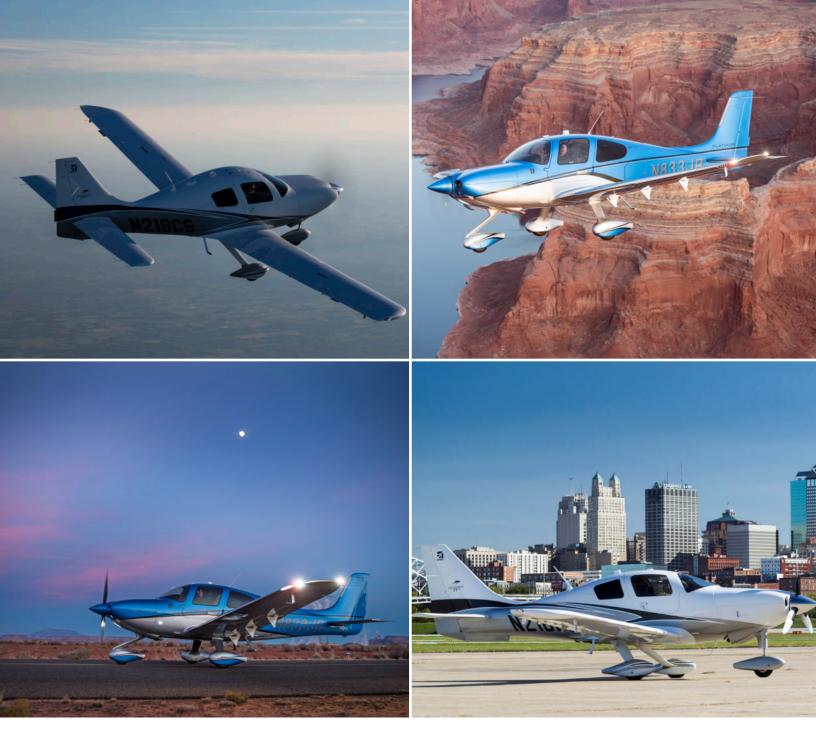
# CIRRUS SR22 G6 TURBO CESSNA TTX

3



#### 

There are exceptions, but airplane salespeople I know tell me that in the vast majority of cases, before someone buys a Cirrus SR22 or a Cessna TTx, they want to know about both planes. And in the last many years that these two birds have been battling side by side, I've gotten a lot of phone calls from people on the fence between these fast-glass, fixed-gear speedsters. I've written on the subject, and most of the folks I've discussed the question with have read my views, but something about due diligence makes them want to hear it out loud. Maybe they think I'm pulling punches for fear of offending readers who fly one or the other planes, but the truth is, what I've written is what I believe. These are two outstanding aircraft that will repay the big investment in comfort,

airspeed and the safety benefits that modern technology has to offer.

been in every one of the thousands of SR22s, SR20s and SF-50s the company has produced, offers an additional measure of confidence that the TTx doesn't. And for many prospective buyers, the chute is not only an operational consideration but an important tool for convincing significant others and employers that a single-engine airplane is a smart-enough investment. With the TTx, you just don't have that option.

Apart from that, it's pretty much an apples-to-apples comparison. Both planes have their strengths and a few features that could be improved upon.

There is one safety benefit that Cirrus offers that you can't get in a TTx:

the chute. Cirrus' whole-airplane-recovery parachute system, which has

So, what's it like to fly these two speedsters? Climb aboard as we put them through their paces.



## G6.WeFly ItFirst

## Perspective+: Brand-new Garmin glass for 2017

By Robert Goyer Photography By Scott Slocum

hen visions of glass cockpits dance in our heads, we personal aviation pilots usually think of the Garmin G1000 avionics suite, which for more than 15 years has been the de facto standard avionics package in the vast majority of new production Part 23 light planes. With the introduction of its best-selling SR22 G6 high-performance piston single, Cirrus has raised the bar in the category once again. And the way the company did it is surprising, though at this point maybe it shouldn't be.

