

# 2002 FIELD and FINAL TIDE NOTE

## Hydrographic Sheet: H11163

### Sheet C

### Bush Rock to Barnacle Rock Northern Clarence Strait, Alaska

NOAA Project No:	OPR-O327-KR-2002 Clarence Strait, AK				
NOAA Contract No:	50-DGNC-8-90028				
The NOS Ketchikan, AK tide station (945-0460) served as control for the subordinate station on this project. Datum determinations were made for the tertiary subordinate station: Beck Island (945-0906). The NTDE 1960-78 was utilized.					
Location and Time Meridian	Name: Beck Island	Lat (NAD 83) 56° 02' 47"	Long (NAD 83) 132° 51' 45"	Time Meridian: 0° (UTC)	
Time Period and Datum Reference	Name: Beck Island	Established: 7/15/2002	Removed: 9/18/2002	MLLW 0.000	MHW units 4.632 meters
Tide observer	LCMF, Inc. 139 E. 51st Avenue Anchorage, AK 99503 (907) 273-1825				
Gauges	Three Design Analysis H350/355 bubbler systems.				
Installation	Each gauge was secured inside a waterproof Pelican case, and fastened vertically inside of an Weatherport Tent.  Refer to the tide station package for additional site specific details of installation.				
Tide staff	No tide staff was installed. Leveling was performed from a tidal benchmark to the water surface. The water height was read using a metric rod with a stilling well attached to remove interference from waves.				
Benchmarks	The following benchmarks were installed at this site: Beck Island: none  The following NOS benchmarks were recovered at this site: Beck Island: 0906 A 1978, 0906 B 1978, 0906 C 1978, 0906 D 1978, 0906 E 1978				
Levels	Benchmarks were leveled at the installation, reinstallation and removal of the tidal station. The benchmarks and station datums were connected through frequent measurements to the water. The level runs closed within NOS tolerance and the benchmarks were stable.				
Final Tidal Zoning	Tide zones SA133 and SA135 were used to apply tide data from Beck Island to reduce hydrographic soundings to MLLW.				
Reduction of Hydrographic data	Thales Geosolutions, Pacific (the prime contractor) was provided with preliminary datums developed by LCMF during July 2002 based upon a short series simultaneous comparison between Ketchikan and the subordinate station. Six minute tide data reduced to MLLW and smoothed with a 5th order 5 hour polynomial curve fit was provided to Thales throughout the field season. In October 2002, LCMF finalized datums and forwarded all data necessary to reduce hydrographic soundings to the prime contractor.				