PREFLIGHT INSPECTION

Stall warning tester	RETRIEVE
ARROW documents	VERIFY
Avionics master	OFF
BAT 2 master	ON
PFD	VERIFY ON
Avionics cooling fan	AUDIBLE
Voltmeter	23-25 V
Flap position light	OUT
BAT 1	ON
Lights	CHECK
Stall warning	CHECK
Fuel quantity	CHECK
Fuel selector	FULLEST TANK
Flaps	100%, CHECK LIGHT ON
Oil annunciator	ON
BAT 1 and BAT 2	OFF
Alternate static source	NORMAL
Circuit breakers	CHECK IN
Fire extinguisher	CHARGED & AVAILABLE
Emergency egress hammer	AVAILABLE
CAPS handle	PIN REMOVED
Tach / Hobbs time	RECORDED
FlightCircle	DISPATCHED

WALK-AROUND

LEFT FUSELAGE	Door lock	UNLOCK
	COM 1 antenna	CONDITION
	Wing/fuselage fairing	CHECK
	COM 2 antenna	CONDITION
	Baggage door	CLOSED & SECURE
	Static button	CHECK FOR BLOCKAGE
	Parachute cover	SEALED & SECURE
EMPENNAGE	Tiedown rope	REMOVE
	Horizontal and vertical stabilizers	CONDITION
	Elevator and tab	CONDITION/ MOVEMENT
	Rudder	CONDITION/ MOVEMENT
	Rudder trim tab	CONDITION
	Rudder hinges/bolts/cotter pins	SECURE
RIGHT FUSELAGE AND WING	Static button	CHECK FOR BLOCKAGE
	Wing/fuselage fairings	CHECK
	Door lock	UNLOCK
	Flap and rub strips	CONDITION
	Right aileron	FULL TRAVEL
	Aileron gap seal	SECURITY
	Aileron hinges/bolts/cotter pins	SECURE
	Right wing tip	ATTACHMENT
	Strobe, nav light and lens	CONDITION
	Fuel vent	UNOBSTRUCTED
	Leading edge and stall strips	CONDITION
	Fuel cap	QUANTITY & SECURITY
	Wheel fairings	SECURITY & CONDITION
	Tire	CONDITION/ INFLATION
	Wheel and brakes	LEAKS/OVERHEATING
	Chocks and tiedown ropes	REMOVE
	Cabin air vent	UNOBSTRUCTED

PFFC N549SR - 2006 Cirrus SR22 Version 1.0

WALK-AROUND (CONT.)

NOSE AND PROP	Vortex generator	CONDITION
	Cowling	ATTACHMENTS SECURE
	Exhaust pipe	CONDITION & SECURITY
	Transponder antenna	CONDITION
	Tow bar	REMOVE AND STOW
	Strut	CONDITION
	Nose wheel fairing	SECURITY & CONDITION
	Nose wheel and tire	CONDITION/ INFLATION
	Propeller	CONDITION
	Spinner	CONDITION/OIL LEAKS
	Air inlets	UNOBSTRUCTED
	Alternator	CONDITION
	Landing light	CONDITION
	Engine oil level	CHECK 6-8 QUARTS
	Engine oil door	LEAKS/DOOR SECURE
	Cowling	ATTACHMENTS SECURE
	External power	DOOR SECURE
	Vortex generator	CONDITION
	Exhaust pipe(s)	CONDITION & SECURITY
LEFT WING	Wheel fairings	SECURITY & CONDITION
	Tire	CONDITION/ INFLATION
	Wheel and brakes	LEAKS/OVERHEATING
	Chocks and tiedown ropes	REMOVE
	Fuel drains	DRAIN AND SAMPLE
	Cabin air vent	UNOBSTRUCTED
	Fuel cap	QUANTITY & SECURITY
	Leading edge and stall strips	CONDITION
	Fuel vent	UNOBSTRUCTED
	Pitot mast	COVER OFF/TUBE CLEAR
	Strobe, nav light and lens	CONDITION
	Left wing tip	ATTACHMENT
	Flap and rub strips	CONDITION
	Left aileron	FULL TRAVEL
	Aileron gap seal	SECURITY
	Aileron hinges/bolts/cotter pins	SECURE
FUEL	Left fuel drains	SAMPLED (2 drains)
	Right fuel drains	SAMPLED (2 drains)
	Gascolator	SAMPLED FOR 3 SEC.