ATINUM

The new model, which Cirrus has dubbed the SR22 G6, isn't a new airframe. It builds on the impressive incremental progress the company has made over the 15-plus years of production. The airframe is nearly identical to the G5 model introduced two years ago, so it features more carbon fiber than ever, taller gear, better lights, and more interior and exterior options. It has better seats, including the 60/40 Flex Seating that allows for a fifth passenger or split fold-down for hauling larger items. It has flight into known icing capability with

## Cirrus SR22 G6

### 2017 Cirrus SR22 G6 Turbo GTS Platinum Edition

The Cirrus SR22 G6 we flew for this report was a loaded 2017 model with the new Perspective+ by Garmin avionics suite with new keypad with QWERTY layout, autopilot controller, numerical array layout and more. Standard or optional equipment includes SiriusXM aviation weather and entertainment, Electronic Stability and Protection, terrain and traffic awareness utilities, flight into known icing TKS anti-ice system and more. Like all Cirrus aircraft, the SR22 G6 is equipped with a whole airplane parachute recovery system (Cirrus Airframe Parachute System, or CAPS).

- » PRICE AS FLOWN/BASE: \$889,800/\$639,900
- » ENGINE: CONTINENTAL TSIO-550-K
- » HORSEPOWER: 315 HP
- » **PROPELLER:** HARTZELL, THREE-BLADE COMPOSITE
- » LANDING GEAR: FIXED
- » SEATS: 4/5 WITH 60/40 FLEX SEATING
- » DOORS: 2
- » EMPTY WEIGHT: 2,270 LBS.
- » MAX. TAKEOFF WEIGHT: 3,600 LBS.
- » USEFUL LOAD: 1,330 LBS.
- » FUEL CAPACITY, GALS: 92 GALS. USABLE/552 LBS.
- » WINGSPAN: 38.3 FT.
- » LENGTH: 26 FT.
- » HEIGHT: 8.9 FT.
- » CABIN WIDTH: 49 INCHES
- » TAKEOFF DISTANCE: 1,517 FT. (GROUND ROLL)
- » MAX. CLIMB RATE (FPM): 1,203 FPM
- » MAX. CRUISE SPEED (KTAS): 213 KTAS
- » MAX. OPERATING ALTITUDE (FT.): 25,000 FT.
- » MAX. RANGE: 1,021 NM (45-MIN. RESERVE)
- » STALL SPEED, WITH FLAPS: 60 KCAS
- » LANDING: 1,178 FT. (GROUND ROLL)



The new Spectra wingtip lighting system is many things at once—a recognition system, bright nav lights, strobes and landing lights all in one. The bright and flexible all-LED system is anchored by a long light rope that can act as a strobe, a pulse light or path lighting.

a powerful and redundant certified TKS system. It has air conditioning, built-in oxygen and USB ports everywhere you turn. And, yes, it also has the smooth, powerful Continental TSIO-550 factory turbocharged engine for 200-plus-knots true airspeed in cruise and 1,000-plus fpm rate of climb with the simplicity and user-friendliness of a fixed-gear single.

So, what *is* new? Essentially, there are just two new things, the new Perspective+ flatpanel avionics system, which is based on the brand-new Garmin G1000 NXi. That "one" new thing, of course, incorporates more than a dozen significant changes. The second thing is all-new exterior lighting, which takes an already slick exterior package and turns the wick up even brighter.

#### **TOP SECRET: FLYING G6**

I met Cirrus' single-engine product line manager Ivy McIver in San Marcos, Texas, to go flying in the new G6. With its distinctive paint scheme and otherworldly wingtip lighting, the plane attracts a lot of attention, so Ivy found the most out-of-the-way piece of ramp she could to park the plane. I met her on the ramp, and even before she tied the G6 down, she pulled out some wingtip covers to hide them from prying eyes, as we were still nearly a month from the official launch date of the plane.

That hasn't stopped Cirrus from selling G6s. In fact, the company has sold nearly 100 of them in advance of the public launch, but all its contacts have been made under strict non-disclosure agreements.

