The SR20 and SR22 Model History and Market

by Tim Gieseler

In 1999, the owners of the first delivered Cirrus aircraft had waited in line for years. Before I took delivery of my first Cirrus in 2002, the few recently used ones available were asking *more* than the factory new price. Now, with some 3,600 Cirrus airplanes in the fleet, it's a different story.

State of the Market

Cirrus has now built some 2,700 SR22s and 850 SR20s. At this writing there are 140 SR22s and 34 SR20s listed on controller.com, the biggest online market for used airplanes. (Cirrus built only 25 SRVs – a minimally-equipped SR20 – so it is seldom seen in the used market.) There is a vibrant market for used Cirrus airplanes of all vintages, and with today's soft economy it's an especially great time for buyers.

New or Used?

As anyone who has taken delivery of a brand-new Cirrus at the factory will tell you, there's nothing quite like the experience. Owners choose the exact options and color scheme, receive factory training, and fly away with 100% of the original warranty. You have the privilege of being first to settle into the pilot's seat and the first in command (other than the test pilots). You occupy the lofty position as owner of the very latest Cirrus money can buy – very nice indeed.

On the other hand, you can own a fairly recent used Cirrus for a *lot* less than buying a new one. Many Cirrus owners pamper their airplanes like babies, so it's not uncommon to find used aircraft that are in excellent condition and look brand new.

A used Cirrus can be a big step up from what you're flying now. It might be missing a few new features or the latest color scheme, but a "previously loved" Cirrus will still take you cross-country at a breathtaking speed and turn heads at the airport.

Cost of Ownership

Keep in mind that owning an airplane costs more than just the purchase price. (Read about ownership costs on page 34).

Which model – SR20 or SR22?

This topic is argued endlessly on the COPA forum. Cirrus has built three times as many SR22s as SR20s, although in recent years the ratio has increased to four to one. While some new or low-time pilots lean toward the SR20, thinking that for safety reasons, the SR22 might be "too much airplane," accident rates have not supported this concern.

In addition to the greater load capacity of the SR22, a key difference is the climb rate, where high altitudes and hot weather can impact the SR20's capability. If flying in the mountainous Western United States or routinely filling the seats with adults is in your future, give the SR22 a close look. Some owners suggest considering an older SR22 over a newer SR20 if your budget is tight. Another difference is that air conditioning and the TKS anti-ice system were never offered on the SR20. However, SR20s are substantially less expensive and have held their value better than SR22s. Bottom line; understand your mission and budget and pick what is best for you.

Cirrus Original Price Recap

While pricing sometimes changed mid-year and various incentives were given at different times, these published prices will give you a general idea of what was originally paid for a Cirrus in past years.

	SR20 base	SR20 GTS*	SR22 base	SR22 GTS*
2001	$197,600		$276,600	
2002	$207,800		$289,400	
2003	$229,700	$293,545	$313,900	$383,950
2004	$236,700	$309,650	$328,700	$413,150
2005	$239,695	$325,240	$334,700	$434,145
2006	$249,995	$334,995	$349,995	$449,995
2007	$257,045	$342,235	$371,200	$469,990

**Prices without turbo or a/c; GTS or equivalent.*

Installed and Optional Equipment

You'll see these terms repeatedly in this article and in ads for airplanes.

