DATE: 1/2/85

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

## TIDE NOTE FOR HYDROGRAPHIC SHEET

Marine Center: Pag

Pacific

OPR: P114

Hydrographic Sheet: H-10137

Locality: Ushagat Island and Vicinity, Cook Inlet, Alaska

Time Period: June 17 - August 20, 1984

Tide Station Used: 945-5478 Ushagat Island, Alaska

Plane of Reference (Mean Lower Low Water): 15.45 ft.

Height of Mean High Water Above Plane of Reference: 12.9 ft.

Remarks: Recommended Zoning:

- l. North of latitude  $59^{0}00.0'$  apply a -10 minute time correction to all heights.
- 2. South of latitude  $59^{\circ}00.0$ ' to  $58^{\circ}54.0$ ' zone direct.
- 3. South of latitude  $58^{0}54.0$ ' apply a -10 minute time correction to all heights.

Chief, Tidal Datums Section

FIELD TIDE NOTE RA-20-3-84 H-10137

Field tide reduction of soundings for survey H-10137 was based on predicted tides from Seldovia, Alaska (945-5500). Corections were obtained from Preliminary Tidal Zoning OPR-P114-RA-84. The predicted tides were derived using program AM500.

The reference station at Seldovia was leveled on June 21, 1984. Five permanent benchmarks (including the primary mark) were connected to the ETG reading mark. Levels were run at the end of survey operations on August 24, 1984. Initial and final levels compared very well.

A subordinate station at Ushagat Island, Alaska (945-5478) provided data for this survey. A standard Bristol Bubbler tide gage was installed in a small harbor on the north side of Ushagat Island on June 17, 1984, (58/56/30N, 152/14/30W). Five permanant benchmarks were recovered near the site. Initial levels were run to these marks on June 17, 1984. A tide staff was not installed. For tide staff observations, levels were run to the waters edge.

On August 9, 1984 a storm in the area prevented the ship from checking the gage. This storm caused the orifice to relocate to a position 3.0 ft deeper. Records are consistent and should be accurate throughout the period. The orifice was secured at the new level by divers on August 17. The office remained in this position untill 2300 August 19, when the marigram was lost completely untill the completion of hydro at 1500 August 20, 1984.

The gage will be removed following the final levels planned for September 1, 1984.