# Contents in the education to Professional Rope Access Technician® (PRAT®).

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# What's all this, then?:

Below, you'll find an overview of some of the themes, which we go through in theory and practise on the PRAT®-course, education and authorization. Of course the themes are not necessarily presented in the order in which we'll go through them on the education.

The idea is to show, what we'll go through and even to enable you to use it as a checklist during the education or for the training-periods.

It should be seen in combination with PRAT®-authorization-standards,

which are downloadable from: www.prat.cc

# 1. Harnesses

- Sit-harnesses
- Fullbody-harnesses
- Combination-harnesses, ie. chestharnesses and the risk of othostatic shock / suspension trauma
- Tie in (the importance and advantages of high / low)
- Buckles
- Workloops
- Equipmentloops
- Advantages, disadvantages and risks

# 2. Belay-systems etc.

- Sticht-type
- HMS
- Gri-gri, ID'20 etc.
- Handling different belaysystems
- Locking off the systems with and without load
- Advantages, disadvantages and risks

# 3. Ropes

- Static / dynamic - Single / double
- Single / dou - Prussik
- Diameters
- Strength
- Elongation
- Material
- Construction - Usage
- Storage
- Cleaning
- Maintenance
- Life-expectancy
- Use of logbook
- Cutting and melting
  Coiling of short and long ropes
- Laying out and preparing ropes

# 4. Knots

- Double figure of eight knot
  Figure og eight loop
  Double fishermans knot
  Clove hitch
  Tapeknot
  Bowline
  Prussikknot
  French prussik / klemheist
  Bachmannknot
  Knots for flat and hollow tape
  Knots for tying in
- Correct use of sliding knots

#### 5. Communication - Rope management

- Warning etc.
- Climbing

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#### 6. Carabiners - Common

- Screwdate
- Twistlock / snaplock
- Steel / aluminium
- Oppositely directed carabiners
- Strength in different directions etc.
- Advantages and disadvantages

## 7. Slings and tape etc.

- Materials
- Flat / hollow
- Strength / diameter
- Tying together - Quick-draws
- Quick-draws

# 8. Fallfactor

- Definition - Understanding
- Practical implementation
- Calculation
- Riscs
- RISCS
- Relation to impact-force
- Knowledge of risks and techniques relating to Via Ferrata
- Use of dymanic shock absorbers

# 9. Belaystations

- Definitions
- Setup
- Configurations
- Angles
- Independency
- Loadsharing
- Resulting direction of pull
- Stability
- Equalisation of two or more anchors

# 10. Anchors

- -- Anchorpoints
- . Back-up-stystems
- Prevention against abrasion
- Organisation

### 11. Climbing-techiniques

- Freeclimbing
- . Artificial climbing
- Direct and indirect topropingsystems
- Lead climbing
- Knowledge, skills, risks and understanding of...
- Fallfactor
- Distance between stoppers
- Belays, both up and down
- Downclimbing and traversing

Read more about the professional PRAT®-authorization:

# www.prat.cc



- Figure of eight
- Belay-plate, sticht-type

- Abseiling with prussik

- Abseil past a knot

- Use of back-up-rope

13. Prussik-climbing

- Advantages, disadvatages etc.

- Advantages, disadvantages and risks

- Climbing with different combinations of jumars

- Passing to jumars, from fully loaded abseil-tools

- Passing a knot through the system during lowering

- Passing to abseiltools, freehanging and fully loaded

- Risk of abrasion. Prevention

14. Jumar-climbing etc.

- Correct mounting and use

- Counterweight-abseil

- Safety-attitude

- Safety-thinking

- Partner-control

17. Approvals etc.

- Manufacturers info etc.

18. Legal stuff etc.

- Working-regulations etc

- Employers insurances

- Work-authorities

**19.Insurance** 

- Accidents

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- The law and responsibility etc.

- Liability and professional responsibility

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**Professional Rope** 

Access Technicians®

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- Maturity

- UIAA

- CE

- Reflection

- Lowering of injured climber

- Bringing up an injured climber

- Confidence and self-confidence

- Incident-reports and evaluation

16. General safety etc.

15. Emergency-procedures

- Tving of prussik-slings

- Tving of prussik-knots

- Climbing with prussik

- ID'20
- Italian hitch
- Advantages and disadvantages to each method
- Techniques not to abseil over the end of the rope - Locking off diverse abseil-tools during abseil

- Different prussiks, Klemheist, french, Bachmann

- Passing to abseiltool, freehanging and fully loaded

- Use of different jumars, ie. Ascender, Basic, Croll etc.

- Use of back-up systems, involving ie. Shunt and Rocker etc.

- Loosening fastened prussik in two ways



# Information about the PRAT®-Authorization

The practical, timesaving and economical advantages of Rope Access can be huge.

To ensure, that the job can be done in comfort and with maximum safety, it's of course all important, that the workers get the very best education available.

The education and authorization to Professional Rope Access Technician® (PRAT®) gives this background and is unique and worldleading in its safety-thinking and implementation of the latest research, knowledge and techniques.

It enables each  $\mathsf{PRAT}^{\texttt{B}}\text{-}\mathsf{worker}$  to work comfortably and safely with Rope Access.

The workers work independently in teams of two equally trained and authorized persons.

Each worker learns how to make safe belaystations, partnerchecks, supervision, and of course Rope Access. Also PRAT®-workers are taught and trained in rescuing their colleague and in handling a number of emergency-situations. Furthermore the PRAT®-workers are trained to report and evaluate incidents, so that safety procedures can be optimized, and routines and techniaues can be changed,

adapted and implemented accordingly to maximize safety.

All this constitutes a major difference, compared to other industrial rope access educations and authorizations, which lets a worker with only four days education work with industrial rope access as long as he is being supervised by a more experienced tehcnician or supervisor.

PRAT®-authorized workers, on the other hand, are allowed to work with equally trained and authorized PRAT®-workers, which allows for a great deal of flexibility.

Many years of experience also show, that this gives the highest degree of safety, which in turn also increases the feeling of confidence amongst the workers.

The PRAT®-authorization ensures that each PRAT®-worker is working on a safety- and technical level, at least equaling an IRATA®-supervisor.

The education typically lasts from two to four months and consists of four intensive courses, each lasting up to a week, separated by periods of training, concluding with the assessment, which in turn leads to the issuing of the PRAT®-authorization-certificate.

The PRAT®-authorization builds on many years of experience, both with industrial rope access and with mountaineering, rock climbing

Look for more information on:



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