057	210
215	N. F'land	9455869	-14	1.023		Boulder	9455781	32	1.034	215
216	N. F'land	9455869	-14	1.034		Boulder	9455781	32	1.046	216
217	N. F'land	9455869	-14	1.046		Boulder	9455781	32	1.057	217
222	Boulder	9455781	30	1.046		N. F'land	9455869	-16	1.034	222

Tide Zones in Sheet D.



Tidal data for a twenty-four hour period was assembled by LCMF and emailed to the Davidson at the end of every day, UTC. A cumulative file for each gauge was updated each day by appending the new data. HPTools (ver. 8.9.5) was used to calculate zoned tidal correctors using CARIS navigation files. The output from HPTools was appended to the project tide file, 1782.tide.