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Long Flight Home of the Meyers 200E

Trials and mishaps plague the quest to relocate an aviation one-of-a-kind.

By R. E. Herkert

AFTER TWO YEARS of worry, government bureaucracy, competitive bidding and historical research, Vince Vanderford threw open the corrugated doors of the Oklahoma State University Aviation Department hangar in Stillwater and witnessed his prize. In a back corner—covered with boxes, bird droppings and various other educational throwaways—sat an engineless one-of-a-kind.

Starting at 8 o'clock on a muggy Oklahoma morning, he lifted boxes off the wings and from around the fuselage. Tables, chairs, paint buckets and several generations of owl deposits concealed the stripped and rotting piece of aviation history. It wasn't until 1 p.m. that the plane was cleared of the burdensome refuse.

Blotchy red paint covered four coats of primer; it was a pathetic sight with no engine and almost as many instruments. Even though its tires were flat, upholstery torn and paint badly chipped, Vanderford could see nothing but beauty in the tattered remains of the only six-place, single-engine Meyers 200E ever built.

The Yuba City, California, rancher and his partner, Dr. Richard Morgan, a Chico, California, physician, would have to work fast to meet their goal of flying the plane to Vanderford's ranch in northern California in just three days.

The prototype 200E that Vanderford uncovered was built by Aero Commander for FAA certification. Only 72 hours were logged during tests to determine if the airframe could handle six people without major structural modifications. According to Vanderford, the 200E was progressing through the certification process with flying colors, but the Meyers line was sold before certification was complete.

When the Aero Commander division of Rockwell sold the rights to Interceptor Corporation, the 200E was flown to Norman, Oklahoma, and donated to Oklahoma State University. The original engine was purchased by Vanderford for his Meyers 200C model in 1971.

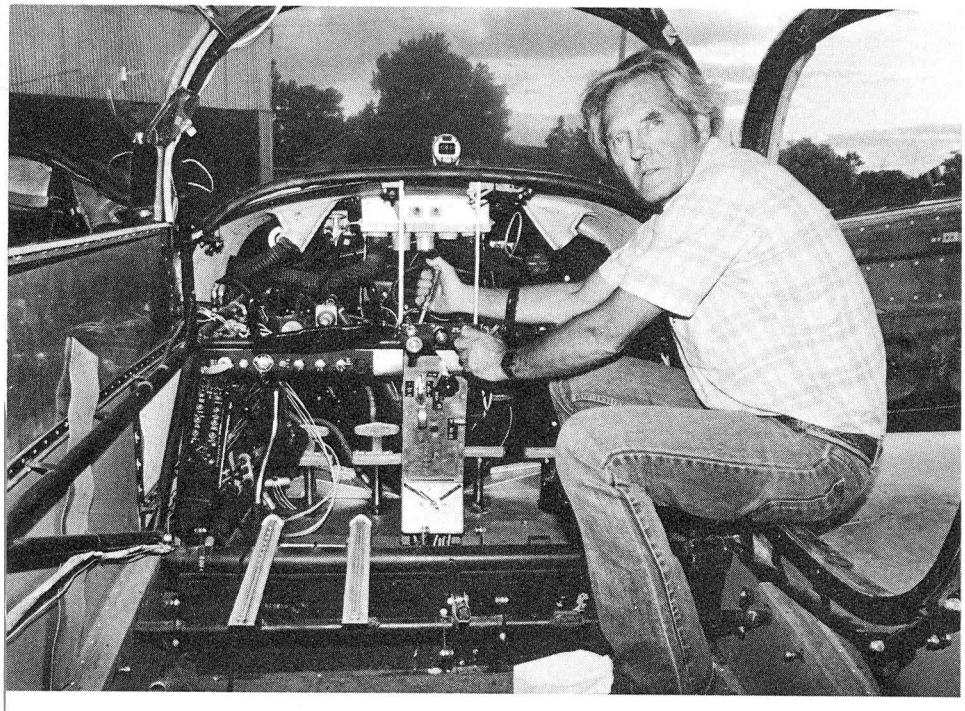
After the plane was donated to the university, it wasn't flown again until 1981, when Vanderford and Morgan devoted themselves to its restoration. While it was at the university, students tore it apart and put it back together as a learning experience. "It had an old run-out engine in it that was only good for taxiing around," said Vanderford.