- **Arnav ICDS-2000 MFD** – Original Cirrus MFD with somewhat lower screen resolution and fewer functions, good reputation for reliability and support.
- **Avidyne EX5000C Multifunction display (MFD)** – Seen on nearly all Cirrus aircraft. Optional display functions depend on software revision level and installed equipment.
- **Avidyne EX3000C MFD** – lower cost version of EX5000C. Less capable flight path display (no DME arcs, some options unavailable.) Uncommon.
- **Century NSD-1000 HSI** – Mechanical HSI standard original equipment unit up until PFD; very poor reliability reputation.
- **CMax** – Jeppesen approach plates and geo-referenced airport/taxiway maps for Avidyne MFD. Software upgradable add-on. Subscription required.
- **EMax Engine monitor** – Integrated optional system for the Avidyne MFD with fuel computer, downloadable data logging.
- **E-TAWS or EGPWS** – KGP-560 Certified Class B EGPWS (Enhanced Ground Proximity Warning System) that provides visual and audible terrain, obstacle, excess sink rate, arrival warnings and relative-altitude visual display on the MFD.
- **Flight Director** – Replaces the "flying W" aircraft symbol on the PFD attitude indicator with a yellow "wedge." Command bars give the pilot visual cues to hand-fly programmed altitudes, descents, climbs, headings, routes, or approaches.
- **Garmin GNS430** – Ubiquitous GPS/Nav/Comm nearly always used for #1 position and commonly seen as dual install in Cirrus airplanes.
- **Garmin GNS420** – Lower cost IFR (nonprecision approach) GPS/Comm without ground-based Nav or Glideslope.
- **Garmin GNS430W/420W** – WAAS enabled navigators, added with the G3, with improved performance and additional vertical guidance capability, upgradeable to older models. Cost of upgrade depending on specific configuration (PFD, six-pack).
- **Garmin GNC250 GPS/Comm** – Combination communications radio and VFR-only GPS navigator.
- **Garmin GTX330 Mode S Transponder with TIS** – Data link transponder with ATC radar traffic uplink, displays traffic similar to SKYWATCH but only in some terminal radar areas; FAA support and future in question.
- **GPSS** – GPS Steer function standard on 55X optionally added to some earlier S-TEC autopilot installations.
- **Oxygen** – "Semi Portable" is a small oxygen bottle in an approved installed, removable padded center armrest in the rear seat. Late 2006 installed system, as found in Turbo SR22, uses large tank in tail with controls and plumbed outlets in cockpit.
- **PFD** – Primary Flight Display (Glass Cockpit); the Avidyne Integra PFD replaces all conventional "round" flight instruments. Conventional electric AI, Altimeter, and airspeed indicator are installed as a backup.
- **Platinum Engine** – An upgraded engine incorporating additional balancing, flow porting, etc., with certain upgraded components; includes a longer warranty.
- **S-TEC 55X Autopilot** – By far the most common Cirrus autopilot. Includes vertical speed, Heading, and Nav modes, plus altitude hold, altitude preselect, GPS Steer (GPSS), and glideslope capture.
- **S-TEC 55 Autopilot (not "X")** – Similar to 55X but without GPSS. Some aircraft have been upgraded, which can be identified by the installed "GPSS" button.
- **S-TEC 55SR Autopilot** – Uncommon lower cost version of the 55X without altitude preselect or glideslope capture capability.
- **S-TEC 30 Autopilot** – Found on some SR20 airplanes from 1999-2003. A three-inch panel mounted control head provides tracking via heading bug or by VOR, LOC, or GPS. Includes altitude hold.
- **S-TEC 20 Autopilot** – Lower cost version similar to the 30 but without Altitude Hold.
- **SKYWATCH** – Active interrogation traffic display, visual warning system displays on Garmin GNS430 and on Avidyne MFD. Audible feature incorporated on newer models or available as an upgrade.
- **Sandel SN3308 EHSI** – Electronic multi-mode HSI; became an optional upgrade until PFD arrived.
- **Tannis or Reiff preheater** – Aftermarket electric heaters installed to pre-heat the engine when operated in cold climates. Should not impact buying decision as these are easily added on.
- **TAWS –** Inexpensive (~$500), less detailed terrain/obstacle alert displaying on Garmin GNS430, no audio alerts or MFD display.
- **TKS Anti-icing system** – Glycol fluid based system with prop slinger, laser drilled wing and horizontal stabilizer titanium panels. For escaping inadvertent icing encounters, not certified or safe for flight in ice. Weight of full TKS fluid adds 27 pounds (G2) or 34.5 pounds for G3 (not included in the basic empty weight).
- **XM Weather** – Satellite-based WxWorx weather receiver displayed on and controlled by Avidyne MFD. Subscription required.

OPTIONS

Original new pricing 2000-2006

If you are looking at a used aircraft that isn't a loaded "GTS," a fair price will take into account the installed equipment. While accessories were sometimes bundled into packages at a discount, you can at least get some idea what a feature originally sold for and factor that into the equation when comparing different aircraft for sale.

