

Tracking intensity: Norseman Xtreme Triathlon

Norway

The Norseman Xtreme Triathlon was the first extreme triathlon in the world. Each year, the best of the best put themselves to the ultimate physical and mental test, attempting to complete 226 kilometers (approximately 140 miles) of unforgiving icy temperatures, high altitudes and inhospitable rugged Norwegian wilderness, in what is one of, if not the, toughest races of its kind on the planet.

The 21st edition of the race took place in 2024 in Norway. A group of 250 athletes (each accompanied by his or her support team), chosen from thousands of applicants made a brave jump from a ferry into the Hardangerfjord and swam 3.8 kilometers (2.4 miles) to shore, where they cycled for 180 kilometers (112 miles) across rugged terrain and steep climbs, before running 42.2 kilometers (26 miles), finishing at the top of Mount Gaustatoppen.



The Zalaris Norseman Xtreme Triathlon is unlike other endurance challenges in that it is a point-to-point race, covering a very large area of rugged and diverse terrain. The unique course presents challenges in marshaling the race and keeping track of athletes, both for their safety and the competition. To accomplish this, in 2024 Norseman employed HxGN Connect.

Eye on athlete safety

The brutal Zalaris Norseman Xtreme Triathlon course is described as “a journey through fjords, mountains and valleys” through “raw nature.” And that course includes 5,000 vertical meters (16,404 vertical feet). The terrain is beautiful, but unforgiving. The management team wanted to source a system that would give them an overview of the entire course and allow them to monitor and manage the race including athletes, support crews, medical teams and marshals, from the fjord to the finish line.

Eager to embrace new technology across every facet of the race, the team learned of Hexagon’s expertise in building real-time incident center as a service solutions and wanted to explore the opportunity to use its technology for the triathlon.

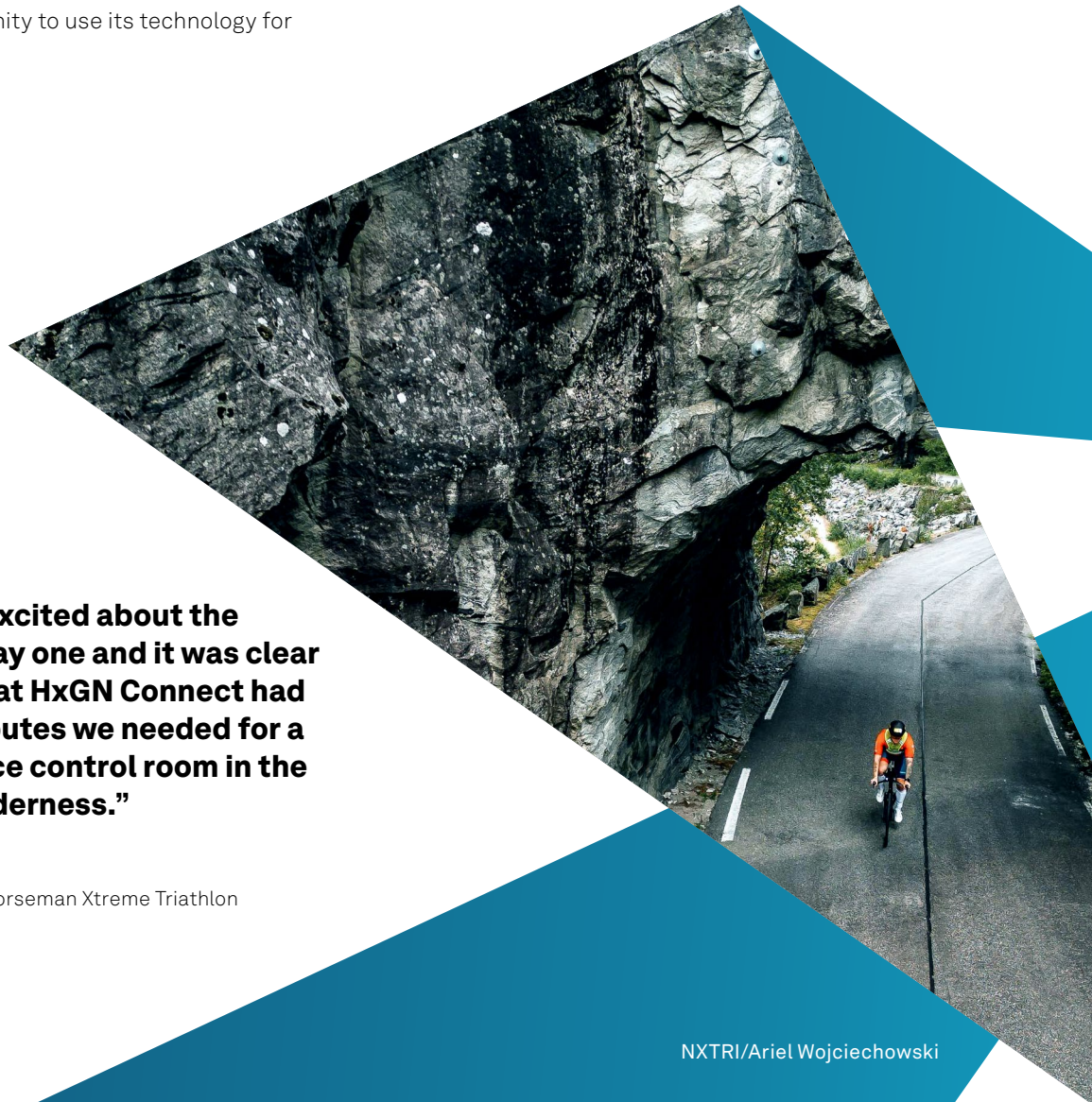
Norseman Xtreme Triathlon Chief Venue Control Espen Laaveg stated, “Hexagon was excited about the project from day one and it was clear to everyone that HxGN Connect had all of the attributes we needed for a functioning race control room in the Norwegian wilderness.”