The 200E is the same as the 200D, except the engine mounts are moved about a foot forward for weight and balance, allowing extra passenger room and two more seats. Another window was added in the aft section of the 200E cabin and the baggage compartment was, for all intents and purposes, eliminated. A swept rudder was installed and the chord of the elevator was increased by 1.5 inches. Otherwise, all parts are interchangeable between the 200E and 200D.

In 1980, the University of Oklahoma made provisions to eliminate its Aviation Department. Two helicopters and two Aero Commanders (one of which was the Meyers 200E) were put on the auction block. Morgan and Vanderford were the only bidders interested in restoring the 200E, as most others were salvage operators.

The bid was accepted, but Morgan and Vanderford had to wait another year until the Oklahoma State Legislature officially relinquished ownership to them.

Three weeks prior to Vanderford and Morgan's flight to Oklahoma to retrieve their plane, they pulled out the engine of Morgan's Meyers 200 and shipped it to Stillwater, Oklahoma. The trucking firm promised the engine would arrive at least



Photos: R.E. Herkert

Vince Vanderford and the Meyers 200E's panel—just the way he found it in the Stillwater, Oklahoma hangar.

one week before Morgan and Vanderford flew in. In the meantime, Morgan replaced his engine with a turbocharged racehorse.

Vanderford flew to Oklahoma on a Sunday evening, one day ahead of Morgan. First thing Monday morning, he drove out to Stillwater Field to see if the good doctor's engine had arrived as promised. No engine.

Trying to forget his frustration, he began working on the plane: inflating the tires, replacing lost inspection plates and cleaning up. Later on that day, Morgan arrived and immediately went to work finding the lost engine. After a few phone calls to the carrier, he traced it to a dock in Dallas, Texas. The carrier informed them the engine would not be delivered for another week due to "internal complications." Knowing all about internal complications, Morgan did some fast talking and paid another $400 for another carrier to pick up the engine and deliver it the next day. The engine arrived late Tuesday evening and Vanderford began installing it at 6 a.m. Wednesday. For safety's sake, he installed new engine mounts before attempting to bolt in the powerplant.

Borrowing a light crane-hoist from the university, the two raised the engine off the ground and rolled it toward the aircraft firewall. The hoist was inches away from the engine compartment when the lift and its load tipped forward. Straining to keep the engine from falling on the plane, Vanderford gave the engine a mighty push. But his effort went for naught—the engine fell to the ground, denting the oil pan and breaking off an intake pipe on the right side.

Even though the intake pipe is a common part—it's the same one used on Aztecs and many other aircraft—the closest one was in Tulsa, Oklahoma. As luck would have it, Morgan met a pilot in a Cessna 172 who wanted to log some hours. The pilot flew to Tulsa and brought back a new pipe later that afternoon.

Meanwhile, Vanderford found some counterweights and readjusted the hoist. With some effort, they mounted the engine without further incident. Hoping to leave the next day, Vanderford called the nearest FAA office in Oklahoma City to request a ferry permit, which gave them legal authorization to fly the uncertified plane to their home in northern California. The administration, however, was not amiable to fulfilling the longdistance request on such short notice.

"We're leaving tomorrow," said a frustrated Vanderford, "with or without your approval."

"You can't do that," replied the FAA representative.

"Well, as far as I'm concerned, the plane is experimental because it isn't certified," argued Vanderford.

At that point, Morgan joined in the conversation and with some coaxing, the representative agreed to meet them the following morning to inspect the aircraft. By late Wednesday afternoon, the Meyers 200E was ready for flight—at least that's what Vanderford and Morgan thought. As scheduled, the two FAA representatives arrived, but were hesitant to grant a ferry permit because the 200E, in their minds, didn't look anything like the traditional Meyers 200.

Being a rancher for most of his life, Vanderford was independent by nature and didn't have much tolerance for bureaucrats. As tactfully as he could, Vanderford explained that the 200E was exactly the same as the 200D, except the engine mounts were one foot forward and the tail was swept. After he explained that all 200E parts were interchangeable with the 200D—the stickers were on the plane to prove it—the FAA representatives believed him. Vanderford made the few needed adjustments during the inspection. After six hours of inspection, the FAA representatives signed the ferry permit.

At 3 p.m., they began to fuel up. The left tank filled beautifully, but the right tank spilled fuel all over the hangar. After defueling the plane, Vanderford reached up under the wing and discovered a leaking fuel line on the suction side. No problem, he replaced the leaky line in short order.

During the flight from Stillwater, Oklahoma, the 200E's elevator trim was run full-down, but couldn't keep the plane from climbing; Morgan and Vanderford stiff-armed it to Amarillo, Texas.

