

## Tide Correctors ✓

Predicted tides for the project were provided on diskette by N/CG241 for the Nikiski, Alaska reference station (945-5760). Tidal correctors as provided in the project instructions for Zone VI are:

<u>Zone</u>	<u>Time Correction</u>	<u>Range Ratio</u>	<u>Longitude Boundaries</u>
Zone V	-00:25	x 0.98	151° 32.0'W* to 151° 27.0'W
Zone VI	-00:25	x 1.00	151° 27.0'W to 151° 20.0'W
Zone VII	-00:25	x 1.03	151° 20.0'W to 151° 15.5'W**

\* Sheet A's western boundary

\*\* Sheet A's eastern boundary

Portions of this survey fall in tide zones V, VI, and VII. Because of processing constraints with HDAPS, the following zones were applied to the corresponding sheets: zone V was applied to sheet A(W), zone VI was applied to sheet A(C), and zone VII was applied to sheet A(W). While sheet's A(C) and A(W) tide zone's are correct, sheet A(W)'s tide zones will need to be reapplied in post processing. Sheet A(W) should have the following zones applied: zone V starting from the western limit of 151° 30.5'W to longitude 151° 27.0'W, and zone VI starting at longitude 151° 27.0'W to the sheet's eastern limit of longitude 151° 25.5'W.

A problem with the applied tides was noted on the northeast section of the sheet as seen from the final depth plot. This problem should be resolved when the final tides are applied at the Pacific Hydrographic Section. *The application of approved tides has resolved this problem.*

HDAPS listings of the data used in generating tide corrector tables are included in Appendix V. ~~of this report.~~ \*

Seldovia, AK (945-5500) was used as the primary control station for datum determination.

RAINIER personnel installed 8200 digital gages at Nikiski, Alaska (945-5760) on May 22, 1995 and Chinulna Point (945-5735) on May 27, 1995. The staff was connected

\* Filed with the hydrographic data.

to five benchmarks at both stations during opening and closing level runs. Opening levels completed May 22, 1995 at Nikiski and on May 28, 1995 at Chinulna Point. On June 17, 1995, the staff at Chinulna Point was found to be broken at the two meter mark, which was the portion above the top of the boulder and the staff stop was gone. It was determined that the staff was probably busted by the debris carried by the strong currents. Since the remainder of the staff was secured directly to the rock face and it was inevitable that the top of the staff would again be broken, a new staff stop was installed at the 1.3m mark on June 18, 1995. The new staff stop was leveled to bench mark 5735A. Both tide gages ran without problems during data acquisition. Closing levels were conducted at Nikiski on July 20, 1995 and at Chinulna Point on July 21, 1995. Both stations were removed on July 21, 1995.

The station descriptions, field tide records, field tide notes and data (Appendix V) have been forwarded to N/OES212 in accordance with HSG 50 and FPM 4.3. A request for approved tides was forwarded to N/OES2 in accordance with FPM 4.2.3. *Tide Note dated December 14, 1995 is attached.*