## LIGHT PLANE HERITAGE

## George Bogardus, The Homebuilder's Advocate -

by Bob Whittier (EAA 1235) P.O. Drawer T Duxbury, MA 02331

On October 22, 1993, three persons became the initial inductees into EAA's new Homebuilders Hall of Fame. Two were the very well-known Paul H. Poberezny and Sylvester J. "Steve" Wittman, while the third was the all but unknown George Bogardus. Many readers of this magazine probably wonder who he was and what he did.

Because I have known him for a long time, it's fitting that I should undertake to tell his story.

You see, I was an "airport kid" in the 1930s and an avid reader of aviation magazines of that time. Thus I have a better-than-average knowledge of what went on. I strongly feel it's a story with which younger EAA members should become familiar, the better to appreciate the liberal and cooperative view today's FAA takes of homebuilt aircraft.

As I am a lifelong resident of Massachusetts and Mr. Bogardus is a native of distant Oregon, I'll begin by explaining how we came to know one another. Between 1935 and 1938 *Popular Aviation* magazine (now *FLYING*) published a series of articles by another Oregonian, Leslie L. "Les" Long. They described how this early homebuilder had de-



George Bogardus flew his "Little Gee Bee" homebuilt from Oregon to Washington, D.C. three times between 1947 and 1951 seeking more reasonable homebuilt plane registration procedures from the CAA.

signed, constructed and flown a series of lightplanes. All were much the same size and power, but were of various high-wing, low-wing, wire-braced and strut-braced configurations.

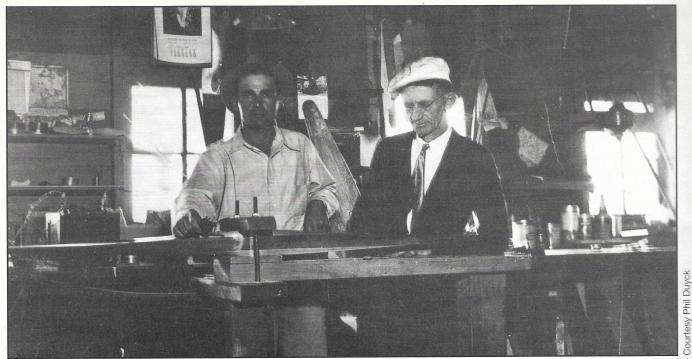
His objective was to discover through actual flight experience which type gave the best combination of structural simplicity, light weight, good aerodynamics and pleasing flight qualities for recreational flying. He concluded that his wire-braced, lowwing Longster was the best of the lot. These articles fascinated me and stuck in my mind.

Not long after World War II ended, I chanced upon a classified advertisement in an aviation newsletter for plans for this design, offered by one George Bogardus of Troutdale, Oregon. That's about 10 miles up the Columbia River from Portland. Being familiar with this ship, I promptly sent for the plans.



Jack Mc R

Bogardus poses beside Little Gee Bee. Continental 65 gave cruising speed in region of 95 mph. Enclosed cockpit made handling maps less hectic proposition on long cross-country flights.



Les Long, right, inspects craftsman Ed Ball's progress on a wooden propeller in his Cornelius, Oregon shop in the early 1930s. Something of a recluse, Long was seldom photographed. This rare photo was supplied by Phil Duyck who today lives a short distance down the road from where Long did.

After they arrived, I spent many hours poring over them. Several questions occurred to me, so I wrote to Mr. Bogardus for answers. We became pen pals, and among other things I learned that "Bog," as his friends call him, knew Les Long well and in fact worked with him from around 1932 to 1937.

At this point, I'd like to comment that one of the fine things about the homebuilt airplane hobby is that it brings together kindred souls from both near and far. Chance contacts made at chapter meetings, fly-ins and by telephone and mail have a way of developing into longstanding and often surprisingly productive friendships. For example, this article would never have been written had I not sent away for Longster plans so many years ago.

I learned that Bogardus had taken over Les Long's homebuilt plane endeavors following the latter's passing as an outcome of poor health at the age of 56 in 1945; that the two of them had started a homebuilt plane enthusiasts organization called the Oregon Airmen's Association a few years before Long's passing, and that he was a keen booster of our hobby.

George Bogardus was born in a rural area near Cascade Locks some 30 miles up the Columbia River from Portland. At that time and in that place, birth records were so poorly kept that he isn't sure of his exact birth date. He uses 1914 on paperwork but

senses that his actual arrival in this world might have been a few years earlier.

