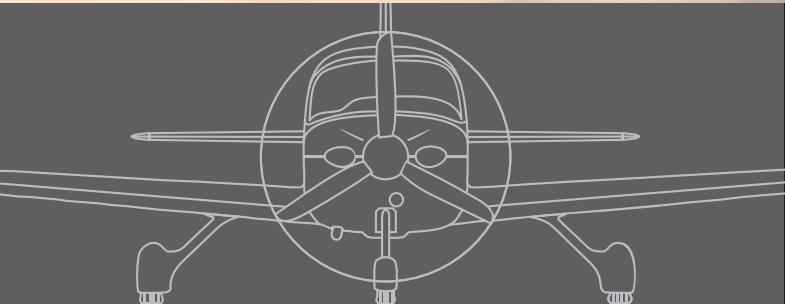


PILOT'S CHECKLIST

CIRRUS SR22 TURBO

G3



#13728-004

Quick Reference Checklist

for
SR22 G3 Aircraft Serials 2334, 2420, 2438 and Subsequent
with Turbonormalizing System.

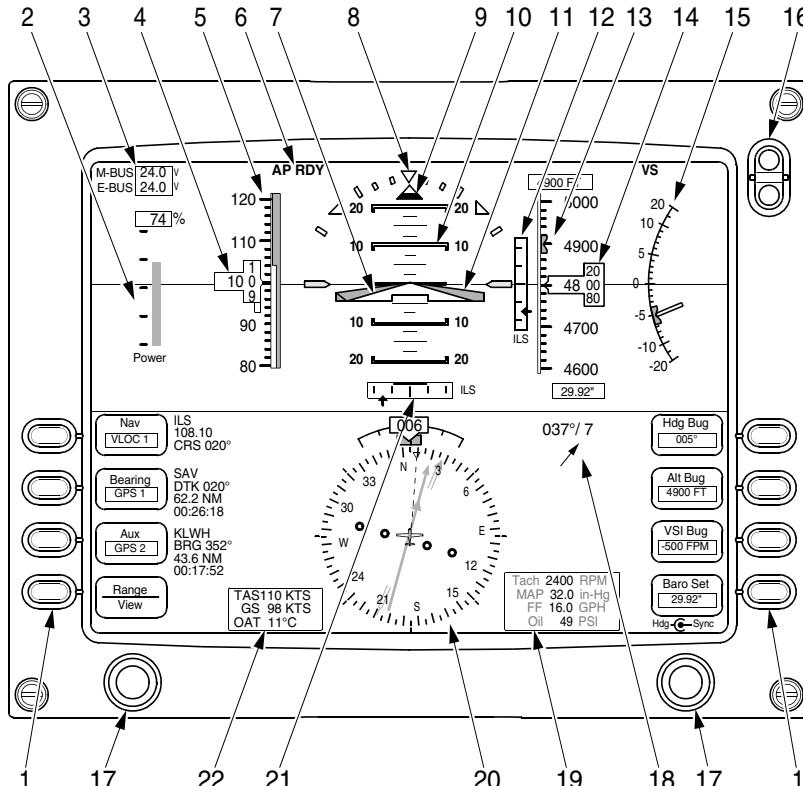


The procedures in this publication are abbreviated and derived from procedures in the FAA Approved Airplane Flight Manual and Pilot's Operating Handbook (POH) Revision A5. These procedures do not supersede the procedures in the basic POH. In the event of conflict, the basic POH shall take precedence.



Cirrus Design
Normal Checklist

| | |
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**LEGEND**

1. Navigation & Avionics Configuration Buttons
2. Percent Power
3. Bus Voltages
4. Airspeed Window
5. Airspeed Tape
6. Autopilot Annunciations
7. Aircraft Reference Symbol
8. Bank Angle Indicator
9. Skid/Slip Indicator
10. Pitch Ladder
11. Flight Director Steering Command Bars
12. Vertical Deviation Indicator (VDI)
13. Altitude Tape
14. Altitude Window
15. Vertical Speed Indicator (VSI)
16. Brightness Control (BRT/DIM)
17. Mode and Display Selection
18. Wind Vector
19. Engine Information Data Block
20. Horizontal Situation Indicator (HSI)
21. Horizontal Deviation Indicator (HDI)
22. Air Data Block

SR22_FM07_2221A

AIRSPEEDS FOR NORMAL OPERATION**Takeoff Rotation:**

| | |
|-------------------------------------|---------|
| Normal, Flaps 50% | 70 KIAS |
| Obstacle Clearance, Flaps 50% | 78 KIAS |

Enroute Climb, Flaps Up:

| | |
|---|----------|
| Normal, Full Power, Full Rich Climb | 120 KIAS |
| Best Rate of Climb, SL | 101 KIAS |
| Best Rate of Climb, 10,000' | 95 KIAS |
| Best Angle of Climb, SL | 78 KIAS |
| Best Angle of Climb, 10,000' | 82 KIAS |

Landing Approach:

| | |
|---|------------|
| Normal Approach, Flaps Up | 90-95 KIAS |
| Normal Approach, Flaps 50% | 85-90 KIAS |
| Normal Approach, Flaps 100% | 80-85 KIAS |
| Short Field, Flaps 100% (V_{REF}) | 77 KIAS |

Go-Around, Flaps 50%:

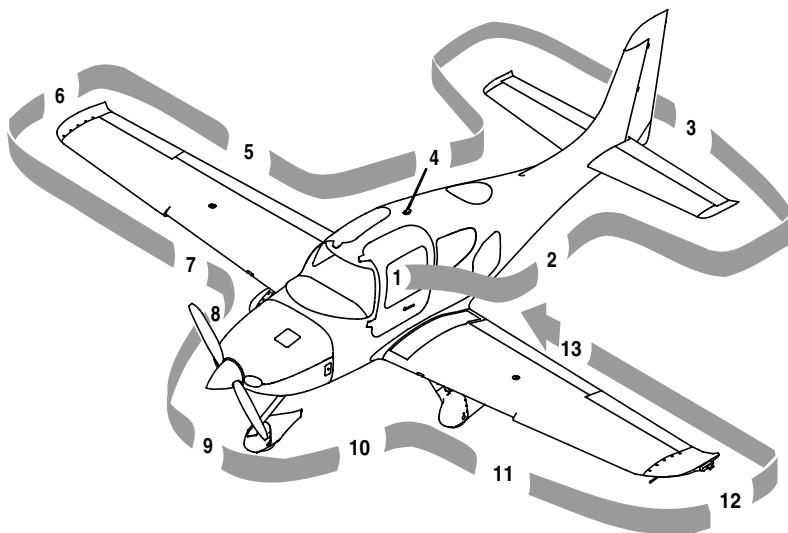
| | |
|------------------|---------|
| Full Power | 80 KIAS |
|------------------|---------|

Maximum Recommended Turbulent Air Penetration:

| | |
|---------------|----------|
| 3400 Lb | 133 KIAS |
| 2900 Lb | 123 KIAS |

Maximum Demonstrated Crosswind

| | |
|--------------------------|----------|
| Takeoff or Landing | 20 Knots |
|--------------------------|----------|



SR20_FM04_1001

PREFLIGHT INSPECTION

1. Cabin
 - a. Required Documents On Board
 - b. Avionics Power Switch OFF
 - c. Bat 2 Master Switch ON
 - d. PFD - *Serials 0435 and subsequent with PFD*..... Verify On
 - e. Avionics Cooling Fan..... Audible
 - f. Voltmeter 23-25 Volts
 - g. Flap Position Light OUT
 - h. Bat 1 Master Switch ON
 - i. Lights..... Check Operation
 - j. Stall Warning Test
 - k. Fuel Quantity Check
 - l. Fuel Selector Select Fullest Tank
 - m. Flaps 100%, Check Light ON
 - n. Oil Annunciator..... On
 - o. Bat 1 and 2 Master Switches OFF

(Continued on following page)

PREFLIGHT INSPECTION (Continued)

