# TAYLORCRAFT WON'T QUIT



An old aviation tradition lives a threatened existence in Alliance, Ohio.

BY THOMAS A. HORNE

Walk through the doors at the Taylorcraft factory in Alliance, Ohio, and it is as though time has stood still. For decades, the workers there—all 17 of them—have been building the same old design, using the same old techniques and the same old tooling. Average age of the employees? "Oh, about 60 or 65," said company president Dorothy Feris. "All but three of them have been working on Taylorcrafts since the beginning, in the 1930s."

Feris inherited the presidency when her husband, Charles, died in 1976. "Charlie couldn't have picked a worse time to go," Dorothy told us. "I knew very little about the airplane business up to that time. All I ever did was pump avgas. But I sure have learned a lot since taking over."

Now she works out of Charlie's old office. Pictures of Charlie are on the walls. There is one showing him flying a B-24 with one of the engines feathered and another one with him in the cockpit of an old biplane, taken when he used to fly the mail out of Chicago.

There is a rash of other pictures spread all over, sent from Taylorcraft devotees throughout the world. "The Only Taylorcraft in England" is written across the bottom of one old photo. Pictures of restored Taylorcrafts are everywhere. Back by the portable typewriter is a poster of a man holding up a book entitled *I'm Gonna Bury You*. It is Gene Neill, we are told. He used to live a life of crime until he discovered the Lord and Taylorcraft.

This homey ambience permeates the entire Taylor-craft operation. Everybody knows everybody else from way back when. The employees have been working on these airplanes for so long that they do not need to be told what to do. They just come in to work and act instinctively. Their pride and skill is evident.

The Amish folk came to mind: Taylorcraft workers are a tightly knit group who believe in old-fashioned ways and build old-fashioned products. Watch them work and you come away with a new appreciation for the phrase "built by hand."

In one corner of the dingy cinderblock building, an ancient hydraulic press slowly stamps out aluminum shapes under the watchful eye of Herb Feris, Dorothy's son. In another section, Ben Johnson, Del Mc-







Del McCarty



Bill Tanner



Bill Thompson

continued

liam T. Piper. From 1931 to 1935,

Piper bankrolled Taylor's very suc-

cessful single-engine, 37-hp, two-seat

lightplane-the Cub. A creature of

the Depression, the Taylor Cub pros-

pered because of its simplicity, econo-

my and low price. But Taylor felt the

Cub could be cleaned up, made to go

faster and be more comfortable if a

few changes were made. This and

other issues caused a parting of the

ways between he and Piper. Piper kept



making Cubs, renaming them "Piper Cubs," and Taylor went his way.

Taylor formed the Taylorcraft Aviation Company and set up shop in Butler, Pennsylvania. There, the first Taylorcrafts-called Model As-were built. Taylor took the basic design of the Cub and streamlined it; the Cub's tandem seats were replaced with a side-by-side arrangement. A 40-hp Continental engine provided the power. This was the same engine that

powered the Cubs of the day, but the Taylorcraft could fly a few miles per hour faster. The airplane was an immediate success.

Taylor needed more space to build his airplanes, but the Depression was on and the price had to be right. The city of Alliance, Ohio, offered the old Hess "Argo" plant rent-free, and the move was made. One W.C. Young bought into the company, and by August 1937, the 200th "Taylor-Young"

# INSPECTION DEET, WILL NOT ACCEPT ANY PARTS WITHOUT THE PROFES CAPERWORK

Ken Luginbuhl

# **TAYLORCRAFT**



Ken Kilbreath



Dorothy Feris



Model A had been sold. Production was running at 75 airplanes per month. Back then, you could buy a Taylorcraft for \$1,495—\$495 down and the rest in 12 monthly payments.

A dealer at the Los Angeles Air Show of 1937 claimed that "selling Taylorcraft airplanes is like selling life preservers at a shipwreck."

In 1938, the "B" models came out, featuring 50-, then 65-hp Continental engines; Franklin and Lycoming en-

gines also were offered on later models. You either had a Model BC (Continental engine), a BF (Franklin) or a BL (Lycoming) aircraft. These airplanes performed better than the Model A and enjoyed the same success.

When World War II came along, the company built trainer versions of the Taylorcraft, known as the O-57 and L-2 to Army cadets.

After the war, production of the BC-12 began (the 12 stood for the

gross weight of 1,200 pounds). In 1946, an unprecedented 3,151 Taylor-crafts were sold.

And then the bubble burst. A shortage of engines brought a drop in orders. One thing led to another, and by November 1946, the company was bankrupt. The assets went up for sale at a public auction in March 1947. Taylor bought back his old company.

He renamed it Taylorcraft, Incorporated, and moved the plant to the

### TAYLORCRAFT

Home—just across the tracks at 14600 Commerce Street, N.E.



