Cirrus SR-22 G2 Flight Operations Checklist v2022.08.18 — N727SL

Preflight

Weather	BRIEF
Flight Plan	FILE as rqd.
Weight & Balance	VERIFY OK
INTERIOR	
Documents	ON BOARD
Airworthiness, Registration, POH, W&B	
Battery Master 2	ON
Avionics Cooling Fan	AUDIBLE
PFD Voltmeter	23–25 V
Flap Position Light	OUT
Battery Master 1	ON
Exterior Lights	CHECK
Fuel Quantity	CHECK
Flaps	100%, CHECK LIGHT ON
Oil Annunciator	ON
Battery Masters 1 & 2	OFF
Alternate Static Source	NORMAL
Circuit Breakers	IN
Fire Extinguisher & Hammer	ON BOARD
Exterior	WALKAROUND

Before Starting Engine

Preflight Inspection	COMPLETED
Tiedowns & Wheel Chocks	REMOVED
Passengers	BRIEF
Seat Belts, A/C, Fire, Exit, Traffic/Talking, CAPS	
Seat Belts	ADJUST & SECURE
CAPS Pin	REMOVE

Starting Engine

Brakes	HOLD
Ignition Key	INSERTED
Battery Masters 2 & 1	ON, CHECK 24 V
Strobe Lights	ON
Propeller Area	CLEAR
PRIMING (COLD START)	
Mixture	FULL RICH
Power Lever	FULL FORWARD
Fuel Pump	PRIME
Prime for 5 secs until fuel flow reaches 15 gph	
NORMAL START	
Mixture	FULL RICH
Power Lever	OPEN ¼ INCH
Fuel Pump	BOOST
Ignition Switch	START
FLOODED START	
Fuel Pump	OFF
Mixture	CUTOFF
Power Lever	FULL FORWARD
Ignition Switch	START
Power Lever	RETARD
Mixture	ADVANCE TO RICH
AFTER ENGINE START	
Power Lever	1000 RPM
Mixture	GROUND LEAN
Alternator Masters 1 & 2	ON
Avionics Master	ON
Engine Parameters	CHECK GREEN

Before Taxiing

Weather Information	OBTAIN
Altimeter	SET
Flaps	UP
DURING TAXIING	
Brakes	CHECK
HSI Orientation	CHECK
Attitude Indicator	CHECK
Turn Coordinator	CHECK

Before Takeoff

CAPS Pin	REMOVED
Flight Instruments	CHECK
Flight Controls	FREE & CORRECT
Autopilot	TEST
Trim	SET TAKEOFF
Fuel Quantity	CONFIRM
Fuel Selector	SWITCH TANK
Fuel Pump	BOOST
Doors	CLOSE & LATCH
ENGINE RUN-UP	
Mixture	FULL RICH or as rqd.
Brakes	HOLD
Power Lever	1700 RPM
Annunciators	CHECK CLEAR
Pitot Heat & Lights	ON
Alternator Load	CHECK
Alternator Voltage	CHECK 28 V
Pitot Heat & Lights	As rqd.
Magnetos	CHECK L & R
Check RPM drop < 150, RPM differential < 75	
Engine Parameters	CHECK GREEN
AFTER ENGINE RUN-UP	
Power Lever	1000 RPM
Mixture	GROUND LEAN
Flaps	50%
Altimeter	SET
Navigation & GPS	SET
COM Radios	SET
Transponder	SET
Flight Plan	OPEN
Takeoff & Abort Plan	BRIEF

Takeoff

Lights	ON
Transponder	SET
Flaps	VERIFY 50%
Mixture	FULL RICH or as rqd.
Fuel Pump	BOOST
STARTING TAKEOFF	
Power Lever	FULL FORWARD
Propeller	CHECK 2600 RPM
Engine Parameters	CHECK GREEN
At 70 kts, Elevator	ROTATE
At 90 kts, Flaps	UP
At 500' AGL, CAPS	CALLOUT
Best Angle V_X	78 (SL) 82 (10,000')
Best Rate V_Y	101 (SL) 95 (10,000')

Climb

Power	FULL
Mixture	As rqd.
Lean to maximum power flow when above 4000'	
Engine Parameters	CHECK GREEN
Fuel Pump	BOOST
Flaps	VERIFY UP
Enroute Climb	110–120 KIAS

Cruise

Lights	As rqd.
Fuel Pump	OFF
Power	SET
Mixture	LEAN as rqd.
Engine Parameters	CHECK GREEN
Fuel Selector	SWITCH as rqd.

Approach & Descent

Weather Information	OBTAIN
Altimeter	SET
Approach Procedure	BRIEF
Lights	ON
Fuel Pump	BOOST
Fuel Selector	FULLEST TANK
Mixture	As rqd.

Before Landing

Fuel Pump	BOOST
Mixture	FULL RICH or as rqd.
Seat Belts	SECURE
Flaps	DEPLOY
Approach (Flaps UP)	100–110 KIAS
Approach (Flaps 50%)	90–100 KIAS
Approach (Flaps 100%)	80–85 KIAS
Short Field (Flaps 100%)	77 KIAS

Go-Around

Autopilot	DISENGAGE
Power Lever	FULL FORWARD
Mixture	FULL RICH or as rqd.
Flaps	50%, UP
Retract all flaps when airspeed is above 80 KIAS	

After Landing

Power Lever	1000 RPM
Mixture	GROUND LEAN
Flaps	UP
Transponder	VFR

Shutdown

Fuel Quantity	RECORD
Avionics Master	OFF
Power Lever	IDLE
Fuel Pump	OFF
Mixture	CUTOFF
All Switches	OFF
Ignition Switch	OFF

AIRSPEEDS (KIAS) AND LIMITATIONS

Never Exceed V_{NE} 201 | Max Cruise V_{NO} 178 | Maneuvering V_O 133 (3400 lb) 123 (2900 lb) | Max CAPS V_{PD} 133

Flap Extension V_{FE} 119 (50%) 104 (100%) | Best Glide V_G 88 | Stall V_S 70 (clean) 59 (flaps)

Oil (15W-50/20W-50/20W-60) 6–8 qt | Fuel Capacity 47 gal (tabs) 81 gal (total) | MTOW 3400 lb BEW 2340 lb

POWER SETTINGS (TODO: THESE NUMBERS NEED VERIFICATION)

Cruise (EGT ~1450°F, 50°F LOP): 2400 RPM, 70% Power, 13.6 gph, 170 KTAS @ 8000' | Slow Cruise: 40% Power, 11 gph, 120 KIAS

Precision Descent: 20% Power, 50% Flaps, 105 KIAS, 500fpm | Non-Precision Descent: 15% Power, 50% Flaps, 105 KIAS, 700fpm