AVALANCHE

Mr Radivoje Vuković

- There is no expert who has determined with certainty that a slope is safe from avalanches.

TYPES OF SNOW

- A snowstorm
- Prsic
- Grain snow - firn
- Snow tent (trash)
- Whole
- Artificial snow

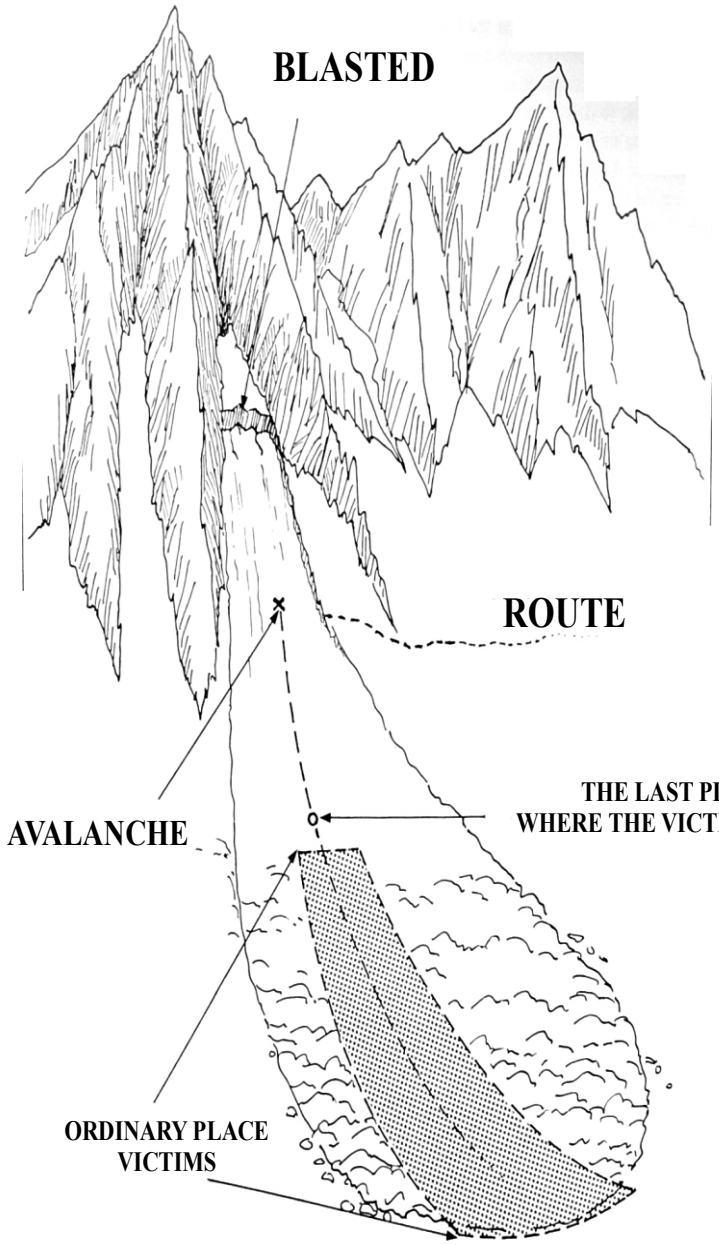
- Avalanche or owl are the names for breaking large masses of snow down steep mountain slopes with higher slopes, most often in winter and early spring.
- Steep mountain ranges favor the accumulation of snow masses, which are sharply down the slope into the valley (split opinion) under the influence of wind, earthquakes, loud sound (gunshots, locomotive beeps, human voice) or the movement of humans and animals.
- Snow action can be dry or wet. Dry avalanches occur in the winter, move at high speeds (up to 100 m / s) and create high destructive force winds ahead.
- Wet avalanches occur in the spring when snowmelt begins and are characterized by a relatively high content of rocky moraine material (rocks, rock blocks and trees) mixed with snow .

