DATE: October 28, 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): 945-7283 Kodiak, Alaska

Period: July 20-29, 1982

HYDROGRAPHIC SHEET: H-10032

OPR: P-304

Locality: St. Paul Harbor, Kodiak, Alaska

Plane of reference (mean lower low water): 3.77 ft.

Height of Mean High Water above Plane of Reference is 7.8 ft.

REMARKS: Recommended Zoning

Zone Direct

Chief, Tidal Datums and Information Branch

FIELD TIDE NOTE

S-P304-FA-82

St. Paul Harbor, Alaska

Kodiak Alaska Tide Gage (945-7283) served as reference station for predicted tides for the St. Paul Harbor project. This gage also provided for direct control for datum determination for the entire survey area, as stated by Project Instructions S-P304-FA-82 dated 14 July 1982.

Predicted tide correctors were interpolated by the hydroplot system using program AM 500. All times of both predicted and recorded tides were based on Universal Coordinated Time (UTC). The predicted tides were acceptable for hydrography with no discrepancies in data attributable to tides errors.

The tide station in Kodiak, Alaska, Coast Guard small boat basin, located at 57° 44.7'N latitude and 152° 28.7'W longitude was the primary gage for this project. Opening levels were run to this gage on 20 July 1982 (J.D. 201). Four Bench Marks and Horizontal Control Station ABBERT (1939) were leveled with a closure of 6.2 mm attained over the entire run. Bench Marks 14, 19, 20 and 21 were leveled in, and closing levels will be performed by Pacific Tides Party at the end of this project.

OPERATIONAL PROBLEMS

The Kodiak Tide Gage marigram exhibited an erroneous trace which only appeared on the higher of the two high tides during a tidal cycle. The effect on the marigram trace was minimal and can be easily interpolated resulting in no loss of tidal records. The gage otherwise worked well with no other problems.

MISCELLANEOUS

The erroneous trace of gage no. 67A16200 has been reported to Pacific Tides Party and plans have been made to replace the gage at this projects end. At this time, levels will also be run which will be used as closing levels for this project. These levels may be obtained from Pacific Tides Party upon request. Post-project comparison with historic level data reveals that levels run on 820720 utilized the top of staff, rather than the staff stop. This error gives the impression of staff movement, when no such movement has occurred. Pacific Tides has supplied a corrector for the difference between staff stop and top of staff which rectifies this field error.

Submitted by:

Arthur E. Francis

Ensign, NOAA

Approved by:

Walter F. Forster Commander, NOAA Commanding Officer