PILOT'S CHECKLIST

SR20

WITH CIRRUS PERSPECTIVE AVIONICS

Quick Reference Checklist

for

SR20 Serials 2016 and Subsequent with Perspective Avionics

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 11934-004 Revision A1. These procedures do not supersede the procedures in the POH. In the event of conflict, the POH shall take precedence.

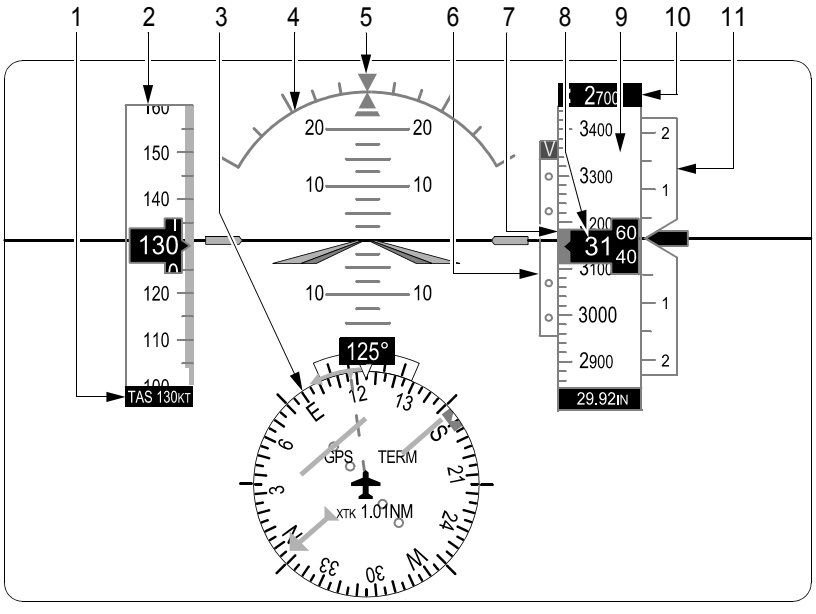
ISSUED: January 2016
P/N 11935-005

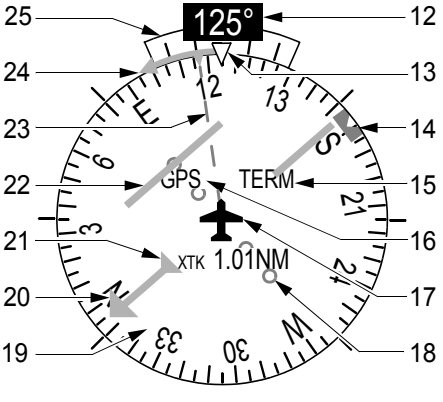
Normal Procedures

Table of Contents

Primary Flight Display N-1
Airspeeds for Normal Operation N-2
Preflight Inspection N-3
Before Starting Engine N-6
Starting Engine N-7
Before Taxiing N-7
Taxiing N-7
Before Takeoff N-8
Normal Takeoff N-9
Short Field Takeoff N-9
Climb N-9
Cruise N-9
    Cruise Leaning N-10
Descent N-10
Before Landing N-10
Normal Landing N-10
Short Field Landing N-11
Balked Landing/Go-Around N-11
After Landing N-11
Shutdown N-11

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_2790

Airspeeds for Normal Operation

Takeoff Rotation:

- Normal, Flaps 50% ..... 65 - 70 KIAS
- Short Field, Flaps 50% ..... 65 KIAS
- Obstacle Clearance, Flaps 50% ..... 77 KIAS

Enroute Climb, Flaps Up:

- Normal, SL ..... 96 KIAS
- Normal, 10,000' ..... 92 KIAS
- Best Rate of Climb, SL ..... 96 KIAS
- Best Rate of Climb, 10,000 ..... 92 KIAS
- Best Angle of Climb, SL ..... 83 KIAS
- Best Angle of Climb, 10,000 ..... 87 KIAS

Landing Approach:

- Normal Approach, Flaps Up ..... 88 KIAS
- Normal Approach, Flaps 50% ..... 83 KIAS
- Normal Approach, Flaps 100% ..... 78 KIAS
- Short Field, Flaps 100% ..... 78 KIAS

Go-Around, Flaps 50%:

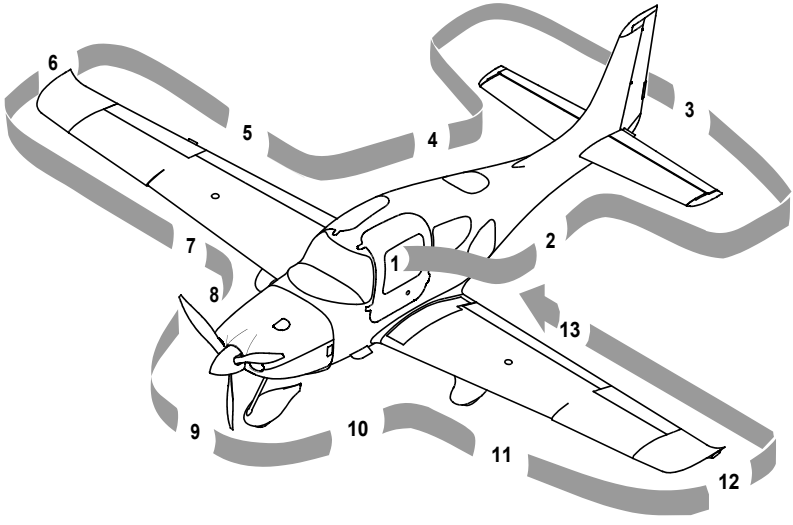
- Full Power ..... 78 KIAS

Maximum Recommended Turbulent Air Penetration:

- 3050 Lb ..... 131 KIAS
- 2600 Lb ..... 122 KIAS
- 2200 Lb ..... 111 KIAS

Maximum Demonstrated Crosswind

- Takeoff or Landing ..... 20 Knots



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Preflight Inspection

1. Cabin
   - a. Required Documents ..... On Board
   - b. Avionics Power Switch ..... OFF
   - c. Bat 2 Master Switch ..... ON
   - d. PFD ..... Verify On
   - e. Essential Bus Voltage ..... 23-25 Volts
   - f. Flap Position Light ..... OUT
   - g. Bat 1 Master Switch ..... ON
   - h. Avionics Cooling Fan ..... Audible
   - 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. Bat 1 and 2 Master Switches ..... OFF

(Continued on following page)

o. Alternate Static Source ..... NORMAL
p. Circuit Breakers ..... IN
q. Fire Extinguisher ..... Charged and Available
r. Emergency Egress Hammer ..... Available
s. 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. Wing/Fuselage Fairing ..... Check
   e. COM 2 Antenna (underside) ..... Condition and Attachment
   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
   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. 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)

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. Cowling ..... Attachments Secure
   b. Exhaust Pipe ..... Condition, Security, and Clearance
   c. Gascolator (underside) ..... Drain for 3 seconds, Sample
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 Belt ..... Condition and Tension
10. Nose, Left Side
   a. Landing Light ..... Condition
   b. Engine Oil ..... Check 6-8 quarts, Leaks, Cap & Door Secure
   c. Cowling ..... Attachments Secure
   d. External Power ..... Door Secure
   e. 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

(Continued on following page)

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

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. Hinges, actuation arm, bolts, and cotter pins ..... Secure

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 & 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 ..... 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. Fuel Pump ..... OFF
13. Oil Pressure.....CHECK
14. Alt Master Switches .....ON
15. Avionics Power Switch.....ON
16. Engine Parameters..... MONITOR
17. External Power (If applicable).....DISCONNECT
18. 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. Air Conditioner ..... AS DESIRED

• Caution •

Use of RECIRC mode prohibited in flight.

5. Fuel Quantity ..... CONFIRM
6. Fuel Selector ..... FULLEST TANK
7. Flaps ..... SET 50% & CHECK
8. Transponder ..... SET
9. Autopilot ..... CHECK
10. Navigation Radios/GPS ..... SET for Takeoff
11. Cabin Heat/Defrost ..... AS REQUIRED
12. Brakes ..... HOLD
13. Mixture ..... FULL RICH
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. Magnetos ..... CHECK Left and Right
    a. Ignition Switch ..... R, note RPM, then BOTH
    b. Ignition Switch ..... L, note RPM, then BOTH
21. Engine Parameters ..... CHECK
22. Power Lever ..... 1000 RPM
23. Fuel Pump ..... BOOST
24. Flight Instruments, HSI, and Altimeter ..... CHECK & SET
25. Flight Controls ..... FREE & CORRECT
26. Trim ..... SET Takeoff
27. Autopilot ..... DISCONNECT

Normal Takeoff

1. Brakes ..... RELEASE (Steer with Rudder Only)
2. Power Lever ..... FULL FORWARD
3. Engine Parameters ..... CHECK
4. Elevator Control ..... ROTATE Smoothly at 65-70 KIAS
5. At 85 KIAS, Flaps ..... UP

Short Field Takeoff

1. Flaps 50%
2. Brakes ..... HOLD
3. Power Lever ..... FULL FORWARD
4. Engine Parameters ..... CHECK
5. Brakes ..... RELEASE (Steer with Rudder Only)
6. Elevator Control ..... ROTATE Smoothly at 65 KIAS
7. Airspeed at Obstacle ..... 77 KIAS

Climb

1. Climb Power ..... SET
2. Flaps ..... Verify UP
3. Mixture ..... FULL RICH
4. Engine Parameters ..... CHECK
5. Fuel Pump ..... AS REQUIRED

Cruise

1. Fuel Pump ..... OFF

• Note •

The Fuel Pump must be set to BOOST during maneuvering flight (i.e. flight training maneuvers, chandelles, stalls, etc.).

