

GROUND PROCEDURES

Beech Sierra C24R

N38566

CABIN

1. Required Documents..... A.R.O.W.
2. Parking Brake SET
3. Control Lock REMOVE
4. Ignition Switch.....OFF / KEY on Dash
5. Landing Gear Handle..... DOWN
6. All Switches (except Beacon) OFF
7. Circuit Breakers CHECK
8. Battery Switch ON
9. Fuel Quantity Indicators..... CHECK
10. All Exterior Lights ON
11. Pitot Cover..... REMOVED
12. Pitot Heat Switch..... ON
13. Exterior Lights CHECK OPERATION
14. Pitot Tube..... CLEAR / WARM
15. Stall Warning..... CHECK
16. Exterior Lights ALL OFF, Beacon ON
17. Pitot Heat OFF
18. Battery Switch OFF
19. Flush-type Fuel Drain Tool OBTAIN

LEFT WING TRAILING EDGE

1. Flap..... CHECK
2. Fuel Vent Line..... UNOBSTRUCTED
3. Aileron..... CHECK
4. Wing Tip CHECK
5. Position Light..... CHECK

LEFT WING LEADING EDGE

1. Pitot Tube.....CHECK, (Remove Cover)
2. Landing Light CHECK
3. Tie Down and Chocks REMOVE
4. Stall Warning..... CHECK
5. Fuel Tank . CHECK QUANTITY; Cap - SECURE

LEFT LANDING GEAR

1. Tire, Wheel and Brake..... CHECK
2. Fuel Sump..... DRAIN (use fuel-drain tool)

NOSE SECTION

1. Left Cowl SECURE
2. Induction Air Intake..... CLEAR
3. Air Filter..... CHECK, security of attachment
4. Propeller CHECK
5. Tire and Nose Gear..... CHECK
6. Engine Oil CHECK, Cap - SECURE
7. Right Cowl SECURE
8. Fuel Strainer DRAIN
9. Nose Wheel Chocks..... REMOVE (if present)

RIGHT LANDING GEAR

1. Fuel Sump..... DRAIN (use fuel-drain tool)
2. Wheel Well, Tire and Brake..... CHECK

RIGHT WING LEADING EDGE

1. Fuel Tank . CHECK QUANTITY; Cap - SECURE
2. Tie Down and Chocks REMOVE
3. Wing Tip CHECK
4. Position Light..... CHECK

RIGHT WING TRAILING EDGE

1. Aileron CHECK
2. Flap CHECK
3. Fuel Tank Vent Line..... UNOBSTRUCTED

RIGHT FUSELAGE

1. Static Pressure Button UNOBSTRUCTED
2. Emergency Locator Transmitter ARMED

EMPENNAGE

1. Control Surfaces CHECK
2. Tie Down REMOVE
3. Position Light CHECK

LEFT FUSELAGE

1. Static Pressure Button UNOBSTRUCTED
2. All Antennas..... CHECK
3. Baggage Door..... SECURE



V-SPEEDS INFO

Vso	60	Cruise Climb	96
Vs	65	Landing	70
Vr	66	Go Around	70
Vx	71	Emgy Landing	74
Vy	85	Emgy Descent	135
Vg	91	Max Demo Xwind	17
Vlo/Retract	135/113	Fuel [use]	60 [57]
Vfe	96	Oil (full/min)	8 / 6
Va	125	Max Baggage	270
Vno	143	Weight Takeoff	2750
Vne	168	Weight Landing	2750

BEFORE STARTING ENGINE

1. Seats POSITION AND LOCK
2. Seat Backs UPRIGHT
3. Seat Belts & Shoulder Harnesses FASTENED
4. Passengers BRIEFED
5. Parking Brake SET
6. All Avionics..... OFF
7. Circuit Breakers..... IN
8. Landing Gear Switch Handle DOWN
9. Flaps..... UP
10. Light Switches AS REQUIRED
11. Battery Switch..... ON
12. Alternator Switch..... ON
13. Fuel Selector Valve ROTATE thru 360°
14. Fuel Selector Valve SET on fullest tank

NO TAKEOFF WITH EITHER FUEL TANK IN YELLOW ARC

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STARTING ENGINE (With Battery)

1. Beacon..... ON
2. Brakes..... HOLD
3. Propeller..... FULL FORWARD
4. Propeller Area CLEAR

Cold Start:

5. Mixture..... FULL RICH
6. Throttle FAST IDLE position
7. FUEL BOOST PUMP..... ON (Max 3 seconds)
8. FUEL BOOST PUMP..... OFF
9. Magneto/Start Switch START

Hot Start:

10. Mixture..... IDLE CUT-OFF
11. Throttle FAST IDLE position
12. Magneto/Start Switch ENGAGE
13. Mixture..... ADVANCE MIXTURE SLOWLY

Flooded Engine Start:

14. Mixture..... IDLE CUT-OFF
15. Throttle FULL OPEN
16. Magneto/Start Switch ENGAGE
17. Mixture..... ADVANCE MIXTURE SLOWLY
18. Throttle RETARD (to fast idle position)

