DATE: March 26, 1984

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 -10121

**Locality:** Behm Canal, Offshore Hassler Island, Alaska

**Time Period:** November 3 - 18, 1983

**Tide Station Used:** 945 0807 Convenient Cove, Alaska

**Plane of Reference (Mean Lower Low Water):** 18.56 Ft.

**Height of Mean High Water Above Plane of Reference:** 14.6 Ft.

**Remarks:** Recommended Zoning:

Zone Direct

James R. Hubbard
Chief, Tidal Datums Section

FIELD TIDE NOTE

H-10121

Field tide reduction of soundings for survey H-10121 was based on predicted tides from Ketchikan, Alaska (945-0460). Corrections were obtained from Preliminary Tidal Zoning OPR-0168-RA-83. The predicted tides were derived using program AM 500.

The reference station at Ketchikan was leveled at the beginning of survey operations on September 22, 1983. Three permanent benchmarks (including the primary mark) were connected to the ETG reading mark. Levels were run at the end of survey operations on November 14, 1983. Initial and final levels compared favorably.

Three subordinate stations provided data for survey H-10121.

A bubbler tide gage was installed on October 19, 1983 in Convenient Cove (945-0807), 55°52.08'N, 131°41.3'W. Five permanent benchmarks were established and leveled on October 20, 1983. The staff value of the zero line on the analog tide record is +13.0 feet. The gage operated well throughout the period of hydrography. Final levels for this gage were run on November 18, 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 October 21, 1983 at the historical site in Fitzgibbon Cove (945-0879), 55°59'N, 131°10.5'W. Three permanent benchmarks were recovered and two new benchmarks were established at this location. Initial levels were run on October 22, 1983. The staff value of the zero line on the analog tide record is +4.1 feet. The gage operated well throughout the time of hydrography. Final levels for this gage were run on November 18, 1983. Comparison of initial and final levels indicated that no significant movement of the staff occurred during the survey period.

The third bubbler tide gage was installed on November 2, 1983 at the historical site in Klu Bay (945-0791), 55°50.54'N, 131°27.8'W. Three permanent benchmarks were recovered at this location. BM 1 1930 was covered by water at all but low tides, therefore a temporary benchmark (RR spike) was used instead. Initial levels were run on November 5, 1983. The staff value of the zero line on the analog tide record is +12.9 feet. The first gage that was installed failed after one day of operation, creating a gap in the record of 7 hours. The replacement gage operated well throughout the remaining time of hydrography. Final levels for this gage were run on November 18, 1983. Comparison of initial and final levels indicated that no significant movement of the staff occurred during the survey period.

The time meridian used for records annotation at all sites was $0^{o}$ (UTC).