Creating Hasty Task Assignments in MapSAR Enhanced

Nov 20, 2014
Note that the "Hasty" features have been replaced by the Quick Response Task (QRT) features. This is a replacement in name only.
Also the Hasty-assignments tool has been superseded by the QRT/Air/Search-Create Assignment Tool. Please also refer to the documentation for that tool as this document is being updated.

Don Ferguson, PhD

Mountaineer Area Rescue Group

A member of
Appalachian Search and Rescue Conference

Appalachian Search and Rescue Conference

Mountaineer Area Rescue Group

Objective

- Typical initial (Hasty) search tasks occur along linear features such as Roads, Trails or hydro feature (drainage, stream, creek, etc).
- Need for rapid deployment of teams
  - Process the Task Assignment Forms (TAF)
  - Print maps
- *Hasty Segments Tool* rapidly defines hasty search areas based on availability of linear features in the immediate area of the IPP.
- Hasty Assignment Tool utilizes spatial information and feature names of the hasty search areas to auto-generate Assignments which are then available for printing using the Create Assignment Form Tool

Hasty Task Explanation

- Emphasis is on speed (Type I)
- Also known as Scratch search
- Small fast moving teams quickly clearing likely locations
  - Trails, roads, attractants (waterfalls, rock outcrops), etc.
  - Campsites
  - Known hazardous areas
  - Creeks and drainages
- Route search – follow man-made or natural land route as guide
- Area search – use of artificial navigation device (compass or GPS) to quickly clear an area.
  - Large fields
- Mark beginning and end of search or record on map

Understanding the Need

- The current bottleneck is in processing the TAF.
  - The Assignment statement is fairly generic (helps with rapid processing)
    - " Search along the Flat Rock Trail starting at the main trailhead (17 635890 4312178)and continue for 3 miles to the end of the trail (17)
  - Need to provide details on start and stop locations and /or length of the feature to search.
    - Stop / stop locations could be descriptive names or coordinates. Both take time to compile.