- p. Alternate Static Source NORMAL
- q. Circuit Breakers..... IN
- r. Fire Extinguisher Charged and Available
- s. Emergency Egress Hammer Available
- t. CAPS Handle Pin Removed
- 2. Left Fuselage
 - a. COM 1 Antenna (top) Condition and Attachment
 - b. Wing/Fuselage Fairing Check
 - c. COM 2 Antenna (underside) Condition and Attachment
 - d. Baggage Door Closed and Secure
 - e. Static Button Check for Blockage
 - f. Parachute Cover Sealed and Secure
- 3. Empennage
 - a. Tiedown Rope Remove
 - b. Horizontal and Vertical Stabilizers..... Condition
 - c. Elevator and Tab Condition and Movement
 - d. Rudder Freedom of Movement
 - e. Rudder Trim Tab..... Condition and Security
 - f. Attachment hinges, bolts and cotter pins Secure
- 4. Right Fuselage
 - a. Static Button..... Check for Blockage
 - b. Wing/Fuselage Fairings Check
- 5. Right Wing Trailing Edge
 - a. Flap and Rub Strips (if installed) Condition and Security
 - b. Aileron and Tab Condition and Movement
 - c. Aileron Gap Seal Security
 - d. Hinges, actuation arm, bolts, and cotter pins Secure
- 6. Right Wing Tip
 - a. Tip Attachment
 - b. Strobe, Nav Light and Lens..... Condition and Security

(Continued on following page)

PREFLIGHT INSPECTION (Continued)

7. Right Wing Forward and Main Gear
- c. Fuel Vent (underside).....Unobstructed
 - a. Leading Edge and Stall Strips.....Condition
 - b. Fuel Cap.....Check Quantity and Secure
 - c. Fuel Drains (2 underside).....Drain and Sample
 - d. Wheel FairingsSecurity, Accumulation of Debris
 - e. TireCondition, Inflation, and Wear
 - f. Wheel and BrakesFluid Leaks, Evidence of Overheating, General Condition, and Security
 - g. Chocks and Tiedown RopesRemove
 - h. Cabin Air VentUnobstructed
8. Nose, Right Side
- a. Vortex GeneratorCondition
 - b. CowlingAttachments Secure
 - c. Exhaust PipeCondition, Security, and Clearance
 - d. Transponder Antenna (underside)...Condition and Attachment
 - e. Gascolator (underside).....Drain for 3 seconds, Sample
9. Nose gear, Propeller, and Spinner
- a. Tow BarRemove and Stow
 - b. Strut.....Condition
 - c. Wheel FairingSecurity, Accumulation of Debris
 - d. Wheel and TireCondition, Inflation, and Wear
 - e. Propeller.....Condition (indentations, nicks, etc.)
 - f. Spinner.....Condition, Security, and Oil Leaks
 - g. Air InletsUnobstructed
 - h. AlternatorCondition
10. Nose, Left Side
- a. Landing Light.....Condition
 - b. Engine Oil.....Check 6-8 quarts, Leaks, Cap & Door Secure
 - c. CowlingAttachments Secure
 - d. External PowerDoor Secure

(Continued on following page)

PREFLIGHT INSPECTION (Continued)

- e. Vortex Generator..... Condition
- f. Exhaust Pipe(s)..... Condition, Security, and Clearance
- 11. Left Main Gear and Forward Wing
 - a. Wheel fairings Security, Accumulation of Debris
 - b. Tire Condition, Inflation, and Wear
 - c. Wheel and Brakes Fluid Leaks, Evidence of Overheating, General Condition, and Security
 - d. Chocks and Tiedown Ropes Remove
 - e. Fuel Drains (2 underside)..... Drain and Sample
 - f. Cabin Air Vent Unobstructed
 - g. Fuel Cap..... Check Quantity and Secure
 - h. Leading Edge and Stall Strips..... Condition
- 12. Left Wing Tip
 - a. Fuel Vent (underside)..... Unobstructed
 - b. Pitot Mast (underside) Cover Removed, Tube Clear
 - c. Strobe, Nav Light and Lens Condition and Security
 - d. Tip Attachment
- 13. Left Wing Trailing Edge
 - a. Flap And Rub Strips (If installed) Condition and Security
 - b. Aileron Freedom of movement
 - c. Aileron Gap Seal Security
 - d. Hinges, actuation arm, bolts, and cotter pins Secure

ENGINE START

BEFORE STARTING ENGINE

- 1. Preflight Inspection COMPLETED
- 2. Emergency Equipment ON BOARD
- 3. Passengers BRIEFED
- 4. Seats, Seat Belts, and Harnesses ADJUST & SECURE

STARTING ENGINE

1. External Power (If applicable) CONNECT
2. Brakes HOLD
3. Bat Master Switches ON (Check Volts)
4. Strobe Lights ON
5. Mixture FULL RICH
6. Power Lever FULL FORWARD
7. Fuel Pump LOW BOOST
8. Fuel Pump PRIME, then BOOST
9. Propeller Area CLEAR
10. Power Lever OPEN ¼ INCH
11. Ignition Switch START (Release after engine starts)
12. Power Lever RETARD (to maintain 1000 RPM)
After engine starts:
13. Mixture LEAN until RPM rises to maximum value.
14. Oil Pressure CHECK
15. Alt Master Switches ON
16. Avionics Power Switch ON
17. Engine Parameters MONITOR
18. External Power (If applicable) DISCONNECT
19. Amp Meter/Indication CHECK

BEFORE TAXIING

1. Flaps UP (0%)
2. Radios/Avionics AS REQUIRED
3. Cabin Heat/Defrost AS REQUIRED
4. Fuel Selector SWITCH TANK

TAXIING

1. Parking Brake DISENGAGE
2. Brakes CHECK
3. HSI Orientation CHECK
4. Attitude Gyro CHECK
5. Turn Coordinator CHECK

BEFORE TAKEOFF

1. Doors LATCHED
2. CAPS Handle Verify Pin Removed
3. Seat Belts and Shoulder Harness SECURE
4. Fuel Quantity CONFIRM
5. Fuel Selector FULLEST TANK
6. Fuel Pump LOW BOOST
7. Mixture AS REQUIRED
8. Flaps SET 50% & CHECK
9. Transponder SET
10. Autopilot CHECK
11. Navigation Radios/GPS SET for Takeoff
12. Cabin Heat/Defrost AS REQUIRED
13. Brakes HOLD
14. Power Lever 1700 RPM
15. Alternator CHECK
 - a. Pitot Heat ON
 - b. Navigation Lights ON
 - c. Landing Light ON
 - d. Annunciator Lights CHECK
16. Voltage CHECK
17. Pitot Heat AS REQUIRED
18. Navigation Lights AS REQUIRED
19. Landing Light AS REQUIRED
20. Magnitos CHECK Left and Right
 - a. RPM drop \leq 150, difference between mags \leq 75 RPM.
21. Engine Parameters CHECK
22. Power Lever 1000 RPM
23. Flight Instruments, HSI, and Altimeter CHECK & SET
24. Flight Controls FREE & CORRECT
25. Trim SET Takeoff
26. Autopilot DISCONNECT

NORMAL TAKEOFF

1. Brakes..... RELEASE (Steer with Rudder Only)
2. Power Lever FULL FORWARD
3. Engine Power..... CHECK
 - a. Verify full-throttle engine operation early in takeoff run.
 - The engine should run smoothly and turn approximately 2700 RPM.
4. Engine Parameters CHECK
5. Elevator Control ROTATE Smoothly at 70-73 KIAS
6. At 80 KIAS, Flaps UP

SHORT FIELD TAKEOFF

1. Flaps..... 50%
2. Brakes HOLD
3. Power Lever FULL FORWARD
4. Mixture SET
5. Engine Parameters CHECK
6. Brakes..... RELEASE (Steer with Rudder Only)
7. Elevator Control ROTATE Smoothly at 70 KIAS
8. Airspeed at Obstacle 78 KIAS

CLIMB

1. Oxygen AS REQUIRED
2. Power Lever FULL FORWARD
3. Mixture FULL RICH
4. Airspeed Vy
5. Electric Fuel Pump LOW BOOST
6. Fuel Flow MONITOR
7. Engine Parameters MONITOR

CRUISE

1. Oxygen AS REQUIRED
2. Fuel Pump OFF
3. Cruise Power SET
4. Mixture LEAN as required
5. Engine Parameters MONITOR
6. Fuel Flow and Balance MONITOR

CRUISE CLIMB - MIXTURE SET AT LEAN OF PEAK

1. Oxygen AS REQUIRED
2. Power Lever FULL FORWARD
3. Mixture 17.0 to 17.6 GPH
4. Minimum Airspeed 130 KIAS
5. Electric Fuel Pump LOW BOOST

