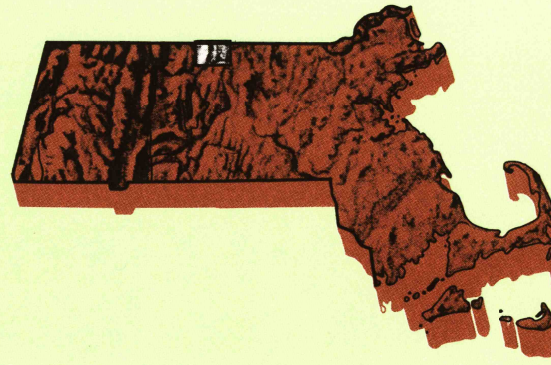




7.5 X 15 MINUTE QUADRANGLE
SHOWING

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



GEOLOGICAL SURVEY

1988

Produced by the United States Geological Survey in cooperation with Massachusetts Department of Public Works
Control by USGS, NOS/NOAA, and Commonwealth of Massachusetts agencies
Compiled by photogrammetric methods from aerial photographs taken 1980-81. Field checked 1983. Map edited 1988
This area also covered by 7.5-minute, 1:25,000-scale maps: Royalston and Winchendon dated 1971
Projection and 1000-meter grid, zone 18
Universal Transverse Mercator
10,000-foot grid ticks based on Massachusetts coordinate system, mainland zone, and New Hampshire coordinate system
1927 North American Datum
To place on the predicted North American Datum 1983, move the projection lines 5 meters south and 39 meters west as shown by dashed corner ticks
There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 3 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 METER
OTHER ELEVATIONS SHOWN TO THE NEAREST 0.5 METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet			1	2	3
1	3.2808			4	5	
2	6.5617					
3	9.8425					
4	13.1234					
5	16.4042					
6	19.6850			6	7	8
7	22.9658					
8	26.2467					
9	29.5275					
10	32.8084					
To convert meters to feet multiply by 3.2808		UTM grid convergence (GN and 1983 magnetic declination (MM) at center of map)		1 Winchendon 2 Monadnock Mountain 3 Greenfield 4 Northfield 5 Ashburnham 6 Orange 7 Alford 8 Fitchburg		
To convert feet to meters multiply by 0.3048		Diagram is approximate				

FOR SALE BY U. S. GEOLOGICAL SURVEY
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Topographic Map Symbols

Primary highway, hard surface	
Secondary highway, hard surface	
Light-duty road, hard or improved surface	
Unimproved road, trail	
Route marker: Interstate; U. S.; State	
Railroad: standard gauge; narrow gauge	
Bridge: drawbridge	
Footbridge: overpass; underpass	
Built-up area: only selected landmark buildings shown	
House; barn; church; school; large structure	
Boundary:	
National, with monument	
State	
County, parish	
Civil township, precinct, district	
Incorporated city, village, town	
National or State reservation; small park	
Land grant with monument; found section corner	
U. S. public lands survey: range, township, section	
Range, township, section line: location approximate	
Fence or field line	
Power transmission line; railroad tower	
Dam; dam with lock	
Cemetery; grave	
Campground; picnic area; U. S. location monument	
Windmill; water well; spring	
Mine shaft; prospect; shaft or cave	
Control: horizontal station; vertical station; spot elevation	
Contours: index; intermediate; supplementary; depression	
Disrupted surface: strip mine, lava, sand	
Bathymetric contours: index; intermediate	
Perennial lake and stream; intermittent lake and stream	
Rapids, large and small; falls, large and small	
Swamp; marsh	
Saltonated marsh: hard subject to controlled inundation	
Woodland; scattered trees	
Scrub; mangrove	
Orchard; vineyard	

A pamphlet describing topographic maps is available on request

RETURN TO:
USGS RMD HISTORICAL MAP ARCHIVES

11-21-88