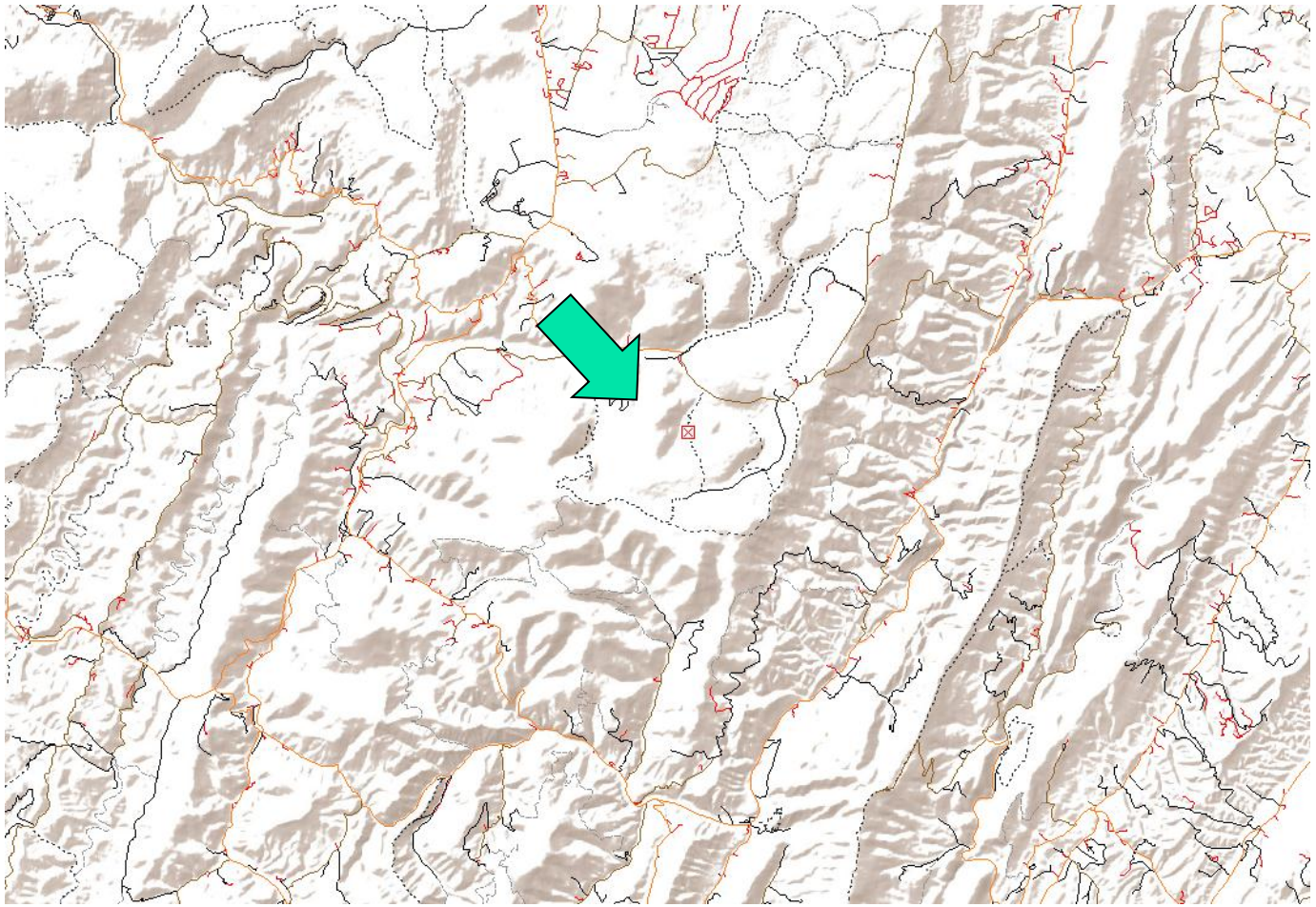
Understanding the Need…the map

- Once a basic map with roads, trails and hydro features is available maps can be produced. But…
  - Need to locate and identify the area to be searched on field team maps