3-blade prop (SR20)	$3,450
Leather interior (SR20)	$3,395
EX5000C upgrade (SR20 thru '04)	$2,995
Primary Flight Display (before std.)	$24,500
GNS430/430/55X (SR20)	$17,845
GNS430/430/55X (SR22)	$13,890
SKYWATCH traffic	$21,500
TKS ice protection (SR22)	$19,950
Platinum engine (SR22)	$4,750
XM Weather Datalink	$7,490
WX-500 Stormscope	$9,795
XM + Stormscope package	$13,995
EMax Engine Monitor	$5,985
CMax Approach Plates	$3,600
ETAWS/EGPWS Early G2	$11,500
ETAWS/EGPWS Late G2-G3	$6,995
Flight Director	$1,395
Tinted windows	$495
Polished spinner	$595
Leading Edge Protectant	$495
406 Mhz ELT	$1,495
Fan Powered Ventilation G2	$4,850
Air conditioning (SR22 G2 before #1864)	$30,000
Air conditioning (SR22 G2 #1864 & later)	$19,990
Turbo Package ('06-'07 G2)	$59,800
Oxygen, semi-portable	$1,990
Oxygen system, built-in	$9,995
Composite 3-blade prop (SR22)	$9,995

Photo courtesy of Cirrus Design

CIRRUS MODEL HISTORY, SPECIFICATIONS AND COMMENTS

Serial number, not year built, is the best guide to features.

Unlike car manufacturers, Cirrus doesn't introduce design improvements in annual model years. The year assigned to a Cirrus by the FAA is simply the date the airplane was deemed airworthy. Don't think that all aircraft of the same year are similar. Significant design changes have been introduced throughout the year.

Note: You can look up the serial number of any aircraft by the N-number at *registry.faa.gov.* The following is a description of the various features, keeping the following in mind:

- Serial number ranges listed are approximate and there are exceptions. Equipment/features should be confirmed on any aircraft.
- SR20 serial numbering started at #1,000.
- The author's "educated guess" selling (not asking) prices listed are for typically-equipped airplanes with the normal range of hours and condition, as of late 2007.
- Refer to "Installed Equipment" on page 26 for descriptions of many of the features and equipment.

First Generation Cirrus (G1)

Cirrus hit the aviation world like a storm with the SR20, first delivered to faithful early-adopters in 1999, after years of waiting. The unique features common to every Cirrus aircraft built included the composite (fiberglass) construction, big flat panel multifunction display and the standard-equipment Cirrus Airframe Parachute System™ (CAPS). But the real story was that these airplanes were just drop-dead gorgeous for new and old pilots alike in a world of 20-year-old "spam cans."

(Aircraft built before the introduction of the G2 are often called G1, although Cirrus has never officially referred to it with that designation.)

■ **Original SR20** (1999 – 2003, Serial #1005-1267)

The SR20 was first produced with conventional "6-pack" flight instruments and a vacuum system with an electric/automatic standby pump. The Continental IO-360-ES 6-cylinder fuel-injected engine produces 200 horsepower and has 56-gallon tanks. Cirrus built around 267 of the original models with the ARNAV ICDS-2000 Multifunction Display (MFD), although subsequently some owners upgraded to the Avidyne MFD.

Gross weight was originally 2,900 pounds, and later increased to 3,000 pounds, retroactive with a Service Bulletin (SB) for rudder hinge replacement. Real-world empty weight varied from unit to unit on these early airplanes, but typically ran 2,050-2,100 pounds on bare-bones airplanes and 2,100-2,150 pounds on loaded ones, especially those with the popular optional 3-blade prop. But don't avoid the 2-blade … it performs quite well.

Other standard equipment included a Garmin GNS430 GPS/Nav/Comm, a GNC-250 GPS/Comm, and an S-TEC 20 autopilot. Options included a Century HSI and 3-blade prop, dual alternators, Stormscope, and an S-TEC 30 autopilot. Engine monitoring was an option added later, which is worth looking for.

Market: At roughly $150,000 to $190,000, an early SR20 is very reasonably priced and has a lot to offer. If you can find one that's been well taken care of, it's a steal. Be sure proper servicing of the life-limited 5-year parts, such as reef cutters, has not been overlooked.

