THE GEE BEE STORY

(Bill Sweet Photo)

And today, Bill Sweet stands knee-deep in undergrowth to view again the original Gee Bee aircraft factory. Though it isn't visible in the picture, a visitor can still make out the faded Granville Brothers sign above the hangar door.

By Thomas Granville
As Told To Bill Sweet

PART II

THE LATE 1920's and early 1930's have been called the "golden days of aviation," and for good reason. It was a time when individuality and personal brilliance counted, when new designs poured forth in a torrent from countless small airplane factories, when the real advancement of aviation was in the hands of these daring designers and pilots. They designed and built planes by rule of thumb. They didn't have huge engineering staffs or the "systems" approach. Lead time was days or weeks, not years. Many a great design began as chalk lines on the floor, not as stacks of blueprints.

This swift advance of aviation was paced by mechanics and pilots who gambled everything to win. The military air services looked enviously at designs like the Gee Bee "Sportster"; it could outrun anything they had. Aviation was being advanced by men like the Granville brothers — with their own money, not the taxpayers.

If any one airplane symbolized this golden era it was the Gee Bee "Super Sportster." Recognized as one of the classic airplanes of all time, this stubby-winged, fat-bodied racer didn't look as it could even fly, but it took the 1931 Thompson Trophy race at an average speed of 236.2 mph. Small wonder that the military's first low-winged pursuit plane, the P-26, looked suspiciously like a Gee Bee "Sportster."

But let's digress a moment, back to the spring of 1929, and pick up the Gee Bee story in Tom Granville's own words.

"In the spring of 1929, business was booming all over the country. To buy a new plane, all you'd have to do was put in an order and wait three to six months for delivery. Our little E-1 biplane that I talked about in the March issue flew so well and attracted so much attention that Granny (Zantford D. Granville) got the bug to manufacture them in quanity. He went to a number of financiers, but none were interested.

"One day we heard of an air meet to be held at Springfield Airport and flew up there from Boston. The E-1 attracted quite a bit of favorable attention. Among others, Lowell Bayles flew it and liked it, but all agreed that more power would help it.

"The Taits, who owned Springfield Airport, were also interested. There were four of them: George, Harry, Frank, and James, all self-made men who now owned a big ice cream business. George became interested and advanced Granny the money to buy a new English 'Genet' 85-hp engine, which proved to be a big improvement. Soon the Taits bought out Granny's whole outfit — lock, stock, and barrel. They paid him partly in cash and partly in stock of the new Granville Brothers Aircraft, Inc. of which Granny was president.

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"We brought all of the equipment and men to Springfield and set up shop. It was big time for those days. Rob, Mark and Ed Granville, along with Albert Axtman, Austin Savary, and Harry Jones installed a line shaft the length of the building, which ran lathes, nibbler, jointer, planer, bandsaw and bench saw. In the weld shop were three acetylene outfits, two metal cutting bandsaws, and a drill press. Then we hired a secretary and three engineers — Robert Hall, Robert Dexter, and Robert Ayer. Rob Granville took over purchasing, Ed the welding, and Mark the general assembly.

"The engineers slightly redesigned the plane, omitting the flaps and widening the cockpit a little. They ran a stress analysis of the whole plane in order to obtain an NC license. Three planes were built, but when the first was flown it was quite tail heavy. So, a new engine mount was made, allowing the engine to sit about six inches further forward, and this meant a new cowling too. Long before this, a Kinner K-5 had been tried in the E-1 and it was decided to make this the standard engine. I think it was late fall or early winter before these three planes were completed and licensed, the only restrictions being a 35 lb. baggage limit. They could be flown with pontoons and skis, as well as wheels.

"About Thanksgiving time, I joined the crew in Springfield. I began in welding and shifted to wood working, eventually took charge of all wing, aileron, tail surfaces, fuselage fairing, covering, doping and painting.

"About the time we began another group of five planes, the 1929 stock market crash was on everyone's mind and we found we couldn't give planes away. However, we completed that five and were about to start on another five when the stockholders decided to stop making planes right then and there. So, we swept up the shop and were out of a job. About all of the five had been sold, including a special one equipped with a Haywood starter, metal prop, compass, and turn and bank indicator, to the well-known aviatrix Maude Tait.

