May 5, 1981

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 844-8208, Oaks Bluff, Massachusetts

Period: September 12 - October 28, 1980
WIRE DRAG:
HYDROGRAPHIC SHEET:

OPR: S-B609 RU/HE-80

Locality: Oaks Bluff, Massachusetts

Plane of reference (mean lower low water): 4.00 ft.

Height of Mean High Water above Plane of Reference is 1.80 ft.

REMARKS: Zone Direct

Chief, Datums and Information Branch

1/13/69

MASSACHUSETTS - 102

U. S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

TIDAL BENCH MARKS

Oak Bluffs, Martha's Vineyard
Lat. 41°27'.5; Long. 70°33'.3

BENCH MARK 1 (1928) is a standard disk, stamped "NO 1 1928", set on top of outcropping rock in Ocean View Park, near south curb of Lake Avenue, between Ocean and Sea View Avenues. Rock is 3 feet from curb of Lake Avenue, 40 feet from Ocean Avenue and 112 feet from Sea View Avenue. Elevation: 15.25 feet above mean low water.

BENCH MARK 3 (1928) is a standard disk, stamped "NO 3 1928", set on concrete sea wall extending northward from steamboat wharf to south jetty of entrance to Lake Anthony. It is about 150 feet south of south jetty and 100 feet east of curve of Circuit and Sea View Avenues. There is a break in elevation of top of wall about 2 feet north of beach mark. Elevation: 9.33 feet above mean low water.

BENCH MARK 4 (1953) is a standard disk, stamped "NO 4 1953", set in concrete edge of steps leading from Sea View Avenue down to sea wall. It is at top of steps, about 300 feet north of steamboat wharf, and about 25 feet east of centerline of Sea View Avenue. Elevation: 22.92 feet above mean low water.

Mean low water at Oak Bluffs, Martha's Vineyard is based on 4 months of records, August - November 1934, reduced to mean values. Elevations of other tide planes referred to this datum are as follows:

	Feet
Highest tide (September 14-15, 1944)	8.2
Mean high water	1.70
Mean tide level	0.85
Mean low water	0.00

The estimated lowest water level to the nearest half foot is 2½ feet below mean low water.

Rcd 11/26/79 TM

NOAA FORM 77-12 (6-77) — U.S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

TIDE STATION REPORT

NOTE: This form is designed for both the establishment and inspection of a tide station. Questions not pertinent to the work at hand may be omitted; but at the time of an inspection it is desirable that the water depth, and other such data that can be conveniently obtained, should be entered on the form so that any changes since the previous inspection may be detected.

STATION NAME	STATION NUMBER
Woods Hole MA.	844-7930

LATITUDE	LONGITUDE	TIME MER.
41°31.5'N	70°40.3'W	75W

TYPE OF STATION: [x] PRIMARY [ ] SECONDARY [ ] TERTIARY

PROJECT: [ ] BOUNDARY [ ] HYDROGRAPHIC [x] CONTROL [ ] CIRCULATORY [ ] OTHER

[ ] ESTABLISHED [x] INSPECTED [ ] REMOVED

BY: ECTP 754 DATE: 10-24-79

APPROVED BY: DATE:

WHARF

NAME: Woods Hole Oceanographic Institution

OWNER'S NAME:

BUSINESS ADDRESS: Woods Hole MA.

TIDE OBSERVER

NAME: Ms Dorothy Rogers

TELEPHONE NO. HOME: (617) 548-4416 BUSINESS: ( )

HOME ADDRESS: 15 Ludlam St. Falmouth, MA. 02540

TIDE HOUSE

SIZE AND BRIEF DESCRIPTION: Tide station is housed in saltwater pump room in South west corner of main shop area. [ ] Continued on reverse.

TIDE STAFF AND ROD STOP

[x] PORTABLE [ ] ELECTRIC [ ] FIXED — [x] FIBERGLASS [ ] OTHER [ ] VITRIFIED — HINGED [x] YES [ ] NO — DATE OF INSTALLATION: 8-15-77

LIMITS OF GRADUATIONS (L.G.): 0-9' — TOTAL MEASURED LENGTH OVER L.G.: 9.000 — STAFF GRADUATION CORRESPONDING TO STOP (MEASURED): 8.99 FT. — INITIALS: E.N

PRECISE LOCATION, METHOD OF SECURING STAFF, TYPE AND CONDITION OF ROD STOP, AND ADDITIONAL REMARKS:
4" x 6" wooden staff support is lassed to a piling on the west side of entrance to small boat enclosure on south side of pier

[ ] Continued on reverse.

