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

## TIDE NOTE FOR HYDROGRAPHIC SHEET

DATE: 08/08/85

Marine Center: Pacific

OPR: 0179

Hydrographic Sheet: H-10176

Locality: Seymour Canal, AK

Time Period: April 18-May 17, 1985

Tide Station Used: 945-2128 Rasp Ledge, Seymour Canal, AK

Plane of Reference (Mean Lower Low Water): 19.10 ft.

Height of Mean High Water Above Plane of Reference: 14.2 ft.

Remarks: Recommended Zoning:

Zone Direct

Chief, Tidal Datum Quality

Assurance Section

#### FIELD TIDE NOTE RA-10-1-85 H-10176

Field tide reduction of soundings for survey H-10176 was based on predicted tides from Juneau, Alaska (945-2210). Corrections were obtained from Preliminary Tidal Zoning OPR-0179-RA-85 (0 min time corrector for high and low water and a height ratio of 0.94). The predicted tides were derived using program AM500.

One Bristol Bubbler tide gage was installed in the project area. The gage was tended by RAINIER personnel at regular intervals. Annotations were made in UTC. The location and period of operation is as follows:

SITE	LOCATION	PERIOD	
Rasp Ledge	57/40.7 N 134/02.3 W	April 15 - May 12, 1985 May 15 - May 23, 1985	

#### RASP LEDGE

The 0-30 ft gage (S/N 67A16209) was installed and began operation April 15, 1985. Rasp Ledge is a rock outcrop offshore of Flaw Point just north of Mole Harbor. The gage site was only accessible by boat. Four benchmarks were recovered as described, one benchmark 2128A was set. The staff was a 2x4 with plastic sections marked with graduations nailed to it. The staff was installed and leveled April 15, 1985. The marigram reads 10.4 ft less than the staff.

Excellent records were obtained at Rasp Ledge. The gage was operational during all periods of hydrography and shoreline verification. However, due to weather and sea conditions before and after a scheduled inport the gage could not be tended at the regular interval. This resulted in the clock stopping on May 12 for a period of 2.5 days. The gage was restarted May 15 and ran satisfactorily throughout the duration of the survey. The Tiedeman Island gage was operational for concurrent survey RA-20-2-85 (H-10174) during this period.

Final levels verified no movement in the tide staff.

#### LEVELS

The reference station at Juneau was leveled April 26, 1985. Final levels were run May 22, 1985. Initial and final levels compared very well.

Comparisions between opening and closing levels showed less than 0.003m movement in the tide staff.

### COMPARISONS

Times and height of high and low tides were scanned off the marigrams. The following estimates were made using Juneau as the reference station.

TIME CORRECTORS				
Location	<u>High Water</u>	Low Water	Height Ratio	
Rasp Ledge	-7 min	-7 min	×0.92	