

Why the World's Tallest Waterfall is Named Angel Falls

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Jimmie Angel (1899–1956) was an aviator and adventurer in the early years of air exploration. This article discusses his discovery of Angel Falls, the world's tallest waterfall, which bears his name, and the impact of that discovery — and his reputation and dogged determination — on later expeditions into the Venezuelan interior. The author, Angel's niece, pieces together this fascinating story using a blend of dedicated archival research and painstakingly acquired family history and the reminiscences of friends and acquaintances of Jimmie and his wife Marie. The result is a tale of modern-day exploration and geographic discovery.

KEYWORDS Jimmie Angel, Angel Falls, Auyántepeui, E. Thomas Gilliard, Anne Roe Simpson, George Gaylord Simpson, Venezuela

When I began researching the life of American aviator James “Jimmie” Crawford Angel (1899–1956), there were many stories about him in books, newspapers, magazines, and more recently on websites and blogs. Some stories can be verified by the Angel family or other sources; some stories are plausible, but remain unverified; other stories are fabrications. The result is a tangle of true stories and unverified stories. Finding the truth about Jimmie Angel is also complicated because he himself repeated the various unverified stories that became legends about his life.¹

As the daughter of Jimmie Angel's youngest brother Clyde Marshall Angel (1917–97), I had heard stories about my uncle since childhood, but the family had few documents to support the stories. I have had to piece together his story through archival research and interviews with people who knew him.

¹ Some aspects of this article have been previously published, but in a different form. Karen Angel, “The Truth about Jimmie Angel and Angel Falls,” in *Homage to Alexander von Humboldt: Travel Literature to and from Latin America XV through XXI Centuries*, ed. Jorge L. Martinez (Oaxaca, 2005), pp. 31–32. Jimmie Angel's stories include that he taught himself to fly at age fourteen, was a Royal British Flying Corps ace in World War I, created an air force for a Chinese warlord in the Gobi Desert, and worked as an aviation scout for Lawrence of Arabia.

When my father died in 1997, I was surprised that his northern California newspaper obituary led people who knew Jimmie Angel in the 1920s through the 1940s to contact me. The result was a new group of people to interview who had known and worked with him. Prior to this, some of my interviews were dead ends.² For example, Harry Gibson Dreisbach was quoted at length about Angel in a 1991 *Air & Space Smithsonian* article.³ When I interviewed Gibson in his Caracas, Venezuela, home in 1996, I found a gracious, retired airline pilot with colorful stories to tell about his own flying career. When I asked him about Jimmie Angel, he sheepishly acknowledged that he did not know him: “Never knew the man. I was just repeating stories I had heard.”⁴

My new informants had known Jimmie Angel; they provided me with fresh insights into his character and with new avenues of research to pursue. Their information, combined with previous firsthand interviews, reliable family oral history, and archival research, enabled me to document the events that led to the attachment of his name to the tallest waterfall in the world — Angel Falls — in the southeastern region of Venezuela known as the Great Savannah.

Born on 1 August 1899, in the Cedar Valley region of Missouri, he was the oldest child in a family of five sons and one daughter. His full name was James Crawford Angel. During his early youth he was called Crawford because his grandfather, who lived nearby, was also named James. As a young adult, he adopted the name Jimmie rather than the conventionally spelled Jimmy, which was frequently used by others when referring to him.

Using the name Crawford Jas Angel, he enlisted in the US Army on 5 August 1917; he was honorably discharged just four days later, on 9 August 1917, because he was underweight.⁵ Various stories have circulated suggesting that he subsequently served in Europe during World War I, but documents have not been found to substantiate them. After he learned to fly, he worked as a flying circus barnstormer with members of his family, a movie stunt pilot, a test pilot, a flight instructor, and a commercial pilot hauling cargo and passengers who contracted for his services.⁶ He considered

² Karen Angel, “The Legends of Jimmie Angel,” *Américas* (March/April 2011), p. 61.

³ Carl Posey, “Jimmie Angel, Devil’s Mountain, and the Lost River of Gold,” *Air & Space Smithsonian* (June/July 1991), p. 31.

⁴ Harry Gibson Dreisbach, interview with the author, Caracas, Venezuela, 4 March 1996.

⁵ J. K. Riordan, Acting Adjudication Officer, US Veterans Administration, to Mrs James C. Angel (Marie), 9 January 1957; Jimmie Angel Historical Project (JAHP) Archive, Eureka, California.

⁶ Harry Middleton, interview with the author, Paradise, California, 26 December 1997. According to Middleton: “I first met Jimmie Angel at an airfield in Texarkana, Texas, in 1920 or 1921. He was a mechanic just out of the army. He was learning to fly at Twin City Flying Service. One day I was told that they turned Jimmie loose, in other words, he had soloed that day. A few days later he was flying passengers. He was a skinny little runt — good looking — had to beat the girls off with a stick. In 1930, I was working for a subsidiary of Pan American Airway in Mexico — one of our captains was K. K. Hoffman — had been a lieutenant in the 94th Pursuit Group in WWI. I have heard them talk about Jimmie being their crew chief.” Middleton’s accounts may be interpreted in at least two ways: Angel did not learn to fly until 1920 or 1921, or the Twin City Flying Service was putting him through his paces before they allowed him to fly their airplanes and passengers. The 1920 US Census lists Angel living with his parents in West Plains, Missouri, and working as a mechanic.

the life of a commercial airline pilot too routine, too structured. “It would be like driving a bus,” he responded to his youngest son Rolan, when asked late in his life why he didn’t have an airline pilot’s job.⁷

He married his first wife, Virginia Martin (1906–85), on 19 August 1922 in Coffeyville, Kansas.⁸ She performed stunts in the barnstorming Angel Family Flying Circus with Angel and three of his brothers and their wives in the 1920s. Jimmie and Virginia Angel separated in 1933. In 1934 he met his second wife, Mavis Marie Sanders (1906–87), while visiting friends in Los Angeles.⁹ Similar to Virginia in appearance, slender with red hair, Marie like Virginia was a tough and independent woman. Marie Angel was his companion and sometimes co-pilot and navigator from 1935 until their first child was born in Nicaragua in 1943.¹⁰

In 1928, his pilot’s identification card, with his pilot’s license number 1987, listed his weight as 150 lb, height 5 ft 9 in, hair color black, eye color brown. He signed the card “(Jimmie) James C. Angel.”¹¹ He often told people that he was mostly an American Indian, which was partially true. His mother, Margaret Belle Marshall Angel, born in Arkansas (1874–1937), was part Cherokee.

Jimmie Angel told his brother Clyde that his first trip to Venezuela was in 1921, when he met an American mining geologist named McCracken in a Panamanian bar and agreed to fly him to a secret location in southeastern Venezuela for a fee of \$5000. Following McCracken’s directions, Angel landed his airplane on a tabletop mountain where the two of them removed many pounds of gold from a river. They returned safely to Panama, where McCracken departed with the gold and Angel with his promised \$5000.

Documents or informants have not verified Jimmie Angel’s account of McCracken and the river of gold. Many of his friends and family members believed the story, which he told frequently. The story was sometimes a successful means of attracting investors to his search for gold, a quest that lasted for the balance of his life.

The Great Savannah of southeastern Venezuela is home to tabletop mountains known as *tepuis*. Referred to as “islands in time” by contemporary Venezuelan naturalist and explorer Charles Brewer-Carias, *tepuis* are towering ancient Cambrian sandstone structures that are believed to be remnants from the vast continent of

⁷ Rolan Angel, son of Jimmie and Marie Angel, interview with the author, Santa Barbara, California, 12 May 1995.

⁸ Marriage License, State of Kansas, Central Division of Vital Statistics, C No 1062, P. J. 10212; JAHP Archive. After they separated in 1933, Jimmie and Virginia maintained contact for the balance of his life. Apparently they never divorced; Virginia claimed to be his widow until her death.

⁹ Marie Sanders Angel, “The Angel Falls,” unpublished manuscript, 1978, p. 109; JAHP Archive. According to Missouri Marriage Records, 1805–2002, Jimmie Angel and Marie were married on 7 November 1935, in Belton, Missouri: <http://search.ancestry.com/cgi-bin/sse.dll?h=507943107&db=MOmarriages&indiv=1>.

¹⁰ Jimmie and Marie Angel’s first son, James Herbert Glenn Angel, was born 10 November 1943 in Managua, Nicaragua (died 2009). Twin boys were born on 13 August 1947, in San José, Costa Rica. Only Rolan Parker Angel survived; his twin died a few days after his birth.

¹¹ The Air Commerce Act, which included the licensing of pilots, was passed by the United States Congress in 1926.

Gondwana, which broke apart about 135 million years ago to form the continents of Africa and South America.¹² Each *tepuí* rises from the Great Savannah as an isolated island with its own unique botanical and zoological world. In his search for the lost river of gold, Angel became obsessed with Auyántepuí, a 348 square mile heart-shaped *tepuí* not shown on official maps prior to his explorations of the region.¹³ He claimed that it was the home of the river of gold.

In the fall of 1933, Angel was working as an aviator/guide in the Great Savannah for the Santa Ana Mining Company of Tulsa, Oklahoma. His expedition companions were American mining official D. H. Curry and Angel's Mexican co-pilot and mechanic Jose Cardona.¹⁴ While on a solo flight on 18 November 1933, in his Travel Airs-6000B (registration no. NC-0431W), Angel flew into Churun Canyon, popularly known as Devil's Canyon, on the north side of Auyántepuí, and saw for the first time what was to become known to the world as Angel Falls (see Figure 7).¹⁵ He wrote in his pilot's log book in capital letters, "FOUND MYSELF A WATERFALL." He returned to the waterfall the next day and wrote in his log, "MY WATERFALL"; and again on the 22nd he wrote, "FLIGHT OVER THE BIG FALLS — 1 MILE" (Figure 1). Neither Curry nor Cardona believed the story Angel told them about a "mile high waterfall." Because of heavy rains, they left the area soon afterward and never saw it themselves.

