



Mapped by the Defense Mapping Agency and the National Ocean Service  
Published for civil use by the Geological Survey Control by NOS/NOAA and USCE  
Topography by multiplex methods from aerial photographs taken 1943. Field checked 1949  
Bathymetry compiled by the National Ocean Service from tide-coordinated hydrographic surveys. This information is not intended for navigational purposes  
Mean low water (dotted) line and mean high water (heavy solid) line compiled by NOS from tide-coordinated aerial photographs. Apparent shoreline (outer edge of vegetation) shown by light solid line  
Polyconic projection. 1927 North American Datum  
10,000-foot grid based on Washington coordinate system, south zone and Oregon coordinate system, north zone  
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue  
To place on the predicted North American Datum 1983, move the projection lines 24 meters north and 97 meters east as shown by dashed corner ticks  
Dashed land lines indicate approximate locations  
Revisions shown in purple compiled by the Geological Survey from aerial photographs taken 1981 and other sources  
This information not field checked. Map edited 1984

NATIONAL OCEAN SERVICE  
HYDROGRAPHIC SURVEY INDEX

SCALE 1:24,000

1 0000 0 1000 2000 3000 4000 5000 6000 7000 FEET  
1 0 5 10 15 20 25 30 35 40 KILOMETER

ROAD CLASSIFICATION  
Secondary highway, all weather, Light duty road, all weather, hard surface improved surface  
Unimproved road, fair or dry weather  
State Route

CONTOUR INTERVAL 50 FEET  
DASHED LINES REPRESENT HALF-INTERVAL CONTOURS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929  
BATHYMETRIC CONTOUR INTERVAL 2 METERS WITH SUPPLEMENTARY 1 METER CONTOURS - DATUM IS MEAN LOWER LOW WATER  
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE  
THE MEAN RANGE OF TIDE IS APPROXIMATELY 2.4 METERS

BASE MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
BATHYMETRIC SURVEY DATA COMPLIES WITH INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO) SPECIAL PUBLICATION 44 ACCURACY STANDARDS  
AND/OR STANDARDS USED AT THE DATE OF THE SURVEY  
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, CO. ORADO 80225, OR RESTON, VIRGINIA 22092  
AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20852  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

UTM GRID AND 1984 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

WASHINGTON  
QUADRANGLE LOCATION

KNAPPTON, WASH. - OREG.  
46123-C7-TB-024  
1949  
PHOTOREVISED 1984  
BATHYMETRY ADDED 1984  
DMA 1276 IV SE - SERIES V891

USGS NMD HISTORICAL MAP  
DEC 19 1985  
REC'D FILE COPY

HYDROGRAPHIC SURVEY INFORMATION			
SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (NAUT. MILES)
H-8420	1958	1:10,000	01-12
H-8422	1958	1:10,000	01-17

NOS CHART 18521 MARCH 27, 1982 1:40,000