After spending a couple of hours on Friday afternoon going over the new avionics package's ins and outs, Ivy and I took off from San Marcos on Saturday morning to meet up with our photographer in Page, Arizona, roughly a 1,000 nm trip. The trip started out fine, with moderate headwinds, that is, moderate for the desert Southwest in winter. With the brown and rugged Texas High Country below, we made our way westward, the terrain rising beneath us as we flew along, 12,000 feet and the frequency mostly quiet, save for a few airliners checking in high above us.

After a quick stop in Albuquerque at Double Eagle, we continued northwest over ever more surreal landscapes, canyons and crags crafted in stone and sand. Descending around a final big flat-topped mesa east of town, we arrived in time for a late lunch.

Our trip was typical for a turbo SR22. We were truing around 185 knots at 12,000, so our



**ABOVE, LEFT:** The all-new keypad in the Perspective+ cockpit has several brand-new features. Note the laterally arrayed number pad for entering frequencies and transponder codes. Near the bottom of the pad is the autopilot controller, and toward the top center is the brand-new home key for easy keypad nav.

**ABOVE, RIGHT:** The differences between old G1000 and new are numerous and important. The displays are the same size but the processors driving them are a lot faster. Zooming and panning now go at light speed. The keys and knobs and buttons are newly styled, there are dual ADAHRS instead of separate air data and AHRS, and there are new utilities, like on-screen weight and balance and data-driven maps. Perspective+ is a game changer.

groundspeed was around 150 knots, which might sound slow, but it's a lot faster than the 95 knots many less slippery GA planes would have been making on that day. The new optional seats in the plane—actually, a feature introduced last year—are the most comfortable yet in a Cirrus, and Ivy tells me they're one of the most popular options, for reasons I well understood after our five-hour-plus trip west. With more and better high-tech foam placed in more strategic places, the seats cradle you and eliminate many of

Similar systems to the G2000 grace the panels of airplanes from TTx to Phenom 300. So why didn't Cirrus select G2000 for the SR22, too? the areas where fatigue starts to set in with other designs.

Our photo shoot late in the day was nothing short of spectacular, as you can see in a couple of the accompanying shots.

#### PERSPECTIVE+ BY GARMIN

Here's the big thing. As you probably know, Cirrus incorporated G1000 years ago in its products with a specially designed package that Cirrus calls Perspective.

It's not just branding, either. Perspective offers several big bonuses to standard G1000, including Cirrus' exclusive keypad, larger displays than on most G1000 installations and a number of features, including charts and vertical guidance, that were first launched by Cirrus on its Perspective cockpit before being picked up by other aircraft manufacturers on their planes. And the "plusses" in the new Perspective+ glass cockpit are noteworthy indeed. Some are common to the new Garmin G1000 NXi suite that Garmin just launched—we flew it first at *Plane & Pilot*—and some are pure Cirrus.

For a pilot who has experience with G1000—this is around the 40<sup>th</sup> different airplane model I've flown with a factory-installed G1000 panel—the new Perspective+ panel is a revelation.

The displays are about as sharp, which is to say, plenty sharp, but they look brighter, though admittedly that might be because the way information is presented on the screens is different. Garmin admits that it borrowed from the way it shows text and graphics on its G2000, G3000 and G5000 touch-controlled avionics systems to give G1000 NXi (Garmin's name for the updated system) a cleaner, fresher and more user-friendly look. It worked. I loved the look and feel, and my eye fell to the right value without even consciously trying to find it.

I also loved the new QWERTY keypad with the autopilot controller integrated into it. The keypad has a row of numeric buttons arrayed across its face for entering frequencies and transponder codes. When the buttons are lit up in blue, they're active for entering data. It took a little practice for me to get the hang of the new process, but once I did, entering data was dirt-simple. Codes and frequencies are entered in a heartbeat, and there's zero hunting for the right digit. After all, when keys are arranged in a square, unless you're an accountant, you probably have to at least look for the right one. With this layout, we all know that 7 will be to the right of 6 and so on. It's super-intuitive. Same for frequencies. You do have to enter the digit 1 first, though I'm not sure why since all of our frequencies start with that number. Or why the numbers8 and 9 light up when you're about to enter a transponder code. Does Garmin know something I don't?



