

2025

# OWNERS AND PILOTS QUICK REFERENCE GUIDE

AN OVERVIEW TO OWNING AND OPERATING AN SR SERIES G7 CIRRUS AIRCRAFT



**This Quick Reference Guide is intended to help protect the cosmetic appearance and mechanical integrity of the aircraft. It is not a Cirrus FAA Authorized Pilot Operating Handbook, Pilot Information Manual, Aircraft Flight Manual, Flight Operations Manual, Aircraft Maintenance Manual, or supplement nor is it intended to replace those documents. Always refer to these documents for mandatory aircraft operation and maintenance information.**

**For technical or maintenance questions, please contact Cirrus Field Support: [fieldservice@cirrusaircraft.com](mailto:fieldservice@cirrusaircraft.com) or +1 (218) 788-3000, option #2.**

**For pilot operation or flight training questions, please contact Cirrus Approach: [learning@cirrusaircraft.com](mailto:learning@cirrusaircraft.com)**

# WELCOME

---

Welcome to the Cirrus family. This Quick Reference Guide is a collection of best practices from Cirrus company pilots and covers day-to-day operation of your Cirrus aircraft that may not be covered in the PIM, AFM, or AMM (Aircraft Maintenance Manual). It is designed to answer many common questions about ownership and operation, and basic maintenance & service requirements.

When it comes to flying your Cirrus SR Series G7 aircraft, please refer to the PIM, AFM and the interactive Cirrus **iFOM** or Flight Operations Manual, which is available from the Apple iBooks store. To download it onto your iPad, look in the Apple Books app and search for **“Flight Operations Manual”** published by Cirrus Aircraft. This tool truly revolutionizes the flight training experience and is now available for both Cirrus Perspective aircraft and Avidyne aircraft. (Make sure you download the version appropriate for the avionics in the plane you fly.)

## **A note for pilots/operators of previous generation aircraft:**

At Cirrus, a key component to our success has been our continuous innovation from year to year. This Quick Reference Guide has been created for the 2025 SR Series G7, so while the majority of the sections herein apply to all our aircraft, you may see some features that are different from or not included in your aircraft. Nonetheless, we think you'll still find this to be a valuable addition to your ownership experience.

# TABLE OF CONTENTS

---

PRE-FLIGHT INSPECTION AND CONSUMABLES .....	05
RE-FUELING .....	11
WINTER OPERATIONS .....	12
WINDSHIELD/WINDOW CLEANING .....	14
ACCESSING THE AIRCRAFT .....	15
PREPARING THE COCKPIT .....	17
PERSPECTIVE TOUCH+ PILOT PROFILES .....	21
EFFICIENT PRE-FLIGHT PROCESS TIPS .....	22
GROUND HANDLING AND PARKING .....	24
HEADSETS AND RADIOS .....	26
USB CABLES .....	27
REMOTE TANIS AVIONICS & ENGINE PRE-HEATER CONTROL .....	28
SUPPLEMENTAL OXYGEN .....	28
CIRRUS IQ .....	31
OWNER RESPONSIBILITIES FOR SCHEDULED MAINTENANCE .....	32
UNSCHEDULED/EMERGENCY MAINTENANCE .....	33





# PRE-FLIGHT INSPECTION AND CONSUMABLES

---

**IN ADDITION TO FOLLOWING ALL PRE-FLIGHT CHECKLISTS CALLED OUT IN THE AFM AND THE FOM, PLEASE FOLLOW THESE HELPFUL REMINDERS.**

---



Make sure you remove these four items prior to flight, if they are present: Cowl plugs, pitot tube cover, tie-down ropes, and chocks. No gust lock is used in Cirrus aircraft because the trim cartridges are sufficient to prevent a gust from moving the controls to the stops.



**Beware of leaving a chock behind a wheel.** While it may appear to be clear as you pre-flight, once you add weight to the plane this chock could damage the wheel pant as you taxi away. The plane will also tend to rock up and down once the engine starts, increasing the risk of trapping a chock.



If there is a canopy cover on, carefully remove it making note as to how to reinstall it. Be careful not to scratch the paint as you remove and/or reinstall the canopy cover. Whenever possible, store the canopy cover in its bag in the baggage compartment. If the cover is wet, it is best to dry it prior to placing it in its bag for storage.

# PRE-FLIGHT INSPECTION AND CONSUMABLES

---



## **BAGGAGE DOOR LATCH**

The new baggage door is locked and unlocked via the remote key fob, so a key is no longer required. There is a manual back-up key that is mounted on the fuselage behind the door. The new latch simply requires a solid push of the door to ensure it's latched. A double check is to look at the latch release button to ensure you can see the green ring showing around the button. If the door were to accidentally open items could fall out while taxiing, but the speed of the airflow at take-off and in flight would force the door closed.



## **IN-DOOR STORAGE**

In addition to the gas strut to hold the door open and the wider opening angle, the new door now features a great storage pocket that is custom sized for two quarts of engine oil and a small fuel tester. It's also a great place to store your two wing jack point lugs, mentioned elsewhere in this User Guide.

# PRE-FLIGHT INSPECTION AND CONSUMABLES

---



## SEAT RECLINE/FOLD-DOWN MECHANISM

The front and rear seats are equipped with an automotive-style recline and fold-down mechanism. Simply use the lever on the side of either seat to position the seat into one of four positions:

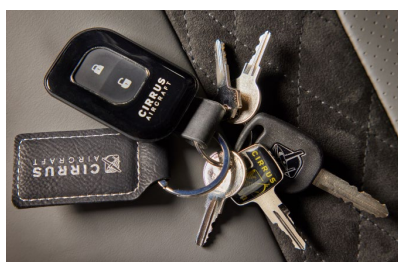
1. Fully upright
2. 50% reclined
3. Fully reclined or
4. Folded forward



## CLEANING KITS

Many owners choose to keep a small cleaning kit in their aircraft, often in a sealed plastic container.

**CAUTION: Never use any chemicals on the PFD or MFD screens, never use paper towels on the windshield and never clean the windshield “dry”!**



## DUPLICATE KEYS

Some owners choose to have a spare key accessible in case they accidentally lock themselves out of their plane. To do this, order a blank key, part number 51013-002 from your Cirrus Authorized Service Center. Then take your door key to a local specialty locksmith and get a spare or two made.



