DATE: August 29, 1983

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): 945-8461 Wide Bay, Alaska

Period: June 6 - July 13, 1982

HYDROGRAPHIC SHEET: H-10019

OPR: P-146 -

Locality: Wide Bay, Shelikof Straits, Alaska

Plane of reference (mean lower low water): 0.54 ft.

Height of Mean High Water above Plane of Reference is 11.0 ft.

REMARKS: Recommended Zoning:

- 1. Zone Direct
- 2. For J-Day 192-194 no smooth tides available.

thief, Tidal Datums Section, Tides & Water Levels Branch

FIELD TIDE NOTE

OPR-P146-FA-82

Wide Bay, Alaska

Tide Gage (945-5500) Seldovia, Alaska served as reference station for predicted tides for the entire Wide Bay project as stated in Project Instructions OPR-P146-FA-82. Because leveling was required at the beginning and end of project OPR-P114-RA-82, which was run concurrently with OPR-P146-FA-82, leveling of station (945-5500) Seldovia, Alaska was not conducted by FAIRWEATHER personnel. See Field Tide Note for P114-RA-82 for level data applicable to OPR-P146-FA-82.

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. All predicted tides were acceptable for hydrography with no discrepancies in data attributable to tides errors.

Tide station (945-8461) Wide Bay, Alaska (Mouth of Short Creek) located at latitude 57° 21' 54"N, longitude 156° 24' 07"W was the primary gage during this project. Opening levels were run to four existing Temporary Bench Marks (TBM's) on 04 June 1982 (J.D. 155). Two additional Bench Marks stamped 8461E and 8461F were established and included in leveling observations. A closure of 7.14mm was obtained for the entire run of 0.6km. Closing levels were run on 20 August 1982 (J.D. 232) to the above-mentioned marks resulting in a 27.10mm closure. This closure is 6.1mm above the acceptable limits set forth by the Hydrographic Manual, Fourth Edition, Section A.8.4. A comparison of opening to closing levels shows no sign of any vertical movement in the marks or tide staff. This error is presumed to be located at set-up number one between the staff stop and TBM #1. This area is a sand bar which covers at high water and is very soft sand, making stable set-ups difficult.

OPERATIONAL PROBLEMS

ADR Gage 6402A4596M2 operated well until 4 July 1982 (J.D. 185) when it was discovered that the gage was skip and double punching. On 15 July 1982 (J.D. 196) the gage was removed and replaced with ADR Gage 7404A0407M3 at 165400 (GMT +9). A new staff to gage comparison was taken and the new gage functioned well until projects end on 20 August 1982 (J.D. 232). Gage 6402A4596M2 was found to have bad punch block pins, which were replaced in the field. The gage was tested for three days without malfunction, and then stored aboard. Table I, Gage Malfunctions, is a listing of skip and double punches found on tidal records for the period of time. ADR Gage 6402A4596M2 was operating.

Table I, Gage Malfunctions, Cont.

Date	Time	Comments
05 July	0106 0112 0130-0342 0348 0436-0512 0518	Good. Double punched, skipped. Good. Double punched, skipped. Good. Double punched, skipped.
06 J uly √÷	2142 2148 2224	Good. Double punched, skipped. Good.
07 July	0624 0630	Good Double punched, jammed.
08 July	031800	Restarted.
09 July	1700 1718-2142 2148 2154 2312-18 2324	Double punched, skipped. Good. Skipped. Good. Skipped. Good
10 July	0442-54 0500 2342 2354	Skipped. Good. Skipped. Skipped.
11 July	0518-30 0542-54 1000 1706-12 1824-36 2242	Skipped. Skipped. Skipped. Skipped. Skipped. Skipped.

Submitted by: Arth E, Fran

> Arthur E. Francis Ensign, NOAA

Approved by:

Walter F. Forster Commander, NOAA

Commanding Officer