

DATE: 2/21/84

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Marine Center: Pacific

OPR: P114

Hydrographic Sheet: H-10104

Locality: Southern Cook Inlet, Alaska

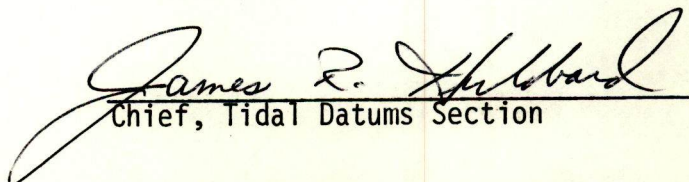
Time Period: July 21-August 11, 1983

Tide Station Used: 945-6477 Cape Douglas, Alaska

Plane of Reference (Mean Lower Low Water): 16.37 ft.

Height of Mean High Water Above Plane of Reference: 12.5 ft.

Remarks: Recommended Zoning: (See Page 2)


Chief, Tidal Datums Section

February 21, 1984

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H-10104

A. West of longitude 153°05.0'

1. North of latitude 58°57.0' zone on 954-6477 and apply x1.03 range ratio.
2. South of 58°57.0' zone direct on 945-6477.

B. East of longitude 153°05.0'

1. North of latitude 59°07.0' zone on 945-6477 and apply x1.03 range ratio.
2. South of 59°07.0' to 58°58.0' zone on 945-6477, apply - 10 minute time correction and x1.03 range ratio.
3. South of 58°58.0' zone on 945-6477, apply a -10 minute time correction and x0.98 range ratio.

FIELD TIDE NOTE
RA-40-3-83

Field tide reduction of soundings for survey H-10104 was based on predicted tides from Seldovia, Alaska (945-5500). Corrections were obtained from Preliminary Tidal Zoning OPR-P114-RA-83. The predicted tides were derived using program AM500.

The reference station at Seldovia was leveled at the beginning of survey operations on May 24, 1983. Three permanent benchmarks (including the primary mark) were connected to the tide staff. Levels were run to five permanent benchmarks at the end of survey operations on August 12, 1983. Initial and final levels compared favorably.

Two subordinate stations provided data for survey H-10104.

A bubbler tide gage was installed on June 4, 1983 at the historical site near Burr Point on Augustine Island (945-6537), $59^{\circ} 25.2'N$, $153^{\circ} 25.5'W$. Five permanent benchmarks were recovered and leveled on June 5, 1983. The staff value of the zero line on the analog tide record is +12.8 feet. The gage operated well throughout the period of hydrography. Final levels for this gage were run on August 17, 1983. Comparison of initial and final levels indicated that no significant movement of the staff occurred during the survey period.

The second bubbler tide gage was installed on July 21, 1983 at the historical site in Sukoi Bay at Cape Douglas (945-6477), $58^{\circ} 51.8'N$, $153^{\circ} 16.8'W$. Five permanent benchmarks were recovered and leveled on July 21, 1983. The staff value of the zero line on the analog tide record is +6.5 feet. The gage operated well throughout the period of hydrography. Final levels for this gage were run on August 19, 1983. Comparison of initial and final levels indicated that no significant movement of the staff occurred during the survey period.

In addition to the two subordinate stations installed for this survey, there were three other tide stations operating concurrently for adjacent survey operations: Flat Island (945-5452), Oil Bay (945-6463), and Ushagat Island (945-5478).

The time meridian used for records annotation at all sites was 0° (UTC).