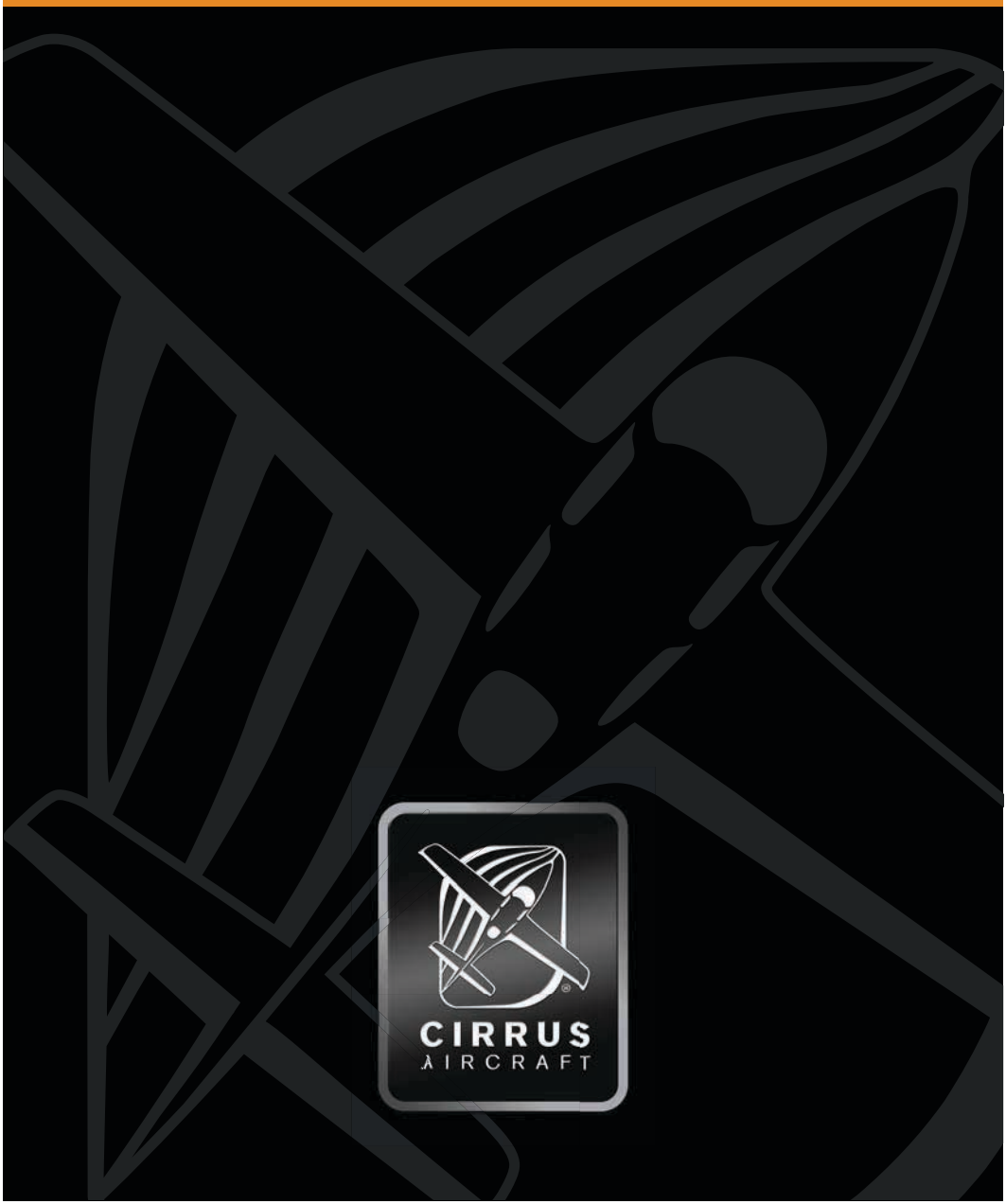
ABBREVIATED CHECKLIST

SR22

WITH CIRRUS PERSPECTIVE+ AVIONICS



Abbreviated Checklist

for

SR22 Aircraft Serials 4435 and Subsequent

with Cirrus Perspective+ Avionics with Garmin System Software 2647.N4 or later

Includes Serials w/ and w/o Flight Into Known Ice System (FIKI)

The procedures in this publication are abbreviated and derived from procedures in the FAA Approved Airplane Flight Manual and Pilot's Operating Handbook (POH) P/N 13772-006, Revision A1. These procedures do not supersede the procedures in the POH. In the event of conflict, the POH shall take precedence.

ISSUED:09 Nov 2021

P/N 13728-014

Normal Procedures

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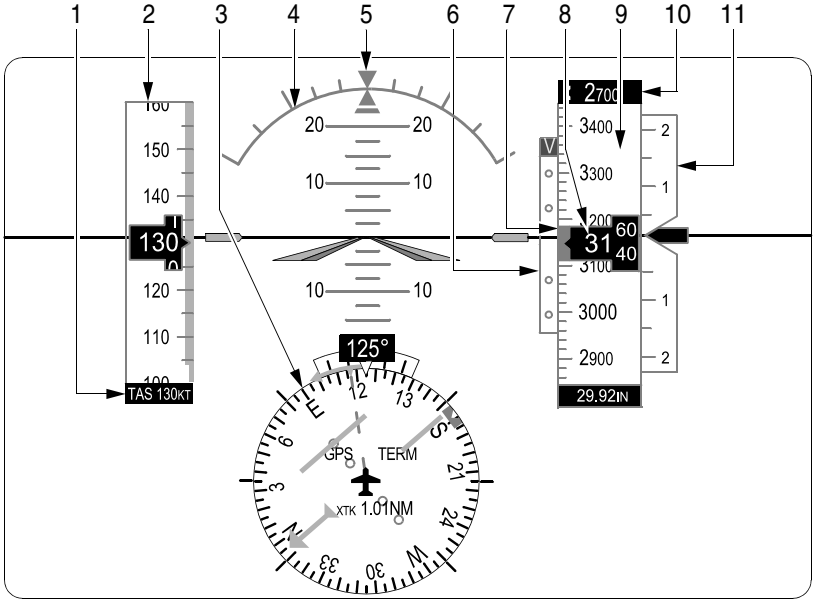
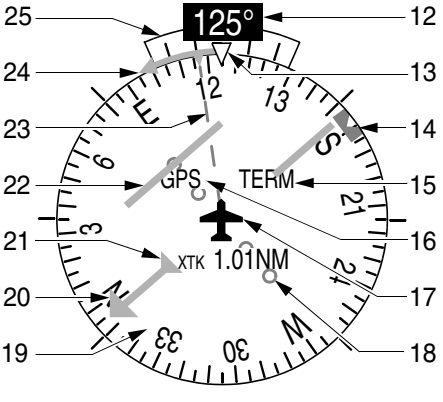
Primary Flight Display





HSI DETAIL

LEGEND

1. True Airspeed
2. Airspeed Indicator
3. Horizontal Situation Indicator (HSI)
4. Attitude Indicator
5. Slip/Skid Indicator
6. Vertical Deviation Indicator (VDI)
7. Selected Altitude Bug
8. Current Altitude
9. Altimeter
10. Selected Altitude
11. Vertical Speed Indicator (VSI)
12. Current Heading
13. Lubber Line
14. Selected Heading Bug
15. Flight Phase
16. Navigation Source
17. Aircraft Symbol
18. Course Deviation Scale
19. Rotating Compass Rose
20. Course Pointer
21. To/From Indicator
22. Course Deviation Indicator
23. Current Track Indicator
24. Turn Rate/Heading Trend Vector
25. Turn Rate Indicator

SR22_FM07_5347

Airspeeds for Normal Operation

Takeoff Rotation:

- Normal, Flaps 50%..... 73 KIAS
- Obstacle Clearance, Flaps 50%..... 84 KIAS

Enroute Climb, Flaps Up:

- Normal ..... 110-120 KIAS
- Best Rate of Climb, SL ..... 108 KIAS
- Best Rate of Climb, 10,000..... 99 KIAS
- Best Angle of Climb, SL..... 88 KIAS
- Best Angle of Climb, 10,000 ..... 88 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}) ..... 79 KIAS

Go-Around, Flaps 50%:

- Full Power..... 80 KIAS

Maximum Recommended Turbulent Air Penetration:

- 3600 lb..... 140 KIAS
- 2900 lb..... 123 KIAS

Maximum Demonstrated Crosswind Velocity:

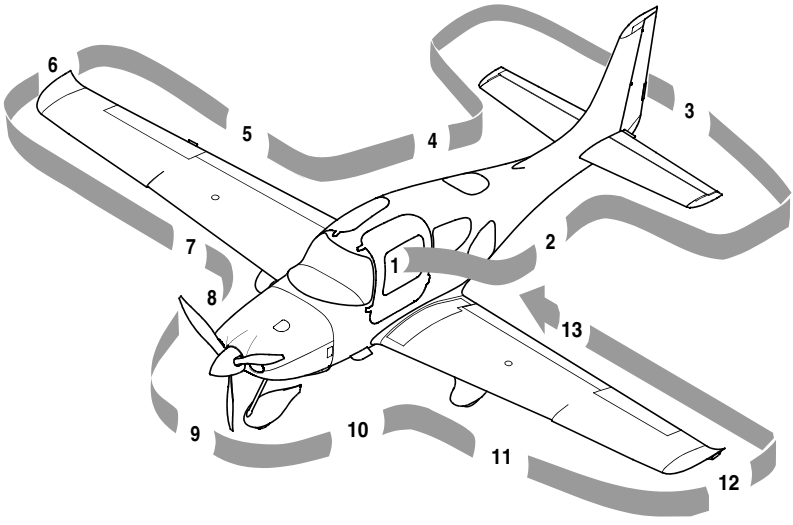
- Takeoff or Landing..... 21 Knots

Anti-Ice System (Serials w/ FIKI):

- Minimum Airspeed For FIKI Conditions.....95 KIAS*

  **Includes all phases of flight, including approach, except as required for takeoff and landing.*

- Max Airspeed Anti-Ice System Ops..... 177 KIAS and 204 KTAS
- Recommended Holding Airspeed..... 120 KIAS



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Preflight Inspection *(All Serials)*

1. Cabin
   - a. Required Documents ..... ON BOARD
   - b. AVIONICS Switch..... OFF
   - c. BAT 2 Switch ..... ON
   - d. PFD ..... VERIFY ON
   - e. Essential Bus Voltage ..... 23-25 VOLTS
   - f. Flap Position Light..... OUT
   - g. BAT 1 Switch ..... ON
   - h. Avionics Cooling Fan..... AUDIBLE
   - i. Oxygen Masks/Cannulas and Hoses (if available)..... CHECK CONDITION
   - j. AVIONICS Switch..... ON
   - k. Fuel Quantity..... CHECK
   - l. Fuel Selector ..... SELECT FULLER TANK
   - m. Flaps ..... 100%, CHECK LIGHT ON

(Continued on following page)

n. Lights..... CHECK OPERATION
o. Stall Warning System Inlet .....UNOBSTRUCTED
p. Stall Warning..... TEST
q. Oxygen System (if available)..... ON
(1) Quantity ..... VERIFY ADEQUATE SUPPLY FOR FLIGHT WITH RESERVE
(2) Flow .....CHECK FLOWMETER ON ALL MASKS
(3) Oxygen System ..... OFF
r. Pitot Heat .....ON
(1) Verify probe is hot.
s. Pitot Heat ..... OFF
t. AVIONICS Switch..... OFF
u. BAT 1 and BAT 2 Switches..... OFF
v. Alternate Static Source .....NORMAL
w. Circuit Breakers.....IN
x. Fire Extinguisher .....CHARGED AND AVAILABLE
y. Emergency Egress Hammer .....AVAILABLE
z. CAPS Handle ..... PIN REMOVED

2. Left Fuselage
a. Door Lock..... UNLOCK
b. COM 1 Antenna (top) .....CONDITION AND ATTACHMENT
c. Transponder Antenna (underside).....CONDITION AND ATTACHMENT
d. COM 2 Antenna (underside) .....CONDITION AND ATTACHMENT
e. Wing/Fuselage Fairing .....CHECK
f. Baggage Door.....CLOSED AND SECURE
g. Static Button..... CHECK FOR BLOCKAGE
h. Parachute Cover .....SEALED AND SECURE

3. Empennage
a. Tiedown Rope .....REMOVE
b. Horizontal and Vertical Stabilizers..... CONDITION

(Continued on following page)

