

Budget Buys •

Swinging with the Swift

Rediscovering
a classy
dance partner

BY RICK DURDEN

In eighth grade you impatiently took ballroom dancing lessons but fell for rock and roll. As the years went by, you—like so many others—realized that there might be a little more to the steps you ignored in your youth, so you decided look again. You liked what you saw. So it is with pilots and the Globe/Temco Swift.

The true beginning of the Swift is a little fuzzy, although it is most likely that Rufus Johnson built a version of the two-seat, retractable-gear Culver Cadet at his home; modified it somewhat; and convinced a fledgling airplane manufacturer, Globe Aircraft Corporation, of Fort Worth, Texas, to manufacture it. Globe wasn't the most heavily financed company, so despite public awareness of the first Swift and several orders, certification was progressing slowly when World War II diverted everyone's attention. Globe found itself staying alive by building Beechcraft AT-10s under license, and bits of Curtiss Commandos and Lockheed Lightnings, while

PHOTOGRAPHY BY MARK SCHAIBLE





The good news is that the Swift is back, some fine ones are

for production of the Swift as soon as a degree of civility returned to the planet.

As the war wound down, Globe moved fast to modernize the design and advertise the resulting airplane. Demand initially was staggering, far beyond Globe's capability. The company was approached by Robert McColloch, head of a new company made up of the key people who built P-51s in North American Aviation's Grand Prairie, Texas, plant and found themselves out of work as war contracts were canceled. They formed Texas Engineering and Manufacturing Company (Temco) and were determined to stay in the airplane manufacturing business. The Swift, being nearly all metal, fit their background perfectly and a deal was struck to build it as well. Interestingly, Temco would soon add the Luscombe to the stable of airplanes it built.

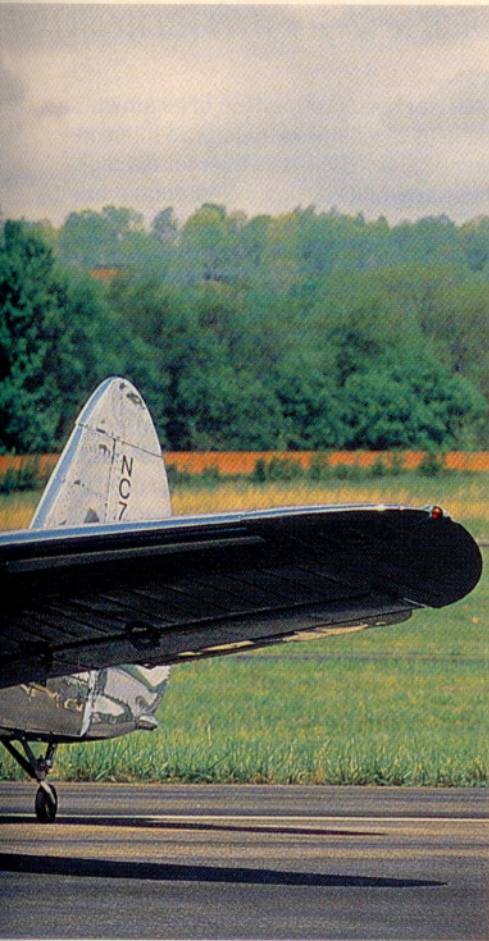
The first postwar Swift was the GC-1A, with only 85 horsepower but capable of a 120-mph cruise. Despite some notable shortcomings, not the least of which were atrocious short-field performance and the use of a full swiveling tailwheel that made any operation on the ground far more exciting than necessary, the GC-1A simply couldn't be built fast enough for the demand. Globe quickly dropped a 125-hp Continental engine into the airframe and added a steerable tailwheel, solving the worst of the GC-1A's problems, and the GC-1B was born.

