Norwegian Alpine Rescue Groups

Big wall rescue procedures with helicopter
• film
Sea King helicopter

- AUW 21400lbs/9600kg
- Crew of 6, including doctor
- Dual hoist (hydraulic)
- Hoist cable length 245 feet
- Coms
- EO/IR camera
Considerations

• Procedure development
• Mountanious hoisting
  – Wind
  – Turbulence
  – Settlig with power/vortex ring state
  – Big wall proximity (stress)
  – Workload
  – Safety (escape)
Longline

• Is an extension to the hoist cable

• Helicopter has to descend along the wall – risk of settling with power

• Longline is used as a long guideline to pull the hoist cable to the extraction point

• Longline is used to control the load during hoisting
Superlongline

- Is an extension to the hoist cable
- Helicopter does not have to descend along the wall
- Reduces hover time near the wall
- This procedure accepts very long ropes
- Rope and load can be hoisted into the helicopter
Superlongline vs. Longline

Superlongline
- Helicopter does not have to descend along the wall
- Helicopter can hover above deep ravines/gullies
- Helicopter can hover above difficult wind conditions
- Less downwash on accident site
- Less rockfall hazard
- Facilitates rescues in very steep or narrow places

Longline
- Helicopter has to descend along the wall
- Helicopter has to hover in an offset position
- Facilitates extraction of a larger number of casualties or rescuers
Rescuers will gain access to the casualty by lowering or by rappel.

A third, untensioned rope will be laid out between the upper belay and the accident site.

This rope will be used as a «superlongline». 
The procedure:
Superlongline ready for pick up

Upper belay point

Extraction point

Illustration created using Rigger
Superlongline pick up on upper belay point
Connection of superlongline in the helicopter
Releasing stretcher from wall
Hoisting the superlongline
• Film