"It was pretty deluxe for those days; she could go anywhere without needing a helper to start the engine. One day she hit a stone wall while taking off. She beat up the right-hand landing gear drag strut and broke the right stabilizer brace strut but still managed to fly back to Springfield. There she made a beautiful left wheel landing with no further damage to the plane.

"That winter, bad luck followed us as Granny and Bob Ayer were out demonstrating our planes. One had its tail chewed off by another plane taxiing up from behind; another locked wings with a plane that landed ahead of it and ground-looped. A third landed so hard that the wheels went up through the leading edge of the wings and smashed the prop. Then to cap the climax, Granny test-hopped a new ship one forenoon, then headed for an air show in the Midwest. About ten o'clock that night we got a call from New York upstate. It was Granny, asking us to bring out two new compression struts, a new prop, and some aluminum and wood screws.

"They had flown into a real snowstorm that they thought was just a squall. They tried to fly over it but with no blind flying instruments they were just circling instead of climbing. A mountain appeared on the right wing tip and when they had turned away from it a church steeple went by. They saw a field that looked big enough but Granny couldn't find it again in the snow so he sat it down in the very next field he found. He landed hard and both wheels came up through the lower-wing leading edges. They slid on the ship's belly through a five-strand barbed wire fence. It was snowing so hard that they had a hard time finding their way to a farm house, and the local sheriff had a crew looking that never did find them.

"The Taits let us use their hangar for any kind of work we could get. We painted cars, welded sleds, overhauled engines, and repaired planes. My brothers Ed and Mark rented a room in an attic and lived on beans, which they bought by the case.

"Bob Hall, one of our first engineers, was still around and when he heard about the Cirrus Derby (or All-American Flying Derby) he got very excited about building a plane around the Cirrus engine to enter it. He and Granny finally got enough money together to start building one. (As I recall, Lowell Bayles also put some money into it.) The derby attracted 24 planes, but only 18 were able to start. Ours was a low wing, wire braced plane and Bayles was to be the pilot. Goodyear air wheels had just come out and were supposed to be the last word, since shocks weren't needed.

"This was the first of eight planes and proved to be hard to keep on the ground. Without shocks, it bounced like a rubber ball. Bayles was the only pilot I ever saw who could land it without scaring us half to death. He flew it in the Cirrus Derby, a 5541-mile flight across the country and came in second with an average speed of 116.4 mph. Lee Gehlback won in a Commandaire 'Rocket' with an average 127.1 mph. Bayles' second-place money was enough to buy the plane and a new Hudson auto. He and Roscoe Britten barnstormed around the country with the Gee Bee and two old Wright-powered Wacos.

"In all, we built eight 'Sportsters' with a variety of engines, including Cirrus, Menasco, and Warner. All were NC licensed with no restrictions, even without shock struts.

"About that time, we built the two-place tandem 'Sportster,' model Y-1, with a Pratt & Whitney engine. In my opinion, this was the best airplane we ever built. It had plenty of power, landed nicely and flew beautifully. I think it won more money than any other plane. Russell Boardman won the Speed Holman aerobatic trophy in it, and Maude Tait the Aerol Trophy Race. It also won many one and two thousand dollar prizes.

"In 1931, Bob Hall interested the Taits in starting the Springfield Air Racing Associates (S.A.R.A.) to sponsor building a new plane for the Cleveland Air Races. Bob did much of the engineering on it while Granny was still touring the country trying to sell planes. The Ford Reliability Tour was going on at about the same time, but we couldn't build another plane in time for this too. We arranged with Bill Sloan to use his plane, replacing it with a new one as soon as we built it. While Bayles was flying Sloan's plane in the tour, the Warner swallowed a valve and was ruined. We installed another engine and Bayles finished the tour in fourth place."

Here, we'll leave Tom Granville's narrative and get back to the big chapter in the Gee Bee story — the 1931 Cleveland Air Races. Bayles averaged 267.3 mph in the qualifying trials, a speed never seen in Cleveland before.

