

DATE: 10-28-83

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): 941-4881 Point Orient, Ca.
941-5056 Point Pinole, Ca.

Period: April 11-29, 1983

HYDROGRAPHIC SHEET: H-10081

OPR: L123

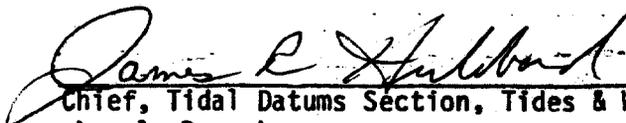
Locality: San Pablo Bay Entrance, California.

Plane of reference (mean lower low water): 941-4881 = 3.94 ft.
941-5056 = 6.96 ft.

Height of Mean High Water above Plane of Reference is 941-4881 = 5.4 ft.
941-5056 = 5.4 ft.

REMARKS: Recommended Zoning:
In San Pablo Bay

- 1) North of Latitude $38^{\circ}05'0''$ Zone on 941-5056 Point Pinole and apply +15 minutes time correction.
- 2) South of $38^{\circ}05.0'$ to $38^{\circ}00.0'$
 - a) West of Longitude $122^{\circ}19.0'$ Zone Direct on 941-5056 Point Pinole.
 - b) East of $122^{\circ}19.0'$ Zone on 941-5056 Point Pinole and apply +15 minutes time correction.
- 3) South of $38^{\circ}00.0'$ Zone on 941-4881 Point Orient and apply +15 minutes time correction.


Chief, Tidal Datums Section, Tides & Water
Levels Branch

Field Tide Note
H-10081

Field tide reduction of soundings for survey H-10081 was based on predicted tides from San Francisco (Golden Gate), California. Corrections were obtained from Preliminary Tidal Zoning OPR-L123-RA-83. The predicted tides were derived using program AM500. One subordinate tide station provided data for survey H-10081.

An ADR tide gage was installed at the historical gage site on the pier ruins at Point Pinole, California (941-5056), $38^{\circ}00.9'N$, $122^{\circ}21.8'W$. The gage was installed on March 26, 1983 and removed on May 2, 1983. The existing float well and staff from the 1979 installation by the NOAA Ship McArthur was used. This gage operated well throughout the period of hydrography.

As stated in the Project Instructions, third-order levels were required from the tide staff to a minimum of three bench marks on installation and removal of each station. Three permanent bench marks were recovered as described and leveled to during the installation of the Point Pinole tide gage. The initial levels were run on March 26 and 27, 1983. Final levels were run on May 2, 1983. Comparison of initial and final levels indicated that the staff stop elevation changed by 8mm during the course of this survey. This is not surprising considering the poor condition of the piling at the gage site.

The time meridian used for records annotation was 0° (UTC).