

# Avalanche Terrain Classification

20080403 Draft, Adapted by Southeast Alaska Avalanche Center from Parks Canada Model

| Terrain Complexity Factors    | 1 Easy<br>+  | 2 Moderate<br>0   | 3 Difficult<br>-  |
|-------------------------------|--|---|---|
| Route Options or Alternatives | Numerous, terrain allows multiple choices.                         | A selection of choices of varying exposure, options to avoid avalanche paths.   | <b>Limited chances to reduce exposure, avoidance not possible.</b>  |
| Slope Angle                   | Angles generally < 30°.  | <b>Mostly low angle, isolated slopes &gt; 35°.</b>  | <b>Variable, with many &gt; 35°.</b>  |
| Terrain Traps & Consequences  | Minimal, some creek slopes or cutbanks.                            | <b>Some depressions, gullies or hollows, and/or avalanche terrain above, trees, brush, cliffs, rocks, narrows creeks, or water with some good escape routes or “islands of safety”.</b> | <b>Many depressions, gullies or hollows, cliffs, hidden slopes above gullies, cornices, trees, brush, cliffs, rocks, narrows, creeks, or water with few escape routes or “islands of safety”.</b> |
| Avalanche Frequency           | 30 year return, ≥ D2 size.   | Yearly for < D2 size.<br><b>3 year return for ≥ D2 size.</b>  | Yearly for < D3 size.<br><b>Yearly for ≥ D3 size.</b>   |
| Interaction with Paths        | Runout zones only.   | Single path or paths with separation.   | <b>Numerous and overlapping paths.</b>  |
| Exposure Time                 | None, or limited exposure crossing runouts only.                   | <b>Isolated exposure to start zones and tracks.</b>   | <b>Frequent exposure to start zones and tracks.</b>   |
| Glaciation                    | None or smooth.  | <b>Generally smooth with isolated bands of crevasses.</b>   | <b>Broken or steep sections of crevasses, icefalls or serac exposure.</b>   |
| Start Zone Density            | Limited starting zone terrain.                                     | Some start zones; isolated avalanche paths leading to valley bottom.  | Large expanses of start zones; multiple paths leading to valley bottom.   |
| Runout Zone Characteristics   | Solitary, well-defined areas, smooth transitions, spread deposits. | Abrupt transitions or depressions with deep deposits.   | Multiple converging runout zones, confined depositions area, steep tracks overhead.   |
| Slope Shape                   | Uniform.   | Some convexities.   | Convolutated.   |

## Notes:

Terrain may fit into multiple classes. Consider all the variables and note that there are some default properties. Properties with a **bold italicized** descriptor automatically default into that or a higher terrain class. Non-italicized descriptors are considered as carrying less weight.