■ **Original SR22** (2001 – early 2002, Serial #002-141)

In 2001, Cirrus delivered the first SR22 using the same fuselage as the SR20, a beefed-up wing with integral 81-gallon tanks and wingtip extensions. The SR22 was mated to the perfectly matched Continental IO-550-N fuel-injected powerplant producing 310 horsepower, which has been used by every SR22 since. The power boost made the SR22 a real rocket, amazing pilots with Bonanza-like speeds despite the fixed gear. On the SR22, Cirrus went "all-electric" from the beginning; no vacuum system. Conventional "6-pack" flight instruments and 3-blade props were standard equipment, as were dual alternators and batteries. Standard avionics included an ARNAV ICDS-2000 MFD, Garmin GNS430 & 420, S-TEC 30 autopilot, and a Century HSI. Options included dual 430s, S-TEC 55X autopilot with altitude preselect, Sandel 3308 EHSI, and Stormscope.

The original gross weight of 3,400 pounds hasn't changed. Actual empty weights of 2,230 to 2,250 pounds have been seen on typically-optioned early SR22s.

Market: There aren't many of this type of Cirrus around. Some have been upgraded to an Avidyne MFD. A realistic budget would be $190,000 to $220,000. Check the time-limited component compliance.

■ **All-Electric/Avidyne "Version 2" SR20** (2003, Serial # 1268-1336)

Once the all-electric SR22 had been in production for a while, Cirrus applied the design improvements to the SR20. The original vacuum system was eliminated in favor of all-electric flight instruments. Around the same time, the Avidyne EX3000 MFD took the place of the earlier ARNAV. An upgraded EX5000 MFD, Sandel electronic HSI, S-TEC 30 and S-TEC 55 or 55X autopilots were offered as additional options. Empty weights were typically 2,100-2,150 pounds.

Market: Like other early models, these are fairly rare birds since Cirrus built less than 100 before introducing the PFD. If you don't care about glass, they are worth looking for. Expect to pay around $180,000 to $210,000 or so, depending on options, time, and condition.

■ **Later "6-Pack" SR22** (2002, Serial #142-434)

Cirrus hit their stride and cranked out a lot of upgraded SR22s in 2002 with the introduction of the Avidyne EX5000C MFD as standard equipment. New options included EMax™ engine monitoring and SKYWATCH. Most were ordered loaded with these options as well as dual 430s, S-TEC 55X, and Stormscope. Late in the year, a select few were equipped with an optional TKS anti-icing system. An improved starting mod was installed with serial #278, and a dual-exhaust system was added around serial #320. Bose® headset jacks were added late in '02. Typical empty weights ranged from 2,275 to 2,300 pounds.

Market: These are great airplanes and there are plenty on the market to choose from. You should be able to find a fully equipped one (but without TKS) in the range of $210,000 to $240,000.

■ **First "Glass" SR22** (late 2002 – early 2004, most serial numbers between #435 and 819)

Initially announced as a $24,500 option late in 2002, the Avidyne Entegra Primary Flight Display (PFD) – the first available on a certified piston aircraft – had so much appeal that virtually everyone wanted it. Very few non-PFD airplanes were subsequently produced, and by mid-2003 Cirrus changed the PFD to standard equipment on every model.

The base model included Garmin GNS430/420 and an S-TEC 55SR autopilot. The options offered were dual 430s, Stormscope, SKYWATCH, EMax, and TKS anti-ice. Most of the aircraft built were fully loaded. Toward the end of production, the "Centennial Edition" was introduced. It featured a 6-point engine mount, which was designed to reduce vibration, but was otherwise a cosmetic package with special paint and trim.

As airplanes acquire more features, they become heavier. The typical fully equipped airplane, with TKS, weighed in around 2,350 pounds, a full 100 pounds more than the original SR22.

Market: If you want glass on a budget, this is the one to shop for. Loaded, including TKS, should run $240,000 to $280,000.

■ **First "Glass" SR20** (mid 2003 – mid 2004, Serial #1337-1443)

The Avidyne PFD was not originally offered, even as an option on the SR20; the 6-pack configuration persisted until mid-2003, when the PFD became standard equipment on both models.

Base configuration included Avidyne EX3000C MFD, Garmin GNS430 & GNC250 GPS/comms, and an S-TEC 55SR autopilot. Options included Garmin GNS420/430 upgrade for the #2 radio, EX5000C MFD, Stormscope, SKYWATCH, EMax, 3-blade prop, and leather interior. Typical gross weights ranged from 2,110-2,160 pounds with the 3-blade prop being the big factor.

Market: Selling for around $200,000 to $230,000, the early SR20 glass models are very desirable and modern when compared to some similar vintage Cessnas.

