



Normal/Abnormal/Emergency Checklists

Revision 02 – 05/10/2023

CIRRUS SR-20

G-1000 Perspective Avionics

PREFLIGHT

Pitot Tube Cover Removed

Cabin:

Documents Check

Avionics Power Switch OFF

BAT 2 Master Switch ON

PFD Verify ON

Essential Bus Voltage 23-25 Volts

Flap Position Light OUT

BAT Master 1 Master Switch ON

Avionics Cooling Fan Audible

Fuel Quantity Check

Fuel Selector Fullest Tank

Flaps 100%, Light ON

Aircraft Lights ON

Pitot Heat ON

Exit Aircraft and Quickly Complete:

Stall Warning Opening Check

Pitot Heat (IFR) Check

Aircraft Lights Check

Pitot Heat (IFR) OFF

Aircraft Lights OFF

BAT 1 and 2 Master Switches OFF

Alternate Static Source Normal

Circuit Brakers IN

Fire Extinguisher Check

Emergency Egress Hammer Available

CAPS Handle Pin Removed

Left Fuselage:

Baggage Compartment Door Locked

COM 1 Antenna Check

Wing/Fuselage Fairing Check

COM2 Antenna Disconnect

Static Button Check

Parachute Cover Check

Final Walk Around:

Chocks Removed
Fuel Caps Secure
Engine Air Inlet Covers Removed
Pitot Mast Cover Removed
Baggage Door Closed

BEFORE START

Passenger Briefing Completed
Seats and Seat Belts Adjust and Lock
Hobbs Time Check

ENGINE START

Parking Brake ON
BAT Master Switches ON (Check Volts)
Strobe Light ON
NAV Light As Required
Mixture Full Rich

→ Cold:

Power Lever Full Forward
Fuel Pump PRIME, then BOOST
Power Lever ¼ inch
Propeller Area Clear
Magneto/Starter Engage
Mixture (When Engine Starts) Smoothy Advance
CAUTION: If engine does not start within 10 seconds, follow Stater Limits, and wait 20 seconds. Repeat Procedure at "Prime"

→ Hot:

Fuel Pump BOOST
Power Lever ¼ inch
Propeller Area Clear
Magneto/Starter Engage
Mixture (When Engine Starts) Smoothy Advance
CAUTION: If engine does not start within 10 seconds, follow Stater Limits, and wait 20 seconds. Repeat Procedure at "Prime"

Flooded:

Power Lever Full Forward
Mixture Idle Cut-Off
Propeller Area Clear
Magneto/Starter Engage
Mixture (When Engine Starts) Smoothy Advance
Throttle Reduce
CAUTION: If engine does not start within 10 seconds, follow Stater Limits, and wait 20 seconds. Proceed to Hot or Cold Start procedure

THIS CHECKLIST MUST REMAIN IN AIRPLANE

AFTER START

Fuel Pump	Boost
Mixture	As Required
Flaps	50%
Air Conditioner.....	OFF
COM/NAV Frequency.....	Set
Transponder	Set
Pitot Heat	As Required
Takeoff Briefing/Time	Reviewed
Doors.....	Latched
Brakes	Release
Landing Light.....	ON

CLIMB

Airspeed	96 KIAS (106 KIAS En-Route)
Mixture	As Required
Flaps	UP
Engine Gauges.....	Check

NOTE: Retract flaps at or above 85 KIAS

CRUISE

Throttle	2100-2700 RPM
Mixture	As Required
Fuel Pump.....	OFF
Engine Parameters.....	Check
Landing Light.....	OFF

DESCENT

Throttle	As Required
Mixture	Adjust
ATIS/AWOS/ASOS.....	Obtain
Altimeter(s).....	Set (3)
PFD Altitude Select	Set
Landing Light.....	ON
Cabin Heat/Defrost	As Required

BEFORE LANDING

Seat and Seatbelts	Check Secure
Fuel Pump.....	BOOST
Mixture	Rich
Autopilot	OFF
Approach Briefing.....	Complete
Air Conditioner.....	OFF

Empennage:

Tiedown Rope	Removed
Horizontal and Vertical Stabilizers	Check
Elevator and Tab.....	Check
Rudder	Check
Rudder Trim Tab	Check
Attachment hinges, bolts, and pins.....	Check

Right Fuselage:

Static Button.....	Check
Wing/Fuselage Faring	Check
Door Lock.....	Unlock

Right Wing:

Flaps	Check
Aileron and Tab.....	Check
Aileron Gap Seal.....	Secure
Hinges, Bolts, and Pins	Check
Wing Tip.....	Secure
Fuel Vent.....	Unobstructed
Leading Edge and Stall Strips	Check
Fuel Caps.....	Check Quantity and Secure
Fuel Drains (2)	Sample
Wheel Faring's	Check
Main Wheel Tire and Brake Pad/Disc	Check
Tiedown Rope	Removed
Cabin Air Vent	Unobstructed