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
   c. Door Lock ..... UNLOCK
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. Wing Tip Light and Lens ..... CONDITION AND SECURITY
   c. Fuel Vent (underside) ..... UNOBSTRUCTED
7. Right Wing Forward and Main Gear
   a. Leading Edge and Stall Strips ..... CONDITION
   b. Fuel Cap ..... CHECK QUANTITY AND SECURE
   c. Fuel Drains (2 underside) ..... DRAIN AND SAMPLE
   d. Wheel Fairings ..... SECURITY, ACCUMULATION OF DEBRIS
   e. Tire ..... CONDITION, INFLATION, AND WEAR
   f. Wheel and Brakes ..... FLUID LEAKS, EVIDENCE OF OVERHEATING, GENERAL CONDITION, AND SECURITY
   g. Chocks and Tiedown Ropes ..... REMOVE
8. Nose, Right Side
   a. Vortex Generator ..... CONDITION
   b. Ice Inspection Light ..... CONDITION AND SECURITY
   c. Cowling ..... ATTACHMENTS SECURE
   d. Exhaust Pipe ..... CONDITION, SECURITY, AND CLEARANCE

(Continued on following page)

9. Nose Gear, Propeller, and Spinner
   a. Tow Bar ..... REMOVE AND STOW
   b. Strut ..... CONDITION
   c. Wheel Fairing ..... SECURITY, ACCUMULATION OF DEBRIS
   d. Wheel and Tire ..... CONDITION, INFLATION, AND WEAR
   e. Propeller ..... CONDITION (INDENTATIONS, NICKS, ETC.)
   f. Spinner ..... CONDITION, SECURITY, AND OIL LEAKS
   g. Air Inlets ..... UNOBSTRUCTED
   h. Alternator ..... CONDITION
10. Nose, Left Side
   a. Landing Light ..... CONDITION
   b. Engine Oil ....CHECK 6-8 QUARTS, LEAKS, CAP AND DOOR SECURE
   c. Ice Inspection Light ..... CONDITION AND SECURITY
   d. Cowling ..... ATTACHMENTS SECURE
   e. External Power ..... DOOR SECURE
   f. Gascolator (underside)... DRAIN FOR 3 SECONDS, SAMPLE
   g. Vortex Generator ..... CONDITION
   h. Exhaust Pipe .... 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. Fuel Cap ..... CHECK QUANTITY AND SECURE
   g. Leading Edge and Stall Strips ..... CONDITION

(Continued on following page)

12. Left Wing Tip
    a. Fuel Vent (underside) ..... UNOBSTRUCTED
    b. Pitot Probe ..... COVER REMOVED, UNOBSTRUCTED
    c. Wing Tip Light and Lens ..... CONDITION AND SECURITY
    d. Tip .....ATTACHMENT
13. Left Wing Trailing Edge
    a. Hinges, Actuation Arm, Bolts, and Cotter Pins..... SECURE
    b. Aileron Gap Seal ..... SECURITY
    c. Aileron .....FREEDOM OF MOVEMENT
    d. Flap and Rub Strips (If installed).....CONDITION AND SECURITY

Supplemental Preflight Inspection *(Serials w/ FIKI)*

14. Cabin
    a. Circuit Breakers..... SET
    b. BAT 1 Switch .....ON
    c. Flaps 100%
    d. AVIONICS Switch.....ON
    e. Cabin Speaker .....ON
    f. Cabin Doors ..... CLOSE
    g. WIND SHLD Push-Button ..... PRESS
        (1) Verify evidence of deicing fluid from spray nozzles.
    h. PUMP BKUP Switch .....ON
        (1) Metering Pump Duty Cycle..... VERIFY CONTINUOUSLY ON
        (2) Deicing Fluid and Endurance Indications .....CHECK
    i. PUMP BKUP Switch ..... OFF
    j. ICE PROTECT System Switch.....ON
    k. ICE PROTECT Mode Switch..... NORM
        (1) Metering Pump Duty Cycle... VERIFY 30 S ON, 90 S OFF
        (2) Deicing Fluid and Endurance Indications .....CHECK

(Continued on following page)

l. ICE PROTECT Mode Switch..... HIGH

(1) Metering Pump Duty Cycle.....VERIFY CONTINUOUSLY ON

(2) Deicing Fluid and Endurance Indications .....CHECK

m. ICE Inspection Lights Switch.....ON

(1) Verify LH and RH Operation.

n. PITOT HEAT Switch . ON, CHECK, OFF (MAX 45 SECONDS)

15. Empennage

a. Stabilizers Porous Panels..... CONDITION AND SECURITY

(1) Verify evidence of deicing fluid along length of panels and elevator horns.

b. Vertical Porous Panel ..... CONDITION AND SECURITY

(1) Verify evidence of deicing fluid along length of panel.

16. Right Wing Forward and Main Gear

a. Fluid Tank..... VERIFY DESIRED QUANTITY

(1) Filler Cap ..... CONDITION AND SECURITY

(2) Fluid Vent (underside wing) .....UNOBSTRUCTED

b. Porous Panels ..... CONDITION AND SECURITY

(1) Verify evidence of deicing fluid along length of panels.

c. Lift Transducer Faceplate .....PERCEPTIBLY HOT

d. Lift Transducer Vane ..... VERY HOT

(1) Verify Stall Warning audio alert after lifting stall vane with wooden tooth pick or tongue depressor.

17. Nose, Right Side

a. Ice Inspection Light ..... CONDITION AND SECURITY

(Continued on following page)

18. Nose Gear, Propeller, Spinner
    a. Slinger Ring.....EVIDENCE OF DEICING FLUID
19. Nose, Left Side
    a. Ice Inspection Light ..... CONDITION AND SECURITY
    b. Windshield Spray Nozzles..... CONDITION AND SECURITY
20. Left Wing Forward and Main Gear
    a. Fluid Tank..... VERIFY DESIRED QUANTITY
        (1) Filler Cap ..... CONDITION AND SECURITY
        (2) Fluid Vent (underside wing) ..... UNOBSTRUCTED
    b. Porous Panels ..... CONDITION AND SECURITY
        (1) Verify evidence of deicing fluid along length of panels.
21. Left Wing Tip
    a. Pitot Probe (underside) ..... UNOBSTRUCTED
    b. Pitot Probe ..... VERY HOT
22. Cabin
    a. Fluid Quantity ..... VERIFY 5 GALLONS MINIMUM
    b. ICE PROTECT System Switch..... OFF
    c. Flaps 0%
    d. Cabin Speaker ..... OFF
    e. AVIONICS Switch..... OFF
    f. BAT 1 Switch ..... OFF

Before Starting Engine

1. Preflight Inspection ..... COMPLETED
2. Weight and Balance..... VERIFY WITHIN LIMITS
3. Emergency Equipment ..... ON BOARD
4. Passengers..... BRIEFED
5. Seats, Seat Belts, and Harnesses..... ADJUST AND SECURE

Engine Start

1. External Power (If applicable) ..... CONNECT
2. Brakes..... HOLD
3. BAT 1 and BAT 2 Switches ..... ON (CHECK VOLTS)
4. Strobe Lights ..... ON
5. Mixture..... FULL RICH
6. Power Lever..... FULL FORWARD
7. Fuel Pump ..... PRIME, THEN BOOST
8. Propeller Area..... CLEAR
9. Power Lever..... OPEN ¼ INCH
10. Ignition Switch ..... START (RELEASE AFTER ENGINE STARTS)
11. Power Lever..... RETARD (TO MAINTAIN 1000 RPM)
12. Oil Pressure..... CHECK
13. ALT 1 and ALT 2 Switches..... ON
14. AVIONICS Switch ..... ON
15. Engine Parameters ..... MONITOR
16. External Power (If applicable) ..... DISCONNECT

Cold Weather Operation: Starting

1. Ignition Switch ..... OFF
2. Propeller .....HAND TURN SEVERAL ROTATIONS
3. External Power (If applicable) .....CONNECT
4. Brakes..... HOLD
5. BAT 1 and BAT 2 Switches ..... ON (CHECK VOLTAGE)
6. Mixture.....FULL RICH
7. Power Lever..... FULL FORWARD
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)
13. Oil Pressure.....CHECK
14. ALT 1 and ALT 2 Switches.....ON
15. AVIONICS Switch .....ON
16. Engine Parameters ..... MONITOR
17. External Power (If applicable) .....DISCONNECT
18. Amp Meter/Indication.....CHECK
19. Strobe Lights .....ON

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. ECS Control Panel ..... SET
5. Air Conditioner ..... RECIRC DISABLED
6. Fuel Quantity ..... CONFIRM
7. Fuel Selector ..... FULLER TANK
8. Fuel Pump ..... BOOST
9. Mixture ..... AS REQUIRED
10. Flaps ..... SET 50% AND CHECK
11. Autopilot ..... CHECK AND DISCONNECT
12. Transponder ..... SET
13. COM and NAV/GPS ..... SET
14. Brakes ..... HOLD
15. Power Lever ..... 1700 RPM
16. Alternator ..... CHECK
    a. Pitot Heat ..... ON
    b. Navigation Lights ..... ON
    c. Landing Light ..... ON
17. Voltage ..... CHECK
18. Pitot Heat ..... AS REQUIRED
19. Navigation Lights ..... AS REQUIRED
20. Landing Light ..... AS REQUIRED
21. Magnetos ..... CHECK LEFT AND RIGHT
    RPM drop must not exceed 150 RPM for either magneto. RPM differential must not exceed 75 RPM between magnetos.
    a. Ignition Switch ..... R, NOTE RPM, THEN BOTH
    b. Ignition Switch ..... L, NOTE RPM, THEN BOTH
22. Engine Parameters ..... CHECK
23. Power Lever ..... IDLE
24. Power Lever ..... 1000 RPM

(Continued on following page)

25. Flight Instruments, HSI, and Altimeter ..... CHECK AND SET
26. Flight Controls ..... FREE AND CORRECT
27. Trim ..... SET TAKEOFF
28. CAS Messages ..... CHECK

If icing conditions are anticipated immediately after takeoff (Serials w/ FIKI):

29. ICE PROTECT System Switch ..... ON
30. ICE PROTECT Mode Switch ..... HIGH
31. PITOT HEAT Switch ..... ON
32. Cabin Heat ..... HOT
33. Windshield Defrost ..... ON
34. Ice Inspection Lights ..... AS REQUIRED
35. Verify airframe is free of contamination immediately before takeoff.
36. Flaps ..... RETRACT AS SOON AS PRACTICAL

Normal Takeoff

1. Brakes.....RELEASE (STEER WITH RUDDER ONLY)
2. Power Lever..... FULL FORWARD
3. Engine Parameters.....CHECK
4. Elevator Control .....ROTATE SMOOTHLY AT 73-76 KIAS
5. At 90 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 73 KIAS
8. Airspeed at Obstacle ..... 84 KIAS

Climb

1. Climb Power ..... SET
2. Flaps..... VERIFY UP
3. Mixture.....LEAN AS REQUIRED FOR ALTITUDE
4. Engine Parameters.....CHECK
5. Fuel Pump .....BOOST

Icing Conditions: In Flight *(Serials w/ FIKI)*

If Icing Conditions OR Inadvertent Icing Encounter Exist:

1. PITOT HEAT Switch..... VERIFY ON
2. ICE PROTECT System Switch ..... ON
3. ICE PROTECT Mode Switch ..... NORM
4. WIND SHLD Push-Button..... PRESS AS REQUIRED
5. Monitor ice accumulation.

   If ice accretions persist on protected surfaces following each cycle:

   a. ICE PROTECT Mode ..... HIGH

   If ice continues accumulating on protected surfaces:

   b. ICE PROTECT Mode Push-Button .....MAX

   If ice accretions do not shed from protected surfaces:

   c. PUMP BKUP Switch ..... ON

   d. Perform *Anti-Ice System Failure* Checklist.

   e. WIND SHLD Push-Button ..... PRESS AS REQUIRED

   f. Airspeed..... MAINTAIN 95-177 KIAS
   AND LESS THAN 204 KTAS

While in Icing Conditions:

1. Flaps ..... UP
2. Ice Inspection Lights ..... AS REQUIRED
3. Cabin Heat ..... HOT
4. Windshield Defrost ..... ON
5. Deicing Fluid Quantity ..... MONITOR
   a. Ensure adequate quantity to complete flight.

After Leaving Icing Conditions:

1. Anti-Ice System ..... OFF
2. Airspeed ..... AS FLIGHT CONDITIONS DICTATE
3. Ice Inspection Lights ..... AS REQUIRED
4. Cabin Heat ..... AS REQUIRED
5. Windshield Defrost ..... AS REQUIRED
6. WIND SHLD Push-Button ..... PRESS AS REQUIRED

Cruise

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

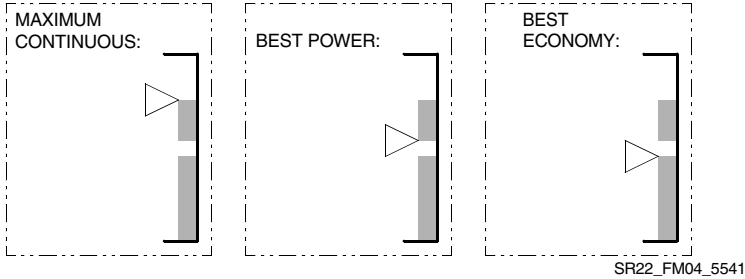
If icing conditions are encountered during cruise (Serials w/ FIKI):

6. Perform *Icing Conditions: In Flight* Checklist.
7. Engine Power.....INCREASE TO MAINTAIN CRUISE SPEED
8. Autopilot.....AS REQUIRED
   Disconnect every 30 minutes to detect any out-of-trim conditions. When disconnecting the autopilot with ice accretions on the airplane, the pilot should be alert for out-of-trim forces.

