

Technical rescue teams intervene in particularly difficult or dangerous situations. Intensively trained and taught, they operate in any environment where conventional rescue teams cannot intervene safely. These specialists master all the techniques for progression and belaying on ropes, including the more complex ones: evacuation downward, upward, or by Tyrolean traverse, etc.

### Downward evacuation

Easier to install, this type of evacuation is favored whenever possible. Downward evacuation takes place using gravity, applying different techniques determined for specific types of terrain.

### Upward evacuation

Upward evacuation requires techniques which are sometimes particularly complex (hauling with a mechanical winch, creating a hauling system built from lightweight pulleys, using counterweight techniques, etc.). Upward evacuation is a team effort and requires perfect coordination by everyone involved.

### Evacuation by Tyrolean traverse

When evacuation of the victim is difficult (urban sites, industrial sites, confined spaces, canyons, etc.) or impossible due to the presence of an obstacle, victims can be evacuated via Tyrolean traverse. These complex systems can only be installed by rescue workers who have been specially trained to make suitable decisions about the choice of techniques (Tyrolean traverse set up with transport rope and back-up safety rope, «cable-car» system, special Tyrolean traverse for moving the victim in all directions while adapting to the terrain, etc.).

PCHM Isère et Savoie - Col du Coq (France) © Arnaud Chifleric - Thomas Marchand



**A ALVEO VENT:** lightweight and ventilated helmet for rescue with strong chin strap to limit risk of the helmet coming off during a fall.

**B ULTRA:** powerful headlamp.

**C FALCON:** lightweight seat harness for rescue.

**D I'D S:** versatile self-braking belay device/descender with integrated anti-panic function allows the speed of the descent to be easily controlled. Can also be used to make a reversible haul system.

**E RESCUE:** high strength and efficiency pulley designed for manipulation of heavy loads or for intensive use.

**F ASCENSION:** ergonomic handled rope clamp (right- and left-handed versions) for rope ascents and hauling (pulling aid).

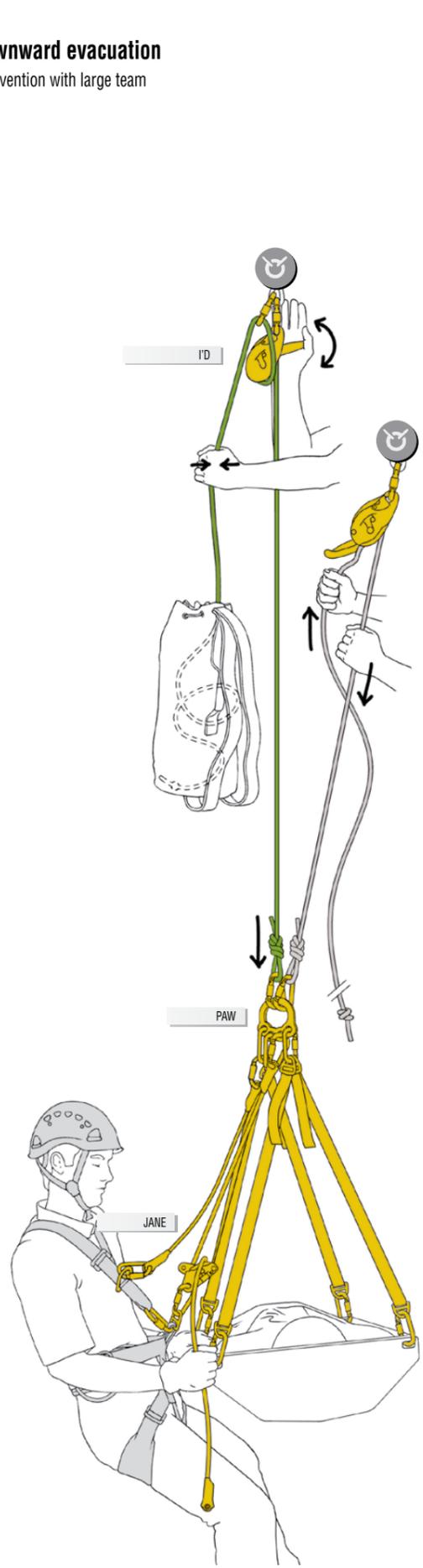
**G PAW L:** rigging plate.

