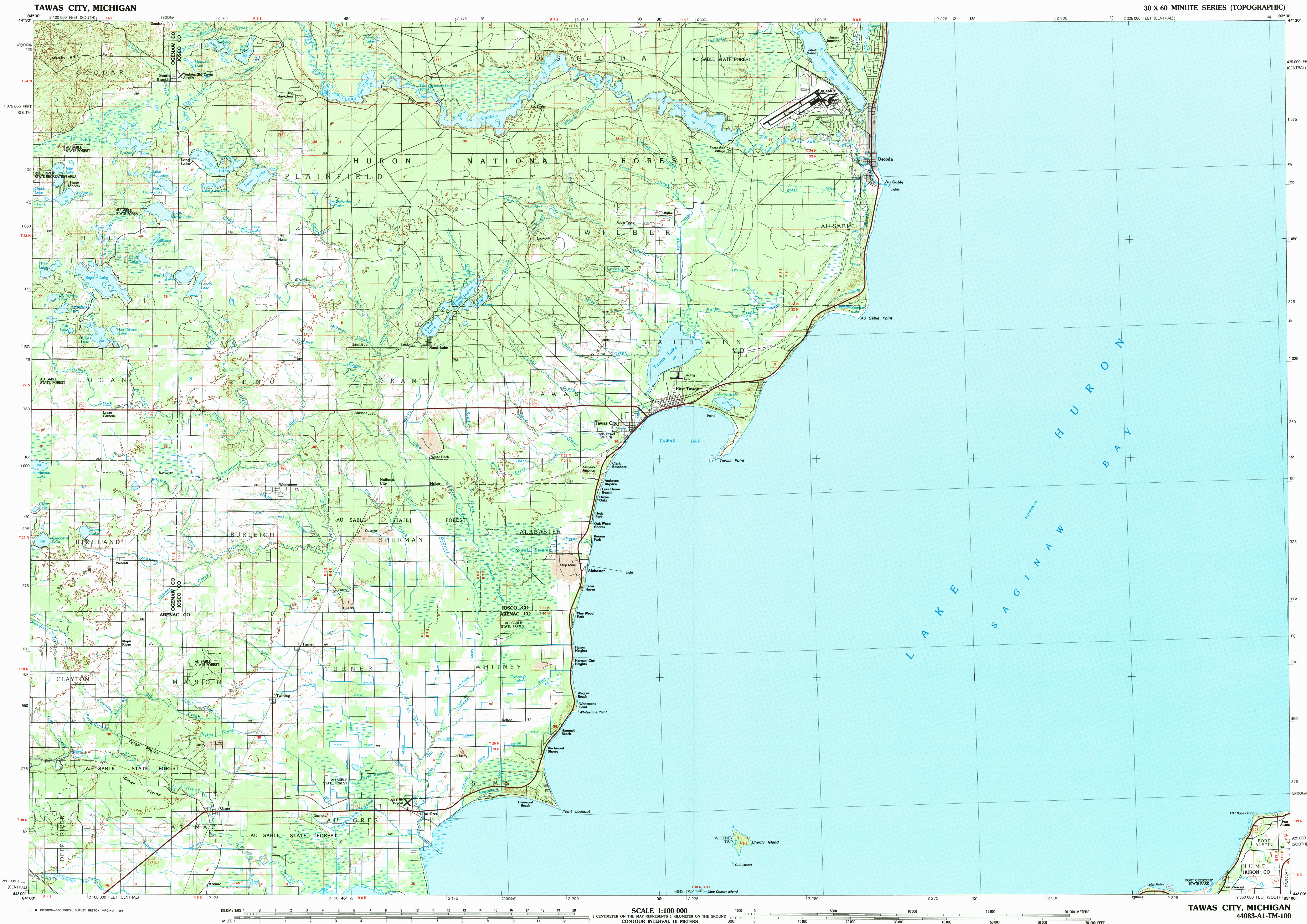
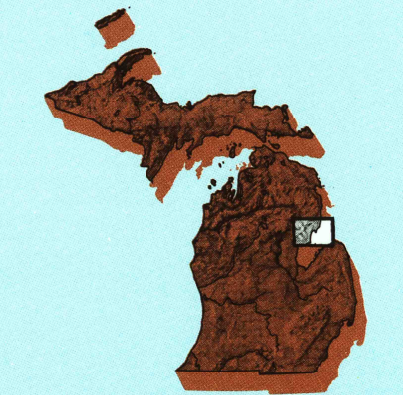




Tawas City

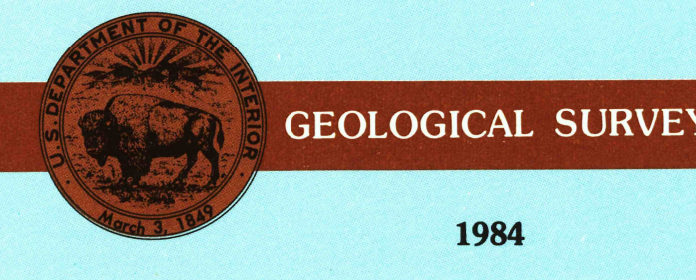
MICHIGAN

1:100 000-scale metric
topographic map



30 X 60 MINUTE QUADRANGLE
SHOWING

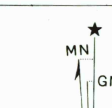
- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names



Produced by the United States Geological Survey
Compiled from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1959-1976. Planimetry revised from aerial photographs taken 1982 and other source data. Revised information not field checked. Map edited 1984.
Projection and 10 000-meter grid, zone 17.
Universal Transverse Mercator
25 000-foot grid ticks based on Michigan coordinate system, central and south zones
1927 North American Datum
To place on the predicted North American Datum 1983, move the projection lines 1 meter 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
SUPPLEMENTARY CONTOUR INTERVAL 5 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	50° 50 MILS 1° 45' 31 MILS	1	2	3	
2	6.5617		4	5		
3	9.8425					
4	13.1234					
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 (GN) and 1984 magnetic declination (MD) at center of map Diagram is approximate	4	5	6	
To convert feet to meters multiply by 0.3048			7	8		

1 Grayling

2 Hubbard Lake

3 Houghton Lake

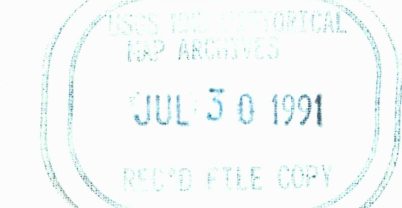
4 Point Aux Barques

5 Midland

6 Bay City

8 Harbor Beach

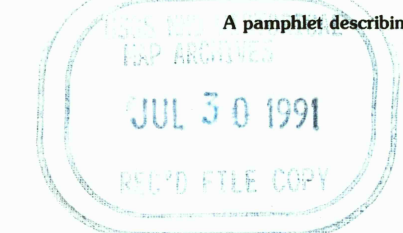
FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092



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 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: 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; 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



TAWAS CITY, MICHIGAN
44083-A1-TM-100
1984