2. Cruise Power ..... SET
3. Mixture ..... LEAN as required
4. Engine Parameters ..... MONITOR
5. Fuel Flow and Balance ..... MONITOR

Cruise Leaning

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

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

Before Landing

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

Normal Landing

1. Flaps 100%
2. Airspeed ..... 81-83 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 ..... 78 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 ..... BEST ANGLE OF CLIMB (81 – 83 KIAS)

After clear of obstacles:

5. Flaps ..... UP

After Landing

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

Shutdown

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

Performance

Table of Contents

Takeoff Distance: 3050 LB P-1
Takeoff Distance: 2500 LB P-2
Cruise Performance P-3
Cruise Performance P-4
Landing Distance - Flaps 100% P-5
Landing Distance - Flaps 50% P-6
Landing Distance - Flaps 0% P-7
Wind Components P-8
Weight and Balance P-9
  Loading Calculations P-9
  Loading Data P-10
  Moment Limits P-10
Temperature Conversion P-11

• Note •

Aircraft with optional Air Conditioning System; Brake Horsepower is reduced by approximately 6 BHP.

Takeoff Distance: 3050 LB

WEIGHT = 3050 LB **Speed at Liftoff = 71 KIAS** **Speed over 50 Ft. Obstacle = 77 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 20% to Ground Roll. **Wet Grass:** Add 30% to Ground Roll. **Air Conditioner**: Add 300 feet to ground roll and 400 feet to distance over 50' obstacle if A/C is ON during takeoff.

PRESS ALT FT	DISTANCE FT	TEMPERATURE ~ °C						
		0	10	20	30	40	50	ISA
SL	Grnd Roll	1319	1424	1534	1648	1767	1890	1478
	50 ft	1996	2145	2300	2460	2626	2797	2221
1000	Grnd Roll	1448	1563	1684	1809	1940	2075	1599
	50 ft	2183	2346	2515	2691	2872	3060	2396
2000	Grnd Roll	1590	1717	1850	1988	2131	2279	1730
	50 ft	2389	2568	2753	2945	3144	3349	2586
3000	Grnd Roll	1748	1888	2034	2185	2343	2506	1874
	50 ft	2616	2812	3015	3226	3444	3669	2792
4000	Grnd Roll	1923	2077	2237	2404	2577	2757	2030
	50 ft	2868	3082	3305	3536	3775	4022	3017
5000	Grnd Roll	2117	2287	2463	2647	2837	3035	2201
	50 ft	3145	3381	3625	3879	4141	4412	3262
6000	Grnd Roll	2333	2519	2714	2916	3126	3343	2388
	50 ft	3452	3711	3980	4258	4546	4843	3529
7000	Grnd Roll	2572	2777	2992				2592
	50 ft	3792	4076	4371				3820
8000	Grnd Roll	2837	3064	3300				2815
	50 ft	4167	4480	4805				4137
9000	Grnd Roll	3132	3383	3644				3059
	50 ft	4584	4928	5285				4483
10000	Grnd Roll	3460	3737					3326
	50 ft	5045	5424					4860

Takeoff Distance: 2500 LB

WEIGHT = 2500 LB **Speed at Liftoff = 68 KIAS** **Speed over 50 Ft Obstacle = 75 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 20% to Ground Roll. **Wet Grass:** Add 30% to Ground Roll. **Air Conditioner**: Add 300 feet to ground roll and 400 feet to distance over 50' obstacle if A/C is ON during takeoff.

PRESS ALT FT	DISTANCE FT	TEMPERATURE ~ °C						
		0	10	20	30	40	50	ISA
SL	**Grnd Roll**	787	850	915	983	1054	1127	882
	50 ft	1215	1306	1400	1497	1598	1702	1353
1000	**Grnd Roll**	864	933	1005	1079	1157	1238	954
	50 ft	1329	1428	1531	1637	1748	1861	1459
2000	**Grnd Roll**	949	1025	1104	1186	1271	1360	1032
	50 ft	1454	1563	1676	1792	1913	2037	1574
3000	**Grnd Roll**	1043	1126	1213	1304	1398	1495	1118
	50 ft	1593	1712	1835	1963	2095	2231	1700
4000	**Grnd Roll**	1147	1239	1335	1434	1537	1645	1211
	50 ft	1745	1876	2011	2151	2296	2446	1836
5000	**Grnd Roll**	1263	1364	1469	1579	1693	1810	1313
	50 ft	1914	2057	2206	2359	2518	2683	1985
6000	**Grnd Roll**	1392	1503	1619	1739	1865	1995	1424
	50 ft	2101	2258	2421	2589	2764	2944	2147
7000	**Grnd Roll**	1534	1657	1785				1546
	50 ft	2307	2479	2658				2324
8000	**Grnd Roll**	1692	1828	1969				1679
	50 ft	2535	2725	2922				2516
9000	**Grnd Roll**	1868	2018	2174				1825
	50 ft	2788	2997	3213				2727
10000	**Grnd Roll**	2064	2229					1984
	50 ft	3068	3298					2956

Cruise Performance

Conditions:

- Mixture ..... Best Power
- Weight ..... 2600 LB
- Winds ..... Zero
- Shaded Cells: Cruise Pwr above 85% not recommended.

• 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.

Aircraft with optional Air Conditioning System: Cruise performance is reduced by 2 knots. For maximum performance, turn air conditioner off.