CRUISE LEANING

| Desired Cruise Setting | Configuration |
|------------------------|---|
| Maximum Cruise Power | <ul style="list-style-type: none"> • Power Lever - Max available MAP at 2500 RPM • Mixture - 17.6 GPH (~85% Power) • High CHT reads below 380°F |
| Economy Cruise Power | <ul style="list-style-type: none"> • Power Lever - 24" MAP at 2500 RPM • Mixture - 13.0 to 14.5 GPH (~63% to 69% Power) • High CHT reads below 380°F |

MAXIMUM CRUISE POWER

1. Cruise Altitude ESTABLISHED
2. Power Lever 2700 RPM
3. Mixture FULL RICH for 1 to 2 minutes
4. Highest CHT VERIFY LESS THAN 380°F
5. Power Lever 2500 RPM at max available MAP (29.0" to 29.6")
6. Electric Fuel Pump LOW BOOST
7. Mixture FULL RICH
8. Engine Parameters MONITOR
9. Electric Fuel Pump AS REQUIRED

DESCENT

1. Altimeter SET
2. Cabin Heat/Defrost AS REQUIRED
3. Landing Light ON
4. Fuel System CHECK
5. Power AS REQUIRED
6. Mixture AS REQUIRED
7. Brake Pressure CHECK
8. Oxygen AS REQUIRED

RAPID DESCENT

1. Altimeter SET
2. Power Lever Smoothly REDUCE MAP 17 to 20 in.Hg
3. Mixture Maintain CHTs above 240°F
4. Airspeed AS REQUIRED
5. Oxygen AS REQUIRED

BEFORE LANDING

1. Seat Belt and Shoulder Harness SECURE
2. Fuel Selector Valve SELECT FULLEST TANK
3. Electric Fuel Pump LOW BOOST
4. Mixture FULL RICH
5. Flaps AS REQUIRED
6. Autopilot AS REQUIRED

BALKED LANDING/GO-AROUND

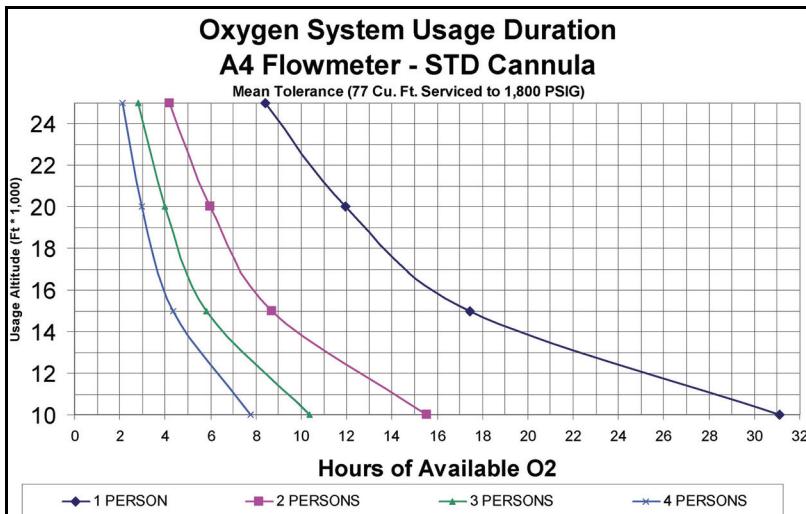
1. Autopilot DISENGAGE
2. Power Lever FULL FORWARD
3. Mixture FULL RICH
4. Flaps 50%
5. Airspeed 75-80 KIAS
After clear of obstacles:
6. Flaps UP

AFTER LANDING

1. Power Lever 1000 RPM
2. Electric Fuel Pump OFF
3. Flaps UP
4. Transponder STBY
5. Lights AS REQUIRED
6. Pitot Heat OFF
7. Mixture LEAN to obtain maximum idle RPM

SHUTDOWN

1. Fuel Pump (if used) OFF
2. Throttle IDLE
3. Ignition Switch CYCLE - MAG GROUNDING CHECK
4. Mixture CUTOFF
5. All Switches OFF
6. Magnetos OFF
7. ELT TRANSMIT LIGHT OUT
8. Chocks, Tie-downs, Pitot Covers AS REQUIRED

OXYGEN SYSTEM DURATION



Cirrus Design
Performance Data

| | |
|--------------------------------------|-----|
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| Takeoff Distance | P-2 |
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| Cruise Performance (Continued) | P-5 |
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| Weight and Balance..... | P-7 |
| Wind Components | P-9 |

CIRRUS
SR22**Performance Data****TAKEOFF DISTANCE****Maximum Weight 2900 Pounds**

| WEIGHT = 2900 LB Speed at Liftoff = 70 KIAS Speed over 50 Ft Obstacle = 74 KIAS Flaps - 50% · Takeoff Pwr · Dry Paved | | | Headwind: Subtract 10% for each 12 knots headwind. Tailwind: Add 10% for each 2 knots tailwind up to 10 knots. Runway Slope: Ref. Factors. Dry Grass: Add 15% to Ground Roll | | | | | |
|---|-------------|------|---|------|------|------|------|--|
| PRESS ALT FT | DISTANCE FT | | TEMPERATURE ~ °C | | | | | |
| | | 0 | 10 | 20 | 30 | 40 | ISA | |
| SL | Grnd Roll | 605 | 654 | 704 | 757 | 811 | 679 | |
| | 50 ft | 958 | 1029 | 1103 | 1180 | 1259 | 1066 | |
| 1000 | Grnd Roll | 668 | 721 | 777 | 835 | 895 | 738 | |
| | 50 ft | 1053 | 1131 | 1212 | 1297 | 1383 | 1155 | |
| 2000 | Grnd Roll | 737 | 796 | 857 | 921 | 989 | 802 | |
| | 50 ft | 1158 | 1244 | 1334 | 1426 | 1522 | 1253 | |
| 3000 | Grnd Roll | 815 | 880 | 948 | 1018 | 1092 | 873 | |
| | 50 ft | 1275 | 1370 | 1469 | 1570 | 1676 | 1361 | |
| 4000 | Grnd Roll | 901 | 973 | 1048 | 1126 | 1207 | 952 | |
| | 50 ft | 1408 | 1510 | 1619 | 1731 | 1847 | 1479 | |
| 5000 | Grnd Roll | 998 | 1078 | 1161 | 1248 | 1337 | 1088 | |
| | 50 ft | 1552 | 1667 | 1787 | 1911 | 2039 | 1610 | |
| 6000 | Grnd Roll | 1107 | 1195 | 1287 | 1383 | 1483 | 1134 | |
| | 50 ft | 1714 | 1842 | 1974 | 2111 | 2253 | 1753 | |
| 7000 | Grnd Roll | 1229 | 1327 | 1429 | 1535 | 1646 | 1239 | |
| | 50 ft | 1896 | 2037 | 2184 | 2335 | 2492 | 1912 | |
| 8000 | Grnd Roll | 1366 | 1475 | 1588 | 1706 | 1829 | 1356 | |
| | 50 ft | 2100 | 2257 | 2419 | 2587 | 2760 | 2087 | |
| 9000 | Grnd Roll | 1520 | 1641 | 1767 | 1899 | 2035 | 1486 | |
| | 50 ft | 2329 | 2503 | 2682 | 2868 | 3061 | 2281 | |
| 10000 | Grnd Roll | 1683 | 1828 | 1969 | 2115 | 2267 | 1630 | |
| | 50 ft | 2586 | 2779 | 2978 | 3185 | 3399 | 2495 | |

