
**HFI**: Hal, when and where were you born?

**Symes**: I was born in Glen Ridge, New Jersey, in 1924.

**HFI**: Can you tell us when you began your aviation career?

**Symes**: I became interested in aviation when I was just a young fellow. At about the age of 10, I started buying models and designing model helicopters and airplanes and constructing them out of balsa wood. There were some children in the neighborhood that hung out with me. They later chose military careers. I found out two of them signed up for the Navy and one flew for the Army Air Corps, and they all ended up with their commissions as pilots. Their mothers told me that it was my influence that got them interested in aviation.

When I graduated from high school, World War II was going on. With my interest in aviation, I went down to Newark, New Jersey, and took some courses at the Casey Jones School of Aeronautics. I finished up in September of 1943. About three months later, I went across the street and signed up for the aviation cadet training program in the Army Air Corps. There were about 250 of us in the class originally, and I was the only one who got a commission. I found out I got the commission because of my
schooling at Casey Jones. You never know in life how certain decisions you make are going to work out.

**HFI:** In the Army Air Corps, you served as an airplane instructor for four years. Can you tell us about some of your experiences as an instructor and the planes that you flew?

**Symes:** I got my commission toward the end of the war. I was checked out as a B-25 pilot. At that time they decided to make me an instructor. All of the pilots who were overseas were coming back to the States and were held over for about three months before they were discharged. In the meantime, they had to get their four hours a month to maintain their proficiency. Then I became an instructor at Scott Field, Illinois, for all the pilots coming back who had been flying B-24s and B-17s. At this base, we had a combination of AT-6s, AT-11s, DC-3s, C-47s, and we had one B-25. I was the only pilot on the base checked out on the B-25 so I ended up doing a lot of instruction work. And then on top of that, I got assigned as an adjutant to a 1,250-bed hospital, and I became the hospital pilot. So oftentimes, even as the war was winding down, I was on duty for 36 hours at a time. I stayed on in the Army Air Corps for another year before finally being discharged.

**HFI:** What other types of aircraft did you fly?

**Symes:** I flew C-47s, AT-6s, and AT-11s. We had a P-80 made by Lockheed. I wanted to fly that one but never got around to it.

**HFI:** Did you ever see any wartime action?

**Symes:** No, I never did get overseas.

**HFI:** You were discharged in December of 1946 and began working with Bell in February of 1947.

**Symes:** Yes. Bell Aircraft had a new program that involved acquiring 25 hours of pilot time and completing 30 hours of ground school, consisting of flight theory and mechanical training. The training lasted about three months and was a very intensive course. Basically, you had 12 hours of dual, 13 hours of solo time, and then you had a ground school that lasted over 30 hours. It was probably the finest school I ever attended. Richard “Dick” Bachelor was our ground school instructor and was the one that set up the whole program for maintenance instruction. We learned about all of the mechanical parts of the helicopter.

**HFI:** How did you get started as a helicopter pilot?

**Symes:** Bell assigned Dick Stansbury as my flight instructor. It turns out Dick had never instructed anybody before. I was his first student at Bell Aircraft Corporation. Dick and I became good friends over the years. Dick was the test pilot flying the first tiltrotor helicopter that Bell built. He unfortunately had an accident flying it and would never walk again. In early 2006, we had quite a long conversation over the telephone. Two months later, Dick passed away.

**HFI:** What was Dick like?

**Symes:** Dick Stansbury was a delightful person to be around. He was quiet, but was one of those people that when you first get to know him, you become friends right away. We kept in contact with each other until he passed away shortly after HAI’s 2006 convention.

**HFI:** When did you get your helicopter pilot certificate?

**Symes:** I got my rating April 6, 1947. Floyd Carlson and Joe Dunn signed it. I was in fact the 26th helicopter pilot to be trained by Bell. And they started their flight school program shortly thereafter.

**HFI:** Tell us about the NC-1H.

**Symes:** The Bell 47’s type certificate, “NC-1H,” was the first ever granted by the Civil Aeronautics Board, forerunner of the FAA. Since 1938, there had been a race between Bell and Sikorsky to acquire commercial certification for helicopters. Larry Bell, who was then president of Bell Aircraft Corporation, was anxious to be the first one to have a certificated helicopter. In 1945, he got the first certificate and beat Sikorsky out for that honor.