Cruise Leaning

Mixture Description	Exhaust Gas Temperature
Best Power	75 °F Rich Of Peak EGT
Best Economy	50 °F Lean Of Peak EGT

Fuel flow reference for leaning



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Descent

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

Approach and Landing

If Icing Conditions Exist *(Serials w/ FIKI)*:

1. ICE PROTECT System Switch ..... ON
2. ICE PROTECT Mode Switch ..... HIGH
3. Monitor ice accumulation.

   If ice continues to accumulate:

   a. ICE PROTECT Mode Push-Button ..... MAX

   If ice accretions do not shed from protected surfaces:

   b. PUMP BKUP Switch ..... ON

   c. Perform *Anti-Ice System Failure* Checklist.
4. WIND SHLD Push-Button ..... PRESS AS REQUIRED
5. Ice Inspection Lights ..... AS REQUIRED
6. Flaps 50%
7. Airspeed ..... MINIMUM OF 95 KIAS
8. Airspeed on Short Final ..... 88 KIAS

Before Landing

1. Seat Belt and Shoulder Harness ..... SECURE
2. Fuel Pump ..... BOOST
3. Mixture ..... AS REQUIRED
4. Flaps ..... AS REQUIRED
5. Autopilot ..... AS REQUIRED

Normal Landing

1. Flaps 100%
2. Airspeed ..... 80-85 KIAS

   If Icing Conditions Exist:

   a. Airspeed on Short Final ..... 88 KIAS
3. Power Lever ..... AS REQUIRED

   After touchdown:
4. Brakes ..... AS REQUIRED

Short Field Landing

1. Flaps 100%
2. Airspeed ..... 79 KIAS
3. Power Lever ..... AS REQUIRED

   After clear of obstacles:
4. Power Lever ..... REDUCE TO IDLE

   After touchdown:
5. Brakes ..... MAXIMUM

Balked Landing/Go-Around

1. Autopilot ..... DISENGAGE
2. Power Lever ..... FULL FORWARD
3. Flaps 50%
4. Airspeed ..... 80-85 KIAS

   After clear of obstacles:
5. Flaps ..... UP

After Landing

1. Power Lever ..... 1000 RPM
2. Fuel Pump ..... OFF
3. Flaps ..... UP
4. Lights ..... AS REQUIRED
5. Pitot Heat ..... OFF

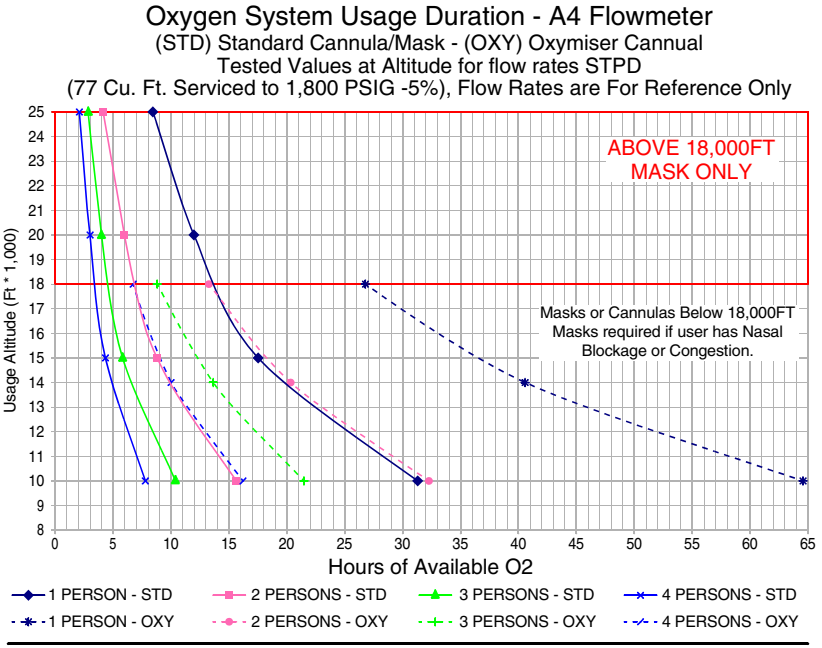
Serials w/ FIKI:

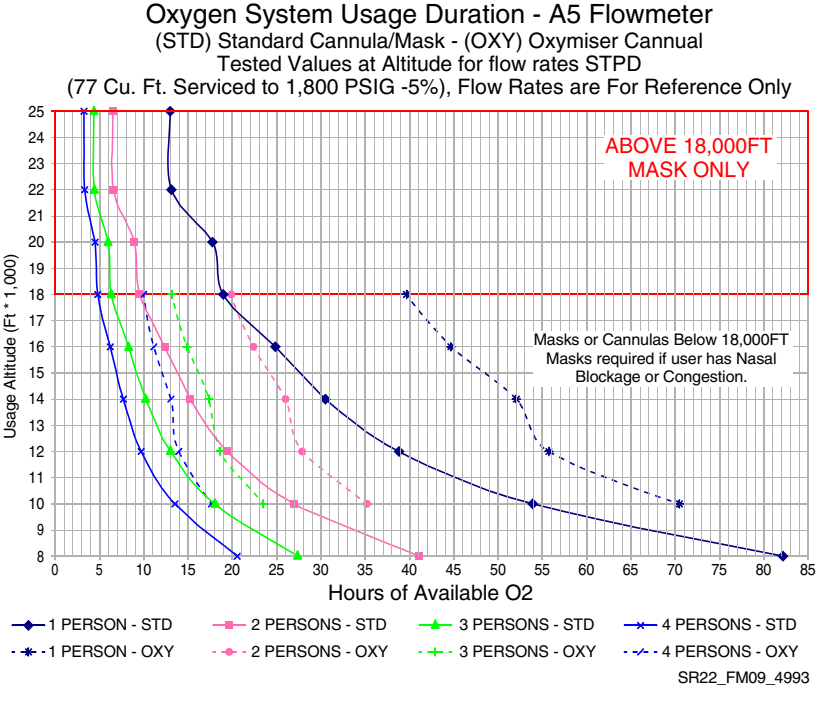
6. ICE PROTECT System Switch ..... OFF
7. PUMP BKUP Switch ..... OFF
8. Ice Inspection Lights ..... OFF

Shutdown

1. Fuel Pump ..... OFF
2. Power Lever ..... IDLE
3. Mixture ..... CUTOFF
4. All Switches ..... OFF
5. Magnetos ..... OFF
6. ELT ..... TRANSMIT LIGHT OUT
7. Chocks, Tie-downs, Pitot Covers ..... AS REQUIRED

Oxygen Duration (Precise Flight System)





SR22_FM09_4993

O2 DURATION

Performance

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• Note •

Serials w/ Air Conditioning System: Brake Horsepower is reduced by approximately 6 BHP.

Takeoff Distance: 3600 LB (1633 kg)

Weight: 3600 LB (1633 kg)
Approx. Speed at Liftoff: 76 KIAS
Speed over 50 ft Obstacle: 84 KIAS
Flaps: 50%
Power: Full Throttle
Mixture: Set to very top of GREEN ARC.
Runway: Dry, Paved, Level

Headwind: Subtract 10% for each 12 knots headwind.
Tailwind: Add 10% for each 2 knots tailwind up to 10 knots.
Runway Slope: Refer to POH.
Dry Grass: Add 20% to ground roll.
Wet Grass: Add 30% to ground roll.
Air Conditioner: Add 100 ft to ground roll and 150 ft to distance over 50 ft obstacle if Air Conditioner if ON during takeoff.

PRESS ALT FT	DISTANCE FT	TEMPERATURE ~°C						
		0	10	20	30	40	50	ISA
SL	Grnd Roll	965	1042	1123	1207	1294	1384	1082
	50 ft	1680	1804	1933	2066	2203	2345	1868
1000	Grnd Roll	1063	1148	1237	1330	1426	1526	1175
	50 ft	1844	1980	2121	2267	2418	2573	2022
2000	Grnd Roll	1172	1267	1365	1467	1573	1683	1277
	50 ft	2025	2174	2329	2490	2656	2827	2190
3000	Grnd Roll	1295	1399	1507	1620	1737	1858	1389
	50 ft	2226	2391	2561	2738	2920	3109	2375
4000	Grnd Roll	1431	1546	1666	1791	1920	2054	1512
	50 ft	2451	2632	2820	3014	3215	3422	2578
5000	Grnd Roll	1584	1711	1844	1982	2125	2273	1648
	50 ft	2701	2900	3107	3322	3543	3772	2801
6000	Grnd Roll	1755	1896	2043	2195	2354	2519	1798
	50 ft	2979	3200	3428	3665	3910	4162	3047
7000	Grnd Roll	1946	2103	2266	2435	2611	2794	1963
	50 ft	3291	3535	3787	4049	4319	4598	3317
8000	Grnd Roll	2161	2335	2516	2704	2900	3102	2146
	50 ft	3640	3909	4189	4478	4777	5086	3616
9000	Grnd Roll	2403	2596	2798	3007	3224	3449	2349
	50 ft	4030	4329	4639	4959	5291	5633	3946
10000	Grnd Roll	2675	2890	3114	3347	3589	3840	2574
	50 ft	4469	4800	5144	5499	5867	6247	4312

Takeoff Distance: 2900 LB (1315 kg)

Weight: 2900 LB (1315 kg)
Approx. Speed at Liftoff: 70 KIAS
Speed over 50 ft Obstacle: 74 KIAS
Flaps: 50%
Power: Full Throttle
Mixture: Set to very top of GREEN ARC.
Runway: Dry, Paved, Level

Headwind: Subtract 10% for each 12 knots headwind.
Tailwind: Add 10% for each 2 knots tailwind up to 10 knots.
Runway Slope: Refer to POH.
Dry Grass: Add 20% to ground roll.
Wet Grass: Add 30% to ground roll.
Air Conditioner: Add 100 ft to ground roll and 150 ft to distance over 50 ft obstacle if Air Conditioner if ON during takeoff.

PRESS ALT FT	DISTANCE FT	TEMPERATURE ~°C 0	10	20	30	40	50	ISA
SL	Grnd Roll	610	659	710	763	818	875	684
	50 ft	971	1043	1118	1195	1275	1358	1080
1000	Grnd Roll	673	727	783	841	902	965	743
	50 ft	1066	1146	1228	1313	1401	1492	1170
2000	Grnd Roll	743	802	864	929	995	1064	809
	50 ft	1173	1260	1351	1444	1541	1641	1269
3000	Grnd Roll	821	887	955	1026	1100	1177	880
	50 ft	1292	1388	1487	1590	1697	1807	1378
4000	Grnd Roll	908	981	1057	1135	1217	1302	959
	50 ft	1424	1530	1639	1753	1871	1992	1498
5000	Grnd Roll	1006	1086	1170	1257	1348	1442	1046
	50 ft	1571	1688	1809	1935	2065	2199	1630
6000	Grnd Roll	1116	1205	1298	1394	1494	1598	1143
	50 ft	1736	1865	1999	2138	2281	2429	1775
7000	Grnd Roll	1238	1337	1440	1547	1659	1774	1249
	50 ft	1920	2063	2211	2365	2523	2687	1936
8000	Grnd Roll	1376	1486	1601	1720	1843	1971	1367
	50 ft	2127	2285	2449	2619	2795	2977	2113
9000	Grnd Roll	1532	1654	1781	1914	2051	2194	1498
	50 ft	2359	2534	2716	2904	3099	3300	2309
10000	Grnd Roll	1707	1843	1985	2132	2285	2444	1643
	50 ft	2619	2814	3016	3225	3441	3665	2527

Cruise Performance

Conditions:

- Weight ..... 3400 LB
- Winds ..... Zero

• Note •

Subtract 10 KTAS if nose wheel pant and fairing removed. Lower KTAS by 10% if nose and main wheel pants and fairings are removed.

Serials w/ Air Conditioning System: Cruise performance is reduced by 2 knots. For maximum performance, turn air conditioner off.

Serials w/ Enhanced Vision System: Cruise performance is reduced by up to 1 knot.

