

Pilot Flight Check:

# The Taylorcraft F-19... return of a classic

by DON DOWNIE / AOPA 188441

■ ■ The runway ahead, just over the stubby nose of the new F-19 Taylorcraft, wasn't on any maps. It was simply a fairly smooth spot, some 1,100 feet long and 2,700 feet high, on a ridge in the foothills of California's Sierra Nevada. To a new fly-in visitor, the windsock and a Cessna 140, parked beside the unpaved strip, were welcome assurances that this was indeed an airport.

I squared away on approach for what would be my first landing in a Taylorcraft in nearly 20 years. After a lengthy hiatus in production, the doughty little craft is again being manufactured in Alliance, Ohio, its original home—and about that, more later.

Beside me in the right seat of the F-19 (which is a beefed-up, 100-hp version of the popular Model BC-12D) was Amelia Reid. Amelia (AOPA 170397) runs a flying school at Reid-Hillview Airport in San Jose ("Pop" Reid, who started the airport, is her father-in-law), and is a Taylorcraft dealer. Most of her more than 19,000 flying hours have been logged in taildraggers, 10 of which she operates for flight training.

"I usually keep about 60 miles an hour on final," Amelia commented, then lapsed into silence and let me work things out for myself.

The borders of the airport were not too well defined, as we pointed into the hazy, late-afternoon sun, but there was a clear approach from the low end of the runway—and a 1,000-foot dropoff into a riverbed if we overshot. Thus we were firmly committed either to land short or to initiate a go-around very early in our flare.

Our 60-mph approach speed was perhaps 5 mph fast, so there was a little float, but not much. I chopped the throttle and eased back on the nose, noting that visibility ahead in this attitude isn't the greatest in the world.

We thumped onto the runway. I tested the heel brakes for proper action and eyeballed the indistinct edge of the runway from around the corner of the cowling.

"You'd better add a little power before we come to a stop," Amelia suggested. "This side hill is quite steep, and it'll take almost full throttle to get to the top."

I applied enough power to taxi gingerly to the small plateau at the top of the runway, eased on one brake, and spun the little craft around to ready it for a downhill takeoff.

As we unfolded from the barely-large-enough cabin of the T-Craft, I couldn't resist saying to Amelia, "I'll bet you don't use this strip as a regular check-







Taylorcraft dealer Amelia Reid flies the new Model F-19 near Reid-Hillview Airport, San Jose, Calif. Photos by the author.

out for your students.”

“Not really,” she replied, “but if you can’t get a Taylorcraft in and out of a place like this, you really shouldn’t be flying it at all.”

The instrument panel of the new T-Craft can accurately be called “basic.” Standard instruments are oil temperature and pressure gauges, tachometer, airspeed indicator, insensitive altimeter, and ammeter. N3556T had a sensitive altimeter instead of the standard one, and in addition a turn-and-bank indicator, a Hobbs meter, and a Narco Es-

cort 110 nav/com. Navigation lights are standard equipment, but cockpit lighting and anticollision light are optional and were not on 56T, so we’d have to be down by 30 minutes after official sunset to remain legal.

Placards on the panel remind you: Airplane Marked for Normal Category Only; Acrobatics (Including Spins) Prohibited in Normal Category; VFR Day Only; No Smoking; Refill Main Tank in Level Flight and Only When Main Tank Is Less Than Half Full; Main Tank Usable Fuel 9 Gallons;

Auxiliary Wing Tank Usable Fuel 6 Gallons.

The T-Craft has a 12-gallon main tank that’s virtually in your lap. In addition, there are two six-gallon, gravity-feed wing tanks with on-off valves beneath the instrument panel. A Rochester fuel gauge, above the panel and beyond the compass, indicates fuel status.

The placard specifying nine gallons of usable fuel in the main tank would indicate that you’re always flying with three gallons unusable, but according



F-19 makes itself at home at Pop Reid's 1,200-foot Railroad Hill airstrip, in the foothills of the Sierra Nevada.



TAYLORCRAFT continued

to Amelia it doesn't work out that way. "I've always been able to get every drop of gas out of the main tank in level flight," she says. The nine-gallon restriction is put on to keep pilots from taking off and making steep climbs with less than three gallons remaining.

