DATE: 01/15/85  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SERVICE  

TIDE NOTE FOR HYDROGRAPHIC SHEET  

Marine Center: Pacific  
OPR: A166  
Hydrographic Sheet: H-10146  
Locality: Penobscot River, ME  
Time Period: July 30 - October 4, 1984.  
Tide Station Used: 841-4612 Bangor, ME  
841-4781 Winterport, ME  

Plane of Reference (Mean Low Water): 841-4612 = -1.57 ft.  
841-4781 = 2.32 ft.  

FROM PHONE CONV. W/JOE MULLEN 2/25/85.  

Height of Mean High Water Above Plane of Reference: 841-4612 = 13.2 ft.  
841-4781 = 11.7 ft.  

Remarks: Recommended Zoning:  
1) South of latitude 44°043.6' to 44°041.5' zone on 841-4612 and apply x0.94 range ratio to all heights.  
2) South of latitude 44°041.5' south to 44°039.8' zone on 841-4781 and apply x1.03 range ratio to all heights.  
3) South of latitude 44°039.8' to 44°037.0' zone direct on 841-4781  

FROM PHONE CONV. W/JOE MULLEN 2/26/85.  

(Signature)  
Chief, Tidal Datums Section
FIELD TIDE NOTE (HI0146)

Field tide reduction of soundings was based on daily high and low water levels from the ADR gauge at Winterport, Maine (Station No. 841-4781). The values were reduced to mean low water using the bench mark elevations for the Winterport tide station. All times for the gauges installed by the field party are UTC.

The operating tide station at Rockland, Maine (841-5490) and Bar Harbor, Maine (841-3320) will serve as control for datum determination at all subordinate tide stations. The Rockland gauge was leveled by the NOAA Ship Mt. Mitchell at the beginning of OPR-Al66 in 1984 and was leveled out by HFP-3 on 8 October 1984.

Standard Fischer/Porter ADR tide gauges with tide staffs were installed, operated and observed by HFP-3 for the period indicated:

<table>
<thead>
<tr>
<th>SITE</th>
<th>LOCATION</th>
<th>PERIOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangor, Maine</td>
<td>LAT 44°47.1N</td>
<td>IN 30 May 84</td>
</tr>
<tr>
<td>#841-4612</td>
<td>LON 68°46.3W</td>
<td>OUT 9 Oct 84</td>
</tr>
<tr>
<td>Winterport, Maine</td>
<td>LAT 44°38.2N</td>
<td>IN 18 Jun 84</td>
</tr>
<tr>
<td>#841-4781</td>
<td>LON 68°50.5W</td>
<td>OUT 9 Oct 84</td>
</tr>
<tr>
<td>Bucksport, Maine</td>
<td>LAT 44°34.3N</td>
<td>IN 24 Aug 84</td>
</tr>
<tr>
<td>#841-4684</td>
<td>LON 68°48.1W</td>
<td>OUT 8 Oct 84</td>
</tr>
</tbody>
</table>

The staff on the Bangor gauge was changed on 27 June 1984. A level run was made to the old staff at the change. The staff was moved because the water level of the Penobscot River dropped below the staff's zero. A bubbler tide gauge was installed at the Bangor tide station to backup the ADR gauge when the river dropped below the level of the float well. Levels were run at the Winterport and Bucksport tide stations when the stations were installed and removed. There was no change in the tide staffs at Winterport or Bucksport from the level data.

The bubbler was installed at the Bangor, Maine tide station (841-4612) on 27 June 1984. The station operated until 31 August 1984 when the bubbler tubing was cut by accident during construction work at the tide station site.

ZONING

There are no recommendations for zoning by the field party. Zoning should be provided by the Tides and Water Levels Branch (N/OMS12).