As is now well known to any student of aviation history, the bottom fell out of the post-World War II boom by the end of 1946. For Globe and Temco things went sour fast. In 1946 the

management of Temco figured out that Globe had made a bit of an error in calculating manufacturing expenses and was selling the airplanes for some \$300 less than they cost to build. By the time the price could be set right, the aviation rumor mill was buzzing with nasty tales of the 85-hp GC-1A, and Globe learned what others would find out in later years: If the first version of an airplane gets a bad reputation, deserved or not, it is nearly impossible to live down, even if the problems are cured in the next model.

The combination of events, questionable management, and eventually a fight within Globe's boardroom took Globe into bankruptcy in early 1947, leaving Temco holding the bag for the more than \$1.3 million it was owed by Globe. Temco managed to obtain Globe's assets and completed airplanes. The next few years were a textbook exercise in good management and how to sell airplanes in troubled times. Temco put its own imprint on the Swift, primarily changing the rollover structure, hat shelf, and rear windows. The company then sold Swifts, Luscombes, and such other products that it could—including popcorn machines—at a profit.

Globe built 932 airplanes before it folded, although when the company was taken over by Temco, 210 unsold aircraft were still in inventory. Those airplanes ranged from a stage of metal just being cut and bent to finished airplanes parked and awaiting buyers. Temco did finish up a number of airplanes that started life as Globe aircraft, but Temco is also credited with building



That blinding glare off of the aircraft's aluminum frame is a sure sign that you're in the company of a Swift. The airplane's distinctive cabin canopy—which lifts up and forward—is another broad hint, although many Swifts have been modified with sliding canopies.



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589 airplanes. In the early 1950s Temco decided to get out of the general aviation manufacturing business and sold the Swift type certificate and tooling to Univair, a Colorado company that kept Swift owners supplied with parts until 1980.

A combination of an undeservedly bad reputation and a general falling from favor of two-place airplanes caused one of the most common sights at little airports in the 1950s and 1960s to be a forlorn Swift sitting in the weeds, quietly returning to its original bauxite. The fickle wave of aviation popularity had moved elsewhere. Nevertheless, there were a few who marched away from the crowd, owning Swifts because they liked airplanes with some panache. Univair experimented with modifications to overcome the distressingly high drag of the design, increasing the cruise speed. In 1968 Swift owner Charlie Nelson of Athens, Tennessee, organized what is now the International Swift Association to provide support for Swift owners. Combined with a renewed interest in sport aviation in the 1970s, a good support organization, and simple word of mouth that the Swift was underrated and underpriced, pilots again came to dance with the Swift.

In 1980 Nelson and the association pulled off a heroic accomplishment by raising the money necessary to buy the Swift type certificate and tooling when it appeared that they would be sold overseas. In rapid succession, everything was moved to McMinn County Airport in Athens, hangars were acquired, and a museum foundation was formed to be the parent corporation of the

owners' association and a separate parts corporation. A maintenance facility dedicated to rebuilding, repairing, and modifying Swifts, Swift Works, moved in some years later, now McMinn County Airport is the international repository of Swift knowledge, parts, and several airplanes, including two of the very rare tandem Swifts built for the military service and christened the Buckaroo.

The good news is that the Swift is back, some fine ones are on the market, and more are being restored all the time. The bad news is that the Swift is back, and prices are climbing. Some bargains can still be found among relatively stock GC-1Bs, which—depending on condition—will run anywhere from \$20,000 to \$50,000. But the highly modified, 210-hp, 160-knot Super Swifts have just crossed over the \$100,000 line.

So, is this an airplane for the pilot who wants something that isn't plain vanilla? Do not plan on merely walking onto the dance floor and cutting in, as you will be in for much unpleasantness. You must be introduced. The Swift seems to take delight in heading for the weeds carrying high-time pilots who did not bother to learn the airplane's wiles. You must ask someone knowledgeable in the ways of the Swift to ease you on to the dance floor and teach you the rhythms of your new partner. This is particularly important because the Swift has probably the largest number and widest variety of aftermarket modifications available of any production airplane.