PRESS ALT FT			ISA - 30 °C			ISA			ISA + 30 °C		
	RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2000	2700	27.4	103%	186	24.6	98%	186	23.3	93%	181	22.0
	2600	27.4	99%	183	23.5	94%	183	22.2	89%	178	21.5
	2500	27.4	93%	179	22.1	88%	179	20.9	84%	174	20.8
	2500	26.4	89%	176	21.1	84%	176	19.9	80%	171	20.2
	2500	25.4	84%	173	20.0	80%	173	19.0	76%	168	19.5
	2500	24.4	80%	170	19.0	76%	170	18.0	72%	165	18.8
	2500	23.4	76%	167	18.0	72%	167	17.0	68%	162	18.1
4000	2700	25.4	96%	185	22.9	91%	185	21.6	87%	180	20.8
	2600	25.4	92%	182	21.9	87%	182	20.7	83%	177	20.6
	2500	25.4	87%	178	20.6	82%	178	19.5	78%	173	19.9
	2500	24.4	82%	175	19.5	78%	175	18.5	74%	170	19.2
	2500	23.4	78%	172	18.5	74%	172	17.5	70%	167	18.5
	2500	22.4	73%	169	17.4	69%	169	16.5	66%	163	17.7
	2500	21.4	69%	165	16.4	65%	165	15.5	62%	159	16.9
6000	2700	23.5	89%	184	21.2	85%	184	20.1	81%	179	19.6
	2600	23.5	85%	181	20.3	81%	181	19.2	77%	176	19.1
	2500	23.5	80%	177	19.1	76%	177	18.1	72%	172	18.3
	2500	22.5	76%	174	18.1	72%	174	17.1	68%	169	17.6
	2500	21.5	72%	170	17.0	68%	170	16.1	64%	165	16.9
	2500	20.5	67%	166	15.9	64%	166	15.1	60%	161	16.1
	2500	19.5	63%	162	14.9	59%	162	14.1	56%	157	15.3

PRESS ALT FT	RPM	MAP	ISA - 30 °C			ISA			ISA + 30 °C		
			PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
8000	2700	21.7	83%	183	19.7	78%	183	18.6	75%	178	17.7
	2600	21.7	79%	180	18.8	75%	180	17.8	71%	175	17.0
	2500	21.7	75%	176	17.7	71%	176	16.8	67%	171	16.0
	2500	20.7	70%	172	16.7	66%	172	15.8	63%	167	15.0
	2500	19.7	66%	168	15.6	62%	168	14.8	59%	163	14.0
	2500	18.7	61%	163	14.5	58%	163	13.8	55%	158	13.1
	2500	17.7	57%	159	13.5	54%	159	12.8	51%	153	12.1
10000	2700	20.0	77%	182	18.2	73%	182	17.3	69%	176	16.4
	2600	20.0	71%	177	17.0	68%	177	16.1	64%	172	15.3
	2500	20.0	67%	173	16.0	64%	173	15.1	61%	167	14.4
	2500	19.0	63%	168	14.9	59%	168	14.1	56%	163	13.4
	2500	18.0	58%	163	13.8	55%	163	13.1	52%	158	12.5
	2500	17.0	54%	158	12.8	51%	158	12.1	48%	153	11.5
12000	2700	18.5	71%	180	16.9	67%	180	16.0	64%	175	15.2
	2600	18.5	68%	177	16.2	64%	177	15.3	61%	172	14.5
	2500	18.5	64%	173	15.2	60%	173	14.4	58%	167	13.7
	2500	17.5	59%	168	14.1	56%	168	13.4	53%	162	12.7
	2500	16.5	55%	162	13.0	52%	162	12.3	49%	157	11.7
	2500	15.5	50%	156	12.0	48%	156	11.3	45%	151	10.8
14000	2700	17.1	66%	178	15.6	62%	178	14.8	59%	173	14.1
	2600	17.1	63%	175	14.9	60%	175	14.1	57%	170	13.5
	2500	17.1	59%	171	14.1	56%	171	13.3	53%	165	12.7
	2500	16.1	55%	165	13.0	52%	165	12.3	49%	159	11.7
	2500	15.1	50%	159	11.9	47%	159	11.2	45%	153	10.7
16000	2700	15.8	61%	176	14.5	58%	176	13.7	55%	171	13.0
	2600	15.8	58%	173	13.8	55%	173	13.1	52%	167	12.5
	2500	15.8	55%	168	13.0	52%	168	12.3	49%	163	11.7
	2500	14.8	50%	162	11.9	47%	162	11.3	45%	156	10.7
17000	2700	15.2	59%	175	13.9	55%	175	13.2	53%	169	12.5
	2600	15.2	56%	171	13.3	53%	171	12.6	50%	166	12.0
	2500	15.2	53%	167	12.5	50%	167	11.9	47%	162	11.3
	2500	14.2	48%	160	11.4	45%	160	10.8	43%	155	10.3

Landing Distance - Flaps 100%

Weight: 3600 LB (1633 kg)
Speed over 50 Ft Obstacle: 79 KIAS
Flaps: 100%
Power: Idle
Runway: Dry, Paved, Level

Headwind: Subtract 10% for each 13 knots headwind.
Tailwind: Add 10% for each 2 knots tailwind up to 10 knots.
Runway Slope: Refer to POH.
Dry Grass: Add 20% to ground roll.
Wet Grass: Add 60% to ground roll.

PRESS ALT FT	DISTANCE FT	TEMPERATURE ~°C 0	10	20	30	40	50	ISA
SL	Grnd Roll	1117	1158	1198	1239	1280	1321	1178
	Total	2447	2505	2565	2625	2685	2747	2535
1000	Grnd Roll	1158	1200	1243	1285	1327	1370	1213
	Total	2506	2567	2630	2693	2757	2821	2585
2000	Grnd Roll	1201	1245	1289	1333	1377	1421	1250
	Total	2568	2633	2699	2765	2832	2900	2636
3000	Grnd Roll	1246	1292	1337	1383	1428	1474	1287
	Total	2635	2702	2771	2841	2911	2983	2691
4000	Grnd Roll	1293	1340	1388	1435	1482	1530	1326
	Total	2705	2776	2848	2922	2996	3070	2748
5000	Grnd Roll	1342	1391	1440	1489	1539	1588	1367
	Total	2779	2854	2930	3007	3085	3163	2808
6000	Grnd Roll	1393	1444	1495	1546	1598	1649	1409
	Total	2857	2936	3016	3097	3179	3261	2871
7000	Grnd Roll	1447	1500	1553	1606	1659	1712	1453
	Total	2941	3024	3108	3193	3279	3365	2937
8000	Grnd Roll	1503	1558	1613	1668	1724	1779	1499
	Total	3029	3116	3205	3294	3384	3475	3006
9000	Grnd Roll	1562	1619	1677	1734	1791	1848	1546
	Total	3122	3214	3307	3401	3496	3592	3079
10000	Grnd Roll	1624	1683	1743	1802	1862	1921	1595
	Total	3221	3318	3416	3515	3614	3715	3155

Landing Distance - Flaps 50%

Weight: 3600 LB (1633 kg)
Speed over 50 Ft Obstacle: 87 KIAS
Flaps: 50%
Power: Idle
Runway: Dry, Paved, Level

Headwind: Subtract 10% for each 13 knots headwind.
Tailwind: Add 10% for each 2 knots tailwind up to 10 knots.
Runway Slope: Refer to POH.
Dry Grass: Add 20% to ground roll.
Wet Grass: Add 60% to ground roll.

PRESS ALT FT	DISTANCE FT	TEMPERATURE ~°C 0	10	20	30	40	50	ISA
SL	Grnd Roll	1166	1209	1251	1294	1337	1379	1230
	Total	2681	2745	2810	2875	2942	3010	2777
1000	Grnd Roll	1209	1253	1298	1342	1386	1430	1267
	Total	2745	2813	2881	2950	3020	3091	2833
2000	Grnd Roll	1254	1300	1346	1392	1438	1484	1305
	Total	2814	2885	2957	3029	3103	3178	2892
3000	Grnd Roll	1301	1349	1396	1444	1491	1539	1344
	Total	2886	2961	3037	3113	3191	3269	2954
4000	Grnd Roll	1350	1399	1449	1498	1548	1597	1385
	Total	2963	3042	3121	3202	3283	3366	3019
5000	Grnd Roll	1401	1453	1504	1555	1607	1658	1427
	Total	3045	3127	3211	3296	3382	3468	3087
6000	Grnd Roll	1455	1508	1561	1615	1668	1721	1472
	Total	3131	3218	3306	3395	3485	3576	3158
7000	Grnd Roll	1511	1566	1622	1677	1732	1788	1517
	Total	3223	3314	3407	3501	3595	3691	3233
8000	Grnd Roll	1570	1627	1685	1742	1800	1857	1565
	Total	3320	3416	3514	3612	3712	3812	3312
9000	Grnd Roll	1631	1691	1751	1810	1870	1930	1614
	Total	3423	3524	3627	3731	3835	3941	3395
10000	Grnd Roll	1695	1758	1820	1882	1944	2006	1666
	Total	3532	3639	3747	3856	3966	4077	3481

Landing Distance - Flaps 0%

Weight: 3600 LB (1633 kg)
Speed over 50 Ft Obstacle: 94 KIAS
Flaps: 0%
Power: Idle
Runway: Dry, Paved, Level

Headwind: Subtract 10% for each 13 knots headwind.
Tailwind: Add 10% for each 2 knots tailwind up to 10 knots.
Runway Slope: Refer to POH.
Dry Grass: Add 20% to ground roll.
Wet Grass: Add 60% to ground roll.

PRESS ALT FT	DISTANCE FT	TEMPERATURE ~°C 0	10	20	30	40	50	ISA
SL	Grnd Roll	1365	1415	1465	1515	1565	1615	1440
	Total	3165	3241	3319	3398	3478	3558	3280
1000	Grnd Roll	1415	1467	1519	1571	1623	1675	1483
	Total	3242	3323	3404	3487	3571	3656	3347
2000	Grnd Roll	1468	1522	1576	1629	1683	1737	1527
	Total	3324	3409	3495	3582	3670	3759	3418
3000	Grnd Roll	1523	1579	1635	1690	1746	1802	1574
	Total	3411	3500	3590	3682	3775	3868	3491
4000	Grnd Roll	1581	1638	1696	1754	1812	1870	1621
	Total	3503	3597	3692	3788	3885	3984	3569
5000	Grnd Roll	1641	1701	1761	1821	1881	1941	1671
	Total	3600	3699	3799	3900	4003	4106	3650
6000	Grnd Roll	1703	1766	1828	1890	1953	2015	1723
	Total	3703	3807	3913	4019	4127	4236	3736
7000	Grnd Roll	1769	1834	1899	1963	2028	2093	1776
	Total	3813	3922	4033	4145	4258	4373	3825
8000	Grnd Roll	1838	1905	1972	2040	2107	2174	1832
	Total	3929	4044	4161	4279	4398	4518	3919
9000	Grnd Roll	1910	1980	2049	2119	2189	2259	1890
	Total	4052	4173	4296	4420	4545	4671	4018
10000	Grnd Roll	1985	2058	2130	2203	2276	2348	1950
	Total	4183	4310	4439	4569	4701	4833	4122

Stall Speeds with Ice Accumulation (*Serials w/ FIKI)*

Conditions:

- Weight ..... 3600 LB
- CG ..... Noted
- Power ..... Idle
- Bank Angle ..... Noted

• Note •

Altitude loss during wings level stall may be 600 feet or more.

KIAS values may not be accurate at stall.

Weight	Bank Angle	STALL SPEEDS			
		Flaps 0% Full Up		Flaps 50%	
LB	Deg	KIAS	KCAS	KIAS	KCAS
3600 Most FWD CG	0	77	76	72	69
	15	79	77	73	70
	30	83	82	75	74
	45	91	90	82	82
	60	107	107	95	98
3600 Most AFT CG	0	77	76	72	69
	15	79	77	73	70
	30	83	82	75	74
	45	91	90	82	82
	60	107	107	95	98

Cruise Performance with Ice Accumulation (*Serials w/ FIKI)*

Conditions:

- Cruise Weight ..... 3400 LB
- Winds ..... Zero

• Note •

Serials w/ Air Conditioning System: Cruise performance is reduced by 2 knots. For maximum performance, the air-conditioner should be off.