SECURING AIRPLANE

ELT	TRANSMIT LIGHT OUT
Parking brake	AS REQUIRED
Hobbs + flight time	RECORDED
Pitot tube cover	INSTALL
Chocks	INSTALL
Tiedowns	AS REQUIRED
Engine inlet plugs	INSTALL
Battery charger	CONNECTED
Windscreen	CLEANED
Leading edge	CLEANED
FlightCircle	CHECK IN
Tug	CHARGING
Logbook	ENTERED

ENGINE START

BEFORE START

Preflight inspection	COMPLETED
Emergency equipment	ON BOARD
Passengers	BRIEFED
Seats and belts	ADJUSTED AND SECURE
Brakes	HOLD
BAT master switches	ON CHECK VOLTS
Strobe lights	ON
Mixture	FULL RICH
Power lever	FULL FORWARD
Fuel pump	PRIME THEN BOOST
Propeller area	CLEAR
Power lever	OPEN 1/4 IN.
Ignition switch	START
Power lever	MAINTAIN 1000 RPM
Oil pressure	CHECK
ALT master switches	ON
Avionics power switch	ON
Engine parameters	MONITOR
Ammeter indication	CHECK

TAXI

Flaps	UP
Radios avionics	AS REQUIRED
Cabin heat defrost	AS REQUIRED
Fuel selector	SWITCH TANK
Parking brake	DISENGAGE
Brakes	CHECK
AHRS calibration	CONFIRM

RUN UP

Doors	LATCHED
CAPS handle	VERIFY PIN REMOVED
Seats and belts	SECURE
Air conditioner	AS DESIRED
Fuel quantity	CONFIRM
Fuel selector	FULLEST TANK
Fuel pump	BOOST
Mixture	AS REQUIRED
Flaps	50%, CHECKED
Transponder	SET
Autopilot	CONFIGURED
Nav/Radios/GPS	SET FOR TAKEOFF
Cabin heat defrost	AS REQUIRED
Brakes	HOLD
Power lever	1700 RPM
Alternator	CHECK
Pitot heat	ON
All lights	ON
Annunciator lights	CHECK
Voltage/ammeter/alternator	CHECK
Pitot heat	AS REQUIRED
Lights	AS REQUIRED
Magnetos	LEFT ONLY / RIGHT ONLY
RPM drop	≤150 RPM, ≤75 RPM BETWEEN MAGS
Engine parameters	CHECK
Power lever	1000 RPM
Altimeter 1 & 2	BARO SET
Flight controls	FREE AND CORRECT
Trim	SET FOR TAKEOFF
Autopilot	DISCONNECTED

DEPARTURE BRIEFING

Runway, crosswind	BRIEFED
Rotation speed	70-73 KIAS
Climb-out speed	80-90 KIAS
Takeoff emergency	<500' / >500' / >2000'
CAPs available	500 FT. AGL

PFFC N549SR - 2006 Cirrus SR22 Version 1.0

NORMAL TAKEOFF

Brakes	RELEASE
Power lever	FULL FORWARD
Engine parameters	CHECK
Elevator control	ROTATE 70-73 KIAS
80-90 KIAS	FLAPS UP

SHORT FIELD TAKEOFF

Flaps	50%
Brakes	HOLD
Power lever	FULL FORWARD
Mixture	SET
Engine parameters	CHECK
Brakes	RELEASE
Rudder	STEER WITH RUDDER ONLY
Elevator control	ROTATE SMOOTHLY, 70 KIAS
Airspeed at obstacle	78 KIAS

CLIMB

Climb Power	SET
Flaps	VERIFY UP
Mixture	LEAN AS REQUIRED
Engine parameters	CHECK
Fuel Pump	BOOST

CRUISE

Fuel Pump	OFF
Cruise Power	SET
Mixture	LEAN AS REQUIRED
Engine parameters	MONITOR
Fuel flow and balance	MONITOR