Under the cowl of what started life as an 85- or 125-hp

Any pilot used to a modern airplane must mentally st

Swift you may find engines of 90, 145, 150, 180, 200, 210, or 220 hp; the canopy may be a clear bubble; the control wheels replaced with sticks; the leading-edge slots closed up; and the wing skins replaced with baby-smooth aluminum. Tail wheels have been retracted and main wheels made smaller; doors have been designed to cover the entire landing gear when retracted; the battery has been moved to improve weight distribution; the twist of the wing has been changed and fuel systems completely reworked. Be ready for dozens of modifications, and be willing to learn the intimate details of the partner with which you plan to take the runway lest you embarrass yourself grievously.

So, with the appropriate level of humbleness and willingness to learn, push the polished metal airplane from its hangar—but not by the fragile tail, please—and be prepared to look away, as the reflection of the sun from the shiny aluminum will dazzle you. Then take your time walking around, for the more you know of this airplane, the better. The tailwheel deserves attention. On the stock Swift it does not retract and the area has a history of corrosion.

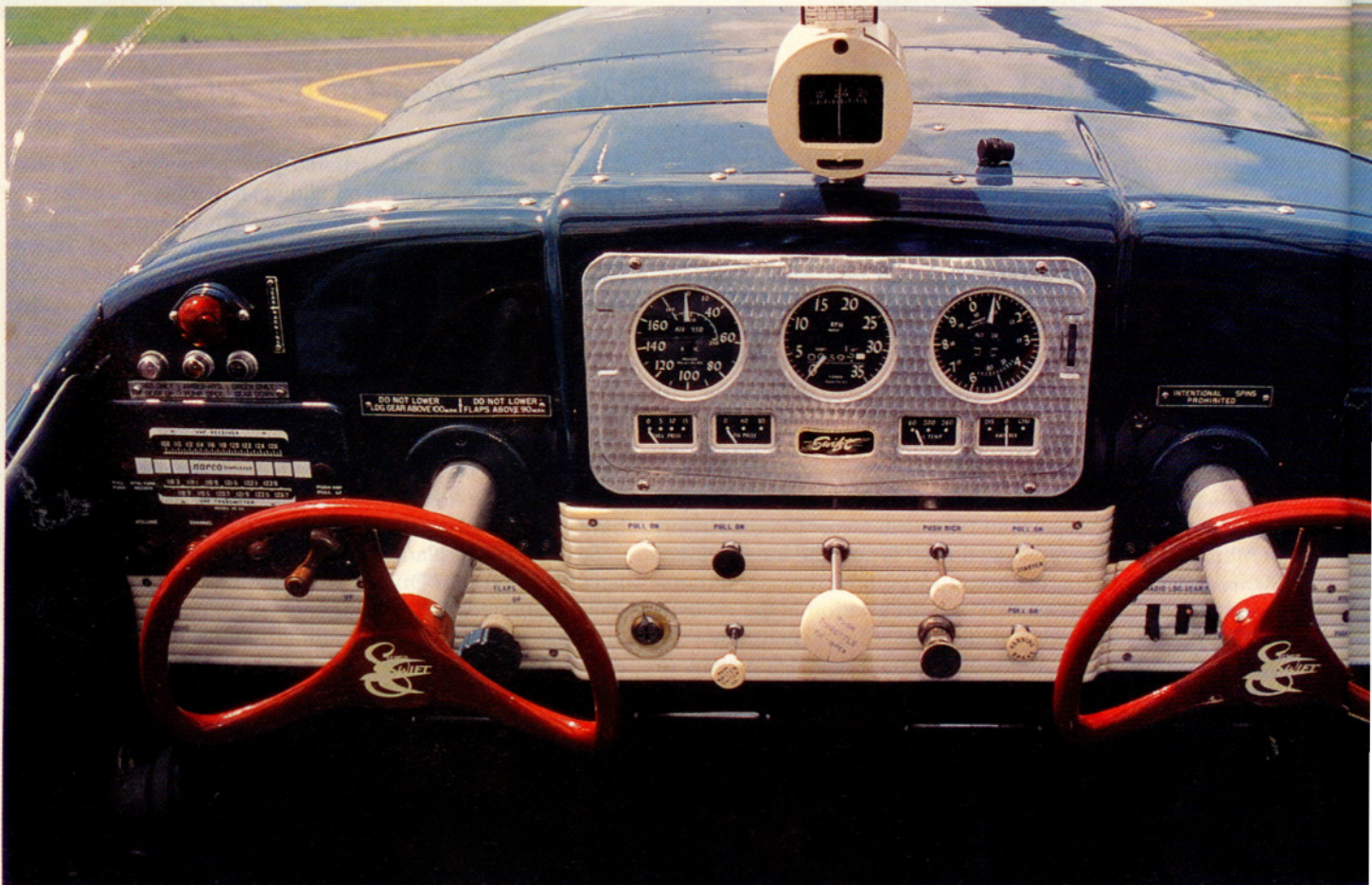
The slots in the leading edge of each wing should be open and free of debris. Among Swift owners there is some question as to their effectiveness. When Swifts are converted to big engines the slots are closed, for they are a source of significant drag. The pitot tube under the left wing is one of the longest and has one of the oddest shapes in aviation, the result of last-minute compliance with a Civil Aeronautics Administration (forerunner of the FAA) concern that the opening be in undis-