TAKEOFF DISTANCE**Maximum Weight 3400 Pounds**

| WEIGHT = 3400 LB Speed at Liftoff = 73 KIAS Speed over 50 Ft. Obstacle = 78 KIAS Flaps - 50% · Takeoff Pwr · Dry Paved | | | Headwind: Subtract 10% for each 12 knots headwind. Tailwind: Add 10% for each 2 knots tailwind up to 10 knots. Runway Slope: Ref. Factors. Dry Grass: Add 15% to Ground Roll. | | | | | |
|--|------------------|------|--|------|------|------|------|-----|
| PRESS ALT FT | DISTANCE FT | | TEMPERATURE ~ °C | | | | | |
| | | | 0 | 10 | 20 | 30 | 40 | ISA |
| SL | Grnd Roll | 910 | 982 | 1058 | 1137 | 1219 | 1020 | |
| | 50 ft | 1414 | 1520 | 1629 | 1742 | 1860 | 1574 | |
| 1000 | Grnd Roll | 1003 | 1084 | 1167 | 1254 | 1344 | 1108 | |
| | 50 ft | 1554 | 1670 | 1790 | 1915 | 2044 | 1706 | |
| 2000 | Grnd Roll | 1108 | 1196 | 1289 | 1385 | 1484 | 1206 | |
| | 50 ft | 1710 | 1837 | 1970 | 2107 | 2248 | 1851 | |
| 3000 | Grnd Roll | 1224 | 1322 | 1424 | 1530 | 1640 | 1312 | |
| | 50 ft | 1883 | 2024 | 2169 | 2320 | 2476 | 2010 | |
| 4000 | Grnd Roll | 1354 | 1463 | 1575 | 1693 | 1814 | 1430 | |
| | 50 ft | 2076 | 2231 | 2392 | 2558 | 2730 | 2185 | |
| 5000 | Grnd Roll | 1500 | 1620 | 1746 | 1875 | 2009 | 1560 | |
| | 50 ft | 2291 | 2462 | 2640 | 2823 | 3013 | 2377 | |
| 6000 | Grnd Roll | 1663 | 1796 | 1935 | 2078 | 2228 | 1704 | |
| | 50 ft | 2532 | 2721 | 2917 | 3120 | 3330 | 2590 | |
| 7000 | Grnd Roll | 1846 | 1994 | 2147 | 2307 | 2473 | 1862 | |
| | 50 ft | 2801 | 3010 | 3227 | 3452 | 3684 | 2824 | |
| 8000 | Grnd Roll | 2052 | 2216 | 2387 | 2564 | 2748 | 2038 | |
| | 50 ft | 3103 | 3335 | 3575 | 3823 | 4080 | 3083 | |
| 9000 | Grnd Roll | 2284 | 2466 | 2656 | 2853 | 3058 | 2233 | |
| | 50 ft | 3442 | 3698 | 3965 | 4240 | 4526 | 3370 | |
| 10000 | Grnd Roll | 2544 | 2748 | 2959 | 3179 | 3407 | 2449 | |
| | 50 ft | 3822 | 4107 | 4403 | 4709 | 5026 | 3687 | |

CRUISE PERFORMANCE**Conditions:**

- Power As Noted
- Mixture As Noted
- Cruise Weight 3200 LB
- Winds Zero

Example:

Outside Air Temp -9° C
 Cruise Press Alt..... 12000 FT
 Manifold Pressure..... 29.5"
 Fuel Flow 176 GPH

% Power 85%
 True Airspeed 186 Knots

| 2000 Feet Pressure Altitude | | | | | | |
|-----------------------------|---------------------|------------------|----------------------|---------------------------------|------------------------|--------------------------------|
| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-19° C) KTAS | ISA (11° C) KTAS | ISA + 30° C (41° C) KTAS |
| 29.0-29.5 | 2500 | 17.6 | 85% | 162 | 168 | 174 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 155 | 161 | 166 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 147 | 153 | 158 |

| 4000 Feet Pressure Altitude | | | | | | |
|-----------------------------|---------------------|------------------|----------------------|---------------------------------|-----------------------|--------------------------------|
| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-23° C) KTAS | ISA (7° C) KTAS | ISA + 30° C (37° C) KTAS |
| 29.0-29.5 | 2500 | 17.6 | 85% | 165 | 171 | 177 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 158 | 164 | 169 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 150 | 156 | 161 |

| 6000 Feet Pressure Altitude | | | | | | |
|-----------------------------|---------------------|------------------|----------------------|---------------------------------|-----------------------|--------------------------------|
| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-27° C) KTAS | ISA (3° C) KTAS | ISA + 30° C (33° C) KTAS |
| 29.0-29.5 | 2500 | 17.6 | 85% | 168 | 175 | 181 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 161 | 167 | 173 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 153 | 159 | 164 |

| 8000 Feet Pressure Altitude | | | | | | |
|-----------------------------|---------------------|------------------|----------------------|---------------------------------|------------------------|--------------------------------|
| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-31° C) KTAS | ISA (-1° C) KTAS | ISA + 30° C (29° C) KTAS |
| 29.0-29.5 | 2500 | 17.6 | 85% | 172 | 178 | 184 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 164 | 170 | 176 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 156 | 162 | 167 |

CRUISE PERFORMANCE (Continued)

10000 Feet Pressure Altitude

| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-35° C) KTAS | ISA (-5° C) KTAS | ISA + 30° C (25° C) KTAS |
|-----------------------|------------------|---------------|-------------------|---------------------------|------------------|--------------------------|
| 29.0-29.5 | 2500 | 17.6 | 85% | 175 | 182 | 188 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 167 | 174 | 180 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 159 | 165 | 171 |

12000 Feet Pressure Altitude

| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-39° C) KTAS | ISA (-9° C) KTAS | ISA + 30° C (21° C) KTAS |
|-----------------------|------------------|---------------|-------------------|---------------------------|------------------|--------------------------|
| 29.0-29.5 | 2500 | 17.6 | 85% | 178 | 186 | 194 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 171 | 177 | 184 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 162 | 168 | 174 |

14000 Feet Pressure Altitude

| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-43° C) KTAS | ISA (-13° C) KTAS | ISA + 30° C (17° C) KTAS |
|-----------------------|------------------|---------------|-------------------|---------------------------|-------------------|--------------------------|
| 29.0-29.5 | 2500 | 17.6 | 85% | 182 | 189 | 196 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 174 | 181 | 187 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 165 | 172 | 178 |

16000 Feet Pressure Altitude

| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-47° C) KTAS | ISA (-17° C) KTAS | ISA + 30° C (13° C) KTAS |
|-----------------------|------------------|---------------|-------------------|---------------------------|-------------------|--------------------------|
| 29.0-29.5 | 2500 | 17.6 | 85% | 186 | 193 | 200 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 178 | 185 | 191 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 169 | 175 | 182 |

18000 Feet Pressure Altitude

| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-51° C) KTAS | ISA (-21° C) KTAS | ISA + 30° C (9° C) KTAS |
|-----------------------|------------------|---------------|-------------------|---------------------------|-------------------|-------------------------|
| 29.0-29.5 | 2500 | 17.6 | 85% | 190 | 198 | 205 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 181 | 189 | 196 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 172 | 179 | 185 |

CRUISE PERFORMANCE (Continued)

| 20000 Feet Pressure Altitude | | | | | | |
|------------------------------|---------------------|------------------|----------------------|---------------------------------|----------------------|-------------------------------|
| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-55° C) KTAS | ISA (-25° C) KTAS | ISA + 30° C (5° C) KTAS |
| 29.0-29.5 | 2500 | 17.6 | 85% | 193 | 201 | 209 |
| 29.0-29.5 | 2500 | 16.8 | 80% | 189 | 197 | 204 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 185 | 192 | 199 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 175 | 182 | 189 |

| 22000 Feet Pressure Altitude | | | | | | |
|------------------------------|---------------------|------------------|----------------------|---------------------------------|----------------------|-------------------------------|
| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-59° C) KTAS | ISA (-29° C) KTAS | ISA + 30° C (1° C) KTAS |
| 29.0-29.5 | 2500 | 17.6 | 85% | 197 | 205 | 213 |
| 29.0-29.5 | 2500 | 16.8 | 80% | 193 | 201 | 208 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 188 | 196 | 203 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 178 | 186 | 193 |

| 24000 Feet Pressure Altitude | | | | | | |
|------------------------------|---------------------|------------------|----------------------|---------------------------------|----------------------|--------------------------------|
| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-63° C) KTAS | ISA (-33° C) KTAS | ISA + 30° C (-3° C) KTAS |
| 29.0-29.5 | 2500 | 17.6 | 85% | 201 | 209 | 217 |
| 29.0-29.5 | 2500 | 16.8 | 80% | 196 | 205 | 212 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 192 | 200 | 207 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 182 | 189 | 196 |

| 25000 Feet Pressure Altitude | | | | | | |
|------------------------------|---------------------|------------------|----------------------|---------------------------------|----------------------|--------------------------------|
| Manifold Pressure MAP | Engine Speed RPM | Fuel Flow GPH | Percent Power PWR | ISA - 30° C (-65° C) KTAS | ISA (-35° C) KTAS | ISA + 30° C (-5° C) KTAS |
| 29.0-29.5 | 2500 | 17.6 | 85% | 203 | 211 | 219 |
| 29.0-29.5 | 2500 | 16.8 | 80% | 198 | 207 | 215 |
| 26.0-28.0 | 2500 | 16.0 | 75% | 193 | 202 | 209 |
| 22.0-25.0 | 2500 | 14.0 | 65% | 183 | 191 | 198 |