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However, when they refueled the plane and were just about ready to top it off, fuel leaked out of the left side again. This time, it was the return line.

This Meyers 200E had an integrated fuel system and the only way to fix a return line was to take the tanks out. After removing what seemed like a million screws, the tank came out and Vanderford fixed the line. Covering his bet, he filled the tank while it was on the floor—finally, a tight seal. The million screws went back in and the plane was ready to be fueled.

For the first time in a decade, the plane was fired up for flight. Vanderford smiled and looked over at Morgan; the old bird purred like a kitten. On Sunday morning, the world's only Meyers 200E was an engineless pile of bolts, pushed into a crowded corner and destined for an Oklahoma landfill. On Thursday morning, Morgan and Vanderford were sitting in the 200E on the Stillwater runway, going through the preflight checks.

Everything seemed fine: fuel, magnetos, brakes, flaps, ailerons and beacons. For good measure, they let the engine warm for 20 minutes. "There was no hesitation or rough running," remembered Vanderford. "She felt like she was ready to fly."

The culmination of two years' red tape and four days' honest labor was about to come together—or was it? Given full power, the Meyers ran down the runway like a cat on fire. With the trim tabs adjusted in the climb position, Vanderford pulled ever so slightly on the elevator and inch-by-

The high-ticket Meyers: Commanders of speed, beauty and ease of handling.

THE MEYERS 200E was the last in a series of four famous and historic airplanes designed by Allen H. Meyers. Meyers' contributions to aviation are honored at the Allen H. Meyers Foundation in Tecumseh, Michigan, the Pioneer Aviation Hall of Fame and the Curtiss Aviation Museum, where he is in company with such famous aviators as Lindbergh, Earhart, Stinson and Rickenbacker.

Meyers is most noted for his design of the Meyers OTW (Out to Win), the 145 and 200-series airplanes. During World War II, the Meyers OTW was one of three biplanes approved by the CAA as a trainer for the military flying program, according to Meyers' widow, Nydia.

When the war ended and orders for the OTW declined, Meyers began producing aluminum sport and fishing boats. In the 1950s the revenues from this highly successful business allowed him the freedom to certify and produce the two-place Meyers 145, a sleek, low-wing, all-aluminum airplane with retractable maingear. This led to the development of the four-passenger Meyers 200, which still is touted as the strongest and fastest normally aspirated, single-engine production airplane in general aviation. And, of course, the six-place 200E was to follow, but it never completed the certification process, although some 70 hours of test flying were logged in the prototype.

Meyers produced 200s from 1959 to 1965 in Tecumseh until North American Rockwell Corporation purchased the design and manufacturing rights from Al Meyers. For a short period of time, Rockwell marketed the Aero Commander 200 under the Meyers certificate.

Meyers built 48 of the 200s before he sold the rights to Rockwell, which built 85 of the airplanes. Rockwell sold the tools and certificates to the Interceptor Corporation in 1967. Interceptor had designs on converting the basic Meyers to a pressurized, turbocharged bullet, capable of cruising at 275 mph at 24,000 feet. At one time called general aviation's P-51, the Interceptor 400 also fell on hard times. Today, many Meyers enthusiasts await the day when a Meyers 200 or an Interceptor 400 makes it to the production lines.

The rare Meyers 200s have many things going for them, say today's owners: speed, good looks, airworthiness, safety and ease of handling. Affordability, however, isn't included in this list. According to *The Aviation Consumer* magazine (September 15, 1980) the Meyers 200 has maintained a whopping 240% of its value since 1971. The Beech Bonanza V-35, in comparison, maintained 187%.

All three companies who manufactured the Meyers design claim that while it probably was the best single-engine airplane ever engineered, it is also one of the most expensive to build. No two airplanes were built exactly alike because much of the construction was done by hand.

The Meyers 200 is revered for its strength of construction and quality of design. Members of the clannish Meyers 200 Association tell of accidents in which pilots walked away with minor injuries when death appeared imminent.

"One fellow literally flew through a barn in a low-visibility situation and walked away without a scratch," said one association member. "He fared better than Waldo Pepper."

inch it left the runway.

"This is how a Meyers is supposed to run," thought Vanderford as he pulled back harder on the elevator and the plane quickly neared 800 feet. They leveled it off and throttled back to cruise. As easily as it started, it quit. Then, when he attempted to call the tower for emergency clearance to land, they discovered the transmitter was broken.

