Avalanche Advisory for Friday, February 13, 2015

Expires tonight at 12:00 midnight

Tuckerman and Huntington Ravine have Considerable avalanche danger. Dangerous avalanche conditions exist. Natural avalanches are possible and human triggered avalanches are likely. Careful snowpack evaluation, cautious route-finding, and conservative decision making are essential. The only exceptions to this rating are the Lower Snowfields which is Moderate and Little Headwall which has Low avalanche danger. Natural avalanches are unlikely and human-triggered avalanches are possible in the Lower Snowfields. Natural and human-triggered avalanches are unlikely in the Little Headwall.

AVALANCHE PROBLEM: Wind Slabs remaining from loading on Monday, Tuesday, overnight, and today is the main avalanche problem. Soft slab instabilities that developed early this week, bolstered by several loading events, has kept human-triggered avalanche danger concerns between "possible" and "likely" for the past several days. Currently, wind speeds are ramping up quickly and plumes can be seen on the upper mountain. We are expecting the highest wind speeds today that we've seen since last weekend. This will move left over snow from alpine areas down into the Ravines even though blue skies dominate above. New dense wind slabs in the deposition from NW winds on top of many areas of lighter density snow has increased the potential of avalanches, naturals being possible and human triggered being likely.

WEATHER: Glimpses of the alpine zone from Route 16 made it clear that the 11" (28cm) of snow that has fallen since last Saturday is no longer living out a sedentary existence in the higher elevations of the range. The light density snow is being picked up by 65+ mph winds and broken into fragments as it bounces along the ground before being dropped or packed into lee areas of our terrain. A ground level veil hugs the landscape with higher gusts sending plumes off the Boott Spur and Nelson Crag. Wind will continue to send snow on this adventure until the supply of loose snow is more or less exhausted later today. Winds were forecast to increase to the 50-70 mph (80-115 km/h) range though we seem to have reached those velocities already at 7:30am. Temperatures have also surpassed tonight's forecast low of -20F (-29C). It is currently -22F (-30C). A spell of high pressure takes over today before the next Low moves in Saturday night generating another round of snow. Tomorrow's weather looks better for mountain travel than Sunday albeit still an arctic conditions day.

SNOWPACK: There is a lot of weather and snowpack history to accurately depict our current situation. In yesterday's advisory we described the day by day issues that affected stability since last weekend's storm so review that discussion again as a reference for more details. In brief, we've had low density 4F wind slabs plaguing us on slopes with a N to E facing component all week. On other faces, taking direct solar heating, slabs gained some stability on Tuesday and Wednesday. Then yesterday new snow, totaling a bit over 2" (5cm), fell with a moderate NW wind adding another thin low density slab layer. Early this morning winds have gained octane, building to a current close to 70mph (112kph). **This has rapidly generated our main issue today, new loading of old alpine snow down into lee slopes.** These are the highest winds we have seen in several days and since 11" (25-28cm) of snow has fallen this week. Expect winds to pulverize transported snow into small particles creating densely packed slabs. These new slabs will likely have roughly a P (pencil) hardness developing over less dense snow. Most of these potential bed surfaces are at least 1 step lighter at 1F (1 finger) with some being 2 steps lighter at 4F (4 finger). This translates into a classic unstable scenario with these 1F and 4F layers acting as the weakness, and likely shear failure, for today's new harder slabs. Temperatures are plummeting ahead of schedule, currently at -20F. It will be a tough holiday weekend with very cold temperatures. A Winter Storm Watch is in effect for Saturday night and all day Sunday with heavy snow anticipated with high winds. Be ready for an elevated avalanche danger through the long weekend.

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 8:20am 2-13-2015. A new advisory will be issued tomorrow.

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