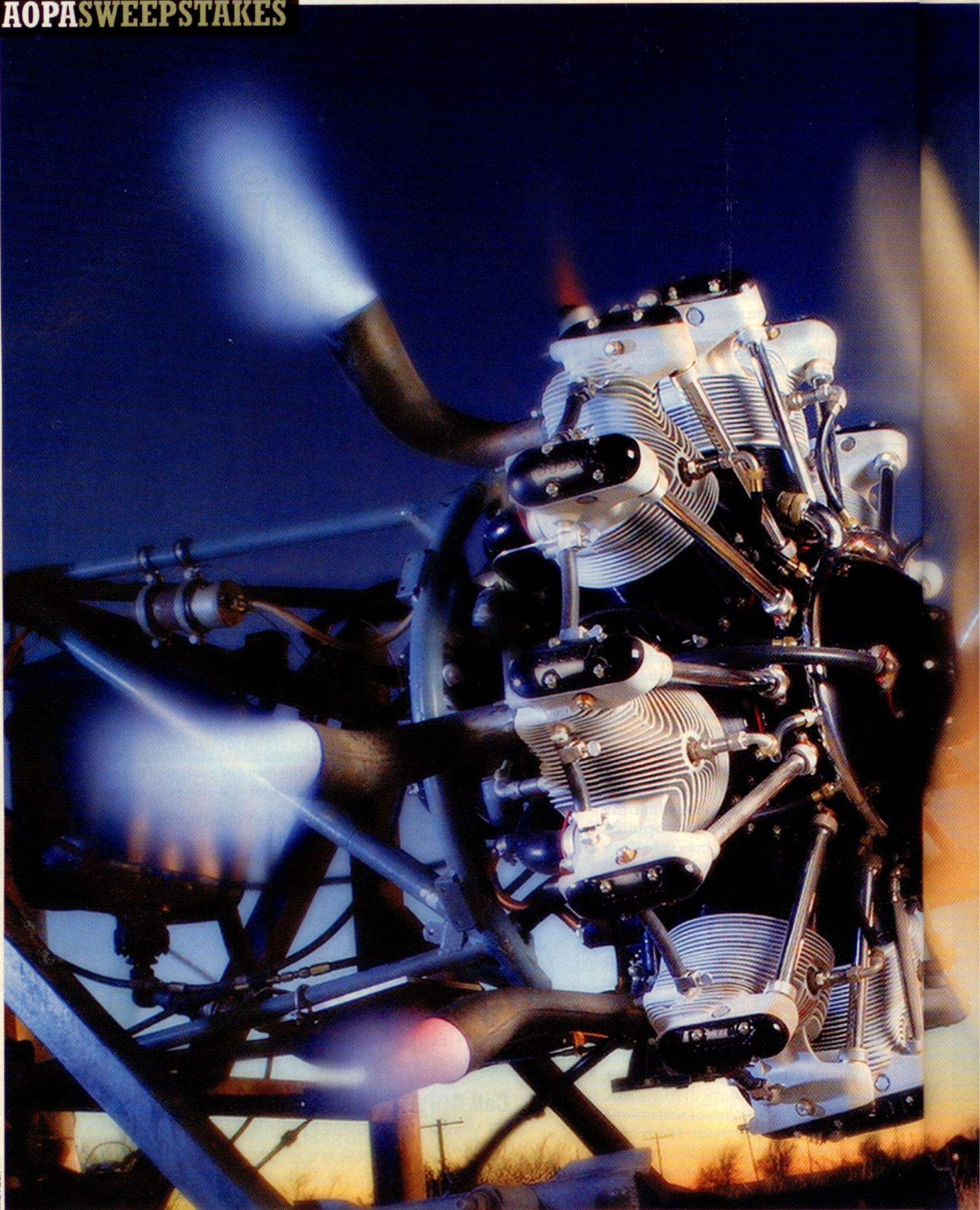


# AOPASWEEPSTAKES



MIKE FIZLER

# We have an engine!

Engines grow on an Oklahoma farm

BY ALTON K. MARSH

**Y**es, we have an engine to hang on your Waco UPF-7 airframe. It was built at Radial Engines Ltd. near Oklahoma City. Like Rare

Aircraft—the restoration company in Owatonna, Minnesota, that is restoring the AOPA Sweepstakes 1940 biplane—Radial Engines is a family-owned and -operated business. This story is really about Radial Engines' owner Steve Curry and how he realized his dreams as an aviation enthusiast.

