Avalanche forecasting for large area mechanized ski guiding

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It is a given that practitioners need to provide a safe and enjoyable experience to their clients, they also have a legal responsibility to provide a standard of care to their guests – the highest known current standard. Within the mechanized ski industry, an effective risk management program needs to ensure safe travel within avalanche terrain. The ability to travel safely in avalanche terrain relies on, early detection of Avalanche danger. This warning then makes way for avoidance, terrain selection, and guiding procedure. MWHS employs a *Five Step* checklist method to snow stability forecasting in order to gather the pertinent information on factors that have a direct contributory effect. This approach can be applied in all mountains, elevations, exposures and slope formations. The *five step* method relies on daily weather data, graphs, snowpack profiles, field observations and ski test/stability ratings. This allows us to prepare for that day, get ready for the coming days. Daily weather data is recorded from remote weather stations and other areas around the Province for temperature, wind speed, snowfall, humidity and trends. We graph the lunar cycle and take cosmic solar radiation into account using an approach pioneered by MWHS and Alta Utah. The snowpack profile uses numerous shear tests to provide snowpack stability rating on a scale from 1 to 7. The stability rating is given for all elevations and aspects based on the *five step* information. Terrain is selected for the day. Field decisions carry on throughout the operational day by repeating the process in the field. The ski guide then employs a precision guiding procedure even more so with the presence of a gliding layer, regardless of the stability rating.