

DATE: 10/3/83

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Pacific Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 945-1277 Chatham Straits, AK
945-1392 Washington Bay, AK

Period: April 26 - May 18, 1983

HYDROGRAPHIC SHEET: H-10085

OPR: 0353

Locality: Washington Bay and Chatham Strait, Alaska

Plane of reference (mean lower low water): 945-1277 = 5.4 feet
945-1392 = 9.8 feet

Height of Mean High Water above Plane of Reference is 945-1277 = 11.1 feet
945-1392 = 11.9 feet

REMARKS: Recommended Zoning:

1. South latitude 56°38.0' zone Direct on 945-1277 Chatham Straits, AK.
2. North of 56°38.0' to 56°40.0' zone on 945-1277 Chatham Straits, AK and apply x 1.02 range ratio.
3. North of 56°40.0' to 56°42.0' zone on 945-1277 Chatham Straits, AK and apply x 1.04 range ratio.
4. North of 56°42.0' to 56°43.0' zone on 945-1277 Chatham Straits, AK and apply x 1.06 range ratio.
5. North of 56°43.0' zone direct on 945-1392 Washington Bay, AK.


Chief, Tidal Datums Section, Tides & Water
Levels Branch

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-10105

Locality: Southern Cook Inlet, Alaska

Time Period: July 28-August 11, 1983

Tide Station Used:

945-5452 Flat Island, Alaska
945-5478 Ushagat Island, Alaska
945-6477 Cape Douglas, Alaska

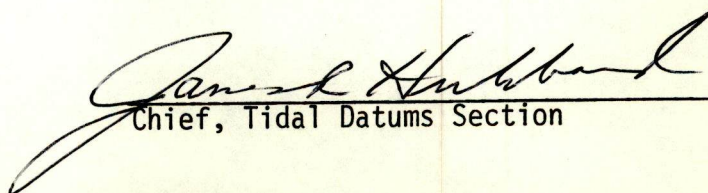
Plane of Reference (Mean Lower Low Water):

945-5452 = 13.38 ft.
945-5478 = 9.72 ft.
945-6477 = 16.37 ft.

Height of Mean High Water Above Plane of Reference:

945-5452 = 15.3 ft.
945-5478 = 12.6 ft.
945-6477 = 12.5 ft.

Remarks: Recommended Zoning: (See page 2)


Chief, Tidal Datums Section

February 21, 1984

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H-10105

A. West of longitude 152°30.0'

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 -10 minute time correction and x0.98 range ratio.

B. East of longitude 152°30.0'

1. South of latitude 59°02.5' zone on 945-5478 and apply x0.99 range ratio.
2. North of 59°02.5' to 59°12.0' zone on 945-5478 and apply x1.03 range ratio.
3. North of 59°12.0' a zone bordered at the corners by the following points:
 - a. 152°30.0' 59°17.0'
 - b. 152°23.0' 59°17.0'
 - c. 152°00.0' 59°12.0'
 - d. 152°30.0' 59°12.0'

Zone on 945-5452 and apply x0.84 range ratio.

4. Northeast of the previous zone, to a zone bordered at the corners by the following points:

- a. 152°23.0' 59°17.0'
- b. 152°05.5' 59°17.0'
- c. 151°59.0' 59°14.0'
- d. 152°00.0' 59°12.0'

Zone on 945-5452 and apply x0.87 range ratio.

5. Northeast of the previous zone, zone on 945-5452 and apply x0.91 range ratio.

FIELD TIDE NOTE
RA-40-4-83

Field tide reduction of soundings for survey H-10105 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-10105.

A bubbler tide gage was installed on May 24, 1983 at the historical gage site on Flat Island (945-5452), $59^{\circ} 19' 8'' \text{N}$, $151^{\circ} 59' 5'' \text{W}$. Five permanent benchmarks were recovered and leveled to on May 25, 1983. The staff value of the zeroline on the analog tide record is +4.25 feet. The gage operated well throughout the period of hydrography. Final levels for this gage were run on August 11, 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 23, 1983 at the historical site on Ushagat Island (945-5478), $58^{\circ} 56' 3'' \text{N}$, $152^{\circ} 14' 5'' \text{W}$. Five permanent benchmarks were leveled to on July 23, 1983 (Three benchmarks were recovered; two were established). The staff value of the zeroline on the analog tide record is +6.0 feet. The gage operated well throughout the period of hydrography. Final levels for this gage were run on August 20, 1983. At this gage site a staff was not installed. For tide staff observations, levels were run to the waters edge using a benchmark as a reference point. All levels run at this gage site indicated that no significant movement of the orifice 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: Oil Bay (945-6463), Augustine Island (945-6537), and Sukoi Bay (945-6477).

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