In an airplane like the T-Craft, there's not much to the pretakeoff checklist: check fuel, mags, carb heat; check for control freedom; set trim tab; go.

The little craft's acceleration was refreshingly rapid, as red mud spun off the tires and the tailwheel emerged from the Railroad Hill strip's damp clay surface. As soon as the tailwheel was airborne, I started to ease back on the elevators, and we came unstuck at about 40 mph indicated in ground effect. When the airspeed needle passed 60 mph, I started a very gentle, climbing right turn to take us out through a slot in the trees and on down the Mokolume Hill canyon.

N3556T had logged just over 250 hours since Amelia picked it up at the factory in Alliance, and it was well broken in. We were able to pull a full 775-fpm climb at 3,000 feet, with an outside air temperature of 40°F and a tailwind (downhill) component of about 5 mph. If I did much of this type of timber-touring in the T-Craft, however, I believe I'd install shoulder harnesses.

"The T-Craft is not quite as fast as a Cessna 150," said Amelia. "The specs call for a true airspeed of 115 miles per hour, and I believe that's about right. But the real payoff, with that fat, 36-foot wing, is in low stalling speed, excellent rate of climb, and a service ceiling of 18,000 feet."

You need appreciable bottom rudder on entering turns, because of aileron differential. During steep slips, we found that the Taylorcraft runs out of aileron while the rudder remains effective.

The new F-19 model is not approved for inverted flight but has been adapted as an excellent aerobatic ship with clipped wings, a single seat, and usually a larger engine. As is, in the light-weight utility category (1,380 pounds gross weight, as compared with 1,500 pounds in the normal category), you can legally do chandelles, lazy eights, steep turns, stalls (except whip stalls), and spins.

Following my mountain-ridge reintroduction to Taylorcraft landings, Amelia and I headed back into the sunset toward San Jose. By this time the T-Craft had burned off sufficient fuel to be in the utility category, so I stowed my cameras under a baggage tiedown strap and we sampled spins.



# TAYLORCRAFT MODEL F-19

## Specifications

Engine	Continental O-200-A, 100 hp at 2,750 rpm
Propeller	McCaughey 1A105SCM
Length	22 ft 1¼ in
Height	6 ft 6 in
Wingspan	36 ft
Wing area	183.71 sq ft
Wing loading	8.17 lb/sq ft
Power loading	15 lb/hp
Empty weight	870 lb
Gross weight	1,500 lb
Useful load	630 lb
Fuel capacity	24 gal
Oil capacity	6 qt
Baggage capacity	72 lb
Seats	2, side-by-side
Basic price	\$9,250

## Performance

Top speed	127 mph
Cruise speed (TAS)	115 mph
Best-rate-of-climb speed	70 mph
Stall speed (full gross)	43 mph
Range	400 mi
Fuel consumption (80 octane)	6 gph
Takeoff roll (full load)	300 ft
Rate of climb (1st minute)	775 fpm
Service ceiling	18,000 ft

Visibility over the nose of the aircraft is rotten just before the stall, but the break is smooth, with plenty of warning, and rotation is relatively docile. With the slightest relaxation of full back wheel, the ship pops right out. Our recoveries were all well below the 141-mph (136 in the normal category) redline.

"Want to see something interesting that happens only in these side-by-side models?" Amelia asked. "Put both feet on the floor and watch what happens, without touching the rudders."

She took her feet off the controls. "As the ship stalls, it will slowly start a spin entry to the right. It's always to the right. The spin will continue, with your feet on the floor, until you release just a little back pressure."

So we tried a no-rudder spin. The rotation was slow on entry but picked up appreciably as the spin progressed. After two turns had been completed, Amelia eased off slightly on the wheel and we were flying again.

"The only reason I know of for this," she said, "is the length of the fuselage and the slipstream from the idling propeller, which must combine to cause the ship to spin that way. I've never been able to do it with the tandem-model Taylorcraft."

Our nav lights were on and we were crowding the "day only" restriction as Reid-Hillview Airport came into view. The tower cleared us to land, and we slipped in over the brightly lit shopping center just east of the airport. The slip was not for the glamor of it: A standard T-Craft approach is out of a slip,

so that you can see the runway until just before touchdown. If the nose of the aircraft isn't in line on ground contact, you could groundloop.

