The Cresta Run: A uniquely evolving tradition

Abstract

The Cresta Run is a unique toboggan run and exists in only one place in the world, namely, St. Moritz, Switzerland. The height of the resort is over 6,000 feet (1828 metres). Therefore there is a diminution of oxygen content in the air. Normally it takes from three to seven days for a person from lower habitat altitudes, visiting the resort, to become fully acclimatized if they are to be involved in energetic competitive sport. The age and fitness of the toboggan rider is a factor.

The Cresta Run takes place each year and has, since its inception under the auspices of the St Moritz Tobogganing Club, been built from virgin snow to a formula determined by a brilliant 22-year-old Swiss geometrician, Peter Bonorand, who devised the first Run in 1884. Using his exceptional mathematical knowledge to determine a course from St. Moritz to Celerina, he drew up plans and drawings for the first Cresta Run. The Run therefore is constructed to a known formula and it is significant that in over 115 years the times on the Run have only improved on average by a few tenths of a second progressively each year despite improvements to riding equipment.

Since the Run's inception in 1885 there has always been an element of danger, but accidents have invariably occurred on the section of the Run that comprises the competition course between the start line and the finish line. During the past few seasons, an increasing number of accidents have taken place after the finish line. The problem is short-term blackout while riding (Reader, 1978). There is now a need to investigate what changes have been made or have evolved to cause this. However, certain immutable facts have remained constant and these must be identified and then considered in the context of recent changes as a result of improvements in equipment. Considerable improvements have been made over the past 25 years to safety helmets. These are the result of different materials, their suitability and ease of manufacture, particularly with regard to the full-face type helmet. The full-face helmet could be a significant contributing factor to the problem of accidents, particularly after the finish line, on the Cresta Run.