



TACTICAL ROPE ACCESS COURSE (TRAC)

COURSE OVERVIEW AND INSTRUCTIONAL GOALS

COURSE LENGTH: 32 Hours (4 Days)

COURSE OVERVIEW

The Tactical Rope Access Course (TRAC) is designed to equip SWAT and other specialized tactical personnel with the vertical access skills needed to operate safely and effectively in a wide range of environments, from urban structures to mountainous terrain. The course emphasizes practical rope-based movement, rescue capabilities, and equipment proficiency, using the PACE (Primary, Alternate, Contingency, Emergency) methodology to support decision-making under operational stress. Instruction focuses on simple, highly functional knots and hitches, modern rope technologies, and techniques that complement a team member's primary tactical role, ensuring they can perform vertical access tasks with confidence in high-risk situations.

REQUIRED PRE-REQUISITES

- Students are required to be assigned to a tactical team or other specialized team that requires rope access capability.
- This is a strenuous course, and students need to be physically fit due to the physical requirements of the course.

INSTRUCTIONAL GOALS

Upon completion of this course the attendee will be familiar with:

1. Safety Protocols for Rope Operations
2. Rope Access Standards
3. Essential Knots, Hitches, and Anchor Systems
4. Mechanical Advantage Systems
5. Conducting Safe and Controlled Vertical Movement
6. Insertion, Bailout, and Rescue Techniques
7. Tactical Rope Skills options to expand Mission Capabilities



TACTICAL ROPE ACCESS COURSE (TRAC)

DAY TO DAY / HOUR TO HOUR AGENDA

DAY ONE

Hours:	Instruction:
0800-0815	Introduction/Administration
0815-0830	Safety Protocols and Guidelines
0830-0900	Knots and Hitches
0900-1100	Descent Devices, Flat Ground Practice
1100-1200	Lunch
1200-1400	Vertical Descent, Belays, Edge Transition
1400-1630	Ascending
1630-1700	Clean Up Training Area and Debrief

DAY TWO

Hours:	Instruction:
0800-0815	Review Day 1, Safety Brief
0815-1100	Reactive action procedures
1100-1200	Lunch
1200-1400	Mechanical Advantage Overview and Practical Application
1400-1600	Webbing Overview
1600-1630	Retrievable Rope Systems
1630-1700	Clean Up Training Area and Debrief

DAY THREE

Hours:	Instruction:
0800-0810	Review Day 2, Safety Brief
0810-1100	Pick Offs
1100-1200	Lunch
1200-1300	Tight Area Access and Confined Space Considerations
1300-1630	Team scenarios (if applicable)
1630-1700	Clean Up Training Area and Debrief



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DAY FOUR

Hours:

0800-0810

0810-1030

1030-1100

1100-1200

1200-1430

1430-1630

1630-1700

Instruction:

Review Day 3, Safety Brief

Urban climbing

Suicidal/Jumper Considerations

Lunch

Hostage Rescue access considerations and Practical Application Exercise

Testing

Review, Clean Up Training Area and Course Close-Out



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COURSE OUTLINE

- I. Introduction/Administration
 - A. Welcome
 - i. Instructor Introductions and Contact information
 - ii. Student Introductions
 - iii. Name, Agency, Current Assignment, tactical experience, what do you want to get from this course, and what is most challenging about rappelling in a tactical environment
 - B. Course Objectives
 - i. Course Schedule
 - ii. Course Attendance
 - iii. Course Expectations
 - iv. Administration
 - v. Roster
 - vi. Restroom locations
- II. Safety Protocols and Guidelines
 - A. Safety is Our #1 Priority
 - i. Flat Ground practice before ever going vertical
 - ii. Safety/Belay line, "Fireman Safety" or other secondary safety will always be utilized
 - iii. Instructors will do a safety check of students' equipment before going vertical to ensure the gear is donned, assembled and being used correctly
 - iv. All students are safety officers, check yourself and your partners before approaching the edge
 - v. An edge restraint device will be used to prevent an accidental fall while working near the edge
 - vi. Report any gear malfunctions or damage to an instructor
 - vii. Report any injuries to an instructor
 - viii. Safety Briefs – Daily Morning and Afternoon session- POST Safety Policy will be read and posted where students can read it. Copies will be made available to students.
 - B. Rappel commands (i.e. "on belay", "on rappel", etc.)
 - i. Voice commands are utilized when going vertical. The appropriate signals will be taught and utilized during all phases of the course
 - C. Weapons Check before rappelling evolutions



