

ROPE ACCESS INFO SHEET

ROPE ACCESS SKILLS WORKSHOP-1/2/3



Jerome, Arizona
See Dates on:

RTR Open
Enrollment
Schedule



RASW Lead RTR Instructor, Keith Thorne
working on Grand Canyon SKYWAY BRIDGE

The Rope Access Skills Workshop 1:

Is an intensive 5 day workshop intended specifically for those who work on rope at elevation. It is a custom contract-only workshop at this time. If the RASW-1 is offered as an "Open Enrollment" workshop, it will be seen on the Open Enrollment Schedule for any given year. The RASW-1 covers the minimum rope access essentials (for SPRAT Level 1 Technicians): Single and multi-point anchor building

- Descent and descent-to-ascent,
- Ascent and ascent-to-descent,
- Knot passes (ascent and descent),
- Passing deviations in ropes (ascent and descent),
- Passing intermediate anchors (rebelays),
- Rope-to-rope transfers (ascent and descent),
- Aid climbing (horizontal),
- Rescue of coworker who is descending and ascending,
- Negotiating the edge in ascent and descent mode,
- Parapet rescue or worker over the edge,
- Controlled lowers/raise
- Basic mechanical advantage

The Rope Access Skills Workshop 2:

Is the next level beyond SPRAT Level 1. It teaches the techniques needed to certify at SPRAT Level 2 or 3. This program also goes well beyond these levels and teaches many rescue techniques not found in the SPRAT Safe Work Practices and Certification Guidelines.



RASW-1 is ideal for-

Rope access is used around the world to support or place workers in various environments for the purpose of performing their jobs. This may include, but is not limited to:

- Bridge, dam or structural inspectors
- High scalers
- Construction personnel
- Sea platform inspection and construction
- Tower workers

RASW-1 KEY POINTS-

- Job site safety!
- Applicable federal and state laws on rope access
- Knotcraft for rope access work: end line, middle, hitches, bends
- Rope access rope and equipment, inspection and care
- Rope management
- Job site evaluation and rigging for safe working conditions
- Two-point contact principles (main/belay)
- Rope access equipment:
 - ▶ Descenders / ascenders
 - ▶ Connectors / carabiners / screw links
 - ▶ Fall arrest, work positioning
 - ▶ Helmets, PPE, harnesses, other...
 - ▶ Lanyards
- Beginning pulley systems
- Complete use of AZTEK kit
- Belaying (safety line) techniques and communication
 - ▶ True belays
 - ▶ Self belays
- Anchoring principles
 - ▶ Distributing
 - ▶ Multipoint
 - ▶ Fixed and focused
 - ▶ Bolts / hangers
- Improvised and manufactures lanyards and slings
- Minimum rope access essentials:
 - ▶ Descent and descent-to-ascent
 - ▶ Ascent and ascent-to-descent
 - ▶ Knot passes (ascent and descent)
 - ▶ Passing deviations in ropes (ascent and descent)
 - ▶ Passing intermediate anchors (rebelays)
 - ▶ Rope-to-rope transfers (ascent and descent)
 - ▶ Aid climbing (horizontal)
 - ▶ Rescue of coworker who is descending and ascending
 - ▶ Negotiating the edge in ascent and descent mode
 - ▶ Parapet rescue or worker over the edge
 - ▶ Controlled lowers/raise
- Hazard analysis and risk assessment
- Communication

The RASW-2 is ideal for-

Those SPRAT Level 1 technicians wishing to prepare for Level 2. Those SPRAT Level 2 technicians wishing to prepare for Level 3. Fire fighters or emergency personnel wishing to gain rope access skills (with option not to certify)

RASW-2 KEY POINTS

- Ideal for advanced SPRAT L-1 rope access technicians
- Strong emphasis on advanced personal rope access skills
- Many rescue techniques
- Anchor building using rock pro (active and passive)
- Anchor building using piton family (if available)
- Backtying and opposition (front ties) and general rigging for anchoring
- Critical analysis of multi-point anchoring systems (understanding physics)
- Rope coiling methods
- Rope management to eliminate snarls and frustration
- Improvisation and minimalism "What do you do if the gadget does not show up?"
- Knotcraft to the extreme (There is a strong emphasis on knot skills)
- Advanced to pulley systems (partial lecture)
- Multiple methods of descending on rope (including improvised)
- Multiple methods of ascending on handled ascenders
- Passing knots on ascent and descent with a casualty in tow
- Rope-to-rope transfers on ascent and descent with a casualty in tow
- Passing re-belays on ascent and descent with a casualty in tow
- Passing standard deviations against wall on ascent and descent with a casualty in tow
- Passing "flying" deviations (no wall) on ascent and descent with a casualty in tow
- Horizontal and sloping up or down aid climbing
- True belays and self belays
- Self rescue techniques / Buddy rescue techniques
- AZTEK kit orientation for personal and team operations:
 - ▶ First 8 uses of AZTEK
 - ▶ Single and double part hasty rappels (5 & 6)
 - ▶ Belays and self belays (3 & 4)
 - ▶ Dynamic fixed and traveling brakes
 - ▶ Ascending with AZTEK in 2 parts (7)
 - ▶ Personal travel restrict (1 & 2)
 - ▶ Set of fours pulley system (8)
- Solo rescue: Complete Seven Minimalist Rescue Archetypes (7MRA)
 - ▶ Solo rescuer pick off ("gecko" and hanging)
 - ▶ Semi-solo rescuer pick offs ("gecko" and hanging)
- Solo one-on-one rescues:
 - ▶ Pitch head rescue (breaking into lines on top with AZTEK and bringing casualty up from bottom)
 - ▶ Pitch toe rescue (descending to bottom and attaching to casualty with AZTEK and ascending with them to top)
 - ▶ Counter balance rescue (if time permits)(Using your own weight to advance someone up a cliff or drop)
- Lead climbing (optional)
- Sound anchoring principles: simple through advanced system anchors
- Rigging plates and pods using AZ Vortex, focused floating anchors made "bombproof" for over edge rope work
- Manual and auto stop friction appliances

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 [HERE](#).