Angel was introduced to L. R. Dennison in 1934, in the New York City office of Durand A. Hall. He agreed to be the pilot and guide for Hall and Dennison's exploratory Great Savannah expedition, sponsored by the mining group Case, Pomeroy, and Company. They became the second and third individuals to see Angel's waterfall, when he flew them into Devil's Canyon on 24 March 1935.¹⁶ Seven years later, Dennison told about his adventurous months with Jimmie Angel in a book titled *Devil Mountain*. The following passage recounts his first view of Angel Falls:

¹² Uwe George, "Venezuela's Islands in Time," *National Geographic* (May 1989), p. 539.

¹³ Except when used in a direct quote, the spelling "Auyántepuí" is used in this article for the heart-shaped *tepuí* located in Canaima National Park in the Great Savannah of southeastern Venezuela. *Auyán* means "devil" and *tepuí* means "house" in the language of the indigenous Pemón people; hence "the Devil's House." Angel Falls is located in Churún Canyon, which is a large cleft on the north side of Auyántepuí. The canyon is often referred to as Devil's Canyon. The Churún River originates on Auyántepuí. The primary waters of the Churún flow over the canyon's walls at a different point than Angel Falls and are called Churún Falls.

¹⁴ "Flyers Seeking Gold Mine," *St Louis Post Dispatch* (3 September 1933). Angel and Curry left Muskogee, Oklahoma on 26 August 1933 for Venezuela in search of a lost gold mine.

¹⁵ Isabel Barton, e-mail communication with the author, 22 December 2009. According to Venezuelan filmmaker Barton, who is working on a cultural history with the indigenous Pemón people in the Kamarata Valley, "The elders state that their name for Angel Falls is Churún-Vená. Vená means waterfall. The water, after it collects in the pool at the base of the waterfall and then cascades over the rocks is called Churún-Merú. Merú means rapids or cascade, in other words, water flowing over rocks. The Churún part of the name comes from the fact that it is the largest waterfall flowing into the Churún Canyon which is a very important place in their culture. The word Churún is a sound in their language with no particular meaning."

¹⁶ L. R. Dennison, *Devil Mountain* (New York, 1942), pp. 22–28; Marie Sanders traveled with Jimmie Angel and his brother, Henry Parker Angel (1904–85), to South America in March 1935. She did not have a visa to enter Venezuela and stayed in Barranquilla, Columbia, while the brothers continued on to Venezuela to meet Durand A. Hall and L. R. Dennison.

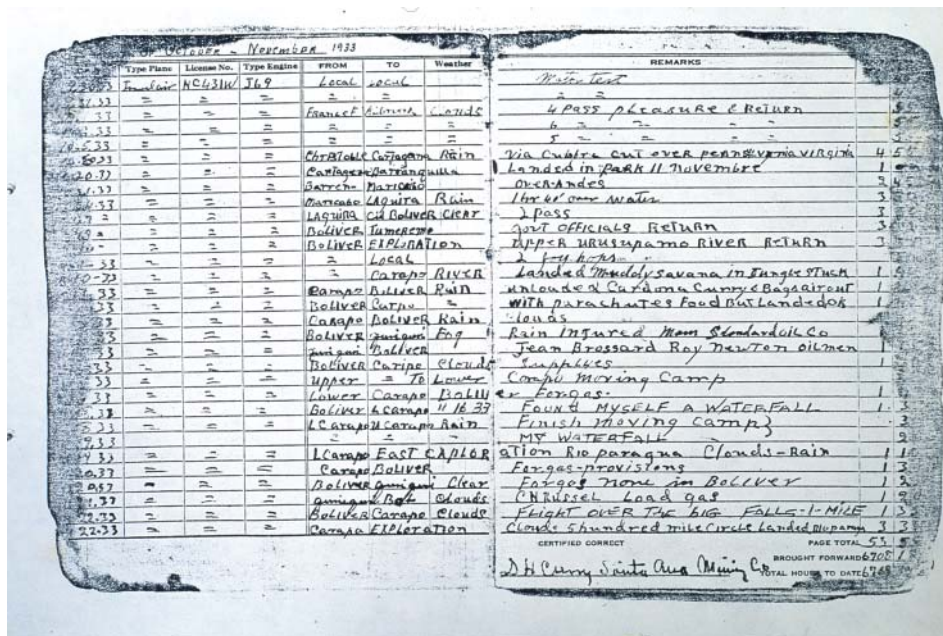


FIGURE 1 Jimmie Angel’s pilots record and log book recorded his November 1933 discovery of the waterfall.
 Courtesy of JAHF Archive.

“Now I will show you my waterfall!” shouted Jimmie with glee, as we entered a wide valley.

He did not have to point it out, for the fall was plainly visible in the distance.

“How is that for a waterfall?” Jimmie demanded.

I could not have answered him if I had tried. My eyes must have been popping right out of my head. I could only stare in amazement. It looked like an immense rope hanging over the canyon wall, and it fell for all of 3,000 feet, possibly more, without interruption until it spread out into a billowy cloud of fine, fluffy mist. Jimmie now flew close to this wonder of the world; so close that I feared the plane’s wing would get splashed with water from it. Then he circled around once and dipped his wing three times as though saluting something belonging to him alone.¹⁷

Not long after Dennison and Hall saw the waterfall, Angel flew Francis “Shorty” Martin, a well known and respected American oil geologist, to see the waterfall. Martin took photographs of the waterfall and Auyántepui, and made rough maps of the area to validate Angel’s claim (Figure 2). Angel had been telling people about his waterfall since he first saw it, but no one had believed him, because the official maps for the region did not show any feature as tall as Auyántepui or the waterfall.¹⁸

¹⁷ Dennison, *Devil Mountain*, p. 39.

¹⁸ E. Thomas Gilliard, “Unchallenged Champion,” *Natural History, The Magazine of the American Museum of Natural History* (December 1940), p. 261.

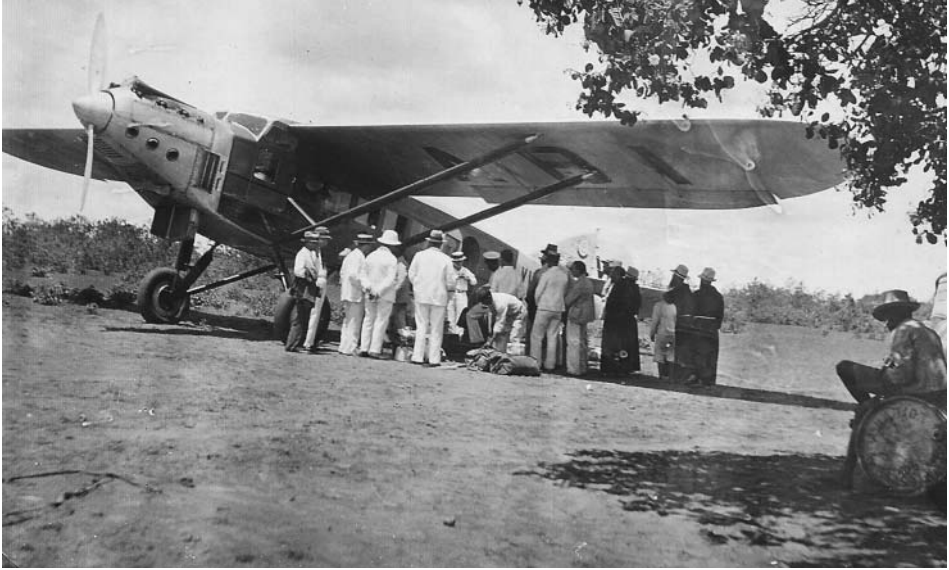


FIGURE 2 Jimmie Angel, Henry Parker Angel, Durand A. Hall, L. R. Dennison, and Francis I. “Shorty” Martin are among those pictured in this group photo, Ciudad Bolívar Airport; March, 1935.

Courtesy of JAHP Archive.

The 1937 expedition to Auyántepui

Angel acquired his Metal Flamingo G-2W airplane (serial no. 22, registration no. NC-9487) from United States Airways, Inc., based in Kansas City, Missouri, on 3 August 1936.¹⁹ He named the airplane *El Rio Caroni* after the Caroni River, which he used as his primary visual navigational guide when flying over southeastern Venezuela. The Caroni River rises in the Great Savannah and flows south to north to join the Orinoco River at Ciudad Guayana, east of Ciudad Bolívar, the capital of the State of Bolívar. It was the landing of this plane on Auyántepui on 9 October 1937 — another attempt to find the river of gold — that brought Jimmie Angel and Angel Falls to the attention of the world.

This 1937 expedition included Jimmie and Marie Angel and their companions: Gustavo Heny; Heny’s gardener, Miguel Angel Delgado, who was an expert at climbing rope and handling a machete; and Captain Felix Cardona Puig. The Angels were already familiar with Cardona’s and Heny’s reputations as explorers when they met them earlier that year. Cardona had been collecting plants and came into their Kamarata camp at the foot of Auyántepui, where he introduced himself and voiced an interest in Angel’s exploration for gold on Auyántepui’s plateau.²⁰ They met Heny

¹⁹ C. Klein, Examiner, Abstract Certificate; Federal Aviation Title Company, requested by Peter Bruemmer, 2010; JAHP Archive. The same Abstract Certificate states that Angel transferred the airplane to Joel Eli Meacham of Phoenix, AZ on 6 January 1937. I speculate that Meacham invested in Angel’s search for gold and that ownership of the airplane was transferred to Meacham as collateral.