All equipment pages 40 to 149.



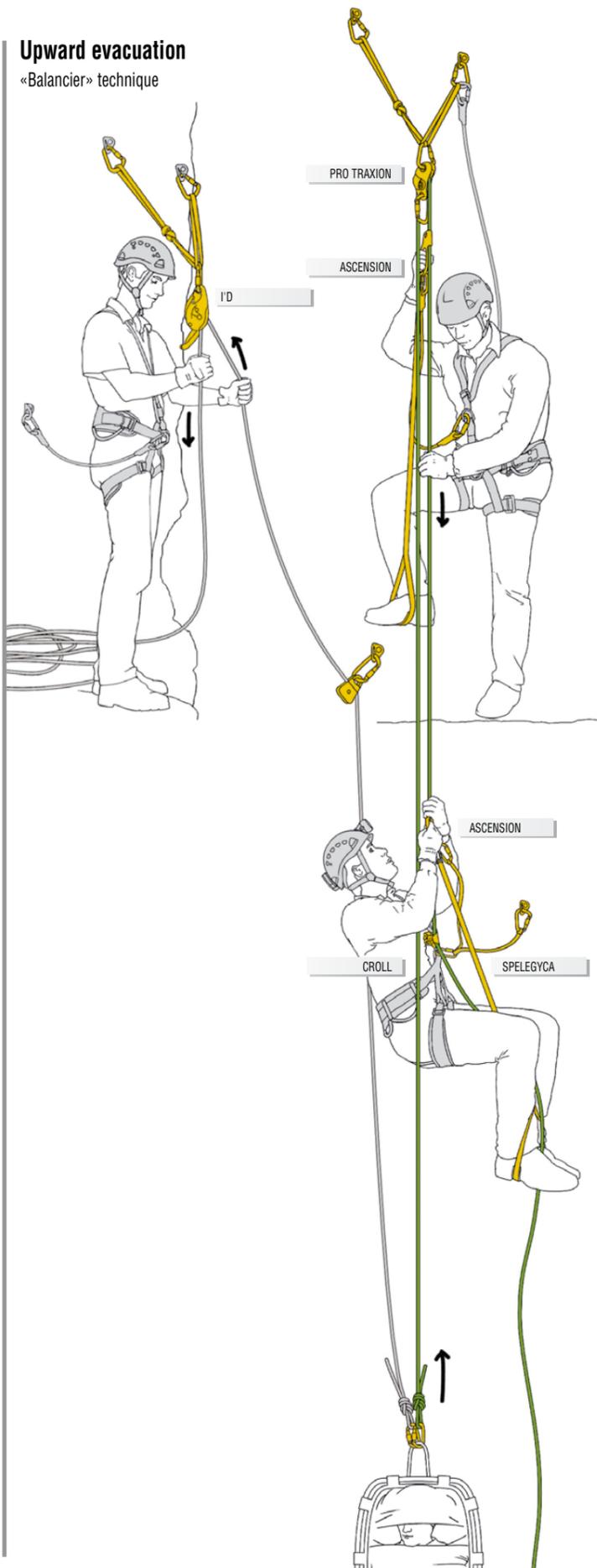
## Downward evacuation

Intervention with large team



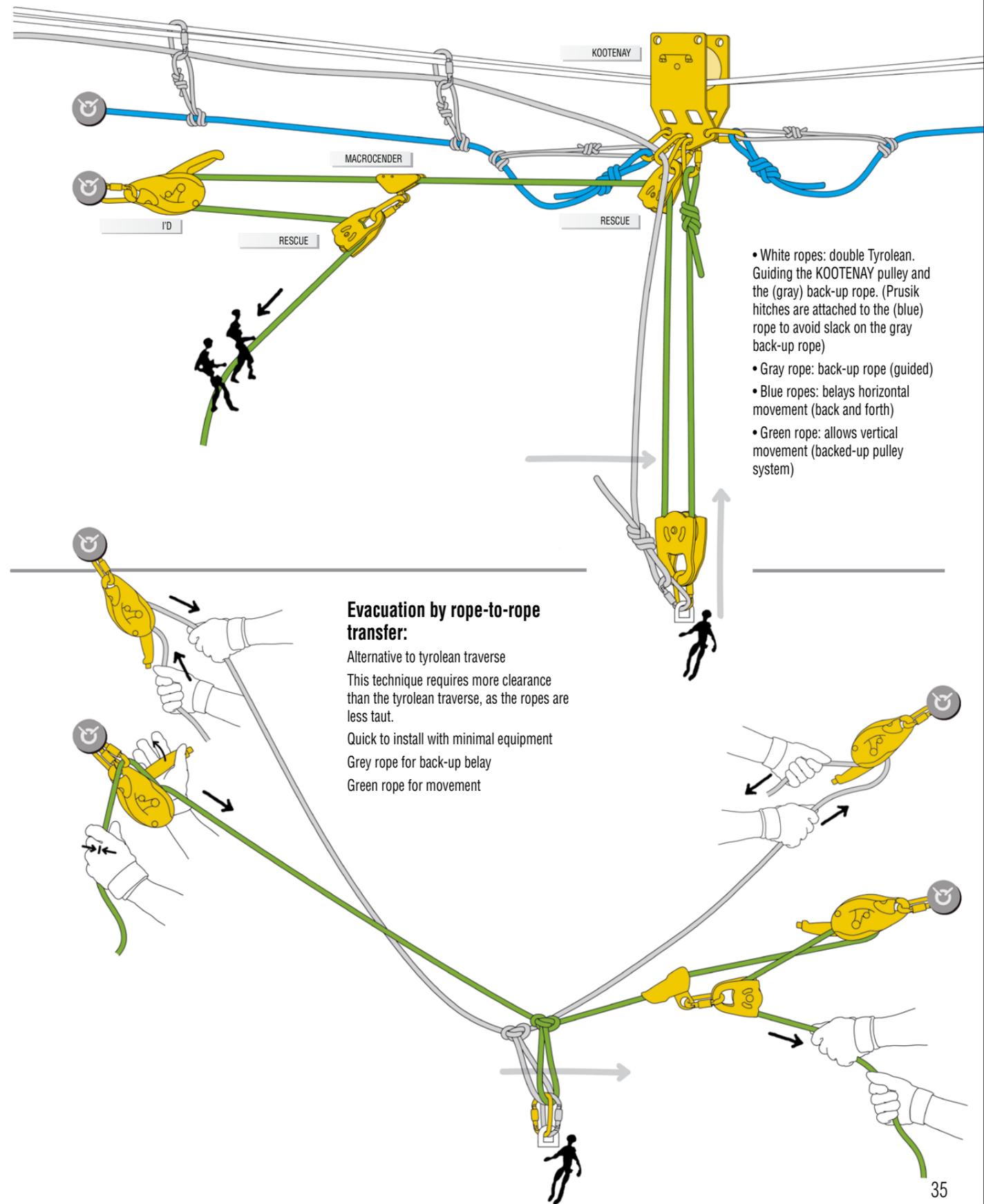
## Upward evacuation

«Balancier» technique



## Evacuation by Tyrolean traverse

Backed up rescue system (vertical and horizontal)



### Evacuation by rope-to-rope transfer:

Alternative to tyrolean traverse  
 This technique requires more clearance than the tyrolean traverse, as the ropes are less taut.  
 Quick to install with minimal equipment  
 Grey rope for back-up belay  
 Green rope for movement

Information is non-exhaustive. Refer to the other pages as well as to the user instructions and technical manuals. Technical training is essential.

- HARNESSES
- HELMETS
- LANYARDS AND ENERGY ABSORBERS
- MOBILE FALL ARRESTER
- CARABINERS, CONNECTORS
- DESCENDERS
- ROPE CLAMPS
- PULLEYS
- ANCHORS AND ROPES
- PACKS AND ACCESSORIES