## PRE-FLIGHT WALK-AROUND

Check the two Phillips head screws (one each side) in the cowling just behind the propeller. The engine **MUST NOT BE STARTED** if either screw is loose or missing. Operating the engine without these screws may result in damage to your cowl, propeller, or engine. Pay special attention after having the cowling removed.

# PRE-FLIGHT INSPECTION AND CONSUMABLES

---

## LOWERING FLAPS TO 100% FOR PRE-FLIGHT STALL WARNING TEST

Since the flaps are not connected directly to the flap position selector and they are now controlled through software in the avionics, they will not respond to a change in the flap selector position until the avionics have initialized. If you activate the position switch too soon, this will create a “Flap Position Mis-Compare”. This is not harmful or damaging, it’s just an inconvenience you’ll need to address later. To avoid this, turn BAT 1 on first and allow a few extra seconds for the avionics to initialize before lowering the flaps. Verify that the flaps moved in response to the 100% position of the selector.

**While doing a Probe Heat/Stall Warning test, make sure the pitot tube cover is removed BEFORE you turn on the Probe Heat to avoid melting the cover on to the tube. Turn the heat off immediately after you complete the test. The probes get very hot without airflow over them and should not be left on for more than 45 seconds.**



### OIL

As you open the oil inspection cover don't allow the spring-loaded latches to “snap” open as this will eventually chip the paint. Hold and guide them up with your finger as they unlatch.

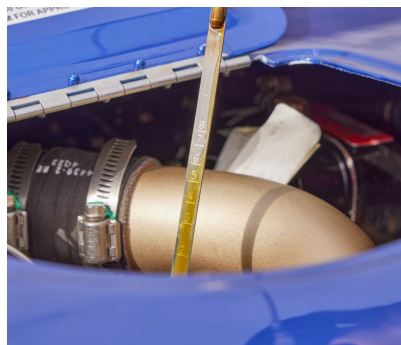
**Avoid holding anything else in your hand when you check the oil...**if you drop anything into the engine compartment, it will be very difficult to retrieve without removing the cowling!



### ADDING OIL

All Cirrus SR Series aircraft should be operated with a minimum of 6 quarts of engine oil. If you find less than 6, add a quart. Over time you will discover the optimum oil level for your aircraft's engine.

For the SR20 with the Lycoming engine, the access door is on the co-pilot side. Be cautious to NOT tighten the dip stick more than finger tight to avoid stripping the threads.



### SR22 AND SR22T

NOTE: THE DIPSTICK HAS A FLEXIBLE SECTION.

**CAUTION: IT IS IMPORTANT TO KEEP DIPSTICK FREE OF ANY CONTAMINATES OR DEBRIS SUCH AS DIRT. AVOID PLACING DIPSTICK ON THE GROUND.**



# PRE-FLIGHT INSPECTION AND CONSUMABLES

---



## **STATIC PORT**

There is a static source on each side of the aircraft aft of the rear window. Make sure each is not blocked, contaminated nor covered over.

Just above this, behind the rear window, is the area through which the CAPS® system fires upon activation. This area should be perfectly smooth. If it appears uneven, ask your Cirrus Authorized Service Center (ASC) to inspect it.



## **HORIZONTAL STABILIZER**

Ensure the clear tape covering access holes is intact.



## **ELEVATOR HORN**

Ensure that the counterweight in the elevator horn is present and that the torque stripes are intact.



## **TAIL**

If the rudder is equipped with a counterweight, be sure it's securely in place and safety wired.

# PRE-FLIGHT INSPECTION AND CONSUMABLES

---



## CONTROL HINGE COTTER PINS

Check that the cotter pins are present in the appropriate places.

During the pre-flight of the flaps, inspect the push rod that drives the flaps and ensure that the rod ends are properly aligned with the center safety-wired turnbuckle.

NOTE: THE REAR-FACING WHITE NAVIGATION LIGHTS ARE BUILT INTO THE SPECTRA™ WING TIP AND THE STROBES TAKE THE PLACE OF A RED ROTATING BEACON ON A MODERN AIRCRAFT.



## TIRE PRESSURES

In order to ensure maximum tire life and guard against wheel shimmy or damaging tension on the nose landing gear, it is important to maintain correct tire pressures. Be sure they are checked regularly with a tire pressure gauge. The nose wheel should be 30 to 35 PSI and the mains should be 60 to 65 PSI. This applies to the SR20, SR22 and the SR22T. We recommend aiming for the middle of these ranges.



## READING TIRE PRESSURES

Since 2022, the SR Series has featured a new and more aerodynamically-efficient set of wheel pants. A key part of the drag reduction was the change to the access panel, which requires a Phillips head screwdriver to release the Zeus quarter-turn fastener. There's a simple tip to make it easier to locate the Schrader valve to test the pressure or fill the tire. **(This is a two-person procedure, and you'll need a grease pencil or paint marker in addition to the Phillips screwdriver).**



Open the access panel. With one person looking at the side wall of the tire, slowly move the aircraft to rotate the tire until the Schrader valve is easily accessible. Next mark a line or an arrow on the tire at the six o'clock point, vertically down to the ground. With this mark, it will be easier to find the right point in the rotation to service the tire in the future. Once you need a new tire, ask the service center to mark the tire in the same way before they reinstall the wheel pant.



# RE-FUELING



If you're using self-serve or a line service truck, please observe the following tips:

- Your belt buckle can easily scratch the leading edge, so cover this or any other sharp objects on your clothing
- Use the exhaust pipe as the grounding point for static electricity discharge
- Use a rubber refueling mat whenever possible
- To avoid “splash back”, insert the nozzle at an angle pointed towards the cabin
- Avoid rubbing the fuel nozzle against the rim of the filler hole
- Avoid allowing the fuel nozzle to rest on the bottom of the tank or on the small metal fuel level tabs that can be easily bent



## FUEL

Be careful when you look into the fuel tanks to check levels, especially at night if you are holding a flashlight. As you pour the “sumped” gas back into the tank, make sure you don't drop the fuel tester into the tank and be sure to check the security of the filler cap latches once you're finished with the fuel checks.



