

February 21, 1984

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-10099

Locality: Southern Cook Inlet, Alaska

Time Period: June 24-July 21, 1983

Tide Station Used:

945-6463 Oil Point, Alaska
945-6477 Cape Douglas, Alaska

Plane of Reference (Mean Lower Low Water):

945-6463 = 15.15 ft.
945-6477 = 16.37 ft.

Height of Mean High Water Above Plane of Reference:

945-6463 = 13.3 ft.
945-6477 = 12.5 ft.

Remarks: Recommended Zoning: (See page 2)


Chief, Tidal Datums Section

FIELD TIDE NOTE

Field tide reduction of soundings for survey H-10099 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. Final levels were run to five benchmarks on August 12, 1983. No significant displacement of the staff occurred.

Two subordinate stations provided data for survey H-10099.

A bubbler tide gage was installed on June 2, 1983 at the historical site near Oil Point (945-6463), $59^{\circ} 38.7' N$, $153^{\circ} 15.7' W$. Five permanent benchmarks were recovered and leveled to the tide staff on June 1, and August 17, 1983. No significant displacement of the staff occurred. The gage operated well throughout the period of hydrography.

The second 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 to the tide staff on June 5 and August 17, 1983. No significant displacement of the staff occurred. The gage operated well throughout the period of hydrography.

In addition to the two subordinate stations installed for this survey, there was another tide station operating concurrently for adjacent survey operations.

A bubbler tide gage was installed on May 24, 1983 at the historical site on Flat Island (945-5452), $59^{\circ} 19.8' N$, $151^{\circ} 59.5' W$. Five permanent benchmarks were recovered and leveled to the tide staff on May 25 and August 11, 1983. The staff value of the zeroline on the analog record is +4.25 feet.

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

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H-10099

A. North of latitude 59°36.0'

1. West of longitude 152°35.0' zone on 945-6463 and apply x1.01 range ratio.

2. East of 152°35.0' zone on 945-6463 and apply x1.05 range ratio.

B. South of latitude 59°36.0' to 59°28.0'

1. Zone on 945-6463 and apply x1.01 range ratio.

C. South of latitude 59°28.0' to 59°17.0'

1. West of longitude 152°35.0' zone on 945-6463 apply -10 minute time correction and x0.97 range ratio.

2. East of 152°35.0' zone on 945-6463 apply -15 minute time correction and x1.01 range ratio.

D. South of latitude 59°17.0'

1. ~~Zone on 945-6477 and apply x1.03 range ratio. SEE TIDE STATUS.~~

Zone for area south of LAT. 59°17.0'. Zone on 945-6463 and apply x0.97 Range Ratio and -10 minute time correction.