

# ROPE ACCESS SYSTEMS INTENSIVE

## INFORMATION SHEET



*Jerome, Arizona  
See Dates on:*

[RTR Open  
Enrollment  
Schedule](#)

*"Great for  
Firefighters"*

**The Rope Access Systems INTENSIVE:** No prerequisites

The Rope Access System INTENSIVE (RASI) is an "intensive" 5 day long open enrollment (when offered - [see latest Schedule](#)) and custom contract workshop intended specifically for those rope access technicians or supervisors wishing to obtain and demonstrate more depth of understanding in multi-faceted and complex rope systems used in rope "disciplines" of any kind. The RASI therefore is more classroom oriented and yet therefore perfect for SPRAT level 3 supervisors or others running complex rope access jobs. It dramatically differs from the on-rope intensive RASW-1 and RASW-2 in scope in that there is very little "on-rope" access skills. After the comprehensively-illustrated media presentations and in-class lecture, students take to the field with outdoor demonstration of learned principles. These would include skillsets involving around artificial high directionals, or AHD's (tripods, bipods and monopods), back from the edge rigging pods, bipods and tripods, anchoring jamb poles and alternate anchoring methods using the Arizona Vortex or other manufactured frames, mechanical advantage (tensioning, lifting and moving equipment with pulley systems), advanced anchoring analysis, and high angle "offsetting" involving 1) tag lines, 2) guiding lines, 3) tracking lines, 4) skate blocks, 5) deflecting lines and 6) two rope pendulums).



Extensive tripod, bipod and monopod frame building at the edge. Also back from edge rigging pods, bipods and tripods.



## ROPE ACCESS SYSTEMS INTENSIVE is ideal for -

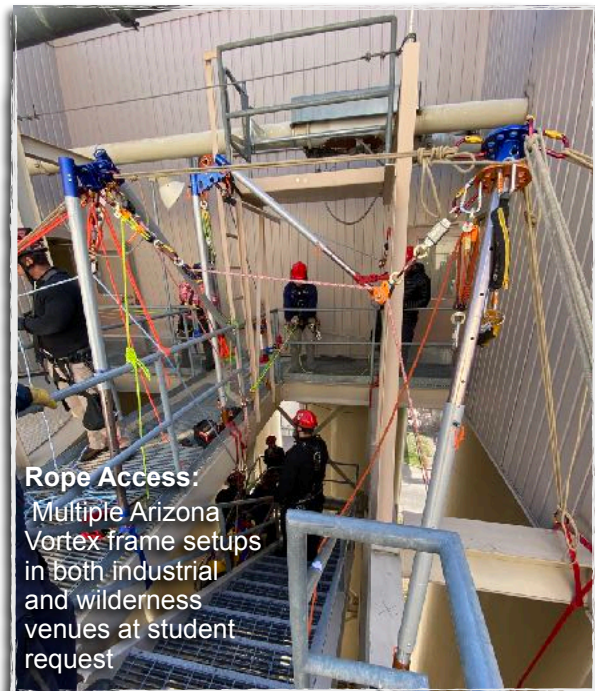
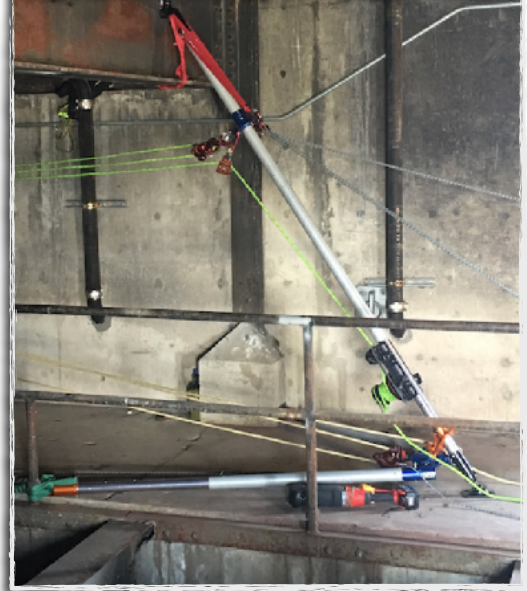
- Rope access job supervisors
- SPRAT Level 3 Rope Access Technicians
- SPRAT Evaluators
- Theater and stage riggers
- SPRAT Level 1 or Level 2 Technicians who wish to increase their personal understand to improve their job performance
- Fire fighters who want a compact 5 day review of rescue systems in a benign setting where the AZ Vortex, offsets, anchoring are all reviewed at a place where exposure is limited.