All attempts to restart the engine were in vain, Vanderford was forced to circle back and land the stricken airplane in a crowded pattern. Two other aircraft were on approach; one nearing final. After some spacing, they put the plane on the deck, but there wasn't enough momentum to reach the taxiway.

Because it was late in the afternoon, they borrowed the airport tractor and a tow bar and pulled the Meyers off the runway and hangared it. They were to spend another night in Oklahoma and it was back to the drawing board the next morning.

Any number of things restrict the flow in an airplane fuel system. This is especially true in an aircraft that's been hangared for an extensive period. Vanderford and Morgan spent most of Thursday night going over the possibilities.

At breakfast the next morning, they agreed a check valve was either defective or had been installed backwards in the fuel line by an unwitting student. The suspect valve is opened by the electric fuel pump then closes when the engine-driven pump takes over.

They located the valve without difficulty; it appeared to be in good shape. The valve opened and closed on command and was installed properly. However, in examining the valve, Vanderford noted an extra fuel line coming out of a T-intersection—one he'd never seen in a Meyers.

The FAA was hesitant to grant a ferry permit because it didn't look like the traditional Meyers 200.

Having owned three Meyers 200s in his lifetime—his most recent purchased from the author of *Jonathan Livingston Seagull*, Richard Bach—Vanderford knew the extra line wasn't supposed to be there. He traced the line to the firewall where it was attached to another electric fuel-pressure sensor. Then it dawned on him: the runout engine the students used for taxiing had a pressure carburetor that required two fuel lines. He spotted the line earlier and thought it went to a fuel pickup. Believing it was of no use, he had plugged the line.

Vanderford removed the T-section and added a new line. The plane had been running off the electric fuel pump alone. When throttled back, the engine pump sucked air out of the T-section and starved the engine for fuel.

It was midmorning before the checks were complete and the pilots were ready to set a heading for Amarillo. Once airborne, they circled Stillwater several times, not wanting to press their luck by setting out over rough terrain before they were sure the airplane would maintain altitude.

They left the pattern when the airplane gained 4000 feet of altitude. They headed due west for Amarillo and leveled off at 8500 feet. Morgan pulled back the throttle to cruise and ran in the trim all the way. At this point, everything was fine, except the plane didn't want to maintain a level cruise attitude. "It just wanted to keep climbing," said Vanderford. "I asked Richard if he wanted to turn around and readjust the trim tabs at Stillwater, but he said no, he would stiff-arm it to Amarillo and adjust them there."

Morgan strong-armed the controls for one hour and 15 minutes. It was a smooth flight to Amarillo, except for running one fuel tank dry before anticipated. With only a fuel pressure gauge to indicate fuel use, and because they intentionally were running an extra-rich mixture, Vanderford wasn't at all surprised the tank drained as

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quickly as it did.

Bucking a 35-knot wind, the two aviators landed safely and with power at Amarillo. Vanderford dug out some tools and re-adjusted the trim while Morgan used the telephone to call Santa Fe, New Mexico, tower to get approval to land without radio communications.

Using dead reckoning, they left Amarillo at midday and followed Highway 66 to Santa Fe. About half way through the leg, they encountered several thunderstorms and were confronted with a tornado about 15 miles to the north.

They discovered a glob of paint chips and something that looked like mouse hair.

Dodging the twister and several thunderheads, it was an incredibly rough flight into Santa Fe. When they finally reached the Rocky Mountains east of Santa Fe, they didn't have enough altitude to clear them.

Circling back, they found the Pecos River and followed it into Santa Fe. The turbulence worsened by the minute. By the time they reached Santa Fe airspace, the bouncing was unbearable, remembered Vanderford. Just prior to landing, it was so bad the cabin door popped open.

A 30°crosswind jetted across the Santa Fe field as the Meyers 200E buzzed the tower and dipped its wings, requesting permission to land. The tower flashed a green light: Land With Caution! Vanderford flew around the pattern and aligned the plane into the wind. The crosswind increased so much he couldn't keep the plane lined up with the runway. Luckily, they were about to flare on a 200-foot-wide runway. He pointed the plane directly into the wind touched down and managed to kick the nosegear back on course before they ran off the side.

If the takeoff was going to be half as rough as the landing, Vanderford and Morgan weren't going to chance it. The wind blew two days and two nights until Sunday morning.

Finally, the weather cleared and the two jumped into the plane to head for the next scheduled fuel stop, Prescott, Arizona. Morgan hit the master switch and turned on the fuel boost—silence. Vanderford, discouraged, crawled under the wing to check the new electric fuel-boost pump, which had been installed in Oklahoma. It must have burned out in the rough weather. Although it's a common part, there wasn't one to be found in the area. Enough was enough. They hopped on a commercial flight and went home.