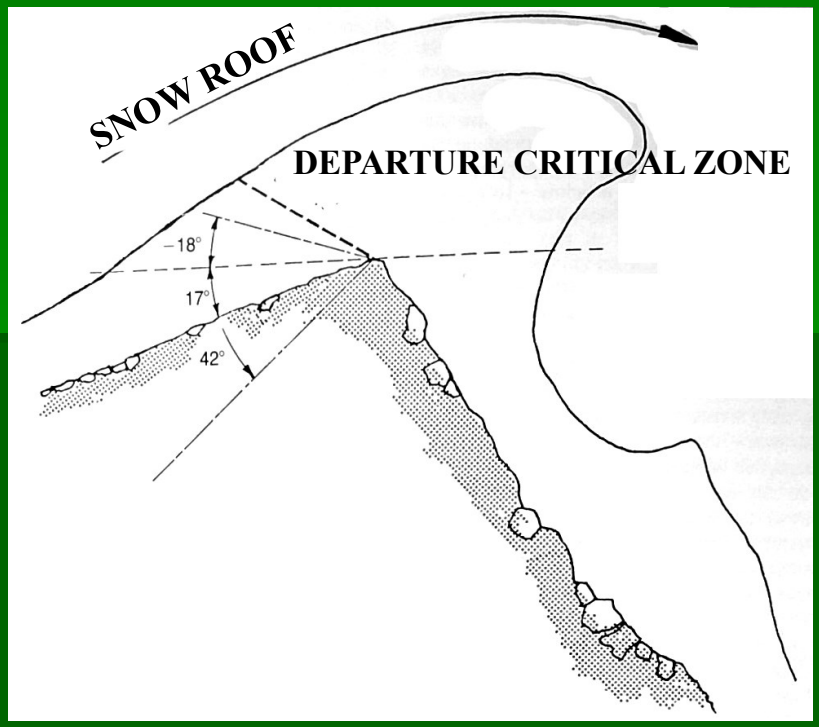
- Avalanches often cause extensive damage and loss of human life, although given the relatively low population density of mountainous areas, they are limited in comparison to other natural disasters.
- Avalanches are a very common occurrence in the Alps, and rare in the Prokletije and Dinarides.
- The European avalanche protection measures are as follows:
  - organization of a surveillance and alert service;
  - artificially causing small avalanches before large accumulation;
  - preventing snow accumulation in endangered areas;
  - erecting temporary facilities to direct and slow down snowmelt.

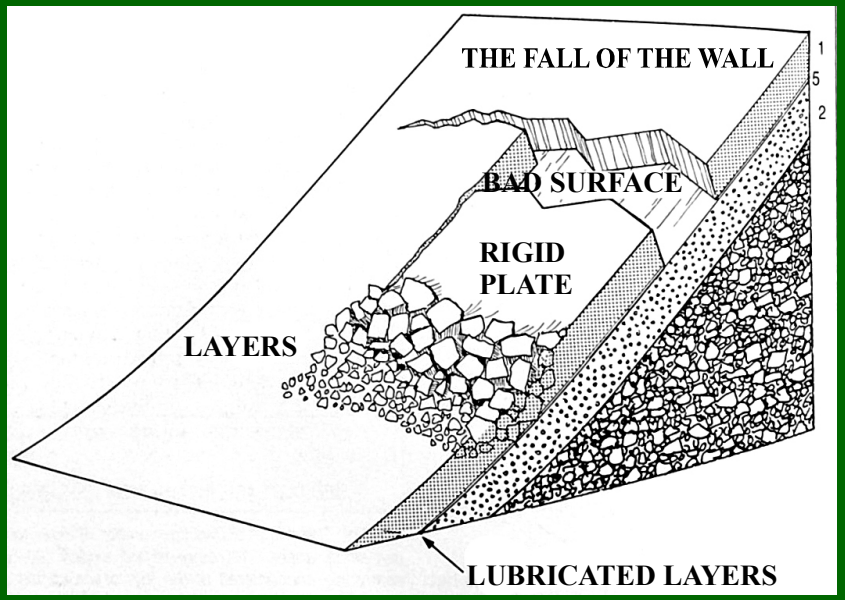
Risk table

- This table was adopted in April 1993.

Category	Snow stability	The flag	Degree description
low (1)	snow is generally stable		an avalanche will only occur if heavy loads cross the steepest slopes; any spontaneous avalanches are negligible; the situation is stable
limited (2)	snow is partly stable on some slopes, while on the rest it is stable		an avalanche occurs only if heavy loads pass over the slopes, especially on relatively steep slopes; no spontaneous snow slides
middle (3)	on most slopes the snow is only partially stable		an avalanche can occur on any slope even with relatively low loads; on particularly sensitive slopes, there may be moderate spontaneous snow slippage
tall (4)	snow is generally not stable on all slopes		an avalanche can easily be reached on any slope with a relatively low load; especially sensitive slopes may cause spontaneous slippage of snow
Very high (5)	snow is generally unstable		on all the slopes there can be a big one


BLASTED
ROUTE
AVALANCHE
THE LAST PLACE
WHERE THE VICTIM IS SEEN
ORDINARY PLACE
VICTIMS


SNOW ROOF
DEPARTURE CRITICAL ZONE
18°
17°
42°


THE FALL OF THE WALL
1
5
2
BAD SURFACE
RIGID
PLATE
LAYERS
LUBRICATED LAYERS

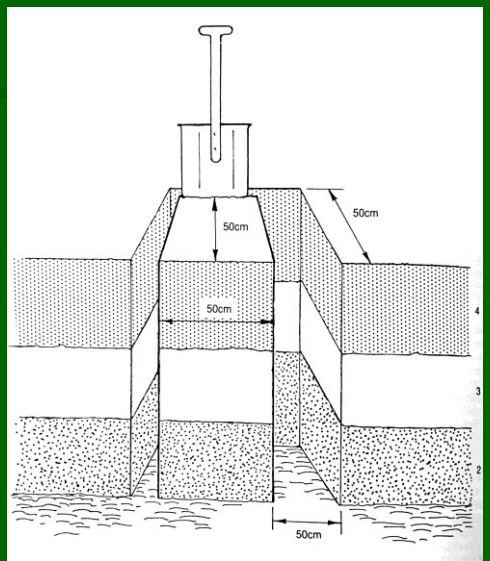
Strength table

Degree	The result	Damage	Size
slush (1)	snow breaks down but does not bury people	small; usually human injuries (rarely death)	length <50 m volume <100 m³
small (2)	the snowmelt stops on the slope itself	burying, injuring, and killing	length <100 m volume <1000 m³
median(3)	the snow mass reaches the bottom of the slope itself	damage to trees, buildings and vehicles	length <1000 m volume <10,000 m³
big (4)	snow crosses all hills and plains	felling of trees, buildings and vehicles	length> 1000 m volume> 10,000 m³

