

“The Gardenville Way” The Birth of the Bell Helicopter

By Paul Fardink



The former Union Garage in Cheektowaga, New York was called “Gardenville” by the early Bell pioneers. (Bell Helicopter)

The AHS International Vertical Flight Heritage Site dedication ceremony – commemorating the Gardenville, New York site as the birthplace of the Bell helicopter – was held Wednesday, June 24th, at the Niagara Aerospace Museum. The occasion marked the 70th anniversary of the completion of a three-year effort (June 23, 1942 to June 24, 1945) to design and build Bell’s first helicopter. On this date, the members of the small team left Gardenville to return permanently to the Bell Aircraft facility in Niagara Falls twenty miles to the north, unaware at the time that they had changed the course of aviation forever.

Using the former Union Garage on Union Road just north of the Hamlet of Gardenville as their headquarters, Art Young, the chief designer; Bart Kelley, the chief engineer; Floyd Carlson, the chief pilot; along with other Bell Aircraft employees, designed, built and flew the first three of what would become thousands of Bell helicopters. The Gardenville group, never more than 30 to 35 members at any given time, could have been a prototype for the modern day concept of a “skunk works.”

Inventing and flight demonstrating the Bell Model 30 between June 1942 and June 1945 resulted in the design of a production helicopter, the Bell Model 47, which on May 8, 1946 became the first in the world to receive civil certification.



Model 30 Ship 3 at Gardenville. Floyd Carlson is seated in the helicopter, with Arthur Young to his immediate right, leaning over his shoulder. (Bell Helicopter)

In his book *The Bell Notes* [Robert Briggs Assoc., 1979], Arthur Young (1905-1995) describes the culmination of the Gardenville effort: “This ship (Model 30 - Ship 3), launched on April 20, 1945, was an immediate success. With room for two passengers, no body or windshield, only a small instrument column between the passenger and pilot, one had an unobstructed view up and down. It was like sitting in a chair and flying through space. Vice President Truman had witnessed flights a few weeks before we started giving rides. I recall his smile as we stood together waiting for it to take off. Now we were giving rides to whoever came by – Governor Dewey, Mayor LaGuardia. Hundreds at the plant also had rides, and it improved morale, not only for our group but for others possibly depressed by the demise of pursuit airplane contracts” after World War II.”

Young continues, “Then came a great blow. Since we were now successful, we were to be transported back to the main plant. This had now been moved to Niagara Falls, the Wheatfield Plant, built and owned by the government and on



Niagara Aerospace Museum Curator Paul D. Faltyn with Bell Helicopter CEO John Garrison, standing by Larry Bell's personal Model 47. (NAM photo)

the edge of a commodious airport We were moved, machinery and all, June 24th, exactly three years after we moved to Gardenville (June 23rd, 1942). On December 8, 1945, less than six months after we came to Wheatfield, the first model 47 was rolled out, complete with bubble canopy."

Niagara Aerospace Museum Celebration and Plaque Unveiling

Today, the "commodious airport" that Young mentions is known as the Niagara Falls International Airport. The Niagara Aerospace Museum is located here in what was the old passenger terminal, not far from the original Bell Aircraft plant that later became the home of Bell Aerospace. In fact, the museum's archives and business offices are located in part of the original Bell building. Larry Bell's office and exterior balcony still preside over the gated entrance.

The AHS Vertical Flight Heritage Site dedication ceremony and reception, hosted by Bell Helicopter, featured a formal program, followed by museum tours and discussions of Bell Model 47 helicopters on display, including Larry Bell's personal aircraft.

Hugh Neeson, a retired 44-year employee of Bell Aerospace and its last Vice-President, offered commentary from his uniquely qualified perspective. Presently serving as the Development

Director of the Niagara Aerospace Museum, Neeson wrote and published the detailed study, "Bell Aircraft/ Aerospace Overview: A Brief History of the Past, Larry Bell Era (1956-1996)."

