Incident Management using SARTopo

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History: 2015

• New laptops

• SOG#3 Map Setup and Printing rewritten
  • SARTopo instead of Terrain Navigator Pro

• Small group classes on how to print a map with SARTopo
History: 2016

• SARTopo Operating Guide created

• SOGs
  • #12, #12B – Collection of GPS data
  • #13 – Use of GPS in the field

• First 8-hour SARTopo class in October

• SARTopo used at searches / Sims
  • Rivesville, Cheat Lake Sim, Renick, White Park Sim
History: 2017

- Second 8-hour SARTopo class (without the network headaches!)

- More fully deployed at Canaan Valley

- Developing and refining best practices

- First 4-hour class:
  - Everything but drawing areas and writing tasks
  - More in depth on GPS prep and collection
Now

TaskPrep Utility:

Our TAF form for SARTopo assignments
  • FTL notes on back

Set for all TAFs:
  • Safety message
  • Radio freqs
  • Base phone number

Generate GPS assignments faster
Now

SOG#3 : Managing an Incident using SARTopo

• Soon to be released, submitted to BOD

• Integrates:
  • SOG#3 Map Setup and Printing
  • SOG#12, and #12B Collection of GPS Tracks
  • Workflow portion of SARTopo Operating Guide

• Updated:
  • Incident checklist
  • Lessons learned -> Evolving best practices
  • One source
### Chapter 1 Incident Checklist

<table>
<thead>
<tr>
<th>INITIAL INCIDENT RESPONSE - PLOPS</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup initial computer</td>
<td>2.1</td>
</tr>
<tr>
<td>If reliable Internet is available: Connect to the Internet and start SARTopo</td>
<td>3.2</td>
</tr>
<tr>
<td>Otherwise: Start SARTopo offline</td>
<td>3.3</td>
</tr>
<tr>
<td>Create data folders for the Incident</td>
<td>3.1</td>
</tr>
<tr>
<td>Create IC, LKP, PLS or IPP marker(s) in SARTopo</td>
<td>3.4</td>
</tr>
<tr>
<td>Center the map on a marker</td>
<td></td>
</tr>
<tr>
<td>Save the map using incident ID convention (SSYYYYYMMDDAA)</td>
<td>3.5</td>
</tr>
<tr>
<td>If needed, print maps with desired base layer for &quot;paper&quot; planning</td>
<td>9.1</td>
</tr>
</tbody>
</table>
SARTopo – Large Incident

OPS Dispatch

Comms
(In a quiet place)

OPS Back Table

Plans
(In a very quiet place)
TAF Forms

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

1. Resource Type: GROUND
2. Assignment #: A01-1
3. Priority:

- Mission Number / Incident Name: WV20170610A
- Dispatch Number: T01 - 01
- Team Identifier: Alpha

14. Task Instructions
   Type 1 search (Speed over thoroughness).
   Area bounded by Pineview drive on northeast, Pineview Dr on southeast, line along northeast side of Birch Towers, northwest edge of parking lot
   Area Corners (NE most then CW): 17S ND 89707 90839, 17S ND 89806 90728, 17S ND 89793 90692, 17S ND 89682 90819
## Task Log

**Task Assignment Log**  
MOUNTAINEER AREA RESCUE GROUP  
FORM ICS 204A.SAR  Rev.2017.PAL

<table>
<thead>
<tr>
<th>Dispatch #</th>
<th>Assignmt #</th>
<th>Team Identifier</th>
<th>Type of Team</th>
<th># of Persons</th>
<th>Task</th>
<th>Time Out</th>
<th>Time In</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>A01-1</td>
<td>Alpha</td>
<td>K9</td>
<td>3</td>
<td>Segment: A01</td>
<td>15:44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**1. Incident Name:**  
WV20160503A
Task Numbers

Assignment Number

• Every task has one
• Does not imply order
• Tasks written by Operations
  • OPS001, OPS002, etc
• Tasks written by Plans
  • A01-1, A01-2 <- tasks that search segment A01
  • PLN001 <- any others written by Plans

