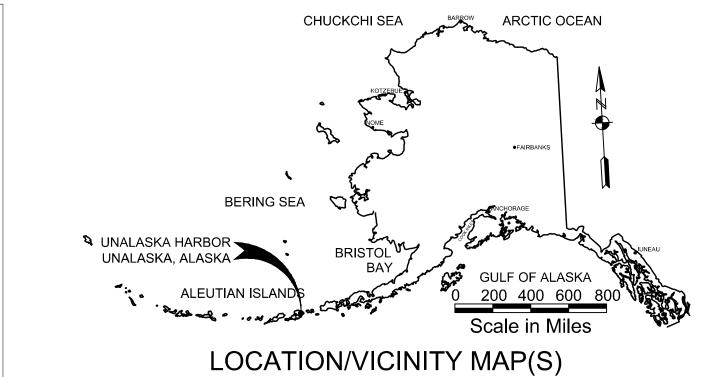


Anchor Data						
ID	Northing	Easting	Top Elevation	Description		
ANCHOR-1	1181240.5	5314186.7	-76.3	Anchor		
ANCHOR-2	1181308.0	5314106.8	- 75.7	Anchor		
ANCHOR-3	1181256.0	5314299.6	-77.6	Anchor		
ANCHOR-4	1181360.4	5314146.7	-74.3	Anchor		
ANCHOR-5	1181407.2	5314187.6	-72.1	Anchor		
ANCHOR-6	1181309.9	5314332.8	-77.0	Anchor		
ANCHOR-7	1181465.4	5314312.5	-76.7	Anchor		
ANCHOR-8	1181600.6	5314415.3	-74.1	Anchor		
ANCHOR-9	1181499.1	5314265.6	-71.5	Anchor		
ANCHOR-10	1181636.8	5314363.7	-73.4	Anchor		
ANCHOR-11	1181620.7	5314251.9	-68.0	Anchor		
ANCHOR-12	1181661.2	5314299.9	-70.9	Anchor		
ANCHOR-13	1181700.9	5314243.1	-68.3	Anchor		
ANCHOR-14	1181589.8	5314162.5	-58.1	Anchor		
ANCHOR-15	1181626.7	5314110.3	-54.0	Anchor		
ANCHOR-16	1181736.9	5314194.5	-65.5	Anchor		
ANCHOR-17	1181677.2	5314062.6	-47.5	Anchor		
ANCHOR-18	1181763.2	5314122.2	-59.6	Anchor		
ANCHOR-19	1181744.1	5314087.9	-54.1	Anchor		
ANCHOR-20	1181718.4	5313998.6	-32.6	Anchor		
ANCHOR-21	1181768.1	5313965.5	-26.6	Anchor		
ANCHOR-22	1181851.5	5314021.1	-45.6	Anchor		
ANCHOR-23	1181828.5	5314091.4	-57.5	Anchor		
ANCHOR-24	1180620.4	5313838.1	-59.6	Anchor		
ANCHOR-25	1180653.7	5313888.4	-67.5	Anchor		
ANCHOR-26	1180696.6	5313709.1	-54.7	Anchor		

Anchor Data						
ID	Northing	Easting	Top Elevation	Description		
ANCHOR-27	1180799.8	5313695.7	-67.3	Anchor		
ANCHOR-28	1180783.0	5313748.8	-68.4	Anchor		
ANCHOR-29	1180706.4	5313926.4	-73.6	Anchor		
ANCHOR-30	1180766.7	5313864.8	-72.7	Anchor		
ANCHOR-31	1180822.3	5313774.7	-72.5	Anchor		
ANCHOR-32	1180869.0	5313806.4	-74.6	Anchor		
ANCHOR-33	1180760.8	5313973.5	-77.0	Anchor		
ANCHOR-34	1180925.2	5313839.7	-75.5	Anchor		
ANCHOR-35	1180818.7	5314002.0	-78.7	Anchor		
ANCHOR-36	1180978.1	5313880.6	-75.4	Anchor		
ANCHOR-37	1180869.2	5314039.9	-78.9	Anchor		
ANCHOR-38	1181037.7	5313914.3	-75.6	Anchor		
ANCHOR-39	1180925.0	5314077.3	-78.2	Anchor		
ANCHOR-40	1180986.8	5314111.7	-78.0	Anchor		
ANCHOR-41	1181089.8	5313956.4	-76.0	Anchor		
ANCHOR-42	1181035.2	5314150.0	-77.6	Anchor		
ANCHOR-43	1181142.9	5313989.7	-75.4	Anchor		
ANCHOR-44	1181092.8	5314186.6	-77.2	Anchor		
ANCHOR-45	1181200.0	5314027.9	-75.7	Anchor		
ANCHOR-46	1181258.4	5314068.8	-75.0	Anchor		
ANCHOR-47	1181149.9	5314224.9	-76.6	Anchor		
ANCHOR-48	1181208.2	5314264.0	-77.0	Anchor		
ANCHOR-49	1181167.3	5314016.9	-75.8	Possible Ancho		
ANCHOR-50	1181042.5	5314086.7	-78.3	Possible Ancho		
ANCHOR-51	1181563.6	5314221.7	-60.4	Possible Ancho		
ANCHOR-52	1181250.4	5314263.5	-73.9	Possible Ancho		



US Army Corps of Engineers ⊗

ALASKA DISTRIC



NOTES

1. PRIMARY PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 10, NAD83 (CORS), IN US SURVEY FEET BASED ON A STATIC GPS NETWORK HOLDING NGS EPOCH 2003.00 CORS L1 PHASE CENTER VALUES FOR "PLATINUM_AK 2007 CORS ARP" (NGS PID DL6672), "PORT HEIDEN AK 2007 CORS ARP" (NGS PID DL6447) AND "SAND POINT_AK 2004 CORS ARP" (NGS PID DL7635).