#### **PERSPECTIVE+ VS. G2000**

For the last few years I had assumed that Cirrus would at some point launch a G2000-equipped SR22. I was wrong. Cessna with its TTx has the only G2000-outfitted piston single, to date. That system relies on a single touch controller to input data and enter flight plan information. Similar systems with more controllers and more features grace the panels of airplanes from the Cessna TTx to the Phenom 300 and Cessna Citation X+ in the form of the G3000 and G5000. So why not G2000 in the SR22? Why this new system?

The answer isn't that easy, and G2000 has some real advantages over this G1000 update. For one, Perspective+ (NXi) isn't as shallow a menu system as G2000, which means you need more button pushes to get where you're going, though Garmin/Cirrus mitigated that, to some degree, by adding a really cool "home" button with a cute little house symbol, so you can get back to square one with a single push. The home button also replaces many of the functions of the "clear" button, though it has been retained.

As much as it loves the new Perspective+, and it's right to feel that way, Cirrus also has to be careful about not throwing shade on the G2000 system, which is essentially what it's putting in its recently certificated Cirrus SF50 Vision Jet. The company talking point now seems to be that a *single* touch controller isn't ideal. The Vision Jet has three controllers; the Cessna TTx, by coincidence (or lack thereof), has just one. So I take that argument with a grain of salt.

#### **PERSPECTIVE+ PLUSSES**

That said, I was prepared upon hearing about Perspective+ to be nonplussed. I was way off-base. I love it. Here are a couple of things it does that are new.

The profile view is totally updated. Now you can see the terrain ahead of you in context to the flight plan you've filed. Let me explain that. If you're going to waypoint #1 a hundred miles distant and then making a 90-degree right turn to waypoint #2, a hundred miles farther out, the profile view will now show you the terrain not straight out ahead of waypoint #1, but as it pertains to your route, which makes a hard right in the middle. This means you know what terrain is in front of your route instead of merely in front of you. Great improvement.

Perspective+ will also show you your approach path with altitudes and waypoints along the path. This is huge. Now you can see what your approach looks like ahead of time, not on a chart, but on the moving map page of the MFD. You see what altitudes you need to be at and you see where your little airplane symbol is in relation to the glideslope/ glidepath and the lateral approach course. This will save lives. Kudos to Garmin, Cirrus and the FAA for this change.

As chance would have it, I got the opportunity to try this function out in anger coming back to Texas after my trip to Arizona.

We'd filed direct and nonstop, even though the weather in the Austin area was right at minimums. There was good marginal VFR and VFR weather within diversion distance, and the weather in three hours' time was sure to improve. It didn't. And because the ILS at San Marcos was out of service, we got to fly the LPV to Runway 17. Because the lighting on that runway is limited, the decision altitude for that approach is 360 feet agl. The ceiling was reported as 400 feet overcast, so it would be close. (As I said, we had options, including four good ILSes a few miles north at the International airport (KAUS). The profile view of the approach was spectacular. In the right seat, Ivy, by now a pro in Perspective+, pointed out the new features as we approached the terminal area. Once on vectors for the approach, we activated it and the profile view popped up with our waypoints and altitudes plotted clearly.

On intercept, we got a heading to join and had to cheat it a little due to strong crosswinds. The headwind component, we reported when asked by the tower controller, was 50 knots. We had plenty of time to fly the approach with a ground speed of around 50 knots at one point. Even with the winds and 15 knots plus or minus of wind shear, the approach went smoothly, and I was happy to be home after a sub-four-hour nonstop leg from Arizona to central Texas. The tailwinds, at one point 60 knots on the tail, were much appreciated.

Another big addition that we enjoyed along our route were the data-driven charts on the MFD for both high and low IFR enroute and sectional charts. The data-driven charts self-declutter as you zoom out, and as you zoom in, more detail emerges. In our case, we were able to keep an eye on the Grand Canyon special rules flight area as we approached Page. As we zoomed in on the area around Grand Canyon, the special flight rules chart appeared like magic, along with the pertinent rules and regs associated with it.

