

BY BUDD DAVISSON

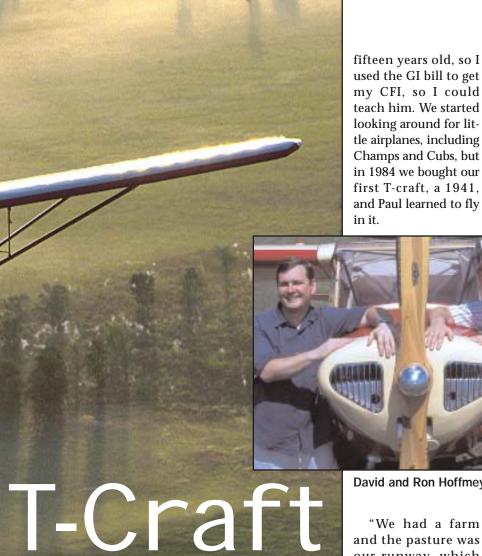
s a breed, Taylorcrafts are definitely coming into their own. Even though they may have been one of the last classics to hitch a ride on the restoration bandwagon, more and more are showing up at fly-ins once again dressed in their Sunday-goto-meeting duds. Ron Hoffmeyer's 1946 BD-12D, which was destined to be based on his farm in Evart, Michigan, is one of those. However, the little airplane had more than its share of life's problems and the road it traveled to Sun 'n Fun 2003 was a rough one. In fact, both the airplane and Ron Hoffmeyer have stories to tell.

Like so many others during the 1960s, Ron was a member of the ROTC while in college at Michigan State. He had opted to try for flight training, which meant that during college he had to take thirty-five hours of flight training. So even though he was bound for some sort of whiz-bang U.S. Air Force airplane, he took his first steps into the air in a Piper Colt. A side effect of that kind of training was that rag and tube airplanes were central to his aeronautical core, something that would surface many years later.

As was the case with most pilots trained during that period, it was only a matter of time before he found himself looking down at the jungles of Vietnam. However, Ron had a great seat for the role he was about to play in the drama around him.

"When I graduated from flight school, the usual pipeline was to fly one of the older airplanes then move up to the newer ones. That changed just about the time I got my wings, however, because they put me right into an F-105, rather than having me work my way up through F-100s. It was a terrific thrill to strap on a 'Thud.' Especially since I was a kid just out of flight school.

"I spent most of '68 and '69 flying out of Korat, Thailand, with the 34th Tactical Fighter Squadron carrying the war to North Vietnam against some of the heaviest de-



David and Ron Hoffmeyer.

fended targets. We were always dodging SAMs, MiGs and triple-A. I flew a total of 146 missions."

As soon as he got out of the service he started flying light airplanes again although he stayed in the Air National Guard for 28 years.

"In '72 I started flying for Eastern Airlines but was also working my way up through the Guard and made it sort of a side career."

As part of that "side career" Ron became the squadron commander of an air-refueling unit first flying KC-97s, and then moving into KC-135s.

"During the first Gulf War, we were flying out of Abbu Dabe. We were constantly up there as a gas station in the sky keeping everything else flying."

"My son, Paul, started showing some interest in flying when he was

"We had a farm and the pasture was our runway, which was perfect for the T-Craft. That was my first taildragger and I

really came to love it. I still think the Taylorcraft is the most under-appreciated of the classics. It gives good cross-country performance and is faster than almost all of the 65-hp airplanes. I think it's a great all-purpose flying machine.

"That first airplane was Franklin powered, and was very smooth and nice flying, but over the years, it had been neglected. Rather than change the engine or rebuild the airplane, we decided we'd keep that one flying, but get another one to rebuild. Paul did that first one, a '46 model, and he put it in my name.

"In 1993 I started going through chemotherapy, which grounded me for a while and was pretty hard on my spirits. I had to get my head into something, so I decided I'd rebuild a Taylorcraft for therapy and put the airplane in Paul's name. Somehow, that just seemed fair."

