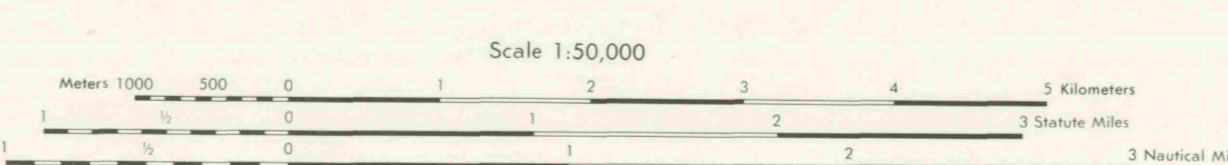


Prepared by the U.S. Geological Survey for publication by the Defense Mapping Agency Hydrographic/Topographic Center, Washington, D.C.

**LEGEND**

ON THIS MAP, A LAKE IS GENERALLY CONSIDERED AS BEING A MINIMUM OF 2.5 METERS (8 FEET) IN WIDTH. IN DEVELOPED AREAS, ONLY THROUGH ROADS ARE CLASSIFIED.

<b>ROADS</b>	Divided highway with median strip	Primary, all weather, hard surface	Secondary, all weather, hard surface	Light duty, all weather, hard or improved surface	Fair or dry weather, unimproved surface	Traffic	Route markers: Interstate, Federal, State	Bridge, with superstructure, without superstructure	RAILROADS (Standard gauge 1.44m, 4'8 1/2")	Single track	Multiple track	Nonoperating	Railroad station: location known, location unknown	Car line	Railroad bridge: With superstructure: Without superstructure	Tunnel: Highway, Railroad	<b>BOUNDARIES</b>	National, with monument	State, territory	County, parish	Civil township, town	Incorporated city, village, town	Reservation: National, State, Military
	Power transmission line	Buildings	Structures	Church, School	Power substation	Windmill, Watermill	Well, Tank	Mine shaft	Cave or mine or quarry	Horizontal control station	Bench mark, monumented	Bench mark, non-monumented	Spot elevations in meters	Leaves, rills, dikes	Bluffs, cliffs	Woodland	Scattered trees, scrub	Vegetation, Orchard, plantation	Interriment lake, Dam, Earthfill, Masonry	Stream, Perennial, Intermittent	Marsh, swamp	Small rapids, Small falls	Large rapids, Large falls



**ELEVATIONS IN METERS**  
CONTOUR INTERVAL 10 METERS  
SUPPLEMENTARY CONTOURS 5 METERS

**SPHEROID** ..... CLARKE 1866  
**GRID** ..... 1,000 METER UTM ZONE 15 (BLACK NUMBERED LINES)  
10,000 FOOT STATE GRID TICKS: MISSOURI, WEST ZONE AND KANSAS, NORTH ZONE  
**PROJECTION** ..... UNIVERSAL TRANSVERSE MERCATOR  
**VERTICAL DATUM** ..... NATIONAL GEODETIC VERTICAL DATUM OF 1929  
**HORIZONTAL DATUM** ..... 1927 NORTH AMERICAN DATUM  
**CONTROL BY** ..... U.S. GEOLOGICAL SURVEY  
**PREPARED BY** ..... U.S. GEOLOGICAL SURVEY  
DIRAHTIC

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**100 METER REFERENCE**

- Read large numbers labeling the VERTICAL grid lines (left of point and estimate height (100 meters) from grid line to point. 12 3
- Read large numbers labeling the HORIZONTAL grid line below point and estimate height (100 meters) from grid line to point. 45 6

Example: 123456

**WHEN REPORTING OUTSIDE THE 100,000 METER SQUARE AREA IN WHICH THE POINT LIES, PREFIX THE 100,000 METER SQUARE IDENTIFICATION.**  
Example: UPT123456

**WHEN REPORTING OUTSIDE THE GRID ZONE DESIGNATION AREA IN WHICH THE POINT LIES, PREFIX THE GRID ZONE DESIGNATION.**  
Example: 15SUP123456

**ELEVATION GUIDE**

**ADJOINING SHEETS**

6963 I	7063 IV	7063 I
6963 II V779	7063 III	7063 II
6962 I	7062 IV	7062 I

**BOUNDARIES**

**GRID CONVERGENCE** 17' (21 METERS) FOR CENTER OF SHEET

**TO CONVERT A MAGNETIC AZIMUTH TO A GRID AZIMUTH**  
1973 G-M ANGLE 71° (130 MAS)  
SUBTRACT G-M ANGLE

**THIS MAP IS RED-LIGHT READABLE**

USERS SHOULD REFER TO CORRECTIONS, ADDITIONS, AND COMMENTS FOR IMPROVING THIS PRODUCT TO DIRECTOR, DEFENSE MAPPING AGENCY HYDROGRAPHIC/TOPOGRAPHIC CENTER, WASHINGTON, D.C. 20315, ATTN: PFD.