Press Alt			ISA - 30°C			ISA			ISA + 30°C		
	RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
2000	2700	27.8	101%	160	16.0	95%	160	15.0	91%	157	14.2
	2500	27.8	90%	154	14.1	85%	154	13.4	81%	151	12.9
	2500	26.6	85%	151	13.4	80%	151	12.8	76%	148	11.7
	2500	25.4	80%	147	12.7	75%	147	11.6	72%	144	11.3
	2500	24.1	74%	143	11.5	70%	143	11.1	67%	140	10.7
	2500	22.9	69%	139	11.0	65%	139	10.6	62%	136	10.2
	2500	22.0	65%	136	10.5	62%	136	10.2	59%	133	9.9
	2500	19.7	55%	127	9.5	52%	127	9.20	50%	124	8.9
4000	2700	25.8	94%	159	14.8	89%	159	14.4	84%	157	13.4
	2500	25.8	84%	153	13.3	79%	153	12.7	75%	150	11.7
	2500	24.8	80%	150	12.7	75%	150	11.6	72%	147	11.2
	2500	23.6	75%	146	11.5	70%	146	11.1	67%	143	10.8
	2500	22.3	69%	141	10.9	65%	141	10.5	62%	138	10.2
	2500	21.0	63%	136	10.3	60%	136	10.0	57%	133	9.7
	2500	19.8	58%	131	9.8	55%	131	9.4	52%	129	9.2
6000	2700	24.0	88%	159	13.8	83%	159	13.1	79%	156	12.6
	2500	24.0	79%	152	12.0	74%	152	11.5	71%	149	11.1
	2500	23.0	74%	148	11.5	70%	148	11.1	67%	145	10.7
	2500	21.8	69%	144	11.0	65%	144	10.6	62%	141	10.2
	2500	20.8	65%	140	10.4	61%	140	10.0	58%	137	9.7
	2500	19.4	59%	134	9.8	55%	134	9.5	53%	131	9.2

Cruise Performance

Press Alt			ISA - 30°C			ISA			ISA + 30°C		
	RPM	MAP	PWR	KTAS	GPH	PWR	KTAS	GPH	PWR	KTAS	GPH
8000	**2700**	**22.2**	82%	157	12.9	77%	157	11.6	73%	154	11.4
	2500	**22.2**	73%	150	11.4	69%	150	11.0	65%	147	10.6
	2500	**21.2**	69%	146	10.9	65%	146	10.5	62%	143	10.2
	2500	**20.1**	64%	142	10.4	60%	142	10.0	57%	139	9.7
	2500	**18.9**	59%	136	9.8	55%	136	9.5	52%	134	9.2
	2500	**17.7**	53%	131	9.2	50%	131	8.9	48%	128	8.7
10000	**2700**	**20.6**	76%	155	11.7	72%	155	11.2	68%	152	10.9
	2500	**20.6**	68%	148	10.8	64%	148	10.5	61%	145	10.1
	2500	**19.6**	64%	144	10.4	60%	144	10.0	57%	141	9.7
	2500	**18.5**	59%	139	9.8	55%	139	9.5	53%	136	9.2
	2500	**17.3**	54%	134	9.3	50%	134	9.0	48%	131	8.7
12000	**2700**	**19.0**	70%	153	11.1	66%	153	10.7	63%	150	10.3
	2500	**19.0**	63%	146	10.3	59%	146	9.9	56%	143	9.6
	2500	**18.0**	59%	141	9.8	55%	141	9.5	52%	138	9.2
	2500	**16.8**	53%	136	9.2	50%	136	8.9	47%	133	8.6
14000	**2700**	**17.6**	66%	151	10.5	62%	151	10.2	58%	148	9.8
	2500	**17.6**	59%	144	9.8	55%	144	9.5	52%	141	9.2
	2500	**16.5**	54%	142	9.3	50%	142	9.0	48%	139	8.7

Landing Distance - Flaps 100%

WEIGHT: 3050 LB
Speed over 50 Ft Obstacle: 78 KIAS
Flaps: 100%
Power: Idle
Runway: Dry, Level Paved Surface

Headwind: Subtract 10% per each 13 knots headwind.
Tailwind: Add 10% for each 2 knots tail-wind up to 10 knots.
Runway Slope: Ref. Factors.
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	809	838	868	897	927	957	853
	Total	2557	2609	2663	2717	2773	2829	2636
1000	Grnd Roll	838	869	900	931	961	992	878
	Total	2610	2665	2722	2779	2838	2898	2682
2000	Grnd Roll	870	901	933	965	997	1029	905
	Total	2666	2725	2785	2846	2907	2970	2731
3000	Grnd Roll	902	935	968	1001	1034	1067	932
	Total	2726	2788	2852	2916	2981	3048	2782
4000	Grnd Roll	936	971	1005	1039	1073	1108	960
	Total	2790	2856	2923	2991	3060	3130	2837
5000	Grnd Roll	972	1007	1043	1079	1114	1150	990
	Total	2858	2928	2999	3070	3143	3217	2894
6000	Grnd Roll	1009	1046	1083	1120	1157	1194	1021
	Total	2931	3004	3079	3155	3232	3310	2954
7000	Grnd Roll	1048	1086	1125	1163	1201	1240	1052
	Total	3008	3086	3165	3245	3326	3409	3017
8000	Grnd Roll	1089	1128	1168	1208	1248	1288	1085
	Total	3091	3173	3256	3341	3427	3513	3084
9000	Grnd Roll	1131	1173	1214	1255	1297	1338	1119
	Total	3179	3265	3353	3443	3533	3625	3154
10000	Grnd Roll	1176	1219	1262	1305	1348	1391	1155
	Total	3272	3364	3457	3551	3646	3743	3228