#### LOOKS AND LIGHTING

Cirrus has been making a push in recent years to offer amenities in keeping with those offered to buyers of high-end cars by companies like Porsche, Audi and Mercedes, and Cirrus' branding efforts reflect this. The GTS package is an all-up options collection, and the three trim levels, Carbon, Platinum and Rhodium, offer styling options intended to please everyone of its customers by offering a range of colors, fabrics, upholstery and aesthetic choices to suit a wide variety of customer preferences. The Carbon package, for example, is an in-your-face supercar approach to a fast next-gen single-engine plane, while the Platinum and Rhodium packages are increasingly more understated and luxurious. The SR22 I flew for this report was the Platinum package, and its middle-ground aesthetic sensibility seemed just right to me.

As part of this drive to go the auto way, Cirrus introduced a remote entry system a while back, and on the G6 they've improved it and given it new functionality. As with your high-end car, the G6 has a key fob from which you can control the door locks. When you unlock your plane, lights illuminate the wingtips, so others are less likely to walk or taxi into them, the steps, so it's easy to see them when you're climbing in, and the interior.

Also new is the fantastic, sci-fi-looking wingtip lighting, a light rope that wraps around the tip in a line. It's super-bright, and serves multiple purposes, with nav and strobe lighting (all LED), as well as pulse recognition lighting all incorporated in the new design, which Cirrus calls Spectra. Check out the pic. It's very cool.

With the new G6, Cirrus has once again upped the ante in the high-performance single-engine piston market. The plane is beautiful and capable, it incorporates numerous safety features—don't forget that it has a chute—and it adds the latest in avionics to make a product that impressively updates what was already the best-selling airplane in the world. For many more details, go to **planeandpilotmag.com**. **PP** 

Cirrus SR22 G6

CESSNA TTX SHINES

\_\_\_\_\_

BY ROBERT <u>Goyer</u>

After more than 10 years in production, this remarkable and too often overlooked single has become the star it was always meant to be. sometimes get calls out of the blue asking me for my advice about airplane buying decisions. Sometimes the caller isn't so much seeking guidance as much as getting confirmation that the decision they've already made is the right one: "Yeah, a Cessna 180 sounds like a great airplane for you," I'll often concur.

When it comes to new planes, far and away the most common call I get is from someone who's looking to buy either a Cirrus SR22 or a Cessna TTx. Almost without exception, they hope that I might have some secret knowledge that would help them make the call, because they can't really figure it out.

I don't blame them. It's a complicated decision, and the truth is, I don't have any secrets to expose. Both the SR22 and TTx are terrific airplanes, though both of them, in my estimation, are misunderstood, except, that is, by people who fly them a lot. And I've had the opportunity over the years to fly them both. While I have around 1,000 hours in SR22s, I have far less time in the TTx, a grand total of 46 hours, but that has been enough experience to get to know the airplane well. It's a remarkably honest airplane.

The long and winding story of the TTx precedes it, and I'd argue that it's not particularly relevant anymore. Still, this is the story in a nutshell.

The original ancestor of the TTx was a fixedgear four-seater called the Lancair ES. Over the years that plane would morph from a concept-driven kitplane built by Lancair into a production four-seat speedster originated by Columbia Aircraft into the polished speedster it is today under Textron Aviation's ownership. Lancair's very good idea was to create in the ES an airplane that was easier to fly than the company's notorious Lancair IV, a retractable kitplane that was crazy fast but a handful to fly, with questionable stability and ridiculously fast approach and engine-out speeds. They also decided upon fixed gear, for cheaper insurance and less pilot workload and mechanical complexity. Sound familiar?

The ES would eventually become the basis for the certificated Columbia-series airplanes, of which there were eventually two, a normally aspirated and a turbocharged model. The planes were very well received, but unable to deliver on their promise because of a series of financial, production and act-of-God calamities that wound up putting the company into bankruptcy.

