

The Polaris RZR, an Off-Road Thrill That Can Go Up in Flames

The Polaris RZR, a vehicle for recreational use, has been linked to scores of fires and four deaths. But its maker insists it is safe.

By David Jeans

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For almost two years, James Bingham's off-road vehicle had provided endless fun on camping and hunting trips in Idaho. The vehicle, a four-seat Polaris RZR, could zip across the sand hills at up to 80 miles an hour.

He expected the same kind of thrill on a weekend outing with friends in May. But minutes into the first ride, with Steven Groves, 23, in the passenger seat, chaos erupted.

"Steven yelled, 'Fire!'" Mr. Bingham said. "All I saw was orange."

After struggling to unbuckle his harness, Mr. Bingham escaped with severe burns. Mr. Groves, however, was trapped as flames covered him. Not until his harness melted did he fall to the ground, his body still on fire. He died the next day.

"You think that you're safe because you have a five-point harness on," Mr. Bingham, a 42-year-old chiropractor, said from his hospital bed at the University of Utah's burn unit. "I really didn't know much of anything."

The manufacturer's safety record indicates more than an occasional problem. From 2013 to 2018, Polaris Industries issued RZR recalls 10 times for fire hazards, far more than for any competing product. There have been more than 180 RZR fires, often leaving little more than scorched earth and a skeletal metal frame. Four people have been killed and at least 30 others have been burned, according to a tally from recalls, lawsuits and reports to federal regulators. And like Mr. Groves, the victims have often been young.

Even as Polaris has repeatedly told customers that the vehicles are safe, dozens of YouTube videos show RZRs burning. And a slew of litigation — including a lawsuit that is seeking class-action status, wrongful-death and personal-injury claims, and shareholder suits — contends that the company sought to conceal its knowledge of defective products.

The RZR, pronounced "razor," was the first off-road vehicle made primarily for recreational driving when it was introduced in 2007; its predecessors were suited to farm and maintenance work. Like an evolved dune buggy, it is known as a side-by-side for the way its occupants sit beside each other. Providing an adrenaline-pumping experience, it comes in two- and four-seat versions, costing \$5,300 to \$28,200.



A Polaris RZR in a race in Dubai this year. The vehicle has an avid following, and images of new models are often featured in magazines for off-road sports. Francois Nel/Getty Images

Online forums dedicated to the RZR unearth news on the latest products, and images of new models churning dust frequently cover magazines for enthusiasts. The RZR can even be driven in video games.

Nine years ago, as its competitors' models caught on, Polaris installed a souped-up engine that made the RZR faster and more powerful. The new engine has an exhaust pipe that is housed inches behind passengers and too close to key components without adequate ventilation, lawsuits have alleged, citing reviews by mechanical engineers.

When reports of melting and smoking panels in RZR's emerged, Polaris did not heed initial calls to conduct a recall, according to a former safety director for the company who testified in lawsuits, and it later reported far fewer heat-related incidents than he had cited. As new versions were rolled out yearly, each more powerful and faster, the number of fires, injuries and fatalities climbed.





A video on the Consumer Product Safety Commission website, submitted with a consumer complaint, shows a Polaris RZR on fire.

The hazard extends to other Polaris side-by-sides, which have the same powerful engine as the RZR. The Polaris Ranger, made for commercial use, has figured in at least 48 fires, according to recall notices since 2016.

Last year, Polaris settled a dispute with federal regulators in which it was accused of not immediately reporting a possible defect in more than 200,000 side-by-sides sold over four years. The company paid \$27.25 million — the stiffest penalty ever assessed by the Consumer Product Safety Commission — but the agreement allowed Polaris to avoid admitting wrongdoing.

Polaris has settled at least three lawsuits related to fires in its side-by-sides, and at least 11 more lawsuits are pending.

The company declined requests for interviews for this article. In response to a detailed list of questions, it said the “allegations, inferences and claims against Polaris are misleading, lack full context and, at times, are simply inaccurate.”

In a separate statement, it said it stood by its vehicles’ safety.

“We are deeply saddened by the accidents that occurred and send our condolences to those impacted,” the statement said. “The safety of our riders has always been our top priority.”

Building a Brand

Founded as a snowmobile manufacturer in Minnesota in the 1950s, Polaris has produced off-road vehicles for decades. In recent years, it recorded a meteoric rise in its share price, and now sells its vehicles in more than 100 countries. Cultivating loyalty and trust has been crucial.