Nose:

Surface Condition.....	Check
Strut	Check
Wheel Faring.....	Check
Tire and chocks	Check and Remove
Gascolator (Underside)	Drain for 3 Seconds
Propeller.....	Check
Spinner and Air Inlets	Check
Alternator Belt	Check
Engine Oil (6 Quarts Minimum)	Check
Exhaust.....	Check

Left Wing:

Cabin Air Vent	Unobstructed
Wheel Faring's	Check
Main Wheel Tire and Brake Pad/Disc	Check
Tiedown Rope	Removed
Fuel Caps.....	Check Quantity and Secure
Fuel Drains (2)	Sample
Leading Edge and Stall Strips	Check
Fuel Vent.....	Unobstructed
Pitot Tube.....	Check
Wing Tip.....	Secure
Aileron and Tab.....	Check
Aileron Gap Seal.....	Secure
Hinges, Bolts, and Pins	Check
Flaps	Check

DO NOT RUSH

ENGINE FIRE DURING START

Mixture	Cutoff
Fuel Pump.....	OFF
Fuel Selector	OFF
Power Lever	Forward
Starter	Crank

ELECTRICAL FIRE (SMOKE IN CABIN)

BAT/ALT Master Switches.....	OFF
Heater	OFF
Air Vents.....	CLOSED
Fire Extinguisher.....	Activate
Cabin Doors	Partially Open
Avionic Power Switch	OFF
All Other Switches	OFF
Land	As Soon as Practical

ENGINE FIRE IN FLIGHT

Mixture	Cutoff
Fuel Pump.....	OFF
Fuel Selector	OFF
Airflow Selector	OFF
Power Lever	IDLE
Ignition Switch	OFF
Cabin Doors	Partially Open
Land	As Soon as Practical

WING FIRE

Pitot Heat Switch	OFF
NAV Light Switch.....	OFF
Landing Light Switch	OFF
Strobe Light Switch.....	OFF
Land	As Soon as Practical

CAUTION: Putting the airplane into a dive may blow out the fire. Do not exceed V_{NE} during the dive.

SMOKE AND FUME ELIMINATION

Air Conditioner.....	OFF
Temperature Selector	COLD
Vent.....	FEET/PANEL/DEFROST POSITION
Airflow Selector	SET AIRFLOW TO MAXIMUM
Panel Eyeball Outlets	OFF
If smoke is forward of firewall:	
Airflow selector	OFF

SHUTDOWN

Power Lever.....	1000 RPM
Fuel Pump.....	OFF
Mixture	As Required
Flaps	UP
Landing Light	OFF
Pitot Heat	OFF

AFTER LANDING

Parking Brake.....	ON
Power Lever.....	1000 RPM
ELT	Silent on 121.500MHz
Transponder	ALT and "1200"
Avionics Switch	OFF
Mixture	Idle Cut-Off
Magneto Switch.....	Off and Key Removed
All Switches.....	OFF
BAT Master Switches.....	OFF
CAPS Handle	Pin Installed
Hobbs and Tach Time	Record
Final Walk-Around:	
Control Lock.....	Install
Cowl Plugs	Install
Pitot Tube Cover	Install
Chocks	Install
Parking Brake.....	Release

FLY THE AIRPLANE

DO NOT RUSH

BEFORE TAKEOFF

Tachometer	1000RPM
Oil Pressure.....	Check
Engine Parameters.....	Monitor
Amp Meter/Indication.....	Check
ALT Master Switches.....	ON
Fuel Pump	OFF
Avionics	ON

BEFORE TAXI

ATIS/AWOS/ASOS.....	Obtain
Altimeter(s)	Set (2)
Heading Indicator	Match Compass
Radio Check	Completed
Seat and Seatbelts	Secure
Taxi Briefing	Completed
Fuel Selector	Switch Tank
Flaps	UP (0%)
Transponder	ALT and SET
Parking Brake.....	Release
Brakes	Check

RUN-UP

Parking Brake	ON
Flight Control.....	Free and Correct
Trim	Takeoff
CAPS Handle	Pin Removed
Fuel Selector	Fullest Tank
Fuel Quantity	Check
Fuel Pump	Boost
Mixture	Rich
Autopilot Function Check.....	Completed
Brakes	Hold
Power Lever	1700 RPM
Alternator.....	Check
Voltage	Check
Magnetos	Check L & R
Engine Parameter.....	Check
Power Lever	1000 RPM
Air Conditioner.....	As Required

CABIN FIRE

BAT/ALT Master Switches.....	OFF, As Required
Fire Extinguisher	Activate
Cabin Doors	Partially Open

Avionics Power Switch	OFF
All other Switches.....	OFF
Land	As Soon A Practical

If Fire has been eliminated OR night OR IMC:

