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**WHEELSPIN**

## **Recalling His Own Crashes in Pursuit of a Safer Track**

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MONTICELLO, N.Y.



Susan Stava for The New York Times

THEY don't build racetracks like they used to, and for Brian Redman, the sports car and endurance racing champion, that is just as well. Bolstering his case, he rolled up a shirtsleeve to show where his arm had been broken in a racing accident years ago.

Standing in the clubhouse of the Monticello Motor Club, a private membership track about two hours northwest of New York City, Mr. Redman told of breaking his forearm in two places at the 1968 Belgian Grand Prix. The race was held at Spa-Francorchamps, a long and fast circuit carved out of the Ardennes Forest, whose tall trees and hilly terrain contributed to its reputation as one of the

world's deadliest tracks.

Mr. Redman was 28 and driving in his third Formula One race. On the sixth lap the steering and brakes in his car failed at the entrance of a downhill right-hand turn. "I rolled over the barrier," Mr. Redman recalled. "I had a compound fracture. There were bits of bone sticking out."

Forty years (and countless wins) later, the injury is no longer visible, though the memories remain vivid. Mr. Redman would survive worse perils in his career; he barely escaped his burning racecar during the Targa Florio race in Italy, one of five times he has been on fire, he said.

Now 68 and retired from professional racing, he was one of the lucky drivers who survived a particularly deadly era in racing that lasted into the late 1970s. It was precisely for his experience on those historic tracks — many of which have since been shut — that Mr. Redman was hired to help design Monticello's 4.1-mile track.

Hunched behind the steering wheel of a new Porsche 911 Turbo Cabriolet, Mr. Redman, who is British and lives in Florida, offered a guided (and fast) lap of the Monticello course.

He's every bit a champion from a storied era, affable and distinguished-looking with white hair and clear blue eyes that brightened as he hit the punch line in each of his harrowing tales. On the back straightaway, he pushed the car to 155 miles an hour. "A racecar could definitely do 180," he said.

The only cars at the Monticello track, which held an extravagant grand opening last July, are those owned by club members, who pay a \$125,000 initiation fee

and annual dues that start at \$7,500 for access to the track and its yet-to-be-finished facilities. The track is not open for sanctioned racing events.

Bruce Hawkins, a design engineer at Paulus, Sokolowski & Sartor, based in Warren, N.J., collaborated with Mr. Redman on the track design.

Mr. Hawkins began by sketching the layout by hand, mostly so his clients would not think that the design was set in stone, he said. Mr. Redman provided technical guidance from a driver's perspective as well ideas on how to make the track as exciting as possible.

"He's the voice of experience," said Mr. Hawkins. "Brian would be able to tell me if you hit the brakes and there's no room to take the next turn."

Monticello Motor Club lies on 175 acres of what was once the Monticello Airport. Mr. Hawkins drafted the track to take advantage of the undulating topography, which resulted in a challenging combination of rising corners, blind crests and swerving dips.

Certain contours of the natural terrain let Mr. Hawkins borrow features from other noted tracks; one corner was carved to resemble the famous Corkscrew downhill section of Mazda Raceway Laguna Seca in Salinas, Calif., though the Monticello version is hardly as steep or dramatic.

In order to accommodate the varying skill levels of the club's members, the designers came up with a two-in-one layout; the track can be split into two shorter circuits, one more difficult than the other.

Mr. Hawkins and Mr. Redman spent hours lapping the course on all-terrain

vehicles during its construction to ensure it yielded the best possible combination of difficulty, entertainment and most important, safety.

The amount of attention paid to design refinement and safety is quite a change from the way people thought about tracks and racing in Mr. Redman's prime, when enthusiasm trumped common sense.

One of the most famous tracks, the Nürburgring Nordschleife — the original long course, at least — looped up and around the Eifel Mountains in Germany, where the sun could be shining on one section of the track while rain fell on another.

It may have been picturesque, but as Mr. Redman pointed out, "there were no curbs and no barriers, just little hedges on both sides." Hedges, he emphasized, "with 200 feet of root" anchoring them in place.

When things went wrong, which they often did, the consequences were dire or deadly. The monumental character of these early tracks was shaped partly by the tragedies that happened there: Niki Lauda's near-fatal crash at the Nürburgring in 1976; Zandvoort in Holland will be forever linked with the death of Piers Courage in 1970. Monza in Italy claimed the life of Alberto Ascari, a world champion.

"Imagine an 11-year window of time when you lose 57 — repeat, 57 — friends and colleagues, often watching them die in horrific circumstances doing exactly what you do, weekend after weekend," Jackie Stewart, a three-time Formula One champion, wrote in his autobiography, "Winning Is Not Enough."

Elected as president of the Grand Prix Drivers Association in 1968, Mr. Stewart began a long campaign to improve safety in the sport. And despite winning at the

Nürburgring three times, he lobbied his fellow drivers to boycott the circuit in 1970. They did, and it eventually was removed from grand prix use.

That was only the beginning. Other circuits were either closed or have undergone extensive renovations for safety. Spa in Belgium was shortened to 4.35 miles, from 8.7 miles, in the early 1980s.

Of course there were complaints. Even now, some fans maintain that safety considerations and computer-aided design have robbed newer racetracks of their soul and character.

Mr. Hawkins disagreed. While we are not likely to see another Spa or Nürburgring, he said, each road course can be classified as one of a kind. "Each has its own nuances, quirks of the landscape," he said. "Some are famous for their quirks."