²⁰ Angel, “The Angel Falls,” p. 231.

in Ciudad Bolívar during one of their supply trips. Heny was unfamiliar with Auyántepeui but became fascinated by Angel's stories about it.²¹

Gustavo Heny (1903–82) was born in Caracas, Venezuela, into a wealthy family of German descent. He was a civil engineer and an expert outdoorsman and mountaineer. He was tall and slender and called *Cabuya* (String) by many. His niece, Carmen Dearden, recalled, "My uncle was quite special. He had a wonderful ability of freedom. He had the quality of a kind of magical bird that would fly in and fly out. He would take off for months at a time into the jungle with only a shotgun and a bag of salt."²²

Originally from Catalonia and a former officer in the Spanish merchant marine, Captain Felix Cardona Puig (1903–82) had explored the Guianan highlands of Venezuela on foot and by dugout canoe.²³ Angel considered him a good radioman, which was a skill that would be needed to maintain communications between the Auyántepeui landing party and the group's base camp.

Angel scouted a landing spot on Auyántepeui from the air. Then Heny and Cardona looked for a land route from Angel's camp at Guayaraca on Auyántepeui's south flank to the proposed landing site, which was on the northern side of the plateau, but their search was not completely successful (Figure 3). Cardona returned to camp after a few days, while Heny continued to pursue a northern route across much of the plateau. He was stopped from reaching the planned landing site by the *tepeui*'s great interior wall. During Heny's fifteen days of reconnaissance, Angel dropped supplies from *El Rio Caroni*, each bundle attached to parachutes that had been fashioned by Heny's sister Carmen.²⁴

According to Enrique Lucca, who was Gustavo Heny's friend and executor for Heny's photographs of the 1937 Auyántepeui landing, "Jimmie was sure that Cabuya [Heny] could lead them safely back if something happened. Cabuya trusted Jimmie's ability as a pilot so he thought that there was little danger, but he did want more time to explore the landing site Jimmie had selected on the *tepeui*. Jimmie didn't give him the time he needed."²⁵

The morning of the flight, Cardona stayed in camp to maintain radio contact with the Auyántepeui landing party, composed of Jimmie and Marie Angel, Heny, and Delgado. Marie Angel wrote in her unpublished account, "We were well prepared in case of a mishap with the plane. Plenty of canned food . . . a tent, an extra roll of canvas to eliminate dampness when we slept on the ground . . . two hundred feet of half-inch rope, cameras, medicines, and other sundries we felt were necessary."²⁶

²¹ Angel, "The Angel Falls," p. 316.

²² Carmen Dearden, interview with the author, Caracas, Venezuela, 7 March 1996.

²³ Jorge González, "Ruth Robertson: Lady of Angel Falls (or Lady of the Falls)," unpublished manuscript, p. 13; Angel, "The Angel Falls," p. 316.

²⁴ Carmen Heny, interview with the author, Caracas, Venezuela, 7 March 1996.

²⁵ Enrique Lucca, interview with the author, Caracas, Venezuela, 29 February 1996.

²⁶ Angel, "The Angel Falls," pp. 428–29.



FIGURE 3 Gustavo Heny (left) and Captain Félix Cardona Puig making preparations to search for an Auyántepeui overland route.

Gustavo Heny; JAHP Archive in association with the Enrique Lucca Collection.

Gustavo Heny described the landing on Auyántepeui as follows:

When the day cleared on 9 October, 1937 everything was ready. The takeoff occurred without problems at 11:20 AM, arriving in 15 minutes at the plateau, which was over flow for a few minutes before starting to land. I could not conceal the emotions caused by the present daring against the Great Unknown of landing without problems on Auyantepeuy. So prepared was Jimmy to do this, that once he had aligned the plane with the selected track where the terrain was favorable, he “CUT” the motor, magnetos and set all the switches to “OFF”; the lot had been cast . . . The “Flamingo” gently began brushing the surface with its three wheels — in a position perfect for a three point

landing — and leaving a trail with its tires among the little grassy humps but each time sinking a little deeper because of the decreasing speed and loss of lift from the wings. Everyone remained eloquently silent until a voice was heard. It was the voice of Gustavo Heny who, from the depths of the cabin, shouted “Pull out Jimmy . . . pull out . . .”

Coincident to the alert, the plane took a small jump prior to dropping onto much softer terrain and this grabbed the front landing gear and with the inertia raised the tail, burying the nose cone up to the propeller shaft and it remains in that position as if to say: “Auyantepui, in your presence I am overcome . . .” It was 11:45 AM.²⁷

Two days later, when it became clear that there was no gold to be found and that *El Rio Caroni* was hopelessly mired in her muddy landing spot, Angel wrote the following note and left it in the airplane:

By Jimmie Angel

This Flamingo Airplane was landed here Saturday Oct 9, 1937 at 11:45 AM
the landing was intentional, switch was cut also gas.

We were on the ground 750 feet before we hit soft spot
Plane nosed up. And tore extending edge on left wing tip.
And pulled one hose connection loose on oil radiator.

No more visible damage done

passengers Mrs Angel Gustavo Heny Miguel Delgado
today is the eleventh of October

we are walking out in good Health for Comarata camp
our radio has failed us completely.²⁸

Before starting the long march from the plateau to the village of Kamarata in the valley below, the landing party used ropes to free the airplane’s nose from the mud because Jimmie did not want to abandon his airplane in an undignified position.²⁹ In the hope that aerial searchers would see the airplane, cloth was torn, a message written on it and then taped to the top of a wing; it read “ALL OK” with an arrow showing the direction the landing party was headed (Figure 4).

Cardona was not able to maintain radio contact with the landing party, but he did get a message to the outside world that was acted on by Heny’s friend, Dr William H. Phelps, Sr, a wealthy American businessman and ornithologist living in Caracas. Phelps sent an airplane to look for them, but the pilot could not see through the

²⁷ Enrique Lucca, “El Aterrizaje de Jimmy Angel Sobre el Auyantepuy 33 Años Despues,” *Lineas* (April 1970), p. 14. My thanks to John A. de Coup-Crank for his translation.

²⁸ Angel’s note remained in the airplane until it was removed by Alejandro Laime; JAHP Archive. “As had been promised to Jimmy to examine the whole plateau, Gustavo returned to the place where the plane had been after he had taken all of the personal property left behind, including the photo and movie equipment. For certain, the movie was taken started passing from hand to hand and today its whereabouts is unknown. Not so with the photos — which illustrate this report — which have been provided as well as the narrative of the actions of Mr Gustavo Heny,” Lucca, “El Aterrizaje de Jimmy Angel Sobre el Auyantepuy 33 Años Despues,” p. 16, trans. John de Coup-Crank.

²⁹ Enrique Lucca, interview with the author, Caracas, Venezuela, 29 February 1996.



FIGURE 4 *El Rio Caroni* stranded on Auyántepui.
Gustavo Heny; JHP Archive in association with the Enrique Lucca Collection.

clouds covering the mountain. After a few days, the Angel party was presumed hopelessly lost or dead.³⁰ The rescue Angel and Heny had expected did not appear.

As previously planned in the event that the aerial part of the expedition encountered trouble, Heny led the Angels with the assistance of Delgado, down from the Auyántepui plateau, scrambling over crevasses, climbing rock walls, fording rivers, and hacking their way through jungle.³¹ According to Heny's sister Carmen, "Jimmie was a great pilot, but he wasn't very good on the ground. He didn't like to walk."³²

The Phelps expedition

Phelps had heard fantastic stories over the course of several months that same year from Shorty Martin about Jimmie Angel's new "Lost World" of Auyántepui and the mile-high waterfall Angel had discovered.³³ He wrote to fellow ornithologist and friend Frank Chapman, curator of the Department of Ornithology at the American Museum of Natural History, and offered his sponsorship of an expedition

³⁰ Gilliard, "Unchallenged Champion," p. 264.

³¹ Enrique Lucca, interview with the author, Caracas, Venezuela, 29 February 1996.

³² Carmen Heny, interview with the author, Caracas, Venezuela, 7 March 1996.

³³ Gilliard, "Unchallenged Champion," p. 259.

to Auyántepeui and the participation of himself and his son, William “Billy” H. Phelps, Jr, who also was an ornithologist.³⁴

The American Museum of Natural History had explored *tepui* Roraima and Duida a decade before and had discovered many previously unknown plants and birds.³⁵ Located northwest of Roraima with Duida to the southwest, and with hundreds of miles separating them, Chapman believed Auyántepeui was the missing link in the museum’s exploration of the *tepui*.³⁶ He enthusiastically responded to Phelps, “Your letter of June 9 is unique in my museum experience of forty-nine years. It is the kind of a letter that a curator, when in a particularly happy and imaginative mood, might write to himself, the kind of a letter of which dreams both geographic and zoologic come true.”³⁷

Eager to move forward with preparations for the expedition, Chapman selected twenty-six-year-old ornithologist E. Thomas Gilliard to organize the expedition gear and to make the advance preparations in Venezuela.³⁸ He called upon George H. H. Tate, who had led the Roraima and Duida expeditions and was now assistant curator of South American mammals, to accept the mantle of leadership for the new expedition.³⁹

Gilliard had arrived at the museum in 1932 as a twenty-year-old volunteer trainee, fresh from two years at Deep Springs College in the remote high desert east of southern California’s Owens Valley.⁴⁰ Then, as now, Deep Springs College was a working cattle ranch that attracted the nation’s brightest students, who were required to do the hard physical labor of ranch hands, engage in self-governance, and maintain the highest academic standards.⁴¹ Gilliard’s willingness to take on daily hours of hard physical tasks while maintaining high scientific standards served the Auyántepeui expedition in unanticipated ways.

