

DECISION MAKING AT THE CRUX WITH



AT THE CHECKPOINT BEFORE THE CRUX

- Slope description (Aspect, Angle, Elevation, Size, Shape)
- Recall trip planning: Are conditions as expected?

IDENTIFYING THE HAZARD

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- Assess local conditions in the area: Avalanche problem? Likelihood of triggering? (▶ Example on p.10, use current observations)
- Estimate the likelihood of triggering at the crux: Initiation? Propagation? Tracks? Other hazards? (▶ example on p.11 with help on p.86)

ANTICIPATING THE CONSEQUENCES

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Estimate the consequences of a release: Slope size?
Release volume? Terrain traps? Safe grouping spots?
(▶ example on p.11 with help on p.86)

CONSIDERING MITIGATION

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We can mitigate our risk at the crux by reducing

- The likelihood of triggering (e.g. spreading out) and/or
- The consequences of release (e.g. avoiding a terrain trap).

ASSESSING THE RISK

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- Weigh hazard <-> consequences (p.11)
- Do we accept the risk?
No ▶ Change mitigation measures, look at alternatives or bail.
Yes ▶ Communicate risk evaluation and organize the group.
- Human factors: Peer pressure? Own goals? Group dynamics?

RATING THE CRUX SLOPES

Answering the detailed questions will guide you through the risk evaluation process. To assess the risk you will need to combine the ratings for the likelihood of triggering and the ones for the possible consequences of release.

LIKELIHOOD OF TRIGGERING

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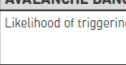




- Failure initiation: Is failure initiation unlikely? Are there weak layers? Can we trigger along the intended route or at grouping spots?
- Crack propagation: Is crack propagation unlikely? What is the slab(thickness)? Did the weak layer have time to strengthen?
- Tracks: Has the slope been skied much? Skiing is a stability test and triggering is less likely on tracked slopes. Skier traffic increases variability which can stop crack formation. Be careful with persistent weak layers.
- Other hazards: Is the group threatened by additional hazards? Natural release? Seracs? Crevasses? Other people?

POSSIBLE CONSEQUENCES OF RELEASE

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- Slope size: Is the slope rather large? Would release mean serious burial? It may depend on where you ski or climb the slope.
- Release volume: How much snow is going to move? Release width and possible crown thickness? Larger slides tend to be more harmful.
- Terrain traps: Are there terrain traps that increase the consequences of being caught? Cliffs, trees, rocks in the runout? Gullies or unfavorably shaped runout terrain?
- Safe spots: Can we avoid multiple burials? Is only one person exposed at a time? Is the group near to help in case of a burial.

ASSESSING LOCAL AVALANCHE DANGER

| | | | |
|---|--|---|---------------------|
| Location | | Name | |
| Date | | Time | RATING |
| SIGNS OF INSTABILITY (RECENT / CURRENT) | | | positive negative |
| | | | |
| SNOW COVER INFORMATION AND SNOW INSTABILITY | | | |
| Layering | | | |
| Test results | | | |
| AVALANCHE PROBLEM | | CURRENT WEATHER | |
|  | | Precipitation | |
|  | | Wind | |
|  | | Air temperature | |
|  | | Warming / Wetting | |
| AVALANCHE DANGER | | | |
| Likelihood of triggering | | UNLIKELY – POSSIBLE – EXPECTED | |
| Avalanche prone locations corresponding to avalanche problems: | | | |
| Avalanche problem: | | Avalanche problem: | |
|  | |  | |
|  | |  | |
| Avalanche type and size | | | |
| Local danger estimate | | LOW – MODERATE – CONSIDERABLE – HIGH – VERY HIGH | |
| Weather outlook | | Danger outlook | |
| OTHER SAFETY ISSUES (Visibility, Fall hazards, Health, Group dynamics, etc.) | | | |
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