Map Systems Guide

ASRC SYSTEM
Uses 1 km grids. Labeled with a 0.0 origin in lower left, read to 1/10 km precision “read right up” “Delta-One-Four-Two-Six”

GAZETTEER
Large scale topographic map book of a state.
Each page is 16 USGS topo maps in size.

LAT / LONG
Measured in Degrees, Minutes, Seconds. (° ’ ”) Read from the edge of the USGS topo.
1° = 60’ and 1’ = 60”
1” lat = 1 nautical mile = 1.15 statute mile

GPS
Uses several variants of Lat/Long.
150° 20’ 30” = 150° 20.5’ = 150.342°

UTM (Universal Transverse Mercator)
Military system for mapping entire globe. Uses meters for position. Also has many zones throughout the world, each having a different coordinate origin. Need to know what zone you are in to give the coordinates! Zone 17, 4209400 N 710400 E

BRMRG Map Filing System
Each Topo is given a unique map number and letter combo. The letter is the file folder in the lap drawer that contains the map, and the letter is the quadrant that the map is in. Each folder contains copies of 4 USGS topos.
VA grid block (148) = 1 folder(148) = 4 topos (148A, 148B, 148C, 148D)
TOPO MAP INFO
There's useful information on the edge of the topo if you have to convert between coordinate systems.

- **Map number**: 157B
- **Map Name**: CHARLOTTESVILLE WEST QUADRANGLE
- **Series**: 7.5 MINUTE SERIES (TOPOGRAPHIC)
- **UTM Zone**: 14Z
- **UTM Grid and True Magnetic North Declination at Center of Sheet**
- **Decimation indicator true north, grid north (UTM) and magnetic north**
- **Contour interval**: 20 feet
- **Map scale**: 1:24,000
- **Legend**
- **Revision date**: 1973
- **Adjacent map names**
- **State Plane**
- **Lat / long**
- **Polycyclic projection. 1927 North American datum. 10,000-foot grid based on Virginia coordinate system. South zone. 1000-meter Universal Transverse Mercator grid lines. Zone 17, shown in blue. Revised North American Datum 1983.**