Starting Continuation

19. Alternator Switch ON
20. Oil Pressure . ABOVE RED RADIAL<30 SECS
21. Warm-up 1000 to 1200 RPM
22. Ammeter <25% of Full Charge
23. Engine Instruments CHECK
24. Throttle IDLE
25. Avionics Equipment..... ON, AS REQUIRED
26. Transponder ALT
27. Airport Taxi Diagram DISPLAYED
28. ATIS / Altimeter SET
29. Lights AS REQUIRED
30. Parking Brakes..... RELEASE
31. Brakes..... RELEASE AND CHECK

ENGINE FIRE DURING START

1. Fuel Selector Valve OFF
2. Throttle CLOSE
3. Mixture..... IDLE CUT-OFF
4. Battery and Alternator Switches OFF
5. Magneto/Start Switch OFF
6. Fire Extinguisher.. USE TO EXTINGUISH FIRE

RUN-UP

1. Parking Brake SET
2. Seat Belts and Harness CHECK
3. Avionics..... CHECK
4. Autopilot.. TEST per S-tec AFM supplement
5. Engine Instruments..... CHECK
6. Flight Instruments..... CHECK and SET
7. Ammeter <25% of Full Charge
8. Throttle 2000 RPM
9. Magnetos CHECK (100/25)
10. Propeller EXERCISE (300-400 RPM drop)
11. Vacuum Gauge CHECK
12. Throttle 1000 RPM
13. Stabilator Trim TAKE-OFF RANGE
14. Flaps..... CHECK and SET (15°)
15. Flight Controls..... FREE and CORRECT
16. Mixture FULL RICH (or as req'd by elevation)
17. Initial Fuel SET in TOTALIZER
18. Doors and Windows SECURE
19. Takeoff Briefing COMPLETE
20. Parking Brake RELEASE
21. Lights..... AS REQ'D

INFLIGHT CHECKS ON SECOND CARD

SHUTDOWN

1. Parking Brake SET or HOLD
2. Throttle 1500 RPM
3. Mixture LEANED, 20 seconds
4. Avionics..... CHECK 121.5
5. ELT Transmit Light..... OUT
6. Throttle REDUCE as REQ'd
7. Parking Brake RELEASED
8. Electrical and Avionics Equipment..... OFF
9. Throttle CLOSE
10. Magneto Ground CHECK
11. Mixture IDLE CUT-OFF
12. Magneto/Start Switch..... OFF
13. Aircraft Keys..... ON DASH
14. Battery and Alt Switch OFF
15. Control Lock..... INSTALLED
16. Pitot Cover INSTALLED
17. Wheel Chocks INSTALLED
18. Tie Downs INSTALLED
19. Nose Plugs INSTALLED
20. Tires and Aircraft INSPECTED
21. Shade/Canopy Cover INSTALLED

FLIGHT NORMAL PROCEDURES

NORMAL TAKEOFF

1. Takeoff Briefing COMPLETE
2. Doors VERIFY CLOSED
3. Fuel Pump VERIFY OFF
4. Fuel Selector FULLEST TANK
5. Mixture FULL RICH
6. Flaps VERIFY 15
7. Takeoff Trim VERIFIED
8. Lights ON
9. Power Lever FULL FORWARD
10. Engine Instruments CHECK
11. Brakes RELEASE
12. Rotate **66 KIAS**
13. Landing Gear RETRACT (+rate, no rwy)
14. Flaps UP (over obstacles)
15. Climb Vy **85 KIAS**
16. Noise Abatement 2500 rpm

SHORT FIELD TAKEOFF

1. Steps 1-13 of Normal Takeoff then:
2. Airspeed at obstacle Vx **71 KIAS**
3. Flaps UP (over obstacles)
4. Climb Vy **85 KIAS**
5. Noise Abatement 2500 rpm

CRUISE CLIMB

1. At 1000' AGL CLIMB AIRSPEED **96 KIAS**
2. Gear and Flaps VERIFY UP
3. Power AS REQUIRED
4. Mixture AS REQUIRED
5. Temperature MONITOR

CRUISE

1. Cruise Power ...SET (per performance tables)
2. Mixture LEAN (75-100° F Rich of Peak)
3. Fuel TankCHECK / SWITCH (every 30 min)
4. Engine Parameters MONITOR

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Vr	66	Go Around	70
Vx	71	Emgy Landing	74
Vy	85	Emgy Descent	135
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DESCENT

1. ATIS / Altimeter SET
2. Fuel System CHECK
3. Mixture ENRICH AS REQUIRED

BEFORE LANDING

1. Seat Belts and Harness SECURE
2. Fuel Selector Valve FULLEST TANK
3. Fuel Boost Pump VERIFY OFF
4. Mixture FULL RICH
5. Landing Gear (<=135) DOWN and CHECK
6. Landing and Taxi Lights AS REQUIRED
7. Propeller FULL FORWARD
8. Flaps (<=96) DOWN
9. Autopilot OFF
10. Airspeed ESTABLISH (70 KIAS)