## FUEL DRAINS

There are five fuel drains to check - two under each wing and one just behind the nose wheel. On FIKI equipped aircraft, avoid sampling from the TKS drains, as they look similar to the underwing fuel sumps. Be especially cognizant of the inboard (collector tank) drains: they can flow very quickly. We recommend you return clean sumped fuel to the tanks. **Contaminated fuel should be properly disposed of in designated containers. Dumping fuel on the ground may result in significant monetary fines.**

# WINTER OPERATIONS

---

For cold weather engine operations please refer to Section 4 of your AFM and to the engine manufacturer's operating manuals for the best procedures.

## NEVER FLY WITH A CONTAMINATED WING.

The Cirrus laminar flow composite wing could lose lift with **EVEN THE SLIGHTEST FROST. DECONTAMINATE YOUR AIRCRAFT BEFORE YOU ATTEMPT TO FLY!**

There are a number of techniques to do this:

- Use TKS ice protection fluid from a garden-style sprayer to melt the frost/ice and then wipe clean. This requires having access to a sprayer and TKS fluid. *(There are actually two approved fluids: AL-5 and DTD-406B)*
- Park the aircraft facing the sun and then wipe the melting frost off. This can take time
- Move the plane to a heated hangar until the frost melts

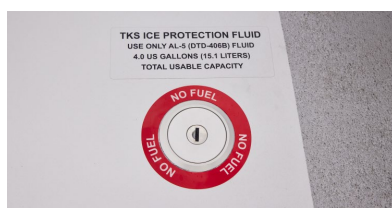
## SR22 AND SR22T WITH CERTIFIED FLIGHT INTO KNOWN ICE (FIKI)

Adhere to the **“Never fly with a contaminated wing”** rule as discussed above. Once you are airborne, the FIKI system is designed to handle most icing conditions; however, it is VITAL that you have studied the online Cirrus Icing Awareness course and passed the quiz at the end. Even the FIKI system has its limitations; treat icing conditions with respect at all times! *Any operations in icing conditions must be conducted according to the criteria defined by FAR Part 25, Appendix C.*

If you need to refill the ice protection fluid tanks, you can ask the FBO to do it for you, but be aware it may be a maintenance department function rather than a line crew function and may incur a minimum labor charge.

If you have spare fluid available and choose to fill yourself, use an appropriate funnel.

**MAKE SURE YOU'RE FILLING THE TWO INBOARD DE-ICE TANKS AND NOT THE OUTBOARD 100LL GAS TANKS!**



TKS ice protection fluid filler tank. One on each wing.







# WINDSHIELD/WINDOW CLEANING

---



**Never use a paper cloth....it will scratch the windshield!** If the windshield needs cleaning, make sure you use a **perfectly clean microfiber rag along with a cleaning aerosol such as Prist™** or similar cleaning product identified on Cirrus' approved cleaning product list.

NEVER use a dry cloth on a dry windshield and if you drop the cloth on the ground DO NOT continue with that cloth. Dust and dirt in a dry cloth will create scratches and swirls in the windshield. Use the Prist™ (or similar cleaning product identified on Cirrus' approved cleaning product list) liberally to ensure a damp surface and wipe in straight lines up and down, never in a circular motion as this too can create "swirls" in the windshield.

Cirrus approved cleaning products are listed in Section 8 of your AFM.

## PREVENTING PAINT SCRATCHES

Be very careful when leaning over the cowl or the wing to check fluids as your belt buckle can easily scratch the paint, so try to cover this or any other sharp objects on your clothing.

## FOR FIKI EQUIPPED AIRCRAFT

The leading edge of the wing uses a titanium panel with over 820 holes drilled per square inch. To prevent clogging these tiny holes **DO NOT USE ANY WAX ON THE LEADING EDGE!** Refer to your AFM for more details on cleaning the TKS panels.

## TAKE 10 & 10

Take 10 steps back and take 10 seconds. Put your cell phone away and focus 100% on completing your pre-flight inspection. Pause for a moment. Make sure the line crew hasn't left a cone or anything else in front of the propeller. Make sure you've removed the tug/tow bar, and that nothing is hanging/dangling — tie-downs, pitot tube cover, chocks — and ensure that the baggage door latch is secure.

# ACCESSING THE AIRCRAFT

---



## OPENING DOORS WHEN WET

If it's been raining and you open the doors, water can drip on the seats. The best way to avoid this is to wipe the water off the door, from front to back, along the top door seam, either side of the GPS and traffic antennae. This is where water that can drip on the seats sits.



## UNLOCKING THE DOORS

We recommend unlocking and opening the doors from the leading edge, while standing in front of the wing. It's simply easier to control the door from in front than from behind.



## FLAPS

Some owners choose to leave the aircraft with the flaps in the 50% position while parked. This makes it easier for people to board with much less likelihood that they'll accidentally step on the flap.



## WING WALK

As you and your passengers step up onto the plane, stay on the rough wing walk surface and be especially aware of any small stones on the bottom of your shoes. These can damage the paint if you're not careful. **BE ESPECIALLY CAREFUL IF THE WING IS WET, PARTICULARLY IF YOU'VE BEEN RUNNING THE FIKI SYSTEM. ENSURE YOU STEADY YOURSELF ON THE WAY DOWN.**



## OPENING DOORS

Don't leave the keys in the lock as you unlatch the door as they will dangle and scratch the paint. As you release the door catch, try to "hold/guide" the door as it opens and don't allow the door to "swing" hard against the gas strut.

# ACCESSING THE AIRCRAFT

---



## INGRESS/EGRESS

**The seats in Cirrus aircraft are made of special energy-absorbing material**, which, if pressed on with a focused point, such as a knee or a foot, will lose its absorbent qualities over time, so don't place a knee on the seat or stand on the seat. When entering the aircraft, be cautious to avoid side-loading the center console and armrest as this could strain the hinge, especially when in the open position.



