

# Hey, I Flew That!

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## **Buz Carpenter**

*Lockheed SR-71 Blackbird*

It’s the fastest jet ever built, flying at a mind-numbing 2,100 mph, 16 miles above Earth. Its speed is so great, it takes the aircraft 170 miles to turn around. But in the Blackbird, says former pilot Buz Carpenter, the greatest sense of speed is during takeoff. “You’re pushed against the seat like in a drag racer,” he says, “lifting off at about 240 miles an hour.”

Carpenter first saw the SR-71 at an Air Force Academy graduation. “It was really an inspiration to us to see that the Air Force was getting an airplane that was this advanced,” he says.

He flew the SR-71 from 1975 to 1981, as both a pilot and an instructor. He flew the one in the Museum’s collection—number 972—to the Middle East at the request of President Jimmy Carter. “You knew that the pictures you were taking and the electronic information you were collecting were vital to the president of the United States,” Carpenter says.

His longest mission lasted 10 hours and 20 minutes, in which he flew from California to the north coast of Russia. During the trip he traveled more than 15,000 miles, and refueled the aircraft—which gulped 72,000 gallons of fuel during the mission—five times.

Refueling was so important to the mission that pilot applicants were selected in part based on their refueling experience. If a pilot had never refueled, Carpenter says, it was hard to teach him the skill in the fast SR-71. “The airplane was really pretty sporty.”

### **Joe Duff**

#### *Cosmos Phase II ultralight*

Leading Whooping cranes across seven states is a slow proposition. Slower than 40 mph, in fact. And for flying that leisurely, you need an ultralight. For many years, the mainstay of Operation Migration was a Cosmos Phase II with three-wheel landing gear.

“Birds fly at about 38 miles an hour, and our aircraft will fly down to about 32 miles an hour before it stalls,” says Joe Duff, CEO of Operation Migration. “In a conventional airplane, all of your attention is focused on the stall, but in a trike it’s almost a non-event. You can focus on the birds.”

Whooping cranes are soaring birds, and in the wild they would normally travel 200 to 300 miles a day without expending much energy, riding thermals. But following an ultralight calls for a different kind of flying.

“Our birds instinctively learn to fly on the wake created by the wingtip,” says Duff. “They just figure it out.”

The birds compete for the best position off the wingtip; the others settle into a diagonal line, “surfing” the less intense vortex off each bird.

The pilots fly in the early morning, when the vortices off the wingtips are smooth. As the air heats up and thermal activity rises, it becomes more difficult for the birds to follow, and they move away from the ultralight and “flap-fly”—something that tires them quickly. “Sometimes they just drop out,” says Duff. “That’s when a chase plane will come down and pick that bird up.” A second pilot, also in a Cosmos ultralight, moves his wing right in front of the struggling bird, which will latch onto the wing’s vortex. In this way, the team will travel between 23 to 200 miles a day.

By 1941, the whooping crane population had dropped to 15; when Operation Migration led its first crane migration in 2004, the population had risen to 200; it’s now 500. For the species to survive, cranes must migrate on their own. In 2006, a crane trained by Operation Migration soloed from Florida to Wisconsin—the first to do so in more than 100 years.

### **Robert Harris**

#### *Grob 102 Standard Astir III*

A small road sign—Sailplane rides \$5—sparked an eight-year obsession that culminated in a world record.

When Robert Harris took his first sailplane ride, in Hemet, California, in 1978, he had no idea he’d sign up for lessons and eventually buy a Grob 102.

“I don’t know how many years I had it,” says Harris, “when I thought I’ve got to do something more with this plane than just fly around the airport.”

Harris had heard of Paul Bickle's 1961 altitude record—46,267 feet—and decided to try to break it. "I knew nothing about high-altitude flying," says Harris. But he eventually partnered with someone who did: Jim Meyer, a U-2 pilot. He and Meyer flew together in the two-seat Twin for three years.

"We accumulated a lot of information," says Harris, "and we were learning gradually what made mountain waves. We had 12 flights over 30,000 feet, and five flights over 35,000 feet. The highest we ever got was 39,800 feet."

When Meyer had to drop out of the world-record quest, Harris sold his Twin and bought the Grob 102, previously owned by Sabrina Jackintell, the women's altitude record holder.

On February 17, 1986, Harris made his daily stop at the nearby weather station. "Everything was there," he recalls. "I had been looking for this for years. All the clouds were there, ready and waiting for me."

Harris was supposed to be taking his son to the airport and picking up a new puppy—instead, he headed for California City. Once the Grob was towed to 9,000 feet, Harris released and drifted up the Owens Valley. At 41,000 feet, his canopy frosted over completely. "I had never flown on instruments before," Harris says. He remembers smiling as he passed Bickle's record. As his eyes began to water, the tears froze and became ice cobwebs. At 49,009 feet the temperature was -65 degrees Fahrenheit, and Harris' oxygen supply began to fail. He headed back to Earth and realized he was in a spiral dive. "I think I had lost concentration for just a tad," he says. He took control of the situation—gently. "At that point my plane is very cold, very brittle, and I don't want to stress it."

Just four hours after taking off, Harris landed, having set a world record that would last for 20 years. "The weather doesn't come along that often," says Harris. "This is like hitting the double jackpot in Las Vegas."