Semi-technical Rescue (Semi-Tech) is an overland patient transport where the steep terrain requires the use of a rope belay system to protect the patient and the team.

**Personnel you need:**
- 5 Litter carriers
- 1 Litter Captain
- 1 Medical Officer (can be a litter carrier too)
- 3 rope handlers
- Rescue Specialist
- Safety Officer

**Equipment you need:**
- Strong living trees for anchors
- Static Rope
- 2 large steel biners
- Stokes with yoke & face shield attached
- 6 short perlon cords
- 6 personal size biners
- 6 harnesses or webbing
- Helmets
- Vacuum splint (opt)

**Communication**
Be loud and clear. Be precise in your commands, but use plain English if needed. Relayers can assist in making sure commands are heard.

**Training**
Practice doesn't make perfect, perfect practice makes perfect. SemiTech isn't a skill to be learned in one day. It takes plenty of pitches in the training setting before you're ready to lead a pitch on a search.

1. On Belay?
2. Belay On!
3. Preload!
4. Preload!
5. Thank you, Up Slow!
6. Up Slow!

ROCK! FALLING! STOP! Man, this guy's heavy...

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Big picture

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Semitechnical Rescue Crib Sheet

Belayer sets up and controls the rope around the anchor.

UpHill checks biners on litter and stays between the litter and belay. Pads the rope and relays commands when needed.

DownHill clears the path for the litter team and points out any unsecured footing. Watches for the next belay point.

Sometimes, a semitech evac is longer than the length of one rope. This rotation system allows pitches to quickly follow each other with very little lag time. It’s designed to allow the belayer to get in position almost immediately. All transitions should be under one minute, you should try for 30 seconds.

DownHill Rotation – B → U → D

Uphill Rotation - D → U → B

Belaying:
Uphill belaying requires lots of timing and skill because you are taking up the rope while protecting the litter at all times. There are three steps:

1) Pull the slack rope from the tree and around your waist,
2) Grab both sides of the rope, not quite to the end of your reach,
3) Slide your brake hand along the rope back to your brake position.

DownHill assists the belayer in feeding the rope around the tree. Keeps fingers clear of the tree.

UpHill takes end of rope up the hill as it leaves the belayer, watches for next belay point.

Belayer sets up and controls the rope around the anchor.

Belay setup: back in to rope uphill of tree

1 2 3
Normal command sequence:
Litter Captain to Belayer: *On Belay?*
Belayer to Litter Captain: *Belay On.*
Litter Captain to Litter Team: *Ready to Lift?*
Litter Team to Litter Captain: *Ready!*
Litter Captain to Belayer: *Preload?*
Belayer to Litter Captain: *Preload!*
<Litter slowly gives increasing tension >
Litter Captain to Belayer: *Thank You*

Litter Captain to Belayer: *Down Slow*
Belayer to Litter Captain: *Down Slow*
<Litter Team moves forward under belay>
...the litter moves, at the point when there is about 20 feet of line left above the belay point...
Belayer to the Litter: Two-Oh
Litter to Belayer: Two-Oh
<Litter Captain and Downhill RH find a spot to set the litter down >

Litter Captain to Belayer: *Up Slow*
Belayer to Litter Captain: *Up Slow*
<Litter Team moves forward under belay>
...the litter moves, at the point when the litter is about 20 feet from the belay point...
Belayer to the Uphill RH: Two-Oh
Uphill RH to Belayer: Two-Oh
<Litter Captain finds a spot to set the litter down >

Litter Captain to Belayer: *Off Belay*
Belayer to Litter Captain: *Belay Off*
<Rope Handler rotation begins>

Belayer moves to Uphill position
Uphill moves to Downhill position
Downhill moves to Belayer position

Sequence starts again.

Special Events
Anyone can give these commands. The belayer always locks off when these commands are given.

**Rock!!** The litter team leans over the patient to protect them from falling rocks, sticks, etc.

**Stop!!** The litter team stops immediately

**Clear!!** Indicates a danger has passed

**Vomit!!** The patient is vomiting. The litter team stops, removes the face shield and leans the patient to one side. The medic attends to the patient

**Falling!!** The litter team is slipping on leaves, etc. and needs to be stopped immediately
**The Litter Captain** is in charge of the Team that carries the patient. The LC must look out for the teams wellbeing while moving the litter at a fast pace through often steep and rough terrain

**MOVING THE LITTER:**
Team gets in position, 3 on each side. Have each team member check their connection and the person across from them. When your belay is on,

**THE SPEECH:**
The Litter Captain may have inexperienced volunteers on the evac team. He or she must explain the process ahead of time, while the packaging and rope team are working so the evac will go smoothly.

- **Objective:** to get patient to safety as safely and as quickly as possible.
- With team attached to litter and purpose of belay system.
- Check equipment of team including ASRC seat harness, helmet, sling of perlon, and carabiner.
- Commands between you (the LC) and the Rope Handlers...minimize extra talking.
- Explain commands between you (the LC) and your team. Lifting, Falling, Rock, Vomit, Stop.
- Keep the litter as level as possible. If an angle is necessary, make sure head is higher than feet.