

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

TIDE NOTE FOR HYDROGRAPHIC SHEET

DATE: 09/24/85

Marine Center: Pacific

OPR: P146

Hydrographic Sheet: H-10183

Locality: Cape Unalishag^vak, Shelikof Straits, AK

Time Period: June 19 - July 25, 1985

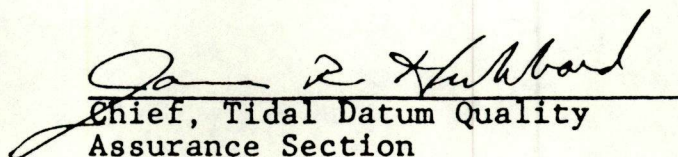
Tide Station Used: 945-8361 Bird Island, AK

Plane of Reference (Mean Lower Low Water): 2.27 ft.

Height of Mean High Water Above Plane of Reference: 10.9 ft.

Remarks: Recommended Zoning.

Apply a -10 minute time correction and x 1.03 range
ratio to all heights


Chief, Tidal Datum Quality
Assurance Section

Field Tide Note
OPR-P146-FA-85
Jute Bay, Alaska

The tide gauge at Kodiak, Alaska (945-7283) served as the reference station for the predicted tides used for correctors on surveys H-10181 and H-10183, as stated in the project instructions, OPR-P146-FA-85. The controlling tide station was Seldovia, Alaska (945-5500). Leveling and maintenance of these stations are performed by the Pacific Tide Party.

Predicted tide correctors were interpolated aboard FAIRWEATHER using data from the 1985 West Coast Tide Tables and program AM 500 dated November 10, 1972. All correctors calculated were based on the zone correctors for Lees Cabins, Wide Bay, AK.

All times of predicted and reported tides are expressed in Universal Coordinated Time (UTC). Predicted tides were acceptable for hydrography with no discrepancies in the data attributable to tide errors.

One field tide station, Bird Island (945-8361) was established in support of this project. The Bird Island station, located at latitude 57/30/42 N, longitude 156/01/54 W, operated throughout the period of surveying on sheets H-10181 and H-10183. The station was installed on June 11, 1985 (DN 162) and removed on July 26, 1985 (DN 207). A Bristol Bubbler analog tide gauge was installed on the southern half of Bird Island. The gauge, serial number 68A9333, had a range of 0 to 30 feet. The orifice was bolted to a rock which was set in place by a diver. The tubing was led ashore and buried under rocks by divers. A freestanding staff was bolted to a rock outcrop at the one foot level and guyed from the top. From June 12 (DN 163) until June 19 (DN 170) zero of the staff equalled 9.56 feet on the gauge. The gauge was changed on June 19 (DN 170) and a new value for zero of the staff was noted at 8.8 feet on the gauge. This value remained constant until the staff was replaced on July 24 (DN 205). The new gauge to staff comparison was 9.1 feet. The gauge was removed on July 26 (DN 207). For further information refer to the Tide Station Report #945-8361, Bird Island, AK.

Three of the five benchmarks leveled to are standard NOS brass disks. These disks consist of station BIRD and two RM's. The other two marks are eyebolts and are to be considered temporary. Opening levels were performed on June 11, 1985 (DN 162) from the staff to the five benchmarks. Closure of four millimeters was obtained over the entire run of approximately 0.1 mile. Closing levels were performed on July 26, 1985 (DN 207) over the same run. A closure of 2 millimeters was obtained.

Because of a sticking flow meter the Bristol gauge (S/N 68A9333) was replaced by an identical gauge (S/N 67A16208) on June 19, 1985 (DN 170). No data was lost due to the gauge change. On July 24 (DN 205) it was found that the staff had been vandalized and the 2x4 on which it was mounted had been removed. The staff was replaced and levels were run to the first bench mark. The new staff was found to be 11 mm higher than the original staff. As noted earlier in this note a new gauge to staff value was obtained. No data was lost due to staff replacement. No other problems were encountered with either the gauge or the staff.

No zoning recommendations are forwarded.