THE FRENCH CHOICES AMONG THE GROWING RANGE OF THE AVALANCHE BLASTING TECHNIQUES

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In France the ski resort manager, the avalanche expert, and the road maintenance engineer have several different types of avalanche blasting techniques from which to choose.

1. The Available Techniques:

1.1. Close Blasting
   ** Hand-tossed charges, including from helicopter or chairlift : use of cap and safety fuse,
   ** Charges sent sliding down the slope : use of light sled and electric cap,

1.2. Remote Blasting
   ** The "avalauncher" : arrow-like projectile launched with the help of compressed gas,
   ** The bomb-tram or CATEX : charges forwarded to the blasting points by a ropeway,
   ** The gas exploder or GAZEX : aerial explosion of a propane-oxygen mixture.

2. The Choices :
(Developed with the help of a widespread survey).

2.1. The Experts’ One
   After hazard identification, the expert chooses the method that theoretically fits best the nature requirements and/or the avalanche workers’ safety. As he/she is consulted about difficult cases only, the advice to use a remote blasting method (CATEX and now GAZEX) is more frequent (approx. 90%) than use of a close blasting method.

2.2. The Mountain Managers and Ski Patrol Leaders’ One
   For these managers, the best choice will be both the fastest and the cheapest one, very often. Therefore, they choose the tossed-charge method (approx. 70%) rather than anyone else. Recent data show that the remote blasting ideas gains ground in their minds.

2.3. The Highway Maintenance Engineers’ One
   In that case, the only possible choice is the remote blasting (approx. 99%), more often the CATEX, as the avalanche workers cannot reach easily the starting zones of the avalanches that threaten the roads.