G2 (Generation 2) Models

Cirrus introduced the SR22 G2 in Spring of 2004 and the SR20 G2 late that summer. The redesigned G2 fuselage was built from entirely new tooling, although overall dimensions remained unchanged. Redesigned interior panels and trim were more substantial and car-like, while the overall fit and finish improved. The door mechanism was redesigned to work like a car door; slam it to close, push a button on the outside (or pull a latch on the inside) to open. The sometimes-criticized door mechanism is generally reliable and trouble-free once it is properly adjusted.

Photo credit: Will Robertson

The lower cowl was split for easier access, and more access panels were added to the fuselage for easier maintenance. The oil door was redesigned and the latches improved. The firewall was beveled at the bottom, allowing the exhaust pipes a lower-profile fit to the fuselage, reducing the size of the "bells" in the lower cowl and theoretically providing better crashworthiness as the aircraft may tend to "skip" rather than dig in during an off-field landing. The lower-vibration 6-point engine mount from the Centennial Edition also became standard equipment on the SR22. Finally, cowl inlets were redesigned and a new Hartzell Scimitar prop was also fitted to the SR22.

Generally Cirrus owners report the SR22 G2 to be three to four knots faster than its predecessor … but unfortunately the TKS system installed on most has a drag penalty that pretty much cancels out the gain. As a result, a G2 with TKS is about the same speed as the original SR22 without the TKS panels

Standard or optional equipment added during production of SR20 and SR22 G2 models:

A number of system improvements and additional options were incorporated during the production of around 2,000 G2 aircraft over three years. Cirrus sometimes tweaked the standard equipment list, making it tricky to know what is installed in different aircraft that are for sale. If there is something on your "must have" list, be sure and track the serial number and ask.

■ **Early G2s; Items common to both SR20 and SR22**

TAWS, ETAWS, and EGPWS may be confusing, but it's an important detail. In mid-2004 (SR22 Serial #1230, SR20 #1441) Cirrus began installing the sophisticated and expensive ($11,500) KPG560 as an option (standard on GTS), and called it "TAWS". Not long after, Garmin offered the inexpensive ($500) terrain warning function on the GNS430, calling it "TAWS". Cirrus changed their term for the KPG560 to "ETAWS" and later to "EGPWS". Many newer airplanes have both systems. Many owners consider ETAWS the most important safety option in the airplane. Be sure you know what you are getting with an airplane advertising just "TAWS."

Airbags in the front seat shoulder harnesses (AmSafe) become standard equipment (SR22 #1520, SR20 #1541).

XM entertainment radio was added to the XM weather option. The Cirrus now included a "car radio," no wires, complete with remote control (SR22 Serial #1544, SR20 #1473).

Later improvements to SR20/SR22 G2's

■ Electrical system redesign

In Fall 2005, Cirrus introduced a significant engineering overhaul of the electrical system (SR22 Serial #1663, SR20 #1582), which significantly improved reliability – a big deal on an all-electric airplane. This change is instantly noticeable by the presence of the "glove box" instead of the engine gauges on the co-pilot panel. The heart of the electrical system, the Master Control Unit (MCU) was replaced with the MCU130, moving its "brains" into the cockpit instead of the hot engine compartment and improved sealing of the housing forward of the firewall. The new Data Acquisition Unit (DAU) allowed the PFD to display more information, including electrical bus voltages, percentage power and, along with Avidyne's Rev. 7 software, oil pressure and temperature. The MFD was also able to display and log additional electrical load information. The previous 60-amp alternator was replaced with a larger one rated at 100-amps.

The mechanical/analog engine gauges were eliminated and the MFD and/or PFD displayed data became the primary instruments. The MFD's data logging function now included additional data such as pressure and density altitude.

■ Ventilation and heating system; Dual hour meters

Finally, excellent car-like climate controls were added along with improved air flow. The fan-forced ventilation option was a very nice feature in the greenhouse cabin of a Cirrus without air conditioning – taxiing with the doors open was no longer standard procedure. A second "flight time" meter was installed alongside the Hobbs meter (SR22 Serial #1863, SR20 #1639).

■ Static system improvements

The alternate static air source valve was relocated to permit operation without bending over to reach into the pilot footwell – a safety benefit that could help avoid vertigo when alternate air is needed in IMC. The static system plumbing was also redesigned to reduce the risk of water intrusion in the static system (SR22 #2043, SR20 #1706).

