



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of Ocean and Earth Sciences
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: March 28, 1997

HYDROGRAPHIC BRANCH: Atlantic

HYDROGRAPHIC PROJECT: OPR-K204-AHP

HYDROGRAPHIC SHEET: H-10661

LOCALITY: Galveston Bay, Texas, Red Bluff to Houston Point

TIME PERIOD: November 9, 1995 - April 4, 1996

TIDE STATION USED: 877-0613 Morgans Point, Tx.

Lat. $29^{\circ} 40.9'N$ Lon. $94^{\circ} 59.1'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.00 feet

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.2 feet

TIDE STATION USED: 877-1013 Eagle Point, Tx.

Lat. $29^{\circ} 28.8'N$ Lon. $94^{\circ} 55.1'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.00 feet

HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 1.1 feet

REMARKS: RECOMMENDED ZONING

Use zone(s) identified as: GB112, GB113, GB120 & GB127


Refer to attachment(s) for zoning information.

Note: Provided time series data are tabulated in English units (Feet) and on Greenwich Mean Time.

Note: Tidal phase progressions are inconsistent in this tidal regime. The best available time corrections are provided for both high and low water times. An average of the high and low water time corrections are provided for each zone for survey applications.



Note: Relative sea level trends show that the Galveston Bay, Texas area is undergoing substantial land subsidence. The relative sea level trend observed at the site for the control station, Galveston, Pier 21, for the time period 1950 through 1993 is +0.025 ft./yr. with a standard error of 0.002 ft./yr. As a result of high rate of sea level change, the 1960 to 1978 Tidal Epoch value of Mean Lower Low Water (MLLW) used as chart datum and reference datum for NOS tidal predictions does not reflect present conditions. The data are under review to determine an updated value of MLLW. Even though the 1960-78 Epoch value of MLLW is not the most current, the change is in the direction that is safe for navigation purposes.



CHIEF, TIDAL ANALYSIS BRANCH

Final tide zone correctors and node point locations for OPR
K204-AHP. Sheet H-10661.

Format: Longitude in decimal degrees (negative value denotes
Longitude West),
Latitude in decimal degrees
Tide Station (in recommended order of use)
Average Time Correction (in minutes)
Range Correction

		Tide Station Order	AVG Time Correction	Range Correction
Zone GB112				
-94.97929	29.552671	877-1013	30	1.12
-95.011273	29.525865	877-0613	-24	0.94
-95.017311	29.546834			
-95.016733	29.557514			
-95.013385	29.568704			
-94.999816	29.590316			
-94.987435	29.60139			
-94.955797	29.629003			
-94.946074	29.631713			
-94.902708	29.656925			
-94.869904	29.615248			
-94.931651	29.581928			
-94.97929	29.552671			
Zone GB113				
-94.902708	29.656925	877-1013	30	1.16
-94.874064	29.670729			
-94.837099	29.689389			
-94.810854	29.701673			
-94.784105	29.71264			
-94.758871	29.720976			
-94.708906	29.724485			
-94.682163	29.721414			
-94.688248	29.671402			
-94.732652	29.671841			
-94.769487	29.663506			
-94.803295	29.649906			
-94.869904	29.615248			
-94.902708	29.656925			
Zone GB120				
-94.987435	29.60139	877-0613	-12	0.97
-95.02613	29.606029	877-1013	42	1.15
-95.030133	29.620524			
-95.005764	29.66289			
-94.982082	29.677124			
-94.918321	29.666686			
-94.902708	29.656925			
-94.946074	29.631713			

-94.955797 29.629003
-94.987435 29.60139

Zone GB127

-95.005764	29.66289	877-0613	0	1.00
-95.033819	29.688195	877-1013	54	1.19
-95.012401	29.708916			
-94.998965	29.714083			
-94.992438	29.734754			
-94.980989	29.739753			
-94.944645	29.728253			
-94.935471	29.725308			
-94.900324	29.71379			
-94.918321	29.666686			
-94.982082	29.677124			
-95.005764	29.66289			