Neeson offered details on the connection between Bell Helicopter and Cheektowaga (Gardenville), Buffalo, and Niagara Falls, from the past to the present. He also summarized the importance of the region during World War II, stating that "Curtiss-Wright was headquartered at Buffalo and had most of the airframe engineering and production facilities in the city. Curtiss, along with several other aircraft companies such as Consolidated and Bell, effectively turned the city into the center of the U.S. aircraft industry from World War I through World War



Todd Carlson (Top), son of Bell Chief Pilot Floyd Carlson, emphasizes the camaraderie and close friendships of Gardenville. (AHS photo)

Parrish Kelley (Bottom), son of Chief Engineer Bartram Kelley, highlights the Gardenville nonsense style of carrying out a project. (AHS photo)

II. In fact, between Curtiss-Wright and Bell Aircraft, more airplanes were built in Buffalo in 1940-1942 than the rest of the U.S. aircraft industry combined." He went on to say that "almost 33% of the U.S. aircraft flown in WWII were manufactured in Buffalo, New York."

John Garrison, President and CEO of Bell Helicopter (and immediate past Chair of the AHS Board of Directors), talked about the significance of the accomplishments at Gardenville and



(L-R) Paul Faltyn; Mike Hirschberg; Paul Fardink, AHS organizer of the recognition ceremonies; Todd Carlson; Parrish Kelley with Kathleen Linehan-Kelley; Tommy Thomason, AHS nominator of the site. (AHS photo)



Mike Hirschberg and John Garrison cutting the birthday cake celebrating the site and 70 years of Bell helicopters. (AHS photo)

how they continue to inspire Bell Helicopter today. Garrison also showed a short video highlighting some of the recent accomplishments of Bell Helicopter.

Mike Hirschberg provided remarks on the Vertical Flight Heritage Sites Program and officially dedicated the plaque, which was then unveiled by Garrison and Hirschberg.

Following this, author Tommy Thomason (and original nominator of the site for the AHS award) provided his perspective on the magic of Gardenville, "which was more than just a place; it represented a spirit of innovation that remained with Bell Helicopter for decades."

Next, Todd Carlson, son of Gardenville Chief Pilot Floyd Carlson (1917-1984), shared his memories: "Our whole family felt that there was another member of our family – Gardenville. When Dad spoke of Gardenville it was with reverence, not as much about the place as the team that worked there."

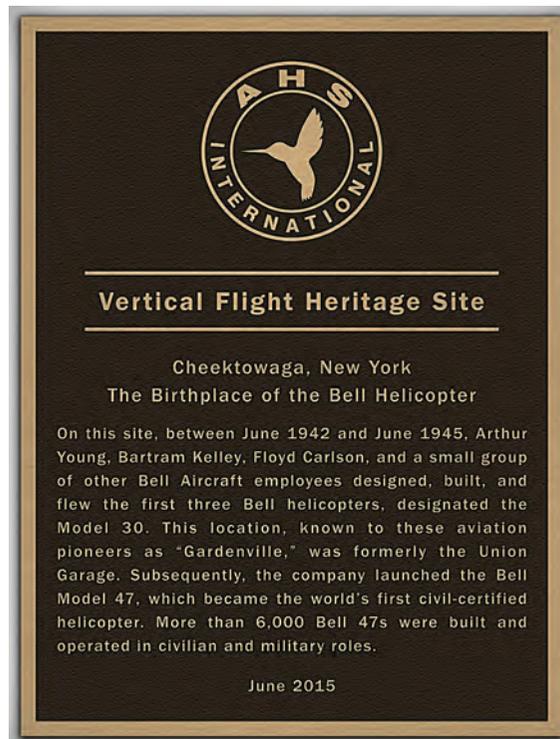
Carlson continued, "The word 'Gardenville' evoked the excitement, danger, camaraderie, innovation,

determination and, most of all, success. My father knew hundreds, maybe thousands of Bell employees, but his

lifelong best friends were the members of the Gardenville team. As kids, we usually spent every Saturday at the houses of one or more of Dad's closest friends, playing with the other kids while Dad sat around various kitchen tables discussing the latest ideas, problems, or successes with the ongoing development of Bell helicopters. Almost exclusively, his friends were from Gardenville."

