

# Adventure Racing Navigation Supplies

Table Top Adventure Race™  
& Navigation Challenge

12 Navigation Challenges for Map and  
Compass Navigation



Volume 1. June 2009



Presented by AR Navigation Supplies, Inc.  
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**\*\*\*\*Disclaimer\*\*\*\***

The locations for these Navigation Challenges are not to be visited in reality. Many use private land and some of the routes would be very dangerous in real life. Only try these challenges as tabletop navigation exercises at home as preparation for your real adventures. AR Navigation Supplies, Inc. is not responsible for any death or injury that occurs trying to follow these adventures in real life.

## About the Challenge

The Table Top Navigation Challenges have been designed to allow you to practice your map and compass navigation skills without having to go anywhere.

These challenges will allow you to test your skills plotting Compass Bearings and UTM's while interpreting topographical map details, contour lines and map symbols in the same way you would during a race or wilderness adventure.

## Things you will need

To complete the navigation challenges you will need the following simple tools:

- Racing Compass or 360° Protractor
- Basic Roamer© AR or 1:24,000 UTM Tool
- Sharp Pencil or Fine Pen
- Straight Edge

## Instructions

The navigation challenge book contains 12 different navigation challenges. Each challenge is self-contained and has its own set of instructions. The individual navigation challenge instructions are like the rules of travel that you will receive at a race. These rules of travel must be followed to find the locations of each of the CP's on the map. Each CP has a question that must be answered before you can move onto the next location. The answer to each question should be written in the space provided to prove that you have found the correct location.

Answer all the questions in order to complete the whole challenge. Depending on your skill level each challenge will take between 20 and 30 minutes to complete.

## Printing the Maps from the PDF

If you downloaded the navigation challenge book and need to print the maps you must ensure that the printer settings are configured with page scaling set to NONE or OFF and Auto Rotate and Center is set to ON. This will ensure that the maps are printed at the 1:24,000 scale to match your UTM tool.

## The Challenges

All of the maps for the navigation challenges are portions of USGS 7.5 minute quads and are printed at 1:24000 scale. See the section on Topographic Map Symbols to find the descriptions for all the details shown on these maps.

### \*\*\*\*Important\*\*\*\*

To keep things simple True North Magnetic North and Grid North are assumed to be identical on these 1:24,000 maps so plot all your bearings using the vertical UTM grid lines as the North reference. See the Navigation Help section for more information on The 3 North's, Magnetic Declination and other helpful navigation topics.

