



1 X 2 DEGREE QUADRANGLE
SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names
- Bathymetric contours in meters



U.S. GEOLOGICAL SURVEY
NATIONAL OCEAN SERVICE



1989

Produced by the United States Geological Survey
and the National Ocean Service

Compiled from USGS 1:100 000-scale topographic maps dated 1983-84
Supersedes map dated 1978. Map edited 1989

Bathymetry compiled by the National Ocean Service from tide-coordinated
hydrographic surveys. This information is not intended for navigational
purposes.

Mean lower low water (dotted) line and mean high water (heavy solid) line
compiled by NOS from tide-coordinated aerial photographs

North American Datum of 1983 (NAD 83). Projection and
10 000-meter grid: Universal Transverse Mercator, zone 18

25 000-meter grid ticks: Maryland, Pennsylvania (south
zone), Virginia (north zone), and West Virginia (north
zone). Coordinate Systems of 1983

The difference between NAD 83 and North American Datum of
1927 (NAD 27) for 7.5 minute intersections is given in USGS
Bulletin 1875

There may be private inholdings within the boundaries of the
National or State reservations shown on this map

1989 MAGNETIC DECLINATION FROM TRUE NORTH VARIES FROM 9°1' (160 MILS) WESTERLY FOR THE CENTER OF THE WEST EDGE TO 11° (196 MILS) WESTERLY FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS 6.5° WESTERLY

CONTOUR INTERVAL 40 METERS WITH SUPPLEMENTARY
CONTOURS AT 20 METER INTERVALS

NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER

BATHYMETRIC CONTOUR INTERVAL 2 METERS
DATUM IS MEAN LOWER LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE

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 AS OF THE DATE OF THE SURVEYS

CONVERSION TABLE

Meters	Feet	Meters	Feet
1	3.2808	1	3.048
2	6.5616	2	6.096
3	9.8424	3	9.144
4	13.1232	4	12.192
5	16.4040	5	15.240
6	19.6848	6	18.288
7	22.9656	7	21.336
8	26.2464	8	24.384
9	29.5272	9	27.432
10	32.8080	10	30.480

To convert meters to feet
multiply by 3.2808

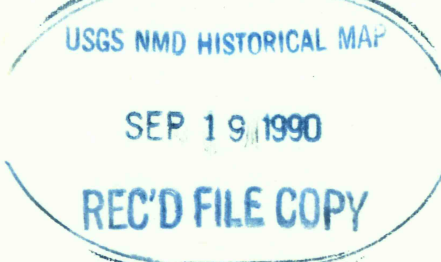
To convert feet to meters
multiply by 0.3048

FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND NATIONAL OCEAN SERVICE, ROCKVILLE, MARYLAND 20852

Topographic Map Symbols

Dual highway, interchange	
Primary highway, hard surface	
Secondary highway, hard surface	
Light duty road, hard or improved surface	
Other road; trail	
Route marker: Interstate; U.S.; State	
Bridge: overpass, underpass	
Tunnel: road; railroad	
Railroad: standard gauge; single, multiple track	
Railroad: narrow gauge; single, multiple track	
Build-up area; locality; elevation	
Airport: runway pattern known; unknown	
Natural boundary	
State boundary	
County boundary	
National or State reservation boundary	
Land grant boundary	
U.S. public lands survey: range, township (surveyed)	
U.S. public lands survey: range, township (granted)	
Dam; pipeline: aboveground, underground	
Pier; landmark feature; landmark building	
Well; water; other; spring; tank	
Cave; mine; quarry; oil platform	
Landmark area; landmark marker	
Colorful surface: strip mine, lava, sand	
Contours: index; intermediate; supplementary	
Bathymetric contours: index; primary	
Bathymetric contours: intermediate; supplementary	
Stream, lake; perennial; intermittent	
Reefs, large and small; falls, large and small	
Land subject to controlled inundation; marsh, swamp	
Woodland; orchard, vineyard	
Mangrove	

A pamphlet describing topographic maps is available on request
Figures in red denote approximate distances in kilometers between markers



BALTIMORE, MD.-PA.-VA.-W. VA.