## ROPE ACCESS SYSTEMS INTENSIVE KEY POINTS-

NOTE: Each RASI is different and will be directed as to student needs concerning high directional frame use, anchoring and much much more.

- Safety factors / Safety margins (need calculator)
- Whiteboard analysis of systems
- Classroom lecture and then to the field for practical demonstrations and building of systems leading to competency
- Strong emphasis on understanding of simple to complex rigging skills
- Knotcraft (for advanced rigging) Understanding knots, bends and hitches
- Anchoring principles (Marginal, substantial and "bombproof") intermediate through advanced system anchors
- Intermediate pulley systems (simple, compound and complex)
- Physics of rope rescue (force vectors and their applications to rigging)
- Two tensioned rope systems analysis
- Artificial high directions (AHD's or frames):
  - ▶ Jamb poles
  - ▶ A-frames (bipods)
  - ▶ Sideways A-frames (In-line A-frame bipod)
  - ▶ Easel A-frames (un-equal sided tripod)
  - ▶ Tripods (equal sided tripod)
- Directionals and anchor angle force calculations
- Back for the edge focused and focused-floating anchors:
  - ▶ Rigging pods
  - ▶ Rigging bipods
  - ▶ Rigging tripods
- High Angle Offsets:
  - ▶ Tag and guiding line offsets
  - ▶ Deflected offsets
  - ▶ Tracking line offsets
  - ▶ Skate block offsets
  - ▶ Two rope offsets
- Much more....

Rigging jamb pole anchors with SkyHook Capstan Winch using the Arizona Vortex



**Rope Access:**  
Multiple Arizona Vortex frame setups in both industrial and wilderness venues at student request



## ABOUT THE INSTRUCTORS: KEITH & REED THORNE

Keith Thorne main occupation: ARBORIST. (Mick's Tree Service, Flagstaff, AZ)

Keith is Reed and Jayne Thorne's middle son (born 1990). He is a regular assistant co-instructor with his father, Reed, and travels extensively around the United States, Canada, Australia, England/Scotland, Japan and anyplace else where he can assist in rope rescue or rigging classes for Ropes That Rescue. Known as a true critical thinker, he prides his ability to think outside the box with the students. With tree work, Keith brings the understanding he has attained from years of rope access and rescue rigging and understanding of physics to the arborist world. When dealing with trees where limbs are often not strong, this knowledge is crucial for a tree rescue workshop of this kind. That is why there is so much information in this seven day TRW-F.

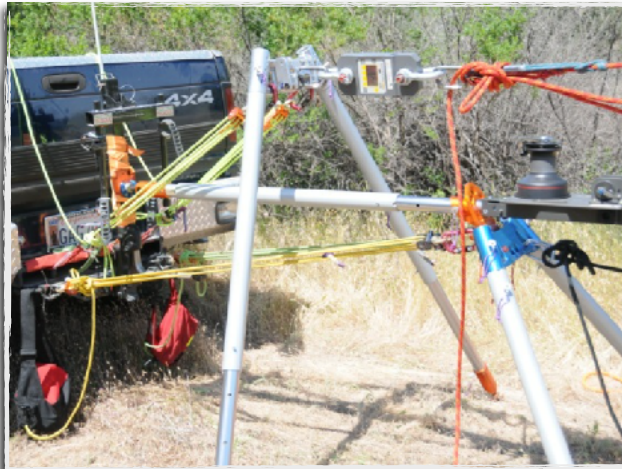
### Keith's Professional Accomplishments:

Keith has also certified as a rope access technician supervisor Level 3 with the Society of Professional Rope Access Technicians (SPRAT) and has supervised rope access jobs on wind turbines, bridges and hydroelectric dams throughout the USA for Abseilon in Phoenix. Keith has also worked both in Saudi Arabia for Arabian Rope Services and in Queensland, Australia with Rob Stringer and his rope access company, Highpoint Access and Rescue. In 2020, Keith competed with two friends (Both RTR alumni) in the [North American Petzl North American ROPE TRIP](#) in Salt Lake City, Utah where they took first place honors for Abseilon. They were slated to then compete in the 2021 Petzl Rope Trip World Championships in Singapore but that was unfortunately cancelled due to the worldwide pandemic.