In 1926 he and another youngster built a hang glider from magazine plans. It wasn't very controllable and cracked up after each had made a couple of modest flights. As aviation grew in the 1920s more and more planes flying both east and west got past the Cascade Mountain range by following the low-level Columbia River Gorge route. He was fascinated with them as they flew over the town of Cascade Locks. In 1927 during his nationwide goodwill tour, Charles A. Lindbergh flew the Spirit of St. Louis there as part of a bridge dedication celebration, and

Bogardus remembers that sight vividly.

In 1928 he hitchhiked to Spokane to see the National Air Races and was thrilled to meet lightplane pioneers Ed Heath and Jack Irwin. The following year he took some instruction in a Travel Air biplane, but it took him until 1933 to solo in an Aeronca C-3. A vision problem kept him from passing the then very strict physical exam for a pilot's license, so he enrolled in an aircraft mechanic course. He also studied aviation engineering at Oregon State College.

People he met while taking those courses took him out to Beaverton Airport about 10 miles west of Portland.



Except for its modern Rotax engine, this Longster built by Phil Duyck is an exact reproduction of Long's original, down to the white and red colors and even the same registration number.

Phil Duyck

This was a simple grass airstrip which a rancher and aviation enthusiast named Charles Bernard had created on his property for the benefit of homebuilt planes and their pilots. It got them away from the Portland area's growing commercially oriented airfields and thus made everyone happy.

In time he found his way ten miles farther west to the small farmland town of Cornelius, where Les Long had a 16 x 32-foot wooden workshop. Never in the best of health and afflicted by agoraphobia, a fear of appearing in public places, Long was also one of those persons with a wonderful knack of transforming textbook theory into practical results. He serviced radios and electric fences and became interested in airplanes.

As a result, in the early 1930s he began to have articles and plans published in the old *Modern Mechanics* magazine and its annual *Flying Manual* and later in *Popular Aviation*. He probably never realized how many people these efforts would ultimately influence.

From 1932 to 1937, Bogardus worked with Long making wooden propellers for both airplanes and fruitdrying equipment. In 1937 he went to California to work as a mechanic at various airports, and by 1942 was chief of maintenance at Ryan's military flying school at Hemet. A health problem obliged him to return to Portland in 1942, where he worked at a military air base and met his wife-to-be, Lillian. He also got back into contact with the Beaverton homebuilt airplane gang.

At this point we must digress. As the 1920s moved along, better airplanes in the hands of responsible pilots began to demonstrate the value of fast air travel in this vast country of ours. But at the same time, the escapades and mishaps of barnstorming pilots flying decrepit World War I surplus planes began to give civil aviation an increas-

Jack Mc Rae



Together again in Bob's daughter's Portland, Oregon garden in 1993, aviation writer Bob Whittier, left, and George Bogardus, the subject of this article, renew their acquaintance. They first met outside Boston in 1947.

ingly bad name. To get matters under control, Congress in 1926 passed the Air Commerce Act. This created the Bureau of Air Commerce (BAC), later renamed the Civil Aeronautics Authority (CAA) and then the Federal Aviation Administration (FAA).

It took time to formulate aircraft airworthiness and pilot certification regulations, hire and train employees and set up offices in many parts of the country. By the mid-1930s, the BAC was sufficiently organized to think of doing something about the homebuilt airplane matter. While there were at that time some very good homebuilts scattered about the country, there were also poorly constructed and disastrously flown ones built by people having little or no aviation experience. The BAC feared that the resulting lurid news stories would frighten the public

away from the growing airline networks being fostered by the government as a national service.

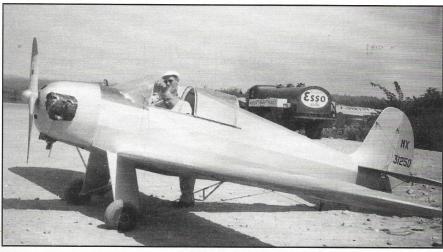
Therefore, from around 1935 onward, things became progressively more difficult for homebuilts. About the only ones still to fly were those built and safely flown by the more capable builders in places far away from BAC offices. When I visited the late Bernie Pietenpol in southern Minnesota in the late 1970s, for example, he remarked that "They never bothered us!" But others were not so fortunate.

