Hydrographic Manual Fourth Edition as Example 2 on page 4-77, except that more data points were necessary in the shallow water in order to define the velocity profile. (Appendix IV).

As a system check of the Plessy probe, surface water samples were obtained at the times and locations of the velocity casts. The surface samples showed acceptable agreement with the probe velocities. (Appendix IV).

SETTLEMENT AND SQUAT

Settlement and squat correctors were determined for the automated survey launches in Seymour Canal, Alaska, on April 28 and May 5, 1987, over hard bottom in a depth well exceeding seven times the vessels' drafts. Both sea and wind were calm. Observations were made through a Zeiss Ni2 leveling instrument (S/N 87102) to a rod held vertically on deck of each launch, almost directly over the transducer. Five level readings were made at each speed tested, and the average taken, to compute the correctors. Tide staff readings were taken concurrently with each set of level readings, and all tide height differences were normalized to the tide height of the dead-in-the-water level readings before the correctors were computed.

Soundings on the final field sheet are not corrected for settlement and squat, although corrections of 0.1 fathom must be made for certain vessels at some RPMs. A TC/TI tape for each automated sounding vessel has been prepared and submitted with this survey. Records of settlement and squat data are included with the survey data. (Appendix IV).

TIDE CORRECTORS

The final field sheet is plotted using predicted tide correctors provided by the daily predictions for Sitka, Alaska, station number 945-1600, (reference #1701) in Tide Tables 1987 - West Coast of North and South America including the Hawaiian Islands. Field tide records have been submitted (see Field Tide Note) in Appendix II) and a request for approved tides made. (Appendix XI).

E. HYDROGRAPHIC SHEETS

Survey data are plotted on two 1:5000-scale sheets designated RA-5-1A-87 (Sitka Harbor) and RA-5-1B-87 (Sawmill Cove). In addition, two 1:2500-scale sheets were prepared to show all side scan sonar information and all NSP soundings. These sheets were prepared aboard the RAINIER using a Houston Instrument Complot DP-3 roll plotter with the PDP-8/e Hydrolplot System and program RK201, "Grid, Signal, Lattice plot. This system draws a modified