Which is where Cessna entered the tale. The Wichita giant bought the program, got production humming again at the former Columbia Aircraft factory in Bend, Oregon,



#### What kind of pilot is the Cessna TTx for? The TTx is a great choice for pilots who want to fly long distances (as much as 1,000 nm legs) at

great speed and do it in style and comfort. An instrument rating is a must for this kind of flying.

and then proceeded to work the airplane, a rare adoptee, into the Cessna family lineup. After Cessna moved component production to its Mexico facilities and got some substantial teething problems worked out, the airplane was on its way to being a major player in the single-engine game.

While the complicated story of the TTx—it has had a few different names, including the Oregon-inspired moniker "Corvalis"—is interesting, it makes little practical difference today, except to underscore the high regard that Cessna had for the speedster. The investment is finally paying off. The company is selling TTx's, to mix my metaphors, like fixed-gear hotcakes. In 2016, the company delivered its 100th TTx and was on track for a strong sales year, which is the kind of growth that Cessna has hoped to see from the program. After all, the TTx is the fastest in its class, by a good shot, too.

Which brings up the other part of the TTx story, that of the Cirrus SR22, the TTx's main competitor and I would argue it's only true competitor. The only problem, and it was a big one, for the TTx is that considering its rough early years, the SR22 got a very substantial head start on what would become its main rival, though mostly in theory at the time. Until recently, few folks at Cirrus Aircraft have been losing sleep over the TTx. While Columbia and then Cessna were spending time and money developing the airplane into the mature and very satisfying product it is today, Cirrus was selling SR22s, lots of SR22s. Which they continue to do. **BELOW:** The TTx is the only piston single currently sporting the next-gen Garmin G2000 touch-controlled avionics suite. **BOTTOM:** A single touch controller located on the center console gives the pilot access to just about every conceivable systems function.



And while the SR22 thrived and quickly attracted a cult-like following, the Columbia struggled, which is a shame, because in many ways, it's more of an airplane than the SR22 is, and I believe the SR22, as those of you who've been reading me for a while know, is one heck of an airplane. It's nice to have some real competition.

#### FEELING IT

It was still warm in Central Texas, which means "really hot," when I went flying with demo pilot Will Klein from Textron Aviation recently. As you know, Textron Aviation is the parent company of both Cessna Aircraft and Beechcraft, which makes it hard for journalists to know how to refer to airplanes and employees alike. Textron gets that, and has no problem with both media types and customers sticking with the legendary brands. (No worries: The Cessna 172 is not about to become a Textron Skyhawk.)



#### What are the TTx's strengths?

It's the fastest in its class, it's stylish, very technologically advanced and strong. The TTx has great flying manners and tremendous ramp appeal.

The TTx is not a new airplane to me, though it has had a number of improvements of late that I haven't had the chance to get to know well. But the bones of the plane I know well. I've flown every iteration, from that first Experimental concept plane in the early '90s to the latest Garmin G2000 touch-controlled avionics model. So my recent flight was as much a reacquainting as anything. Like a number of other planes I love, the TTx is like family in that way.

#### WHAT'S THE DIFFERENCE BETWEEN TTx AND SR22?

There are numerous differences between the Cessna TTx and the Cirrus SR22, and there are numerous similarities.

First, the elephant in the baggage compartment. The Cirrus SR22 has a whole airplane parachute. There have been more than 100 confirmed saves of occupants thanks to the chute, which lowers the entire airplane in the event of something terrible happening, such as the pilot losing control in some instances. The chute is expensive to maintain—repacks are required every 10 years and cost around \$15,000. The chute takes up some payload, too, around 80 pounds, and you lose some baggage capacity. But it has proved to be a lifesaver in many instances and you can't get it on the TTx.



Both are low-wing composite construction models. New versions of the SR22 (the G5 model) are five-seat planes, though the rear seating area is really only for two adults and a child or two. Both have remarkable interior room compared with legacy models, but the SR22's interior dimensions are more pleasing to many who have flown in both planes. The TTx has inflatable door seals for some improvement in noise reduction, but both are so noisy—it's the nature of high-performance singles today that you'll need a good headset in either one.

Both use the Continental TSIO-550 engine, though the Cirrus has a power control setup that uses only a throttle and a mixture (no prop), and power control is dirt-simple, giving pilots some of the advantages of single-lever power but all done mechanically. The TTx has conventional power controls, and they require much more hands-on and heads-down time than in an SR22. Both airplanes are easy for pilots to transition into. The TTx has more pleasing response, better-harmonized controls and easier landing manners. The SR22 has better forward visibility.