In 1920, Oregon had established a state aeronautics office which drew up a set of reasonable and fairly liberal regulations. As long as they remained within the boundaries of that fortunately large state and carried metal state registration plates on the sides of their fuselages, homebuilts could legally fly there.

It takes so long to have Congress pass laws making something illegal that bureaucrats develop ways to discourage people from indulging in an activity deemed undesirable. For example, they can write regulations that make a targeted activity so complicated and expensive to engage in that people give it up out of frustration.

BAC regulations made provision for registering general purpose (NC) aircraft, those built or converted for restricted purposes (NR) and bona fide, factory or laboratory built experimental (NX) types. But they made no provision at all for homebuilts.

In official eyes, therefore, homebuilts did not exist and thus could not be issued registration numbers. If any-



At Norwood, Massachusetts airport in 1947, Bob Whittier tries the cockpit of Little Gee Bee while Bogardus watches. Ship was all silver.



wen billina

one flew an "unidentified" plane having no numbers, therefore, he could be held in violation of the regulations.

By going through much paperwork, the creator of a homebuilt could take out an experimental registration and a few did this. But the "X" registration category was meant primarily to enable aircraft manufacturers to quickly put just-completed experimental models into test flying programs. It was valid for only 30 days.

Seeking to get all of the states to adopt air regulations based on their own for the sake of nationwide uniformity, the CAA in 1941 got around to bringing suit against Oregon. If that state adopted national rules, things could become grim indeed for homebuilts.

Oregonians tend to be independent and not much inclined to bend to rules formulated in far-off Washington, DC that they find to be onerous. To the immense relief and delight of Oregon homebuilders, the judge threw the CAA suit out of court on the grounds that it infringed on American citizens' constitutional right to the pursuit of happiness.

When this country entered World War II in the wake of the Japanese attack on Pearl Harbor, aviation people put sport flying matters aside to join the war effort. The very great value of articles and plans by Les Long, Bernie Pietenpol, O.G. Corben and others published in the previously mentioned 1930s magazines is that aviation enthusiasts tended to hold onto their copies. From time to time they'd reread them and this kept the homebuilt plane fervor very much alive in their minds.

When peace returned, the CAA had become a much larger organization. Many people had somehow had gotten the impression that it was illegal to build and fly homebuilt planes. But here and there about the land, determined and knowledgeable people managed to get homebuilts into the air. Despite the 1941 court victory, Oregon homebuilders got the feeling that CAA people in their area still looked upon their activities with disfavor. One sore spot was the 30-day period of validity for NX registrations. It was a real problem for sport pilots who for the usual weather, employment, family and financial reasons could only fly intermittently.

Over the years Oregon homebuilders had done a vast amount of talking among themselves about what to do. It occurred to George Bogardus that nobody from the Beaverton group had ever gone to CAA headquarters in faraway Washington, DC to talk faceto-face with top officials about homebuilder's problems. What kind of people were they? What was their view of homebuilt planes? Were they aware of homebuilder's frustrations?

Therefore, early in 1946 he sent a telegram to the CAA asking for a hearing. To his surprise, they replied promptly and gave him an April date to appear before the Civil Aeronautics Board, their policy-setting office. With the help of one of the Beaverton group, Roy Frye, he drew up a proposal to take with him and submit.

Early in April he set out for Washington in his 1937 Chevrolet. Like many other devoted aviation enthusiasts, he never had the good fortune to become what is called affluent.

He stopped along the way to talk with other homebuilt activists of that time such as Harry Thalman in Salt Lake City, Bernie Pietenpol in Minnesota and Joe Yutz in Pennsylvania. They put him up and chipped in to help with expenses. By the time Bogardus reached the capitol city, suggestions made by these people resulted in four different homebuilt plane proposals having been drawn up for official consideration.

To Bogardus' surprise and initial concern, the CAB hearing lasted only about 15 minutes. But much to his relief, board members were receptive to his presentation. It was the old story

of official Washington being out of touch with the grassroots. After all, ours is a vast and diverse country.

After discussing the matter, they announced that they saw no reason why a separate registration category could not be drawn up for homebuilt planes. They had him visit various CAA departments to discuss practical details. He had found some of the original BAC officials to have a drill-sergeant mentality, and accordingly were pleased to discover that newer people there were less dictatorial. Some had flown in the war and had learned to love airplanes. And a few had even built their own planes before the war!