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- D. On Site Medical Aid / Trauma Kits Location(s)
- E. Nearest Hospital Information
- III. Course Overview
 - A. Course History
 - i. Traditional rope access courses follow a standard commercial rope access or “NFPA” style safety format that do not necessarily address tactical end user requirements. TRAC focuses on providing end users the ability to use lighter weight gear that can perform multiple tasks while also teaching safe principles for access and rescue in a high threat environment.
 - B. Training Methodology
 - i. TRAC instructors recognize that the end user’s primary or secondary job description may not include rope skills, so the training is oriented to reduce the memorization of numerous complicated knots etc, that under operational stress and environmental conditions will be difficult to recall.
 - C. Development Approach/Needs and Skills Analysis
 - i. The course is “Tactical Rope Access” and provides students with more than just rappelling skills but teaches how to use these skills to solve numerous operational scenarios.
- IV. Rope Access Standards, Equipment Technology
 - A. Guidelines
 - i. CATO and California POST
 - ii. NTOA
 - B. Standards
 - i. Society of Professional Rope Access Technicians (SPRAT)
 - ii. Industrial Rope Access Trace Association (IRATA)
 - iii. International Technical Rescue Association (ITRA)
 - C. Ropes, Construction, and Nomenclature
 - i. Nylon
 - ii. Polyester
 - iii. Technora
 - iv. Kevlar
 - D. Knots and Hitches
 - i. Figure 8
 - ii. Figure 9



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- iii. Overhand
- iv. Double Bight Bowline
- v. Alpine Butterfly
- vi. Bowline
- vii. Bowline with Yosemite Finish
- viii. Rigging Bowline
- ix. Munter Hitch
- x. Girth Hitch
- xi. Clove Hitch
- xii. Offset Bound Overhand
- xiii. Frost Knot
- E. Single Point Anchors
 - i. Anchor Rigging
 - ii. Basket Hitch
 - iii. Wrap 3 Pull 2
 - iv. High Strength Tie Off
 - v. Bowline series
- V. Vertical Descent/Rappels, Belays, Edge Transition, Ascending, Body Anchors
 - A. Descent Devices
 - i. Handled descenders are emphasized for tactical operations
 - ii. Petzl products- GriGri, Rig, ID
 - iii. Skylotec spark
 - iv. Madrock Safeguard
 - v. Black Diamind ATC
 - vi. Munter Hitch
 - B. Flat Ground Practice
 - i. Descenders with tie off
 - ii. Anchors
 - C. Vertical Descent – Rappels
 - i. Friction
 - ii. Controlled, soft start- tactical
 - iii. Smooth descent, not bounding
 - D. Belays
 - i. Firemen



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- ii. Members on Top
 - iii. Self-Belay
 - iv. Buddy Belay
 - E. Edge Transition
 - i. Sitting to reduce target profile
 - ii. Pre-rig device so it rests over the edge, tie off
 - iii. Lower self onto device
 - F. Ascending
 - i. Rope Grabs
 - ii. Set up with Purcell Prusik
 - iii. Ascending – Practical Application
- VI. Clean Up Training Area and Debrief
 - A. Course content review
 - B. Secure the training area
- VII. Brief Day 2
 - A. Review course content from prior training day
 - B. Review all safety protocols and expectations
- VIII. Reactive action procedures
 - A. Knot Bypass on rappel
 - B. Stuck on knot on rappel
- IX. Mechanical Advantage Systems Overview and Practical Application
 - A. Overview
 - i. In event member is stuck on rope, raise back to roof, etc.
 - ii. Rescue Raise
 - iii. Introduction to litters and litter rigging
 - B. Mechanical Advantage Systems Practical Application - Passing a Knot on a Lower or Raise System
 - i. Raising weighted line, 3:1, 5:1
 - ii. Converting to lower system
 - iii. Back and forth conversions- raise/lower
 - iv. Passing a knot on raise or lower
 - v. In event a known knot or inadvertent knot is encountered during a raise or lower
 - vi. how to utilize anchor straps, rope grabs, Purcell Prusiks, etc in order to continue the operation.
- X. Webbing



