## Ski helmets evolve, become common equipment

## By Kathryn Reed

For athletes, equipment matters in terms of performance and safety.

While helmet use has increased from 25 percent of skiers-snowboarders wearing one in 2002-03 to 78 percent in 2014-15, according to the National Ski Area Association, consumers don't always pay attention to the quality.

RUROC, which was formed 10 years ago in the United Kingdom, is the first company to create a fully integrated helmet, facemask and anti-fog goggle. For five years their helmets have been on the market, with the hopes of being in stores in the United States for next season. Right now they are available online.

Trevor Jacob of Mammoth Lakes wears the RUROC helmet. He finished fifth in the men's snowboarder cross at the X Games in Colorado last month.

It's a solid fitting helmet that is similar and snug like a motorcycle helmet. However, it's not rated for motorized sports. Departments of transportation regulate helmets for snowmobiling and motorcycling. This is a direction the company wants to evolve into, as well as helmets for downhill mountain biking.

RUROC officials said their helmets pass two European and one United States standards for alpine sports safety.



RUROC helmets are about safety and function with the integrated goggles and facemask. Photo/LTN

"The person just starting out doesn't need a RUROC helmet instantly," Dan Rees, managing director and CEO for RUROC, told *Lake Tahoe News*. "It is more for the extreme rider who is pushing themselves." He noted how Jacob can hit 100 mph on his board.

But even this non-extreme skier feels more secure in it than other helmets. A good whack on the head on a recent Saturday unintentionally tested its protection — with positive results. The company also sees backcountry skiers gravitating toward their product.

The U.S. Ski and Snowboard Association has regulations about what type of helmets are allowed for juniors and adult competitors. Different entities have regulatory standards. There is the American Society for Testing and Materials; CE indicates a helmet meets the requirements of the European Economic Community Directive; and RS-98 is a certification mark of the Snell Memorial Foundation.

According to Snell Memorial Foundation's website, the nonprofit has been dedicated exclusively to head protection since 1957 through scientific and medical research, standards development, helmet testing, and public education.

The foundation lists these elements as critical protective properties:

- · Impact management how well the helmet protects against collisions with large objects.
- Helmet positional stability whether the helmet will be in place, on the head, when it's needed.
- Retention system strength whether the chinstraps are sufficiently strong to hold the helmet throughout an incident involving head impact.
- Extent of protection the area of the head protected by the helmet.

In addition to the safety aspects, what makes the RUROC different is that the system integrates the goggles and the facemask. The mask, while an ideal added safety tool for those in terrain parks, serves as a great addition in cold, snowy conditions. The mask pops out fairly easily, so it doesn't have to be worn the entire day.

The lenses are made in Italy and have an anti-fog coating.

"We wanted a complete closed system," Rees explained. "With the goggles, it is seamless to the roof of the helmet. It creates a constant vacuum of air and prevents fog."

Ski resorts are all over the board when it comes to rules about helmet use.

"We were among the first companies to require helmets on all employees and all children in ski school. If parents don't want a helmet on their children, they have to proactively alert us and sign a waiver," Russ Pecoraro with Vail Resorts told *Lake Tahoe News*. "I'm not aware of a preference in terms of helmets. Anecdotally, it's hard to find people these days not wearing a helmet."

The Broomfield-Colo.-based ski company owns Heavenly, Northstar and Kirkwood ski resorts in the Tahoe area.

Helmets are not mandatory for anyone at Sierra-at-Tahoe, though the resort offers employees a 30 percent discount on helmets to encourage them to buy and wear one.

"Lessons do not require a helmet, but are available for rental with all lessons," Steve Hemphill with Sierra told *Lake Tahoe News*.

The resort also goes into schools in Lake Tahoe Unified School District to educate students on helmet and snow safety.

At Squaw Valley and Alpine ski resorts Giro is the official helmet.

"This program includes a generous allotment of complimentary helmets to our ski team coaches and members of our ski patrol as well as a 50-75 percent off purchase program for all resort employees," Michael Radlick with Squaw-Alpine told *Lake Tahoe News*.

Helmets are no guarantee a person won't be hurt, but for many impacts on the slopes they will lessen or curtail a severe injury.

"Helmets can help prevent injuries and, in many cases, an injury would have been worse without a helmet. I would also speculate that we do not see some patients because they fall and hit their head while wearing a helmet and the injury was not enough to require a trip to the hospital," Lance Orr, medical director of Barton Memorial Hospital's emergency department, told Lake Tahoe News. "If the person had not been

wearing a helmet, it may have been a different scenario. An example of where a helmet may not help is if someone lands in a manner that puts direct force onto the spine.