LANDING DISTANCE

| WEIGHT = 3400 LB | | Headwind: Subtract 10% per each 13 knots headwind. | | | | | |
|--|------------------|--|------|------|------|------|------|
| Speed over 50 Ft Obstacle = 77 KIAS | | Tailwind: Add 10% for each 2 knots tailwind up to 10 knots. | | | | | |
| Flaps - 100% · Idle · Dry, Level Paved Surface | | Runway Slope: Ref. Factors. Dry Grass: Add 40% to Ground Roll | | | | | |
| PRESS ALT FT | DISTANCE FT | 0 | 10 | 20 | 30 | 40 | ISA |
| SL | Grnd Roll | 1082 | 1121 | 1161 | 1200 | 1240 | 1141 |
| | 50 ft | 2244 | 2298 | 2352 | 2408 | 2464 | 2325 |
| 1000 | Grnd Roll | 1122 | 1163 | 1204 | 1245 | 1286 | 1175 |
| | 50 ft | 2298 | 2355 | 2412 | 2470 | 2529 | 2372 |
| 2000 | Grnd Roll | 1163 | 1206 | 1248 | 1291 | 1334 | 1210 |
| | 50 ft | 2356 | 2415 | 2476 | 2537 | 2598 | 2422 |
| 3000 | Grnd Roll | 1207 | 1251 | 1295 | 1339 | 1384 | 1247 |
| | 50 ft | 2417 | 2479 | 2543 | 2607 | 2672 | 2473 |
| 4000 | Grnd Roll | 1252 | 1298 | 1344 | 1390 | 1436 | 1285 |
| | 50 ft | 2481 | 2547 | 2614 | 2681 | 2749 | 2528 |
| 5000 | Grnd Roll | 1300 | 1348 | 1395 | 1443 | 1490 | 1324 |
| | 50 ft | 2550 | 2619 | 2689 | 2759 | 2831 | 2585 |
| 6000 | Grnd Roll | 1350 | 1399 | 1449 | 1498 | 1547 | 1365 |
| | 50 ft | 2622 | 2694 | 2768 | 2842 | 2917 | 2644 |
| 7000 | Grnd Roll | 1402 | 1453 | 1504 | 1556 | 1607 | 1408 |
| | 50 ft | 2698 | 2775 | 2852 | 2930 | 3008 | 2707 |
| 8000 | Grnd Roll | 1456 | 1509 | 1563 | 1616 | 1669 | 1452 |
| | 50 ft | 2779 | 2860 | 2941 | 3022 | 3105 | 2773 |
| 9000 | Grnd Roll | 1513 | 1569 | 1624 | 1679 | 1735 | 1497 |
| | 50 ft | 2865 | 2949 | 3035 | 3121 | 3207 | 2841 |
| 10000 | Grnd Roll | 1573 | 1630 | 1688 | 1746 | 1803 | 1545 |
| | 50 ft | 2956 | 3045 | 3134 | 3225 | 3316 | 2914 |

WEIGHT AND BALANCE**Loading Calculations**

For Moment/1000, refer to Loading Data table on following page.

| Description | Weight | Moment/1000 |
|---|--------|-------------|
| 1. Empty Weight <i>Includes unusable fuel and full oil</i> | | |
| 2. Front Seats Occupants <i>Pilot and Passenger</i> | | |
| 3. Rear Seats Occupants | | |
| 4. Baggage <i>130 lb maximum</i> | | |
| 5. Zero Fuel Condition <i>Subtotal items 1 thru 4</i> | | |
| 6. Fuel Load <i>92 Gallon @6.0 lb/gal. maximum</i> | | |
| 7. Ramp Weight <i>Subtotal items 5 and 6</i> | | |
| 8. Fuel for start, taxi, and runup <i>Normally 9 lb at avg. mmnt of 1394</i> | - | - |
| 9. Takeoff Weight <i>Subtract Item 8 from item 7</i> | | |

Calculation Instructions

1. Enter the current basic empty weight and moment from the aircraft's Weight and Balance Record.
2. Enter the total weight and moment/1000 for the front seat occupants from the adjacent Loading Data Table.
3. Enter the total weight and moment/1000 for the rear seat occupants from the adjacent Loading Data Table.
4. Enter the total weight and moment/1000 for the baggage from the adjacent Loading Data Table.
5. If desired, subtotal the weight and moment/1000 entries from steps 1 - 4.
6. Enter the weight and moment/1000 of usable fuel loaded on the airplane.
7. Subtotal the weight and moment/1000.
8. Enter values for typical start, taxi, and run-up operations of 9 pounds at an average moment\1000 of 1.39.
9. Subtract step 8 weight and moment/1000 from the Ramp Weight to determine the Takeoff Weight and moment/1000.
 - a. Verify Takeoff Weight does not exceed the 3400 pounds.
 - b. Verify Moment/1000 does falls between the interpolated minimum and maximum values listed on the adjacent Moment Limits Table.

WEIGHT AND BALANCE (Continued)

Loading Data

To complete Loading Calculations, use this table to determine the Moment/1000.

| Weight LB | Fwd Pass FS 143.5 | Aft Pass FS 180.0 | Baggage FS 208.0 | Fuel FS 154.9 | Weight LB | Fwd Pass FS 143.5 | Aft Pass FS 180.0 | Fuel FS 154.9 |
|--------------|-------------------------|-------------------------|---------------------|------------------|--------------|-------------------------|-------------------------|------------------|
| 20 | 2.87 | 3.6 | 4.16 | 3.098 | 300 | 43.05 | 54 | 46.47 |
| 40 | 5.74 | 7.2 | 8.32 | 6.196 | 320 | 45.92 | 57.6 | 49.568 |
| 60 | 8.61 | 10.8 | 12.48 | 9.294 | 340 | 48.79 | 61.2 | 52.666 |
| 80 | 11.48 | 14.4 | 16.64 | 12.392 | 360 | 51.66 | 64.8 | 55.764 |
| 100 | 14.35 | 18 | 20.8 | 15.49 | 380 | 54.53 | 68.4 | 58.862 |
| 120 | 17.22 | 21.6 | 24.96 | 18.588 | 400 | 57.4 | 72 | 61.96 |
| 140 | 20.09 | 25.2 | 27.04* | 21.686 | 420 | 60.27 | 75.6 | 65.058 |
| 160 | 22.96 | 28.8 | | 24.784 | 440 | 63.14 | 79.2 | 68.156 |
| 180 | 25.83 | 32.4 | | 27.882 | 460 | | | 71.254 |
| 200 | 28.7 | 36 | | 30.98 | 480 | | | 74.352 |
| 220 | 31.57 | 39.6 | | 34.078 | 500 | | | 77.45 |
| 240 | 34.44 | 43.2 | | 37.176 | 520 | | | 80.548 |
| 260 | 37.31 | 46.8 | | 40.274 | 552** | | | 85.5048 |
| 280 | 40.18 | 50.4 | | 43.372 | | | | |

*130 lb Maximum

**92 U.S. Gallons Usable

Moment Limits

Use this table to determine if Loading Calculations are within limits.

| Weight LB | Moment/1000 | | Weight LB | Moment/1000 | |
|--------------|-------------|---------|--------------|-------------|---------|
| | Minimum | Maximum | | Minimum | Maximum |
| 2200 | 304 | 326 | 2850 | 398 | 422 |
| 2250 | 311 | 333 | 2900 | 406 | 430 |
| 2300 | 318 | 341 | 2950 | 414 | 437 |
| 2350 | 326 | 348 | 3000 | 421 | 444 |
| 2400 | 333 | 355 | 3050 | 429 | 452 |
| 2450 | 340 | 363 | 3100 | 437 | 459 |
| 2500 | 347 | 370 | 3150 | 444 | 467 |
| 2550 | 354 | 378 | 3200 | 452 | 474 |
| 2600 | 362 | 385 | 3250 | 460 | 481 |
| 2650 | 369 | 392 | 3300 | 467 | 489 |
| 2700 | 375 | 400 | 3350 | 475 | 496 |
| 2750 | 383 | 407 | 3400 | 483 | 504 |
| 2800 | 390 | 415 | | | |