Airflow Selector	OFF
BAT/ALT Master Switches.....	ON
Avionics Power Switch	ON
Required Systems.....	ACTIVATE one at a time
Temperature Selector.....	COLD
Vent Selector	FEE/PANEL/DEFROST Position
Airflow Selector	Set to MAXIMUM
Panel Eyeball Outlets	OPEN
Land	As Soon as Practical

SPIN RECOVERY

CAPS	Activate
------------	----------

Proceed to CAPS Deployment Check List

NOTE: Pull activation T-handle from its holder. Clasp both hands around the handle and pull straight down in a strong, steady, and continuous motion. Maintain maximum pull force until the rocket activates. Pull forces up to, or exceeding, 45 pounds may be required. Bending of the handle-housing mount is to be expected.

CAPS DEPLOYMENT

Airspeed.....	MINIMUM POSSIBLE (>133 KIAS)
Activation Cover	Removed
Activation Handle	PULL straight down
<u>After CAPS Deployment, As time permits:</u>	
Mixture	Cutoff
Fuel Selector	OFF
Fuel Pump.....	PFF
BAT/ALT Switches	OFF
ELT	ON
Seat and Seatbelts	Tighten
Loose Items	Secure

Body Position

Emergency Positions

FLY THE AIRPLANE

DO NOT RUSH

BRAKE FAILURE DURING TAXI

Engine Power As Required
Directional Control Maintain with Rudder
Brake Pedals (s) Pump

If Directional Control cannot be maintained:
Mixture Cutoff

ALTERNATOR FAILURE

NOTE: "M BUS 1" or "M BUS 2" CAS Message applies, perform the below procedures.

"ALT 1" CAS Message Displayed:

Alternator 1 Circuit Breaker Check and Reset
ALT1 Master Switch Cycle

If Alternator does not reset:

ALT 1 Master Switch OFF
Non-Essential Bus Loads Reduce
Land As Soon as Practical

"ALT 2" CAS Message Displayed:

Alternator 2 Circuit Breaker Check and Reset
ALT2 Master Switch Cycle

If Alternator does not reset:

ALT 2 Master Switch OFF
Land As Soon as Practical

PFD 1 FAN FAIL

"PFD FAN FAIL" CAS Message Displayed:

AVIONICS FAN 2 Circuit Breaker Cycle

If message remains:

Hot Cabin Temperatures LAND ASAP
Cool cabin temperatures Continue and Monitor

MFD FAN FAIL

"MFD FAN FAIL" CAS Message Displayed:

AVIONICS FAN 1 Circuit Breaker Cycle

If message remains:

Hot Cabin Temperatures LAND ASAP
Cool cabin temperatures Continue and Monitor

PFD ADC FAIL

Standby Instruments Monitor
Land As Soon as Practical
IMC Exit

ENGINE POWER LOSS DURING TAKEOFF

Power Lever Idle
Mixture Cutoff
Brakes Apply

Flaps As Required
Ignition Switch OFF
Fuel Pump OFF
BAT and ALT Master Switches OFF
ATC/CTAF Notify

ENGINE POWER LOSS DURING FLIGHT

Airspeed 99 KIAS
Suitable Place to Land Identify

If Altitude Permits:

Mixture As Required
Fuel Selector Switch Tanks
Fuel Pump BOOST
Alternate Induction Air ON
Air Conditioner (If-Installed) OFF
Ignition Switch Check, BOTH

If engine does not start:

Proceed to Engine Air start or Force Landing

ENGINE AIRSTART

BAT Master Switch ON
Power Lever ½" Open
Mixture Rich, As Required
Fuel Selector Switch Tanks
Ignition Switch BOTH

Fuel Pump BOOST
Alternate Induction Air ON
ALT Master Switches OFF
Starter (Propeller Not Windmilling) Engage
Power Lever Slowly INCREASE
ALT Master Switches ON

If engine does not start:

Forced Landing Procedure Perform

EMERGENCY DESCENT

Power Lever IDLE
Mixture As Required
Airspeed V_{NE} (200 KIAS)

FLY THE AIRPLANE

DO NOT RUSH

FORCED LANDING

Airspeed	99 KIAS
Radio.....	Transmit 121.500 MHz
Transponder	7700
ELT.....	Activate
Power Lever	Idle
Mixture	Cutoff
Fuel Selector	OFF
Ignition Switch	OFF
Fuel Pump	OFF

Flaps (When Landing Assured)	100%
Master Switches	OFF
Seat Belt (s).....	Secure

PROPELLER GOVERNOR FAILURE

Propeller RPM will NOT increase:

Oil Pressure.....	Check
Land	As Soon as Practical

Propeller RPM Overspeed or will NOT decrease:

Power Lever	Adjust (Keep within limits)
Airspeed	Reduce to 90 KIAS
Land	As Soon as Practical

LANDING WITHOUT ELEVATOR

Flaps	Set 50%
Trim	Set 80 KIAS
Power	As Required for Glide Angle

DITCHING

Radio.....	Transmit 121.500 MHz
Transponder	7700
CAPS	Activate

Airplane	Evacuate
Flotation	Inflate when clear of airplane

NOTE: If available, life preservers should be donned and life raft should be prepared for immediate evacuation upon touchdown. Consider unlatching a door prior to assuming the emergency landing body position to provide a ready escape path.