DESCENT

Altimeter	SET
Cabin heat/defrost	AS REQUIRED
Landing light	ON
Fuel system	CHECK
Mixture	AS REQUIRED
Brake pressure	CHECK

BEFORE LANDING

Seats and belts	SECURE
Fuel Pump	BOOST
Mixture	AS REQUIRED
Flaps	AS REQUIRED
Autopilot	AS REQUIRED

GO-AROUND

Autopilot	DISENGAGE
Power lever	FULL FORWARD
Flaps	50%
Airspeed	75-80 KIAS
Clear of obstacles	FLAPS UP

AFTER LANDING

Power Lever	1000 RPM
Fuel pump	OFF
Flaps	UP
Lights	AS REQUIRED
Pitot Heat	OFF

SHUTDOWN

Fuel pump	OFF
Throttle	IDLE
Ignition Switch	CHECK MAG GROUNDING
Mixture	CUTOFF
All switches	OFF, RIGHT-TO-LEFT
Magnetos	OFF

ENGINE FIRE DURING START

Mixture ..... CUTOFF
Fuel pump ..... OFF
Fuel selector ..... OFF
Power lever ..... FORWARD
Starter ..... CRANK

If flames persist, perform Emergency Engine Shutdown on Ground and Emergency Ground Egress checklists

EMERGENCY ENGINE SHUTDOWN ON GROUND

Power lever ..... IDLE
Fuel pump (if used) ..... OFF
Mixture ..... CUTOFF
Fuel selector ..... OFF
Ignition switch ..... OFF
BAT-ALT master switches ..... OFF

EMERGENCY GROUND EGRESS

Engine ..... SHUT DOWN
Seat belts ..... RELEASE

Exit airplane

BRAKE FAILURE DURING TAXI

Engine power ..... AS REQUIRED
Directional control ..... MAINTAIN WITH RUDDER
Brake pedal(s) ..... PUMP

Mixture CUTOFF, if directional control cannot be maintained.

ABORTED TAKEOFF

Power lever ..... IDLE
Brakes ..... AS REQUIRED

INADVERTENT ICING ENCOUNTER

Pitot heat ..... ON

Exit icing conditions. Turn back or change altitude.

Cabin heat ..... MAXIMUM
Windshield defrost ..... FULL OPEN
Alternate induction air ..... ON

INADVERTENT IMC ENCOUNTER

Airplane control ..... STRAIGHT AND LEVEL
Autopilot ..... ENGAGE, HDG & ALT HOLD
Heading ..... INITIATE 180° TURN

DOOR OPEN IN FLIGHT

Airplane control ..... MAINTAIN

ALTERNATOR FAILURE / ALT 1 LIGHT STEADY

ALT 1 master switch ..... OFF
Alternator 1 circuit breaker ..... CHECK AND RESET
ALT 1 master switch ..... ON

Switch off unnecessary equipment on Main Bus 1, Main Bus 2, Non-Essential Buses to reduce load. Monitor voltage.

ALT 1 master switch ..... OFF

Land as soon as practical.

ALTERNATOR FAILURE / ALT 2 LIGHT STEADY

ALT 2 master switch ..... OFF
Alternator 2 circuit breaker ..... CHECK AND RESET
ALT 2 master switch ..... ON

Switch off unnecessary equipment on Main Bus 1, Main Bus 2, and the Non-Essential Buses to reduce loads.

ALT 2 master switch ..... OFF

Land as soon as practical.

PFFC N549SR - 2006 Cirrus SR22 Version 1.0

ENGINE INDICATING SYSTEM FAILURE

Annun/engine inst circuit breaker ..... CYCLE

Land as soon as practical.

LOW VOLTS WARNING LIGHT ILLUMINATED

Land as soon as practical.