Each October, thousands of RZR enthusiasts gather about 150 miles east of San Diego for a Polaris-sponsored festival where country-rock bands play under bright lights and lasers. The music is a sideshow. Those attending the event, Camp RZR, are there to tear up the desert sand dunes. “Push Life to the Limits,” the company’s website for the event exhorts.



At Camp RZR, an annual event in the desert east of San Diego, drivers have a chance to tear across the dunes. Even there, RZR mishaps have occurred. David Almanza

“It’s pretty exciting stuff, you know?” said David Almanza, 33, who has attended the event the last three years with members of his family. “The latest equipment, the latest vehicles, I guess you get to know the people.”

Mr. Almanza recalled zooming across the sand there in 2016 when he arrived at an alarming scene: thick black smoke from a RZR engulfed in a blaze. He has seen other RZR fires, but reassurances by Polaris had quelled his safety concerns.

“We still drive it because we believe Polaris,” Mr. Almanza said. “Why would they still be allowed to operate these vehicles if they are a danger?”

Colby Thompson, who grew up driving Polaris vehicles in Montana, was test-driving a friend’s RZR in the Bridger Mountains in 2017 when the vehicle caught fire. He sustained third-degree burns to 30 percent of his body and said he had lost the grip strength needed for his work as an electrician.

“My friends had Polaris RZRs when I was in high school,” said Mr. Thompson, 26, who now has a desk job in sales and is a plaintiff in a suit against the company. “So I never had a bad thought about Polaris. I never thought anything like that could happen.”

Neither did John Hill, a 40-year-old construction worker who received third-degree burns to 44 percent of his body after his RZR went up in flames in Idaho in 2014. He spent weeks in a coma, suffered nerve damage and underwent countless skin grafts. Five years later, Mr. Hill still deals with pain, though he refuses to take prescribed opiates and last year even bought another side-by-side — a competing model, the Can-Am Maverick. He reached a settlement with Polaris in 2017 for a confidential sum.

As for the RZR, “I still have friends that buy them,” Mr. Hill said. “And I’m like: ‘What are you doing? Didn’t you see what I went through?’”

A Warning Unheeded

In 2006, Polaris reported disappointing earnings and “declining industry trends.” But its side-by-side utility vehicle, the Ranger, was a bright spot. Yamaha had introduced the Rhino, a product that was more powerful than traditional utility vehicles, and consumers saw the potential for recreational use. So Polaris introduced the RZR.

The original RZR was designed with a pipe known as the exhaust header connecting the engine and muffler. The pipe emerged from the side of the vehicle, where it was exposed to cooling airflow, according to patent documents cited in a lawsuit last year. Where that pipe connects to the engine is considered one of a vehicle’s hottest areas, and its purpose is to collect heat generated by the pistons and direct it away.

For many years, Polaris outsourced the production of engines for its side-by-side vehicles to another company. But to save costs in producing a more powerful machine, Polaris developed its own engine, the ProStar.

On the ProStar, the exhaust header pipe is connected to the front of the engine, behind the seats, before turning 180 degrees and ending at the rear of the vehicle.

Without adequate airflow, the exhaust creates a hot spot inches behind passengers that can degrade key components and ignite debris, leaking fuel and plastic panels, according to Mark Arndt, a mechanical engineer who has reviewed RZR design materials. He has been a consultant to several plaintiffs’ attorneys in Polaris litigation and has been deposed in one case.

Polaris unveiled the first ProStar-powered RZRs on New Year’s Eve in 2010, proclaiming that they could accelerate 29 percent faster than any other model.

But customers soon reported that plastic panels between the passengers and the engine were melting and smoking. At a meeting in 2011, the company’s head of product safety told executives that a recall was necessary after he reviewed “between eight and 15” reports of heat damage, according to his testimony in a 2017 wrongful-death lawsuit.

“It was my heartfelt feeling and belief that the vehicle should be recalled,” the safety director, Kenneth d’Entremont, said in a deposition.



Kenneth D'Entremont, a safety director for Polaris, left the company in 2012. "It was no longer possible for me to continue working there ethically," he said. He now teaches at the University of Utah. Kim Raff for The New York Times

Instead, Polaris issued a service bulletin instructing dealers to affix an aluminum sheet to damaged panels. Without a recall, the company was not required to inform customers or the Consumer Product Safety Commission of the fires. Mr. d'Entremont testified that he had been excluded from future safety meetings.

