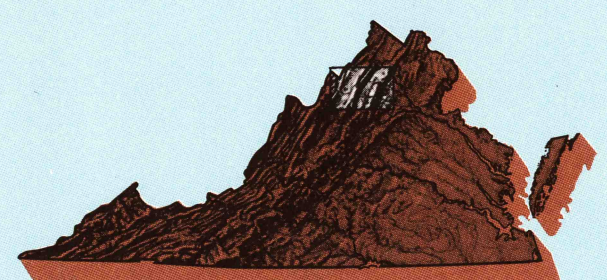


38078-E1-TM-13

Front Royal

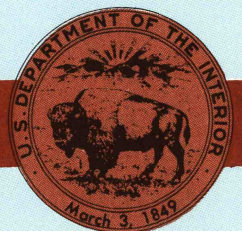
VIRGINIA—WEST VIRGINIA

1:100 000-scale metric
topographic map



30 X 60 MINUTE QUADRANGLE
SHOWING

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

GEOLOGICAL SURVEY

1986

Produced by the United States Geological Survey
Compiled from USGS 1:24 000-scale topographic maps dated 1965-1979. Planimetry revised from aerial photographs taken 1984 and other source data.
Revised information not field checked.
Map edited 1986.
Projection and 10 000-meter grid, zone 17
Universal Transverse Mercator
25 000-foot grid ticks based on Virginia coordinate system, north zone and West Virginia coordinate system, north zone. 1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 8 meters south and 23 meters west.
There may be private inholdings within the boundaries of the National or State reservations shown on this map.

CONTOUR INTERVAL 20 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
ELEVATIONS SHOWN TO THE NEAREST METER

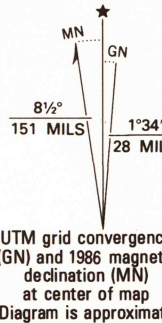
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE

Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9659
8	26.2467
9	29.5275
10	32.8084

To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048

DECLINATION DIAGRAM



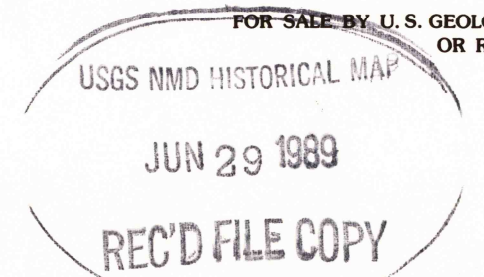
UTM grid convergence (GM) and 1983 magnetic declination (MD) at center of map.
Diagram is approximate.

ADJOINING MAPS

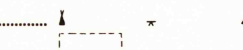
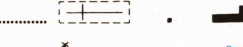
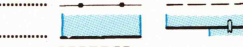
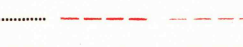
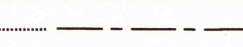
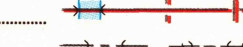
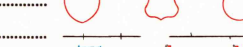
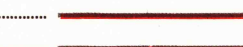
1	2	3
4	5	6
7	8	

1 Kingwood
2 Winchester
3 Frederick
4 Elkins
5 Washington West
6 Staunton
7 Charlottesville
8 Fredericksburg

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225
OR RESTON, VIRGINIA 22092



Topographic Map Symbols

- Primary highway, hard surface
Secondary highway, hard surface
Light duty road, principal street, hard or improved surface
Other road or street; trail
Route marker: Interstate, U. S.; State
Railroad: standard gauge; narrow gauge
Bridge: covered; underpass
Tunnel: road; railroad
Built up area; locality; elevation
Airport: landing field; landing strip
National boundary
County boundary
National or State reservation boundary
Land grant boundary
U. S. public lands survey: range, township; section
Range, township; section line: protracted
Power transmission line; pipeline
Dam: dam with lock
Cemetery; building
Windmill; water well; spring
Mine shaft; adit or cave; mine, quarry; gravel pit
Campground; picnic area; U. S. location monument
Ruins; old dwelling
Disturbed surface: strip mine, lava, sand
Contours: index; intermediate; supplementary
Bathymetric contours: index; intermediate
Stream, lake: perennial; intermittent
Area to be submerged; marsh; swamp
Land subject to controlled inundation; woodland
Scrub; mangrove
Orchard; vineyard
- 

A pamphlet describing topographic maps is available on request