turbed air. Make sure it has not been bumped out of alignment.

Originally the airplane held 26 gallons of fuel in two interconnected tanks in the center section. The single filler for the tanks is on the left wing, and because of its design, water contamination in the fuel of a Swift is a rare event. Nevertheless, one must get down and under to reach the fuel drains. The originals stuck down some distance and would break off in a gear-up landing, causing a very real risk of fire. A nine-gallon auxiliary fuel tank in the baggage compartment was an option when new, but for an airplane with a gross weight of 1,710 pounds and a useful load of about 460 pounds, fuel weight rapidly becomes an issue.

Check the down locks on the landing gear, then look in the wheel wells to make sure the cables for the emergency crank-down system are firmly attached. The top halves of the cowling open toward each other to expose the six-cylinder Continental and the draggy updraft cooling system. Because the 125- and 145-hp Continentals are identical in size, a significant proportion of stock Swifts have been upgraded to 145 hp. The hydraulic reservoirs for the brakes and for the gear and flap systems are on the firewall and easily examined.

For entry, the top of the cabin canopy lifts up and forward, while the two side windows slide down into the fuselage. Yes, the assemblage has leaked air and noise since it was new, and combined with a blunt windshield, is another high-drag item. However, with its sliding side windows, you can still get out if you betray the airplane's faith and flip a Swift over. The interior is less cramped than one may expect, although headroom is tight. The



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original bench seat is adequate but, naturally, there are a number of mods to increase space for the pilots, including the installation of seats from late-model Cessna 150s.

Any pilot used to a modern airplane must mentally stop and shift gears before going any farther in a Swift. Both gear and flap switches are directly in front of the pilot, below the control wheel. The gear switch looks as if it is the end-on view of a wing flap. There is no squat switch (of course there is a mod available), so the only thing that prevents retracting the gear on the ground is a small button that must first be pushed out of the way of the gear lever, and the mental acuity of a pilot who has been properly introduced to the switch. Naturally, to heighten the confusion, the flap switch is round, looks just like a wheel, and is located next to the gear switch. Even the master switch is a bit unusual; it is a knob, and out is on.

Starting is classic 1940s: The master switch is pulled on, the mixture control pushed to rich, and the throttle is unlocked by turning it counterclockwise and then slid to the desired position and relocked by rotating it clockwise. Fuel pressure is obtained by pumping on the wobble pump (or, if another mod has been installed, the electric fuel pump is activated), "clear" is bellowed, and the starter knob pulled. The little six reciprocates in a most satisfying manner, and it's time to taxi out.

Visibility over the nose to the pilot's right is poor. S-turning is needed to avoid running into anything smaller than a truck. On hard surfaces a little bit of brake is essential to successful taxiing; however, the wide track of the landing gear makes up for the

short distance back to the tailwheel, generating reasonably docile ground handling for the pilot who remains attentive.