He drove the 3,300 miles back to Oregon feeling elated.

The new regulations adopted by the CAA permitted homebuilts to fly with NX registrations valid for six months. That was very much better than 30 days. But, these regulations came under a "Temporary" classification and that meant that it would always be possible for some spoilsport to monkeywrench them. Not good.

In 1946, the CAA relaxed the physical requirements for the private pilot license, so Bogardus' eye problem no longer kept him out of the air, and he was building up time. He had completed his "Little Gee Bee" homebuilt, and it was flying on one of the first new NX registrations to be issued.

But still, why should carefully cared for homebuilts have to renew registrations every six months? The thought came that few if any of the top people at CAA had ever actually seen a homebuilt plane. We all have a strong urge to see and feel of something before buying it. In 1947 the daring idea was conceived of flying Little Gee Bee from Oregon to the District of Columbia. That would show CAA officials — and also the media — that the new breed of competently made homebuilts were real and capable aircraft.

So early in August he took off and flew east through the Columbia River Gorge to Spokane. Then on across Montana and South Dakota to Minnesota. From there he flew down past Chicago and Toledo to Pennsylvania and on to New York's Long Island to visit with yet another homebuilt enthusiast, Jack McRae.

Knowing that I wrote articles for outdoor and aviation magazines, Bogardus wanted to meet and talk with me. So he flew up to Massachusetts and we met at Norwood Airport on the southwestern outskirts of Boston. Then owning a new Cessna 140, McRae had flown along in formation with him. As a Grumman employee, Jack had been able to get news photographers to come out to Long Island and nationwide newspaper publicity resulted. I did what I could to help by getting a brief but interesting article about Bogardus' flight and homebuilt planes into the December 1947 issue of the old *Hunting & Fishing* magazine. That put the story in front of 900,000 mechanically inclined outdoor people. During the 1950s I wrote on the subject

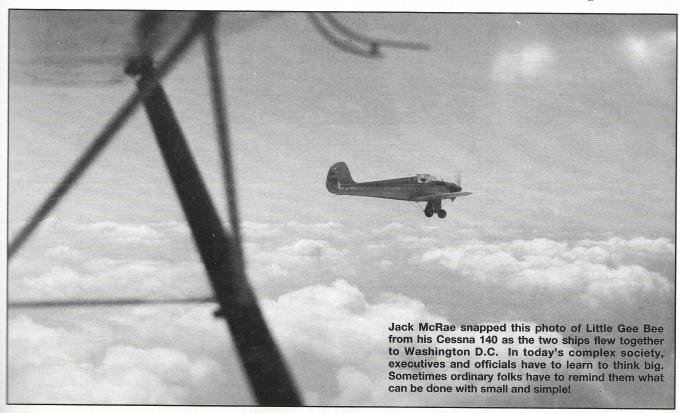
for various American and British aviation magazines, further helping to spread the word.

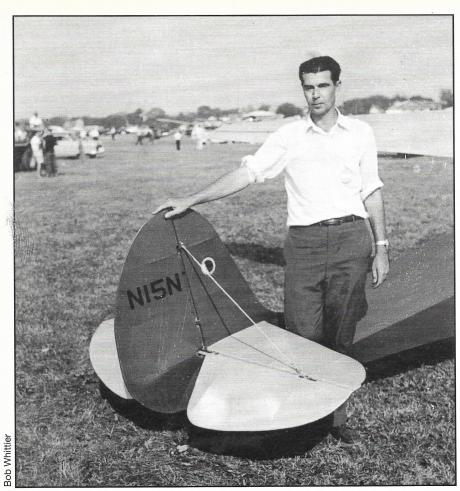
An engineering graduate of the University of Michigan, McRae had worked for Stinson and Republic before moving on to Grumman, where for some 40 years he was a stress analysis specialist. At the time we are discussing he was working on his own homebuilt, a well-engineered update of the 1924 Driggs Dart cantileverwing sportplane. Bogardus urged Jack to fly alongside him in his 140 on the trip to Washington. That turned out to be a brilliant inspiration.

In 1924, all-aluminum aircraft design was in its infancy. Government engineers had two Driggs Dart wings built, one of wood and the other of metal. Both were laboratory tested to destruction and the data thus obtained was of fundamental importance in developing stress analysis formulae for all-metal design work.