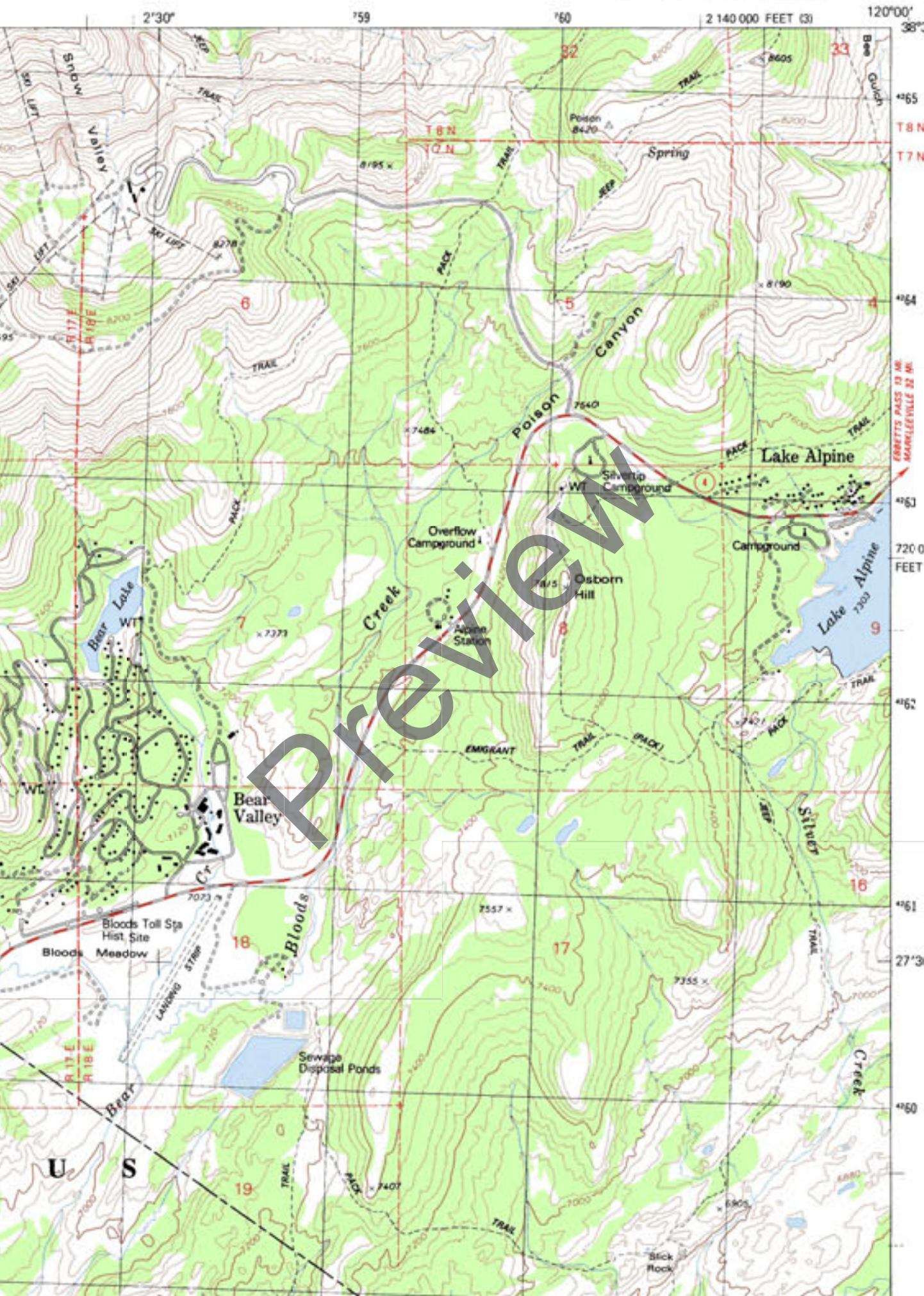
## Glossary of AR Terms

AR	Adventure Racing	A team sport of Kayaking, Mountain Biking and Running with Navigation.
CP	Check Point	A location that needs to be found and have your race passport marked
WP	Way Point	A point that must be passed through but has no CP punch
Passport	Race Passport	A document that proves you have been to all the CP's on the course
UTM	Universal Transverse Mercator	A 14 digit number that is given as a grid reference to define a point on the map
Contour Line	Contour Line	Brown lines that connect points of equal elevation on the map
True North	North Pole	The point that the earth rotates around. The North Pole
Magnetic North	Somewhere near Siberia	This is the direction that your compass will point and may be different to True North
Grid North	Direction that the grid lines on the map point to	The direction that the grid lines on the map point to. This may be different to True and Magnetic North
Basic Roamer© AR	UTM Tool	Navigation Tool to help with map and compass navigation and UTM plotting
Bushwhack	Off trail travel	Cutting across country through the bushes and woods.
Portage	Carrying your Boat	A portage is having to carry your boat over land to reach the water or make a shortcut

## Challenge 1. - Tamarack, CA

Your Team flies into the landing strip at Bloods Meadow to start the first round of the AR Navigation Supplies Navigation Challenge. After a quick gear check the instructions are handed out and the race starts. Follow these instructions on the map below to complete the challenge. Remember to use Grid North for all bearings.

Check Point #	Instruction	Question	Answer
<b>Start</b>	Find the Bloods Meadow Landing Strip	What is the bearing from Grid North of the landing strip?	
<b>CP 1</b>	Find UTM 0758430 4260940	What is the elevation at this location?	
<b>CP 2</b>	From CP 1 plot a bearing of 43° for a distance of 0.62 of a mile	What two map features are within feet of this location?	
<b>CP 3</b>	Take Emigrant Trail to the peak of Osborn Hill	How many contour lines do you cross on this route?	
<b>CP 4</b>	Find the nearest Water Tower (WT)	What is the UTM of this location?	
<b>CP 5</b>	Travel by road to the boat ramp on Alpine Lake where you pick up your kayaks and paddle to the largest island in the lake.	What is the bearing and distance of this paddle?	
<b>CP 6</b>	Paddle back to the boat ramp and find the most Westerly building in the town of Alpine Lake.	What is the elevation of this building?	
<b>CP 7</b>	Travel in a straight line from CP 6 to the top of the creek in Poison Canyon.	How much elevation do you gain on this route?	
<b>CP 8</b>	Follow the creek in Poison Canyon downstream to the road.	What is the distance in miles to the road?	
<b>CP 9</b>	Follow the road North until it crosses the first Pack Trail	What is the elevation of this trail intersection?	
<b>CP 10</b>	Take the road West to Snow Valley Ski Area	How many ski lifts are there?	
<b>Finish</b>	<b>Go to <a href="http://www.ARNavSupplies.com">www.ARNavSupplies.com</a> and check your answers</b>		



Preview

2°30'

75°59'

76°00'

2 140 000 FEET (3)

120°00'

38°

465

T8N

T7N

464

EBBETS PASS 19 MI  
MARLEVILLE 32 MI

463

7200

FEET

462

461

27°3'

460

U S