As this is written, the 275-horsepower Jacobs R755-B2 is roaring away on a testbed built on the back of a truck, drowning out the call of cattle from the nearby ranches, but at the time of my visit in January it was still in pieces.

## Getting there

How do you find Radial Engines? Getting to Oklahoma City was the easy part: The airlines did all the work. But Radial Engines lies 25 miles northwest of the city on a farm. My first attempt to find it dead-ended into a road appropriately named Waterloo. I followed my Waterloo six miles the wrong way until some cowboys at a gas station next to a saddle-and-tack shop herded me in the right direction.

There it was, down a dirt road behind a pink-and-green 1895 farmhouse in the ghost town of Navina, whose other buildings have disappeared. The barn is full of radial engines—so's the chicken coop. But not the grain bin: It's full of cylinders.

Toto the dog, friendly but uncooperative when it comes to taking his picture, monitored my arrival as I explored the barn and found a Piper Pacer—its



wings removed—that is powered by a Ford Taurus V-6 engine. Finally the cold air drove me toward the warmth of two large metal buildings behind the farmhouse where 15 employees rebuild Jacobs, Lycoming, and Continental radial engines. That was the day they started work on AOPA's

Waco UPF-7, an aircraft originally powered by a 220-hp Continental radial engine. Once souped up with the new engine, it will have improved takeoff performance but may not cruise much faster than its 99.9-kt cruising speed with the standard engine. Since our engine has a constant-speed propeller, however, there's hope. It burns about 14 gph and uses a four-gallon oil reservoir.

Entering Radial Engines, I found Curry seated across from his son, Caleb, the general manager. Out back among the staff were two former restaurant managers, a forklift salesman, a former high school drama teacher, an auto body shop owner, and a farmer; all have become highly trained radial-engine craftsmen. The engines they rebuild ruled the skies in the 1940s and 1950s. Jacobs Aircraft Engine Company, located in Pottstown, Pennsylvania, was among the leading manufacturers, building engines from the late 1920s to the 1960s. Early engines were built in Camden, New Jersey, prior to moving to Pottstown. Parts are getting more difficult to find, so some are now manufactured by Radial Engines.

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### The engine begins

"One thing about my company—we're all stuck in some other era," Curry began. "We live on the edge of a ghost town, we gold mine, we live in another era." More about the gold mine later.

Out in the shop, the AOPA engine sat as a collection of small parts on a tier of shelves. By the following afternoon it would begin to look like an engine as John Port, the former high school drama teacher and a professional actor, first built a rose-shape collection of link rods. Under the watchful eye of Port and shop foreman Mark Yost, I would also tighten the very important crankshaft clamp bolt—something I will remember warily as I start the engine for my first flight.

The office lights dimmed each time an air compressor came on as Curry's story unfolded. His passion for old airplanes has led to the realization of

many of his dreams. "It's a hobby that just really got out of control," he said.

He started out as a heavy-line mechanic for the Ford Motor Company in Oklahoma City, working on truck engines, vehicle rear-end systems, and transmissions. An old-airplane enthusiast but not a pilot, he bought a Stearman for restoration and parked it in his driveway to the consternation of neighbors and city fathers. He started the restoration by doing something he knew how to do, and overhauled the engine in the study with his wife's indulgence.

**Steve Curry's Radial Engines Ltd. (bottom) is located on the edge of Navina, a ghost town in Oklahoma (below).**

People came to him with requests for more engines (that's right, they just came to him), so



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he sold the Stearman airframe to finance his new business, hired an employee, moved the operation from the study to an industrial park, and in 1981 his company was born. Then he had a dream. What if his home and business were in the same location so that he could walk out the back door and be at work?

### New site planned

With his daughter, he searched the countryside until he found his farmhouse on

15 acres that the bank was selling for \$30,000. The house is the only one built on the property since the land was claimed in the 1889 Oklahoma land rush.