## DOOR LATCHES

The door latches are easy to close. They do not require the same force that the older doors needed. Simply pull the door in and once the latches engage you can push down on the lever to lock.



---

Before attempting to close the doors, look to make sure all belts, buckles, headset cables and fingers are clear of the door frame. Doors do require a solid pull but they do not need to be slammed.

Practice closing the door a few times and BEFORE the engine is running so you have a smooth technique. **WARNING: Do not commence your take-off roll if either door is not secure. It's impossible to secure the doors once in flight. If enough runway remains, consider an abort. If safely aborting the takeoff is not possible the plane will fly with the door unlatched allowing you to safely circle back to the airport to land, and then close the door.**



# PREPARING THE COCKPIT

---



## **CAPS® SAFETY PIN**

The G7 aircraft now has a CAPS pin and a “Remove Before Flight” tag, the same as the SF50 Vision Jet, with all the required instructions on the tag.

Once you have removed the pin we recommend rolling up the tag and storing it on the convenience slot below the autopilot.



Avoid placing headsets, knee boards or any other items on the glare shield; it's just too easy for them to slip off and scratch either the avionics screens or to slide forward and scratch the inside of the windshield.

## **HEADSET CONNECTIONS**

Another change for the new G7 interior is that all five headset sockets are the LEMO six-pin style that provide stereo audio, microphone and “ships power” for Active Noise Reduction (ANR). Using this style reduces cables in the cockpit and negates the need to replace AA batteries in the headset control module.

If you have older headsets with the dual plugs, you have two options. Bose offers an upgrade that replaces the plug, the control module, and the mic. It's available with or without Bluetooth connectivity and can be purchased from Bose or an aviation retailer. This is the best option because you'll then get the benefit of “ships power” for the ANR.

A cheaper and simpler option is a simple **“Dual Socket to LEMO”** adapter, but this option will **NOT** power the ANR, and you'll still need new AA batteries every 30 or so hours of use.

**DO NOT FORCE THE CONNECTOR INTO THE SOCKET.** If it's properly aligned it will slide in and latch easily.

# PREPARING THE COCKPIT

---



## SWAPPING HEADSETS

When flying with more than one headset make sure you don't accidentally "swap" headsets between seats. If they're swapped and you push the pilot's transmit (PTT) button, you're activating the co-pilot's mic, since he/she is actually wearing the pilot's headset. If ATC says "aircraft transmitting on 123.45, carrier, no voice," this means you're transmitting, but since you have the wrong headset on, you're speaking into the wrong microphone. Another clue that it's not a radio malfunction is that the letters "TX" for Transmit appear next to the frequency as you push to talk.



## CIRRUS PERSPECTIVE TOUCH+™ SCREENS

The screens have a special non-reflective coating which will be damaged if cleaned with anything other than a very slightly water-dampened, soft, clean microfiber cloth. Using ANY chemicals will DESTROY the screen coating, and this item is NOT covered under warranty. **NEVER USE ANY CHEMICALS ON THE SCREENS!**



## FINGERPRINTS

To avoid the build-up of fingerprints, avoid touching the screens directly. If you need to point out something on a screen, we recommend using either the end of a pencil or pen with the nib retracted or the tip of your nail with your finger reversed.

# PREPARING THE COCKPIT

## NIGHT DIMMING OPERATIONS

Although the Cirrus Perspective Touch+ screens use a sensor to automatically adjust screen brightness, as it starts to get dark you might want to adjust the brightness manually. This is a three-step process.



7 O'clock daylight mode



5 O'clock manual bright mode



2 O'clock manual mode

With the dimmer rotated all the way counter-clockwise to the 7 O'clock position they will dim automatically. This is the best setting for daylight operations. *(Left picture)*

As it gets dark, turn the dimmer all the way clockwise to the 5 O'clock position. This is the brightest "Manual" setting. *(Center picture)*

As it continues to get darker, start to rotate the dimmer counter-clockwise and continue to adjust down as your eyes adjust to the darkness. *(Right picture)*

**NOTE:** BEST PRACTICE IS TO RETURN THE DIMMER TO THE FULL COUNTER-CLOCKWISE 7 O'CLOCK POSITION (LEFT PICTURE) FOR THE NEXT DAYLIGHT FLIGHT, OTHERWISE THE SCREENS WILL BE TOO DIM TO SEE IN DAYLIGHT.

## FLIGHT DECK CONVENIENCE LIGHTS

The two swiveling eyeball convenience lights will come on and off with the convenience lighting circuit, which is triggered by the remote key fob and opening or closing the door. They can also be controlled by the two individual rotary dimmers. At the end of a night flight, be sure to turn the rotary dimmers all the way to the counterclockwise OFF position (as seen from underneath). If you do forget to dim these back down to zero, they will go off themselves after five minutes to avoid battery drain.



# PREPARING THE COCKPIT

---



## FRONT SEAT ADJUSTMENT

The front seats adjust back and forth and the seat tracks are set at an angle to make the seat go higher as it travels forward. To adjust the seat, place your hand below the lower instrument panel and release the seat with the bar between your knees.

You may also use the grab handle above the windshield. **DO NOT USE THE TOP OF THE GLARE SHIELD; IT IS NOT STRUCTURAL!**

Since the seat is on an angle, remember to brace yourself as you slide back to avoid moving back too fast.

Consider helping your passenger into the right seat; show them where to grab (and where NOT to grab!) to get their seat adjusted, get them buckled up, and close their door from the outside.

The seat will be locked in place when you release the bar and the pins in the left and right seat tracks spring into place. To ensure the seat is locked in your desired seating position, listen for the pins to click into place, and verify that the seat adjustment bar is in the down position. A quick “shuffle” back and forth in the seat can confirm that the pins are locked into the rail and that you’re safe to go.

**IT IS EXTREMELY IMPORTANT TO ENSURE THE SEAT IS PROPERLY LATCHED BEFORE YOU COMMENCE YOUR TAKEOFF ROLL, OTHERWISE THE SEAT MAY SLIDE BACK AS YOU ROTATE.**



# CIRRUS PERSPECTIVE TOUCH+™ PILOT PROFILES

---

One of the great features of the Cirrus Perspective Touch+ by Garmin® system is its display flexibility with hundreds of variations and configurations that a user may choose from, and the ability to store custom profiles for up to 25 users.

