

MOHAVE COUNTY SHERIFF'S OFFICE

Revised: 9/22/2020

Search and Rescue Rope Team

Member Name: _____

Required knots and skills for Technical Rope Technician

Mandatory	Date Proficient	Approved by (Initials/Unit ID)
Completion of Ground Support (attach documentation)		
Double Overhand follow-through		
Bowline with Yosemite backup		
Butterfly knot		
In-line or directional figure 8		
Double loop figure 8		
Figure 8 bend (join two ropes)		
Double long tail snap bowline		
Use of Purcells		
Tying prusik loops		

Anchors

Constructing floating anchor with adjustable multipoint back ties		
Multipoint focused anchor		
Set up a high directional using Tripod, Side "A" and Monopod		

Lowering Systems

Descending – lock off & unlock while descending (using approved devices such as brake rack, Scarab, 3D, etc).		
Passing a knot while lowering		
Convert lowering system to a raising system under load - Use of brake rack and traditional 3:1 - Use of a mirrored system using MPDs		

Raising Systems

Construct a 5:1 mechanical advantage		
Construct a 2:1, 3:1 complex mechanical advantage		
Use of self rescuers		
Change lines while ascending/descending		
Passing of a knot while raising		
Convert raising to lowering while under load		

Rescue

Pick-off strap		
Hanson harness		
Use of AZTEK for litter tenders		
Rig a litter for high angle rescue with AzTec kit		
Getting Stokes over the edge - Vertical - Horizontal		
Self rescue and passing a knot while self rescuing		

Knowledge

Calculate safety margin		
Calculate stress on anchors/directional based on rope angles		
Calculate mechanical advantage of rope systems		
Be aware of force vectors and resultants		

Useful knots and skills for TRTs

Use of brake rack		
Use of tandem prusik belay		
Use of load releasing hitch		
Tying load releasing hitch		
Bowline with a bight, Yosemite backup		
Use of VT prusik		
Tying purcells		
Unequal two loop figure 8 follow through		
Triple overhand		
Double loop bowline		
Tying a Bowline with one hand		
Construct a ganged-on system with different mechanical advantages		
Rigging highlines - Single line - Double line		

The above named member has completed all Technical Rope Technician requirements and has shown continued proficiency. I recommend them to be recognized as a Technical Rope Technician for the Mohave County Sheriff's Office Rope Team.

Instructor Name and Signature: _____ Unit ID: _____