The TTx has superior avionics, the G2000 touch-control suite, and the latest-gen electronics from the world leader in light plane displays. The SR22 has the previous-gen G1000 panels, remarkably capable. Both have tremendously advanced safety utilities that accompany the electronics suite. These include envelope protection, synthetic vision, extensive autopilot capabilities with great vertical nav, and weather and charts, among many others.

The TTx feels different than any airplane I've flown—they all feel different, true, but there's something very distinctive about the TTx. Even in taxi it feels very solid, like an airplane larger than it is, in fact, and the sense I get is more like driving a Porsche Panamera than a family sedan. Like the SR22, you steer the TTx

#### **Textron Aviation Cessna TTx**

The Textron Aviation Cessna TTx we flew for this report was a loaded late 2016 model with the standard Garmin G2000 touch-controlled avionics suite, with the GFC700 digital autopilot, SiriusXM aviation weather and entertainment, envelope protection, terrain and traffic awareness utilities, flight into known icing TKS anti-ice system, and more.

>PRICE (BASE/AS FLOWN):
\$689,000/\$810,785
>ENGINE: CONTINENTAL TSIO-550-C
>HORSEPOWER: 310
>PROPELLER: MCCAULEY THREE-BLADE, METAL, CONSTANT SPEED
>LANDING GEAR: FIXED
>SEATS: 4
>DOORS: 2 >EMPTY WEIGHT: 2,530 LBS.
>USEFUL LOAD: 1,070 LBS.
>MAX. TAKEOFF WEIGHT: 3,600 LBS.
>FUEL CAPACITY, GALS: 102 GAL USABLE/612 LBS.
>WINGSPAN: 36 FT.
>LENGTH: 25.2 FT.
>HEIGHT: 9 FT.
>CABIN WIDTH: 48 INCHES > TAKEOFF DISTANCE: 1,280 FT.
(GROUND ROLL)
> MAX. CLIMB RATE (FPM): 1400 FPM
> MAX. CRUISE SPEED (KTAS): 237 KTS
> MAX. OPERATING ALTITUDE (FT.):
25,000 FT.
> MAX. RANGE: 1270 NM
> STALL SPEED, WITH FLAPS: 60 KCAS
> LANDING: 1,260 FT. (GROUND ROLL)

## WHAT'S IN A TTx?

here are a number of things about the plane that I take for granted that should probably be said out loud, both for those of us who aren't as familiar with it and for those of us who are, but are apt to forget how big a deal things we take for granted can be—okay, I'm talking mostly about myself here.

• It's a fixed-gear airplane. That means a lot of additional drag, but a great deal less mechanical and user complexity, as well as much lower insurance premiums. None of that has changed in the more than two decades since the concept was launched.

• Construction: The TTx is constructed mainly out of fiberglass with carbon fiber used in places it makes the most sense. Its aerodynamics are really slick, and that's not just spouting the manufacturer's standard line: You don't get 230 knots out of a fixed-gear single unless it's incredibly efficient.

• Power: The powerplant is the Continental TSI0-550-C, a 310 hp turbocharged, six-cylinder, air-cooled opposed engine that's for all intents and purposes the gold standard in high-performance GA. The TTx has conventional power management, with separate throttle, mixture and propeller controls.

• The TTx is really fast, just over 230 knots at 25,000 feet. It's probably more instructive to ask how fast is it at the altitude you fly at, since not many of us use anything over 17,000 feet on a regular basis. The answer: around 220 knots at 16,000, on my last flight at that level. That's hauling.

• Fuel flow is around 18 gph at high cruise. That's about half of what a twin of less performance consumes per hour. The TTx has one engine, however, so engine-out scenarios are a bit more attention-getting.

• The TTx is a utility category airplane, not a normal category one, as most four-seat planes are. This means it has gone through more rigorous strength testing, so its structure is not only as strong as it needs to be, it's even stronger than that.