NOTE: It may be necessary to allow some cabin flooding to equalize pressure on the doors. If the doors cannot be opened, break out the windows with the egress hammer and crawl through the opening.

PFD AHRS FAIL

Standby Instruments	Monitor
Autopilot GPSS Mode	Activate
Autopilot Altitude Hold	Activate
IMC	Exit

A/P or PITCH TRIM FAILURE

Airplane Control	Maintain Manually
Autopilot	Disengage
Circuit Breakers.....	PULL AS Required
• PITCH TRIM	
• ROLL TRIM	
• YAW SERVO	
• AP SERVOS	

Power Lever	As Required
Control Yoke	Manually Hold Pressure
Land	As Soon as Practical

BRAKE OVERTEMP

"BRAKE TEMP" CAS Message Displayed:

Aircraft Movement	Stop
-------------------------	------

LANDING WITH FAILED BRAKES

One Brake INOP:

Land	ON side of INOP brake
Directional Control	Maintain

Both Brakes INOP:

Divert	Longest, Widest Runway
Land	Downwind side
Avoid Obstacles	Rudder

LANDING WITH FLAT TIRE

Main Gear

Land	ON side of good tire
Directional Control	Maintain
<u>NOTE:</u> DO NOT TAXI	

Nose Gear:

Land	Centerline
Nosewheel	Keep flying for as long as possible
<u>NOTE:</u> DO NOT TAXI	

PARK BRAKE CAS MESSAGE

Parking Brake.....	Release
Monitor CAS for BRAKE TEMP caution.	Stop aircraft and allow for the brakes to cool.

FLY THE AIRPLANE

OPEN DOOR IN-FLIGHT

Airplane Control..... Maintain

NOTE: The doors on the airplane will remain 1-3 inches open in flight if not latched. If this is discovered on takeoff roll, abort takeoff if practical. If already airborne, do not allow efforts to close the door interfere with the primary task of maintaining control of the airplane.

LOW OIL PRESSURE

Land ASAP

NOTE: Oil pressure between 10 psi and 30 psi at or above 1000 RPM. This message will appear prior to engine start and should clear after engine start.

“STARTER ENGAGED” CAS MESSAGE

On-Ground:

Ignition Switch DISENGAGE prior to 10 Seconds

Battery Switches..... Wait 20 Seconds

If Stater does not disengage (Relay/Solenoid Fail):

BAT1 Switch.....OFF

Engine SHUTDOWN

STARTER Circuit Breaker PULL

In-Flight:

Ignition Switch Ensure not stuck in START

STARTER Circuit Breaker PULL

Flight CONTINUE

NOTE: Engine will not be available to restart

“FUEL QTY” CAS MESSAGE

Fuel Quantity Gages..... CHECK

If fuel Left & R indicates < 8 gallons per side:

Land ASAP

If fuel Left & R indicates >8 gallons per side:

Flight CONTINUE, MONITOR

IMPORTANT SPEEDS:

V_G.....99 KIAS
V_{PD}.....133 KIAS

V_R.....70 KIAS
V_Y.....96 KIAS
V_X.....83 KIAS

V_S.....69 KIAS
V_{SO}.....61 KIAS
V_{FE}.....119/104 KIAS
V_{NO}.....163 KIAS
V_{NE}.....200 KIAS
V_A.....130 KIAS

PASSENGER BRIEFING:

Seatbelts/Harness

- Operation and Adjustment
- Fastened for Taxi, Takeoff, and Landing

Emergency Exits

- Location and Operation - CAPS

Fire Extinguisher

- Location and Operation

Sterile Cockpit

Flight Controls

- Do not Block or Interfere

Emergency Procedures

TAXI BRIEFING:

Departure Runway

Anticipate Taxi Route

- Taxiways to be used
- Intersecting Runways
- Run-Up area
- Hotspots

TAKEOFF BRIEFING:

Departure Runway

- Length/Distance Available
- Surface Condition
- Wind Direction/Speed

Lift-Off Speed/ Initial Climb Speed

Emergency Procedures

- On-Ground
- In-Air

Normal Departure Procedures

CAUTION: Always ensure that you have the most recent revision of this checklist. Always refer to the pilots operating handbook for specific procedures. Always choose the safest course of action.

THIS CHECKLIST MUST REMAIN IN AIRPLANE