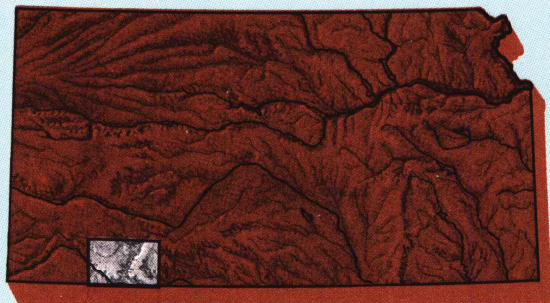


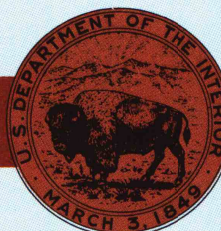
Liberal  
KANSAS-OKLAHOMA

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

1985

Produced by the United States Geological Survey  
Compiled from USGS 1:250 000-scale topographic maps dated 1965-1983. Planimetry revised from aerial photographs taken 1981 and other source data. Revised information not field checked. Map edited 1985.  
Projection and 10 000-meter grid, zone 14, Universal Transverse Mercator.  
25 000-foot grid ticks based on Kansas coordinate system, south zone.  
1927 North American Datum.  
To place on the predicted North American Datum 1983, move the projection lines 1 meter north and 36 meters east.  
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 GEODESIC 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

The diagram shows three vertical lines representing North directions: GN (Grid North), M (Magnetic North), and N (True North). The angle between GN and M is 0°54'. The angle between M and N is 9°. Below the lines, two horizontal distances are indicated: 16 MILS between GN and M, and 160 MILS between M and N.

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

# ADJOINING MAPS

|   |   |   |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 |   |

- 1 Ulysses
- 2 Dodge City
- 3 Kinsley
- 4 Hugoton
- 5 Protection
- 6 Guymon
- 7 Beaver
- 8 Buffalo

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

U.S. Regional  
Depository Copy  
DO NOT DISCARD

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: 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.....             |  |
| Ruin; cliff dwelling.....                                        |  |
| Disturbed 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

LIBERAL, KANSAS-OKLAHOMA

37100-A1-TM-100

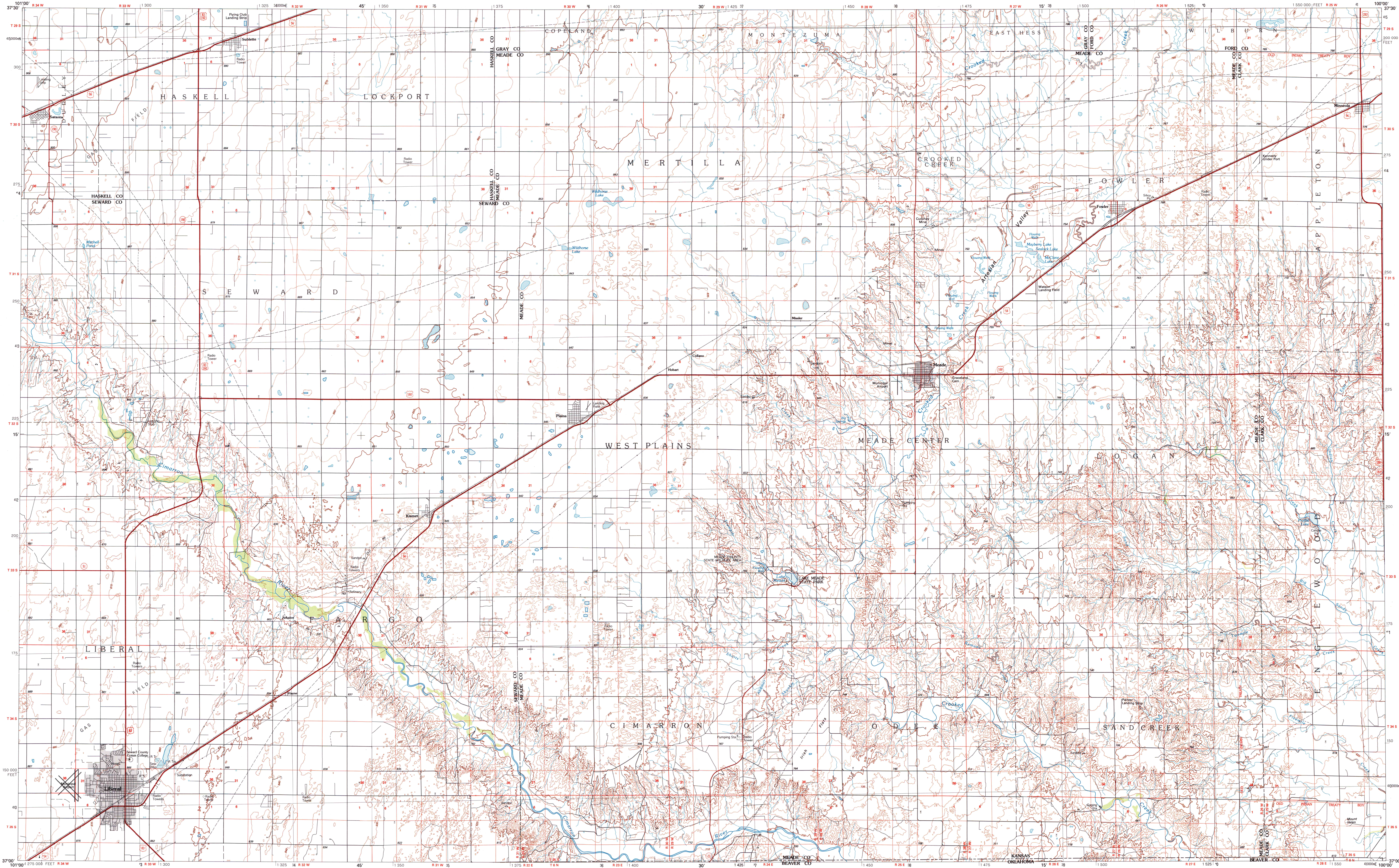
1985

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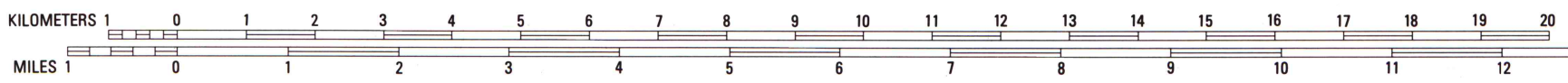
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LIBERAL, KANSAS-OKLAHOMA

30x60 MINUTE SERIES (TOPOGRAPHIC)



• INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-1988



SCALE 1:100 000

1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND  
CONTOUR INTERVAL 10 METERS  
SUPPLEMENTARY CONTOUR INTERVAL 5 METERS