

Digital Mapping for Search and Rescue / Emergency response

Course Outline

1. Maps for SAR / Emergency response
 - a. Needs
2. Introduction to Electronic Maps
 - a. Software
 - b. Internet based
3. Terrain Navigator
 - a. Basic tour
 - b. Access maps / Storing maps / Topo map Server
 - i. Map information
 - c. Setting preferences
 - i. Coordinate System
 - ii. Datum
 - d. Viewing
 - i. Single view / Seamless
 - ii. 2D / 3D
 - iii. Scale / zooming / Map Overview
 - e. Finding locations
 - i. City / zip code / Coordinates
 - ii. Bookmark view
 - f. EXERCISE – Table top #1
 - g. Measuring distance and bearings
 - i. True vs Magnetic
 - h. Adding waypoints
 - i. Adding detail
 - i. Adding tracks
 - i. Adding detail
 - ii. Profile
 - iii. Line of Sight
 - j. Routes
 - i. Map segmenting
 - ii. Area calculation
 - k. Add labels
 - l. EXERCISE - Table top #1 continue
 - m. Terrain Navigator Part 2
 - i. Printing
 - ii. GPS integration
 - iii. Integration with Google Earth
 - n. EXERCISE – Table top #1 continue

4. DNR Garmin
5. Terrain Navigator Pro
 - a. Comparison

6. Topo USA
 - a. Basic tour
 - b. Access maps / Storing maps / MapShare
 - i. Map information
 - c. Setting preferences
 - i. Coordinate System
 - ii. Datum
 - d. Viewing
 - i. Single view / Seamless
 - ii. 2D / 3D
 - iii. Scale / zooming / Map Overview
 - e. Finding locations
 - i. City / zip code / Coordinates
 - ii. Bookmark view
 - f. EXERCISE – Table top #2
 - g. Measuring distance and bearings
 - i. True vs Magnetic
 - h. Adding waypoints
 - i. Adding detail
 - i. Adding tracks
 - i. Adding detail
 - ii. Profile
 - iii. Line of Sight
 - j. Routing / Route Planning
 - k. Search management
 - i. Range rings
 - ii. Map segmenting
 - iii. Area calculation
 - l. Add labels
 - m. EXERCISE - Table top #2 continue
 - n. Topo USA Part 2
 - i. Printing
 - ii. GPS integration
 - o. EXERCISE – Table top #2 continue

7. Google Earth

- a. Getting acquainted with GE
- b. Finding places
 - i. Waypoints
 - ii. Tracks/Trails
- c. GPS integration
- d. Layers
 - i. Adding in
 - ii. Finding additional data
- e. Search management
 - i. Segments
 - ii. Adding photos
- f. Saving / Printing
- g. EXERCISE – Table Top #3
- h. Working Offline
- i. Sharing maps / remote planning
- j. Tracking searches

8. ArcGIS Explorer

- a. Getting acquainted with AE
- b. Finding places
 - i. Waypoints
 - ii. Tracks/Trails
- c. GPS integration
- d. Layers
 - i. Adding in
 - ii. Finding additional data
- e. Routing / Route Planning
- f. Search management
 - i. Range rings
 - ii. Segments
 - iii. Viewshed
 - iv. Adding photos
- g. Saving / Printing
- h. EXERCISE – Table Top #4
- i. Sharing maps / remote planning
- j. Working Offline