

Creating Hasty Task Assignments in MapSAR Enhanced

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Appalachian Search and Rescue
Conference

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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

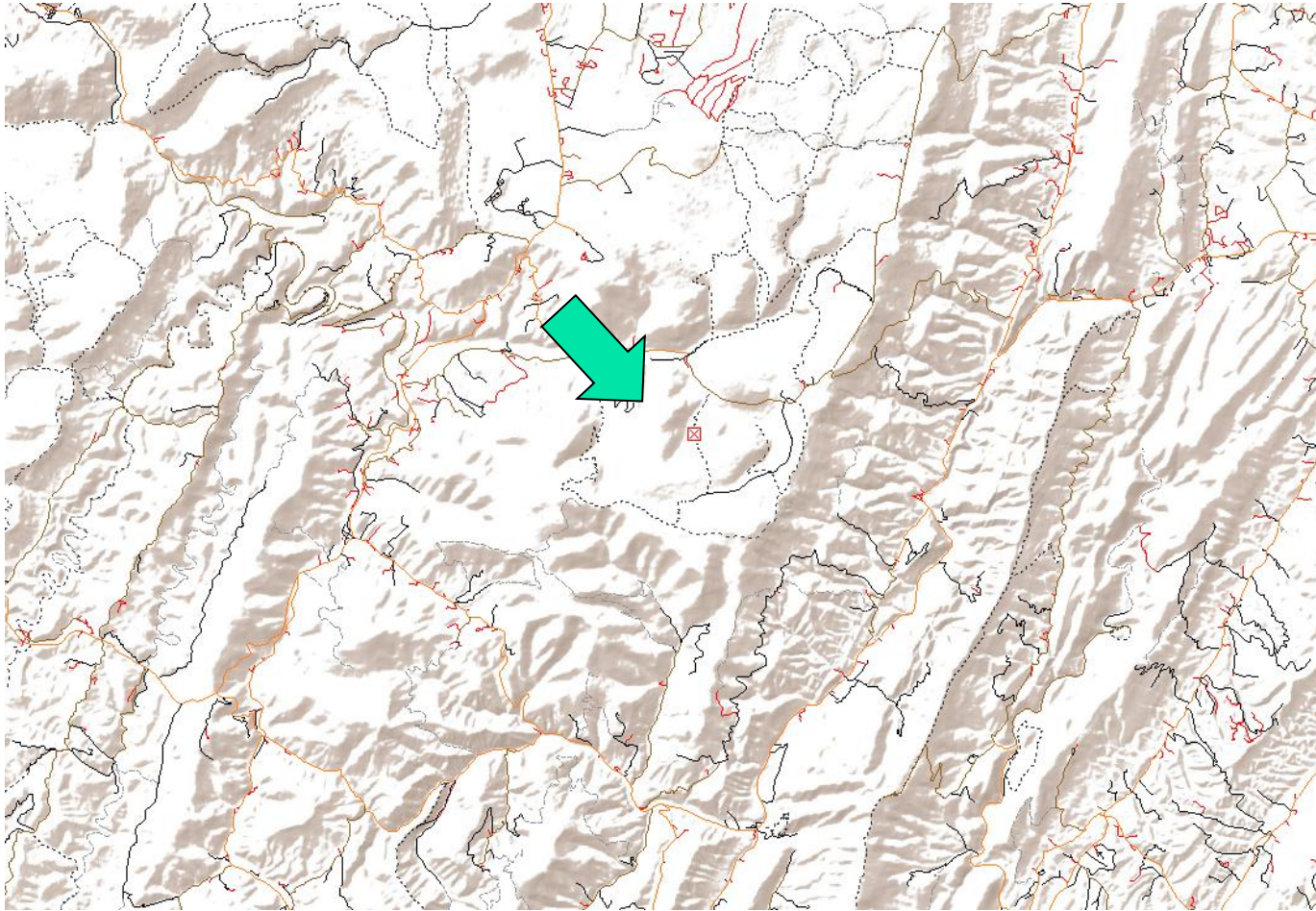


Basemap with Linear Feature Layers

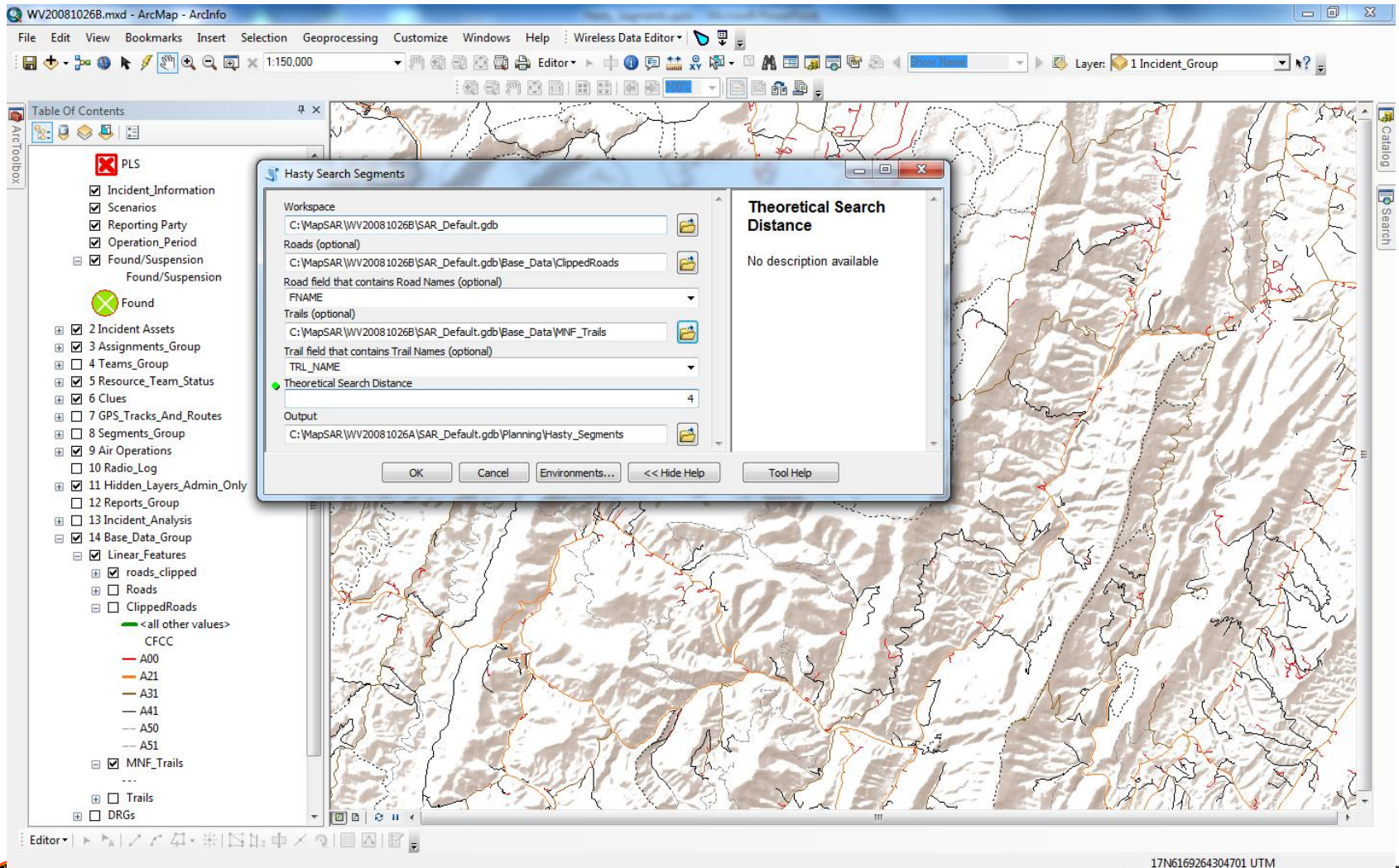
(Roads and Trails)



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

WV200810268.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help Wireless Data Editor

1:50,000

Show Name Layer: 1 Incident_Group

Table of Contents

- ☐ 4 Teams_Group
- ☒ 5 Resource_Team_Status
- ☒ 6 Clues
- ☐ 7 GPS_Tracks_And_Routes
- ☒ 8 Segments_Group
 - ☐ IPPTheoDistance
 - ☐ IPPStatisticDistance
 - ☒ Hasty_Segments
 - Type
 - ☒ Road
 - ☒ Trails
 - ☐ Search Segments
 - ☐ Probability Regions
 - ☐ Search Boundary
 - ☒ 9 Air Operations
 - ☐ 10 Radio_Log
 - ☒ 11 Hidden_Layers_Admin_Only
 - ☐ 12 Reports_Group
 - ☐ 13 Incident_Analysis
 - ☒ 14 Base_Data_Group
 - ☐ Linear_Features
 - ☒ roads_clipped
 - ☐ Roads
 - ☐ ClippedRoads
 - ☐ CFCC
 - <all other values>
 - A00
 - A21
 - A31
 - A41
 - A50
 - A51
 - ☒ MNF_Trails
 - Trails
 - ☐ DRGs
 - ☐ Basemap
 - ☐ Basemap
 - ☐ Basemap

Table

Hasty_Segments

Type	Area_Name	Length_miles	PointA_X	PointA_Y	PointB_X	PointB_Y
Trails	Boars Nest Trail	5.217622	639540	4313762	639395	4310508
Trails	Dunkenbarger Trail	3.385703	638905	4317294	640546	4318591