WIND COMPONENTS**Conditions:**

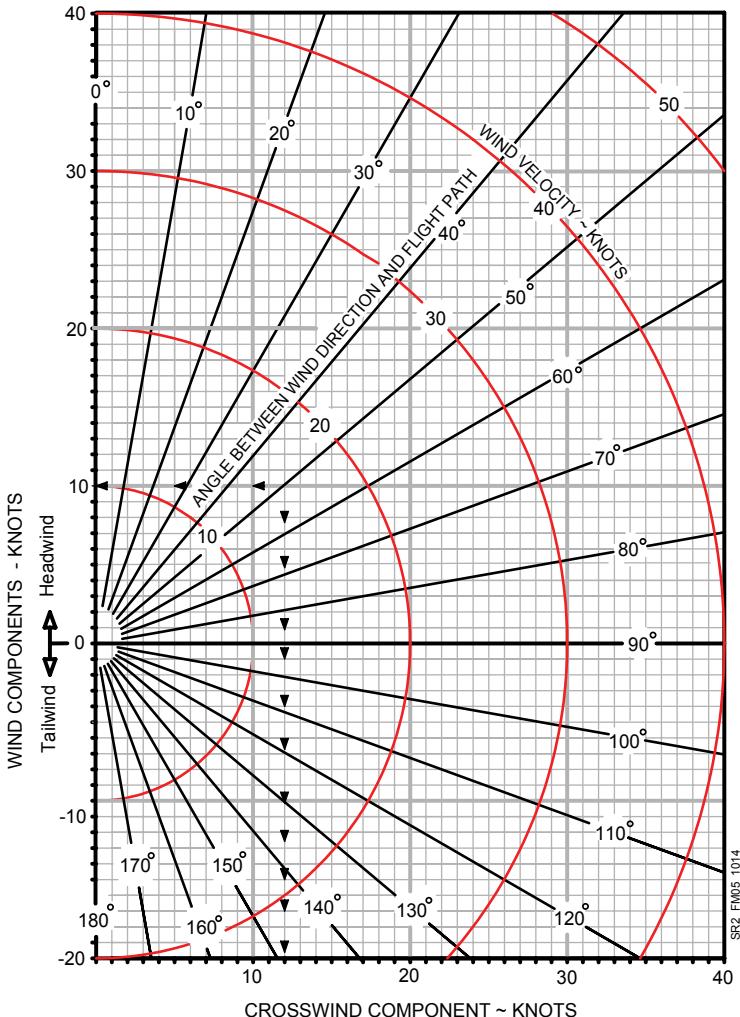
- Runway Heading 10°
- Wind Direction 60°
- Wind Velocity 15 Knots

Example: (See Chart ► ► ►)

- Wind/Flight Path Angle 50°
- Crosswind Component 12 Knots
- Headwind Component 10 Knots

• Note •

- The maximum demonstrated crosswind is 20 knots. Value not considered limiting.



Cirrus Design
Abnormal Checklist



| | |
|---|-----|
| Brake Failure During Taxi | A-1 |
| Aborted Takeoff | A-1 |
| Engine Failure In Flight | |
| * Inadvertently Retarding Power Lever To Idle * | A-2 |
| Inadvertent Icing Encounter..... | A-2 |
| Inadvertent IMC Encounter..... | A-2 |
| Door Open In Flight | A-2 |
| Landing With Failed Brakes | A-3 |
| Landing With Flat Tire | A-3 |
| Alternator Failure | A-4 |
| Engine Indicating System Failure | A-5 |
| LOW VOLTS Warning Light Illuminated..... | A-5 |
| Communications Failure | A-5 |
| Pitot Static Malfunction | A-5 |
| Electric Trim/Autopilot Failure | A-5 |

CIRRUS
SR22***Abnormal Checklist*****GROUND PROCEDURES****BRAKE FAILURE DURING TAXI**

1. Engine Power.....AS REQUIRED
2. Directional Control MAINTAIN WITH RUDDER
3. Brake Pedal(s) PUMP
If directional control can not be maintained:
4. Mixture CUTOFF

ABORTED TAKEOFF

1. Power Lever IDLE
2. Brakes.....AS REQUIRED

IN-FLIGHT PROCEDURES

ENGINE FAILURE IN FLIGHT

*** INADVERTENTLY RETARDING POWER LEVER TO IDLE ***

Below 18,000 Feet

Retarding power lever to idle at or near a full rich mixture setting may cause engine combustion to cease. Advancing the throttle should cause resumption of normal engine operation.

Retarding power lever to idle at or near a very lean mixture setting may cause engine combustion to cease. Using the boost pump in the LOW BOOST position during approach and landing will prevent this condition.

Above 18,000 Feet

If manifold pressure is reduced below 15" Hg and Power Lever positioned close to or at idle, engine may cease combustion. Upon advancing Power Lever, if wind milling engine does not immediately regain power, perform the following:

1. Electric Fuel PumpLOW BOOST
2. Power Lever.....½ OPEN
3. Mixture ControlFULL RICH, then LEAN until engine starts
then slowly advance to FULL RICH
4. Power Lever.....AS REQUIRED
5. MixtureAS REQUIRED
6. Electric Fuel PumpAS REQUIRED

INADVERTENT ICING ENCOUNTER

1. Pitot Heat.....ON
2. Exit icing conditions. Turn back or change altitude.
3. Cabin Heat.....MAXIMUM
4. Windshield Defrost FULL OPEN

INADVERTENT IMC ENCOUNTER

1. Airplane Control..... Establish Straight and Level Flight
2. Autopilot.....Engage to hold Heading and Altitude
3. HeadingReset to initiate 180° turn

DOOR OPEN IN FLIGHT

1. Airspeed REDUCE TO 80 – 90 KIAS
2. Land as soon as practical.

LANDING PROCEDURES**LANDING WITH FAILED BRAKES*****One brake inoperative***

1. Land on the side of runway corresponding to the inoperative brake.
2. Maintain directional control using rudder and working brake.

Both brakes inoperative

1. Divert to the longest, widest runway with the most direct headwind.
2. Land on downwind side of the runway.
3. Use the rudder for obstacle avoidance.
4. Perform *Emergency Engine Shutdown on Ground* checklist.

LANDING WITH FLAT TIRE***Main Gear***

1. Land on the side of the runway corresponding to the good tire.
2. Maintain directional control with the brakes and rudder.
3. Do not taxi. Stop the airplane and perform a normal engine shutdown.

Nose Gear

1. Land in the center of the runway.
2. Hold the nosewheel off the ground as long as possible.
3. Do not taxi. Stop the airplane and perform a normal engine shutdown.

SYSTEM MALFUNCTIONS**ALTERNATOR FAILURE*****ALT 1 Light Steady***

1. ALT 1 Master Switch..... OFF
2. Alternator 1 Circuit Breaker CHECK and RESET
3. ALT 1 Master Switch..... ON

If alternator does not reset:

4. Switch off unnecessary equipment on Main Bus 1, Main Bus 2, and the Non-Essential Buses to reduce loads. Monitor voltage.
5. ALT 1 Master Switch..... OFF
6. Land as soon as practical.

ALT 1 Light Flashing

Serials 0002 thru 1643 and 1645 thru 1666:

1. Ammeter Switch BATT
2. If charging rate is greater than 30 amps, reduce load on Main Bus 1, Main Bus 2, and Non-Essential buses.
3. Monitor ammeter until battery charge rate is less than 15 amps.
4. When battery charge rate is within limits, add loads as necessary for flight conditions.

ALT 2 Light Steady

1. ALT 2 Master Switch..... OFF
2. Alternator 2 Circuit Breaker CHECK and RESET
3. ALT 2 Master Switch..... ON

If alternator does not reset:

4. Switch off unnecessary equipment on Main Bus 1, Main Bus 2, and Non-Essential Buses to reduce loads.
5. ALT 2 Master Switch..... OFF
6. Land as soon as practical.

ENGINE INDICATING SYSTEM FAILURE

Serials 1644, 1663 and Subsequent:

1. ANNUN / ENGINE INST Circuit Breaker CYCLE
2. Land as soon as practical.

LOW VOLTS WARNING LIGHT ILLUMINATED

1. Land as soon as practical.

COMMUNICATIONS FAILURE

1. Switches, Controls CHECK
2. Frequency CHANGE
3. Circuit Breakers CHECK
4. Headset CHANGE
5. Hand Held Microphone CONNECT

PITOT STATIC MALFUNCTION***Static Source Blocked***

1. Pitot Heat ON
2. Alternate Static Source OPEN

Pitot Tube Blocked

1. Pitot Heat ON

ELECTRIC TRIM/AUTOPILOT FAILURE

1. Airplane Control MAINTAIN MANUALLY
2. Autopilot (if engaged) DISENGAGE

If Problem Is Not Corrected:

3. Circuit Breakers PULL AS REQUIRED
 - PITCH TRIM
 - ROLL TRIM
 - AUTOPILOT
4. Power Lever AS REQUIRED
5. Control Yoke MANUALLY HOLD PRESSURE
6. Land as soon as practical.