2000 Feet Pressure Altitude

		ISA -30 °C (-19 °C)			ISA (11 °C)			ISA + 30 °C (41 °C)		
RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2700	27.4	103%	160	24.6						
2600	27.4	99%	157	23.5						
2500	27.4	93%	153	22.1						
2500	26.4	89%	150	21.1						
2500	25.4	84%	146	20.0						
2500	24.4	80%	142	19.0						
2500	23.4	76%	137	18.0						

4000 Feet Pressure Altitude

		ISA -30 °C (-23 °C)			ISA (7 °C)			ISA + 30 °C (37 °C)		
RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2700	25.4	96%	158	22.9						
2600	25.4	92%	155	21.9						
2500	25.4	87%	150	20.6						
2500	24.4	82%	146	19.5						
2500	23.4	78%	141	18.5						
2500	22.4	73%	136	17.4						
2500	21.4	69%	130	16.4						

6000 Feet Pressure Altitude

		ISA -30 °C (-27 °C)			ISA (3 °C)			ISA + 30 °C (33 °C)		
RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2700	23.5	89%	155	21.2	85%	155	20.1			
2600	23.5	85%	151	20.3	81%	151	19.2			
2500	23.5	80%	146	19.1	76%	146	18.1			
2500	22.5	76%	140	18.1	72%	140	17.1			
2500	21.5	72%	134	17.0	68%	134	16.1			
2500	20.5	67%	128	15.9	64%	128	15.1			
2500	19.5	63%	120	14.9	59%	120	14.1			

8000 Feet Pressure Altitude										
		ISA -30 °C (-31 °C)			ISA (-1 °C)			ISA + 30 °C (29 °C)		
RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2700	21.7	83%	150	19.7	78%	150	18.6			
2600	21.7	79%	146	18.8	75%	146	17.8			
2500	21.7	75%	140	17.7	71%	140	16.8			
2500	20.7	70%	133	16.7	66%	133	15.8			
2500	19.7	66%	126	15.6	62%	126	14.8			
2500	18.7	61%	117	14.5	58%	117	13.8			
2500	17.7	57%	108	13.5	54%	108	12.8			

10,000 Feet Pressure Altitude										
		ISA -30 °C (-35 °C)			ISA (-5 °C)			ISA + 30 °C (25 °C)		
RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2700	20.0	77%	144	18.2	73%	144	17.3			
2600	20.0	71%	136	17.0	68%	136	16.1			
2500	20.0	67%	129	16.0	64%	129	15.1			
2500	19.0	63%	120	14.9	59%	120	14.1			
2500	18.0	58%	111	13.8	55%	111	13.1			
2500	17.0	54%	100	12.8	51%	100	12.1			

Landing Distance with Ice Accumulation (*Serials w/ FIKI)*

• Note •

Sloped Runway - Increase distances by 27% of ground roll distance for each 1% downslope. Decrease distances by 9% of ground roll distance for each 1% upslope.

Associated balked landing climb gradient less than 3.3% shown in heavier table borders.

WEIGHT: 3600 LB
Speed over 50 Ft Obstacle: 88 KIAS
Flaps: 50%
Power: Smooth power reduction from obstacle to idle at touchdown.
Runway: Dry, Paved, Level

Headwind: Subtract 10% for each 13 knots headwind.
Tailwind: Add 10% for each 2 knots tailwind up to 10 knots.
Runway Slope: Refer to POH.
Dry Grass: Add 20% to ground roll.
Wet Grass: Add 60% to ground roll.

PRESS ALT FT	DISTANCE FT	TEMPERATURE ~°C -20	-10	0	5	ISA
SL	Grnd Roll	1356	1409	1463	1489	
	Total	2833	2908	2984	3022	
1000	Grnd Roll	1406	1461	1517	1544	
	Total	2903	2981	3061	3101	
2000	Grnd Roll	1458	1516	1573	1602	
	Total	2977	3059	3143	3185	
3000	Grnd Roll	1513	1572	1632	1662	
	Total	3055	3142	3229	3274	
4000	Grnd Roll	1570	1632	1694	1725	
	Total	3138	3229	3321	3367	
5000	Grnd Roll	1629	1694	1758	1790	
	Total	3225	3321	3418	3466	
6000	Grnd Roll	1692	1758	1825	1859	
	Total	3318	3418	3520	3571	
7000	Grnd Roll	1757	1826	1896	1930	
	Total	3416	3522	3628	3682	
8000	Grnd Roll	1825	1897	1969	2005	1963
	Total	3520	3631	3743	3800	3583
9000	Grnd Roll	1896	1971	2046	2084	2025
	Total	3630	3746	3864	3924	3656
10000	Grnd Roll	1971	2049	2127	2166	2089
	Total	3746	3869	3993	4055	3733

Wind Components

Conditions:

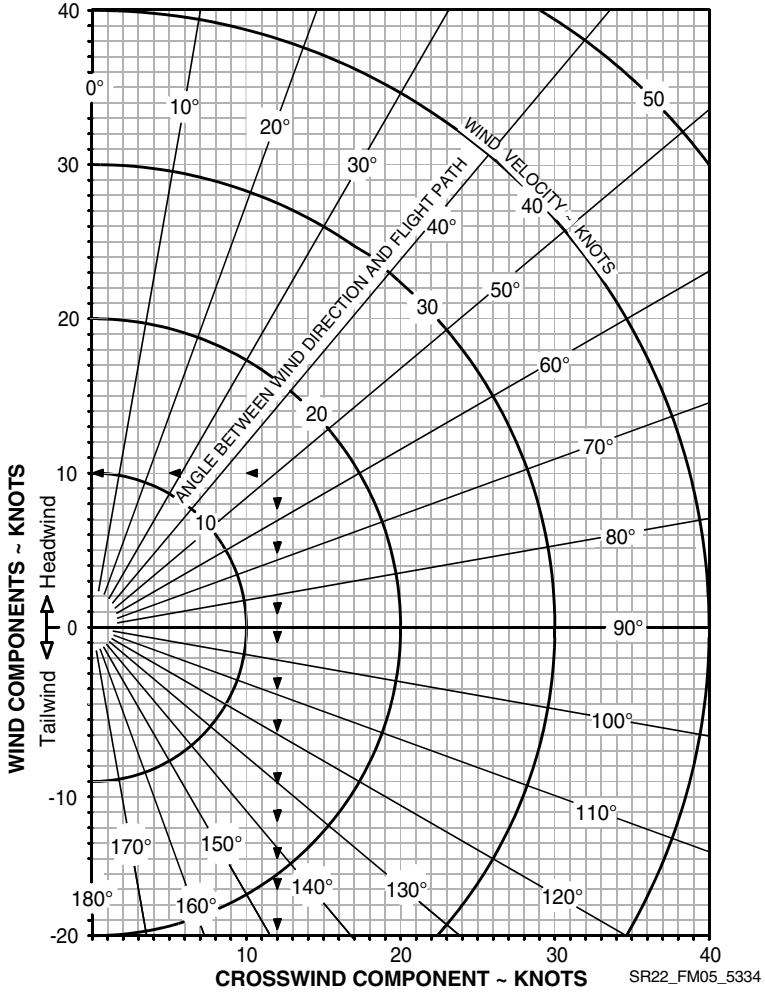
- Runway Heading ..... 10°
- Wind Direction ..... 60°
- Wind Velocity .....15 Knots

Example: (See Chart ▶ ▶ ▶)

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

• Note •

The maximum demonstrated crosswind is 21 knots. Value not considered limiting.



Weight and Balance

Loading Calculations

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

Description	Weight	Moment/1000
1. Basic Empty Weight *Includes unusable fuel & full oil*		
2. Front Seats Occupants *Pilot and Passenger (total)*		
3. Rear Seats Occupants		
4. Baggage Area *130 lb maximum*		
5. **Zero Fuel Condition Weight** *Subtotal items 1 thru 4* *3400 lb maximum*		
6. Fuel Load *92 Gallon @6.0 lb/gal. maximum*		
7. **Ramp Condition Weight** *Subtotal items 5 and 6*		
8. Fuel for start, taxi, and runup *Normally 9 lb at avg. moment of 1.394 (1.4)*	-	-
9. **Takeoff Condition Weight** *Subtract Item 8 from item 7*		

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 1.394.
9. Subtract step 8 weight and moment/1000 from the Ramp Condition Weight to determine the Takeoff Condition Weight and moment/1000.
   a. Verify Takeoff Weight does not exceed the 3600 pounds.
   b. Verify Moment/1000 falls between the interpolated minimum and maximum values listed on the adjacent Moment Limits Table.

Loading Data

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	2.9	3.6	4.2	3.1	300	43.1	54.0	46.5
40	5.7	7.2	8.3	6.2	320	45.9	57.6	49.6
60	8.6	10.8	12.5	9.3	340	48.8	61.2	52.7
80	11.5	14.4	16.6	12.4	360	51.7	64.8	55.8
100	14.4	18.0	20.8	15.5	380	54.5	68.4	58.9
120	17.2	21.6	25.0	18.6	400	57.4	72.0	62.0
140	20.1	25.2	27.04*	21.7	420	60.3	75.6	65.1
160	23.0	28.8		24.8	440	63.1	79.2	68.2
180	25.8	32.4		27.9	460		82.8	71.3
200	28.7	36.0		31.0	480		86.4	74.4
220	31.6	39.6		34.1	500		90.0	77.5
240	34.4	43.2		37.2	520			80.5
260	37.3	46.8		40.3	552**			85.5
280	40.2	50.4		43.4				
*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 Minimum	Moment/1000 Maximum	Weight LB	Moment/1000 Minimum	Moment/1000 Maximum
2200	304	326	2950	414	437
2250	311	333	3000	422	444
2300	318	341	3050	430	452
2350	326	348	3100	438	459
2400	333	355	3150	445	467
2450	340	363	3200	453	474
2500	347	370	3250	461	481
2550	354	378	3300	469	489
2600	362	385	3350	477	496
2650	369	392	*3400	484	504
2700	375	400	3450	494	511
2750	383	407	3500	501	519
2800	390	415	3550	508	526
2850	398	422	3600	515	533
2900	406	430			
*NOTE: Maximum zero fuel weight.					

Temperature Conversion

To convert from Celsius (°C) to Fahrenheit (°F), find in the shaded columns the number representing the temperature value (°C) to be converted. The equivalent Fahrenheit temperature is read to the right.

▶ EXAMPLE: 38 °C = 100 °F.

To convert from Fahrenheit (°F) to Celsius (°C), find in the shaded columns the number representing the temperature value (°F) to be converted. The equivalent Celsius temperature is read to the left.

▶ EXAMPLE: 38 °F = 3 °C.

Temp to Convert °C or °F			Temp to Convert °C or °F			Temp to Convert °C or °F		
°C	◀ ▶	°F	°C	◀ ▶	°F	°C	◀ ▶	°F
-50	**-58**	-72	-17	**2**	36	17	**62**	144
-49	**-56**	-69	-16	**4**	39	18	**64**	147
-48	**-54**	-65	-14	**6**	43	19	**66**	151
-47	**-52**	-62	-13	**8**	46	20	**68**	154
-46	**-50**	-58	-12	**10**	50	21	**70**	158
-44	**-48**	-54	-11	**12**	54	22	**72**	162
-43	**-46**	-51	-10	**14**	57	23	**74**	165
-42	**-44**	-47	-9	**16**	61	24	**76**	169
-41	**-42**	-44	-8	**18**	64	26	**78**	172
-40	**-40**	-40	-7	**20**	68	27	**80**	176
-39	**-38**	-36	-6	**22**	72	28	**82**	180
-38	**-36**	-33	-4	**24**	75	29	**84**	183
-37	**-34**	-29	-3	**26**	79	30	**86**	187
-36	**-32**	-26	-2	**28**	82	31	**88**	190
-34	**-30**	-22	-1	**30**	86	32	**90**	194
-33	**-28**	-18	0	**32**	90	33	**92**	198
-32	**-26**	-15	1	**34**	93	34	**94**	201
-31	**-24**	-11	2	**36**	97	36	**96**	205
-30	**-22**	-8	3	**38**	100	37	**98**	208
-29	**-20**	-4	4	**40**	104	38	**100**	212
-28	**-18**	0	6	**42**	108	39	**102**	216
-27	**-16**	3	7	**44**	111	40	**104**	219
-26	**-14**	7	8	**46**	115	41	**106**	223
-24	**-12**	10	9	**48**	118	42	**108**	226
-23	**-10**	14	10	**50**	122	43	**110**	230
-22	**-8**	18	11	**52**	126	44	**112**	234
-21	**-6**	21	12	**54**	129	46	**114**	237
-20	**-4**	25	13	**56**	133	47	**116**	241
-19	**-2**	28	14	**58**	136	48	**118**	244
-18	**0**	32	16	**60**	140	49	**120**	248

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Abnormal Procedures

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Flight Environment

Inadvertent Icing Encounter (Serials w/o FIKI)

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

Inadvertent IMC Encounter

1. Airplane Control..... ESTABLISH STRAIGHT AND LEVEL FLIGHT
2. Autopilot..... ENGAGE TO HOLD HEADING AND ALTITUDE
3. Heading .....RESET TO INITIATE 180° TURN

Door Open In Flight

1. Airplane Control.....MAINTAIN

P/N 13728-014
09 Nov 2021

Abnormal Landings

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.