• Control is via a true sidestick, like the one in the F-16 fighter.

#### What are the TTx's weaknesses?

It's expensive, though slightly cheaper than its main rival, there's no wholeairplane parachute, it's limited to four seats, and the cabin comfort and visibility aren't quite as good as the competition.

on the ground by use of differential braking, so it can turn on a pivot, making both sharp taxi turns and parking a breeze. The gear is solid feeling, but damps bumps and uneven pavement well enough.

We were flying out of KAUS, Austin's Bergstrom International Airport—it was a south operation that day so we got the two-mile taxi from the Atlantic Aviation FBO location.

The sound of the TTx is all its own, too. The tower cleared us for takeoff, and I rolled the corner, paused briefly to advance the power—you don't want to just cram and go with a turbo—and felt the TTx push us back in our seats as the turbo took hold. We were at 72 knots before we knew it, I glanced down for the gear lever—oh, yeah—retracted the flaps through 400 feet, and soon started the gradual turn to the west as instructed by the tower.

The handling is awesome, and this is one area where the TTx has it all over the SR22. With the sidestick, the feel is smooth and intuitive. Unlike the side yoke in the Cirrus, the stick is just like a stick in a vintage warbird, a single point of attachment that gives you infinite aileron-elevator control input options while being mixed to perfection. On the Cirrus, the side yoke is exactly like a yoke on a Skyhawk, for instance, with the two axes being separated into two different planes of control—back and forth for the elevator and side to side for the ailerons. Both work, but the TTx's sidestick is more pleasing.

As you might imagine, the TTx gets up to altitude in a hurry. With 310 hp up front, it can climb at a maximum rate of 1400 fpm. Knowing that ATC expected us to get out of their hair without climbing at the slow but steep best rate of climb, I settled for a cruise climb at 120 knots, which still produced over 1,000 fpm.

The electronics are a wonder. As I've said, the TTx is the only single-engine piston airplane with the G2000 suite, though I've been suspecting that Cirrus might roll it out in its SR22 anytime now, but it has given no indication that it would do that. It seems very happy with its excellent G1000-based Perspective flight deck. The G2000 goes many steps beyond G1000, though. The entire user interface paradigm is new, and this is a good thing. Instead of having the menu hierarchy system of the G1000, the G2000 (just like the new Garmin suites in jets) makes use of a graphical interface that's very shallow, which in this usage is a good thing. Shallow means that you're never more than a selection or two away from where you want to be, so even complicated stuff, like programming in vertical nay, is greatly simplified.

Like the SR22, the TTx handles really nicely at low airspeeds with the flaps extended—the gear is always helping. There are also speed brakes, a really nice addition for managing airspeed, especially when approach asks you to "keep your speed up" to help with jet arrivals. The speed part is no problem, but when you have to transition from near-cruise speeds to approach speeds, the speed brakes make it a faster and easier process to manage.

The sight picture from the TTx is different from the SR22, or for that matter, from any other single I've flown. The front area is small, as part of that overall aerodynamic slipperiness I mentioned earlier, so the view out front seems a bit narrow, at least compared with that of the SR22, which I'd call expansive. Speeds in the TTx are typical for an airplane in this class—90 knots on final transitioning to 80 knots at 50 feet and slowing from there to a slow flare and landing. Like the Mooney Acclaim and SR22, the TTx lands best when there's not a lot of extra speed to bleed off. Otherwise, it just wants to keep flying, a trait we like in our airplanes.

For pilots looking for a combination of speed, simplicity, reliability, high-tech electronics and fine flying manners, the Cessna TTx is right at the top of the list. There are competitors, including the Cirrus SR22, but for pilots who, among a number of other choices, don't need or don't want the chute, the TTx offers a fast, sexy and technologically advanced alternative catching the eye of more buyers than ever. **PP** 



## **GET MORE**

on the TTx versus the SR22 and expert advice from *Plane & Pilot* magazine delivered right to your door!

Take advantage of our limited-time subscription offer. Pay only \$12 for one year.

## **DON'T DELAY! SUBSCRIBE**

bit.ly/pnpgetmore