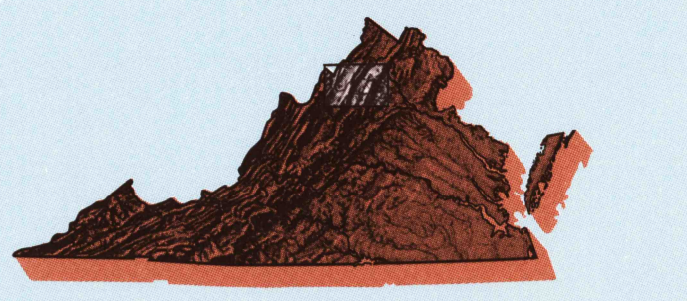


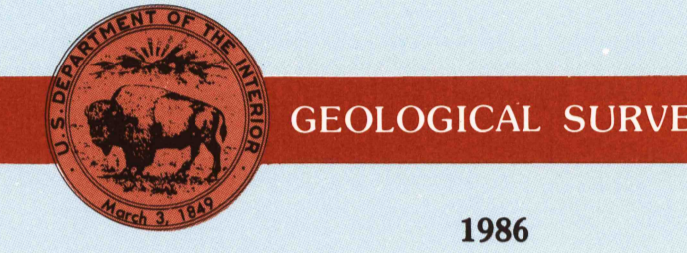
# Front Royal VIRGINIA—WEST VIRGINIA

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



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		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	MAGNETIC		1	2	3
1	3.2808	1986		1	2	3
2	6.5616	1981		4	5	6
3	9.8424	1976		7	8	
4	13.1232	1971				
5	16.4040	1966				
6	19.6848	1961				
7	22.9656	1956				
8	26.2464	1951				
9	29.5272	1946				
10	32.8080	1941				

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

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

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



### 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
- Roads, meter: intervals: U. S.; State
- Railroad: standard gage, narrow gage
- Bridge: overpass; underpass
- Tunnel: road; railroad
- Built up area: locality, elevation
- Airport: landing field; landing strip
- National boundary
- State boundary
- County boundary
- National or State reservation boundary
- Land grant boundary
- U. S. public lands survey: range, township, section
- Range, township; section line; protected
- Power transmission line: pipeline
- Dam; dam with lock
- Cemetery; building
- Windmill; water well; spring
- Mini dam; adobe or stone; quarry; gravel pit
- Campground; picnic area; U. S. location monument
- Ruins; cliff dwelling
- Distorted surface: strip mine, lava, sand
- Contours: index; intermediate; supplementary
- Bathymetric contours: index; intermediate
- Stream, lake, perennial; intermittent
- Ripids, large and small; falls, large and small
- Area to be submerged; marsh, swamp
- Land subject to controlled inundation; woodland
- Sorb; mangrove
- Orchard; vineyard

A pamphlet describing topographic maps is available on request  
 FOR SALE BY U.S. GEOLOGICAL SURVEY  
 DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092