Months of preparation followed Phelps’ invitation before the expedition was ready to depart from New York, with Gilliard and Tate assembling “everything from costume jewelry to dentist’s forceps; you can hardly imagine the million and one items, or the time it takes for preparation and red tape.”⁴² During this period, Gilliard made frequent entries in his field diary. He recorded in his good-natured manner that

³⁴ William H. Phelps, Sr, to Frank M. Chapman, Curator, Department of Ornithology, American Museum of Natural History, New York City, 9 June 1937; Department of Ornithology Archives, American Museum of Natural History (hereafter AMNH/DOA). My thanks to Mary LeCroy for her assistance with my research. She was E. Thomas Gilliard’s assistant at the American Museum of Natural History from May 1959 until his death in January 1965. After that, she was Scientific Assistant and Senior Scientific Assistant in the Department of Ornithology until she retired in 1997. She is currently a Research Associate in that department.

³⁵ “PHELPS VENEZUELAN EXPEDITION . . .,” AMNH Press Bulletin, 1 December 1937; AMNH/DOA.

³⁶ Thomas Gilliard, field diary, 6 August 1937; AMNH/DOA.

³⁷ Chapman to Phelps, 16 June 1937; AMNH/DOA.

³⁸ Gilliard, field diary, 6 August 1937; AMNH/DOA.

³⁹ Chapman to Phelps, 15 July 1937; AMNH/DOA.

⁴⁰ “Dr E. Thomas Gilliard, Noted Ornithologist and Explorer, Dies at 52,” AMNH Press Bulletin, 26 January 1965; AMNH/DOA.

⁴¹ Deep Springs College: <http://www.deep-springs.edu/about/mission.html> (accessed 7 November 2011).

⁴² E. Thomas Gilliard and C. E. Scoggins, “The Eighth Wonder of the World,” *Saturday Evening Post* (26 July 1941), p. 69.

Chapman has “been impressing upon me the dangers . . . horrors of green hell have graced my ears, — insect insanity, diseases, and snake bite.”⁴³

The same day, 14 October 1937, that Gilliard departed from New York City by ship to make advance preparations for the expedition’s arrival in Venezuela, Phelps wrote to Chapman that Jimmie Angel, who had been hired to work as a pilot/guide for the Phelps Venezuela Expedition, had landed his airplane on the top of Auyántepeui in search of gold. With no radio communications from them for over four days, Phelps expressed great concern because “If Angel has cracked in taking off it is bad for us because we need his plane during our stay at the mountain.”⁴⁴

The Angel party returned safely, but, Phelps wrote to Chapman, “The loss of the Angel plane, although fatal to his hopes of gold I think has been a wind-fall for our expedition . . . the expedition will have an elegant clubhouse on top right in the middle of the mountain: lounge chairs, warm room and a radio . . . for I presume that Angel’s plane will never leave its resting place on top.”⁴⁵

Without an airplane to fly in support of the expedition, Jimmie and Marie Angel left Venezuela by ship bound for New York City prior to the arrival of the Phelps expedition.⁴⁶ Angel appeared in Chapman’s New York City office, 20 November 1937, with a perplexing request for a loan of money. Chapman immediately reported Angel’s visit in a letter to Phelps:

I thought that my connection with the expedition would be for the moment quiescent but Jimmy Angel came in this morning in a very disturbed mental condition. It appears that he lost his father and a brother, an aviator in China, and that Mrs Angel has lost her mother. Just how that should affect his financial condition, I do not know, but he wanted a loan of \$200 which I gave him in the belief that it would hasten his departure from America and make him possible for the uses of the expedition at an early date.⁴⁷

When I discovered Chapman’s letter to Phelps in the Department of Ornithology’s archive, I was bemused by the fantastic story Chapman related about Jimmie Angel’s request for a loan, because Angel’s father, my grandfather Glenn Davis Angel, was alive and well in southern California, and his four brothers were also fine. The story did not completely surprise me, however, because Jimmie was given to embellishing the events of his life to achieve his goals. It could also be that Chapman’s memory of Angel’s reasons for needing a loan was not completely accurate. Angel’s mother, Margaret Belle Marshall Angel, died 11 November 1937, ten days before his meeting with Chapman. She was very close to her five sons, but especially to Jimmie, the eldest, which may explain his “disturbed mental condition.” A \$200 promissory note on museum letterhead, dated 20 November 1937, in Angel’s handwriting was also in the file, confirming, at least, that the loan was made as described in the letter.⁴⁸

⁴³ Gilliard, field diary, 24 August 1937; AMNH/DOA.

⁴⁴ Phelps to Chapman, 14 October 1937; AMNH/DOA.

⁴⁵ Phelps to Chapman, 22 October 1937; AMNH/DOA.

⁴⁶ New York Passenger Lists, 1820–1957, James Crawford Angel; <http://search.ancestry.com/content/viewerpf.a.spx?h=24786435&db=nyp1&...> (accessed 6 February 2011).

⁴⁷ Chapman to Phelps, 20 November 1937; AMNH/DOA.

⁴⁸ Jimmie Angel to Chapman, 20 November 1937, “Received from Mr Chapman as a loan the sum of two hundred dollars (\$200) James C. Angel;” AMNH/DOA.

The expedition, composed of ornithologists Gilliard, both Phelps, and William F. Coultas, and mammalogists James A. Dillon and George Tate, assembled 1 December 1937 in Ciudad Bolívar.⁴⁹ The four flights required to transport the expedition to the foot of Auyántepeui were accomplished smoothly.⁵⁰ On Phelps' recommendation, Captain Cardona had been hired as guide, camp manager, and radioman (Figure 5).⁵¹

Unfortunately, difficulties were encountered as soon as they reached Auyántepeui. The impression one has from reading Gilliard's field diary is that Cardona was responsible for many of the expedition's unanticipated problems. "Cardona is a difficult man to fathom. Indeed he has the blood of a true conquistador in his veins but what with his latin vanity and apparent self-belief of proven fabrications, is a difficult person to deal with."⁵²

Cardona also had difficulty maintaining radio communications. All but one of the helpers and porters fled under Cardona's management or perhaps indirectly due to



FIGURE 5 Members of the 1937-38 Phelps-Venezuela Expedition (seated L to R): ornithologist William H. Phelps, Jr, mammalogist James A. Dillon, ornithologist William H. Phelps, Sr, mammalogist and expedition leader George H. H. Tate, ornithologist William F. Coultas, and ornithologist E. Thomas Gilliard holding a camera. The photograph was printed in the *New York Times* 28 August 1938. All of the people standing in the back row were identified as "native helpers."

Department of Ornithology, American Museum of Natural History in association with the JAHF Archive.

⁴⁹ Gilliard and Scoggins, "The Eighth Wonder of the World," p. 69-72.

⁵⁰ Gilliard, "Unchallenged Champion;" p. 264.

⁵¹ Phelps to Chapman, 24 July 1937; AMNH/DOA.

⁵² Gilliard, field diary, 25 December 1937; AMNH/DOA.

his lack of explanation about the endless demands of camp work and the extreme difficulty of supply portage over unexplored and dangerous mountain routes. On one of the rare occasions when the radio was working, Cardona received word that his son had died. He abandoned the expedition 18 December 1937, and returned to Caracas.⁵³

With Cardona gone, who had been the only expedition member familiar with Auyántepeui, the expedition struggled on for almost three months in various camps on the slopes and plateau of Auyántepeui without support. All the members did triple duty as field scientists, porters and camp helpers, with much of the extra work taken on by Gilliard who, loyal to his Deep Springs College tradition, willingly accepted the extra duties.⁵⁴

In a long 8 January 1938 letter from a camp high on Auyántepeui to his mentor Chapman, Gilliard began with a positive report about their successful bird collecting but quickly descended into news of the expedition's desperate condition: "I want to tell you a bit more about the camp situation, as it precariously stands today . . . we are all very well except perhaps Mr Phelps Sr. who some time ago cut his knee with a machete and Bill Phelps (Jr) who took two nasty falls while up here." Gilliard went on to say, "all of the Indians had quit and spread to the four winds except one and he is expected to leave at any time . . . Captain Cardona . . . has long since left and his radio is functioning but weakly . . . [and] is expected to peter out any day and as none of us know 'beans' about such machines, to stay that way." He continued that, in addition to his collecting duties, he was "chief cook and bottle washer" for the camp, food was running low, and finally, Gilliard wrote, "the situation is so bad that we possibly will have to collect as long as we can and then cache all of our equipment and carry out the specimens only."⁵⁵

In March 1938, having never obtained the dreamed-about comforts of Angel's abandoned airplane, Gilliard recorded in his diary,

after 3 months & 16 days [on Auyántepeui] we have reached and successfully worked the furthest camp the expedition will set up. In other words we are today turning back. The worst is over, things will get easier day by day from now on. It has been a real test and all of us have stood it well — all are the best of friends and truthfully, all, I believe, are glad to be on our way off this raft of rocks known now to be an awfully dangerous and desolate uncharted 8,100 foot (2,471 meters) mountain in the Guiana Highlands.⁵⁶

On his way home, Gilliard wrote to Chapman from Port-of-Spain, Trinidad:

In retrospect we were very fortunate in our exodus from Auyan-tepeui. A combination of rare flying conditions and fast work enabled Dr Tate, Billy Phelps and Jim Dillon to reach Caracas, and Bill Coultas and myself to take our leave of Mr Phelps and board the S.S. Trinidad within 24 hours of departing from Auyan-Tepui.⁵⁷

⁵³ Gilliard, field diary, 25 December 1937; AMNH/DOA.

⁵⁴ Gilliard, field diary, 25 December 1937; AMNH/DOA; George H. H. Tate, leader, Phelps Venezuela Expedition, to Harold E. Anthony, Chairman and Curator, Department of Mammals, American Museum Natural History, Auyántepeui, 1850 meter camp, 6 January 1938; AMNH Central Archives, 1218.