**HFI:** You were among 18 individuals who received a lapel pin from Larry Bell for time in the NC-1H.
Symes: The NC-1H had been flying about six or eight months before I got the lapel pin from Larry. I believe my pin is a one of a kind. Joe Mashman, Floyd Carlson, Wes Moore, and all the other people who received their pins have lost theirs. But I still have mine.

HFI: In August of 1946, the Bell 47 was modified from the A model to the B model. What were the changes?

Symes: The aircraft was converted from the bubble version to a cabin configuration because Larry Bell thought it would be easier to market. Bell knew the helicopter could be used for crop dusting and insect eradication because the rotor wash could help blow the dust down and kill the insects that were located around foliage. At that point, Larry had about eight orders for helicopters. He was beginning production and wanted a helicopter that looked presentable for the government and industrial VIP markets. He figured that presidents of companies wouldn’t want to get in a bubbled aircraft, so he redesigned it with a cabin configuration that almost looked like an automobile on the inside.

HFI: Tug Gustafson was marketing manager back then.

Symes: Yes. I first met Tug at Bell. A year or two later, he became the marketing manager for Sikorsky Aircraft.

HFI: The NC-1H was put back in service after September of 1946. When were you introduced to that aircraft?

Symes: I was introduced to it in early 1947. I got all but three hours of flight training in that helicopter. I flew dual, solo, and finished up my flight training on that aircraft in April 1947.

Symes: The winter of 1947 was a bad time for flight training. Most of your flights encountered heavy snow and even whiteouts. How did you handle that?

HFI: How did the NC-1H differ from later production helicopters?

Symes: The NC-1H was pretty much similar to the later B models that came off the line, except there was one little interesting facet: the collective pitch was just a motorcycle grip. You had to roll the collective pitch, which would reduce power to the engine. When the collective pitch was about halfway up, you had to change your handhold, regrip, and move your hand back to where you started, and still keep adding throttle and coming on up. You had to keep the rpm up at a proper speed so you could hover.

HFI: Sometime in April of 1947 the NC-1H was taken into the hangar for refurbishment, overhaul, and painting. Larry Bell had made arrangements with the Smithsonian in Washington to place it on display.

Symes: Yes, I was probably the last student pilot that flew in that ship — weeks later I got my rating. They pulled the aircraft into the maintenance center and put it through a thorough overhaul. I believe they then took the whole helicopter apart and rebuilt it again before they were to send it to the Smithsonian Institution in Washington, D.C. The only way the Smithsonian would accept a helicopter was if it was all in one piece and in
perfect condition. So they worked on it for about six or eight weeks. It was still in the hangar when I left Bell a couple of weeks later to go to Argentina for a spraying contract.

**HFI:** That aircraft never made it to Washington. I understand it crashed. Can you tell us about that?

**Symes:** When I came back from Argentina a little over a year later, I asked about the NC-1H and the Smithsonian. I was told it didn’t make it there. I think Larry Bell told everybody just not to talk about this helicopter. It was not until about eight years ago that I found out what happened to it.

I had contacted the curator at the Buffalo Museum in New York. The curator told me that after I left for Argentina, one of the Bell pilots, without permission, actually got in the ship and flew it out on a demonstration trip to see a female friend of his. And that’s where the ship ended up, on her front lawn!

Of course, they tried to salvage anything they could off this ship, but it was destroyed. The remains were sent to a local junk dealer. The last report I had was that the frame was in a hangar at Viking Helicopter, in Toronto, Canada. The mechanic took the manufacturing plate, and the plate ended up in the museum in Buffalo, New York.

**HFI:** You flew with some notable pilots, such as Wes Moore, Denzil McDowell, Don Jergens, Joe LaVassar, Elton Smith, Harlan Hosler, C.J. Tippett, and Joe Mashman. Can you tell us about these early pioneers?