Engine System

Low Idle Oil Pressure

OIL PRESS Caution

OIL PRESS

1. If In-Flight.....LAND AS SOON AS PRACTICABLE

High Oil Temperature

OIL TEMP Caution

OIL TEMP

1. Power.....REDUCE AS MUCH AS PRACTICAL
2. Airspeed .....INCREASE
3. Mixture.....AS REQUIRED
4. Oil Temperature Gauge ..... MONITOR

Start Engaged

START ENGAGED Caution

START ENGAGED

On-Ground

1. Ignition Switch .....DISENGAGE PRIOR TO 10 SECONDS
2. Wait 20 seconds before next start attempt.

   If starter does not disengage (relay or solenoid failure):
3. BAT 1 Switch ..... OFF
4. Engine ..... SHUTDOWN
5. STARTER Circuit Breaker..... PULL

In-Flight

1. Ignition Switch .....ENSURE NOT STUCK IN START
2. STARTER Circuit Breaker..... PULL
3. Flight.....CONTINUE

   Engine start will not be available at destination.

Fuel System

Low Fuel Quantity

FUEL LOW TOTAL Caution

FUEL LOW TOTAL

1. Fuel Quantity Gauges.....CHECK
2. Totalized Fuel Quantity .....CHECK

   If totalized value differs significantly from sensed quantity:

   a. Initial Fuel Value..... VERIFY AND CORRECT

   If message persists:

   a. Land as soon as practicable.

Fuel Imbalance

FUEL IMBALANCE Caution

FUEL IMBALANCE

1. Fuel Quantity Gauges.....CHECK
2. Fuel Pump .....BOOST

   If BOOST already in use for vapor suppression, pump should be left in this position for tank switch.

3. Fuel Selector ..... SELECT FULLER TANK
4. Fuel Pump .....AS REQUIRED

   After switching tanks, message will remain until sensed imbalance is less than 10 gallons.

FUEL IMBALANCE Advisory

FUEL IMBALANCE

1. Fuel Quantity Gauges.....CHECK
2. Fuel Pump .....BOOST

   If BOOST already in use for vapor suppression, pump should be left in this position for tank switch.

3. Fuel Selector ..... SELECT FULLER TANK
4. Fuel Pump .....AS REQUIRED

   After switching tanks, message will remain until sensed imbalance is less than 8 gallons.

Electrical System

Low Voltage on Main Bus 1

M BUS 1 Caution

M BUS 1

1. Perform *Alt 1 Caution (Failure)* Checklist.

Low Voltage on Main Bus 2

M BUS 2 Caution

M BUS 2

1. Perform *Alt 1 Caution (Failure)* and *Alt 2 Caution (Failure)* Checklists.

Unexpected Discharge on Battery 1

BATT 1 Caution

BATT 1

1. Main Bus 1, 2 and Non-Essential Bus Loads ..... REDUCE
2. Main Bus 1, 2 and Essential Bus Voltages .....MONITOR
3. Land as soon as practicable.

Low Alternator 1 Output

ALT 1 Caution (Failure)

ALT 1

1. ALT 1 Circuit Breaker..... CHECK AND SET
2. ALT 1 Switch..... CYCLE

   If alternator does not reset:

3. ALT 1 Switch..... OFF
4. Non-Essential Bus Loads ..... REDUCE
   a. If flight conditions permit, consider shedding the following to preserve Battery 1:
      (1) Air Conditioning
      (2) Landing Light
      (3) Yaw Servo
      (4) Convenience Power (aux items plugged into armrest jack)
      (5) EVS Camera (if installed)
5. Continue Flight, avoiding IMC or night flight as able (reduced power redundancy).

Low Alternator 2 Output

ALT 2 Caution (Failure)

ALT 2

1. ALT 2 Circuit Breaker..... CHECK AND SET
2. ALT 2 Switch..... CYCLE

   If alternator does not reset:

3. ALT 2 Switch..... OFF
4. Continue Flight, avoiding IMC or night flight as able (reduced power redundancy).

Integrated Avionics System

Avionics Switch Off

AVIONICS OFF Caution

AVIONICS OFF

1. AVIONICS Switch ..... ON, AS REQUIRED

PFD Cooling Fan Failure

PFD FAN FAIL Advisory

PFD FAN FAIL

1. AVIONICS FAN 2 Circuit Breaker ..... CYCLE

   If annunciation does not extinguish:

   a. High cabin temperatures ..... LAND AS SOON AS PRACTICABLE

   b. Low cabin temperatures .....CONTINUE, MONITOR

MFD Cooling Fan Failure

MFD FAN FAIL Advisory

MFD FAN FAIL

1. AVIONICS FAN 1 Circuit Breaker ..... CYCLE

   If annunciation does not extinguish:

   a. High cabin temperatures ..... LAND AS SOON AS PRACTICABLE

   b. Low cabin temperatures .....CONTINUE, MONITOR

Flight Displays Too Dim

1. INSTRUMENT dimmer knob ..... OFF (FULL COUNTER-CLOCKWISE)

   If flight displays do not provide sufficient brightness:

   a. Revert to standby instruments.

Pitot Static System

Static Source Blocked

1. Pitot Heat ..... ON
2. Alternate Static Source ..... OPEN

Pitot Tube Blocked

1. Pitot Heat ..... ON

Pitot Heat Current Sensor

PITOT HEAT FAIL Caution

PITOT HEAT FAIL

1. Pitot Circuit Breaker ..... CYCLE
2. Pitot Heat ..... CYCLE OFF, ON

   If inadvertent icing encountered, perform Inadvertent Icing Encounter Emergency Checklist and:

   a. Airspeed ..... EXPECT NO RELIABLE INDICATION

   b. Exit icing conditions using attitude, altitude, and power instruments.

Pitot Heat Reqd

PITOT HEAT REQD Caution

PITOT HEAT REQD

1. Pitot Heat ..... ON

Flight Control System

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
   - YAW SERVO
   - AP SERVOS
4. Power Lever.....AS REQUIRED
5. Control Yoke .....MANUALLY HOLD PRESSURE
6. Land as soon as practicable.

Flap System Exceedance

FLAPS OVERSPEED Caution

FLAPS OVERSPEED

1. Airspeed ..... REDUCE

or

1. Flaps..... RETRACT

Flaps Not In Takeoff Configuration

TAKEOFF FLAPS Caution

TAKEOFF FLAPS

1. Takeoff ..... ABORT
2. Aircraft Control.....MAINTAIN
3. Aircraft Configuration .....CHECK

Flaps Not Set For Climb

FLAPS CLIMB Advisory

FLAPS CLIMB

1. Flaps ..... UP

Landing Gear System

Brake Failure During Taxi

1. Engine Power ..... AS REQUIRED
   a. To stop airplane ..... REDUCE
   b. If necessary for steering ..... INCREASE
2. Directional Control ..... MAINTAIN WITH RUDDER
3. Brake Pedal(s) ..... PUMP

If directional control can not be maintained:

4. Ignition Switch ..... OFF

Left/Right Brake Over-Temperature

BRAKE TEMP Caution

BRAKE TEMP

1. Stop aircraft and allow the brakes to cool.

Oxygen System

Oxygen Quantity Low

OXYGEN QTY Caution

OXYGEN QTY

1. Oxygen Pressure and Flow Rate.....CHECK
2. Oxygen Duration.....CALCULATE
   a. See Performance Tab - Oxygen Duration: calculate duration based on remaining pressure, number of occupants and type of device (mask or cannula).
3. Perform Normal *Descent* as necessary, dependent on duration calculation.
4. Annunciation indicated tank pressure is between 800 and 400 PSI. See Performance Tab - Oxygen Duration.

OXYGEN QTY Advisory

OXYGEN QTY

On-Ground

1. Oxygen Supply .....REPLENISH IF USE OF OXYGEN IS ANTICIPATED

In-Flight

1. If use of oxygen is anticipated, verify adequate oxygen supply for flight duration. See Performance Tab - Oxygen Duration.

OXYGEN RQD Caution

OXYGEN RQD

1. Oxygen System .....ON
2. Oxygen Masks/Cannula ..... DON
3. Oxygen Flow Rate .....SET AND MONITOR
4. Pulse Oximeter ..... MONITOR O2 LEVELS

Oxygen System Left On

OXYGEN LEFT ON Advisory

OXYGEN LEFT ON

1. Oxygen System ..... OFF

Check Oxygen System Status

CHECK OXYGEN Advisory

CHECK OXYGEN

1. Pulse Oximeter ..... CHECK SATURATION LEVELS

   If O2 saturations are low:

   a. Oxygen Mask/Cannula ..... DON
2. Oxygen Flow Rates ..... CHECK
3. Oxygen Lines ..... VERIFY SECURITY AND ROUTING
4. Oxygen Quantity ..... CHECK

Anti-Ice System *(Serials w/ FIKI)*

Windshield De-Ice System Malfunction

1. ICE PROTECT 1 Circuit Breaker ..... CYCLE
2. Fluid Quantity ..... SWITCH TO FULLER TANK
3. WIND SHLD Push-Button..... PRESS AS REQUIRED

   If the forward field of view is overly restricted during landing approach and taxiing:

   a. Cabin Heat ..... HOT
   b. Windshield Defrost ..... ON
   c. Execute a forward slip as required for visibility.
   d. Avoid taxiing without adequate forward visibility.

Heated Lift Transducer Malfunction

If ice forms on lift transducer vane:

1. STALL VANE HEAT Circuit Breaker..... CYCLE
2. PITOT HEAT Switch..... CYCLE OFF, ON

If ice remains on lift transducer vane:

1. Stall Warning System ..... EXPECT NO RELIABLE INDICATION

   This includes:

   - Impending stall warning.
   - Stall speed indication.
2. Airspeed ..... MONITOR, DO NOT STALL
3. Fly published V_{REF} speeds...MINIMUM 88 KIAS WITH 50% FLAP

Low Temperature Caution

ANTI ICE TEMP Caution

ANTI ICE TEMP

PFD Alerts Window: "Temperature is too low for ice protection (TKS)"

1. ICE PROTECT System Switch ..... OFF
2. Icing Conditions .....AVOID / EXIT

Low Fluid Quantity

ANTI ICE QTY Caution

ANTI ICE QTY

PFD Alerts Window: "Fluid quantity is low (TKS)"

1. Icing Conditions .....AVOID / EXIT

Fluid Quantity Imbalance Detected

Fluid Quantity Imbalance Caution

ANTI ICE QTY

PFD Alerts Window: "Fluid quantity imbalance has been detected"

Imbalance between left and right sensed fluid quantity is greater than 1.0 gallon.

1. Revert to AUTO control of the fluid source to control the fluid quantity.

   If ANTI ICE PRESS annunciates:

   a. Revert to manual control of the fluid source to control the fluid level quantity.

      (1) Fluid Quantity ..... SWITCH TO FULLER TANK

   b. WIND SHLD Push-Button ..... PRESS

      (1) Repeat operation of windshield pump to verify metering pumps are primed properly as evidenced by deicing fluid exiting windshield nozzles.

   If Caution Annunciation extinguishes:

   a. Anti-Ice System ..... MONITOR

   If Caution Annunciation does not extinguish or intermittent:

   a. Fluid Quantity .....SWITCH TO OPPOSITE TANK

   b. WIND SHLD Push-Button ..... PRESS

      (1) Repeat operation of windshield pump to verify metering pumps are primed properly as evidenced by deicing fluid exiting windshield nozzles.

   c. Icing Conditions.....AVOID / EXIT

Low Pressure

LOW PRESSURE Caution

ANTI ICE PRESS

PFD Alerts Window: "Tail pressure is low (TKS)"

1. ICE PROTECT 1 and 2 Circuit Breakers ..... SET
2. Fluid Quantity ..... SWITCH TO FULLER TANK
3. WIND SHLD Push-Button..... PRESS
   a. Repeat operation of windshield pump to verify metering pumps are primed properly as evidenced by deicing fluid exiting windshield nozzles.
4. ICE PROTECT Mode Switch ..... HIGH

   If caution annunciation extinguishes:

   a. Anti-Ice System .....MONITOR

   If caution annunciation does not extinguish or is intermittent:

   a. PUMP BKUP Switch ..... ON
   b. Icing Conditions.....AVOID / EXIT

High Pressure

HIGH PRESSURE Caution

ANTI ICE PRESS

PFD Alerts Window: "Pressure is high (TKS)"

1. Evidence of Anti-Ice Flow .....MONITOR / VERIFY
2. Icing Conditions .....AVOID / EXIT

Low/High Airspeed

AIRSPEED Caution

ANTI ICE SPEED

PFD Alerts Window: "Airspeed is too low/high for ice protection (TKS)"

ANTI ICE SPEED Low: Airspeed is less than 95 KIAS

ANTI ICE SPEED High: Airspeed is greater than 177 KIAS or 204 KTAS

1. Airspeed ..... MAINTAIN 95-177 KIAS AND LESS THAN 204 KTAS

Lift Transducer Heater Failure

ANTI ICE HEAT Caution

ANTI ICE HEAT

PFD Alerts Window: "Stall warning/AoA heater has failed"

1. STALL VANE HEAT Circuit Breaker..... CYCLE
2. PITOT HEAT Circuit Breaker ..... CYCLE
3. Icing Conditions .....AVOID / EXIT
4. Fly aircraft normally using airframe buffet as the stall warning. Ice accumulations on the stall warning vane may result in unreliable stall warning system operation.

