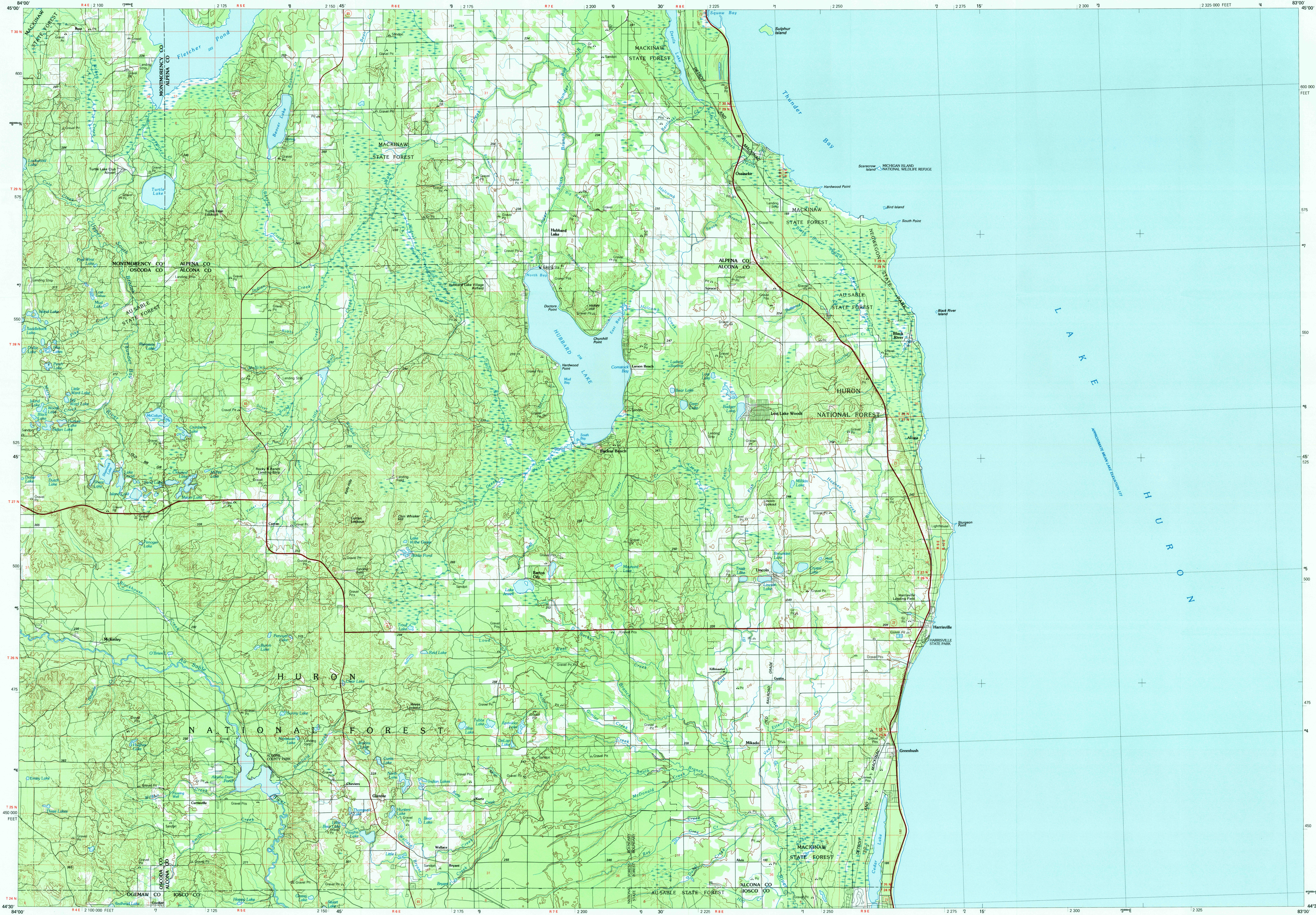


HUBBARD LAKE, MICHIGAN

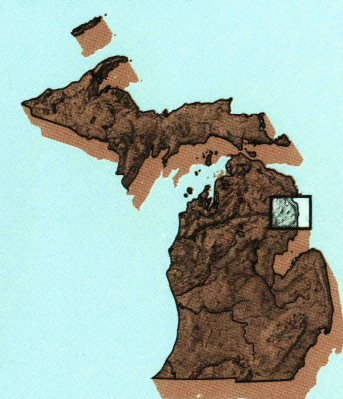
30 X 60 MINUTE SERIES (TOPOGRAPHIC)



Hubbard Lake

MICHIGAN

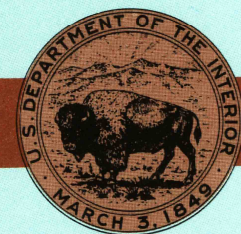
1:100 000-scale metric
topographic map



30 X 60 MINUTE QUADRANGLE
SHOWING

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

3/10/84



GEOLOGICAL SURVEY

1983

Produced by the United States Geological Survey
Compiled from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1959-1972. Planimetry revised from aerial photographs taken 1978 and other source data. Revised information not field checked. Map edited 1983
Projection and 10 000-meter grid, zone 17, Universal Transverse Mercator
25 000-foot grid ticks based on Michigan coordinate system, central zone
1927 North American Datum
To place on the predicted North American Datum 1983, move the projection lines 2 meters north and 5 meters west
There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 10 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		1	2	3
1	3.2808		1	2	3
2	6.5617		4	5	
3	9.8425				
4	13.1234		6	7	8
5	16.4042				
6	19.6850				
7	22.9659				
8	26.2467				
9	29.5276				
10	32.8084				
To convert meters to feet multiply by 3.2808		UTM grid convergence (6N) and 1983 magnetic declination (14N) at center of map. Diagram is approximate	1	Petokney	
To convert feet to meters multiply by 0.3048			2	Alpena	
			4	Craylings	
			6	Houghton Lake	
			7		
			8		

FOR SALE BY U. S. GEOLOGICAL SURVEY
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 gage; narrow gage	
Bridge: overpass; underpass	
Tunnel: road; railroad	
Ball 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; protracted	
Power transmission line; pipeline	
Dam; dam with lock	
Cemetery; building	
Windmill; water well; spring	
Mine shaft; pit or cave; mine; 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	
Rapids, large and small; falls, large and small	
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

RETURN TO:
USGS AND HISTORICAL MAP ARCHIVES

INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-1984

SCALE 1:100 000
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND
CONTOUR INTERVAL 10 METERS

HUBBARD LAKE, MICHIGAN
44083-E1-TM-100

1983