

A SWISS FAMILY'S TRIPLE CROWN

A ballooning dynasty proves what goes up also goes down—and round the world

BY HELEN FIELDS

After an hour of watching the sky, the balloonists at the hot-air ballooning festival in Château-d'Oex, Switzerland, drink up their coffee; the organizers say the high-altitude winds have let up enough for them to take off. The crews start up the noisy, generator-run fans and the flat colorful balloons slowly expand, then, one by one, rise from the hard-packed snow and drift toward the encircling Alps. It takes only a few people to launch a balloon, so clearly something is up in the vicinity of one silvery balloon, where dozens of people, many wielding cameras and press badges, have converged. Swiss President Joseph Deiss climbs into the open basket. But it is the pilot, reaching up to fire the burners with a gloved hand, who is the main attraction. After all, Switzerland gets a new president every year, but Bertrand Piccard headed up the first team to fly a balloon nonstop around the world.

In 1999, when Piccard and his British copilot Brian Jones embarked on that trip, Piccard was embracing a family tradition. Bertrand's father, Jacques Piccard, in 1960 became the first person to descend to the deepest part of the ocean. Twenty-nine years before that, Jacques's father, Auguste Piccard, took a balloon nearly 10,000 feet higher than anyone had ever been before. The Piccards say they aren't daredevils, and they don't take unnecessary risks. But they like being the first, and they work hard, pushing the technology around them to the edges of the world.

In the early 20th century, as today,

meteorologists studied the atmosphere with unmanned balloons. But physicist Auguste Piccard thought he could do better by ascending to the stratosphere to run his experiments on cosmic rays. Even back then, getting up there was relatively easy; people had been flying in hydrogen balloons since the 18th century. The problem was surviving where the air is too thin for breathing. So Auguste invented a 7-foot, spherical pressurized gondola that would be comfortable even when the pressure outside fell to one tenth of that on the ground.

On a windy morning in May 1931, in Augsburg, Germany, Auguste and his assistant, Paul Kipfer, floated up 9 miles in half an hour. But then they got stuck; the rope to let gas out of the balloon for the descent had tangled. They drifted all day, waiting for evening when the hydrogen would cool, allowing them to come down. People on the ground feared they were dead. Jacques Piccard, then 8 years old, and his mother were waiting at home in Brussels. "I was terribly afraid," he says. But Auguste and Kipfer landed after dark on an Austrian glacier. They spent a cold night wrapped in the deflated balloon and hiked out in the morning.

Deep dreams. After this success, Auguste persuaded the Belgian government to fund his long-standing dream of building a deep-sea submersible. In the 1940s, he built the first bathyscaph, modeled on a hydrogen balloon with a huge float made of thin steel and filled with lighter-than-water gasoline. In the early 1950s, Auguste decided to build his next bathyscaph in Trieste, a port on the border of Italy and Slovenia. Jacques, then working as an economist,



helped out, first as a driver and interpreter (his father didn't speak Italian) but later as a full collaborator.

In 1958, they sold the new bathyscaph, called the Trieste, to the U.S. Navy, and Jacques went along as a consultant and pilot. After several successful dives off San Diego and Guam, the Trieste was ready for the big one—a dive to the deepest spot in the ocean, a large hole in the Mariana Trench. On a Saturday in January 1960, Jacques Piccard and Navy Lt. Don Walsh sank for five hours in the Trieste to the oozy bottom, 7 miles below the support ship. Jacques insists there was nothing alarming about being under all that water. "Do you think of the water which is below you [on a boat]? It is the same." After 20 minutes, Jacques flipped a switch to release 800 pounds of iron ballast, and they began the return to sunlight.

Living large. Bertrand was too young to remember the Trieste's dive, but he was 11 when his father embarked on his 1969 adventure, a monthlong drift deep in the Gulf Stream, sponsored by Grumman Aircraft Engineering Corp. NASA took an interest in the project, studying how the six-man crew got on in an enclosed environment for 30 days. For Bertrand, it was an exciting time. "Most of the people coming to have lunch or dinner at home were astronauts, divers, and pilots," he says. "The type of life they had was the type of life that I really wanted to have."

Although when it came time to choose a profession, Bertrand went into psychiatry, he didn't abandon adventure altogether. He had learned hang gliding at 16 and became a European champion. Partly because of his flying experience, Bertrand was invited to join a balloon race across the

Atlantic in 1992. His team won the race, and Bertrand was hooked. Soon after, he persuaded the Swiss watchmaker Breitling to put up money for a round-the-world trip.

The balloon may be the oldest flying vessel, but circumnavigating the globe in one is a very modern feat. Be-

Bertrand left the snowy field at Château-d'Oex on his 41st birthday, March 1, 1999, with copilot Jones, who'd originally joined the team to teach the pilots survival skills. Jacques watched them leave the ground as he had watched his father 67 years before. Bertrand and Jones shot into the air in

their glossy red-and-yellow gondola of Kevlar and carbon fibers under a towering, 180-foot-tall balloon. They swung southwest to Morocco to catch the eastward-moving jet stream and avoided the storms of the north Pacific by taking a new southern route. The gondola twirled slowly as it floated. "You cannot imagine the beauty of the landscapes or the sunrise above the desert," says Bertrand. They completed their circuit of the Earth in the air over Mauritania, when they passed directly south of the point where they'd turned east 17 days before. The next morning, they landed in the Egyptian desert.

For Bertrand, the flight around the world was a metaphor for life: You travel with the wind, but you can change your course by catching a new wind. Now he is working with a Swiss university to make a solar-powered plane that will fly nonstop around the world.

The next generation, Bertrand's blue-jacketed 13-year-old daughter, Estelle, helps prepare his hot-air balloon for the flight with the

president by holding up the balloon's edge as it fills. She and her little sisters hate being asked if they're going to be explorers, Bertrand says. They tell him they are still too young to know. Bertrand's father, Jacques, now 81, is delighted with his family's successes. "You know, I was proud and happy to be the son of my father," he says. "And now I am proud and happy to be the father of my son." ●



FAMILY AFFAIR. Auguste, Jacques, and Bertrand Piccard in 1960 (above). Aboard the bathyscaph Trieste designed by Auguste and Jacques in the early 1950s



DID YOU KNOW? Louise Arner Boyd broke the ice for female explorers by leading seven 20th-century expeditions into the Arctic—and in a 1955 journey became the first woman to fly over the North Pole. Born into an affluent San Francisco family, Boyd journeyed in style: "I powdered my nose before going on deck, no matter how rough the sea was," she wrote. "There is no reason why a woman can't rough it and still remain feminine."

ALPINE VIEW. The Matterhorn through a porthole of the Breitling Orbiter 3, three hours into its journey around the world