

DATE: December 20, 1982

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): 945-0435 Short Point, Smeaton Bay, Alaska
945-0475 Smeaton Bay, Wilson Arm, Alaska

Period: September 13-26, 1982

HYDROGRAPHIC SHEET: H-10047

OPR: 0361

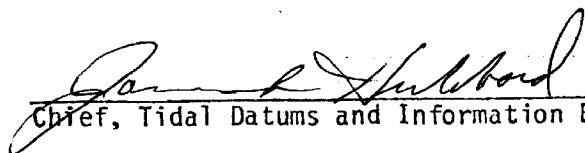
Locality: Smeaton Bay, Alaska

Plane of reference (mean lower low water): 945-0435 = -4.05 ft.
945-0475 = 0.96 ft.

Height of Mean High Water above Plane of Reference is 945-0435 = 14.4 ft.
945-0475 = 14.2 ft.

REMARKS: ~~Recommended~~ Zoning:

1. West of longitude 130°45' zone direct on 945-0435, Short Point, Smeaton Bay, Alaska.
2. East of 130°45'
 - a. south of latitude 55°19' zone direct on 945-0435, Short Point, Smeaton Bay, Alaska.
 - b. north of 55°19' zone direct on 945-0475 Smeaton Bay, Wilson Arm, Alaska.


Chief, Tidal Datums and Information Branch

FIELD TIDE NOTE

Field tide reduction of soundings for H-10047 was based on predicted tides from Ketchikan, Alaska. Corrections were obtained from Preliminary Tidal Zoning OPR-0361-RA-82. The predicted tides were derived using program AM500. The reference station, Ketchikan, Alaska (945-0460), Lat. $55^{\circ} 19.95'$ N, Long. $131^{\circ} 37.5'$ W, was leveled on October 2, 1982. These levels agreed with the historical record.

Two subordinate tide stations provided data for survey H-10047. The Wilson Arm gage (945-0475), Lat. $55^{\circ} 22.5'$ N, Long. $130^{\circ} 37.7'$ W, was installed on September 13, 1982. Initial and final levels for this gage were run on September 13, 1982 and September 25, 1982, covering the period of hydrography. The staff value of the zero line on the tide record was -7.2 feet and the time meridian for records annotation was 0° (UTC).

The RAINIER hired a tide observer for this gage since the ship left the Smeaton Bay working area before the thirty day time period elapsed. A gage malfunction occurred on October 4, 1982, which the tide observer was unable to fix, and due to poor communications, the RAINIER was not notified until 11 days later. The Wilson Arm gage was intended to be a thirty day gage, however, only twenty-two days of data were recoverable from the gage.

The tide gage at the entrance to Smeaton Bay (945-0435), Lat. $55^{\circ} 17.6'$ N, Long. $130^{\circ} 51.3'$ W, was installed on September 11, 1982. Initial and final levels were run on September 12, 1982 and September 24, 1982, covering the period of hydrography. This gage was left on line during the entire Smeaton Bay project, and allowed to run after the RAINIER left the area, to provide additional data. For this gage, the staff value of the zero line on the tide record was -9.8 feet and the time meridian for records annotation was 0° (UTC).