Other G2 Options included: Semi-portable oxygen, XM Weather, Flight Director and CMax™ approach plates.

The GTS

The term "GTS" was introduced as the term for "fully loaded" airplanes in late 2004. This became "sort-of fully loaded" later on, because as new options were added over time, more equipment was included and certain items (such as air conditioning) were excluded. So all GTS models, even of the same year, are not necessarily equipped the same.

Easy Upgrades to Older Cirrus Aircraft

When looking at airplanes on the used market, keep in mind that some design improvements can be economically added to older aircraft, often based on Service Bulletins published by Cirrus. Other improvements just aren't possible or are tough to justify economically.

There are many reliability or maintenance-related upgrades listed in Cirrus service bulletins that are not shown here – this list focuses on feature and functional upgrades only.

▶ **Impractical or Impossible** – Nope, forget it!

- Primary Flight Display
- TKS Ice Protection
- AmSafe Airbags
- PFD engine instruments enhanced data
- Fan-forced ventilation system

▶ **Possible, but fairly expensive** – It may be cheaper and easier to find a plane with one of these features already installed if it's a "must have."

- Stormscope
- EGPWS/E-TAWS KGP-560
- Avidyne MFD upgrade from Arnav MFD equipped SR20/22
- Air Conditioning
- Turbo (if Tornado Alley catches up with Cirrus production, retrofit on G2s after #2037 *might* be in the future)

▶ **Straightforward** – cost varies so evaluate if it's worth it for you.

- SKYWATCH (Avidyne TAS600 is much less expensive and very similar)
- Garmin TAWS (cheap, simple)
- XM entertainment (a portable XM radio is far less)
- XM Weather on Avidyne EX5000 MFD (a Garmin 496 or 396 portable is widely acclaimed and a fraction of the cost)
- Dual hour meters
- CMax approach plates on Avidyne EX5000 MFD
- Flight Director on Avidyne PFD
- Oxygen (Built-in systems available from Aerox or Precise Flight; portable systems are popular)
- Static system improvements

■ Items unique to early SR22 G2's

(Spring 2004 – Fall 2005, #820-1662)

Even with all the new characteristics of the SR22 G2, initially, little changed on the standard equipment list. Standard equipment was still the Avidyne Entegra PFD/MFD suite (as it was now called). Base model radios were unchanged; Garmin GNS430/420, as well as the S-TEC 55SR autopilot. Common options continued to be dual 430s, TKS anti-ice, SKYWATCH, Stormscope, and EMax engine monitoring.

Some new options on the SR22 were offered, including a Platinum version of the IO-550 engine and Keith air conditioning system (added on after manufacture).

Empty weight on actual early SR22 G2s has been reported as low as 2,275 pounds for a non-TKS model, 2,300 to 2,350 pounds for a GTS, and 2,350 to 2,413 pounds for air-conditioned models. If weight is a big issue for you, shop around since as much as a 50-pound variance has been reported on identically equipped aircraft.

Market: For earlier SR22 G2s; 2004 "loaded"' or GTS SR22 G2 without ETAWS (#820- #1229) ranges from $260,000 to $290,000; a loaded 2005 GTS (#1230-#1662) is $300,000 to $340,000.

■ Late SR22 G2

(Fall 2005 – early 2007, #1663-2437)

As described earlier, the numerous changes made to the G2 SR22 during its life (detailed above) took a step up with the revised electrical system. Several other improvements unique to the SR22 followed.

Factory Air Conditioning. A new option integrated with the revised environmental system starting with serial #1864. How effective it is compared to the earlier Keith-built unit has been debated on the COPA forum; some owners feel the older Keith unit may be more effective.

"Turbo-ready" Firewall. At serial #2037, the firewall was redesigned to provide additional heat shielding and other tweaks to accommodate the upcoming turbonormalized engine. Should Tornado Alley, Cirrus' turbo manufacturer, catch up with demand, rumor has it that an aftermarket STC upgrade to turbonormalized capability will become available for G2s built after this point.

Reported weights of late SR22 G2s are 2,350-2,370 pounds; add another 72 pounds for air conditioning.

