DATE: 1/4/85

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

## TIDE NOTE FOR HYDROGRAPHIC SHEET

Marine Center:

Pacific

OPR: 0168

Hydrographic Sheet: H-10160

Locality: Bell Arm to Anchor Pass, Alaska

Time Period: September 18 - October 15, 1984

Tide Station Used: 945 0807 Convenient Cove, Alaska

Plane of Reference (Mean Lower Low Water): 14.58 ft.

Height of Mean High Water Above Plane of Reference: 14.8 ft.

Remarks:

Recommended Zoning:,

Zone Direct

Chief, Tidal Datums Section

## FIELD TIDE NOTE RA-10-4-84 H-10160

Field tide reduction of soundings was based on predicted tides from Ketchikan, Alaska (945-0460). Corrections were obtained from Preliminary Tidal Zoning OPR-0168-RA-84. The predicted tides were derived using program AM500.

Three Bristol Bubbler tide gages were installed at three locations in the project area. Location and period of operation are as follows:

SITE	LOCATION	PERIOD
Convenient Cove	55/52.1 N 131/41.3 W	Sept.4 - Oct.17, 1984
Fitzgibbon Cove	55/59.0 N 131/10.5 W	Sept.5 - Oct.17, 1984
Head of Bell Arm	56/00.2 N 130/25.8 W	Sept.26 - Oct.4, 1984

#### CONVENIENT COVE

Gage (S/N 63A2921) was installed and began operation September 4, 1984. The staff was also installed and leveled September 4. Excellent records were obtained with no interuptions. The marigram reads 6.0 ft greater than the staff.

#### FITZGIBBON COVE

Gage (S/N 736620) was installed and began operation Sept. 5, 1984. The staff was also installed and leveled Sept. 5. Good records were obtained with the exception of a loss of 5 days from 1330 October 6 to 1800 October 11 when the marigram paper jammed. The ship was unable to check the gage during this period because of an extended in-port due to weather. No hydro was run during this period. The marigram reads 6.9 ft less than the staff.

## HEAD OF BELL ARM

Gage (S/N 63A2928) was installed and began operation Sept. 26, 1984. Some reconnaissance was required to find a suitable spot. The gage was installed near triangulation mark OPE 1930. No staff was installed, therefore, levels

were run from OPE 1930 to the waters edge. Excellent records were obtained from September 26 through October 4, 1984. On October 12 more hydro was run in this area. For tidal data, levels were run from benchmark OPE to the waters edge for an 8 hr period.

## **LEVELS**

The reference station at Ketchikan was leveled September 10, 1984. Final levels were run October 19, 1984. Initial and final levels compared very well.

Final levels on the subordinate stations showed no significant movement of the tidal staffs.