LOCAL PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 10, NAD83, IN US SURVEY FEET HOLDING DOMED BC "IC-1, 2002" AS N 1,185,550.28, E 5,316,753.29 AND DOMED BC "UH-1, 2010" AS N 1,180,372.71, E 5,313,655.82.

2. VERTICAL CONTROL IS MEAN LOWER LOW WATER (MLLW=0.0'), BASED ON THE NOAA/NOS TIDAL BENCH MARK LIST: "946 2620, UNALASKA, DUTCH HARBOR, ALASKA" PUBLISHED 10/24/2011. THIS TIDAL DATUM IS BASED ON THE 1983-2001 TIDAL EPOCH AND IS REFERENCED BY HOLDING NOAA/USCGS TIDAL BENCHMARK "NO. 19 1973" AS 16.43.'

3. VERTICAL TIES TO THE NATIONAL SPATIAL REFERENCE SYSTEM ARE BASED ON PUBLISHED NAVD88 (GEOID 12A) ELEVATIONS HOLDING NOAA/USCGS TIDAL BENCHMARK "NO. 19 1973" (PID BBBB51/VM#11816) AS 16.70'.

4. SOUNDINGS ARE IN FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.

5. BATHYMETRY WAS COLLECTED JUNE 23 & 24, 2014. SOUNDINGS WERE COLLECTED USING AN R2SONIC 2022 MULTIBEAM ECHOSOUNDER OPERATING AT 200 KHZ. SOUND VELOCITY THOUGH THE WATER COLUMN WAS DETERMINED WITH A MINOS BASE X SOUND VELOCITY PROBE. POSITION AND VESSEL ORIENTATION WERE MEASURED USING AN APPLANIX POSMV WAVEMASTER V5 SYSTEM. DATA WAS COLLECTED AND PROCESSED USING QINSY 8.1 SOFTWARE. HORIZONTAL CONTROL WAS SURVEYED USING STATIC GNSS EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING DIFFERENTIAL LEVELING TECHNIQUES.

6. THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.

7. MAP SOUNDINGS ARE BINNED AT 24 FEET AND ARE SHOAL-BIASED. CONTOURS ARE BASED ON 12 FEET BINNED SHOAL-BIASED SOUNDINGS. VOLUME SOUNDINGS ARE BINNED AT 3 FEET AND ARE MEAN VALUE SOUNDINGS.

SURVEY CONTROL DATA					
STATION	NORTHING	EASTING	MLLW	DESCRIPTION	
2620 M 1982	1,184,130.08	5,317,058.63	10.97	NOS SBC	
2620 N 1990			11.70	NOS SBC	
ARGENTINA 1994	1,180,828.37	5,312,893.00	33.59	2 INCH AL CAP	
GRAVE 1901-35	1,183,502.41	5,320,202.41	59.72	USCGS SBC (TRI STA)	
NO. 19 1973	1,183,685.10	5,317,889.85	16.43	USCGS SBC (BENCH MARK)	
UH-1 2010	1,180,372.71	5,313,655.82	10.93	3 INCH DOMED BC	
UH-2 2010	1,180,603.19	5,313,280.70	11.05	3 INCH DOMED BC	
UH-3 2014	1,181,089.15	5,313,050.09	13.01	3.5 INCH DOMED BC	
UH-4 2014	1,181,692.30	5,313,719.62	12.32	3.5 INCH DOMED BC	

NAVIGATION AIDS					
USCG NO.	NORTHING	EASTING	DESCRIPTION		
UNKNOWN1	1,180,456	5,313,805	FL G 2.5S 19FT 5M "1"		
UNKNOWN2	1,180,623	5,313,765	Q 13FT 5M "D"		
UNKNOWN3	1,180,990	5,314,017	FL 4S 13FT 5M "C"		
UNKNOWN4	1,181,358	5,314,268	FL 2.5S 13FT 5M "B"		
UNKNOWN5	1,181,532	5,314,364	FL 4S 13FT 5M "A"		

PROJECT LIMITS				PROJECT LIMITS			
DRNER#	NORTHING	EASTING		CORNER#	NORTHING	EASTING	
1	1,180,542.22	5,313,800.45		5	1,181,595.52	5,314,200.49	
2	1,180,513.22	5,313,647.74		6	1,181,521.67	5,314,308.97	
3	1,180,537.04	5,313,612.77		7	1,180,615.89	5,313,692.25	
4	1,180,689.75	5,313,583.77					

VOLUME COMPUTATIONS					
AVAILABLE TO PROJECT DEPTH (-18.0)	0 CU. YD.				
AVAILABLE TO PROJECT DEPTH (-20.0)	0 CU. YD.				
AVAILABLE TO MAX PAY DEPTH (-18.5)	0 CU. YD.				
AVAILABLE TO MAX PAY DEPTH (-20.5)	0 CU. YD.				
TOTAL AVAILABLE	0 CU. YD.				



THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN ACSM/THOSOA CERTIFIED HYDROGRAPHER

David R. Neff C.H. (275)

IDENTIFICATION 5-UAK-92-07-09