PREVENTIVE

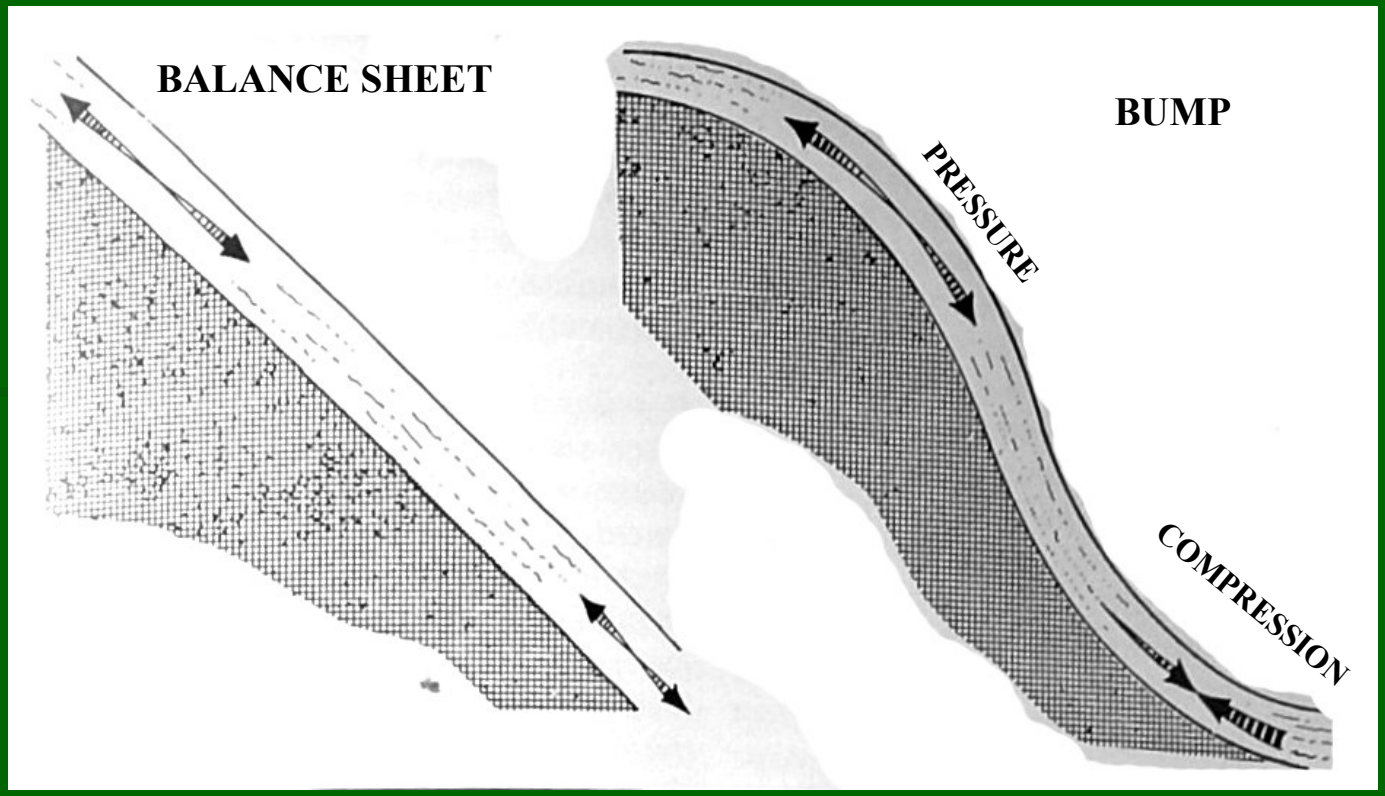
- Perception
- Signs of danger (type of snow, air temperature)
- Planning
- Equipment (avalanche tapes, avalanche shovel)

TEST LOPATOM



Salvage

- Ground sounding
- Avalanche keros
- Beeper



IMPLICATIONS

- Hyperthermia
- Freezing
- Shock
- Death

- The most common accidents occur in a slope between 30^{o} and 35^{o}.
- Avalanches can go as high as 25^{o}.
- The most beautiful ski areas are subject to avalanches.
- Fresh snow contains 90% of the trapped air.

RECOMMENDATION

- **Never without a guide and ski instructor**