Conway-Pittsburgh airport in Pennsylvania. There, sales of B models limped along. Attempts to sell a four-place model (the Ranch Wagon) were less successful than expected. By the late 1950s, the once-popular taildraggers were not selling fast enough to justify their production. The remaining parts and tooling—along with the type certificate—were sold to the Univair Aircraft Corporation of Aurora, Colorado, which specializes in selling classic airplane parts.

There, the Taylorcraft languished until Charlie Feris came along. Feris, an enthusiastic Taylorcraft dealer, operated the airport at Hinsdale, Illinois. In 1965, he bought Univair's interest in Taylorcraft, left the fixed-base-operator business and moved everything back to Alliance.

The first Taylorcraft F-19s (the "F" is for Feris) rolled out of the factory in 1973 and met with a lukewarm reception. Feris discovered that the Taylorcraft had a dedicated, but small, group of followers.

The F-19 is a duplicate of the old B model, except for its 100-hp Continental O-200 engine and its higher gross weight (1,500 pounds). The new engine, together with the large wing area and low empty weight (870 pounds), give the reborn Taylorcraft nearly STOL performance.

Pilots operating out of unimproved strips in Alaska, Texas and Colorado provide Taylorcraft with most of its sales. At gross weight, the F-19 can take off and land over a 50-foot obstacle in just 375 feet.

Though the F-19 baggage compartment is placarded to carry 72 pounds,

the folks at Taylorcraft know that owners have found ingenious ways to overload the airplane. There are stories of Taylorcrafts being used to haul such things as kerosene, lumber and even horse feed. In many remote areas, Taylorcrafts serve as the family pickup truck.

In 1980, Teledyne Continental drastically curtailed production of the F-19's O-200 engine. Taylorcraft was faced not only with finding a new engine but with certifying its installation. Dorothy settled on the 112-hp Lycoming O-235 engine. The new airplane was designated the F-21.

The F-21 performs better than any other Taylorcraft. True airspeed at cruise runs as high as 104 knots, up from the F-19's 100. Takeoff and landing distances over the hypothetical 50-foot obstacle are down to 350 feet. The heel brakes have been replaced with toe brakes, incorporated into the rudder pedals. Useful load is down, thanks to the heavier engine, but the baggage compartment's capacity has been raised to 82 pounds.

The F-21's baggage area also has a whimsical new addition: a "fishing tube." This long cylindrical compartment (made from stovepipe from an Alliance hardware store) is designed to hold fishing rods or shotguns.

The F-21, just as its predecessor, can serve as a fine trainer also. At a reduced gross weight of 1,380 pounds, the airplane can be flown in the utility category, which allows spin practice. The controls are light and well-balanced, and stalls are very docile.

Economy, another feature of all Taylorcrafts, has not been sacrificed in the F-21. With a base price of \$20,750, it is one of, if not *the* least expensive new single-engine airplane on the market today, even with the annual price increases. Last year's F-21 would have cost you \$19,250.

"It's the engine and the accessories that are driving our prices up," said Dorothy. "Every June they jack up the price of the engine another \$500. I didn't want to raise the price, but I just had to."

One change that is in the works will help increase the F-21's utility. Two 20-gallon wing tanks will soon be available as an alternative to the standard system, which will increase usable fuel from 21 to 38 gallons. The present fuel system has two six-gallon wing tanks and one 12-gallon tank mounted just forward of the firewall.

At 65-percent economy cruise (i.e., 2,400 rpm) and 7,500 feet, the F-21 burns 5.5 gph; with the optional tanks, range will increase to 800 miles, almost twice the standard system's 378-mile range.

Tweaks like this, along with the optional navigation instruments, help to make a good airplane even better. But the airplane is not the problem. It is sales. In the two years since the F-21 came out, only 16 have been sold.

Recently, Feris had to lay off three employees. But the rest keep on making parts and building airplanes as though nothing were amiss. Though no orders have been forthcoming, the inventory of completed airplanes is growing. At last count, four were waiting to be sold.

Perhaps what Taylorcraft needs is for some high-powered New York ad-

### TAYLORCRAFT F-21

Base price \$20,750 Price as tested \$28,495 AOPA Pilot Operations/Equipment Category\*:

Sport/Special-purpose \$21,025 Cross-country \$28,050

Speci	ifications
Powerplant	Lycoming O-235 L2C
	118-hp @ 2,800 rpm
(takeoff pov	ver limit of five minutes)
	115-hp @ 2,700 rpm
Rec	ommended TBO 2,000 hr
Propeller	Sensenich 72CK-O-50
Wingspan	36 ft
Length	22 ft 2.75 in
Height	6 ft 6 in
Wing area	183.71 sq ft
Wing loading	8.17 lb/sq ft
Power loading	15 lb/hp
Seats	2
Cabin length	5 ft 8 in
Cabin width	3 ft 2 in
Cabin height	3 ft 9 in
Empty weight	990 lb
Useful load	510 lb
Payload w/full fuel	366 lb
Gross weight, Norma	al category 1,500 lb
Gross weight, Utility category 1,380 lb	
Fuel capacity, std	144 lb (126 lb usable)
	24 gal (21 gal usable)
Oil capacity	6 qt
Baggage capacity	82 lb (27 cu ft) total
	10 lb max in baggage
	extension cylinder
Perf	ormance
Takeoff distance (gro	und roll) 275 ft
Takeoff over 50-ft ob	st 350 ft
Max demonstrated cr	rosswind
component	12 kt
Rate of climb, sea lev	vel 875 fpm
Max level speed, sea	level 109 kt
Cruise speed, 75% po	ower