COMMUNICATIONS FAILURE

Switches, controls ..... CHECK
Frequency ..... CHANGE
Circuit breakers ..... CHECK
Headset ..... CHANGE
Hand held microphone ..... CONNECT

PITOT STATIC MALFUNCTION

Pitot heat ..... ON (Static blockage)
Alternate static source ..... OPEN (Static blockage)
Pitot heat ..... ON (Pitot blockage)

ELECTRIC TRIM/AUTOPILOT FAILURE

Airplane control ..... MAINTAIN MANUALLY
Autopilot ..... DISENGAGE
Circuit breakers ..... PULL AS REQUIRED:
PITCH TRIM
ROLL TRIM
AUTOPILOT
Power lever ..... AS REQUIRED
Control yoke ..... MANUALLY HOLD PRESSURE

Land as soon as practical.

PFD - LOSS OF AIR DATA

Land as soon as practical.

Standby instruments ..... MONITOR

Exit IMC

PFD - LOSS OF ATTITUDE DATA

Standby instruments ..... MONITOR
In IMC, autopilot ..... GPSS MODE

Exit IMC

ENGINE FAILURE ON TAKEOFF (LOW ALTITUDE)

Establish best glide or landing speed ..... 88 KIAS OR 80-85 KIAS
Mixture ..... CUTOFF
Fuel selector ..... OFF
Ignition switch ..... OFF
Flaps ..... AS REQUIRED
If time permits, power Lever ..... IDLE
Fuel pump ..... OFF
BAT-ALT Master switches ..... OFF
Seat belts ..... SECURED

ENGINE FAILURE IN FLIGHT

Establish best glide speed ..... 88 KIAS
Set Mixture ..... AS REQUIRED
Set Fuel Selector ..... TO SWITCH TANKS
Set Fuel Pump ..... TO BOOST
Set Alternate Induction Air ..... TO ON
Set Air Conditioner (if installed) ..... TO OFF
Check Ignition Switch ..... BOTH

If no start, perform Engine Airstart or Forced Landing checklist.

ENGINE AIRSTART

BAT master switches ..... 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 unable to start, perform Forced Landing checklist.

ENGINE PARTIAL POWER LOSS

Air conditioner ..... OFF
Fuel pump ..... BOOST
Fuel selector ..... SWITCH TANKS
Check mixture ..... SET FOR CONDITIONS
Power lever ..... SWEEP
Alternate induction air ..... ON
Ignition Switch ..... BOTH, L, THEN R

Land as soon as practical.

LOW OIL PRESSURE

Power Lever ..... MINIMUM REQUIRED

Land as soon as possible.

PROPELLER GOVERNOR FAILURE

Propeller RPM will not increase:

Oil Pressure ..... CHECK

Land as soon as practical.

Propeller overspeeds or will not decrease:

Adjust Power Lever ..... KEEP RPM IN LIMITS
Reduce Airspeed ..... 90 KIAS

Land as soon as practical.

INADVERTENT SPIN ENTRY

CAPS ..... ACTIVATE

PFFC N549SR - 2006 Cirrus SR22 Version 1.0

SMOKE AND FUME ELIMINATION

Air conditioner ..... OFF
Temperature selector ..... COLD
Vent selector ..... FEET/PANEL/DEFROST POSITION
Airflow Selector ..... MAXIMUM AIRFLOW
If source of smoke is firewall forward ... AIRFLOW SELECTOR OFF
Eyeball outlets ..... OPEN
If airflow does not clear smoke ..... PARTIALLY OPEN DOORS

Prepare to land as soon as possible.

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 possible.

WING FIRE IN FLIGHT

Pitot heat switch ..... OFF
Navigation light ..... OFF
Landing light ..... OFF
Strobe light ..... OFF

If possible, side slip to keep flames away from fuel tank & cabin.

Land as soon as possible.

CABIN FIRE IN FLIGHT

If in IMC conditions, turn ALT 1, ALT 2, & BAT 1 switches OFF. Battery 2 will power the PFD operational for about 30 min.

BAT-ALT master switches ..... OFF, AS REQUIRED
Heater ..... OFF
Air vents ..... CLOSE
Fire extinguisher ..... ACTIVATE
If airflow does not clear smoke ..... PARTIALLY OPEN DOORS
When fire extinguished ..... AIR VENTS FULL COLD
Avionics power switch ..... OFF
All other switches ..... OFF

Land as soon as possible.

