

DATE: February 25, 1982

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY  
CHART EVALUATION  
TIDE NOTE FOR ~~HYDROGRAPHIC SHEET~~

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 851-9436 Great Kills Harbor, NY  
851-9789 Rossville, NY  
853-1681 Sandy Hook, NJ

Period: June 1, 1979 - September 30, 1979

CHART EVALUATION: FE-239  
~~HYDROGRAPHIC SHEET~~

OPR: B408

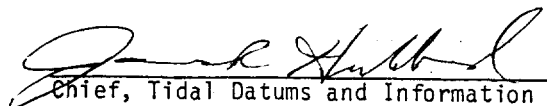
Locality: Chart #12331

Plane of reference (mean ~~lower~~ low water): 851-9436 = 24.41 ft.  
851-9789 = 1.21 ft.  
853-1681 = 2.26 ft.

Height of Mean High Water above Plane of Reference is 851-9436 = 4.79 ft.  
851-9789 = 5.08 ft.  
853-1681 = 4.61 ft.

REMARKS: Recommended Zoning:

1. In Great Kills Harbor zone direct on 851-9436.
2. In Arthur Kills, south to the entrance at 40°30' zone direct on 851-9789. For times of hydrography when 851-9789 was inoperative zone on 853-1681 and apply +20 minute time correction and x1.11 range ratio.
3. In Raritan Bay from 74°17' east to 74°11', zone on 853-1681 and apply +10 minute time correction and x1.08 range ratio.
4. In Raritan Bay East of 74°11', zone on 853-1681 and apply x1.04 range ratio.

  
Chief, Tidal Datums and Information Branch

<u>Tide Station</u>	<u>Location</u>	<u>Type</u>	<u>Station Number</u>
Sandy Hook, N.J.	40°28'00" N 074°00'36" W	ADR	853-1681

This is a primary gauge and was tended regularly by the WHITING and daily by the observer. The gauge was found to be in good operational condition during the entire period of the survey.

Tide correctors to all soundings were applied on the basis of data from Table 1 in the Project Instructions. Correctors for items were applied as specified. Soundings line tide correctors were applied on the basis of their proximity to specific items.

High/low data was obtained from the 1979 Tide Tables. Tide correctors were interpolated by use of Program AM 500, Predicted Tide Generator. The following is time correction and range ratio data supplied in the Project Instructions and applied to soundings in this survey.

Table 1 (Applied to Reference Station at Sandy Hook) follows:

#### TIME CORRECTORS

<u>ITEM</u>	<u>HIGH WATER/LOW WATER</u>	<u>RANGE RATIO</u>
2,8,16,17	-5 min. 0 min.	x1.06
4	-5 min. 0 min.	x1.04
18,19,20,24,26	0 min. 11 min.	x1.11
27,29,32	7 min. 18 min.	x1.11
34,35	14 min. 24 min.	x1.11
37,38	20 min. 30 min.	x1.11