Left/Right Anti-Ice Fluid Level
- *Serials 22-4435 thru 22-4631, 22-4646*

ANTI ICE LEVEL Caution

ANTI ICE LEVEL

PFD Alerts Window: "Right/Left tank fluid quantity is unreliable (TKS)"

1. Revert to manual control of the fluid source to control the fluid level quantity.

   If ANTI ICE PRESS annunciates:

   a. Fluid Quantity .....SWITCH TO OPPOSITE TANK

   b. WIND SHLD Push-Button ..... PRESS

      (1) Repeat operation of windshield pump to verify metering pumps are primed properly as evidenced by deicing fluid exiting windshield nozzles.

Dynamic Stall Speed Band Unavailable Advisory

AOA FAIL Advisory

AOA FAIL

PFD Alerts Window: "Dynamic stall speed band is unavailable"

Angle of Attack signal has failed. This signal is used to calculate and display a dynamic stall speed awareness band (red band) on airspeed tape. With a failed AOA signal, the low speed red band extends to a fixed value of 61 knots.

Other Conditions

Aborted Takeoff

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

Parking Brake Engaged

PARK BRAKE Caution

PARK BRAKE

1. Parking Brake .....RELEASE
2. Monitor CAS for BRAKE TEMP Caution. Stop aircraft and allow the brakes to cool if necessary.

Communications Failure

1. Switches, Controls.....CHECK
2. Frequency.....CHANGE
3. Circuit Breakers ..... SET
4. Headset .....CHANGE
5. Handheld Microphone (if installed) .....CONNECT

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AIRSPEED

Airspeeds for Emergency Operations

Maneuvering Speed

3600 lb (1633 kg) ..... 140 KIAS

Best Glide (Flaps: UP)

All Weights ..... 92 KIAS

Emergency Landing (Engine-out)

Flaps UP ..... 90 KIAS

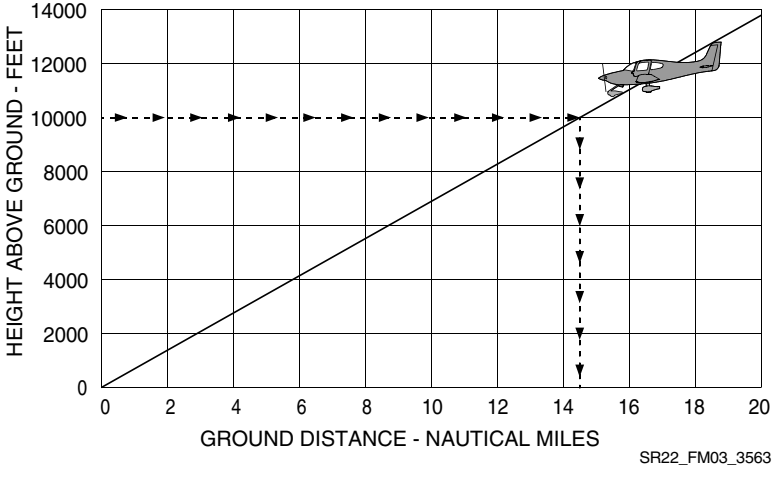
Flaps 50% ..... 85 KIAS

Flaps 100% ..... 80 KIAS

Maximum Glide

Best Glide Speed ..... 92 KIAS at 3600 lb (1633 kg)

Maximum Glide Ratio ~ 8.8 : 1



• Note •

Maximum Glide Ratio with Ice Accumulation ~ 6.4: 1

Memory Items

Checklist steps emphasized by underlining such as the example below, should be memorized for accomplishment without reference to the procedure.

1. Best Glide Speed..... ESTABLISH

Engine Failures

Engine Failure On Takeoff (Low Altitude)

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

If time permits:

a. Power Lever ..... IDLE
b. Fuel Pump..... OFF
c. Seat Belts..... ENSURE SECURED
d. BAT 1, BAT 2, ALT 1, and ALT 2 Switches ..... OFF

Engine Failure In Flight

1. Best Glide Speed..... ESTABLISH
2. Mixture..... AS REQUIRED
3. Fuel Pump ..... BOOST
4. Fuel Selector ..... SWITCH TANKS
5. Alternate Induction Air ..... ON
6. Ignition Switch .....CHECK LEFT, RIGHT, BOTH (AS REQ'D)

If engine does not start:

7. Perform *Engine Airstart*, CAPS Deployment, or *Emergency Landing w/o Engine Power* Checklist, as required.

If engine starts:

8. CHT and Oil Temperature.. WARM ENGINE AT PARTIAL POWER IF REQUIRED

Airstart

Engine Airstart

AIRSTART

1. BAT 1 and BAT 2 Switches ..... ON
2. Power Lever ..... OPEN ½ INCH
3. Mixture ..... RICH, AS REQ'D
4. Fuel Pump ..... BOOST
5. Fuel Selector ..... SWITCH TANKS
6. Ignition Switch ..... BOTH
7. Alternate Induction Air ..... ON
8. ALT 1 and ALT 2 Switches ..... OFF
9. Starter (Propeller not Windmilling) ..... ENGAGE
10. Power Lever ..... SLOWLY INCREASE
11. ALT 1 and ALT 2 Switches ..... ON
12. CHTs and Oil Temperature ..... WARM ENGINE AT PARTIAL POWER IF REQUIRED
13. If engine will not start, perform *Emergency Landing w/o Power* Checklist.

Smoke and Fire

Cabin Fire In Flight

1. BAT 1, ALT 1, and ALT 2 Switches ..... OFF, AS REQ'D
2. Fire Extinguisher ..... ACTIVATE
3. AVIONICS Switch ..... OFF
4. All other switches ..... OFF
5. Land as soon as possible.

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

6. Airflow Selector ..... OFF
7. BAT 1, BAT 2, ALT 1, and ALT 2 Switches ..... ON
8. AVIONICS Switch ..... ON
9. Required Systems ..... ACTIVATE ONE AT A TIME
10. Temperature Selector ..... COLD
11. Vent Selector ..... FEET / PANEL / DEFROST POSITION
12. Airflow Selector ..... SET AIRFLOW TO MAXIMUM
13. Panel Eyeball Outlets ..... OPEN
14. Land as soon as possible.

Engine Fire In Flight

1. Mixture ..... CUTOFF
2. Fuel Pump ..... OFF
3. Fuel Selector ..... OFF
4. Airflow Selector ..... OFF
5. Power Lever ..... IDLE
6. Ignition Switch ..... OFF
7. Land as soon as possible.

Wing Fire In Flight

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

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.

Smoke and Fume Elimination

1. Air Conditioner (if installed) ..... OFF
2. Temperature Selector ..... COLD
3. Vent Selector ..... FEET / PANEL / DEFROST POSITION
4. Airflow Selector ..... SET AIRFLOW TO MAXIMUM

   If source of smoke and fume is firewall forward:

   a. Airflow Selector ..... OFF
5. Panel Eyeball Outlets ..... OPEN
6. Supplemental Oxygen (if available)

   a. Oxygen Masks or Cannulas ..... DON

   b. Oxygen System ..... ON

   c. Oxygen Flow Rate ..... MAXIMUM
7. Land as soon as possible.

Emergency Descent

Emergency Descent

1. Power Lever ..... IDLE
2. Mixture ..... AS REQUIRED
3. Airspeed ..... V_{NE}

Forced Landing

Emergency Landing w/o Engine Power

1. Best Glide Speed ..... ESTABLISH
2. Radio ..... TRANSMIT (121.5 MHZ) MAYDAY GIVING LOCATION AND INTENTIONS
3. Transponder ..... SQUAWK 7700
4. Power Lever ..... IDLE
5. Mixture ..... CUTOFF
6. Fuel Selector ..... OFF
7. Ignition Switch ..... OFF
8. Fuel Pump ..... OFF
9. Flaps (when landing is assured) 100%
10. Seat Belt(s) ..... SECURED
11. BAT 1, BAT 2, ALT 1, and ALT 2 Switches ..... OFF

Ditching

1. Radio ..... TRANSMIT (121.5 MHZ) MAYDAY GIVING LOCATION AND INTENTIONS
2. Transponder ..... SQUAWK 7700
3. CAPS ..... ACTIVATE
4. Airplane ..... EVACUATE
5. Flotation Devices ..... INFLATE WHEN CLEAR OF AIRPLANE

Landing Without Elevator Control

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

Engine System

Engine Partial Power Loss

1. Air Conditioner (if installed) ..... OFF
2. Fuel Pump ..... BOOST
3. Fuel Selector ..... SWITCH TANKS
4. Mixture ..... CHECK APPROPRIATE FOR FLIGHT CONDITIONS
5. Power Lever ..... SWEEP
6. Alternate Induction Air ..... ON
7. Ignition Switch ..... BOTH, L, THEN R
8. Land as soon as practicable.

Oil Pressure Out of Range

OIL PRESS Warning

OIL PRESS

1. Oil Pressure Gauge ..... CHECK

   If pressure low / high:

   a. Power ..... REDUCE TO MINIMUM FOR SUSTAINED FLIGHT

   b. Land as soon as possible.

      (1) Prepare for potential engine failure.

Oil Temperature High

OIL TEMP Warning

OIL TEMP

1. Power ..... REDUCE
2. Airspeed ..... INCREASE
3. Mixture ..... AS REQUIRED
4. Oil Temperature Gauge ..... MONITOR

   If message persists:

   a. Land as soon as possible.

High Cylinder Head Temperature

CHT Caution and Warning

CHT

On-Ground

1. Power Lever ..... REDUCE
2. Annunciations and Engine Temperatures ..... MONITOR

If Caution or Warning annunciation is still illuminated:

3. Power Lever ..... MINIMUM REQUIRED
4. Flight ..... PROHIBITED

In-Flight

1. Power Lever ..... REDUCE
2. Airspeed ..... INCREASE
3. Mixture ..... ADJUST FUEL FLOW TO TOP OF GREEN ARC
4. Annunciations and Engine Temperatures ..... MONITOR

If Caution or Warning annunciation is still illuminated:

5. Power Lever ..... MINIMUM REQUIRED
6. Engine Instruments ..... MONITOR

If Caution annunciation only remains illuminated:

a. Land as soon as practicable.

If Warning annunciation remains illuminated:

a. Land as soon as possible.

Propeller System Emergencies

Engine Speed High

RPM Warning

RPM

1. Tachometer ..... CHECK

   If engine speed normal:

   a. If On-Ground ..... CORRECT PRIOR TO FLIGHT

   b. If In-Flight ..... CONTINUE, MONITOR

   If engine speed high:

   a. Perform *Propeller Governor Failure* Checklist.

2. Oil Pressure Gauge ..... CHECK

Propeller Governor Failure

Propeller RPM will not increase:

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

Propeller overspeeds or will not decrease:

1. Power Lever ..... ADJUST (TO KEEP RPM IN LIMITS)
2. Airspeed ..... REDUCE TO 90 KIAS
3. Land as soon as practicable.

Fuel System Emergencies

High Fuel Flow

FUEL FLOW Warning

FUEL FLOW

On-Ground

1. Correct prior to flight.

In-Flight

1. Mixture ..... ADJUST

   Adjust engine operation to correct condition. Check engine instruments to verify HIGH FLOW Warning is not erroneous, i.e. abnormal engine temperatures or engine roughness after mixture adjustment.

   If FUEL FLOW Warning does not extinguish:

2. Land as soon as practicable.

Low Fuel Quantity in Left Tank

FUEL LOW LEFT Warning

FUEL LOW LEFT

1. Fuel Quantity Gauges ..... CHECK
2. Fuel Pump ..... BOOST
3. Fuel Selector ..... RIGHT TANK

Low Fuel Quantity in Right Tank

FUEL LOW RIGHT Warning

FUEL LOW RIGHT

1. Fuel Quantity Gauges ..... CHECK
2. Fuel Pump ..... BOOST
3. Fuel Selector ..... LEFT TANK

Low Fuel Quantity

FUEL LOW TOTAL Warning

FUEL LOW TOTAL

1. Fuel Quantity Gauges.....CHECK
2. Totalized Fuel Quantity .....CHECK

   If totalized fuel quantity differs significantly from sensed quantity:

   a. Initial Fuel Value.....VERIFY AND CORRECT

   If message persists:

   a. Land as soon as practicable.