If setting master switches off eliminated source of fire and airplane is in night/weather/IFR conditions:

BAT-ALT master switches ..... ON
Avionics power switch ..... ON

Activate required systems one at a time. Activate only the minimum of equipment necessary to safely land.

EMERGENCY DESCENT

Power lever ..... IDLE
Mixture ..... AS REQUIRED
Airspeed ..... TO VNE (205 KIAS)

INADVERTENT SPIRAL DIVE DURING IMC FLIGHT

Power lever ..... IDLE

Stop the spiral dive by using coordinated aileron and rudder control, watching the attitude indicator/turn coordinator to level the wings.

Cautiously apply elevator back pressure to bring airplane level.

Trim for level flight.

Power ..... AS REQUIRED

Use autopilot if functional, otherwise keep hands off control yoke, use rudder to hold constant heading.

Exit IMC conditions as soon as possible.

CAPS DEPLOYMENT

Airspeed	MINIMUM POSSIBLE (MAX 133 KIAS)
Set mixture (time permitting)	CUTOFF
Activation handle cover	REMOVE
Activation Handle	PULL STRAIGHT DOWN

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.

Warning: Jerking or rapidly pulling on the activation T-handle will greatly increase the pull forces required to activate rocket. Use a firm and steady pulling motion - a “chin-up” type pull enhances successful activation.

Mixture	CUTOFF
Fuel selector	OFF
BAT-ALT master switches	OFF
Ignition switch	OFF
Fuel pump	OFF
ELT	ON
Seat belts and harnesses	TIGHTEN
Loose items	SECURE
Emergency landing body position	ASSUME

After airplane comes to a complete stop, evacuate quickly and move upwind.

EMERGENCY LANDING WITHOUT ENGINE POWER

Establish best glide speed	88 KIAS
Transmit on 121.5 MHz or ATC	MAYDAY
Transponder	SQUAWK 7700
ELT, if off airport	ACTIVATE
Power lever	IDLE
Mixture	CUTOFF
Fuel selector	OFF
Ignition switch	OFF
Fuel Pump	OFF
Flaps, when landing is assured	100%
Master switches	OFF
Seat belts	SECURE

DITCHING

Transmit on 121.5 MHz or ATC	MAYDAY
Transponder	SQUAWK 7700
CAPS	ACTIVATE

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 in order to provide a ready escape path.

Airplane	EVACUATE
Flotation devices	INFLATE, ONCE CLEAR OF AIRPLANE

LANDING WITHOUT ELEVATOR CONTROL

Flaps	50%
Trim	80 KIAS
Power	AS REQUIRED FOR BEST GLIDE

POWER LEVER LINKAGE FAILURE

Power lever movement	VERIFY
Power	IF ABLE
Flaps	IF NEEDED
Mixture	AS REQUIRED (FULL RICH TO CUT-OFF)

Land as soon as possible.

PFFC N549SR - 2006 Cirrus SR22 Version 1.0

SPEEDS

V_G	Best glide	**88 KIAS**
V_{FE}	Flaps extended (50%)	**119 KIAS**
V_{FE}	Flaps extended (100%)	**104 KIAS**
V_{PD}	Parachute deployment	**133 KIAS**
V_{S0}	Stall speed, flaps 100%	**59 KIAS**
V_{S1}	Stall speed, flap up	**70 KIAS**
V_{NO}	Normal operating	**176 KIAS**
V_{NE}	Never exceed	**205 KIAS**
	Max demonstrated crosswind	**20 KTS**
	Limited flap landing (50%)	**85-90 KIAS**
	Limited flap landing (0%)	**90-95 KIAS**

LIGHT GUN SIGNALS

ATC LIGHT GUN SIGNALS FOR AIRCRAFT

COLOR & TYPE	GROUND	AIR
STEADY GREEN	Cleared for takeoff	Cleared to land
FLASHING GREEN	Cleared for taxi	Return for landing (to be followed by steady green)
STEADY RED	STOP!	Give way to other aircraft and continue circling
FLASHING RED	Taxi clear of runway in use	Airport unsafe, do not land
FLASHING WHITE	Return to starting point on airport	N/A
ALTERNATING RED/GREEN	Exercise extreme caution	

CLOUD CLEARANCE REQUIREMENTS