Cirrus Design



Emergency Checklist

| | |
|---|------------|
| AIRSPEEDS FOR EMERGENCY OPERATIONS..... | E-1 |
| Maneuvering Speed: | E-1 |
| Best Glide: | E-1 |
| Emergency Landing (Engine-Out): | E-1 |
| Maximum Glide..... | E-1 |
| GROUND EMERGENCIES | E-2 |
| Engine Fire During Start..... | E-2 |
| Emergency Engine Shutdown On Ground | E-2 |
| Emergency Ground Egress | E-2 |
| IN-FLIGHT EMERGENCIES..... | E-3 |
| Engine Failure On Takeoff (Low Altitude) | E-3 |
| Engine Failure In Flight..... | E-3 |
| Engine Airstart..... | E-3 |
| Unexpected Loss Of Manifold Pressure | E-4 |
| Engine Partial Power Loss..... | E-4 |
| Low Oil Pressure | E-4 |
| Propeller Governor Failure | E-4 |
| Smoke and Fume elimination | E-5 |
| Engine Fire In Flight | E-5 |
| Wing Fire In Flight | E-5 |
| Cabin Fire In Flight | E-5 |
| Emergency Descent | E-6 |
| Inadvertent Spiral Dive During IMC Flight | E-6 |
| Inadvertent Spin Entry..... | E-6 |
| CAPS Deployment..... | E-7 |
| LANDING EMERGENCIES | E-8 |
| Forced Landing (Engine Out) | E-8 |
| Landing Without Elevator Control | E-8 |
| SYSTEM MALFUNCTIONS..... | E-9 |
| PFD - Loss of Air Data..... | E-9 |
| PFD - Loss of Attitude Data..... | E-9 |
| Power Lever Linkage Failure | E-9 |
| Annunciator Panel/Optional MFD EMAX Messages..... | E-10 |
| Circuit Breaker Panel..... | E-11 |

CIRRUS
SR22***Emergency Checklist*****AIRSPEEDS FOR EMERGENCY OPERATIONS****MANEUVERING SPEED:**

3400 lb..... 133 KIAS

BEST GLIDE:

3400 lb..... 88 KIAS

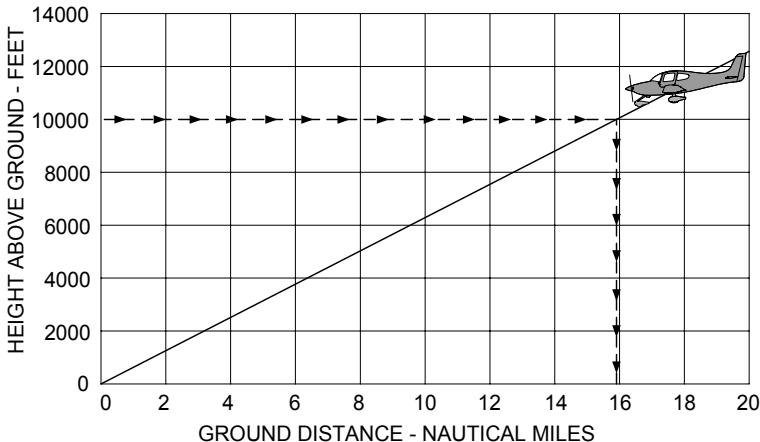
2900 lb..... 87 KIAS

EMERGENCY LANDING (ENGINE-OUT):

Flaps Up 90 KIAS

Flaps 50%..... 85 KIAS

Flaps 100%..... 80 KIAS

MAXIMUM GLIDEGlide Ratio \approx 9.6 : 1

SR2_FM03_1391

Note:

Checklist steps emphasized by underlining such as this:

1. Best Glide Speed ESTABLISH

should be memorized for accomplishment without reference to the procedure.

GROUND EMERGENCIES**ENGINE FIRE DURING START**

1. Mixture CUTOFF
2. Fuel Pump OFF
3. Fuel Selector OFF
4. Power Lever FORWARD
5. Starter CRANK
6. If flames persist, perform *Emergency Engine Shutdown on Ground* and *Emergency Ground Egress* checklists.

EMERGENCY ENGINE SHUTDOWN ON GROUND

1. Power Lever IDLE
2. Fuel Pump (if used) OFF
3. Mixture CUTOFF
4. Fuel Selector OFF
5. Ignition Switch OFF
6. Bat-Alt Master Switches OFF

EMERGENCY GROUND EGRESS

1. Engine SHUTDOWN
2. Seat belts RELEASE
3. Airplane EXIT

IN-FLIGHT EMERGENCIES**ENGINE FAILURE ON TAKEOFF (LOW ALTITUDE)**

1. Best Glide or Landing Speed (as appropriate) ESTABLISH
2. Mixture CUTOFF
3. Fuel Selector OFF
4. Ignition Switch OFF
5. Flaps AS REQUIRED

If time permits:

6. Power Lever IDLE
7. Fuel Pump OFF
8. Bat-Alt Master Switches OFF
9. Seat Belts ENSURE SECURED

ENGINE FAILURE IN FLIGHT

1. Best Glide Speed ESTABLISH
2. Mixture AS REQUIRED
3. Fuel Selector SWITCH TANKS
4. Fuel Pump BOOST
5. Alternate Induction Air ON
6. Ignition Switch CHECK, BOTH
7. If no start, perform *Engine Airstart* or *Forced Landing* checklist.

ENGINE AIRSTART

1. Bat Master Switches ON
2. Power Lever 1/2" OPEN
3. Mixture RICH, AS REQ'D
4. Fuel Selector SWITCH TANKS
5. Ignition Switch BOTH
6. Fuel Pump BOOST
7. Alternate Induction Air ON
8. Alt Master Switches OFF
9. Starter (Propeller not Windmilling) ENGAGE
10. Power Lever slowly INCREASE

ENGINE AIRSTART (Continued)

11. Alt Master Switches ON
12. If no start, perform *Forced Landing* checklist.

UNEXPECTED LOSS OF MANIFOLD PRESSURE

1. Power Lever REDUCE
to minimum setting required for continued flight.
2. Engine MONITOR
Remain alert for the possibility of a fire in the engine compartment.
In the event of a fire in the engine compartment, shut off the fuel at
the fuel valve. Perform *Engine Fire in Flight* checklist.
3. Altitude DESCEND
to the minimum safe altitude from which a landing may be most
safely and expeditiously accomplished.
4. Declare an emergency.

ENGINE PARTIAL POWER LOSS

1. Fuel Pump BOOST
2. Fuel Selector SWITCH TANKS
3. Mixture CHECK appropriate for flight conditions
4. Power Lever SWEEP
5. Alternate Induction Air ON
6. Ignition Switch BOTH, L, then R
7. Land as soon as practical.

LOW OIL PRESSURE

1. Power Lever MINIMUM REQUIRED
2. Land as soon as possible.

PROPELLER GOVERNOR FAILURE*Propeller Rpm Will Not Increase*

1. Oil Pressure CHECK
2. Land as soon as practical.

Propeller Overspeeds Or Will Not Decrease

3. Power Lever ADJUST (to keep RPM in limits)
4. Airspeed REDUCE to 90 KIAS
5. Land as soon as practical.

SMOKE AND FUME ELIMINATION

1. Heater OFF
2. Air Vents OPEN, FULL COLD
3. Prepare to land as soon as possible.
If airflow is not sufficient to clear smoke or fumes from cabin:
4. Cabin Doors UNLATCH

ENGINE FIRE IN FLIGHT

1. Mixture CUTOFF
2. Fuel Pump OFF
3. Power Lever IDLE
4. Fuel Selector OFF
5. Ignition Switch OFF
6. Perform *Forced Landing* checklist.

WING FIRE IN FLIGHT

1. Pitot Heat Switch OFF
2. Navigation Light Switch OFF
3. Strobe Light Switch OFF
4. If possible, side slip to keep flames away from fuel tank and cabin.
5. Land as soon as possible.

CABIN FIRE IN FLIGHT

Warning: *Serials 0435 and subsequent with PFD:* If in IMC conditions, turn ALT 1, ALT 2, and BAT 1 switches OFF. Power from battery 2 will keep the PFD operational for about 30 minutes.