Most Cleveland Air Race fans don't know how close the Gee Bee "Super Sportster," after blazing to a record speed in the trials, came to not competing in the Thompson Trophy Race. Bayles took No. 4 up for a new speed record try on Labor Day, 1931, but his engine lost power and he had to land. The Thompson was that afternoon and he had an ailing engine. Mark Granville and two Pratt and Whitney mechanics started in on the 535-hp "Wasp Junior," soon finding three pistons with ring lands melted and one cylinder scored. One new cylinder and three new pistons were installed and the engine started just before noon. It was never shut off until after Bayles had won the Thompson Trophy Race at a speed of 236.2 mph. His purse was $7500.00, which was a lot of money in 1931. Bob Hall finished fourth in the Gee Bee "Senior Sportster." They had won enough to pay off stockholders of the Springifled Air Racing Associates 100 percent.

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The Granville brothers had tasted victory and were hungry for new records. It was decided that Lowell Bayles would take a crack at the world's speed record for landplanes. Following test flights, the "Wasp Junior" engine was removed and a heavier, more powerful engine installed for the assault on the standing record of 278 mph. Late in November of 1931, at the Wayne County Airport near Detroit (now Detroit Metro), Bayles flew the Thompson-winning Gee Bee to an unofficial speed mark of 307 mph. However, the fickle finger of fate intervened; something went amiss with the NAA timing device and the record could not be official. Had it not, what was to happen later might never have taken place.

The speed run was rescheduled for December 5. Bayles dove for the 1.8 mile measured course from about 1200 ft., flattening out at 300 ft. for the speed run. As he neared 325 mph the Gee Bee suddenly seemed to explode and wreckage was strewn for hundreds of yards along the railroad tracks bordering the airport. The engine rolled down the tracks like a giant fireball. Bayles was thrown from the wreckage on the fourth roll. His crushed body was found with his helmet and goggles still on and his new salt-and-pepper overcoat only slightly burned. He had bought the coat to be married in — on December 13, 1931. Aileron flutter was blamed for the fatal crash. For the many air race fans who have asked me where his body was laid to rest, it was Newton, Illinois — his home town.

Bayles' tragic death failed to dampen the spirit of the Granville brothers. Russell Boardman, who with John Polando had established a distance record by flying from the USA to Turkey, became interested in the Granville Brothers' racing craft. New money came in for them to build two new aircraft for 1932. Bob Hall, the pilot-designer had left the firm in anger and started designing and building planes across the Connecticut River at Bowles airport. He found backing from two wealthy sportsmen and also a Russell Thaw, who in turn had backing of the famous Guggenheim millions.

With Boardman's patronage, the Granville brothers built two racing airplanes in 1932. They were the famous No. 7 and No. 11, both fat, short fuselages with stubby wings, mounting huge radial "Wasp" engines. These red and white racing planes were different. They caught the imagination of the press and public, were dubbed "flying milk bottles," or "bumble bees." It's still a best seller among plastic model airplanes, an all-time classic.

It was Boardman's intention to fly No. 11 in the Cleveland Air Races and Lee Gehlback was to pilot No. 7. However, it didn't turn out that way. Boardman cracked up a lightplane in the trees near Springfield Airport and spent weeks in the hospital. Again, fate intervened. Jimmy Doolittle had also cracked up — in his Laird "Super Solution," sponsored by Shell Oil. He needed a plane, so was named to fly No. 11.

When Doolittle arrived at Springfield, Boardman was still on crutches. He was invited to take No. 11 around the field for familiarization, but instead took off from the sod field and promptly vanished — his first landing in the Gee Bee No. 11 was at Cleveland Municipal Airport, scene of the National Air Races. Doolittle had only shaken hands with Granny, inspected the R-1, climbed aboard and simply flew the new plane 500 miles to Cleveland! The races were to begin the next day.

On the west coast, the famous cross-country Bendix Race was starting. Only four airplanes were flagged into the sky in Burbank, California, and the Granville brothers felt their R-2 was easily the fastest of them all, it also had long-range tanks. But Lee Gehlback fought engine problems all the way across the country, the R-2 bailing oil so badly he landed at Rantoul, Illinois. There he ripped off the oil-spattered canopy, took off and continued to Cleveland, landing an hour and 20 minutes behind winner, Jimmy Haislip.