"It was no longer possible for me to continue working there ethically," Mr. d'Entremont, who left the company in 2012 and now teaches at the University of Utah, said in an interview. He added that the RZR "was the big moneymaker for Polaris, so people were hesitant to put the brakes on."

When Polaris recalled 4,500 RZRs in June 2013, it told the safety agency that it was aware of only one incident of heat damage, far fewer than Mr. d'Entremont had indicated.

The hazard ultimately took a human toll. On July 4, 2015, Baylee Hoaldrige, 15, was in a four-seat RZR 900 with family members in Utah when the vehicle overturned after taking a corner and caught fire. Everyone escaped except Baylee. She was hospitalized with third-degree burns to 65 percent of her body. After 27 operations, and the removal of her large intestine, she was taken off life support four months later.

A month before her death, Polaris recalled 53,000 RZRs from the model year 2015, including the model that Baylee had been riding in. It said 29 fuel leaks and two fires had been reported, one of which led to what the company characterized as a minor injury.

In February 2016, the company told the safety agency that the hazard was worse than previously reported. It said 150 fires had been reported for RZRs made from 2014 to 2016, causing 11 injuries and Baylee's death.

Two months later, it issued a global recall for 160,000 RZRs made from 2013 to 2016, including 133,000 in the United States. The company said the RZRs "can catch fire while consumers are driving," but offered no explanation.

The chief executive, Scott Wine, said on an earnings call in April 2016 that an investigation had "ultimately isolated several disparate and difficult-to-discern root causes." Five months later, Polaris reported in an update to investors that it had "experienced additional RZR thermal-related issues" and was "unable to sufficiently validate" the repair it had devised. The company slashed its 2016 profit forecast by more than 40 percent, and by the end of the year, it said it had spent \$132 million on recalls.

A Regulator's Handicap

The Consumer Product Safety Commission, responsible for regulating products ranging from children's toys to furniture, has no regulations specific to side-by-side vehicles, as is the case with many industries it oversees. It has at times taken steps to address the Polaris fire hazard, but has been restricted in its ability to act swiftly.

Manufacturers are required to report to the agency within 24 hours of receiving information that suggests a product is defective, like a fire. But before its recall of 160,000 vehicles in 2016, Polaris notified regulators only after it had learned of 150 fires, one fatality and 11 burn injuries. One of the blazes burned 10 acres.

"We do depend on manufacturers, seriously, to be telling us these things in a timely way, because they are most likely to get the incident report first from a consumer," said Joseph Martyak, an agency spokesman.

In April 2018, the month it agreed to the record penalty, Polaris recalled another 100,000 RZRs over a fire hazard involving a fuel pump flange. But since then, more fires have been reported — some in recent models, others in vehicles covered by recalls.

Mr. Bingham's 2017 RZR, which caught fire in Idaho in May, had received the prescribed repair after the 2018 recall, a search for his vehicle identification number on the Polaris website shows. Mr. Bingham is among the plaintiffs suing Polaris; in a response to his complaint, the company denied that his vehicle was defective.

In addition, at least three consumer complaints to the safety agency cite RZR fires after the regulatory settlement, including two involving 2018 and 2019 models.

The safety agency said in an email that as part of the 2018 penalty, Polaris had committed to imposing "an enhanced compliance program" and a "system of internal controls and procedures designed to ensure timely reporting in the future."

The commission also said it was working with three industry groups to develop a voluntary standard that addressed "the thermal and debris penetration hazards that we have seen with on- and off-road vehicles industrywide." The agency is barred from introducing regulations if an adequate voluntary standard exists.

In a statement for this article, Polaris cited ways in which it had "invested in safety and quality over the last several years," affecting its product development and its processes for identifying and responding to quality and safety issues.

For many customers, any danger is overshadowed by excitement. Even though Mr. Almanza has seen more RZRs catch fire, he looks forward to Camp RZR each year. "They do the big giveaways," he said. "And they're really big on fixing vehicles for free at that event."

But in case a fire does occur, he practices getting out of his four-seat RZR quickly with his wife, 2-year-old son and 14-year-old sister. "It's just a mentality now," he said. "If a fire happens, we are kind of prepared."