⁵⁵ Gilliard to Chapman, 8 January 1938; AMNH/DOA.

⁵⁶ Gilliard, field diary, Auyántepeui, 1850 meter camp, date not recorded, mid March 1938; AMNH/DOA.

⁵⁷ Gilliard to Chapman, Port-of-Spain, Trinidad, British West Indies, 21 March 1938; AMNH/DOA.

Upon returning to New York, Gilliard wrote his first popular magazine article, titled “Unchallenged Champion,” which appeared in the December 1940 issue of *Natural History, The Magazine of the American Museum of Natural History*. In it Gilliard proclaimed:

The fact that a great Lost World really existed, falls or no falls, was sufficient to put the zoological world on its toes. Scientists in all branches who were acquainted with the strange flora and fauna of the two other Lost Worlds [Roraima and Duida] joined in acclaiming Mr James Angel’s discoveries.⁵⁸

The Museum’s official accession record for the Phelps Venezuela Expedition lists that 2039 bird skins, one nest, 507 mammals, 243 fish, 150 insects and spiders, twenty-two shells, and assorted other materials were received by the American Museum of Natural History.⁵⁹ Gilliard’s first major scientific paper, about the birds that were collected during the expedition, was published in 1941.⁶⁰

Gilliard’s widely read article in the *Saturday Evening Post*, titled “The Eighth Wonder of the World,” was published in July 1941. He concluded in the *Post* article, “I believe that Jimmy Angel has discovered the eighth wonder of the world. And this is not the age of faith, but I still dare to hope that he may someday find his creek of gold.”⁶¹

The reader is struck by the fact that Gilliard wrote as many words in his *Post* article about the adventures of Jimmie Angel, a man he never met, as he did about the Phelps Venezuela Expedition. He remarked in his diary, “This story of Angel incorporated with the American Museum Expedition experiences has the makings of a damned good book.”⁶² Perhaps he did not realize that it would be his and his colleagues’ purposeful scientific work that would validate the adventures of Jimmie Angel for a world audience.⁶³ Or perhaps Gilliard intuitively knew that his written words would provide the generous gift of acknowledgement that would cause Angel to be remembered in history.

I have stood on several occasions beneath the towering cascading wing of water that forms Angel Falls. Although when he wrote these words Gilliard had not seen the waterfall, his lyrically descriptive prose captures its magic:

You’ve walked a mile, but did you ever see a mile of water stood on end, and slowly falling, falling through eternity? Not breaking into spray because there is so much of it, and seeming slow because it falls so far — unbroken by so much as one cascade. It makes you realize the scale on which the world is built, and it belongs just where it is, where time itself is slowed, foreshortened by its own immeasurable reach.⁶⁴

⁵⁸ Gilliard, “Unchallenged Champion,” p. 260.

⁵⁹ Accession Record, 1 and 22 April 1938; AMNH/DOA.

⁶⁰ Thomas E. Gilliard, “The Birds of Mt. Auyan-tepui, Venezuela,” *Bulletin, American Museum of Natural History* LXXVII-IX (1941).

⁶¹ Gilliard and Scoggins, “The Eighth Wonder of the World,” p. 72.

⁶² Gilliard, field diary, 25 October 1937; AMNH/DOA.

⁶³ Mary LeCroy, Research Associate, Department of Ornithology, American Museum of Natural History, e-mail to the author, 29 June 2005. LeCroy states, “Tom Gilliard had a lifelong interest in the stories of people who lived a life of adventure in out-of-the-way places. He was particularly intrigued and captivated by the stories about Jimmie Angel, coming as they did on the heels of the discovery of Angel’s plane at the top of the falls, on one of his own early trips to an out-of-the-way place.”

⁶⁴ Gilliard and Scoggins, “The Eighth Wonder of the World,” p. 272.

The Great Savannah expedition

In the spring of 1938, when Gilliard and the other members of the Phelps Venezuela Expedition had returned home, American Museum of Natural History Director Roy Chapman Andrews was arranging for George Gaylord Simpson, a prominent twentieth-century evolutionist in the Department of Paleontology, and Simpson's wife, psychologist Anne Roe, to join an expedition organized by the Venezuelan Ministry of Development to the Great Savannah.⁶⁵

The Great Savannah Expedition was commissioned 17 December 1938 by Venezuelan President José Eleazar López Contreras to methodically explore all Venezuelan Guayana, including Bolívar State and Delta Amacuro Federal Territory [now Delta Amacuro State], to explore the regions of the Great Savannah to its borders with Amazonas Federal Territory [now Amazonas State], the Imataca Massif, and the basins of the Rivers Cuyuni and Caroni, with the exploration to include: geologic study to investigate the presence and abundance of minerals; soil conditions for agriculture and animal farming; geography and topographic conditions for industrial purposes; climate and sanitary conditions for migratory and colonization purposes; possible penetration routes.⁶⁶

The four leaders of the expedition were geologist Santiago E. Aguerrevere, geological mining engineer Victor M. Lopez, geological engineer C. Delgado O., and mining engineer Carlos A. Freeman (1898–1973).⁶⁷ They met the Simpsons in Caracas and from there traveled by airplane via Ciudad Bolívar, arriving at Kamarata Camp, their first base camp, at the foot of Auyántepeui's south flank on 4 March 1939.⁶⁸ Jimmie and Marie Angel flew in from Ciudad Bolívar and arrived at Kamarata Camp in their Hamilton single engine airplane on 7 March with a new generator for the expedition.⁶⁹ The Angels' intention was to resume their search for gold (Figure 6).

According to Carlos Freeman, "the tremendous value of an airplane and the only pilot acquainted with the region was realized by all, and eventually Angel was convinced that if he joined the expedition, the members would in turn give him their professional aid in his mining problems."⁷⁰ Marie Angel wrote to her brother, Herbert Sanders in California, "The Venezuelan Government have a huge expedition here now, they have one of the most elaborate equipped outfits I have ever seen going over the whole of this part of the country looking for anything they can find."⁷¹

⁶⁵ Roy Chapman Andrews, Director of the American Museum of Natural History, to Diogenes Escalante, Venezuelan Legation, Washington, DC, 20 July 1938; AMNH Central Archives, 12.12.

⁶⁶ José Eleazar López Contreras, "Decreto Ejecutivo," *Revista de Fomento* III, no. 19, Caracas: Ministry of Development (December 1939), p. 390. My thanks to Jorge M. González for his translation.

⁶⁷ "Exploración de la Gran Sabana;" "A report presented to Citizen Doctor Manuel R. Egaña, Minister of Projects, the Exploration Commission of the Great Savannah By: S. E. Aguerrevere, Victor M. Lopez Doctor of Geological Mine Engineering, C. Delgado O, Geological Engineer, C. A. Freeman Mining Engineer," inside cover, trans. John de Coup-Crank; JAHP Archive.

⁶⁸ George Gaylord Simpson Papers, series VIII, travel diaries, folder 5 "Venezuela (1938–1939)," p. 166; American Philosophical Society (APS), Philadelphia, PA.

⁶⁹ Jimmie Angel, "Pilot Flight Record and Log Book," 7 March 1939; Jimmie and Marie Angel returned to Venezuela in 22 February 1939 in their newly purchased Hamilton H-47 airplane, registration number NC-854E; JAHP Archive.

⁷⁰ Carlos A. Freeman, "The Life of James Crawford (Jimmie) Angel," unpublished manuscript, circa 1941, p. 66; JAHP Archive. My thanks to Elizabeth Graham Marsh Christian, Freeman's stepdaughter, for donating a copy of his manuscript to the JAHP Archive.

⁷¹ Marie Sanders Angel to Herbert Sanders, 13 March 1939; JAHP Archive.



FIGURE 6 Members of the Great Savannah Expedition at Kamarata Camp, March 1939, with Jimmie Angel's Hamilton airplane. Back row (L to R): expedition co-leaders Drs. Carlos A. Freeman, v. M. López, S. E. Aguerreverre, and Delgado O. Seated second row: Jimmie Angel, Dr V. Nicki, Dr A. Cristoffal, Dr L. M. Araila, and Dr M. de Lemos. Seated on ground: marie Angel, Dr F. H. Hays, Dr Anne Roe Simpson, and Dr G. G. Simpson. *Carlos A. Freeman Archive in association with the JAHP Archive.*

In between two paleontology reconnaissance expeditions in Venezuela, the Simpsons had joined the Great Savannah Expedition for six weeks as naturalists. George Gaylord Simpson did an ethnographic study of the Kamarakoto Indians⁷² and Anne Roe Simpson collected mammals for the museum.⁷³ The Simpsons also collected plants.⁷⁴ Marie Angel assisted both Simpsons with their research.⁷⁵

⁷² G. G. Simpson, "The Kamarakoto Indians: A Carib Tribe of Venezuelan Guayana," *Revista de Fomento*, nos 22–25 (Caracas: Ministry of Development, June 1940).

⁷³ G. G. Simpson, "Research in Venezuela," reprinted from *Science* vol. 90, no. 2331 (1 September 1939), pp. 210–11; Osborn Library, Simpson Collected Papers, vol. 3, no. 190, p. 4; Division of Paleontology, AMNH. Simpson wrote in his travel diary, "It does seem odd for me to be doing anthropology, but it is what needed doing here and I think I'm getting it all right. I've always maintained that given a little basic background, a real scientist could transfer his scientific method to any field, and this will be a good test of my claim," p. 201; APS.

⁷⁴ Simpson, "Research in Venezuela," p. 3.