**Symes:** Don returned to fly for Helicopter Air Service and also Vertol, and then ended his career with Bell Helicopter. Joe was chief pilot for Vertol. McDowell worked with Ozzie York in Alaska. Elton Smith ended his career with Bell Helicopter. Wes Moore was marketing manager at Vertol. Joe Mashman worked for Bell Helicopter his whole career. Harlan Hosler retired from an FAA position in Washington, D.C. I could spend many hours talking about my associations with Floyd Carlson, Joe Dunn, and so many others during my career.

**HFI:** You mentioned going to Argentina for a spraying contract. In early June of 1947, an Argentinean company called TAYR awarded a contract to Bell to do agricultural work. Bell supplied 10 Bell 47B-3 helicopters and seven American pilots to show the Argentines how to spray. You were one of the selected pilots. Did any of the American pilots have agricultural spray experience?

**Symes:** We were all in the same boat: we all had minimal experience. We went down to Argentina to spray the locusts that were devouring the cotton crop. These locust masses would come in, they would be a mile wide and a thousand feet deep, and they drifted with the wind. They came over from Brazil and would cross Paraguay. At night, they’d land on the crop and defoliate all the cotton. The next morning, after they left, there would
be nothing remaining but sticks on the ground.

HFI: How challenging was it to fly under those circumstances and conditions?

Symes: Well to begin with, none of us were Ag pilots. We had never flown agricultural work at all. The dust that we used was shipped in from Germany. It was actually nerve gas left over from World War I. Why I’m alive today, I just don’t know! But, it did kill the insects. The stuff got in there, hit their nerves, and wiped them out.

HFI: Who were the other pilots with you?

Symes: Don Jergens, Leonard LaVassar, Joe Mashman, and Harlan Hosler were some of them.

HFI: I understand the Argentines had been trying to get rid of the locusts since 1924 by using planes. That proved ineffective, so they turned to helicopters. How well did that work out?

Symes: The Argentines used all types of different aircraft for spraying these insects. Before we got down there, they were using German trimotors (Junkers G 24). These airplanes were flying through masses of insects that could be up to a thousand feet tall. At times, the locust storm would actually block out the sun. Imagine how when you drive down the highway and you pick up a few bugs on your windshield. Well, these airplanes were flying through masses of bugs, and there’d be two or three inches of goo on the windshield! And the pilots trying to fly through this mess were flying blind.

When we began flying helicopters through the swarm, we would encounter the same problem. The mashed locusts would cover the windscreen and collect ankle deep under the tail rotor pedals. It would require two to three hours to clean the helicopter in preparation for the next day’s operation. Water was scarce, so cleanup was difficult.

There were no instruments up there. These bush pilots were operating out of cow pastures; they’d just pick a fairly flat spot and try to fly. But when their windshields were loaded up, they couldn’t see where they were going, and they would have to slide the side windows open and see where they’d been, instead of seeing where they were going. The airplane operation wasn’t too successful.

Symes: Originally, when the Argentines were sold on the use of the helicopter, they were sold on the fact that the rotor could act like a fan to blow the dust down if we could sit a thousand feet above the locust mass. By pumping the poison down onto the bugs by using the rotor blast, we’d kill a lot of the insects in flight. We would figure out what the wind conditions were. This helped us to estimate fairly close where they would be the next day.

Our operation was composed of two helicopters, plus about 25 vehicles loaded up with fuel and dust. We would intercept these swarms at about four or five o’clock in the afternoon. We could usually intercept these insects as they landed at nighttime. We would park the helicopter near them, and the next day we could get out again and start dusting them.

HFI: You dusted the bugs while they were still covered with dew. The dew retained the dust, and that got you that 100 percent kill.

Symes: That is correct. Our original problem was that during the daytime we were trying to hover on top of the mass and pump this dust down from the rotor wash. This proved less effective. So we thought to spray them early in the morning while the dew was covering them. That’s how we got a 100 percent kill.

HFI: After your work in Argentina spraying locusts, you came back to the United States and worked with Bell B3s again.

Symes: Yes, that’s right. In 1948, I was just coming back to the States, and forest fires were raging in southern California. This became the first-ever Forest Service contract.

Look for Part II of this interview, which will focus on Hal’s helicopter firefighting and instruction and demonstration work, in the Winter 2013 issue of Rotor magazine.