1. Bat-Alt Master Switches OFF, AS REQ'D
2. Heater OFF
3. Air Vents CLOSED
4. Fire Extinguisher ACTIVATE
5. When fire extinguished, Air Vents OPEN, FULL COLD
6. Avionics Power Switch OFF
7. All other switches OFF
8. Land as soon as possible.

CABIN FIRE IN FLIGHT (Continued)

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

9. Bat-Alt Master Switches ON
10. Avionics Power Switch..... ON
11. Activate required systems one at a time. Pause several seconds between activating each system to isolate malfunctioning system. Activate only the minimum amount of equipment necessary to complete a safe landing.

EMERGENCY DESCENT

1. Power Lever IDLE
2. Mixture AS REQUIRED
3. Airspeed V_{NE} (201 KIAS)

INADVERTENT SPIRAL DIVE DURING IMC FLIGHT

1. Power Lever IDLE
2. Stop the spiral dive by using coordinated aileron and rudder control while referring to the attitude indicator and turn coordinator to level the wings.
3. Cautiously apply elevator back pressure to bring airplane to level flight attitude.
4. Trim for level flight.
5. Set power as required.
6. Use autopilot if functional otherwise keep hands off control yoke, use rudder to hold constant heading.
7. Exit IMC conditions as soon as possible.

INADVERTENT SPIN ENTRY

1. CAPS ACTIVATE

CAPS DEPLOYMENT

As altitudes increase, true air speed of CAPS deployment increases. Higher true air speeds increase the parachute inflation loads. Slow to the minimum possible airspeed prior to deploying the CAPS.

1. Airspeed **MINIMUM POSSIBLE**

The maximum demonstrated deployment speed is 133 KIAS.

2. Mixture (If time and altitude permit) **CUTOFF**

3. Activation Handle Cover **REMOVE**

4. 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.

After deployment:

5. Mixture **CHECK, CUTOFF**

6. Fuel Selector **OFF**

7. Bat-Alt Master Switches **OFF**

8. Ignition Switch **OFF**

9. Fuel Pump **OFF**

10. ELT **ON**

11. Seat Belts and Harnesses **TIGHTEN**

12. Loose Items **SECURE**

13. Assume emergency landing body position.

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

LANDING EMERGENCIES**FORCED LANDING (ENGINE OUT)**

1. Best Glide Speed..... ESTABLISH
2. Radio Transmit (121.5 MHz) MAYDAY
3. Transponder..... SQUAWK 7700
4. If off airport, ELT ACTIVATE
5. Power Lever..... IDLE
6. Mixture..... CUTOFF
7. Fuel Selector OFF
8. Ignition Switch OFF
9. Fuel Pump OFF
10. Flaps (when landing is assured)..... 100%
11. Master Switches OFF
12. Seat Belt(s)..... SECURED

LANDING WITHOUT ELEVATOR CONTROL

1. Flaps..... SET 50%
2. Trim..... SET 80 KIAS
3. Power..... AS REQUIRED FOR GLIDE ANGLE

SYSTEM MALFUNCTIONS**PFD - LOSS OF AIR DATA**

1. Land as soon as practical.
2. Standby Instruments (altitude, airspeed)..... **MONITOR**
If failure occurs while flying in IMC:
3. Exit IMC.

PFD - LOSS OF ATTITUDE DATA

1. Standby Instruments (attitude, heading)..... **MONITOR**
If failure occurs while flying in IMC:
2. Autopilot GPSS Mode..... **ACTIVATE**
3. Autopilot Altitude Hold **ACTIVATE**
4. Exit IMC.

POWER LEVER LINKAGE FAILURE

1. Power Lever Movement **VERIFY**
2. Power..... **SET if able**
3. Flaps..... **SET if needed**
4. Mixture **AS REQUIRED (full rich to cut-off)**
5. Land as soon as possible.

ANNUNCIATOR PANEL/OPTIONAL MFD EMAX MESSAGES

Engine Speed > 2710 RPM for 5s:

| | | |
|-----------|--|-----|
| Check RPM | | ACK |
|-----------|--|-----|

Alternator 1 < 2 A for 20 s or more:

| | | |
|-------------|--|-----|
| Check Alt 1 | | ACK |
|-------------|--|-----|

Oil Temperature ≥ 240°F:

| | | |
|----------------|--|-----|
| Check Oil Temp | | ACK |
|----------------|--|-----|

Alternator 2 < 2 A for 20 s or more:

| | | |
|-------------|--|-----|
| Check Alt 2 | | ACK |
|-------------|--|-----|

Oil Pressure < 10 psi OR > 99 psi:

| | | |
|-----------------|--|-----|
| Check Oil Press | | ACK |
|-----------------|--|-----|

Battery 1 < -4 A for 30 s or more:

| | | |
|--------------|--|-----|
| Check Batt 1 | | ACK |
|--------------|--|-----|

Cylinder Head Temperature > 460°F:

| | | |
|-----------|--|-----|
| Check CHT | | ACK |
|-----------|--|-----|

Fuel Flow > 26.7 gallons per hour:

| | | |
|-----------------|--|-----|
| Check Fuel Flow | | ACK |
|-----------------|--|-----|

Main Bus Volts < 24.5v OR > 32.0v:

| | | |
|----------------|--|-----|
| Check Main Bus | | ACK |
|----------------|--|-----|

Fuel Remaining < 28.0 gallons:

| | | |
|--------------------|--|-----|
| Check Fuel Remaing | | ACK |
|--------------------|--|-----|

Essential Bus Volts < 24.5v OR > 32.0v:

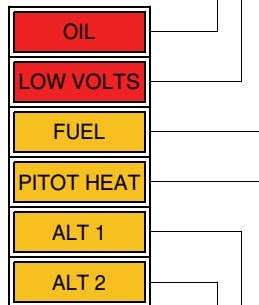
| | | |
|---------------------|--|-----|
| Check Essential Bus | | ACK |
|---------------------|--|-----|

Low Fuel Condition

Each tank below approx. 14 gallons.

System Voltage Below 24.5v

High Oil Temperature
OR Low Oil Pressure



Fuel Flow > 30.0 gallons per hour:

| | | |
|-----------------|--|-----|
| Check Fuel Flow | | ACK |
|-----------------|--|-----|

Fuel Remaining < 9.9 gallons:

| | | |
|----------------------|--|-----|
| Check Fuel Remaining | | ACK |
|----------------------|--|-----|

Oil Temperature ≥ 235°F:

| | | |
|------------------|--|-----|
| Monitor Oil Temp | | ACK |
|------------------|--|-----|

Oil Pressure < 30 psi OR > 75 psi:

| | | |
|-----------------|--|-----|
| Check Oil Press | | ACK |
|-----------------|--|-----|

Flashing: ALT 2 Overload

Steady: ALT 2 Failure

Cylinder Head Temperature > 420°F:

| | | |
|-----------|--|-----|
| Check CHT | | ACK |
|-----------|--|-----|

Flashing: ALT 1 Overload

Steady: ALT 1 Failure

Pitot Switch "ON"

No Power to Pitot Mast

CIRCUIT BREAKER PANEL

| | | | | | |
|--|-------------------------|--|-----------------------------|--|------------------------|
| | 18530-001 | | 18530-011 | | 18530-021 |
| | SKYWATCH / TAWNS | | FUEL PUMP | | ANNUN / ENGINE INST |
| | GPS 2 | | TURN COORD #2 | | TURN COORD #1 |
| | COM 2 | | ATTITUDE #2 | | ATTITUDE #1 |
| | ENCODER / XPONDER | | HSI /PFD #2 | | HSI /PFD #1 |
| | WEATHER / STORMSCOPE | | ALT 1 | | STALL WARNING |
| | MFD | | CABIN LIGHTS | | BATTERY 2 |
| | AUDIO PANEL | | STARTER RELAY | | ALT 2 |
| | AVIONICS | | PITOT HEAT / COOLING FAN | | ESSENTIAL POWER |
| | FUEL QUANTITY | | 12VDC OUTLET | | AUTOPILOT |
| | REC/ INST LTS | | STROBE LIGHTS | | AVIONICS |
| | PITCH TRIM | | NAV LIGHTS | | COM 1 |
| | ROLL TRIM | | FLAPS | | GPS 1 |
| | ICE PROTECTION | | CONDENSER | | |
| | FAN | | | | |
| | COMPRESSOR / CONTROL | | | | |