In a multi-user environment, each pilot should be respectful of their fellow pilot's profile. If you have started the system with a different pilot's profile and you make changes to the displays, those changes will be recorded into that other pilot's profile.



## **To avoid making these unwanted changes to other profiles, try the following:**

1. The first time you fly behind the Garmin system, use a generic profile
2. Immediately go to the Crew Profile and record a new profile with your name
3. Make all the adjustments, tweaks and changes you would like
4. Always select your profile for future flights
5. As you learn more about the Garmin system or if you are flying in different environments, you may wish to make changes to your profile
6. Changing profiles can be done upon start-up or after the system has booted.

## **AUDIO PANEL**

The new G7 avionics suite uses the remote-mounted GMA 36B audio panel controlled via the GTC 585 touch controller, with Bluetooth connectivity.

This audio panel has the option to connect audio devices like phones and MP3 players via Bluetooth. We recommend a thorough tutorial, review, practice and check out before flying with this for the first time. Just like any technology, it's great once you become familiar.

# EFFICIENT PRE-FLIGHT PROCESS TIPS

---

## **CIRRUS PERSPECTIVE TOUCH+ BY GARMIN**

Switch on the left-most switch—this is BAT 2. With the pilot's door open, you can easily see the switch from the leading edge. The flap position indicator on the engine page should be "X'd" out showing the flap system is not energized. If they do, the isolation diodes may be damaged or inoperative. Consult with your ASC or Cirrus Field Service prior to flying the aircraft. Additionally, verify that the Essential Bus voltage is 23 to 25 volts while powered only by battery 2.



Then, switch on BAT 1 in addition to BAT 2. Verify that the Essential Bus remains at 23 to 25 volts after turning on battery 1. Drop full flaps. Switch on the lights and, if appropriate, pitot heat (make sure the pitot cover is removed first!). Quickly walk around and check them. When you come back, both Garmin screens should be on. Right now, looking in at the pilot's footwell is the best time to check all of the circuit breakers.

Limit battery use before starting the engine to 5 minutes. If you and/or your CSIP instructor need to practice programming the Cirrus Perspective Touch+ panel, then consider using an external power source. We suggest using a Start Pac 24 volt Avionics Power Supply available from the Cirrus Store, [cirrusstore.com](http://cirrusstore.com)

## **PASSENGER BRIEFING**

Make certain your passengers have received a thorough safety briefing including:

1. The CAPS handle
2. The Level button
3. The door latches
4. The emergency egress hammer
5. The fire extinguisher

Also remind them that there is no smoking and discuss "Sterile Cockpit" during key phases of flight or an emergency. Apologize in advance if you need to "shush" someone who chimes in at a bad time.

# EFFICIENT PRE-FLIGHT PROCESS TIPS

## AVIONICS STARTUP

Once pre-flight inspections are complete and you are ready to start the engine, here are some avionics startup tips:

The processors in the displays are the brains of the Cirrus Perspective Touch+ avionics and function much like any other computer. Upon start-up, they take time to initialize, to connect with the remote sensors and LRUs that make up the system, and run self-tests. To avoid system interruption upon start-up, it's best to take a steady and deliberate approach.

1. Turn on BAT 2. To check that the bus isolation diodes are working, ensure you do NOT have Flap Position Indicator, MFW or Avionics Cooling Fan
2. Adjust your seat and seat belts
3. Remove the CAPS safety pin
4. By now the system should be ready for the next step
5. Turn on BAT 1
6. Do NOT activate the pitch or roll trim hat. Trim inputs during the Automatic Flight Control System (AFCS) self-test can upset the system
7. Look for the TAWS and AFCS annunciations in the top right corner of the PFW to go out. Finally, wait for the Synthetic Vision (if so equipped) to appear on the PFW
8. If you have any CAS messages remaining, go ahead and shut off BAT 1 and BAT 2, let the system wait for 30 seconds or so, and re-try this sequence

If you start the engine and need to re-boot the system, it's OK to leave the engine running while you do a steady and measured re-boot as shown above.

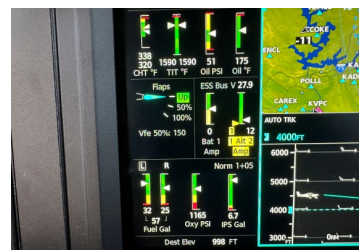
## ELECTRICAL SCHEMATIC UP WHILE TURNING ON ALT 1 AND ALT 2

Immediately after engine start you can access the electrical schematic in the Aircraft Systems menu on GTC 1. We recommend using the right MFW. Turn on ALT 1 and watch as that part of the electrical system comes to life. Wait a few moments, add ALT 2 and watch it start to add power to the system. Not only does this clearly show both alternators have energized and are making electricity, but this is also a great way to best understand the electrical architecture and how the system uses power.



## LOW AMPS WARNING FOR ALT 1

Occasionally, if the electrical current being drawn from ALT 1 is very low, such as having the environmental system and the external lights off, this low draw may cause the yellow CAS Caution to illuminate. To check if this is really a fault or just low usage of the power from ALT 1, simply add load, such as the A/C, and watch the amps increase, which will then cancel the CAS message. There's no need to leave the A/C on...this is just a reassurance that there is not an alternator problem.



# GROUND HANDLING AND PARKING

---

The wingspan is just over 38 feet! Situational awareness is very important as you move the aircraft on the ground. The wingspan is wider than many other general aviation aircraft and the wing is closer to the ground. Look around before you move the aircraft to ensure that your ground handling (or taxi) will not bring the Cirrus close to other aircraft or fixed objects on the ground. When in doubt, ask someone to assist you as a “wing walker” until you are certain that the airplane is clear of all obstacles.



The G7 SR20 has a max take-off weight of 3,150 lbs and a G7 SR22 or SR22T top out at 3,600 lbs so they can be a challenge to handle without assistance. **ALWAYS** use a tow bar for controlling the nose wheel as you move the plane around. Make certain that the tow bar is between prop blades as shown here. If a blade is pointing straight down, turn the prop counter-clockwise, looking from the front at the prop.