Summing up my reacquaintance with the new-old Taylorcraft, it isn't—and never was—the easiest airplane in the world for me to fly. The rudders and brakes seem to me to be slightly toward the center of the cockpit. Thus, on one mountaintop takeoff I had my left foot over the lip of the rudder pedal rather than solidly in the slot, so there was some rudder-waving involved.

The Taylorcraft is noisy. There's no soundproofing, and that 100-hp Continental up front does make a racket. Headsets, earplugs, or cotton would be desirable on a cross-country flight.

The elevator trim is in the ceiling, as in older Pipers. You screw it "in" to make the nose go up, and "out" to drop the nose. Rudder trim isn't required, because of the very light control pressures, and any wing-heavy condition can be corrected, after a little while in the air, by draining fuel out of the heavy side. (Always remember to close those fuel valves at the end of your flight or, if the line boy fills all three tanks, you'll drain gas overboard from the main tank.)

N3556T had a spacious, plywood-covered baggage compartment, capable of handling 72 pounds of bulky cargo. Tiedown straps are provided, and a large window above the baggage compartment greatly improves overall visibility.

A quickly detachable headliner comes in sections to be snapped into place after an easy inspection. It's clean, efficient, and economical, but I doubt that it absorbs any cabin noises.

Perhaps it only happens in 56T, but Amelia commented on the considerable vibration as the 100-hp engine starts up and is shut down. In an airframe originally designed for 40 horsepower and later strengthened, you're well aware that there's plenty of power forward of the firewall for the 1,500-pound gross weight.

On the new F-19 model, #4130 steel tubing is used throughout the entire fuselage structure, providing a beefup of the aft section as compared with earlier models. Wing construction is a combination of stamped metal ribs and spruce spars.

All production Taylorcraft are covered with tried-and-true "Grade A" cotton fabric and butyrate dope. One of the two additional F-19s that Amelia has on order will be the first model to be covered with Ceconite at the factory, but no delivery date or cost figures have been announced.

Amelia considers that Grade A will last from six to seven years on aircraft

parked outside, "as long as the airplane is flown frequently to let the fabric breathe."

If you're an aviation history buff, you probably know that more than 14,500 T-Craft were built, into the early fifties, before production ceased. During World War II, the military L-2 tandem version was a popular scout plane, and the TG-6—in which a student's seat replaced the engine compartment—served well as a military training glider. (A number of TG-6s were later reconverted to the L-2 powered configuration.)

After the original Alliance, Ohio, factory went out of production around 1947, the aircraft had a limited production run in Pennsylvania under new ownership. Then the remaining parts were sold to Univair, in Denver, Colo., which in turn sold them to Charles Ferris, who had been one of the original Taylorcraft distributors. Ferris handled T-Craft parts from his own airport at Hinsdale, Ill., until 1967, when he sold the field. He then had the remaining parts and equipment hauled back to their original starting point, Alliance, where he formed the new Taylorcraft Aviation Corp. the following year.

At least half the 30 employees of the new company built T-Craft in the same town prior to World War II. "All our lead men and women worked here in the early days," says company president Ferris proudly.

The first Model F-19 ("F" is for Ferris) came off the production line in July 1973, and 35 have been delivered to date—the majority to Alaska, where the T-Craft is very popular among bush pilots. At the present production rate of 3 to 3½ aircraft per month, the factory now has enough deposits to keep going for a full year without a single new order.

At this writing all production aircraft must be flight checked, as a formality, by the FAA, but the company is in the process of obtaining a production certificate to eliminate this procedure.

Current price of the standard no-radio F-19 is \$9,250 (ELT \$119.95 extra); however, this figure is expected to rise shortly because of a substantial increase in the price of the Continental engine. The aircraft has a compartment for radio, and the company is now offering Genave's 200B nav/com as an option.

For Taylorcraft fans, the last line of the company's simple, two-page brochure says it all: "Taylorcraft's design remains unchanged."

If you fly in country where the timber is tall, the airports are small, and the density altitude is up in five figures, you're the kind of pilot best constituted to appreciate the return of this rugged little classic. □