Market estimates for later SR22 GTS after #1662: 2005 SR22 GTS $320,000 to $360,000; 2006 SR22 GTS $360,000 to $390,000; and 2007 SR22 G2 GTS $380,000 to $410,000.

Note: The popular, loaded GTS model sold for a full $100,000 more than the base model, so market pricing on a less-equipped model is entirely dependent on options.

■ Upgrades to the SR20 G2 (Mid-2004 – late 2007, serial #1442 and subsequent)

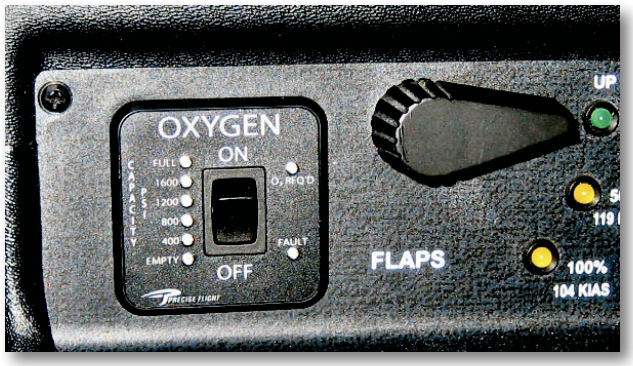
Mirroring the earlier SR22, the SR20 took the jump into the G2 fuselage in the summer of 2004. Avionics and equipment were initially unchanged. Base configuration included an Avidyne EX3000C MFD, Garmin GNS430 & GNC250 GPS/comms, and S-TEC 55SR autopilot. Options included Garmin GNS420/430 upgrade for #2 radio, EX5000C MFD, Stormscope, SKYWATCH, EMax, 3-blade prop, and leather interior.

Typical empty weights for SR20 G2s were 2,120 to 2,140 pounds for aircraft equipped with 2-blade props, and 2,160 to 2,190 pounds for GTS models with 3-blade props. Newer SR20 G2s, with more "stuff," typically gained 20 or 30 pounds over the early ones.

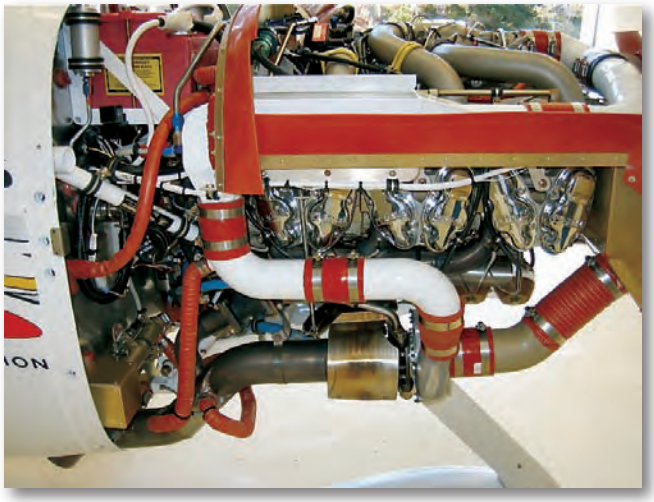
■ Turbo SR22 G2, (2006 – 2007, some serial #2038-#2437)

In July 2006, Cirrus announced a major enhancement – a turbonormalized (Turbo) SR22. Some initial models were referred to as SE22 G2's (Signature Edition) with custom graphics including the Klapmeier's signatures. Still using the same Continental IO-550-N engine, Cirrus added a dual-turbo, intercooled, turbonormalizing system built by Tornado Alley, a company renowned for their turbonormalized systems used on numerous other aircraft.

To help with the forward CG shift and weight of the turbo equipment, Cirrus changed to a new Hartzell lightweight 3-blade composite prop and added a built-in plumbed oxygen system from Precise Flight with a 77-cubic-foot tank located in the tailcone, controlled from the front panel.



Since the turbonormalized engine permits higher altitude operation, the certified ceiling of these models was increased from 17,500 to FL250 (25,000 feet). Air conditioning was not an option on the SE22 or the initial Turbo SR22 G2's.



Pilots have been very enthusiastic about the performance of the Turbo SR22 models. One issue however was the forward CG, particularly with two passengers and a little luggage. Cirrus issued an SB allowing installation of a 15-pound ballast weight in the tail of the airplane to improve the situation. Some owners have dealt with the issue on their own with baggage compartment loading. In any case, weight and balance is a bigger issue on the Turbo SR22 G2's than on normally aspirated units, and should be reviewed against your needs.