About a week later, Vanderford got another pump and a fuel-flow meter and went back to Santa Fe with Morgan to complete the last leg of the journey. Taking only a few minutes to install the meter and the pump, Morgan and Vanderford left for Prescott at 7:30 a.m.

Cruising at 10,500 feet, they crossed over the Winslow, Arizona, airfield, switched fuel tanks and were met with another surprise: the engine spat three times and quit—dead as a hammer. Morgan, at the helm, yelled, "Where's that airport?" He made a great sweeping 270° turn and lined up with the longest runway.

This time the plane had enough momentum to taxi off the airstrip and up to a mechanic's hangar. They got out of the plane, a little unnerved, walked into the hangar, and found a mechanic with his head buried under the cowling of a Cessna 210.

"What can I do for you?" asked the mechanic, wiping his hands on an oily rag.

"Well," said Vanderford. "Did you hear us taxi up?"

"No," he said.

"That's our problem."

With the mechanic's help, they pulled the fiberglass cowl off and inspected the fuel system. Taking out the injectors they found no problem. Digging in deeper, they took the finger screen out of the fuel-injection metering body and discovered a glob of paint chips and something that looked like mouse hair—more fuel contamination from years of storage. They cleaned and replaced the screen. After pumping fuel through the system into a five-gallon bucket they couldn't dredge up any more mouse hair or the like.

The two pilots fueled the 200E in Winslow and decided to skip over Prescott, making their next fuel stop in Lancaster, California. Vanderford also restored some radio communication—not much, three miles at the most.

Leaving Winslow, they began the long cruise to Lancaster at 10,000 feet. The fickle bird ran well: They dodged rain showers and thunderstorms; basically having a good time. When they got within three miles of Lancaster, Vanderford contacted Fox Field. The tower recommended a straight-in approach.

Because Fox Field is only 3500 feet above sea level, Vanderford and Morgan had to lose altitude fast. At 10,000 feet, they cut the power and raised the nose so the gear would go down. "No sooner did we start our descent when that motor quit again," said Vanderford. "There was no real concern because we actually were too high. I was more worried about overshooting the runway than not having power."

While Vanderford was busy dropping the barn doors to 40° to accommodate a straight-in approach, Morgan flipped switches, pushed buttons and switched fuel tanks to start the engine.

As Vanderford flared, the engine fired.

"Hell of a time for that to happen," exclaimed Vanderford. They throttled back the 200E in time to avert a propwash-related stall or overshoot the runway.

"At least we had enough power to taxi to the gas pumps," said Morgan. They tore the fuel system down again and examined the finger screen. Clean as a whistle. "I have yet to figure out what caused the engine to quit over Fox Field," said Vanderford.

While Morgan and Vanderford tore into the fuel system, the weather quickly deteriorated. They were weathered in for three hours. When it began to break up, a pilot in a Cessna 310 took off and reported that it was clear on top.

Vanderford has owned three Meyers aircraft, including a 200D (left), 200E and a wrecked D model.

The 200E jockeys started their engine and brought it up to full power several times. Detecting no problems, they decided to go. Heading toward the west, they tucked up the gear and proceeded to conquer the Tehachapi Mountains.

On this last leg of the journey home, they climbed to 10,500 feet. The plane ran like a top until they reached Merced, California, where it hesitated and coughed a little. But, the engine smoothed out and ran well all the way back to Yuba City, California.

Vanderford said it felt good to touch down on the runway at his Yuba City ranch. After a smooth landing, they taxied toward the hangar that Richard Bach's former airplane would be sharing with the Meyers 200E. Suddenly they heard a distinct knock and later a grinding noise. Vanderford looked at Morgan: "What now?"

They stopped the plane by the hangar and got out to see what happened. A cotter key sheared on the right maingear, allowing the wheel to slide around on the bearing. As a result, brakes failed.

The six-place 200E was to crown the Meyers line, but never completed the certification process.

Staring at the wheel that was cocked to the side like a mutt-dog's ear, Vanderford kicked at some gravel that lie under his feet.

"I guess we made it," said Morgan.

"Never a doubt," replied Vanderford.

A hangar party started that afternoon and went on late into the night as more and more friends poured in to welcome the pilots home. But, this long flight home was only a prelude to the many hours that will be spent restoring the only Meyers 200E.