Senior Lead Instructor, [Reed Thorne](#), will also be assisting with this program. Read more about Reed Thorne and his long history with rope access work



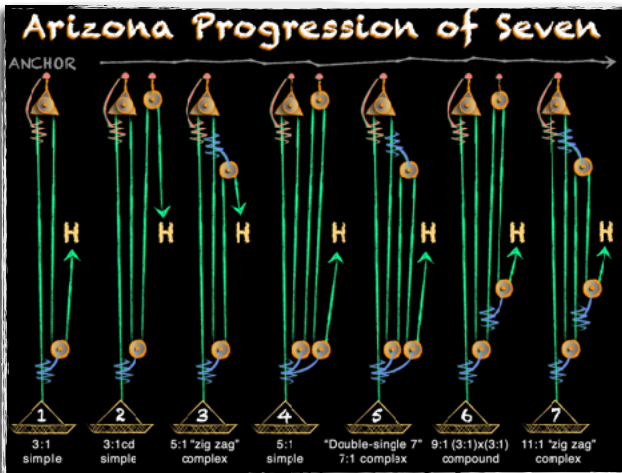
Keith Thorne at Grand Canyon SKYWAY BRIDGE in 2020



Above: Capstan winch platforms an rigging anchor bipods using the AZ Vortex designed at RTR. Below: Extensive pulley systems for moving people and material.



Reed Thorne working on rope with Jayne Thorne on Salt River Project Horse Mesa dam inspection 1999



## HAWAIIAN SHIRT DAY! MANDATORY

The final day of all RTR programs is Hawaiian shirt day. It is a silly but fun tradition which we try to maintain. Please bring a Hawaiian shirt to receive an RTR embroidered hat!

## REQUIRED EQUIPMENT:

NOTE: Required personal equipment for this program may vary widely according to the venues. [Contact RTR](#) for more information. Minimally, you will need personal PPE, harness, helmet, AZTEK gloves and other items.

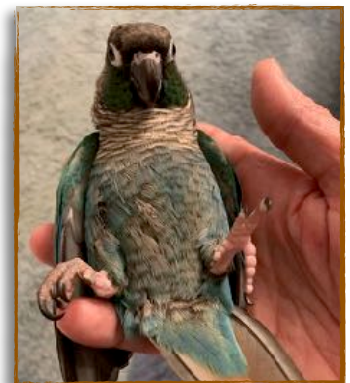
If this RASI is an "Open Enrollment" program offered in Jerome, Arizona, all team equipment, (Gear, Vortex's and rope) will be supplied. If a custom contract program, this will need to be supplied by the client. [Contact RTR](#) for more information.



## Preparation for this *INTENSIVE* program:

Knots, bends and hitches are an integral part of every RTR program. You simply cannot be a good rigger without knowing extensive knotcraft —Pure and simple. To assist you in the mastery of these knots PRIOR to class we have assembled videos of Reed tying each one on camera with the help of Sequoia, the green-cheek conure. Once you have registered for a program, you are invited to join our closed Facebook Page called "[Arizona ART of Clean Rigging](#)" for access to these videos. Look under "Media" and open the link to these videos under "Albums". Look for album "KNOTCRAFT with Reed and Sequoia". On this page (only open to past RTR alumni and current students) you will be able to watch all the knotcraft being performed clearly. This will speed up the learning process during the classroom portion which will allow us to get to the field earlier.

There are NO prerequisites for the Rope Access Systems *INTENSIVE*.



[See RTR Open Enrollment Schedule](#) for next *RASIntensive*