Avalanche Advisory for Sunday, February 02, 2014

Expires tonight at 12:00 midnight

Tuckerman Ravine has Considerable, Moderate and Low avalanche danger. The Sluice, Lip, Center Bowl, Chute, Left Gully, and Hillman's Highway have Considerable avalanche danger. Natural avalanches are possible and human triggered avalanches are likely. Right Gully has Moderate avalanche danger. Natural avalanches are unlikely and human triggered avalanches are possible. The Lobster Claw, Lower Snowfields, and Little Headwall have Low avalanche danger. Natural and human triggered avalanches are unlikely.

Huntington Ravine has Considerable and Moderate avalanche danger. Yale, Central, Pinnacle, Odell, South, and the Escape Hatch have Considerable avalanche danger. Natural avalanches are possible and human triggered avalanches are likely. Damnation and North Gully have Moderate avalanche danger. Natural avalanches are unlikely and human triggered avalanches are possible.

AVALANCHE PROBLEMS: Storm Slab and Wind Slab will combine to be avalanche problem #1 and #2 today. The 3.5" (9cm) we have received so far, and up to another 3" (7.5cm) forecasted on a building W wind, will generate new slabs predominantly on aspects with an E facing component. This is loading over a peppering of Persistent Slabs, which is today's avalanche problem #3. These persistent slabs, due to varying sized facets acting as depth hoar, will become loaded and stressed with the weight of new snow. These weakness could act as the initial fracture and failure point, or may fail secondarily due to an overrunning wind slab avalanche.

WEATHER: Snow began yesterday afternoon around 4pm on a moderate WSW wind around 35-40 mph (56-64kph), quickly shifting to the SW, then becoming W after midnight. Through the evening, velocities steadily increased to reach a maximum of 90mph (144kph) during the early morning before slowly decreasing to a current speed around 60mph (96kph). Snow totals this morning at 7am reached 3.5" (9cm) for the previous 15 hours, melting to .19" (.5cm) of water, producing an average snow density of 5.5%. An additional 1-3" (2.5-7.5cm) is expected to fall today on a diminishing wind, subsiding to as low as 45mph (72kph) later today.

SNOWPACK: New wind and storm slabs developed last night beginning on a moderate SW wind. The low 5.5% density snow on these 35+mph (56+kph) velocities likely created low density slabs that should be the most probable weakness leading to a natural avalanche possibility today. The increasing winds have produced a denser thicker slab over this earlier weaker snow. These new slabs have been constructed over an intense, spatially variable, persistent faceted snowpack. Buried facets have continued to be a problem, demonstrated in our stability tests. These facets around the two ravines continue to change at different rates due to different temperatures gradients and varying depths of this stubborn devil. As new slabs layer today, also of varying depths depending on aspect, we once again are impressed by our diverse and seemingly random buried weaknesses.

The take the field point today is new slabs are being created predominantly on aspects with an E facing component, so SE to NE. The most probable avalanche activity will initiate through failure in this new snow, either by a possible natural trigger, or more likely by you as a human load. The secondary problem is these slabs are now sitting on varying bed surfaces ranging from the old hard Jan 11 rain layer, to thin and thick hard slabs over facets, to loose soft snow that went to facets right to the surface. Expect the potential for failures to step down into these faceted weaknesses. **Conservative decision making is of utmost importance today. You need to be very, very heads up of these diverse stability problems and other people in the terrain on this this snowy, low visibility Sunday.**

Please Remember:

- Safe travel in avalanche terrain requires training and experience. This advisory is just one tool to help you make your own decisions in avalanche terrain. You control your own risk by choosing where, when, and how you travel.
- Anticipate a changing avalanche danger when actual weather differs from the higher summits forecast.
- For more information contact the Forest Service Snow Rangers, the AMC at the Pinkham Notch Visitor Center, or the caretakers at Hermit Lake Shelters or the Harvard Cabin. **Posted 835am 2-2-2014. A new advisory will be issued tomorrow.**

Christopher Joosen, USDA Forest Service Snow Ranger