

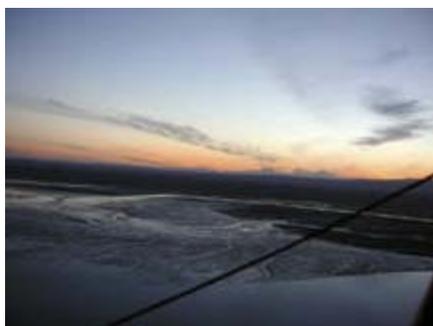
Flying a Powered Parachute in Alaska with Bud Gish



Mt. McKinley is located about one hundred miles northwest of Anchorage. Photo by Dale Person at <http://touchngo.com>.



The side of Bear Mountain where a powered parachute can soar with the engine off on windy days.



Just another Midnight Flight in the land of the Midnight Sun. Looking west across Knik Arm at 12:30 am. Just visible is Mt. Denali at 20,320 feet.

In June of this year, I traveled to Alaska to fly a powered parachute with Bud Gish. I wish everyone could see Alaska in the summer. The temperature is a perfect 65 degrees, the Anchorage area is free of snow, and the sun shines nearly 22 hours a day. When I flew with Bud, the wind was mild and visibility was one hundred miles.

Bud is one of the world's premier powered parachute pilots. In September 2000, he set a National Aeronautic Association altitude record of 17,671 feet in a powered parachute. During a six-day period in July 2000, Bud flew 778 miles in a Six Chuter powered parachute from Prudhoe Bay to Anchorage. Bud is a dealer for the Six Chuter and Powrachute manufacturers. He is also an ultralight Advanced Flight Instructor.

After a thorough preflight, Bud and I took off from Birchwood Airport, about 20 miles north of Anchorage. We flew a Six Chuter Spirit XL with a Rotax 582 engine and a Performance Designs PD-500 Sunriser canopy. After climbing out of the Birchwood traffic pattern, we descended to 300 feet and flew alongside the trees that border the Knik Arm tidal basin northwest of Anchorage.

The majestic Alaska Mountain range was visible in the distance to our left, and the 8,000-foot Chugiak mountains were a few miles to our right. Flocks of seagulls, frightened by our engine noise, lifted from the ground below us.

After a few minutes, Bud descended to an altitude only a few inches above the flat tundra surrounding the Knik tidal basin. We actually flew right through some tall grass and even touched down a couple times with a light kiss on the ground. After the flight, we found particles of grass clinging to the underside of the carriage.

Bud pulled up a few feet and followed a footpath along the tundra, turning and weaving the parachute to maintain our position directly overhead the crooked path. The sensation was like an airborne go-kart, traveling 28 miles per hour right above the ground.

As we continued north, the flat tundra was broken by small canyons carved by river water flowing into the basin. When the footpath descended into the little canyons and back up the other side, the powered parachute simply ignored the terrain, and flew right over the canyons like a magic carpet. As we approached a line of trees ahead, Bud simply added power, and we easily hopped over the obstructions.

We continued climbing about 500 feet per minute, and turned toward the Chugiak mountain range, which extends in a north/south direction a few miles east of Anchorage. In the Chugiak foothills near Birchwood, Bear Mountain sharply rises over 3400 feet above the Chugach basin. When the wind blows from the west and flows upward along the Bear Mountain cliff conditions are perfect for soaring.

Bud hugged the side of Bear Mountain as we continued climbing, back and forth along the shear walls. It seemed as if we could reach out and touch the terrain. Unfortunately, the wind was not strong enough to provide lift, but at least there was no turbulence.

As we climbed higher, the top of 20,000-foot Mt. McKinley became visible over

one hundred miles to the northwest. The entire Matanuska and Susitna Valleys lay before us. The city of Anchorage was about 25 miles to the southwest. Beyond Anchorage was Fire Island, the Knik Arm of the Pacific Ocean's Cook Inlet. Farther in the distance were the Alaska and Susitna mountain ranges. Directly below was Glenn Highway, bordered by cabins and houses nestled between forest trees.

Eventually, we reached the top of Bear Mountain. The summit was not a sharp peak, but a fairly flat plateau that extended several acres to the east. On the other side of the plateau, the Chugach mountains began to rise again.

Bud utilized the plateau as a personal playground. He maneuvered the parachute in circles around the perimeter, as we looked for wild animals and birds. An eagle flew nearby, seemingly curious about the giant flying machine that he was sharing the sky with. Bud swooped low over the land, then pulled up, turned around, swooped down again, and skimmed the surface, all the time staying within the confines of the plateau.

Then Bud headed west, toward the edge of the plateau. He flew inches above the terrain. We rushed closer and closer to the edge, then suddenly crossed the threshold. The land fell away from us as if we had been launched from an aircraft carrier. The Knik valley was a dizzying 3000 feet below. A startled eagle pealed away to our right.

Next, Bud calmly reached down and shut off the engine. It was eerily silent. The sensation was stunning. No longer frightened by the engine noise, the eagle returned closer to us. Bud turned north and flew parallel to the cliff, trying to find at least a little lift to slow our rate of descent. He said that on a windy day he could actually soar along the cliff, just like a hang glider.

Without much updraft, our rate of descent was about 500 feet per minute. That gave us four or five minutes to glide toward the Glenn Highway before starting the engine again. Bud pointed out a suitable spot where we could land if the engine failed to start.