**MAKE SURE THE MAGNETOS ARE OFF AND BOTH BATTERIES ARE OFF BEFORE TURNING ANY PROP.**

When moving forward you can pull the tow bar or the prop. If you have help, ask them to pull from in front of the wing by grabbing the door frame. When moving in reverse **DO NOT PUSH WITH THE TOW BAR**. There is a risk that the lugs will jump out and damage the wheel pant. Instead, push on the inner most part of a prop blade and use the tow bar to steer the nose wheel. **NEVER PUSH ON THE PROP SPINNER!**

Remember also that the nose wheel is free-castering, so if you have someone helping you ask them to push with you on the base of another prop blade, as close to the center line of the fuselage as possible. If the person helping pushes backwards on a wing, even at the root, the plane will start to pivot quickly and get off line. Of course, if you're pushing from behind **DO NOT PUSH ON THE FLAPS OR THE AILERONS. PUSH ONLY ON THE WING ITSELF.**

**NEVER WALK AWAY WITH THE TOW BAR CONNECTED. REMOVE THE TOW BAR BEFORE YOU START THE ENGINE! A SIMPLE DISTRACTION CAN LEAD TO AN EXPENSIVE MISTAKE!**



# GROUND HANDLING AND PARKING

---



## PRIOR TO ENGINE SHUT DOWN

At the end of the flight make sure you turn off the air conditioning, air recirculation and the fan **BEFORE** you shut the engine down. This removes the A/C system as a load on the engine and the starter for the next flight and extends A/C life.



## CHOCKS

Since the plane has low-profile wheel fairings it's important to use the Cirrus low-profile chocks to avoid damaging the wheel fairings. Also, there's no need to "wedge" the chocks in place...simply place them directly in front of and/or behind the wheel.



Always assume that the FBO line crew or a mechanic will try to tug the plane while you're parked. Most FBOs will ask that you confirm the brakes are released when you stop at their facility. Also, their tugs are often powerful enough to pull a Gulfstream™ and so the driver may not even notice that he's tugging your plane with the brakes on. If the plane is tugged with the brakes on, damage could occur. Pay close attention to the "Park Brake" annunciation on the PFW and make it a consistent "last check" as you step away from the plane, double check: **"Park Brake Off"**.



## TUGGING

When stopping at FBOs, especially facilities that handle larger aircraft, it's likely that your plane will be towed. Talk to the line crew and make sure they have experience and the correct tow bar adapters to hook up a Cirrus. Using the wrong adapters can easily damage the nose wheel pant. Be very careful if they use a ride-on "Lektro" tug. These must **ONLY** be used with the correct Cirrus "Fixed Gear" adapter installed.

# HEADSETS AND RADIOS

To ensure you and your passengers have an enjoyable flight, it's worth a few moments to check the headset volumes are set to appropriate levels so everyone can hear and understand any instructions. Headset volume is controlled in three places:

## RADIO VOLUME

This controls the volume of incoming radio calls from ATC and other aircraft and is a single setting for all intercom positions in the aircraft. The pilot will usually set this to best suit his/her listening preferences.

## INTERCOM VOLUME

This controls the volume of all radio and intercom signals in three zones: Pilot, Co-Pilot and rear seat Passengers (all three rear seats are grouped together). Within the intercom menu of the audio section on the touch controller, there is a simple and intuitive way to control each zone's volume, and which zone is talking to other zones. There is also a convenient "Sync to Pilot" option which mirrors all the pilot's preferences to the other two zones.

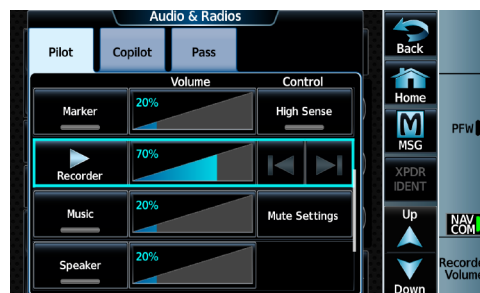


## HEADSET VOLUME

Lastly, most brands of headsets allow the user to adjust the overall volume of all the signals coming into their ears. These volume controls may be on a "Control Module" built into the cable, or on some models the rotary knobs are on the outside of the ear cups of the headset itself. High-end headsets will also allow for a cable or Bluetooth connection to an audio player, such as an iPhone® or iPod®.

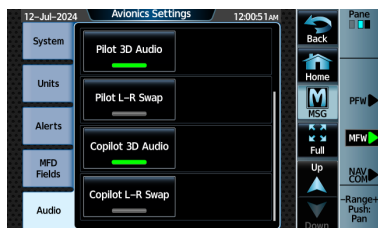
## PLAYBACK VOLUME

Within the "Audio & Radios" section of the NAV/COM page, usually displayed on GTC 2, you can control all the various audio input volumes individually, including the "Recorder". This is what is replayed when you push the "Play" button on the NAV/COM home page. We recommend setting this volume 10% to 20% higher than your usual COM 1 and COM 2 volume settings. The benefit here is that if you use the "Play" feature to hear a previous incoming radio call, it will be distinguished from a current incoming call by being louder.



# HEADSETS AND RADIOS

---



## 3D AUDIO

3D Audio splits the signal from COM 1 into the left headset earpiece and COM 2 into the right. This is especially useful in busy airspace when listening to Approach Control on COM 1 and ATIS/AWOS on COM 2. It really helps you delineate between the two incoming signals.

For 3D Audio to work, several things need to be selected:

- Your headsets must be in stereo mode. On Bose headsets this is a tiny “dip switch” under the batteries in the control module. Select ST rather than MN for Mono
- From the GTC 1 home page, go to the 3D Audio section via Utilities/Setup/Avionics Settings/Audio
- You can then choose to have 3D Audio independently for the pilot and/or the co-pilot headsets.
- On the audio control page you’ll need to select either COM radio to talk & monitor and then add the MON function on the other radio. This will split the incoming signals into the left and right earpieces of your headset.