⁷⁵ Anne Roe (Simpson), PhD, "La Fauna De Mamiferos de Kamarata y Santa Elena," *Revista de Fomento*, vol. iii, no. 19 (Caracas: Ministry of Development, December 1939), p. 559; Anne Roe (Simpson) to John M. Harries, Natural History Museum Los Angeles County, 9 January 1985; George Gaylord Simpson Papers, Series XII miscellaneous, box 1993-54ms; APS.

On their second day in camp, the Angels took the Simpsons and expedition leaders Delgado and Lopez on a flight over Auyántepeui to see Angel's waterfall, located on its north face.⁷⁶ Simpson wrote in his autobiography, *Concessions to the Improbable*: "Most exciting of all, Jimmie Angel had flown us over and past the falls he had discovered, had demonstrated against universal skepticism that they do exist, and had convinced us against all probability that they are by a good margin the highest waterfalls in the world."⁷⁷

Simpson recorded his thoughts about the flight in a travel diary that he and Anne Roe Simpson shared,

I have been practically speechless ever since and even now I just have a sort of sinking, hopeless feeling at trying to record even a bare hint of what all this is like. It is grand, awesome, awful, beautiful, marvelous, and terrible. It seems impossible that such things can exist on our earth. It makes the greatest famous scenery of the world seem puny. Having seen it makes one feel that he can never be the same again. A man who had been to the moon and explored its craters might feel similarly exalted and cut off by the depths of his experience from his fellows and from all that he knew before. Some hint of the terrible impact of the experience: when we went into the canyon we ran very close to the jagged rim and the motor seemed to falter (probably Angel had cut it momentarily) and for a second I thought we were crashing; over the thrill of fear the thought flashed through my mind, "It doesn't matter now, I've seen this and life hereafter is too tame anyhow."⁷⁸

Having seen the top of Auyántepeui and the waterfall before, Marie Angel was much less enthusiastic than Simpson when she wrote to her brother, "We flew over the mountain Auyan-tepeui where we made our landing and had to walk off. The plane is still there just as we left it (sure looks sad) but I will never go up there again . . . This madness for gold sure gets people into some awful predicaments."⁷⁹

The Simpsons trusted Angel's flying abilities. In their travel diary, Simpson recorded his next flight with Angel, "I had more confidence in plane and pilot, and had gotten over the feeling of blank amazement, to some extent, and could take it all in better."⁸⁰ In the same diary, Anne Roe Simpson wrote: "that if G went flying with anyone *but* Jimmie I'd go along or not let him go."⁸¹ Carlos Freeman recounted the manner in which Angel maintained his airplane,

After each flight, no matter how short, Jimmie always inspects his motor and closely checked the working parts of the plane. He had trained a young Indian boy about thirteen years of age to help him service the plane, and it was amusing to see Jose Manuel Angel

⁷⁶ Jimmie Angel, "Pilot Flight Record and Log Book," 8 March 1939; JAHP Archive.

⁷⁷ G. G. Simpson, *Concessions to the Improbable: An Unconventional Autobiography* (New Haven, 1978), p. 4.

⁷⁸ G. G. Simpson, travel diaries, folder 5 "Venezuela (1938-1939)," p. 175; APS.

⁷⁹ Marie Sanders Angel to Herbert Sanders, 13 March 1939; JAHP Archive.

⁸⁰ G. G. Simpson, travel diaries, folder 5 "Venezuela (1938-1939)," p. 190; APS.

⁸¹ A. R. Simpson, travel diaries, folder 5 "Venezuela (1938-1939)," pp. 190-91; APS.

(Jimmie had taken him to Ciudad Bolivar on one of his earlier trips, where he was registered and baptized, and Angel added to his name) greasing the plane and removing rocker arms or wiping the machine. In more than three hundred hours of flying under extremely adverse conditions, not once did Jimmie have to turn back or make a forced landing due to motor or other plane trouble. This is quite an achievement and a credit to his mechanical ability.⁸²

This flying and mechanical skill provided insight into other aspects of Angel's reputation. Speculating about Jimmie Angel's stories, George Simpson noted in his travel diary,

I can see why no one believes Jimmie's tales: he does things that practically no one else would have the skill or the nerve to do, and then takes them so casually that it is hard to believe he did them. He also does have a tendency, entirely unconscious, to exaggerate non-essential points like elevations of mountains, or rather he both over- and under-estimates on occasion. In fact I believe that all his stories are true with this slight correction — all, that is, that he gives on his own authority.⁸³

By his third week with the expedition, George Simpson was irritated with camp life:

Truth to tell, the outfit is getting so large that I am getting somewhat fed up with it and glad that I will soon be done and move on. We have eleven white people in camp, ten servants, and about twenty-five employed Indians, which is simply ridiculous and what should be a peaceful and pleasant spot begins to resemble rather a madhouse.⁸⁴

By their fourth and final week in Camp Kamarata, George Simpson complained that two astronomers had arrived in camp: "They came with *three tons* of baggage and each with a personal servant . . . Since arriving here they have done nothing whatever but lie around in their hammocks and go hunting (they aren't even good hunters)." Simpson did not like the expedition doctor either and remarked, "Not unnaturally, the M.D. and the astronomers have clubbed together and formed a clique — they are our leisure class." About the expedition leaders, he wrote: "our four geologist-topographers work very hard, know their jobs, and do them, and are good company."⁸⁵

When the Simpsons departed Camp Kamarata at the end of March, George Simpson recorded that a soil and a colonization expert had joined the expedition, which had now reached fourteen in number: "the largest crowd I ever was with on a scientific expedition (although at least five of these hardly rate as scientists,

⁸² Freeman, "The Life of James Crawford (Jimmie) Angel," p. 83. Jose Manuel Angel (Ugarte) was known as the adopted son of Jimmie and Marie Angel. He accompanied Rolan Angel's 1965 Auyántepeui expedition, with *Life* magazine photojournalist Carl Mydans, to place a commemorative plaque on Jimmie Angel's airplane *El Rio Caroni*. Mydans' story was published in *Life*, 15 October 1965. I met Jose Manuel Angel in his home village of Kamarata in 1994. He died at Kamarata in 2001.

⁸³ G. G. Simpson, travel diaries, folder 5 "Venezuela (1938–1939)," p. 186; APS.

⁸⁴ G. G. Simpson, travel diaries, folder 5 "Venezuela (1938–1939)," p. 188; APS.

⁸⁵ G. G. Simpson, travel diaries, folder 5 "Venezuela (1938–1939)," p. 199; APS.

in fact).” According to Simpson, Camp Kamarata had changed from “madhouse” to “pandemonium.”⁸⁶

In the introduction to his ethnographic study, *The Kamarakoto Indians*, Simpson thanked the expedition leaders for their excellent equipment and organization and remarked, “I had none of the usual executive tasks or camp work to do or to supervise and was able to devote all my waking hours to the study of the Indians.”⁸⁷ Apparently individuals in the “pandemonium” had performed the tasks that freed Simpson to accomplish his research in the short time he was in the Great Savannah.

The remaining expedition members and the Angels labored on until 31 July 1939. During the five months the expedition was in the field, base camp was moved to three additional locations: Luepa, Wonken, and Santa Elena de Uairén. The expedition also explored the diamond mines of the Venezuelan–Brazilian frontiers.⁸⁸

On 1 May 1939, Angel flew Carlos Freeman to Angel Falls to take photographs and moving pictures.⁸⁹ Two photographs of Angel Falls were published in the official report of the expedition.⁹⁰ According to Freeman, “These are the only pictures of the cataract so far taken that permit man to behold the grandeur of the World Wonder in its entirety (Figure 7).”⁹¹

During the expedition, the Simpsons’ relationship with the Angels was friendly, with admiration for Jimmie Angel’s abilities as a pilot (noted above) and Marie Angel’s good-natured cooperation and support of the expedition field work. According to Dr Joe Cain, who specializes in the history of science at University College, London, and has extensively researched the lives of prominent evolutionists, “Simpson took a strong liking to him, which was something rare.”⁹² Cain also remarked of Simpson, “he detested women in field camps (Anne and Marie were the exceptions — never complained about them).”⁹³

In June 1942, the Simpsons were guests on the radio program “Believe It or Not” and talked about the Angels and Angel Falls. Simpson said: “Well, Jimmie Angel is certainly a romantic figure. He’s been everywhere and seen everything. He’s a man of about forty with the scars of dozens of campaigns.” Anne Roe Simpson said: “Yes . . . and he’s different from any soldier of fortune I’ve ever read about in at least one respect . . . He takes his wife with him wherever he goes . . . no matter how hazardous or dangerous his mission may be.”⁹⁴

⁸⁶ G. G. Simpson, travel diaries, folder 5 “Venezuela (1938–1939),” p. 202; APS.

⁸⁷ G. G. Simpson, “The Kamarakoto Indians: A Carib Tribe of Venezuelan Guayana,” English manuscript (1939), pp. 9–10; APS. See note 72 above.

⁸⁸ Freeman, “The Life of James Crawford (Jimmie) Angel,” pp. 77, 85, 89.

⁸⁹ Jimmie Angel, “Pilot Flight Record and Log Book,” 1 May 1939; JAHP Archive.

⁹⁰ S. E. Aguerrevere et al., “Exploración de la Gran Sabana,” *Revista de Fomento* vol. III, 19 (Caracas: Ministry of Projects, December 1939), Figures 25 and 26.

⁹¹ Freeman, “The Life of James Crawford (Jimmie) Angel,” p. 85.

⁹² Joe Cain, e-mail to the author, 28 January 2003.

⁹³ Cain, e-mail to the author, 1 July 2001.

⁹⁴ Ripley’s — *Believe It Or Not: Episode 21*, radio script, 13 June 1942, 6; George Gaylord Simpson Papers, Series V, APS.

