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): 161-7760 Hilo Hawaii

Period: September 27-October 2, 1982

HYDROGRAPHIC SHEET: H-10052

OPR: T126

Locality: NE Coast of Hawaii

Plane of reference (mean lower low water): 3.69 ft.

Height of Mean High Water above Plane of Reference is 2.0 ft.

REMARKS: Recommended Zoning:

- 1. North of 19°58.0' apply -20 minute time correction and x1.14 range ratio.
- South of 19°58.0' apply -10 minute time correction and x1.14 range ratio.

Chief, Tidal Datums Section, Tides & Water Levels Branch

Field Tide Note OPR-T126-FA-82

Hawaii, Hawaiian Islands

Field tide reduction of soundings was based on predicted tides from Hilo, Hawaii. 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 (UCT). Predicted tides were acceptable for hydrography with no discrepancies attributable to tides errors.

The tide station at Hilo, Hawaii (161-7760) was the primary gage for project OPR-T126-FA-82. Levels were run by FAIRWEATHER personnel at the beginning and end of the project. Three wire levels were run to five benchmarks on 23 October 1982 (JD 266). A closure of 0.6 mm was found for the entire leveling run of .68 km. Closing levels were run to four benchmarks on October 3, 1982 (JD 276). A closure of 1 mm was seen for the entire leveling run of .43 km.

Tide data from this station was used to control surveys FA-20-2-82 (H-10053) and RA-20-7-82 (H-9986). Data from station 161-7760, Hilo, Hawaii, will be transmitted at a later date by the local tide observer in charge of the Hilo gage. All hydrography was run between September 27, 1982 (JD 270) and October 2, 1982 (JD 275). No gage anomalies were seen during hydrographic operations.

A separate gage used solely for zoning purposes was established at Lapahoehoe Pt., Hawaii (station number 161-7725). Fisher/Porter ADR gage number 7404A0407M8 was installed on October 3, 1982 (JD 276) and remained until October 6, 1982 (JD 279) when it was removed. Opening levels were run to three temporary benchmarks on October 3, 1982 (JD 276) and a closure of 2.2 mm was seen for the entire leveling run of .091 km. Closing levels were run on October 6, 1982 (JD 279) to the same three temporary benchmarks and a closure of 2.2 mm was seen for the entire leveling run of .093 km. No gage anomalies were seen during operation. Times of hydrography abstracts are appended to this field tide note.

Submitted by:

Arthur E. Francis

Ensign, NOAA

NOAA Ship FAIRWEATHER

Approved by:

dr. Walter F. Forster Commanding Officer

NOAA Ship FAIRWEATHER