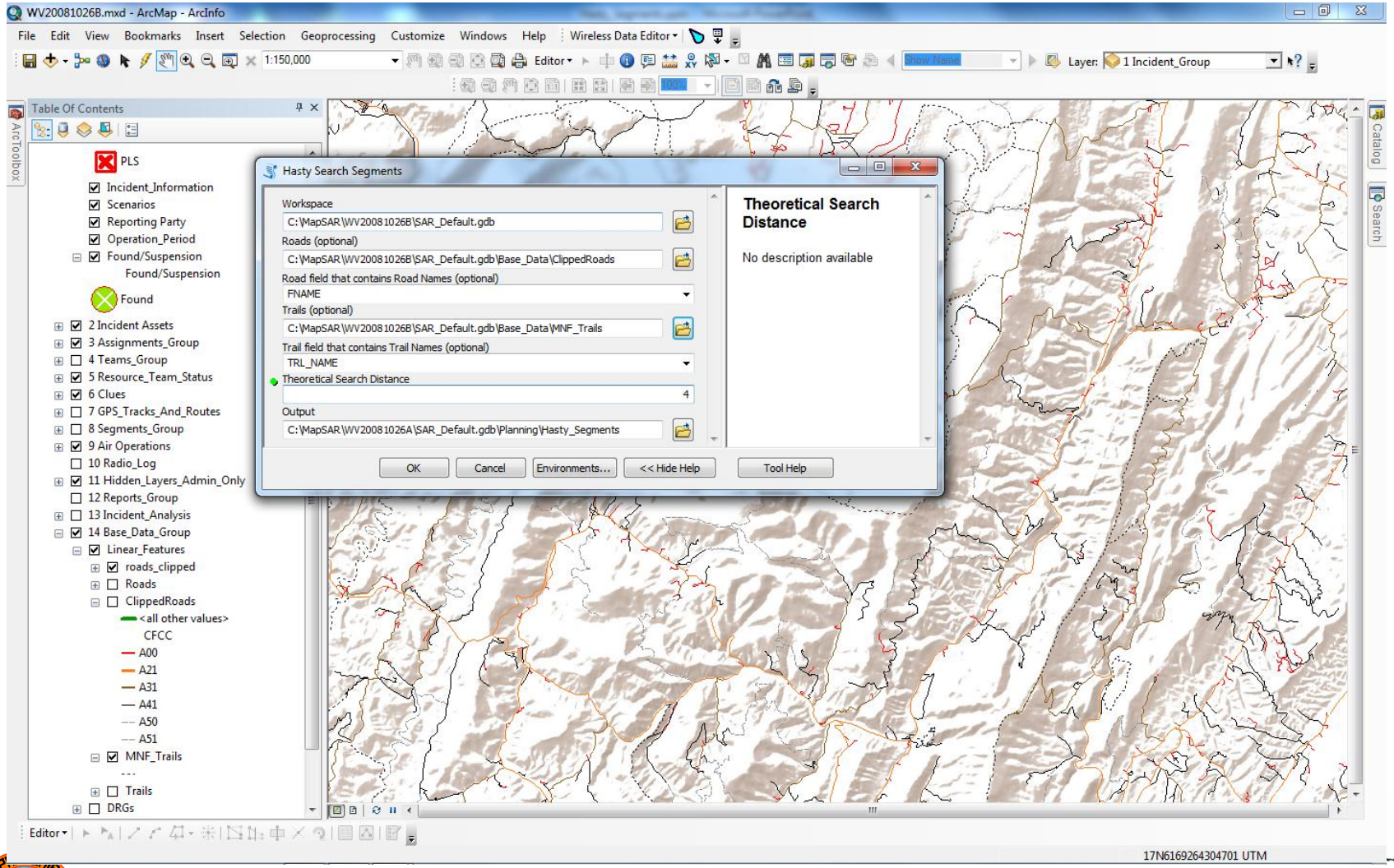
Basemap with Linear Feature Layers

(Roads and Trails)