Since this had been a working day for Bud, we hadn't even starting driving to Birchwood until he returned home from work in the late afternoon. By now it was 9:00 o'clock at night, as we silently drifted lower and lower. The sun peeked through thin clouds in the west. I noticed how easy it was to lose track of time in Alaska in the summer, since the sun lingers in the west for hours, as if it were frozen 20 degrees above the horizon. The low sun cast long, beautiful shadows behind every house and tree below us.

All too soon, we had to start the engine and head back to Birchwood, since we were getting low on fuel. Despite the fact that the wind had been calm at the crest of Bear Mountain, there was a surprising crosswind when we arrived at the airport. Bud entered the arrival pattern, turned base, and lined up to land on runway 1R. The wind was from our right, and Bud had to crab the powered parachute considerably to the east to maintain a track down the centerline of the runway.

It is commonly believed in the powered parachute community that PPCs should only be flown in calm wind, and especially not in a crosswind. Powered parachutes generally operate from open fields, which allow the pilot to position the aircraft directly into the wind for takeoff and landing (if there is any wind). Bud, however, was committed to landing due north on the runway, while the wind was from the east.

From the back seat behind Bud, it looked to me as if we were crabbed 15 to 20 degrees into the wind. We were lined up with the centerline of the runway, but the carriage was facing a magnetic direction of 030, not 010. I remembered the stories I'd heard regarding parachutes twisting in the wind and tipping the cart over. I mulled over how I would extract myself if we turned upside down on landing.

Little did I know that Bud was a master at crosswind operations. (See Bud's related article, "Crosswind Operations in a Powered Parachute," page 42.) As soon as we touched down, Bud steered the nose wheel directly down the runway, and kept the parachute from drifting downwind by using the foot-controlled steering tubes. In this case, he pushed down on the right tube, preventing the chute from falling to the left.

I expected Bud to immediately shut off the engine and let the chute fall down. But just to prove that an experienced pilot can operate a powered parachute in a crosswind, he did not kill the engine. Instead, he taxied down the runway, with the chute still inflated above us. He adroitly used his feet to manage the steering tubes, as if he were playing the foot pedals on a piano. He monitored the chute by looking in a nine-inch convex mirror mounted above the instrument panel. The mirror allowed him to steer the cart and watch the chute without looking overhead.

I was just beginning to feel disappointed that the flight was over when Bud asked if I'd like to see a touch and go. Of course, I said, "Sure." So Bud added power, continued steering the parachute to keep it overhead, and within a few seconds we were airborne again.

This time around the pattern it was not only windy, but also gusty. I looked around and realized that no other ultralights were flying. The wind and gusts didn't seem to bother Bud at all, even though the cart swayed back and forth and bounced up and down.

Once again we turned final and had to crab considerably into the wind. Once more Bud landed in a crab. The nose of the cart veered left to align itself with the direction of the main gear down the runway, and Bud kept the parachute directly overhead by pushing on the right steering tube. Despite the crosswind, Bud taxied down the runway, turned left onto the tarmac, and taxied right up to his parachute trailer before he shut down the engine and the chute fell to the ground.

Immediately, I realized how much more versatile a powered parachute is than most people are aware of. If everyone could handle the chute as well as Bud, it could be flown for more hours during the day—not just in calm air at sunrise and sunset. The significance of operating a powered parachute in windy conditions is especially important in light of the forthcoming Sport Pilot initiative.

Early next year the FAA will issue the rules regarding "Light Sport Aircraft" and the new Sport Pilot certificate. One of the exciting features of Sport Pilot is that ultralight-type aircraft will be allowed to fly out of congested areas and cities, which they are presently precluded from doing.

This means that powered parachutes will be able to operate from municipal airports, and will not be limited to farmer's fields, as they are today. The problem is that airports have runways that are aligned in one direction. If the wind on a specific day is not blowing directly down the runway, there will be a "crosswind component" sideways to the runway.

If the wind changes direction when a powered parachute pilot wants to take off from a farmer's field he simply repositions the cart to face into the wind and modifies the layout of the parachute behind the cart. But when taking off from a runway, the pilot must take off down the runway, not across it. Therefore, he must be able to handle a powered parachute in a crosswind takeoff, or postpone the flight.

It will be imperative that powered parachute pilots be taught how to take off and land in at least a moderate crosswind, if they want to take advantage of the opportunity to operate from municipal airports.

In addition, parachutes will not be welcome at city airports if they clog up the runway by dropping the chute immediately after landing. Bud was able to prove that he did not have to drop his chute after landing, but could taxi down the length of the runway (even with a crosswind) and also turn the cart and taxi onto the tarmac before dropping the chute. This skill would allow parachutes to mingle with general aviation airplanes at city airports, since they could taxi off the runway before dropping the chute.

It's obvious that only a pilot with considerable experience and advanced training could duplicate what Bud demonstrated to me. But at least Bud showed that it can be done, contrary to popular opinion.

The flight with Bud was one of the most memorable flights I've ever had. Not only for the spectacular scenery and unique midnight sunlight, but also for the revelation that a powered parachute is much more capable and versatile than I ever imagined. When I record this flight in my logbook, I will certainly annotate the entry with a gold star.

Editor's note: for more information about crosswind operations in a powered parachute, see the accompanying article by Bud Gish, page 42.

Jon Thornburgh is an ultralight and FAA flight instructor. To see previous articles that he has written for UltraFlight Magazine.