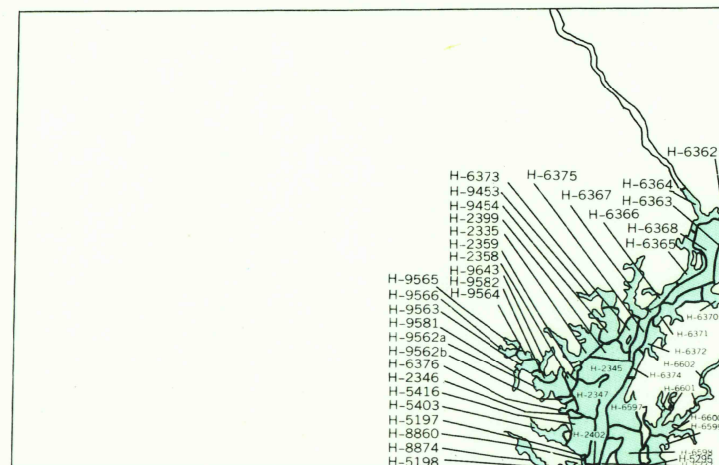


SCALE 1:250 000
1 CENTIMETER ON THE MAP REPRESENTS 2.5 KILOMETERS ON THE GROUND
CONTOUR INTERVAL 40 METERS
SUPPLEMENTARY CONTOUR INTERVAL 20 METERS

HYDROGRAPHIC SURVEY INFORMATION

SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (Nad. Meas.)	SURVEY NUMBER	SURVEY DATE	SURVEY SCALE	SURVEY LINE SPACING (Nad. Meas.)
H-2335	1897	1:20,000	01 17	H-6373	1938	1:10,000	01 10
H-2345	1898-97	1:20,000	03 18	H-6374	1938	1:10,000	02 06
H-2346	1897	1:10,000	01 06	H-6375	1938	1:20,000	02 10
H-2347	1897	1:10,000	01 08	H-6376	1938	1:10,000	02 06
H-2356	1906	1:10,000	10 15	H-6387	1940	1:10,000	01 06
H-2359	1906	1:10,000	10 16	H-6388	1940	1:10,000	02 06
H-2369	1906	1:20,000	06 23	H-6389	1940	1:10,000	01 06
H-2402	1906	1:20,000	06 26	H-6390	1940	1:10,000	01 06
H-5197	1932	1:20,000	02 17	H-6401	1940	1:10,000	01 05
H-5198	1932	1:10,000	01 12	H-6402	1940	1:10,000	01 12
H-5237	1932	1:20,000	02 30	H-6403	1940	1:10,000	02 07
H-5295	1932	1:10,000	01 10	H-6404	1940	1:10,000	01 08
H-5403	1933	1:10,000	01 04	H-6453	1974	1:10,000	01 08
H-5418	1933	1:10,000	02 10	H-6454	1974	1:10,000	01 08
H-6362	1938	1:10,000	01 06	H-6455	1975-76	1:10,000	02 06
H-6363	1938	1:10,000	02 08	H-6456	1975-76	1:10,000	02 06
H-6364	1938	1:10,000	01 04	H-6457	1976	1:10,000	01 04
H-6365	1938	1:10,000	02 10	H-6458	1976-78	1:10,000	01 04
H-6366	1938	1:10,000	02 07	H-6459	1976-78	1:10,000	01 03
H-6367	1938	1:10,000	02 07	H-6460	1976	1:10,000	01 03
H-6368	1938	1:10,000	02 07	H-6461	1976-78	1:10,000	01 03
H-6370	1938	1:10,000	01 06	H-6462	1976	1:10,000	01 03
H-6371	1938	1:10,000	01 06	H-6463	1976	1:10,000	01 03
H-6372	1938	1:10,000	01 06	H-6464	1976	1:10,000	01 03

HYDROGRAPHIC SURVEY INDEX



Photographic copies of the above and prior surveys may be obtained, at the cost of reproduction, by addressing the Director (NCE 263), National Ocean Service, National Oceanic and Atmospheric Administration, Rockville, Maryland 20852.