# USB CABLES

---



Along with all the other innovations in the G7 are new Convenience Power options. Directly above the environmental controls are two of the latest USB-C® charging ports. The rear charging ports have been moved off the back of the center console and into the rear armrests on the left and right cabin walls. This reduces the risk of rear seat passengers tripping over cables as they get into and out of their seats.

## AFTERMARKET CABLES

These aftermarket cables, especially when coiled as shown, may introduce interference into the aircraft audio system and so should be avoided. If you hear audio interference that is new, try removing all USB cables and see if they are the cause.

## “APPROVED” CABLES

Cirrus prefers Apple® brand cables.

# REMOTE TANIS AVIONICS & ENGINE PRE-HEATER CONTROL

---

All FIKI-equipped (and many clean wing) SR Series aircraft have a Tanis Avionics & Engine Pre-Heater installed; however, you may not know when the next cold snap is coming and you may not want to drive to the airport just to plug the pre-heater in. A great accessory is a remote power controller. These plug into a 120V outlet in your hangar and connect to a cellular signal which can remotely turn on and off up to four outlets. So, during the colder months, simply connect this to your Tanis plug via an extension cord and if the temperature drops prior to your next flight, use the power controllers app to pre-heat the avionics and engine. At temperatures below 5° C your oil, your battery and your cylinder life will all benefit from being warmed, as will your avionics and the cabin. (Please note, the Tanis system can self-regulate, so you can't "over-heat" the aircraft, but leaving it off when not needed is a good practice. Also, it can take up to eight hours to fully warm the engine block and the oil). Suitable devices are offered on several aviation specialty websites.

## SUPPLEMENTAL OXYGEN SYSTEM

---

The Cirrus SR22T is equipped with a built-in oxygen system as standard, and the system is offered as an option on the SR22 non-turbo too. Even if you use a portable oxygen bottle, these tips can be helpful.

Using supplemental oxygen adds greatly to the utility of your aircraft and to your comfort and safety. Supplemental oxygen above 10,000 ft is strongly recommended, and in some airspace, it is required (refer to your local aviation authority for specific legal requirements). Once above 18,000 ft (or FL180), cannulas are no longer allowed and you **must use a mask** with a built-in microphone for the crew members. Before you embark on a flight that may require supplemental oxygen, get a briefing from a CSIP on the use of the system and how to spot symptoms of hypoxia. Be aware that a key symptom of hypoxia is euphoria, so you may not realize you're hypoxic since you may be feeling "buzzed".

Even at altitudes below the local requirements, using oxygen can be very useful. Since night vision is the first physiological system to be impacted by reduced blood oxygen saturation levels, the FAA strongly recommends using supplemental oxygen **above 5,000 ft at night**. Remember, no two pilots react the same to lower blood oxygen saturation levels, and so using oxygen can keep you feeling "fresher", especially on a long trip. Considering the approach and landing phases at the end of your trip are among the highest workload environments, oxygen can be especially helpful. Not using supplemental oxygen can leave you feeling "groggy" or even somewhat "hung-over".

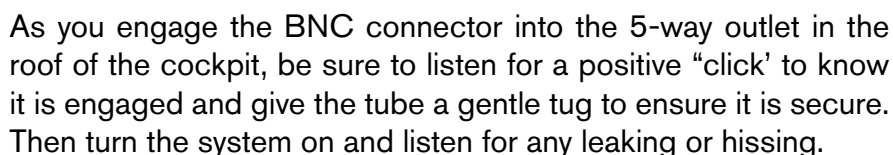
On all but the shortest hops, it's a good idea to have your oxygen kits available. If you found yourself needing to climb for weather, turbulence, terrain, winds, or ATC routing, and your oxygen kit is not available, you could find yourself in a sticky corner.





**Don't wait until the engine is running to check the system.**

## CONNECTING THE REGULATOR



## FITTING THE CANNULAS AND MASKS

On the EIS or “Engine” page there is an oxygen quantity gauge. Full is 2000 PSI. The amount of oxygen you’re likely to consume is a combination of the flow rate based upon your altitude; the number of people using the system; and if you’re using cannulas or masks. A chart to estimate usage can be found in the oxygen supplement pages of the AFM.



29

# SUPPLEMENTAL OXYGEN SYSTEM

---



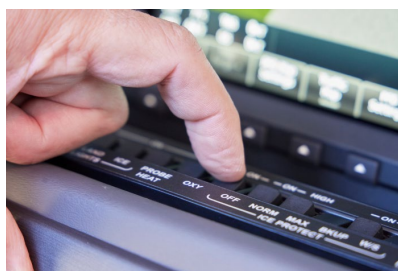
## PULSE OXIMETER

Each oxygen-equipped Cirrus comes with a full set of cannulas and masks and a simple pulse oximeter. These can also be found at larger drug stores, usually for under \$50, and are a great accessory to have at your fingertips. (Pun intended) The pilot and passengers should check their blood oxygen saturation levels prior to take off to establish a “baseline”. Then keep checking regularly, as often as every 10 minutes, especially as you climb higher where the onset of hypoxia will be quicker. If your level is lower than you’re comfortable with, you can take a few deep breaths, especially through your nose if you’re using a cannula. You can also increase the flow rate through the regulator, but this will increase usage.



## SETTING THE FLOW RATE

The regulator has a small black knob at its base. Adjust this knob to increase or decrease the flow of oxygen. You’ll see a small grey ball “bobbling” in the flow of oxygen to indicate that oxygen is flowing. Check the flow rate periodically as the tubing can become kinked or pinched during the flight and remember to adjust the setting as you change altitude.



***A post-flight “Got-Ya”.*** It’s likely that you’ll turn the oxygen off as you descend, but if you still have it on after you land, there’s a little ***“Got-Ya”*** to watch for.

The oxygen system uses electrical power to both open **AND CLOSE** the flow valve, so if you don’t turn the system off **BEFORE** you power down the aircraft, the valve **WILL NOT CLOSE**, and you’ll waste the rest of your oxygen.



The closer you are to mountainous areas, the more FBOs will carry oxygen. Note that many treat an oxygen refill as a maintenance work order, not line service, so hours and pricing will be different from fueling. It’s best to call in advance and make sure the service will be available when you need it.