Carlson was followed by Parrish Kelley, the son of Chief Engineer Bartram Kelley (1909-1998). "From my childhood I remember that although my father rarely said the word 'Gardenville,' when he did use the name it was always with a tone of veneration that in other American households might have been reserved for reference to the Almighty or "The War." It was the great, good time of his life, a time of tough, rewarding work, and those co-workers who had been there with him were a band of brothers. They had come together not as a collection of scientists looking for new things to invent, but as a hand-picked team with a specific job to do, and they had succeeded beyond expectation. For decades afterward, in his vocabulary the word was a synonym for a no-nonsense style of carrying out a project that ought to be repeatable but was seldom equaled, and the first thing that he did upon retiring was to edit together a documentary film of the Gardenville story, called "The Birth of the Bell Helicopter," which he would show to interested groups, narrating it in person. Gardenville was, in fact, the birthplace and the nursery of his career, and the careers of many others."

After the program, Mike Hirschberg and John Garrison cut the reception cake, commemorating the 70th anniversary of the completion of development of the Bell Model 30. This year is also the 80th anniversary of the founding of Bell Aircraft, in Buffalo, New York, on July 10, 1935. So the cake celebrated the foundation of Bell Aircraft, as well as the start of Bell helicopters.



The official plaque was unveiled and dedicated in a ceremony at Niagara Aerospace Museum and then installed in Cheektowaga the next morning. (International Bronze)

After Gardenville – The Bell 47

On May 8, 1946, the Model 47 became the first helicopter in the world to earn civil certification. Bell Helicopter production lists indicate that 2,595 commercial Bell 47 helicopters were constructed, along with 2,414 military models before the end of production in 1974. Another 1,422 were built under license by companies in Japan, Italy, and England. More than 1,100 are still flying today. The Model 47 was the cornerstone of the civil helicopter industry, not only used for training the pilots to fly them, but also for myriad other applications from crop dusting to traffic reporting.

The Model 47 is perhaps best known as the iconic helicopter from MASH (Mobile Army Surgical Hospital), which ferried wounded soldiers directly from the front lines to nearby field hospitals, saving thousands of lives during the Korean War. This gave Larry Bell immense joy when he visited the battlefields of Korea and participated in flying several MASH missions.

Scan this QR code or go to www.vtol.org/gardenville to learn more, and to view photos, videos and links from the ceremonies.



The Vertical Flight Heritage Sites program is intended to recognize and help preserve locations throughout the world with the most noteworthy and significant contributions made in both the theory and practice of helicopter and other VTOL aircraft technology. Go to www.vtol.org/heritage for more information.



Mary Holtz, Town of Cheektowaga Supervisor and Historian, and Mike Hirschberg unveiling the plaque on the historic site, now a shopping center. (AHS photo)

Installation Ceremony at “Gardenville” in Cheektowaga, NY

Following the Wednesday evening ceremony, the on-site installation ceremony took place the next morning in Cheektowaga, New York.

The Master of Ceremonies for the event, Mike Hirschberg, summarized the historical significance of Gardenville by calling it “hallowed ground.” Mary Holtz, Town of Cheektowaga Supervisor and

Town Historian, provided a perspective on the history of the area and the aerospace contributions of Western New York. Hugh Neeson amplified the earlier commentary before Hirschberg and Holtz unveiled the plaque.

The unveiling was followed by comments from Parrish Kelley, who compared the site to Kill Devil Hills where the Wright Brothers first flew their airplane. Kelley urged that a monument as grand as theirs be built in Gardenville.