Dispatch Number

• Every executed task has one
• Assigned in order dispatched
• To1-03 <- Third task dispatched in first Op Period
TAF Paper Copies

- Ops Back Table prints 1 copy, 2 sided

Front

Back: FTL Info / Notes
• FTL is briefed and gathers team names
• Front is copied, placed in “In Progress” folder
• Team gets the 2-sided copy
• At debrief, form pulled from a stack of blank forms
• Debrief form stapled to base copy of TAF front
• Debrief map printed after GPS tracks and clues are loaded to SARTopo, stapled to TAF and debrief
TaskPrep Utility

Inputs:
• Export file from SARTopo
• Fillable-PDF TAF file
• Configure file:
  • Map SARTopo fields to PDF Fillable Fields
  • Text for safety message, radio freqs, etc

Output
• Filled, but editable TAF PDFs
• GPX files, one for each assignment
TaskPrep Utility

Input: SARTopo Backup GPX File
C:/IncidentData/WV20160503A/Assignments/WV20160503A.gpx

Output: Assignment Folder
C:/IncidentData/WV20160503A/Assignments/

Fillable TAF PDF #1
C:/IncidentData/Forms/MARG/MARG_TAF_for_SARTopo.pdf

Fillable TAF PDF #2 (Optional)

Cancel  Config  Next
### TaskPrep Utility

<table>
<thead>
<tr>
<th>PDF Field</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>base_phone_num</td>
<td>304-304-1234</td>
</tr>
<tr>
<td>freq_command</td>
<td>Echo</td>
</tr>
<tr>
<td>freq_tactical</td>
<td>FRS1</td>
</tr>
<tr>
<td>incident_id</td>
<td>WV20160503A</td>
</tr>
<tr>
<td>incident_name</td>
<td>Smith</td>
</tr>
<tr>
<td>mag_decline</td>
<td>-9</td>
</tr>
<tr>
<td>map_coord</td>
<td>USNG</td>
</tr>
<tr>
<td>map_datum</td>
<td>WGS84</td>
</tr>
<tr>
<td>safety_message</td>
<td>Beware of Lions, and Tigers, and Bears, Oh My!</td>
</tr>
</tbody>
</table>
### TaskPrep Utility

#### Select Assignments

<table>
<thead>
<tr>
<th>Operational Period</th>
<th>Assignment</th>
<th>Resource Type</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>A01-1 T01-2</td>
<td>GROUND</td>
<td>INPROGRESS</td>
</tr>
<tr>
<td>PT1 - Planning</td>
<td>A02-1</td>
<td>GROUND</td>
<td>DRAFT</td>
</tr>
<tr>
<td></td>
<td>A03-1</td>
<td>GROUND</td>
<td>DRAFT</td>
</tr>
<tr>
<td>PT3 - Printing</td>
<td>A05-1</td>
<td>GROUND</td>
<td>PREPARED</td>
</tr>
<tr>
<td></td>
<td>A07-1</td>
<td>GROUND</td>
<td>PREPARED</td>
</tr>
<tr>
<td>PT4 - To Be Assigned</td>
<td>PLN001</td>
<td>GROUND</td>
<td>PREPARED</td>
</tr>
</tbody>
</table>

- **Generate TAF 1**
- **Generate TAF 2**
- **Generate GPX**

[Generate] [Cancel]
Debrief Map
Segment Map
Clue Map
Task Progress Map
Projector?
SARTopo Classes

8 Hour Class

- ‘SARTopo Operations’
- For all base staff
- Class limit is 15
- Work in teams of 5
  - Experience SARTopo as a collaborative platform
- Covers full cycle of Incident
- Draw lines and polygons
- Write assignments
- Not hands on with GPS
- Online version coming
SARTopo Classes

4 Hour Class

- ‘SARTopo Ops Specialist’
- For Ops Back Table, and Comms
- Class limit is 5
- Work individually
- Does not cover planning function
- No drawing or writing of assignments
- Hands on with GPS