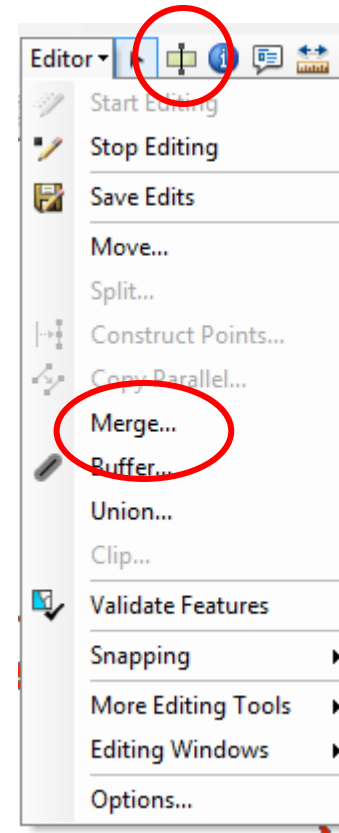
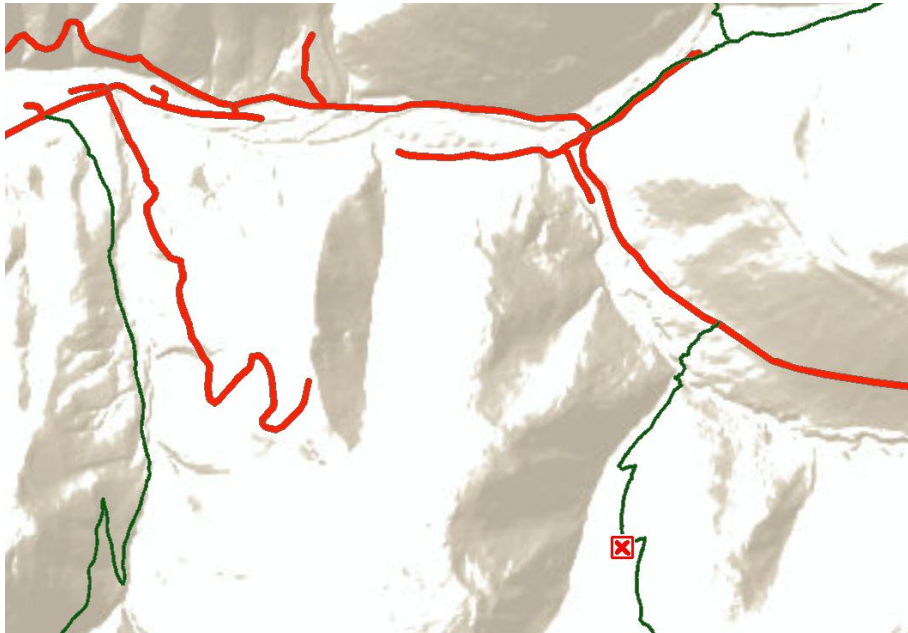
24 (1 out of 33 Selected)

Hasty_Segments



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

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.

Search and Rescue Task Assignment Form ICS 204-SAR (1 of 2)						
1. Resource Type: Ground Team		4. Task Completed <input type="checkbox"/>				
2. Planning #: P1026-01		5. Task Partially Finished <input type="checkbox"/>				
3. Priority: High		6. URGENT Follow-Up ! <input type="checkbox"/>				
7. Mission Number / Incident Name WV20081026B		8. Task Number T1026-01	9. Team Identifier Alpha	10. Task Map(s) Rohrbaugh Trail		
11. Branch		12. Division/Group	13a. Map Datum WGS84	13b. Coord UTM		
A S S I G N M E N T	14. Task Instructions Search along Rohrbaugh Trail for a distance of 6 miles between point 1: 642590 4313965, and point 2: 642900 4317450. Sweep 10 - 20 ft on each side of road/trail.			15. Briefing Checklist: <input type="checkbox"/> Expected Time frame <input type="checkbox"/> Target POD subject <input type="checkbox"/> Target POD clues <input type="checkbox"/> Teams nearby <input type="checkbox"/> Applicable clues <input type="checkbox"/> Terrain/Hazards <input type="checkbox"/> Weather, Safety Issues <input type="checkbox"/> Press, Family Plans <input type="checkbox"/> Subject Information <input type="checkbox"/> Rescue/Find Plans <input type="checkbox"/> Others		
	16. Previous Search Efforts in Area			Mag Declination 9d 4m		
	17. Transportation Foot		18. Equipment Issued GPS and Radio			
P E R S O N S	19. Role	Name	Agency	Role	Name	Agency
	1. FTL	John Smith		8.		
	2. Medic			9.		
	3.			10.		

