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## US TERRAIN PARK COUNCIL

March 20, 2015

Honorable Floyd Prozanski Chair, Senate Judiciary Committee Oregon State Legislature 900 Court St. NE Salem, Oregon 97301

Re: SB 849

Dear Mr. Prozanski,

I am writing to you regarding SB 849 which proposes to revise ORS 30.970 to 30.990 in a manner which I believe is ill advised for the reasons detailed below.

First allow me to introduce myself. I am a retired physics professor and currently the President of the US Terrain Park Council, a litigation-neutral non-profit that uses research to create criteria for best practices in jump design as well as provides certification services. I am a Colorado skier who got involved in terrain park jumps in 2007 through my son, Brodie, who was a professional snowboarder at the time. He suffered many injuries pursuing his sport. Thankfully his injuries were relatively minor, but he would often complain about the jumps on which he was injured, describing hard landings and how their shapes would unbalance him. I saw aspects of these problems as appropriate to a science-based engineering solution.

For the last 8 years I have researched the physics of terrain park jumps and published serveral articles on safety issues related to terrain park jump designs. In addition to my work with the US Terrain Park Council, I am also leading the effort within the American Society for Testing and Materials (ASTM) Committee F27 on Skiing Safety to develop terrain park jump standards. I have experience designing building and testing terrain park jumps as part of the last two International Sports Engineering Association's Winter School in San Vito, Italy. I have been invited to participate in a meeting of the International Olympic Committee and the International Ski Federation (FIS) this summer in Luscerne, Switzerland, on the safety of freestyle terrain park jumps.

As a skier, I intimately understand the inherent risks of the sport and am fully sympathetic to the need of the ski industry to avoid liability from those risks which are inherent to the activity. Terrain park jumping is an especially risky activity. However, not all risks associated with terrain park jumping are inherent to jumping. Some risks arise from faulty jump design and construction, most notably inversions induced by curvature in the takeoff and landings that are much harder than necessary for a given sized jump. These are design flaws that present an especially significant risk of catastrophic injury or death when they are coincident. While rare, such events are personally tragic and incure huge social costs, estimated in the \$10's M range. If "inherent risks" are defined as those intrinsic to the activity and impossible to eliminate, then freestyle terrain park jump design flaws are not "inherent" and should not be included in the statute.

The sensitivity of the industry to litigation arising from such events is understandable; however, the central point is that terrain park jumps are *man-made* features. As such, the risks arising from the design of the jump itself can be mitigated, if not eliminated, through a conscientious application of engineering design and construction practices. I am gravely concerned that legally placing all freestyle terrain in the broad category of inherent risk without any provision requiring engineering design practices will remove any incentive for Oregon ski resort operators to implement such practices. The result will be terrain park jumps that expose Oregon's skiing public to significant risk of injury or death that otherwise could be mitigated.

Furthermore, I am concerned that such a broadly worded liability shield will undermine our efforts within the ASTM F27 Skiing Safety Committee to create standards for safer jumps. The industry is currently cooperating in our efforts to create standards in part out of litigation concerns. Jump design standards could in effect define the line between the mitigatable man-made risks associated with jump designs for which resorts may rightly be held responsible and the risks inherent in the activity of jumping for which they should rightly be shielded. Once standards are in place, resort operators who design and build jumps meeting the standards will be in a much stronger legal position in arguing that an injury on such a jump was indeed due to the inherent risks of jumping and not due to negligent jump design. I fear that industry cooperation on standards would evaporate if operators were so broadly and universally shielded obviating the need for standards to provide clear legal boundaries of liability.

For these reasons I oppose the broad inclusion of terrain park features in the statutory definition of inherent risk. I would be happy to discuss these matters further with you or with the entire judiciary committee.

Regards,

and leader

James A. McNeil President