Real world Turbo SR22 G2 GTS empty weights have been reported at 2,440 to 2,472 pounds.

Market: Due to the quick appearance of the Turbo SR22 G3 in April '07, 2006 and 2007 Turbo SR22 G2 models are likely to take a bigger initial price depreciation. Market guesstimate puts it current value at $420,000 to $460,000.

G3 (Generation 3) Models

■ **SR22 G3** (mid 2007 on, serial #2438 on)

In April 2007, Cirrus announced the "Generation 3" SR22, built around a re-engineered wing structure. The SR22 G3 wing uses a full-span carbon fiber spar instead of the previous fiberglass, with the new spar being an amazing 87 pounds lighter. Cirrus slightly increased the wing's dihedral, allowing elimination of the aileron-rudder bungee and improving lateral stability. The new wing's integral fuel tanks were increased from 81 to 92 gallons. In addition, the new wings placement had a negative effect on forward CG; a problem especially significant to the Turbo and air conditioned planes. The TKS panels now span the entire leading edge of the wing. The relocated TKS wing tank holds 3.75 gallons, while a pulsed pump supplies fluid for up to 90 minutes.

Other improvements include wingtip recognition lights, increased airflow in the environmental systems, redesigned gear and wing fairings, and a taller landing gear for better prop clearance. There was no change to the 3,400-pound maximum gross weight limit, although the CG envelope was increased slightly; providing needed relief for Turbo and air conditioned owners. For all G3's, the standard equipment had few changes from the late G2s. Avidyne Entegra PFD & EX5000C MFD, and an S-TEC 55SR autopilot. A notable change is the WAAS-capable Garmin GNS430W/GNS420W navigators.

Options/upgrades to the base model (but included in the GTS package) include Platinum engine, dual GNS430Ws, XM weather and entertainment, S-TEC 55X, Stormscope, SKYWATCH, Honeywell TAWS-B (formerly called ETAWS), EMax, CMax, Flight Director, TKS anti-ice system, 406 MHz ELT, fan-powered ventilation system, leading edge protection, and a polished spinner.

Additional options to the base model (but not included in the GTS package) are air conditioning (54 pounds), a composite 3-blade prop, and a built-in oxygen system (18 pounds). A significant visual change is that the previously all-white Cirrus body paint, a limitation in the past due to heat absorption, is now available in new optional metallic paints with red, blue, and green top colors as a result of improved engineering of the paint composition.

Empty weight for a an SR22 G3 GTS is approximately 2,307 pounds.

■ **Turbo SR22 G3**

Some optional items on the G3 become standard on the Turbo version: composite 3-blade prop, built-in oxygen system, 406MHz ELT. Other options and GTS equipment are the same as described above for the normally aspirated version.

Empty weights for a Turbo SR22 G3 GTS are approximately 2,396 pounds, with air conditioning adding an additional 62 pounds.

Market (SR22 G3 and Turbo SR22 G3): It's too new to judge the actual resale market as of this writing, but a six-month to one-year old airplane in perfect condition could be expected to typically sell for 10-15% below its original cost.

■ **SR20 G3** (Late 2007 on)

The SR20 remained a G2 through late 2007. The SR20 G3 was announced very late in 2007, and as a result of the longer G3 wing it has an improved maximum gross weight of 3,050 pounds; an increase of 50 pounds over the SR20 G2.

Conclusion

Buying an airplane is a leap of faith and as much an emotional decision as a practical one. Decide on a budget before you seriously start shopping and remember that the price you pay for the airplane isn't the whole picture. Do your homework about financing, pre-purchase inspections, insurance, cost of operation, etc. Crunch your numbers; pick a price range, and start shopping. With a little education and preparation, you'll know when you see an airplane that matches your must-have list. COPA

About the author: *Tim Gieseler is a California native who started flying strictly for fun 20 years ago. After 10 years of flying aging rentals, he bought a Cessna 182 with a friend, earned his instrument rating, and bought a new 2002 SR22 as a 500-hour pilot. He retired in 2005 from the business he started 30 years earlier and is now a business consultant and real estate investor. He now flies a 2006 SR22 GTS and has logged 1,200 hours. Contact: timgieseler@gmail.com*