MOUNT WASHINGTON AVALANCHE CENTER

Avalanche Forecast for Tuesday, January 28, 2020

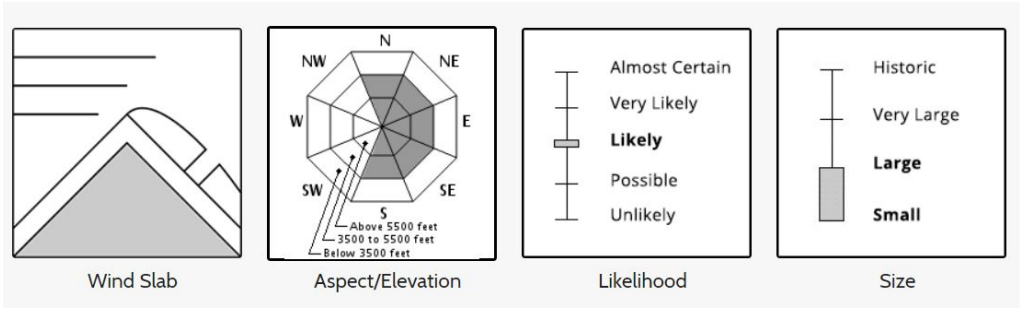
The Bottom Line

CONSIDERABLE danger continues for new and developing wind drifts primarily in steep east facing terrain and cross loaded gullies. Drifted snow may release naturally in the steepest terrain, and is likely to avalanche from a human trigger. An avalanche today could be large in some locations, deep enough to bury a person. An avalanche leading into a terrain trap, such as those found in half-pipe shaped gullies would be especially dangerous. Steep wind drifted slopes should be approached with caution, especially if visibility is poor reducing your ability to fully assess the terrain above or below you. Look for signs of wind loading: smooth snow surface, pillows of snow, and deep sluff-pile aprons of snow at the bottom of steep gullies.

Mountain Weather

The summit of Mount Washington received 2.8" of new snow from continuous snow showers yesterday on WNW wind averaging 50mph. This combined with the 1.3" yesterday, and 5.0" over the weekend, totals 9.1" in the last three days. Almost 8" of new snow was recorded at the Hermit Lake snow plot for the same time period. Cloudy skies and snow showers continue today with a trace to 2" expected as wind shifts N and decreases to 25-40 mph. Temperatures will hover around 10F. Tonight, dry air moves in, shutting down any remaining snow shower activity bringing clearing skies. Mostly clear and sunny tomorrow with a high temperature around 10F and N wind 35-50.

Primary Avalanche Problem



Northwest then North wind will continue to transport new snow into steep, primarily east facing terrain and cross loaded gullies. With lower wind speeds today, new wind slabs will be more sensitive to a human trigger. Watch for signs of unstable snow including the snow surface cracking under or near your feet. Be conservative in terrain choices today, carefully evaluate the snowpack, and give these new wind slabs time to settle and stabilize. A lingering issue is a weak layer of snow sitting just above the ice crust formed January 11 – 12 buried by subsequent storms. While unlikely, it's not impossible that an avalanche today, could provide enough energy to step down to this weak layer resulting in a much larger avalanche.

Forecast Discussion

The lingering concern mentioned above in the Wind Slab avalanche problem begins with a strong melt-freeze crust formed on January 13. A layer of soft 4F snow was capped and preserved by layers of stiffer 1F wind slab creating an upside down snow structure, sitting on an icy bed surface. Two weeks have passed, with additional snow and wind slabs added. So far, this weak layer has been proven to be unreactive, likely due to the bridging strength of the slabs above. We've been mentioning this concern in many recent forecasts and have described it as a Low Probability, High Consequence problem. Now, almost two weeks out, with recent added wind slabs, it may be that the probability has decreased, while the consequence has increased. In some terrain, where the wind slabs are supported by concave ground shape, and bridging to gully walls the likelihood may be very low. However, in steep unsupported terrain, on a convex surface, it would seem not impossible that an avalanche could generate enough weight to break through the supportive wind slabs and pull out everything to the January 13 crust, which would be very high consequence nearly anywhere.

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