



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: January 16, 1997

HYDROGRAPHIC BRANCH: Pacific
HYDROGRAPHIC PROJECT: OPR-P139-RA
HYDROGRAPHIC SHEET: H-10713

LOCALITY: Knight Island from Point Helen to Lucky Bay, Southwest
Prince William Sound, Alaska

TIME PERIOD: September 3 - 12, 1996

TIDE STATION USED: 945-4777 Chenega Island, Southwest End, AK
Lat. $60^{\circ} 17.2' N$ Lon. $148^{\circ} 07.2' W$
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 3.300 meters

TIDE STATION USED: 945-4671 Point Helen, Knight Island, AK
Lat. $60^{\circ} 09.2' N$ Lon. $147^{\circ} 46.0' W$
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 3.240 meters

TIDE STATION USED: 945-4691 Herring Point, Knight Island Passage,
AK
Lat. $60^{\circ} 28.5' N$ Lon. $147^{\circ} 47.5' W$
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 3.362 meters

TIDE STATION USED: 945-4240 Valdez, AK
Lat. $61^{\circ} 07.5' N$ Lon. $146^{\circ} 21.7' W$
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 3.389 meters

REMARKS: RECOMMENDED ZONING

Use zones identified as: PWS16, PWS17, PWS20 & PWS36
Refer to attachment(s) for zoning information.

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



CHIEF, TIDAL ANALYSIS BRANCH



Final tide zone nodal point locations for OPR P139-RA-96.
 Sheet H-10713

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 PWS16 | | | | |
| -147.496732 | 60.017507 | 9454671 | Direct | 1.01 |
| -147.343164 | 60.149285 | 9454777 | Direct | 0.99 |
| -147.483114 | 60.235739 | 9454240 | Direct | 0.96 |
| -147.481428 | 60.261107 | | | |
| -147.706694 | 60.241614 | | | |
| -147.752622 | 60.226545 | | | |
| -147.77381 | 60.206587 | | | |
| -147.766071 | 60.169257 | | | |
| -147.496732 | 60.017507 | | | |
| Zone PWS17 | | | | |
| -147.766071 | 60.169257 | 9454671 | Direct | Direct |
| -147.897377 | 60.108049 | 9454777 | Direct | 0.98 |
| -147.848528 | 60.077316 | 9454240 | Direct | 0.95 |
| -147.844895 | 60.06532 | | | |
| -147.817231 | 60.05974 | | | |
| -147.607856 | 59.951198 | | | |
| -147.496732 | 60.017507 | | | |
| -147.766071 | 60.169257 | | | |
| Zone PWS20 | | | | |
| -148.121387 | 60.20888 | 9454777 | Direct | Direct |
| -148.138224 | 60.236579 | 9454671 | Direct | 1.03 |
| -148.213991 | 60.255044 | 9454240 | Direct | 0.97 |
| -148.192103 | 60.266795 | | | |
| -148.135913 | 60.305498 | | | |
| -147.921026 | 60.250008 | | | |
| -147.781279 | 60.245812 | | | |
| -147.752622 | 60.226545 | | | |
| -147.77381 | 60.206587 | | | |
| -147.766071 | 60.169257 | | | |
| -147.897377 | 60.108049 | | | |
| -147.983011 | 60.100932 | | | |
| -147.971537 | 60.150964 | | | |
| -148.067509 | 60.184539 | | | |
| -148.121387 | 60.20888 | | | |
| Zone PWS36 | | | | |
| -147.37047 | 60.281064 | 9454671 | Direct | 1.03 |
| -147.358524 | 60.29953 | 9454691 | Direct | 0.98 |
| -147.78401 | 60.368002 | 9454240 | Direct | 0.97 |
| -147.715614 | 60.31296 | | | |

-147.779595 60.265117
-147.781279 60.245812
-147.752622 60.226545
-147.706694 60.241614
-147.481428 60.261107
-147.483114 60.235739
-147.37047 60.281064