Locate the IPP



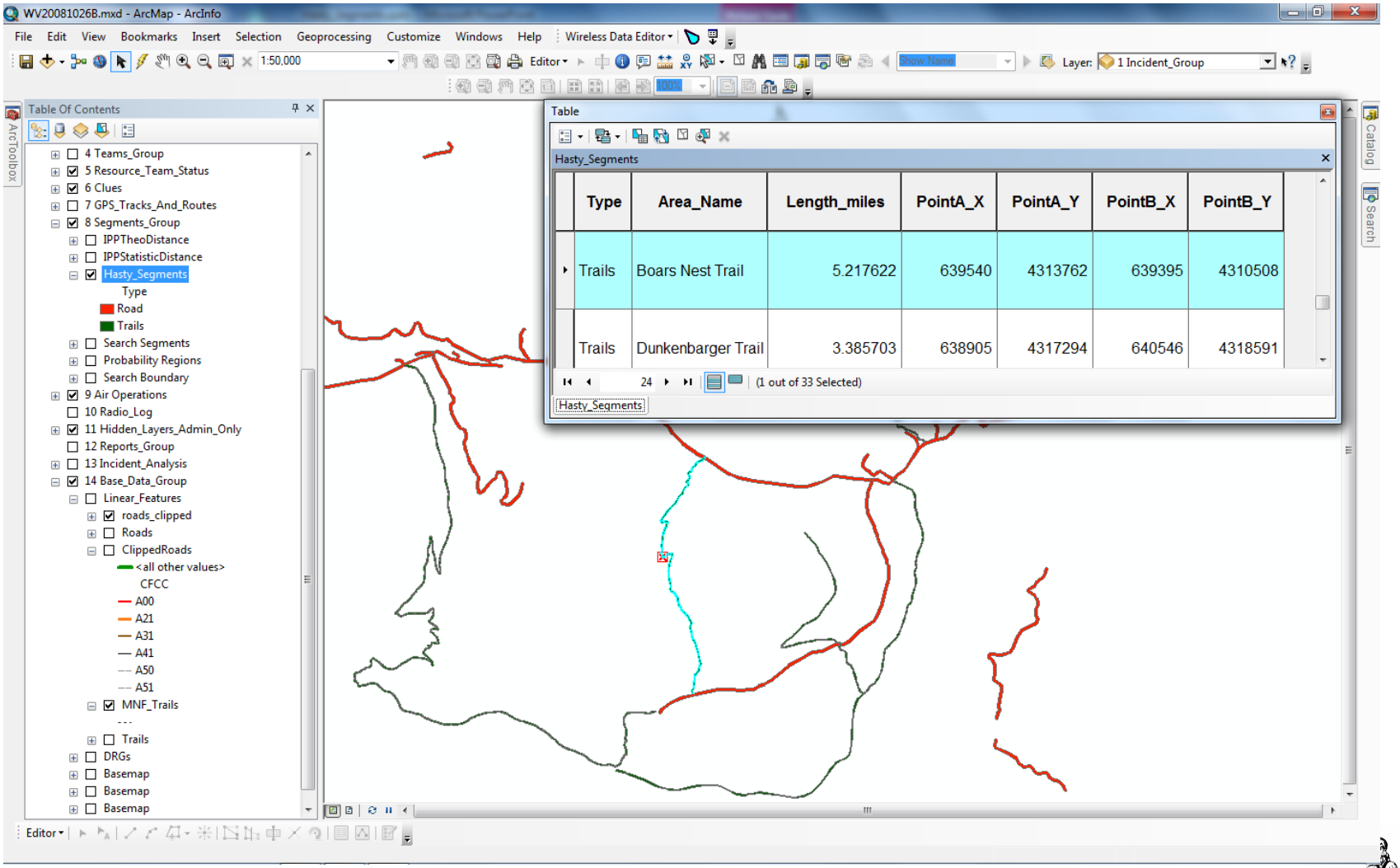
Using the Hasty Segment Tool



Using the Hasty Segment Tool

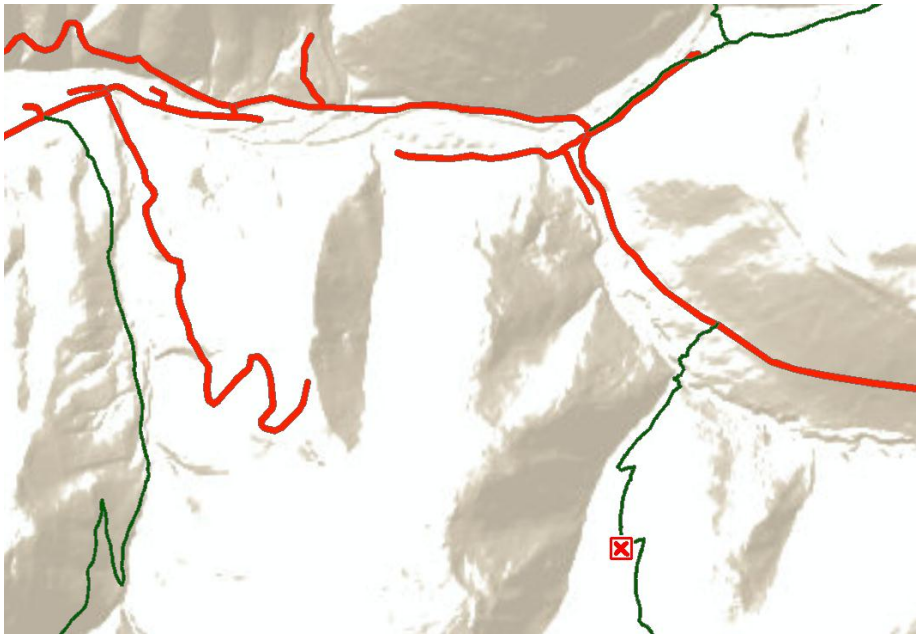
- A Theoretical Search Area is defined by user
- Linear features are "Clipped" by Theoretical Search Area
- Buffer the Clipped features
  - Roads buffered by 20 meters from centerline
  - Trails buffered by 10 meters from centerline
  - Could also add hydro lines
- Dissolve buffered features by names
- Identify feature type: Road or Trail
- Merge features into new feature class, calculate feature length and identify beginning/end coordinates
  - Still perfecting obtaining coordinates. Sometimes it gives same coordinate pair for beginning and end.

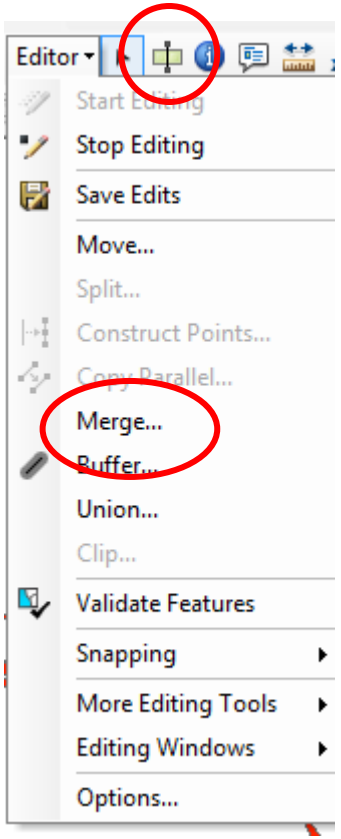
Hasty Segments and Attribute Data



Hasty Segments - Cleanup

- If needed use the Merge and Cut Polygons Tool on the Editor toolbar to clean-up the segments





Hasty Assignments

- Highlight the Segments that you would like to create an Assignment for
- Use the Hasty Assignment Tool (SARTools-Operations) to create the Assignments