Landing Distance - Flaps 50%

WEIGHT: 3050 LB
Speed over 50 Ft Obstacle: 82 KIAS
Flaps: 50%
Power: Idle
Runway: Dry, Level Paved Surface

Headwind: Subtract 10% per each 13 knots headwind.
Tailwind: Add 10% for each 2 knots tail-wind up to 10 knots.
Runway Slope: Ref. Factors.
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	1029	1066	1104	1141	1179	1217	1085
	Total	2704	2768	2833	2899	2966	3033	2800
1000	Grnd Roll	1067	1106	1145	1184	1223	1262	1117
	Total	2768	2836	2904	2974	3044	3115	2856
2000	Grnd Roll	1106	1147	1187	1228	1268	1309	1151
	Total	2837	2908	2980	3053	3127	3202	2915
3000	Grnd Roll	1148	1190	1232	1274	1316	1358	1186
	Total	2909	2984	3060	3137	3216	3295	2977
4000	Grnd Roll	1191	1234	1278	1322	1365	1409	1222
	Total	2987	3066	3146	3227	3309	3392	3042
5000	Grnd Roll	1236	1281	1327	1372	1417	1462	1259
	Total	3069	3152	3236	3322	3408	3496	3111
6000	Grnd Roll	1283	1330	1377	1424	1471	1518	1298
	Total	3156	3243	3332	3422	3513	3605	3183
7000	Grnd Roll	1333	1382	1431	1479	1528	1577	1338
	Total	3248	3340	3434	3529	3624	3721	3258
8000	Grnd Roll	1385	1435	1486	1537	1587	1638	1380
	Total	3346	3443	3542	3642	3742	3844	3338
9000	Grnd Roll	1439	1492	1544	1597	1650	1702	1424
	Total	3450	3553	3656	3761	3867	3974	3421
10000	Grnd Roll	1496	1550	1605	1660	1715	1769	1469
	Total	3560	3668	3778	3888	4000	4112	3509

Landing Distance - Flaps 0%

WEIGHT: 3050 LB
Speed over 50 Ft Obstacle: 87 KIAS
Flaps: 0%
Power: Idle
Runway: Dry, Level Paved Surface

Headwind: Subtract 10% per each 13 knots headwind.
Tailwind: Add 10% for each 2 knots tail-wind up to 10 knots.
Runway Slope: Ref. Factors.
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	1185	1228	1272	1315	1358	1402	1250
	Total	2971	3037	3105	3174	3243	3314	3071
1000	Grnd Roll	1229	1274	1319	1364	1409	1454	1287
	Total	3038	3108	3179	3252	3325	3399	3130
2000	Grnd Roll	1274	1321	1368	1414	1461	1508	1326
	Total	3109	3183	3258	3335	3412	3490	3191
3000	Grnd Roll	1322	1371	1419	1467	1516	1564	1366
	Total	3185	3263	3342	3422	3504	3586	3256
4000	Grnd Roll	1372	1422	1472	1523	1573	1623	1408
	Total	3265	3348	3431	3515	3601	3688	3323
5000	Grnd Roll	1424	1476	1528	1581	1633	1685	1451
	Total	3351	3437	3525	3614	3704	3795	3395
6000	Grnd Roll	1479	1533	1587	1641	1695	1749	1495
	Total	3441	3533	3625	3719	3814	3910	3470
7000	Grnd Roll	1536	1592	1648	1704	1760	1817	1542
	Total	3537	3634	3731	3830	3930	4031	3548
8000	Grnd Roll	1595	1654	1712	1770	1829	1887	1590
	Total	3640	3741	3844	3948	4053	4159	3631
9000	Grnd Roll	1658	1718	1779	1840	1900	1961	1641
	Total	3748	3855	3963	4073	4183	4295	3718
10000	Grnd Roll	1723	1786	1849	1912	1975	2038	1693
	Total	3863	3976	4090	4205	4322	4439	3809

Wind Components

Conditions:

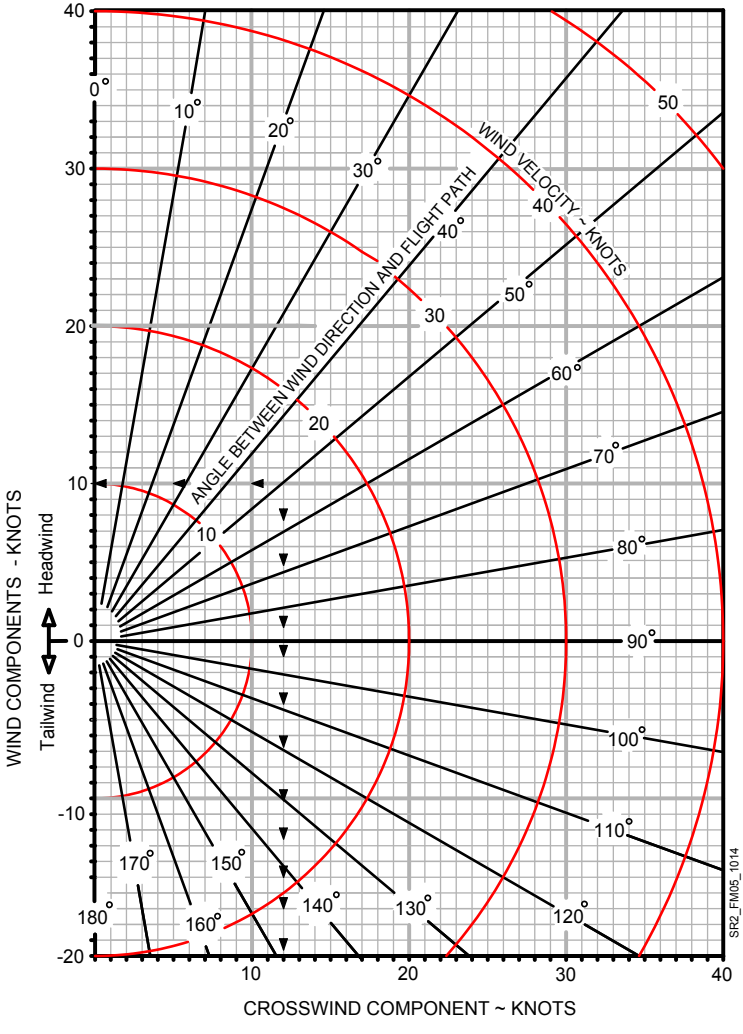
- Runway Heading ..... 10°
- Wind Direction ..... 60°
- Wind Velocity ..... 15 Knots

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.



Weight and Balance

Loading Calculations

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

Description	Weight	Moment/1000
1. Empty Weight *Includes unusable fuel and full oil*		
2. Front Seats Occupants *Pilot and Passenger*		
3. Rear Seats Occupants		
4. Baggage *130 lb maximum*		
5. **Zero Fuel Condition** *Subtotal items 1 thru 4*		
6. Fuel Load *56 Gallon @6.0 lb/gal. maximum*		
7. **Ramp Weight** *Subtotal items 5 and 6*		
8. Fuel for start, taxi, and runup *Normally 9 lb at avg. mmnt of 1384.2*	-	-
9. **Takeoff 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 1.384.
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 3050 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 153.8	Weight LB	Fwd Pass FS 143.5	Aft Pass FS 180.0	Fuel FS 153.8
20	2.87	3.60	4.16	3.10	220	31.57	39.60	34.08
40	5.74	7.20	8.32	6.20	240	34.44	43.20	37.18
60	8.61	10.80	12.48	9.29	260	37.31	46.80	40.27
80	11.48	14.40	16.64	12.39	280	40.18	50.40	43.37
100	14.35	18.00	20.80	15.49	300	43.05	54.00	46.47
120	17.22	21.60	24.96	18.59	320	45.92	57.60	49.57
140	20.09	25.20	27.04*	21.69	336**	48.79	61.20	52.05
160	22.96	28.80		24.78	360	51.66	64.80	
180	25.83	32.40		27.88	380	54.53	68.40	
200	28.70	36.00		30.98	400	57.40	72.00	

* 130 lb Maximum

** 56 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	2650	369	390
2250	311	333	2700	375	398
2300	318	341	2750	383	406
2350	326	348	2800	390	414
2400	333	354	2850	398	421
2450	340	362	2900	406	429
2500	347	369	2950	414	437
2550	354	375	3000	421	444
2600	362	383	3050	429	452

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

Abnormal Procedures

Table of Contents

Perspective Crew Alerting System (CAS) Index

CAS Message	Page	CAS Message	Page
OIL PRESS	A-3	ALT 1	A-6
START ENGAGE	A-3	ALT 2	A-6
FUEL QTY	A-4	AVIONICS OFF	A-7
L FUEL QTY	A-4	PFD FAN FAIL	A-7
R FUEL QTY	A-4	MFD FAN FAIL	A-7
FUEL FILTER	A-4	PITOT HEAT FAIL	A-8
FUEL IMBALANCE	A-5	PITOT HT REQD	A-8
M BUS 1	A-5	FLAPS	A-9
M BUS 2	A-5	BRAKE TEMP	A-10
BATT 1	A-5	PARK BRAKE	A-10