Twenty years after the expedition, George Simpson wrote to Marie Angel: “We do hope that you and the children are well and finding life pleasant. The time we spent with you and Jimmy in Kamarata still stands out, after all these years, as one of the most fascinating experiences of our lives.”⁹⁵ And twenty years after that, nearly forty following the expedition, Simpson devoted the first chapter of his 1978 autobiography to his last flight with Jimmie Angel, departing from Camp Kamarata to Santa Elena de Uairén near the border with Brazil and Guyana.⁹⁶

Carlos Freeman’s relationship with the Angels developed into a friendship that endured many years beyond the expedition; Freeman even wrote an authorized Jimmie Angel biography.⁹⁷ The unpublished biography is a memoir of Freeman’s expedition experiences, a retelling of many of the legendary Angel stories, and a testimonial to Jimmie Angel’s aviation skills: “Without the services of Jimmie the expedition could not have accomplished what it did on the five months’ trip. He flew more than three hundred hours supplying food, scouting from the air, moving camp, taking aerial photographs and mapping, and in addition transporting the members to remote spots.”⁹⁸

In December 1939, the government of Venezuela published the findings of the Great Savannah Expedition in a lengthy report, titled *Exploración de la Gran Sabana* (*Exploration of the Great Savannah*), which included the following introduction:

Among the explorers of Kamarata, the North American aviator James C. Angel merits special mention for conducting three expeditions by airplane of this area from 1933 to 1937. One of Angel’s principal objectives was the exploration and layout of Auyán-tepui’s plateau where he proposed the construction of a landing strip and in 1936 he organized the first climb to the summit in collaboration with Captain Cardona and Gustavo Heny. At the beginning of 1937, Cardona and Heny succeeded in climbing Auyán-tepui and a little time later Angel landed on the summit of the plateau on marshy terrain where the airplane inundated itself in such a manner that it was necessary to abandon it.

The explorations by Cardona and Angel contributed to a great awakening of interest in Kamarata and Auyán-tepui with the result that at the end of 1937, Mr William H. Phelps organized and funded a scientific expedition with the cooperation of the American Museum of Natural History. That same expedition, under the leadership of Dr G. H. H. Tate, remained in the area for three months during which time they climbed Auyán-tepui, gathering data on the flora and fauna for correlation with studies done in Roraima and Duida.⁹⁹

⁹⁵ G. G. Simpson to Marie Angel, 1 May 1959, George Gaylord Simpson Papers, Series I, APS.

⁹⁶ G. G. Simpson, *Concessions*, pp. 4–8.

⁹⁷ Jimmie Angel: “Caracas, Venezuela, 30 November 1941, As several articles have already been written about my experiences in Venezuela. This is my story as I have told to my good friend Carlos A. Freeman. (signed) James C. Angel,” JAHF Archive.

⁹⁸ Freeman, “The Life of James Crawford (Jimmie) Angel,” p. 66.

⁹⁹ Aguerrevere, et al., “Exploración de la Gran Sabana,” p. 511, trans. John de Coup-Crank; JAHF Archive.

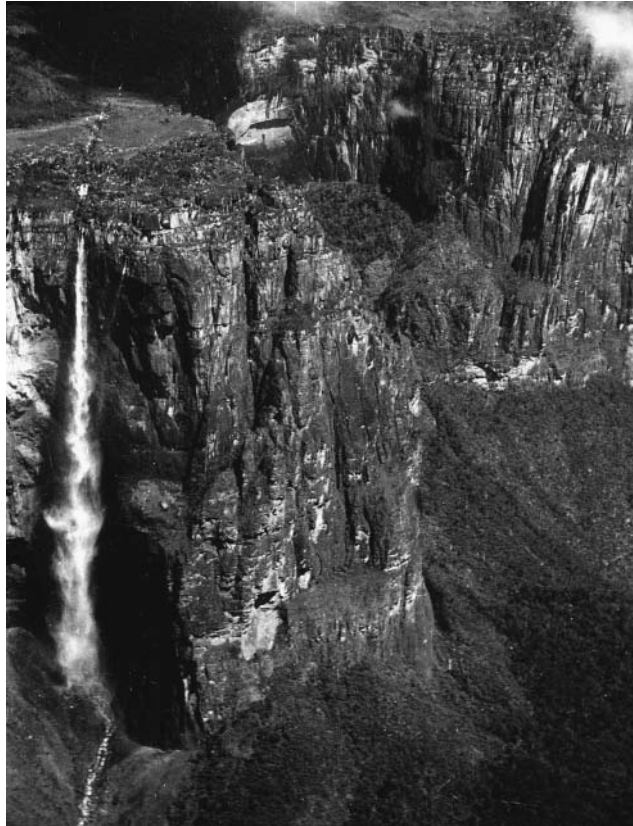


FIGURE 7 Angel Falls. Photo by Carlos A. Freeman, 1 May 1939.
Courtesy of the Carlos A. Freeman Archive in association with the JAHF Archive.

A map in *Exploración de la Gran Sabana* used the name “Salto Angel” or Angel Falls for the first time in December 1939. This publication by the Venezuelan government officially designated the name of the waterfall (Figure 7).¹⁰⁰

When the Great Savannah Expedition concluded its five months of field work, Angel was persuaded to remain in the region and work for the Venezuelan–Brazilian Boundary Commission. Under often difficult conditions, he piloted his airplane for

¹⁰⁰ Jorge M. González, PhD, Department of Entomology, Texas A & M University, and Charles Brewer-Carías, Venezuelan naturalist and explorer, e-mail to the author 14 April 2010: “The president of Venezuela, Eleazar López Contreras, emitted a presidential order (Decreto) 17 December 1938, to explore the Gran Sabana region. As a result, several appointed researchers started exploring the region and produced several works including one titled ‘*Exploración de la Gran Sabana*.’ In this work, published in December 1939, there is a detailed map which accompanied the commission’s report. Because of the fact that the report originated from a presidential order and the *Revista de Fomento* was an official/governmental journal, the map is considered an official document, thus the name ‘Salto Angel’ was officially accepted by the Venezuelan Government on that date. In 1953, the report and the maps were reproduced by the *Revista de Ministerio de Hidrocarburos y Minas* and a caption on a photo of Angel Falls taken by Carlos A. Freeman from Jimmie Angel’s airplane on 1 May 1939 bears the following text: Salto Angel, bautizado así en honor de su descubridor, James Angel [Angel Falls, named as such in honor to its discoverer James Angel].”

an additional four months, taking aerial photographs, establishing emergency landing fields, mapping the region, and transporting equipment, supplies, and personnel on the Venezuelan–Brazil frontier for the Venezuelan government.¹⁰¹

The Robertson expedition to measure the falls

The true height of Angel Falls remained unknown for sixteen years. In October 1947, Canadian pilot Captain Art Jones flew photojournalist Ruth Robertson into Churún Canyon (Devil’s Canyon) in an unconverted C-47 so that she could photograph Angel Falls. The Douglas C-47 was the military version of the Douglas D-C₃ airliner. It was fitted with more powerful engines and was strengthened throughout structurally, including the landing gear. Both types of aircraft were used extensively in Venezuela throughout the twentieth century.¹⁰²

Ruth Robertson worked as a freelance journalist and wrote a daily column for the *Caracas Journal* during the oil boom years of the late 1940s and 1950s. She sold hundreds of her Angel Falls photographs and photos of other Venezuelan subjects in a Caracas photography shop. The Angel Falls photograph was her best-seller; it helped to finance her 1949 expedition to measure the height of the waterfall.¹⁰³

Robertson did not receive encouragement or sponsorship when she proposed the idea of an expedition to measure Angel Falls to *National Geographic*. Four previous expeditions led by men had failed to reach the waterfall. “I detected smiles of amusement at this, and they voiced the opinion that it would be foolish for a *woman* to attempt such an undertaking. One official, apparently tossing it out as a joke, said that *if* I ever tried and did successfully complete the self-assignment the society wanted the first look at the article and photographs.”¹⁰⁴

Robertson’s expedition guide was Alejandro Laime, a citizen of Latvia and engineering graduate from the University of Riga, who had spent many years living among the indigenous Pemón in the Auyántepeui region.¹⁰⁵ Laime had made a solo journey to the base of the waterfall in 1946 or 1947 and pioneered the route into Devil’s Canyon.¹⁰⁶ Robertson’s expedition would be the first successful attempt to reach the waterfall overland, with the two engineers required to validate its height.¹⁰⁷

¹⁰¹ Freeman, “The Life of James Crawford (Jimmie) Angel,” p. 95. According to Jimmie Angel’s ‘Pilot Flights Record and Log Book’ for the period 4 May 1938 to 5 December 1939, his last flight for the Great Savannah Expedition was on 30 July 1939. He resumed flying 24 August 1939. A letter dated 25 September 1939 from Marie Sanders Angel to her brother Herbert Sanders indicates that they were in Caracas during the interval between the Great Savannah Expedition and commencing work for the Venezuelan–Brazilian Boundary Commission; JAHF Archive.

¹⁰² Captain Art Jones, interview with the author, 9 July 1996, Sidney, British Columbia, Canada.

¹⁰³ Victoria Loe, “Reliving the Adventure: Texas Woman’s Life, ’49 Expedition Enthralls Experts,” *The Dallas Morning News* (2 January 1994).

¹⁰⁴ Ruth Robertson, *Churún Merú — The Tallest Angel* (Ardmore: Whitmore, 1975), pp. 205–06.

¹⁰⁵ Robertson, *Churún Merú*, p. 210.

¹⁰⁶ González, e-mail to the author, 30 April 2010.

¹⁰⁷ Ruth Robertson, “Jungle Journey to the World’s Highest Waterfall,” *The National Geographic Magazine* (November, 1949), pp. 667, 690; the expedition’s chief engineer was Perry Lowrey, assisted by Alejandro Laime.