## CIRRUS IQ

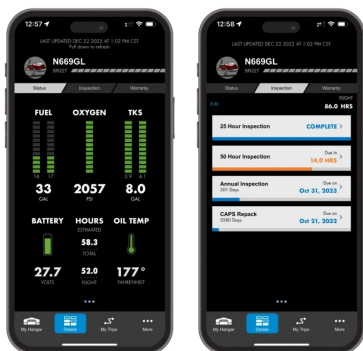
The SR Series aircraft features an LTE module connected to the Convenience System circuit, enabling data transmission to the Cirrus IQ app under specific conditions. Data is sent after landing or when a remote update is requested via the app (see Remote Wake). Factors like enclosed hangars or poor cellular coverage can inhibit connectivity. If this happens, data is stored but won't reflect in the app until a connection is reestablished. Check the last update time at the top of the screen for accuracy.

## KEEPING INSPECTION STATUS CURRENT

Cirrus IQ tracks maintenance schedules, including the 25-Hour Inspection for new or overhauled engines. After completing the first 25-hour inspection, mark “Yes” if another is needed. After the second (50-hour) inspection, mark “No” to finalize. This inspection will then show as “Completed.” For ongoing maintenance, use the 50-Hour Inspection window instead.

## SERVICE LOCATIONS & SUPPORT

Access a map of Authorized Service Centers and 24/7 Technical Support +1 (218) 788-3000, option #2 under the “More” tab in the app.



## REMOTE WAKE AND DEEP SLEEP MODE

The Remote Wake feature lets you request real-time aircraft data by swiping down on the Aircraft Details page. Updates take 3–5 minutes but may fail due to connectivity issues or if BAT1 voltage drops below 25.9V, triggering deep sleep mode to preserve starting power. **The Remote Wake feature is restored** once BAT1 is recharged. For idle aircraft (30+ days), follow storage procedures in the AFM (Section 8: Handling and Servicing – Parking).

## CIRRUS IQ WEBPAGE, FEATURE VIDEOS & FAQs



### WEBPAGE & FEATURE VIDEOS

[cirrus.link/IQ](https://cirrus.link/IQ)



### FAQs

[cirrus.link/IQFAQ](https://cirrus.link/IQFAQ)

# OWNER RESPONSIBILITIES FOR SCHEDULED MAINTENANCE

---

All new Cirrus aircraft come with a minimum of three years/1,000 Flight Hours of Spinner-to-Tail warranty. As detailed in the warranty documents, much of the coverage is offered by the manufacturers of individual sub-assemblies, such as the engine, the propeller, etc., and these individual warranties are then “bundled” together by Cirrus to create the overall coverage.

The sub-assembly manufacturers have very specific inspection requirements for continued warranty coverage and failure to follow these requirements can lead to warranty claims being denied and warranty cancellation. The Instructions for Continued Airworthiness (ICA) are very specific about what must be done at each inspection and the Flight Hours and calendar cadence for these inspections. ICAs are a collective group of maintenance documents for entire aircraft. It is strongly recommended that you read and understand the ICAs and be intentional regarding your communication with your maintenance provider.

Some highlights to note. (This is **NOT** a comprehensive list, but covers the most common items)

- These required inspections are more than just an oil change. They often include other items that require inspection at staggered or “phased” intervals over the life of the aircraft
- All maintenance is predicated on Flight Hours. Each inspection has a limited amount of “wiggle room” for the exact Flight Hours, usually +/- 10% for the 25-Hour and 50-Hour inspections; and +/- 10 Flight Hours for subsequent inspections
- The requirements differ between the Lycoming engine in the SR20 and the Continental engines in the SR22 & SR22T
- Regardless of other items in each inspection, the oil must be changed at least every four months
- More in-depth inspections are usually required for aircraft in commercial operations, such as flight schools, Part 135 charter etc.
- Be very clear about a “100-Hour Inspection” as this phrase has different requirements for warranty versus non-warranty aircraft, and for those in commercial operations
- In addition to the Flight Hour events, there are calendar events, such as the Annual Inspection, IFR Pitot/Static & Transponder checks and life-limited parts such as Line Cutters and CAPS
- Only a **Cirrus Authorized Service Center (ASC)** can perform warranty work, so you're always better off using an ASC for all maintenance just in case a warranty item pops up

**IF IN DOUBT...ASK!** Talk to your local Authorized Service Center or our Technical Support team on +1 (218) 788-3000, option #2. This can avoid uncomfortable conversations regarding warranty claim denials, and unwanted cost on your part.



# UNSCHEDULED/EMERGENCY MAINTENANCE

---

Below are some helpful tips and insights for basic repairs. For a complete guide to repair, maintenance and diagnostics, refer to your specific Aircraft Maintenance Manual.

## FLAT TIRE

If the aircraft requires jacking up, make sure you remove the tie-down eye bolt from the jack point screw and replace it with one of the jacking lugs which are usually kept in the center console or the storage pocket inside the rear baggage door.

**UNDER NO CIRCUMSTANCES** should you lift the plane with the tie down rings. The ring may slip off or it will snap and the jack will puncture the wing as it falls! Also, jack both wings evenly not just one side. This also avoids the nose wheel rotating and the jack point slipping! Complete instructions are located in the Aircraft Maintenance Manual.



## DEAD BATTERY OR STUCK STARTER

Below are some helpful tips if you have to remove the cowling of your aircraft.

- Protect the prop spinner and the windshield. It's very easy to scratch when removing or reinstalling the cowling
- Like many composite components, the cowling derives its rigidity from being screwed together. Once you start to remove the screws the cowling becomes pliable and can easily twist and damage surrounding parts
- Take part of an old cardboard box about 18" x 24" and cut a "mouse hole" about 4" in diameter in the center of the lower edge
- Place this piece of cardboard between the back of the prop spinner and the cowling with the mouse hole sitting over the crankshaft
- Also, be aware that there are environmental air ducts and landing light power connections that attach to the lower cowling. These need to be reattached during reinstallation
- When re-installing the cowling make 100% sure you have replaced the screws at the 9 O'clock and 3 O'clock positions in the air intakes just behind the prop