Taylorcrafts are apparently something of a family tradition because when Ron started looking for a project airplane, he had to go no further than a cousin's garage.

"My cousin had the remains of a T-Craft and I say 'remains' because it had been burned. At some point in its life, it was sitting in an open hangar

and kids set fire to it just for the fun of it. By the time the fire department showed up, the only parts that were still burning were the tires. It was a terrible mess!"

Ron trucked what was left of the airplane home and spread it out on the shop floor to survey what he had.

"The wings were toast. The spars were charred and the aluminum ribs were

crystallized. The heat hadn't been too bad, so all the fittings were useable, but the tank was also no good."

It was obvious he was going to have to build new wings but he didn't even have anything to use as an accurate pattern, so he started from scratch.

"I bought some wings off a wreck that needed spars and a bunch of the ribs rebuilt. These were truss type ribs, not stamped aluminum, and I knew I could make those fairly easily. What made building new wings an easy decision was that I had an extra set of brand new, PMA'd spar blanks, ready to be trimmed and drilled.

"When I started on the wings I got a regular rib building routine going. There are fifteen ribs per wing and I'd do a wing a month, so I was actually moving fairly quickly."

Most airplane spars are nothing but boards with bolt holes in the appropriate places. Taylorcraft spars, however, are a little more complicated.



The basic VFR panel has a solid original feel, but has a few custom touches to suit Ron's taste.



"A lot of the spar bolts in a T-Craft go through big phenolic bushings that are pressed into the spar to help spread the load. I couldn't find any new bushings, and those I had were burned. So, once again, we had to make the parts. I used most of the steel fittings off the original wings, but the aileron hinges came off the lawn-dart wings.

"The fire also warped the original wing struts, so I had to make a new set. I got some strut blanks from Univair. I cut them and in about a week had the ends done and ready to have an approved welding shop TIG them together for me.

"Incidentally," he says with a grin, "rebuilding a burned airplane isn't something I'd do again, and it's definitely not something I recommend."

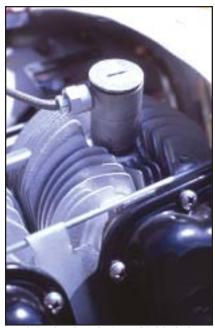
Although the fuselage is largely steel, that doesn't mean a fire does-

n't wreak havoc with everything around it.

"All of the aluminum on the airplane was crystallized, warped, or melted. I suppose I could have purchased some of the sheet metal parts and saved myself a lot of time, but I needed therapy, so I built it all, except the nose bowl. I rolled most of it, but the bottom windshield lip was made out of dead-soft aluminum and I stretch formed that."

Obviously, the fire eliminated the interior altogether and charred the floorboards, so everything inside had to be new.

"Most of the interior is a light tan aircraft wool fabric over a thin foam which is attached to plastic or aluminum backing. The baggage compartment and seat sling came from AirTex. For the seats, side panels, and glare shield I picked out the mate-



Back in the days before shielded plugs were widely available, "cans" such as these were used with unshielded plugs to minimize radio interference. These plug shields are pretty rare, and gathering up a complete set of eight can be quite a challenge.

rial and had an aircraft shop do the stitching and I did the installation."

Originality is fine, but for an airplane to be usable today, the restorer has to deviate once in a while, and this is usually in the area of radios and electrical systems. However, in Hoffmeyer's airplane, the deviations are hardly noticeable.

"The original Taylorcraft battery box is mounted ahead of the seats. It is just the right size to mount a 12-volt motorcycle battery. I use this to drive the nav lights and using an adapter, it also powers my handheld radio and GPS. I didn't try to put one of the old wind-driven generators on it because they slow you down about 5 mph in cruise. I just attach a trickle charge to the battery when we're not flying, which works fine.