HAWAIIAN SHIRT DAY! MANDATORY

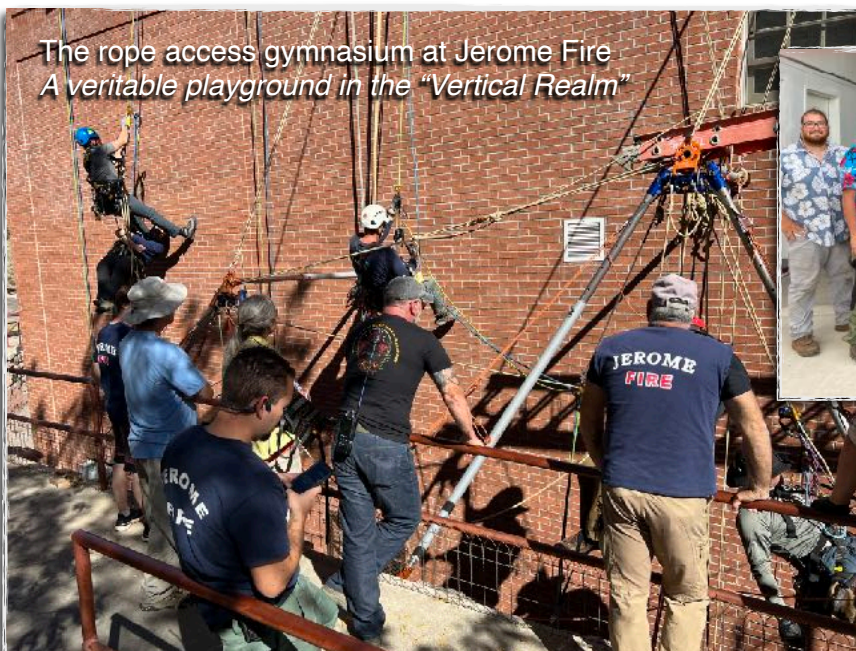
The final day of all RTR programs is Hawaiian shirt day. It is a silly but fun tradition which we try to maintain. Please bring a Hawaiian shirt to receive an RTR embroidered hat!



Keith Thorne at Grand Canyon SKYWAY Bridge 2020



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



Hawaiian Shirt Day at Jerome Fire 2021

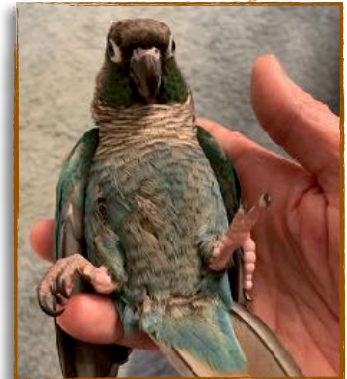
REQUIRED EQUIPMENT:

See [EQUIPMENT LIST](#) for this program which is different than other RTR programs. NOTE! A good fitting rope access harness is required for participation in the RASV.

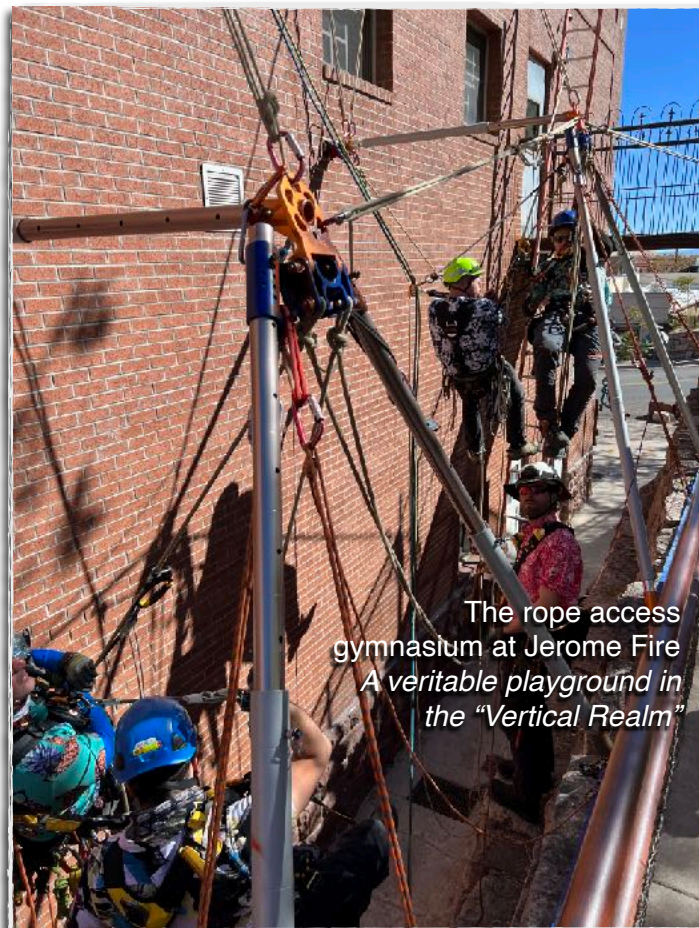


Preparation for this program: **TRY TO DO THIS!**

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.



The rope access gymnasium at Jerome Fire
A veritable playground in the “Vertical Realm”

See RTR Open Enrollment Schedule for next RASW at Jerome Fire, Arizona