Once runup is finished, the true Swift pilot makes one more check to ensure full rudder travel, for if there is a crosswind the relatively small rudder often means that full rudder deflection, and possibly some brake, will be needed on takeoff, particularly if the wind is from the left.

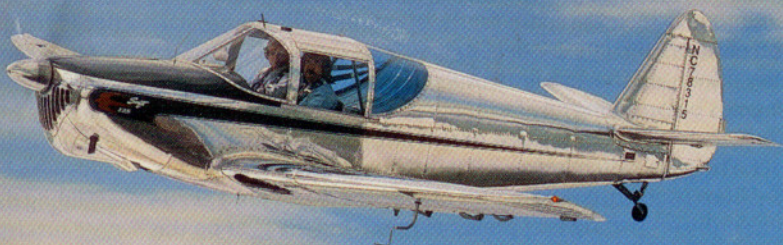
Sliding the throttle forward while determinedly keeping the nose precisely straight yields modest acceleration and the realization that a pilot must pay full attention during this part of the dance. At about 40 mph the tail comes up and the rudder becomes effective. As the music of the engine and the speed build, a Swift comes to life. There is a warm resilience to the controls, but the touch is feather light. Above 40 mph the rudder allows you to keep the nose exactly where you want it; you only have to be willing to take a firm lead. Fly off the runway at 70 mph, set up a climb at 80 to 85, and retract the gear when you are ready while you explore ailerons that seem to react to your desires rather than physical movement. You will also notice that the airplane waits for your command; it stays where you put it until you make a control input. The combination of stability and light, responsive controls makes the Swift a most capable IFR platform in addition to the joy it brings to VFR flight. Use of elevator trim is needed; frustratingly, the control is found on the ceiling behind the occupants.

Climb depends entirely on the engine installed; the stock airplane does not hurry to altitude. Leveling off, a Swift seems to



The cockpit of the Swift recalls an earlier era—it's vintage 1940. Pilots accustomed to newer aircraft may find it difficult to adjust to the Swift's old-fashioned controls.





continue to accelerate for a long time until a very nose-low attitude is achieved at 2,500 to 2,600 rpm and about 140 mph true airspeed. The airplane is not at all quiet. While insulation may help, it adds weight, so noise-canceling headsets are the best way to deal with the noise level.

Smooth pressure on the ailerons and rudder produces delightful, swirling turns. Steep banks can be maintained

with very little back-pressure on the yoke. So little, in fact, that the untrained or ham-fisted can inadvertently stall the airplane. The Swift rolls fairly quickly when it stalls if the ball is not kept absolutely centered. To recover, the angle of attack must be reduced significantly. A stalled Swift is in a very high-drag region of its envelope; it will not fly away from the stall just with application of full power. Slow

flight is solid and docile with good control effectiveness all the way to the stall. Aerodynamic buffet provides the only stall warning, but one must be attuned to it, as it is not pronounced.

Because of the peculiarities of the regulations under which the Swift was certified, it is approved for aerobatics but not spins. The Swift Magic, a wonderful team of three Swifts, has performed aerobatics at many airshows but given the very real concern with corrosion in Swifts, most pilots are reluctant to try tossing a half-century-old dancing partner into the air.

The Swift's behavior on landing is unlike that of almost all other tailwheel airplanes. In the pattern all is normal as the airplane is slowed to 100 mph for the gear and then 90 mph for the flaps. The hydraulic flaps extend to their full 45-degree deflection rapidly, with a notable pitch change. The flaps allow steep descents, and also cause rapid deceleration quickly when the power is reduced. The upshot is that the wheel landings we all struggled to learn when checking out

A tale of two Swifts

From problem student to head of the class

Scott Anderson was a behavior problem in fifth grade. His school was not far from an airport and, to his teacher's consternation, Anderson had to watch every airplane. His teacher, Mrs. Beach, was wise. She figured she would solve the problem by having her husband, a flight instructor, give Anderson a flying lesson. Anderson would get sick, lose interest in airplanes, and that would be that. Harry Beach had to use several pillows to put Anderson into position to reach the controls for his lesson in Temco Swift N78315. Anderson got a little nauseous, but he was hooked. Completely. Over the next several years Harry Beach gave Anderson lessons in that Swift whenever Anderson could save enough allowance money to buy the gas.