When CAA officials saw Little Gee Bee at a small airfield outside Washington, they had a hard time believing that it had been flown all the way from Oregon in three days by a private pilot using only a compass and maps and having no radio. But they saw for themselves that it was a well-made, practical aircraft and were duly impressed.

One of the CAA people present was Albert Voellmecke, chief of the CAA's engineering division and a highly respected aeronautical engineer. When he and other CAA engineers learned





At one of the early EAA fly-ins at Milwaukee around 1957, Jack McRae poses with his carefully engineered homebuilt, an updated version of the 1924 Driggs Dart.

that McRae was a Grumman engineer and was working on an updated version of the Dart, they knew they were dealing with a new and very competent breed of homebuilder. That meeting has to be rated as a milestone in homebuilt aircraft history.

To help refine the developing and steadily more liberal homebuilt aircraft regulations, Bogardus flew Little Gee Bee to Washington two more times in 1949 and 1951.

For having had the initiative to drive and then fly to faraway Washington to effectively present the homebuilt story to key people at the CAA, George Bogardus richly deserves his nomination to the Homebuilders Hall of Fame.

Regulations need constant review to keep up with changing conditions. And so in 1953 a group of Milwaukeearea homebuilders decided it would be useful to create a local group to send a representative to Washington to speak for all of them. Because their planes bore Experimental registrations, they decided to name their little organization the Experimental Aircraft Association. When Paul Poberezny began to visit FAA headquarters, he found people there to be familiar with

and generally friendly toward the homebuilt movement. In the early 1930s, George Bogardus and Les Long had formed the small Oregon Airmen's Association. While planning the first trip to Washington, they decided to rename it the more impressive sounding American Airmen's Association. Although this name greatly helped Bogardus to make a good impression on the CAB and CAA, the AAA gradually faded from the scene while the EAA grew far beyond anything its founders could have imagined. My own feeling is that the midwestern location of early EAA fly-ins at Milwaukee and Rockford made it much easier for people from all over North America to attend — including influential media personnel from Chicago and New York.

Bogardus and I kept in touch over the years and many a time he urged me to come out to Oregon for a visit. But that was so far from home! Then early in 1993 our daughter and her husband moved from California to Portland. As soon as they were settled, they invited us out to visit. When Bogardus learned that I could at long last accept his invitation, he was thrilled.

But as an aside, we were saddened to learn that his wife, Lillian, was then in failing health and later that she had passed away early in November.

But to get back to aviation, in August of 1993 Bogardus and I found ourselves together again, 46 years after our first meeting. He insisted on driving me on tours to airports and shops all over the Portland region. We visited the site of the old Beaverton Airport, now the Beaverton Mall. We went into the McMenamins restaurant there so I could see the many old-time Beaverton photos that decorate the walls.

Then we went to North Plains to visit the shops of Van's Aircraft where kits for the modern RV series of homebuilts are produced. He showed me Les Long's old shop, still standing in Cornelius. And just down the road we popped into Phil Duyck's private hangar where I was startled to find a very accurate, flyable reproduction of a high-winged Longster. It differs from Long's original only in having a 40 hp Rotax engine on its nose in place of the not-very-reliable Henderson motorcycle mill. Phil says it's a joy to fly.

At an airstrip over in the direction of the town of Boring, Bogardus showed me the stripped fuselage of Little Gee Bee up in the rafters of a hangar. The ship hasn't flown for many years. He'd love to see it restored and put on display at some appropriate museum.

Seeing such places and meeting the friendly, enthusiastic people typical of the homebuilt aircraft hobby was a good antidote to the negativism so prevalent today. Wherever presentday EAA members might go, they can easily make contact with local members and find themselves being taken on such tours. These are of immense value in binding us all together in everstronger fashion. And one sees projects under way which some day might well have significant impact on aviation.

As a result of the excesses of some of them, lobbies today are looked upon with disfavor by many. But, it's worth remembering that the old AAA and today's EAA are, in fact, lobbies. They have gained their objectives by presenting their cases rationally and diplomatically. They thus represent democracy at its very best. Where would be without them?

Today one encounters expressions of pessimism about the future of general aviation. Having seen so much enthusiasm and can-do spirit among EAA members, I don't go along with this moaning. And Bogardus came out with a remark that hit me hard. Said he, "The sport aviation movement is going to be the salvation of general aviation."