When Granny arrived at Cleveland and met with Doolittle, both agreed that the 7-11 R-1 round "waffle iron" engine should not be worn out in the preliminary small purse races, but should be saved for the big one — the Thompson. So it remained on the flight line, race after race.

September 3rd was a rainy, overcast day with turbulent air. Jimmy Doolittle casually squirmed into the snug cockpit, gave the big "Wasp" engine the gun and blasted around the official three kilometer course four times at an average speed of 294.4 mph, a comfortable 16 mph over the previous record held by France. Doolittle's performance had been that of a highly skilled "pro," doing a no-nonsense job in the face of growing doubts that the Gee Bee could perform. Jimmy set a new world speed mark and brought the crowd roaring to its feet and waving tiny American flags which had been sold by the thousands to spectators.

It has often been said that Doolittle was scared of the R-1, but if he was he never showed it. On his first flight from Springfield he had become familiar with its habits. At low air speeds, as on take-off and landing, it could be a handful. Quick aileron movement at such time would flip the big hard-nosed bird on its back, stalled out. Longitudinal control was extremely sensitive, while a fish-tailing tendency occured at power settings below three-quarters throttle. It may have had faults but, man, was it fast!

Two days later, the Thompson Trophy was run. Bob Hall, who had quit the Granville brothers and had built his own racer, took the lead and was out in front. But not for long. Jimmy Doolittle zipped past Hall before he had come back to straight-line flight and Hall faded behind. Doolittle was flying his usual hard-charging style, throttle pushed wide open and polishing each pylon on every turn. On his third lap, the R-1 was trailing smoke. It was caused by the large carburetor jets which Pratt & Whitney mechanics had installed minutes before the race got underway. They were designed to help cool the roaring, full-throttle power plant. Doolittle, as well as the five Granville brothers looking on, paid no heed but the crowd thought the Gee Bee was in trouble.

As planned, Doolittle never once let up and the Gee Bee rocketed around the course at fantastic speed. When he took the checkered flag of victory he had lapped the entire field at least once. His winning speed was announced as an official 252.686 mph. His speed on the straightaways was well over 300 mph. For the second straight year, the five Granville brothers returned to Springfield in triumph. Theirs was the glory, the speeches, banquets, ticker-tape parades and headlines they so richly deserved.

But, in the highly competitive air racing world, you don't rest on your laurels. The Granville brothers knew this to be true so they started making plans immediately for the 1933 Gee Bees to fly even faster. More and more horsepower seemed to be the answer, so the R-1 was equipped with a giant 900-hp Wright "Cyclone" and a big "Wasp" engine was installed in the R-2. The Granville brothers firmed plans to enter both racers in the Bendix and Thompson races. Doolittle had announced his retirement from air racing so Russell Boardman — mended from his earlier crash injuries — would pilot R-1 and Russ Thaw was appointed jockey for R-2. Maude Tait, flying a Gee Bee model Y, had swept the racing events at Omaha as well as the Niagara Falls Air Races, and work was also started on a big, new long-range racer for Jacqueline Cochran. It was designed to win the $48,000.00 purse for the London-Melbourne race set for 1934. This Gee Bee two-place racer was named the Q.E.D., arrived at from the Latin phrase "quod era demonstratum" which loosely translates to "the solution of a given problem has been demonstrated."

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The 1933 National Air Races were staged at Los Angeles, which meant flying the Bendix Race from east to west, a switch from previous Bendix races. Russell Boardman and Russ Thaw, in the two big Gee Bee "bumblebees" R-1 and R-2, roared into the sky from Floyd Bennett Field, New York — along with Roscoe Turner, Lee Gehlback, Jimmy Wedell and Amelia Earhart.

The first fuel stop for the Gee Bee racing team was Indianapolis. Thaw, in setting down in the R-2 ground-looped and tore up the wing badly. Boardman, after talking with the unhurt Thaw, took on a full load of gas and poured the big "Cyclone" wide open. Charging down the runway several feet off the ground, he lost control and the R-1 flip-rolled onto its back and crashed, fatally injuring Boardman. In the space of minutes, both Gee Bees had been lost and one pilot killed. Disaster struck swiftly and completely.