104 kt 7,500 ft Fuel consumption 39 pph/6.5 gph Cruise speed, 65% power 99 kt 7.500 ft Fuel consumption 33 pph/5.5 gph

Cruise speed, 55% power 7.500 ft

94 kt 29 pph/4.8 gph Fuel consumption Economy cruise speed, 50% power 7.500 ft 87 kt

336 nm

Fuel consumption 27 pph/4.5 gph Range @ 75% cruise, no rsv, std

fuel, best economy

7.500 ft

Range @ 65% cruise, no rsv, std fuel, best economy

7,500 ft 378 nm 18,000 ft Service ceiling 350 ft Landing distance over 50-ft obst Landing distance (ground roll) 275 ft

Limiting and Recommended Airspeeds Vx (Best angle of climb) 56 KIAS

65 KIAS Vy (Best rate of climb) Va (Design maneuvering) 75 KIAS Vno (Max structural cruising)

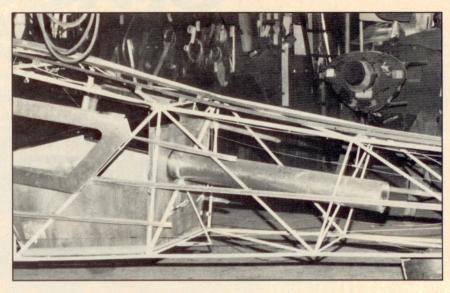
(Normal) 94 (Utility) 90 KIAS Vne (Never exceed)

(Normal) 118 (Utility) 123 KIAS Vso (Stall in landing configuration) 37 KIAS

All specifications are based on manufacturer's calculations. All performance figures are based on standard day, standard atmosphere, at sea level and gross weight, unless noted.

\*Operations/Equipment Categories are defined in June 1981 Pilot, p. 103. The prices reflect the costs for equipment recommended to operate in the listed categories.

## **TAYLORCRAFT**



This view of an F-21 fuselage without its fabric covering shows Taylorcraft's baggage-compartment extension tube, better known as the "fishing tube." Four feet long and six inches in diameter, it can hold fishing rods and a shotgun. It is practical (for a T-craft) and helps with the CG, too.

vertising genius to come to town and set things right. The way it is now, there are no advertising campaigns, no brochures, no photos, only six dealers and, consequently, little recognition. Pilots who have recently entered the aviation community are not aware that Taylorcraft even exists. A top-notch advertising campaign could solve the recognition problem and turn sales away from competing designs such as the Cessna 152, which costs \$3,450 more, is slower and has no character.

It should not be too difficult to promote an airplane like this. The F-21 is one of the best-built airplanes you can find. For the money, you cannot buy a better airplane. It is every bit as honest, unpretentious and hard-working as the people who build it.

Promotion is great in theory but unrealistic for Taylorcraft. The production facilities would have to be made more efficient to keep up with the sales generated by such a campaign. All this would cost too much. Maybe more important, it would change the way Taylorcrafts are built.

A diversified company like Cessna, Beech or Piper is better able to absorb losses. In a single-product company such as Taylorcraft, a sales slump is devastating. Some hard decisions will have to be made-and soon-if the company is to survive. There is talk of ending production and selling Taylorcrafts as kits.

There is one other big problem. Taylorcraft's employees are getting on in years, and young people are not dedicated, interested or patient enough to learn the techniques needed to build the airplane. Bill Tanner's hip is bothering him, and soon he will have to retire. When he goes, there will be nobody left who can build wings quite the way he does.

The town of Alliance is symbolic of Taylorcraft's precarious health. It is a grimy, smokestack community located smack in the middle of the "tool belt" that stretches from Detroit to Pittsburgh. The crippled auto and steel industries have wreaked havoc on the local economy. The national unemployment rate may be 8.5 percent, but in Ohio, it is up to 12 percent. A drive through downtown Alliance shows that many businesses have shut down.

At Taylorcraft, they are hanging on as best they can, determined to perpetuate their airplane. A poem on the office wall entitled Don't Quit seems to reflect the company spirit. The final lines read:

So stick to the fight when you're hardest hit. It's when things seem worst that you mustn't quit.

Meanwhile, the workers in the other room diligently build unsold Taylorcrafts. A stagnant economy may not reward craftsmanship, but Taylorcraft's people do not seem to care deep down inside. They will not quit because they are in a world of their own. You get the feeling that they are making the airplane more for themselves than for the rest of the world.