Flight Environment A-1
Inadvertent Icing Encounter A-1
Inadvertent IMC Encounter A-1
Door Open In Flight A-1
Abnormal Landings A-2
Landing With Failed Brakes A-2
Landing With Flat Tire A-2
Engine System A-3
Low Idle Oil Pressure A-3
Starter Engaged Annunciation A-3
Fuel System A-4
Low Fuel Quantity A-4
Left OR Right Fuel Tank Quantity A-4
Fuel Filter in Bypass Mode A-4
Fuel Imbalance A-5
Electrical System A-5
Low Voltage on Main Bus 1 ..... A-5
Low Voltage on Main Bus 2 ..... A-5
Battery 1 Current Sensor A-5
Low Alternator 1 Output A-6
Low Alternator 2 Output A-6
Integrated Avionics System A-7
Avionics Switch Off A-7

Abnormal Procedures

Table of Contents

PFD Cooling Fan Failure A-7
MFD Cooling Fan Failure A-7
Flight Displays Too Dim A-7
Pitot Static System A-8
Pitot Static Malfunction A-8
Pitot Heat Current Sensor Annunciation A-8
Pitot Heat Required Annunciation A-8
Flight Control System A-9
Electric Trim/Autopilot Failure A-9
Flap System Exceedance A-9
Landing Gear System A-10
Brake Failure During Taxi A-10
Left/Right Brake Over-Temperature A-10
Other Conditions A-10
Aborted Takeoff A-10
Parking Brake Engaged Annunciation A-10
Communications Failure A-10

Flight Environment

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
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

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

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

Starter Engaged Annunciation

START ENGAGE

On-Ground

1. Ignition Switch .....DISENGAGE prior to 10 Seconds
2. Battery Switches.....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 QTY Caution

FUEL QTY

1. Fuel Quantity Gages.....CHECK

   If left & right fuel quantities indicate less than or equal to 8 gallons per side:

   a. Land as soon as practical.

   If left & right fuel quantities indicate more than 8 gallons per side:

   a. Flight .....CONTINUE, MONITOR

Left OR Right Fuel Tank Quantity

Conduct the following procedure if either of the annunciations listed below are displayed on the MFD.

L FUEL QTY	R FUEL QTY

1. Indicated (L or R) Fuel Quantity Gage.....CHECK

   If fuel quantity indicates less than or equal to 8 gallons:

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

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

   If fuel quantity indicates more than 8 gallons:

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

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

Fuel Filter in Bypass Mode

Airplane Serials 2016 thru 2031

FUEL FILTER

1. If In-Flight..... LAND AS SOON AS PRACTICAL
2. Replace fuel filter element prior to next flight.

Fuel Imbalance

FUEL IMBALANCE Caution

FUEL IMBALANCE

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

   If HIGH BOOST already in use for vapor suppression, pump should be left in this position for tank switch.
3. Fuel Selector ..... SELECT FULLEST TANK
4. Fuel Pump .....AS REQUIRED

   After switching tanks, message will remain until sensed imbalance is less than 7.5 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 and Alt 2 Caution (Failure) Checklists.

Battery 1 Current Sensor

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 practical.

Low Alternator 1 Output

ALT 1 Caution (Failure)

ALT 1

1. ALT 1 Circuit Breaker..... CHECK & SET
2. ALT 1 Master Switch..... CYCLE

   If alternator does not reset (low A1 Current and M1 voltage):

3. ALT 1 Master 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. 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 & SET
2. ALT 2 Master Switch..... CYCLE

   If alternator does not reset (low A2 Current and M2 voltage less than M1 voltage):

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

Integrated Avionics System

Avionics Switch Off

AVIONICS OFF

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

PFD Cooling Fan Failure

PFD FAN FAIL

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

   If annunciation does not extinguish:

   a. Hot cabin temperatures..... LAND AS SOON AS PRACTICAL

   b. Cool cabin temperatures .....CONTINUE, MONITOR

MFD Cooling Fan Failure

MFD FAN FAIL

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

   If annunciation does not extinguish:

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

   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:

2. Revert to standby instruments.

Pitot Static System

Pitot Static Malfunction

Static Source Blocked

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

Pitot Tube Blocked

1. Pitot Heat ..... ON

Pitot Heat Current Sensor Annunciation

PITOT HEAT FAIL

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

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

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

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

Pitot Heat Required Annunciation

PITOT HT 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 practical.

Flap System Exceedance

FLAPS

Flaps at 100%, airspeed greater than 109 KIAS for 5 seconds or more,
OR
Flaps at 50%, airspeed greater than 124 KIAS for 5 seconds or more.

1. Airspeed ..... REDUCE

or

1. Flaps ..... RETRACT

Landing Gear System

Brake Failure During Taxi

1. Engine Power .....AS REQUIRED
   - To stop airplane - REDUCE
   - 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

1. Stop aircraft and allow the brakes to cool.

Other Conditions

Aborted Takeoff

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

Parking Brake Engaged Annunciation

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. Hand Held Microphone .....CONNECT

Emergency Procedures

Table of Contents

Perspective Crew Alerting System (CAS) Index

CAS Message	Page	CAS Message	Page
OIL PRESS	E-7	FUEL IMBALANCE	E-9
OIL TEMP	E-7	M BUS 1	E-10
RPM	E-7	M BUS 2	E-10
CHT	E-8	ESS BUS	E-11
FUEL QTY	E-9	CO LVL HIGH	E-12

