

Baumann's Typhoon II is outfitted with a 40-hp. turbine and hydrostatic transmission.

## "One-Of-A-Kind" 8N Tractor Donated To Museum

By Lorn Manthey, Contributing Editor

An Indiana museum dedicated to early Ford Motor Company trucks and cars is also home to the world's most unusual 8N Ford tractor. The "Typhoon II" is an amazing resto-mod fitted with a turbine engine and a hydrostatic transmission.

The tractor was imagined, designed and built by Marvin Baumann, a retired Michigan engineer and lifelong Ford tractor enthusiast. Baumann had previously restored and rebuilt several 8Ns with Chevy, Ford and Chrysler engines over 10 years. One of his project tractors was the "Fourtrans," configured with an intricate quad transmission. He also restored the oldest known 8N in the country, serial number 275 out of more than 500.000 built, and donated it to the Indiana museum. In 1998 Baumann decided his next project would be "even more challenging than previous ones". That line of thinking ultimately produced the world's "one-andonly" turbine-powered 8N Ford.

Baumann says he became fascinated by turbine possibilities for an 8N when he learned that Chrysler and other companies had explored turbine power in the 1950's. He also learned that International Harvester had built a turbine concept tractor. His search to locate a turbine for his tractor brought him to Avon Aero, a Danville, Ind., company that specialized in jet engines. There, an engineer told him that a 40-hp. Garrett Model GTP 30-67 turbine that ran at 56,000 rpm's might work. Its speed was geared down to 8,000 rpm's for use with an Air Force auxiliary power unit that ran 20 kW, 400-cycle generators. Baumann figured he could use it to create an "electric" 8N, but he changed course after finding too many technical issues with that idea.

His next option was hydraulic power, however that too seemed out of the question when a hydraulic engineer told him he'd need at least a 50 gal. oil reservoir. Baumann says that obviously wasn't going to work, so he visited with Ron Gerber, his local New Holland dealer's service manager, who suggested that a hydrostatic transmission from a Model 1630 compact tractor would suit his needs. The 1630 was similar in size to the 8N and used just a 5-gal. reservoir.

Baumann had to gear the turbine's 8,000 rpm's down to the 1,800 needed to operate the hydrostatic. Eventually, he and his nephew Derek Cole along with K&J Fabrication solved that issue, using a gearbox from a B-52 bomber wing flap that Baumann had acquired earlier. The aluminum generator and motor housings were resized and welded together, and shafts



Dash has switches to operate the jet turbine.

were cut to match the housings. They devised a chain and sprocket system to achieve the final driveline speed.

The tractor frame, axles and driveline were modified, a new battery box was designed to hold two 12-volt deep cycle marine batteries, the fuel tank was relocated to the rear of the tractor and the hood was reconfigured and lengthened about 9 1/2 in. A large opening was cut in the grille for the turbine exhaust.

When he first started the turbine, Baumann says it roared to life, but only produced about 70 percent of the required power. He

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renew yo a FR had to replace a pneumatic thermostat, a fuel atomizer and a fuel control unit. With the rear end of the tractor up on blocks, Baumann fired up the turbine again, engaged the transmission, and the wheels turned. After he lowered it to the ground, his neighbor Tom Steinke stood by and applauded as Baumann drove his turbine 8N forward and backward in the yard. "It was quite a feeling," Baumann says with a smile.

To finish the project, Baumann primed, sealed and coated the 8N with acrylic paint, synthetic enamel hardener and custom lettering. For safety, he added a carefully placed metal shield around the turbine and wrapped it in a high-tensile blanket.

Baumann says even though the project required 18 mos. and hundreds of hours to complete, it was extremely satisfying, and he never lost hope that it would be a success. He chose the name 'Typhoon II' after he learned that Ford had built an experimental gas turbine tractor in 1957 and named it the Typhoon. It was built on a stretched Ford 9000 frame and had a 100-hp. gas turbine that ran at an astounding 45,000 rpm's. The tractor never saw its way into the revered Nebraska Tractor Tests and was never put into production. Reportedly it was dismantled in 1978.

Baumann showed and drove his Typhoon II at parades and shows where kids and young people were in awe of the loud turbine. He laughs as he says old-timers were often upset that he'd ruined a perfectly good farm tractor with the unusual modifications.

Baumann says he decided to donate the tractor to the V-8 museum rather than sell it to an individual collector because the turbine's high rpm's made it dangerous to operate. The Typhoon II now resides with another Baumann restoration, the oldest production 8N in existence, at the Early Ford V-8 Museum in Auburn, Ind. Thousands of visitors admire both of the 8Ns every year.

Contact: FARM SHOW Followup, Early Ford V-8 Museum, 2181 Rotunda Drive, Auburn, Ind. 46706 (ph 260-927-8022; www. fordv8foundation.org).



Frame and hood had to be extended 9 1/2 in. for the turbine and transmission.



Baumann restored the earliest known 8N in existence, serial number 275, to its original "new" condition, then donated it to the Ford V-8 Museum in Auburn, Ind.

## **Retired Engineer Became A Ford Tractor Expert**

"I've lived in Michigan my entire life on the farm my ancestors settled in 1845, and I've always enjoyed Ford tractors," says retired La-Z-Boy engineer Marvin Baumann. "After retirement, I became interested in restoring Ford tractors. I had an 8N on my farm, and when I attended shows, I realized people really liked the Funk Ford V-8 flathead conversion kit. That's what got me started."

Baumann couldn't find a Funk conversion kit to work on, so he put a 350-cu. in. Chevy V-8 into an 8N. Showgoers praised his work but wondered why he didn't use a Ford V-8. He solved that the next winter by retrofitting an 8N with a Ford 351-cu. in. Windsor engine followed by another one powered by a 318 Chrysler V-8. From 1993 to 2003, he restored or rebuilt 23 tractors, and all but three were Ford 8N's. His last rebuild was an 8N with serial number 275, the earliest production 8N known in existence from more than 500,000 built.

While working on tractors, Baumann visited swap meets, tool shows, flea markets and other events to collect Ford manuals, books, and automobile, truck and tractor hand tools. That hobby evolved into compiling and selling original tool kits to fellow Ford collectors.

Now 30 years into retirement in 2022, Baumann has liquidated his Ford tractors, parts and memorabilia. He's currently working on a Farmall Cub, and possibly other small tractors are ahead.

"I had accomplished everything I wanted with Fords, so it was time for something different," says Baumann.

Baumann's website has extensive writeups and technical information along with pictures of his work on Ford 8N tractors.

Contact: FARM SHOW Followup, Marvin Baumann, Monroe, Mich. (www. marvinbaumann.com).

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