GAGE

TYPE AND MANUFACTURER: Fischer & Porter 1551 — SERIAL NUMBER: 7006A5833M2 — DATE OF INSTALLATION: 11-2-79

POWER SOURCE: [ ] COMMERCIAL [ ] SOLAR [x] BATTERY [ ] OTHER — FLOAT DIAMETER: 8 1/2 INS. — SCALE: 0-9999 — [x] NEGATOR SPRING [ ] COUNTERWEIGHT

[ ] MORE THAN ONE GAGE (Details on reverse.)

REMARKS: New surge this inspection

[ ] Continued on reverse.

FLOAT WELL

MATERIAL: Fiberglass — INTAKE CLEANED [x] YES [ ] NO — DATE OF INSTALLATION: July 1968

LENGTH	INSIDE DIAMETER	INTAKE SIZE	INTAKE POSITION
16.0 FT.	12 INS.	1 1/2 INS.	bottom center of cone

CONSTRUCTION, INSTALLATION, AND REMARKS:
Float well is cemented in floor and secured with three stainless steel collars at the high water mark.

[ ] Continued on reverse.

SUPERSEDES NOAA FORM 77-12 (3-71) WHICH MAY BE USED.

5.6. Data Reduction: All tide work shall be accomplished in accordance with the Manual of Tide Observations (Special Publication 30-1) and the User's Guide. The particular time zone used for each tide station shall be noted on the marigrams. When tide records are forwarded to OA/C23 at the beginning of each month, a listing of times of hydrography, area surveyed, and controlling gages shall be included. This will decrease the time for obtaining final correctors and allow OA/C23 to determine that all hydrography had proper tide control.

5.7. Datum: Boston, Massachusetts, will serve as the reference station for predicted tides. The existing control stations at Woods Hole, Massachusetts (844-7930), and Boston, Massachusetts (844-3970), will be used as control for datum determination at all subordinate stations. The latest tide station information with the tide observer's name and phone number have been provided.

5.8. Locations: The following historical tide station location has been selected to provide updated information on tidal datums (tide reducers) and harmonic constants and time and range of tide information for predictions. This station shall be installed and operated for a minimum duration of 30 days of observations and from 3 hours before to 3 hours after the periods of hydrography or wire drag.

Station Number	Station Name	Lat. (N)	Long. (W)
844-8208	Oak Bluffs, Martha's Vineyard	41°27.5'	70°33.3'

The Commanding Officer shall be responsible for establishing this station at the beginning of the survey, running installation level connections from the tide staff to a minimum of five bench marks, and ensuring proper gage operation during the survey. It is projected at least two new bench marks will have to be established. If the survey work is expected to be accomplished in less than 30 days, a tide observer shall be hired and trained to continue operation of the tide station before the ship leaves the survey area. OA/C231 will coordinate the removal of the gage and running the removal levels at the end of the 30-day period if ship operations have already been completed. The tide staff shall be installed in such a manner as to ensure stability, permanency, and readability, as it will be left in place after the survey for use by the Steamship Authority. Historical tide station information is provided.

MEASUREMENTS	STAFF	FLOAT WELL	BUBBLER	
	WHARF FLOOR ABOVE ZERO OF TIDE STAFF 10.0 FT.	INTAKE BELOW WHARF FLOOR 14.4 FT.	ORIFICE BELOW CHART DATUM *(Use tide table predictions.)* FT.	
	ZERO OF TIDE STAFF ABOVE HARBOR BOTTOM 54.0 FT.	INTAKE ABOVE HARBOR BOTTOM 10.0 FT.	ORIFICE ABOVE OCEAN BOTTOM FT.	
LATEST LEVELS	DATE OF LEVELS TO TIDE STAFF 10-24-79	NO. OF MARKS CONNECTED 10	NO. OF MARKS ESTABLISHED 0	NO. OF MARKS RECOVERED 10

REMARKS

FIELD ELEVATIONS

NO. 6	10.417'	NO. 7	14.590	NO. 15	8.558
NO 13	10.973'	NO 14	11.165	NO. 16	11.177
NO. 11	11.000'	FISH	10.228		
NO. 10	10.502	NO. 12	11.842		

ALL BM'S RECOVERED AS DESCRIBED

NOTE: *In addition to this report, a chartlet, bench mark sketch, leveling record, and complete bench mark descriptions must be submitted in package form at the time of installation. At other times, submit this form with the leveling record and any other items that need updating.*

INVENTORY OF EQUIPMENT AND SUPPLIES

1 THERMOGRAPH 2099 PROPERTY OF WHOI,
1 TELEMETER 63A6768 " " "
1 BRASS WATER SAMPLER
1 WATER JAR,
1 WATER THERM.
2 HYDRO # 2000 & T-65-345

ADDITIONAL INFORMATION, SKETCH, AND/OR RECOMMENDATIONS

VITRIFIED SCALES ADDED TO STAFF THIS INSPECTION,

NOAA FORM 77-12 (6-77)

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