Fuel Imbalance

FUEL IMBALANCE Warning

FUEL IMBALANCE

1. Fuel Quantity Gauges.....CHECK
2. Fuel Pump .....BOOST

   If the Boost Pump is already in use for vapor suppression, pump should be left in this position for tank switch.
3. Fuel Selector ..... SELECT FULLER TANK
4. Fuel Pump .....AS REQUIRED

   After switching tanks, message will remain until sensed imbalance is less than 12 gallons.

Electrical System Emergencies

High Voltage on Main Bus 1

M BUS 1 Warning

M BUS 1

1. ALT 1 Switch ..... CYCLE
2. M Bus 1 Voltage (M1) ..... CHECK

   If M Bus 1 Voltage is greater than 32 Volts:
3. ALT 1 Switch ..... OFF
4. Perform *Alt 1 Caution (Failure)* Checklist (do not reset alternator).

High Voltage on Main Bus 2

M BUS 2 Warning

M BUS 2

1. Main Bus 1 Voltage (M1) .....CHECK

   If M Bus 1 Voltage is greater than 32 Volts:

2. Perform *M Bus 1 Warning* Checklist.
3. Main Bus 2 Voltage (M2) .....CHECK

   If M Bus 2 Voltage is greater than 32 Volts:

4. ALT 2 Switch..... CYCLE
5. Main Bus 2 Voltage (M2) .....CHECK

   If M Bus 2 Voltage remains greater than 32 Volts:

6. ALT 2 Switch..... OFF
7. Perform *Alt 2 Caution (Failure)* Checklist (do not reset alternator).

High or Low Voltage on Essential Bus

ESS BUS Warning

ESS BUS

1. Essential Bus Voltage (ESS) .....CHECK

   If Essential Bus Voltage is greater than 32 Volts:

2. Main Bus 1 and Main Bus 2 Voltages (M1 and M2).....CHECK
3. Perform appropriate *M Bus 1 Warning* or *M Bus 2* Warning Checklist.

   If Essential Bus Voltage is less than 24.5 Volts:

4. Perform *Alt 1 Caution (Failure)* and *Alt 2 Caution (Failure)* Checklists.

   If unable to restore at least one alternator:

5. Non-Essential Loads ..... REDUCE
   a. If flight conditions permit, consider shedding:

      Air Conditioning, Landing Light, Pitot Heat, Cabin Fan, Nav Lights, Strobe Lights, Audio Panel, COM 2

6. Land as soon as practicable (Battery reserve only).

Environmental System Emergencies

Carbon Monoxide Level High

CO LVL HIGH Warning

CO LVL HIGH

1. Air Conditioner (if installed) .....NOT IN RECIRC MODE
2. Temperature Selector ..... COLD
3. Vent Selector ..... FEET/PANEL/DEFROST POSITION
4. Airflow Selector.....SET AIRFLOW TO MAXIMUM
5. Panel Eyeball Outlets ..... OPEN

   If CO LVL HIGH does not extinguish:
6. Supplemental Oxygen (if available)
   a. Oxygen Masks or Cannulas ..... DON
   b. Oxygen System.....ON
   c. Oxygen Flow Rate.....MAXIMUM
7. Land as soon as possible.

Oxygen System Emergencies

Oxygen System Fault - Above 12,500 Ft

OXYGEN FAULT Warning

OXYGEN FAULT

1. Oxygen Flow Rate ..... CHECK

   If no flow:

2. Initiate Emergency Descent to below 12,500 ft:
   a. Power Lever ..... IDLE
   b. Mixture ..... AS REQUIRED
   c. Airspeed ..... V_{NE}

      Below 12,500 ft:

      (1) Oxygen System ..... OFF
      (2) Flight ..... CONTINUE

      Remain below altitudes requiring supplemental oxygen.

   If flow is normal:

3. Oxygen Flow Rate ..... MONITOR
4. Initiate Normal Descent as soon as practical.

   Below 12,500 ft:

   (1) Oxygen System ..... OFF
   (2) Flight ..... CONTINUE

   Remain below altitudes requiring supplemental oxygen.

Oxygen Quantity Low

OXYGEN QTY Warning

OXYGEN QTY

1. Oxygen Pressure and Flow Rate.....CHECK
2. Initiate Normal Descent (non-emergency) below 12,500 ft.
3. Oxygen Flow Rate .....MONITOR

   Below 12,500 ft:
4. Flight.....CONTINUE

   Remain below altitudes requiring supplemental oxygen.

Oxygen Required

OXYGEN RQD Warning

OXYGEN RQD

1. Oxygen System ..... ON
2. Oxygen Mask/Cannula ..... DON
3. Oxygen Flow Rate ..... SET AND MONITOR
4. Pulse Oximeter ..... MONITOR O2 LEVELS

Anti-Ice System *(Serials w/ FIKI)*

Anti-Ice System Failure / Excessive Ice Accumulation

1. ICE PROTECT 1 and 2 Circuit Breakers ..... SET
2. Fluid Quantity ..... SWITCH TO FULLER TANK
3. WIND SHLD Push-Button ..... PRESS
   a. Repeat operation of windshield pump to verify metering pumps are primed properly as evidenced by deicing fluid exiting windshield nozzles.
4. ICE PROTECT Mode Switch ..... VERIFY HIGH
5. PUMP BKUP Switch ..... ON

If determined windshield pump is not priming:

6. Exit Icing Conditions Immediately.
7. Airspeed ..... 95 KIAS OR GREATER

   Maintain a minimum airspeed of 95 KIAS or higher to stay above pre-stall buffet. If unable to maintain this airspeed, allow altitude to decrease in order to maintain 95 KIAS.
8. Minimum Approach Speed w/ Residual Ice (Flaps 50%) ... 88 KIAS

   In severe icing conditions, it may not be possible to maintain altitude or proper glide path on approach; in this case, it is imperative that a safe airspeed be maintained, the stall warning system may not function and there may be little or no pre-stall buffet with heavy ice loads on the wing.
9. FLAPS ..... MINIMUM REQUIRED

   When landing is assured, select the minimum flap setting required, not to exceed 50%, and maintain extra airspeed consistent with available field length. Do not retract the flaps once they have been extended unless required for go-around.

Low Fluid Quantity

ANTI ICE QTY Warning

ANTI ICE QTY

PFD Alerts Window: "Fluid quantity is low (TKS)"

1. Icing Conditions .....AVOID / EXIT

Lift Transducer Overheat

AOA OVERHEAT Warning

AOA OVERHEAT

PFD Alerts Window: "AOA probe is overheated"

1. PITOT HEAT Switch..... OFF
2. Icing Conditions .....AVOID / EXIT

Tank Control Failure

ANTI ICE CTL Warning

ANTI ICE CTL

PFD Alerts Window: "Tank valves cannot be controlled (closed) (TKS)"

1. Icing Conditions .....AVOID / EXIT

Unreliable Left and Right Fluid Quantity

ANTI ICE QTY Warning

ANTI ICE QTY

PFD Alerts Window: "Left and right fluid quantities unknown (TKS)"

Both fluid quantities are unknown and both tanks are closed.

1. ICE PROTECT System Switch ..... OFF
2. Icing Conditions .....AVOID / EXIT

Full Flaps Prohibited In Ice

FLAPS ICE Warning

FLAPS ICE

PFD Alerts Window: "Full flaps prohibited in icing conditions"

1. Flaps.....SET UP OR 50%

Integrated Avionics System Emergencies

Attitude & Heading Reference System (AHRS) Failure

1. Verify Avionics System has switched to functioning AHRS.

   If not, manually switch to functioning AHRS and attempt to bring failed AHRS back on-line:

2. Failed ADAHRS Circuit Breaker ..... SET

   If open, reset (close) circuit breaker. If circuit breaker opens again, do not reset.

3. Be prepared to revert to Standby Instruments (Attitude, Heading).

Air Data Computer (ADC) Failure

1. Failed ADAHRS Circuit Breaker ..... SET

   If open, reset (close) circuit breaker. If circuit breaker opens again, do not reset.

2. Revert to Standby Instruments (Altitude, Airspeed).
3. Land as soon as practicable.

PFD Display Failure

1. Display Backup .....ACTIVATE
2. Land as soon as practicable.

Unusual Attitude Emergencies

Inadvertent Spin Entry

1. CAPS.....ACTIVATE

Spin Spin Spin Warning

SPIN SPIN SPIN

1. CAPS.....ACTIVATE

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 maintain a constant heading through the coordinated aileron and rudder inputs.
7. Exit IMC conditions as soon as possible.

Other Emergencies

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.

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 1, BAT 2, ALT 1, and ALT 2 Switches..... OFF

Left/Right Brake Over-Temperature

BRAKE TEMP Warning

BRAKE TEMP

1. Stop aircraft and allow the brakes to cool.

Start Engaged

START ENGAGED Warning

START ENGAGED

On-Ground

1. Ignition Switch ..... DISENGAGE
2. Wait 1 minute before next start attempt.

   If starter does not disengage (relay or solenoid failure):
3. BAT 1 Switch ..... OFF
4. Engine ..... SHUTDOWN
5. STARTER Circuit Breaker..... PULL

In-Flight

1. Ignition Switch .....ENSURE NOT STUCK IN START
2. STARTER Circuit Breaker..... PULL
3. Flight.....CONTINUE
   Engine start will not be available at destination.

Emergency Ground Egress

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

CAPS Deployment

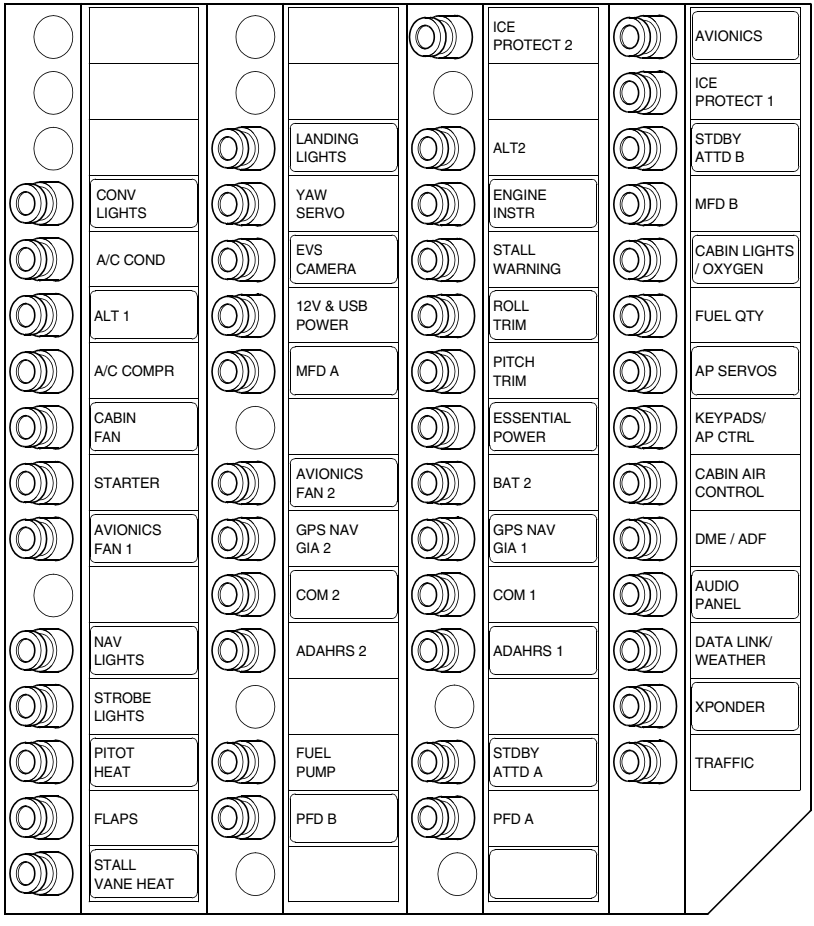
1. Activation Handle Cover ..... REMOVE
2. Activation Handle (Both Hands) ..... PULL STRAIGHT DOWN

After Deployment as time permits:

3. Mixture ..... CUTOFF
4. Fuel Selector ..... OFF
5. Fuel Pump ..... OFF
6. BAT 1, BAT 2, ALT 1, and ALT 2 Switches ..... OFF

   Turn the master switches off after completing any necessary radio communications.
7. Ignition Switch ..... OFF
8. ELT ..... ON
9. Seat Belts and Harnesses ..... TIGHTEN
10. Loose Items ..... SECURE
11. Assume emergency landing body position.
12. After the airplane comes to a complete stop, evacuate quickly and move upwind.

Circuit Breaker Panel



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