On the day of the race, event organizers needed only an internet-connected device with a standard web browser to have a high level of insight regarding how the event was progressing. The HxGN Connect interface provided a single screen from which they were able to scroll through the list of competitors and check their tracker information, view interactive 2D and 3D maps of the course, check the water temperature of the fjord (for safety during the swim), monitor the transition zones and finish line and view footage from video camera feeds. They were also able to receive and rapidly respond to incident alerts.

“ Hexagon was excited about the project from day one and it was clear to everyone that HxGN Connect had all of the attributes we needed for a functioning race control room in the Norwegian wilderness.”

Espen Laaveg

Chief Venue Control, Norseman Xtreme Triathlon





NXTRI/Ariel Wojciechowski

Tracking the course

The trackers worn by each athlete were integrated with HxGN Connect, feeding data into a real-time common operating picture and giving the Command Control a view of the athletes' exact locations and positions in the race. Race penalties and documentation of athletes retiring from the race were also integrated into the solution.

A pivotal moment in an extreme triathlon like Norseman is ensuring athletes are always on course. The last 4.7 kilometers (2.9 miles) of the run leg are on a rocky trail in the Norwegian mountains, and there are monitoring zones with pre-identified notifications if athletes take a wrong turn or path in the mountains. "When alerted to a situation, we were able to contact the support team and put them on the right path," added Laaveg.



Toward the future

The race winner completed the course in just over 10 hours, with the final racer crossing the line nine hours later. The Hexagon team monitored the event digitally for every swim stroke, push of the pedal and step of the way.

Norseman Xtreme Triathlon Head of Marketing Fredrik Mandt stated, “The Hexagon team and HxGN Connect did an amazing job during a very long day in the Norwegian wilderness.”

The team is looking at expanding its use of HxGN Connect, to enable information to be shared with support crew on the course (via mobile devices) and emergency services, to deliver even greater situational awareness for all race stakeholders. With the system developed, tested and proven in Norway, opportunities to use it for other dates on the XTRI World Tour, including races in Brazil, Canada, Greece, Italy, Montenegro, Nepal, Scotland, Slovakia, Sweden, Switzerland, Taiwan and the United States, are also being explored.

Hexagon is the global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications. Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Safety, Infrastructure & Geospatial division improves the resilience and sustainability of the world's critical services and infrastructure. Our solutions turn complex data about people, places and assets into meaningful information and capabilities for better, faster decision-making in public safety, utilities, defense, transportation, government and physical security. Learn more at hexagon.com and follow us @HexagonAB.

© 2024 Hexagon AB and/or its subsidiaries and affiliates. All rights reserved. Hexagon is a registered trademark. All other trademarks or service marks used herein are property of their respective owners. 10/24