"The original instrument panel was also fire damaged, so I found a beat-up instrument panel and welded patches in all the big holes. Then, I made up glove box doors in wood that matches the new floor boards."

It goes without saying that the original instruments were totally



Ron Hoffmeyer's sons, David and Paul, cruise along in their dad's resurrected Taylorcraft.

cooked in the fire, so Ron had to do some high-end scrounging to fill the panel he had just made.

"I collected instruments for something like six years trying to get the right mix. The oil temp is an original with the Taylorcraft logo and the oil pressure gauge, mag switch, and airspeed are correct for the year of airplane. I used a newer tachometer that has an hour meter in it and went to a three-pointer altimeter, which needs to be really short in length to clear the fuel tank. In general, I think the panel has the right look to it."

"We finished the first Taylorcraft in dope, but this time we went with Ceconite and SuperFlite's System 6 with urethane on top of that.

"The paint scheme isn't original, but then, we weren't trying to build an original airplane. We just wanted something that made us happy. For that reason, when we did the interior. we styled it to match the outside.

"I also added a skylight, which was done on a field approval. This adds a lot of brightness to the inside and improves visibility in turns.

No part of the airplane escaped the fire, which was constantly causing headaches right down to the wheels.

"The tires had burned hot enough that they actually melted the hubs, and I had to find another set of original wheels and brakes. I was just glad the wheels weren't fused to the axles."

As Ron began working ahead of the firewall, he found challenges that were even bigger than those behind it.

"The cowling was hard, but the aluminum heat shroud was the single hardest piece of the project. It's formed in two pieces that were probably originally stamped at the factory. I couldn't stamp them, so I made a mold and formed the two halves into it. They came out looking good and the heater works great. The shroud alone took two months.

"Although I'm an A & P, you really can't do an airplane like this without friends, and I had a couple of the best. I built up both the engine and the wings at a friend's house. John Yost was not only my A.I. but also a friend and teacher. He watched over and guided me every step of the way. Unfortunately, he suffered a fatal heart attack and never got to see the airplane finished."

"We started out with a pretty good engine, but I went with a freshly overhauled crankshaft and cam because I was planning on taking this airplane on a lot of cross countries. In fact, by the time we got to Sun 'n Fun, which is a pretty long cross country in a Taylorcraft, we had only fifteen hours on the engine. Four hours of the trip was in light snow, so we were sure glad to see the Florida sunshine."

"John Frieling, another A.I. friend, had done a lot of Taylorcrafts, and I went to him to help me with the covering and the paint. He was a huge help, and you learn so much faster when you're working with someone who has done it before. It's difficult to explain how much I learned from both John Yost and John Frieling. I would never be able to thank them enough."

"When it came time to put a prop on the airplane I went with my heart, not my head. I knew a metal prop would give me more rpm and more performance, but it just wouldn't feel right. So, I got a beautiful Sensenich wood prop. It's so beautiful that my wife made me a prop cover for it to protect it when at fly-ins."

"The airplane spent five and a half years in my garage. Some days I'd make a lot of progress. Some days none. But I kept hacking at it and it was the best therapy I could have found.

Ron did the first flight on the airplane and reports that it was nearly perfect with the wing rigging being almost right on. After getting back from Sun 'n fun, he did tweak one wing, but that was it. The little airplane accumulated 25 hours of flight time going to and from Lakeland.

"The little airplane cruises an honest 95-100 mph, which isn't bad for 65 hp and less than four gallons an hour.

"I was pushing hard to get the airplane ready to take to Sun 'Fun 2003 and barely made it. However, the airplane has been absolutely trouble free almost from the first time we fired it up. I flew it a few hours, and then we were ready to head south and escape what had been a bad winter. We'd earned a little sunshine."

Is he done restoring airplanes? Hardly. He says, "I think I'd like to find an L-2M and restore it into its original military configuration."

It looks as if Taylorcrafts have a way of becoming an addiction.