"Out the back door isn't as cool anymore," Curry said. "It used to be a quiet place to live. Now UPS and freight trucks arrive all day, and the grandkids are playing in the driveway when a UPS truck comes flying through. Also, we used to rev up an engine at full power once a week. Now it's every three days."

So Curry has a solution. He is building a new site for his factory and a 2,600-foot sod runway beside it only a mile south of

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his home. The present six-room factory will become his personal "play area" where he will rebuild aircraft, like that Spartan 7W Executive sitting on a trailer out front. Sometimes people trade in airplane projects for engines, and that is how he has acquired and sold seven classic and antique aircraft.

Now he sells radial engines all over the world—14 nations in all, England most recently. Asked to drop a few names of famous customers, Curry came up with astronaut Frank Borman, country music star Aaron Tippin, and vacuum king David Oreck. He also sold the engine used by author and AOPA contributor Stephen Coonts to fly a Boeing Stearman around the country with his son, a journey resulting in the book *The Cannibal Queen: A Flight Into the Heart of America*.

### The treasure hunt

The AOPA engine was overhauled by the military in 1943, pickled, and put into a crate where it remained until called to serve the sweepstakes Waco. It had 1,100 hours on it and had never been overhauled. Curry's crew cleaned and inspected the parts, magnafluxed them, and provided new linkrods and pistons manufactured by Radial Engines. If AOPA had not bought it, the engine might have ended up on a Cessna T-50 Bamboo Bomber, Curry said. It was part of the original Jacobs inventory that was eventually acquired by Radial Engines.

It's rarely that easy to find an engine. Curry has to scrounge America for parts, such as those he finds on old military bases, but America is nearly scrounged out. That's why he has people in Mexico

**Curry discovered engines and parts that in 1947 belonged to the Royal Canadian Air Force in a bunker in Decatur, Illinois.**



looking for World War II airplanes and parts. Much of the U.S. surplus went to Mexico following that war.

Five semitrailer loads of engines and parts came from a bunker in Decatur, Illinois. They had traveled from Pottstown to the Royal Canadian Air Force in Winnipeg, Canada, and back to a leased bunker by 1947. They sat there undisturbed until Curry and his son braved tons of dust to remove them.

His engine-hunting skills have paid off. While working the crowds at Oshkosh one year, he purchased a 1927 two-cylinder 25-hp Jacobs B-1 engine, one that apparently was meant to power inexpensive trainer aircraft. It is believed to be the oldest example of a Jacobs engine still in existence.

#### Future projects

Curry calls the parts side of the business Vintage Aero Parts; parts are either original or made by his firm. The catalog covers 72 pages, but will soon grow. He has redesigned a piston for the Jacobs L-6 330-hp engine and expects FAA approval for the part this summer. He expects the new part will "revitalize" the engine that was popular in Canada but never caught on in the United States. It is used on the Cabin Waco, Beech Staggerwing, and Cessna 195.

He is also testing a new fuel-injection system for 275-hp Jacobs engines like the one AOPA purchased. The system will boost the horsepower to 320 and yet operate with one gallon less fuel per hour. Curry expects it will speed up the Cessna 195 and should be ready for sale this summer.

Wait, there's more. Curry also sells a cutaway radial engine that can be motorized to demonstrate the moving parts. He has already delivered a few of them.

#### That gold mine

Curry's business is a gold mine, but that's not the one he talks about most. He bought a real one, albeit a worked-out claim, because he needed an excuse to get back to see the mountains of his native Nevada. His mine lies in the middle of the Gold Button gold field, the last big strike in the United States, where \$20 billion in gold was taken from a four-square-mile area.

A town called Goldfield, Nevada, sprung up overnight and housed 35,000 people. Curry said Wyatt Earp, who lived until 1929, was the sheriff. The hotel,

built in 1908, was the largest west of the Mississippi and east of San Francisco: The four-story structure had the first elevator in Nevada. It declined in the 1920s and closed in 1935, but still stands today.

Curry said he gets out to inspect his claim three or four times a year. He has found no claim jumpers yet, so he spends most of his time there fishing and hunting. Like the town where Curry lives, the town where he plays is a ghost town.

AOPA

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