It was a blow to the Granville brothers. They removed the wreckage of both planes to Springfield where they stubbornly rebuilt the R-2. But on the test hop, Jimmy Haislip cartwheeled the rebuilt R-2 completely across the airport. Though Haislip amazingly walked away unhurt, the proud R-2 was a total loss. But this was not the end of it. In Chicago, 26-year old Florence Klingensmith was leading the Frank Phillips Trophy race in the seventh lap when fabric began peeling off the Gee Bee. The plane crashed near the Glenview airport boundary and Florence's body was found nearby. Later, Maud Tait's Model Y spun into the Atlantic Ocean after take-off from what is now LaGuardia Field. Maude, however, was not flying the ship at the time.

There was nothing left now except the big Q.E.D. racer nearing completion, plus the twisted remains of R-1 and R-2. From those two great planes, the Granville brothers hoped to build another racer to regain the gold and glory.

But Granny never got that chance. Instead, he got a choice that proved what he was made of. Flying a Gee Bee model A trainer to a southern buyer, he was on the ragged edge of a stall while preparing to land. Suddenly he noticed two airport maintenance workers on the runway right in front of him. With a split second to choose — their lives or his — Granny chose his. He banked sharply, stalled out at low altitude and spun in. Granny was dead when they reached him.

With Granny gone, leadership of the Granville brothers was gone, and soon after the firm was under the hammer, being sold as bankrupt by the local sheriff.

Gone were the glory days, the victory banquets, newspaper headlines, hero parades. Gone, but not forgotten. The brothers could find no further backing in the area, or jobs either. They split up for the first time, Tom taking a position with the Fairchild Company in Hagerstown, Maryland, in charge of their wood-working wing department. Ed signed on with Pratt & Whitney in Hartford, and Bob bought a potato farm in Maine.

The contributions of the Granville brothers, and many others like them are hard to measure. During those years the military scrimped along on starvation diets, kept lean and ragged by a niggardly Congress. They had no funds to develop new and better planes, and the Gee Bees could outfly anything they had. It's to the eternal credit of the Granvilles and their stubborn, undaunted contemporaries that our aircraft designs were even as good as they were when war clouds again began to gather at the end of the 1930's.

(To the surprise of most aviation historians, one Gee Bee "Super Sportster" still exists, intact. But that's another story we may be able to tell soon.)

A VISIT WITH THE U.L.A.A.A

By Walter H. Struze (EAA 18693)

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SO WHAT'S THE U.L.A.A.A.?, you say! Well, it's the **Ultra-Light Aircraft Association of Australia**, the counterpart of our own EAA in the United States.

I am one of those individuals who have the opportunity to travel about the world and get paid for it. I'm a crew member aboard an American merchant ship. Recently I had the good fortune to get on a ship bound for Australia, the **S.S. African Meteor** operated by Farrell Lines Steamship Co. of New York. Before leaving the states I wrote to EAA Headquarters to get some names and addresses of Australian "blokes" who were EAA members or acquainted with the homebuilt movement in Australia. I requested names in two cities, Sydney and Melbourne, two of three ports of call we were to make in Australia on this voyage.

With the list before me I selected Eric Woods in Sydney and Geoff Robbins in Melbourne. I dashed off a note to each to the effect that I would arrive in their respective cities on a particular date. I received very cordial letters of reply from these gentlemen informing me that they would be happy to take me under their wing and try to get me around to see homebuilts and homebuilders. My choice of these two fellows could not have been more fortunate; both placed their time, their automobiles, and their hospitality at my disposal.

At the port of Sydney, Eric Woods established contact and we were off to Bankstown Airport. Here in Sydney, as well as at Melbourne, there are two airports, or "aerodromes" as the terminology goes down under. Mascot is the big aerodrome used for commercial jets and other behemoths, and Bankstown Aerodrome is for general aviation. In Melbourne, it's Essendon and Moorabbin for big and little respectively. The Australians seem to be one up on us in the United States, having already separated these two phases of flying and have done so for many years. Very few