Shortly after Robertson arrived back in Caracas from her expedition, her friend Jimmie Angel, whom she had met in 1947, heard the rumor that his waterfall was not a mile high and went to see her.

I was at the door ready to give Jimmy a big hug of welcome. Instead, I was face to face with a two-hundred-pound, five-foot-three bundle of indignation and wrath. He simply reeked with fury, and it took minutes before he sputtered to a near halt. As mercurially as he had been mad, now he was sad and near tears. “I’ve been tellin’ folks for years that my waterfall was a mile high. Now you gotta go and spoil the whole thing — I tell ya it is a mile high!” And he slumped against the terrace rail in morose contemplation of the Avila range.¹⁰⁸

A day later, the actual measurements were available and Robertson was relieved to tell her friend Jimmie that the waterfall measured 3212 feet high, with the first main drop at 2648 feet. “Not a mile high, but indeed the highest waterfall in the world!”¹⁰⁹ Her photographs and account of the expedition were published in the November 1949 issue of *National Geographic*.

Robertson’s book about her life in Venezuela and the expedition to Angel Falls, *Churún-Merú — The Tallest Angel*, was published in 1975. At the time of publication, Robertson may have thought Churún-Merú was the indigenous name for the entire waterfall. Churún-Merú is the name for the lowest section of the waterfall that flows over rocks. The indigenous Pemón, who live in the Kamarata Valley, use the name Churun-Vená.¹¹⁰

The remote location of Angel Falls within the “House of the Devil” (Auyántepeui), which was feared by the Pemón people, has led contemporary historians of the region to postulate that the waterfall was unknown to them. According to Venezuelan exploration historians Jorge M. González and Charles Brewer-Carias, the Pemón had not been to Devil’s Canyon, where Angel Falls is located, prior to Ruth Robertson’s 1949 expedition to measure the waterfall. Previous expeditions had used people from the Makiritare (Yekuana) tribe because they were from the Amazonas region, very far from Auyántepeui, and did not fear the *tepeui*. Because they trusted Robertson’s guide Alejandro Laime, the Pemón had agreed to accompany her expedition.¹¹¹

After the waterfall was officially named Angel Falls, at least two individuals claimed to have seen the waterfall prior to Angel.

A 1949 article in *The Caracas Journal* records a claim by Ernesto Sanchez La Cruz:

It was one of these journeys — said Sanchez La Cruz — journeying in the Alto Paragua region looking for “hevea” [rubber] which doesn’t exist in those regions, by the way, that I discovered the mistakenly-named “Angel” Falls, of which the tremendous height made

¹⁰⁸ Robertson, *Churún Merú*, p. 330.

¹⁰⁹ Robertson, *Churún Merú*, p. 330 (Editor’s note: there are 5280 feet in one mile.)

¹¹⁰ Barton. See note 15.

¹¹¹ González, e-mail to the author, 1 November 2011.

an unforgettable impression on me. Before the astounding cataract situated on the Sierra Pacaraima, I made a sketch which I turned over months later to the Casa Blohm in Ciudad Bolivar, where my discovery was greatly admired.¹¹²

González and Brewer-Carias believe that Sanchez La Cruz did not see Angel Falls because Auyántepeui is not in the Sierra Pacaraima region. “The falls that corresponds with Sanchez La Cruz’ sighting is a cataract named ‘Salto Montoya’ which is indeed in the Sierra Pacaraima.”¹¹³ They also believe that Captain Felix Cardona Puig’s claim that he saw the waterfall before Jimmie Angel is false.

We have read and analyzed both articles written by Mundo Freixas [like Cardona, a Spanish-born explorer] about “El Gran Salto.” According to the description given by him and the location, he is talking about the Eutobarima Falls in the River Caroni, very far from Auyántepeuy, and actually IN the Caroni River.

Mundo started drawing a map of Auyántepeui and Cardona finished it. They both travelled several times to the surroundings of Auyántepeuy to draw this map. However they DO NOT put any waterfall in the original maps. An original map drawn by Cardona was used by William H. Phelps for his and the AMNH expedition to Auyántepeui in 1937–1938. NO falls are drawn or mentioned in that blueprint.¹¹⁴

In summation, Jimmie Angel earned the honor of having the world’s tallest waterfall named for him. When Angel first saw the waterfall, he recognized it immediately as an important discovery, recorded it in his pilot’s log book, and told many people about it. In 1939, his aerial explorations of the Great Savannah were acknowledged by the government of Venezuela when it named the waterfall Angel Falls in his honor.

The waterfall was introduced to a wider public as Angel Falls through the writings of scientists E. Thomas Gilliard and the Great Savannah Expedition leaders. Gilliard and the many journalists who have subsequently written about Angel Falls, and Jimmie Angel and the river of gold legend associated with him, made Angel Falls known to the world. Jimmie Angel remains less well known than the waterfall that bears his name; many people believe that Angel Falls is a descriptive name for the giant wing of water that cascades from Auyántepeui.

Jimmie Angel continued his elusive search for gold until his death. He left Los Angeles on 4 April 1956 for Georgetown, British Guiana, with Bill Bjorkland.¹¹⁵ However, a bad landing in David, Panama, left Angel with a concussion. As a result, Angel, who also was in poor health, was in and out of the hospital for months. He

¹¹² “Who Discovered ‘Angel Falls’?,” *The Caracas Journal* (23 May 1949), p. 15. Jorge González believes that Ruth Robertson wrote this unsigned article to encourage interest in her expedition to measure the waterfall, telephone conversation with the author, 2 November 2011.

¹¹³ González, e-mail to the author, 1 November 2011.

¹¹⁴ González, e-mail to the author, 1 November 2011.

¹¹⁵ William Edward Angel (1903–75, Jimmie Angel’s brother), personal diary, 4 April and 2 May 1956; JAHP Archive.

died in Gorgas Hospital, Canal Zone, 8 December 1956.¹¹⁶ His death certificate listed his occupation: “Explorer.” His body was cremated and returned to his wife Marie, who was living in Oxnard, California, with their two sons, Jimmy and Rolan. His ashes were interred in the Portal of Folded Wings, Burbank–North Hollywood, California, in a public ceremony on 15 December 1957.¹¹⁷ Marie Angel removed his ashes from this resting place and with their sons returned to Venezuela and scattered Jimmie Angel’s ashes over Angel Falls on 2 July 1960, in the company of friends, including Gustavo Heny and Patricia Grant, a pilot with whom Angel worked during World War II in Nicaragua and Honduras (Figure 8).

When asked by Grant if he would like his airplane, *El Rio Caroni*, removed from Auyántepeui, Angel responded, “No, as long as it stays up there, it will be a memory of me.”¹¹⁸ The government of Venezuela declared the airplane a national monument in 1964.¹¹⁹ It was removed by the Venezuelan Air Force in 1970, and taken to the



FIGURE 8 This plaque, in Canaima National Park, State of Bolívar, Venezuela, commemorates the scattering of Jimmie Angel’s ashes over Angel Falls, 2 July 1960.

Karen Angel Collection.

¹¹⁶ Karen Angel, “Legends,” p. 63.

¹¹⁷ “Portal Memorial Services: To Jimmie Angel, Discoverer of Angel Falls, World’s Highest, Venezuela, 1933;” JAHP Archive.

¹¹⁸ Patricia Grant to the author, 23 May 1996.

¹¹⁹ Venezuelan Official Gazette #27533, 3 September 1964.

Aviation Museum in Maracay for restoration.¹²⁰ A partially restored airplane, which includes many components of the original *El Rio Caroni*, was later moved to the airport at Ciudad Bolívar, where it remains on the green in front of the passenger terminal with a plaque dedicated to Jimmie Angel.

Venezuelan President Hugo Chavez's announcement in December 2009, that the waterfall should be called Kerepakupai, has failed to gain acceptance.¹²¹ The world's tallest waterfall continues to be called Angel Falls, the popular name used by the people of Venezuela and other nations.

Notes on contributor

With the assistance of people interested in the history of exploration and aviation, Karen Angel, who is Jimmie Angel's niece, co-founded the Jimmie Angel Historical Project (JAHP) in 1996, <http://www.jimmieangel.org>. She is curator of the JAHP Archive. She has authored several papers about Jimmie Angel and his era of exploration and has assisted with numerous books, articles and films about him and Angel Falls. Ms Angel has been to the base of Angel Falls twice and has climbed Auyántepeui from which Angel Falls cascades. She will be co-leading an expedition to Angel Falls in the summer of 2012.

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¹²⁰ Juan Antonio Paredes, Commanding General of the Venezuela Air Force, interview with the author, Caracas, Venezuela, 13 March 1996.

¹²¹ Frank Jack Daniel and Fabian Cambero, "Venezuela: Chavez Renames World's Tallest Waterfall," *Reuters*, 20 December 2009, <http://www.alertnet.org/thenews/newsdesk/N20125231.html> (accessed 20 December 2009). "Venezuela's President Hugo Chavez on Sunday renamed Angel Falls, the world's tallest waterfall, saying it should be called by its indigenous name Kerepakupai Meru . . . 'This is ours long before Angel arrived there,' Chavez said on his weekly television show, in front of a large painted mural of the falls and surrounding jungle. 'This is indigenous property, ours, aborigine.' He said thousands of people had seen the falls before Jimmie Angel 'discovered' them." González, "Ruth Robertson," p. 14: "According to the Venezuelan explorer Charles Brewer Carías the name 'Kerepacupai' or simply 'Pacupai' is not valid to be applied to Angel Falls. That name was used to name the northwestern 'block' of Auyántepeui, far from the river that forms Angel Falls, in a map drew by Juan Mundó Freixas and finished by Felix Cardona Puig, and shown to the public for the first time in 1937 when William H. Phelps was planning an expedition with scientists of the American Museum of Natural History, New York."