His parents' divorce took Anderson to Florida and away from flying for several years and delayed—but did not stop—his obtaining a private pilot certificate. Helping out a friend building a Glasair turned into full-time assistance and brought the money to buy his first airplane, a Cessna 140. While he liked the 140, the memories of those lessons he took in a Swift as a very young man remained powerful. While helping out on another homebuilt, he found and bought a 210-hp Swift and realized he had come home. A series of encounters with Vaughn Armstrong led to employment as a mechanic at Armstrong's company, Swift Works, when it was in Fort Lauderdale, Florida. Not only did Anderson find himself flying a Swift, he was working on them full time, a most satisfactory state of affairs. When Swift Works moved to McMinn County Airport in Athens, Tennessee, Anderson came along, and converted his airplane to a fire-breathing 160-kt Super Swift that won trophies from Florida to Wisconsin.

About three years ago Anderson sold the Super Swift. Sometime later he happened across a nearly stock GC-1B in sad condition. He bought it at the Swift



Scott Anderson

Association fly-in and promptly received the "dog" trophy for the worst airplane present. When he opened up the wings he discovered corrosion so bad that only a very few of the ribs and skin panels could be reused. For a year he worked on other people's Swifts all day long, and on his before and after work. He obtained a firewall, engine mount, and engine in excellent shape from a pilot converting his airplane to a Super Swift. It was the only thing that Anderson was able to simply bolt onto his own airplane; every other component had to either be reworked or scrapped. The entire landing gear proved to be junk and had to be replaced. He wanted to make the airplane as nearly the way it was when it came from the factory as he could. He found a very rare original magneto switch, one of the original gigantic magnetic compasses, and the very last original Swift instrument panel believed to be in existence. Anderson's hours of work paid off not because the airplane first flew again one year later at the fly-in where he had received the dog award, not because he received the best-of-show award at the fly-in, but because it was N78315—Harry Beach's old Swift. —RD

in tailwheel airplanes are surprisingly easy in a Swift. Full-stall landings are not, largely because of the rate at which the airplane decelerates, plus the fact that it is possible to run out of elevator effectiveness in ground effect. Few owners attempt them with any degree of regularity and most report that they cannot predict how they will result. While wheel landings can certainly go wrong, they are the more common method of alighting.

Considering a Swift? Most have been modified in some manner, the majority by adding more power. Because of the hiatus in interest in Swifts many are in bad shape, so a very careful prepurchase inspection is essential. Very few received any sort of corrosion-proofing at the factory and, 50-some years on, it shows. Corrosion is the worst problem facing Swifts. The prospective buyer must carefully check the center section, wings, and the area around the tailwheel. Fortunately, the fuselage does not seem to be as badly affected. More than a few Swifts have been damaged in landing or takeoff accidents, and the quality of repairs varied—as did the willingness to admit to such damage and repairs in logbooks—so the prospective buyer is wise to be cautious and have a knowledgeable mechanic look things over.

Anyone considering a Swift should immediately join the International Swift Association (423/745-9547) and get as many back issues of the newsletter as possible for the excellent technical information they contain. A visit to McMinn County Airport, the Swift Museum, and Swift Works is well worth the time and expense. Armed with some knowledge, going to one of the Swift fly-ins could result in your going home with a new, old airplane.

Is the Swift for everyone? Not at all. But for those pilots who want a sport plane that can go places, prefer an airplane with character and personality, are willing to do their homework when buying, and get a formal introduction before dancing, it can make them very happy.

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Links to additional information and performance specifications for Swifts may be found on AOPA Online (www.aopa.org/pilot/links.shtml).

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