No Planning or Task Numbers provided

Designates a "High" Priority on the Task (can be changed manually) and set Status as Planned

Defines Area_Name using primary feature name

Auto-generated task description based on feature name, feature length and start/stop coordinate pairs Add special instructions as needed

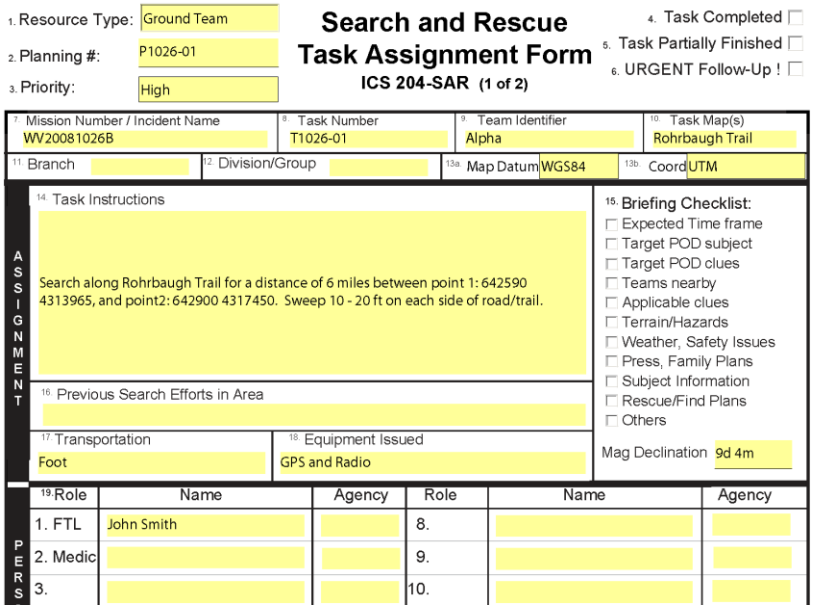
Table

Assignments

	Planning_ Number	Assignment _Number	Priority	Status	Area_Name	Description	Team	Resou
▸	<Null>	<Null>	High	Planned	County Rte 28/2	Search along County Rte 28/2 for a distance of 5 miles between point 1: 643906 4309546, and point2: 643826 4311110. Sweep 10 - 20 ft on each side of road/trail.	<Null>	<Null>
	<Null>	<Null>	High	Planned	Rocky Point Trail	Search along Rocky Point Trail for a distance of 3 miles between point 1: 641023 4317809, and point2: 642039 4318044. Sweep 10 - 20 ft on each side of road/trail.	<Null>	<Null>
	<Null>	<Null>	High	Planned	Rohrbaugh Trail	Search along Rohrbaugh Trail for a distance of 6 miles between point 1: 642590 4313965, and point2: 642900 4317450. Sweep 10 - 20 ft on each side of road/trail.	<Null>	<Null>

Final Task Assignment Form

- Add in additional instructions in the Assignment Feature as needed.
- Select the Assignment to create Assignment Forms using the "Create Assignment Form" Tool.



1. Resource Type: Ground Team
2. Planning #: P1026-01
3. Priority: High

Search and Rescue Task Assignment Form
ICS 204-SAR (1 of 2)

4. Task Completed ☐
5. Task Partially Finished ☐
6. URGENT Follow-Up ! ☐

7. Mission Number / Incident Name	8. Task Number	9. Team Identifier	10. Task Map(s)
WV20081026B	T1026-01	Alpha	Rohrbaugh Trail

11. Branch	12. Division/Group	13a. Map Datum	13b. Coord
		WGS84	UTM

ASSIGNMENT

14. Task Instructions

Search along Rohrbaugh Trail for a distance of 6 miles between point 1: 642590 4313965, and point2: 642900 4317450. Sweep 10 - 20 ft on each side of road/trail.

15. Briefing Checklist:
- ☐ Expected Time frame
- ☐ Target POD subject
- ☐ Target POD clues
- ☐ Teams nearby
- ☐ Applicable clues
- ☐ Terrain/Hazards
- ☐ Weather, Safety Issues
- ☐ Press, Family Plans
- ☐ Subject Information
- ☐ Rescue/Find Plans
- ☐ Others

Mag Declination 9d 4m

16. Previous Search Efforts in Area

17. Transportation	18. Equipment Issued
Foot	GPS and Radio

PERS

19. Role	Name	Agency	Role	Name	Agency
1. FTL	John Smith		8.		
2. Medic			9.		
3.			10.		