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- A. Overview
 - i. 25' webbing, Halo Harness for Lift or Vertical Evac
 - ii. Hasty Bailout Technique - Webbing 3 Wrap on Carabiner Spine
 - iii. Intro to Sked rescue litter
- XI. Retrievable Rope Systems
 - i. Stone knot
 - ii. Alpine Butterfly
 - iii. Carabiner and Screw Link
- XII. Clean Up Training Area and Debrief
 - A. Course content review
 - B. Secure the training area
- XIII. Brief Day 3
 - A. Review course content from prior training day
 - B. Review all safety protocols and expectations
- XIV. Pick Offs
 - A. Overview
 - B. Rescuer carry 4:1 to transfer load
 - C. Technique
 - i. Lowered to just above Rescue
 - ii. Attach Safety
 - iii. Attach 4:1 to take tension out of Rescuer's System
 - iv. Remove Rescuer's Device from their Line
 - D. Lower or raise by top crew
- XV. Tight Area Access and Confined Space Considerations (descending and ascending)
 - A. Overview
 - i. Vertical operations do not always occur on the open side of a building
 - ii. including immediate means of retrieval
 - B. Techniques for safely moving through smaller spaces.
 - C. If a team member is lowered for a task- rescue, recon, etc, the technique for tying into the end of the rope and staying attached while performing the task will be shown and practiced.
- XVI. Team scenarios (if applicable)
 - A. Problem solving using all the skills learned will be applied in scenarios to give students the confidence to apply skills to briefed and non-briefed situations.
- XVII. Scenarios Debrief and Clean Up Training Area



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- A. Course content review
- B. Secure the training area
- XVIII. Brief Day 4
 - A. Review course content from prior training day
 - B. Review all safety protocols and expectations
- XIX. Urban climbing
 - A. Overview
 - B. Caving Ladder
 - C. Urban Climbing – Practical Application
- XX. Suicidal/Jumper Considerations
 - A. Overview and Practical Application
- XXI. Hostage Rescue access considerations and Practical Application Exercise
- XXII. Testing
 - A. Limited Gear Test
 - B. Knot Test
 - C. Written Test

TESTING: Any student scoring below standard on any exercise, as established by the presenter, will be remediated and tested until competency is demonstrated to the satisfaction of the presenter.
- XXIII. Review, clean up training area, course debrief
 - A. Course content review
 - B. Secure the training area
 - C. Course evaluations



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CO-HOST LOGISTIC REQUIREMENTS

CLASSROOM

- Adequate seating for up to 18 students with tables, good ventilation
- Marker board and markers

AUDIO VISUAL

- LCD Projector for computer presentation
- Large projection screen or monitor (minimum of 6'x6' screen size)
- Speaker system to connect to laptop for audio
- Extension cord and power strip
- AV table or cart

OTHER

- Access to copier
- Emergency medical support on site or nearby



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STUDENT EQUIPMENT LIST

INDIVIDUAL

- Law Enforcement / Agency ID
- Gloves
- Helmet
- Boots
- BDU uniform
- Tactical Vest
- Rappel Harness



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NTOA PROVIDED LOGISTICS ITEMS

INSTRUCTOR PACKET (mailed to co-host)

- QR Codes for walk in and substitution registrations
- Course roster
- Instructor agreements
- Dropbox link for student notebook and resource materials

INSTRUCTOR PACKET (emailed in advance)

- Directions to training site and hotel
- Contact numbers for co-host point of contact

COURSE PRESENTATION MATERIALS

- PowerPoint presentations available on Basecamp for download

INSTRUCTOR EQUIPMENT

- Laptop computer

PROVIDED EQUIPMENT FOR STUDENT USE

- 1" nylon tubular webbing- 1x30'
- 2x VT Prusik - Bluewater 7mm
- 5 carabiners - RockExotica Pirate self locking
- 1 carabiner - RockExotica Rock O self locking
- 1 Petzl Microtraxion or equivalent
- 1 Petzl tibloc or equivalent
- 1 Petzl Rollclip
- 1 Petzl GriGri or Skylootec Spark descent device, or handled descender of choice
- 1 Pulley - RockExotica Minipulley or equivalent
- 16' 6mm Aramid cord
- Yates 544 technora rappel daisy link