BALKED LANDING

1. Mixture FULL RICH
2. Propeller FULL FORWARD
3. Power Lever FULL THROTTLE, 2700 RPM
4. Landing Gear UP
5. Airspeed 70 KIAS (clear of obstacles)
6. Airspeed Vy **85 KIAS**
7. Flaps UP

AFTER LANDING

1. Landing and Taxi Lights AS REQUIRED
2. Flaps UP
3. Trim Tab Set to 0°
4. Airport Taxi Diagram DISPLAYED

ENGINE FAILURE DURING FLIGHT

1. Best Glide Speed ESTABLISH **91 KIAS**
2. Best Place to Land SELECTED
3. Mixture FULL RICH
4. Fuel Pump ON
5. Fuel Selector SWITCH TANKS
6. Magnetos CHECK L & R, THEN BOTH

If No Restart

1. Throttle CLOSED
2. Fuel Selector Valve OFF
3. Mixture IDLE CUT-OFF
4. Magneto/Start Switch OFF
5. Transponder 7700
6. Mayday call 121.5 or ATC Frequency

When certain of reaching landing site

7. Airspeed APPROACH SPEED **70 KIAS**
8. Flaps AS REQUIRED
9. Landing Gear DOWN, or UP (terrain)
10. Battery, Alternator, Fuel Boost Switches OFF

FLIGHT EMERGENCY PROCEDURES

ENGINE FAILURE ON TAKEOFF ROLL

1. Throttle CLOSED
2. Braking MAXIMUM
3. Fuel Selector OFF
4. Battery, Alternator, Magneto Switches OFF

AIR START PROCEDURE

1. Fuel Selector Valve SELECT MOST FULL
2. Throttle AS REQUIRED
3. Mixture FULL RICH
4. Propeller AS REQUIRED
5. Fuel Boost Pump ON or OFF as required
6. Magneto/Start Switch BOTH

ENGINE FIRE IN FLIGHT

1. Fuel Selector Valve OFF
2. Mixture IDLE CUT-OFF
3. Propeller FULL FORWARD
4. Throttle CLOSE
5. Cabin Air Control (Red) PULL to CLOSED
6. Defrost Valve (Red) PUSH to CLOSED
7. Alternator Switch OFF
8. Battery Switch OFF
9. Magneto/Start Switch OFF
10. Do not attempt to restart engine

EMERGENCY DESCENT

1. Propeller FULL FORWARD
2. Throttle IDLE
3. Landing Gear DOWN
4. Airspeed ESTABLISH 135 KIAS

MAXIMUM GLIDE CONFIGURATION

1. Landing Gear UP
2. Flaps UP
3. Propeller FULL AFT (Low rpm position)
4. Airspeed ESTABLISH 91 KIAS
Glide is 1.7nm per 1000'

FORCED LANDING (Engine Out)

1. Best Glide Speed ESTABLISH (91 KIAS)
2. Radio TRANSMIT (121.5) MAYDAY
3. Transponder 7700
4. ELT ACTIVATE
5. Airspeed . EMERGENCY APPROACH **74 KIAS**
6. Fuel Selector Valve OFF
7. Mixture IDLE CUT-OFF
8. Flaps AS REQUIRED
9. Landing Gear DOWN or UP (terrain)
10. Battery and Alternator Switches OFF

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LANDING GEAR RETRACTED – with POWER

1. Throttle CLOSED
2. Airspeed . Normal Approach Speed **70 KIAS**
3. Fuel Selector Valve OFF
4. Mixture IDLE CUT-OFF
5. Flaps AS REQUIRED
6. Battery and Alternator Switch OFF
7. Keep wings level during touchdown
8. Get clear of airplane as soon as possible after it stops

PROPELLER OVERSPEED

1. Throttle RETARD TO MIN CRUISE RPM
2. Airspeed REDUCE
(climb to load prop if able)
3. Oil Pressure CHECK
4. Land SELECT NEAREST SUITABLE SITE
5. Follow ENGINE FAILURE AFTER LIFTOFF AND IN FLIGHT procedures

ALTERNATOR-OUT PROCEDURE

1. ALT Switch ...OFF MOMENTARILY, THEN ON
If Alternator-out conditions persists:
2. ALT Switch OFF
3. Nonessential Electrical Equipment OFF

LANDING GEAR EMERGENCY EXTENSION

1. LDG GEAR MOTOR Circuit Breaker OFF
2. LDG GEAR Switch Handle DOWN
3. Throttle 12" OR LESS
4. Indicated Airspeed 87 KIAS
5. Emergency Extension Valve OPEN
After landing do not move any LDG gear controls or reset any switches or CB until airplane is on jacks

INADVERTENT SPIN ENTRY

1. Power IDLE
2. Ailerons NEUTRAL
3. Rudder ...Full opposite direction of the spin
4. Elevator FULL FORWARD
After spin recover
5. Move controls to neutral and execute smooth pullout.