1. INTRODUCTION

H-10146 was accomplished by the NOAA Hydrographic Field Party III in accordance with the following project instructions:

OPR-A166-MT/HFP-84, dated March 20, 1984
Change Number 1, dated May 14, 1984
Change Number 2, dated December 7, 1984

This is a basic hydrographic survey of the Penobscot River in Maine. The survey extends from Treat Hill and Frankfort Flats at latitude 44°36'25"N in the south to Snub Point at latitude 44°42'25" in the north.

Predicted tides were not based on the Portland, Maine gage as recommended by the project instructions. Observed tides based on the Winterport, Maine gage with time and range adjustments were utilized during shipboard processing. Tide correctors used for the reduction of final soundings are computed from approved hourly heights from two tide gages, Bangor and Winterport, Maine.

The field sheet parameters have been revised to center the hydrography on the smooth sheet and to change the projection to polyconic.

The TRA, velocity, settlement and squat, and electronic correctors were changed to reflect corrections made during processing, because of incorrect computations.

2. CONTROL AND SHORELINE

All horizontal control stations used for controlling hydrography were established in accordance with aerotriangulation and Third Order Class I standards. The smooth sheet was plotted using aerotriangulated, preliminary adjusted field positions based on the North American Datum 1927.

Hydrographic positioning was conducted using Del Norte, configured in the range-azimuth mode, the HP-3080A was utilized for distance measuring; and see-field-sheet methods were employed when conventional control was unavailable. Baseline calibrations were performed before and after completing the hydrography. Daily system checks to confirm the baseline values were conducted by static methods and direct comparisons between control stations with the HP-3808A. However, daily corrections were utilized for the corrections of positions on H-10146 instead of baseline calibrations which were not well documented.

All remaining information affecting the positioning and station control of this survey is contained in paragraph F and G of the Descriptive Report and other supplemental data submitted with this survey.