Airspeeds For Emergency Operations E-1
Maximum Glide E-1
Memory Items E-1
Engine Failures E-2
Engine Failure On Takeoff (Low Altitude) E-2
Engine Failure In Flight E-2
Airstart E-3
Engine Airstart E-3
Smoke and Fire E-4
Engine Fire In Flight E-4
Cabin Fire In Flight E-4
Wing Fire In Flight E-5
Engine Fire During Start E-5
Smoke and Fume Elimination E-5
Forced Landings E-6
Emergency Landing Without Engine Power E-6
Emergency Descent E-6
Ditching E-6
Landing Without Elevator Control E-6
Engine System E-7
Oil Pressure Out of Range E-7
Oil Temperature High E-7
Engine Speed High E-7
High Cylinder Head Temperature E-8
Engine Partial Power Loss E-8
Fuel System E-9
Low Fuel Quantity E-9
Fuel Imbalance E-9
Electrical System E-10

Table of Contents

Emergency Procedures

High Voltage on Main Bus 1 ..... E-10
High Voltage on Main Bus 2 ..... E-10
High or Low Voltage on Essential Bus E-11
Integrated Avionics System E-11
Attitude & Heading Reference System (AHRS) Failure E-11
Air Data Computer (ADC) Failure E-11
PFD Display Failure E-11
Unusual Attitude E-12
Inadvertent Spin Entry E-12
Inadvertent Spiral Dive During IMC Flight E-12
Environmental System Emergencies E-12
Carbon Monoxide Level High E-12
CAPS Deployment E-13
Other Emergencies E-13
Power Lever Linkage Failure E-13
Emergency Engine Shutdown On Ground E-13
Circuit Breaker Panel E-14

Airspeeds For Emergency Operations

Maneuvering Speed:

- 3050 lb..... 130 KIAS
- 2600 lb..... 120 KIAS
- 2200 lb..... 110 KIAS

Best Glide:

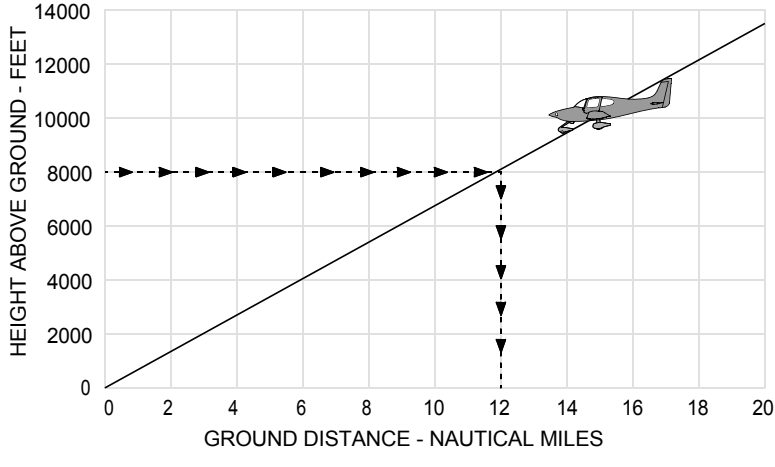
- 3050 lb..... 99 KIAS
- 2500 lb..... 95 KIAS

Emergency Landing (Engine-Out):

- Flaps Up ..... 87 KIAS
- Flaps 50% ..... 82 KIAS
- Flaps 100% ..... 76 KIAS

Maximum Glide

Glide Ratio ~ 9 : 1



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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 (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. Air Conditioner (if installed) ..... OFF
7. Ignition Switch ..... CHECK, BOTH

If engine does not start:

8. Perform *Engine Airstart* or *Emergency Landing Without Engine Power* Checklist, as required.

Airstart

Engine Airstart

1. Bat Master Switches ..... ON
2. Power Lever ..... ½" 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
11. Alt Master Switches ..... ON
12. If no start, perform *Forced Landings* Checklist.

Smoke and Fire

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. Cabin Doors ..... PARTIALLY OPEN
8. Land as soon as possible.

Cabin Fire In Flight

1. Bat-Alt Master Switches ..... OFF, AS REQ'D
2. Fire Extinguisher ..... ACTIVATE

If airflow is not sufficient to clear smoke or fumes from cabin:

3. Cabin Doors ..... PARTIALLY OPEN
4. Avionics Power Switch ..... OFF
5. All other switches ..... OFF
6. 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:

7. Airflow Selector ..... OFF
8. Bat-Alt Master Switches ..... ON
9. Avionics Power Switch ..... ON
10. Required Systems ..... ACTIVATE one at a time
11. Temperature Selector ..... COLD
12. Vent Selector ..... FEET/PANEL/DEFROST POSITION
13. Airflow Selector ..... SET AIRFLOW TO MAXIMUM
14. Panel Eyeball Outlets ..... OPEN
15. 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. Prepare to land as soon as possible.

Forced Landings

Emergency Landing Without Engine Power

1. Best Glide Speed ..... ESTABLISH
2. Radio ..... Transmit (121.5 MHz) MAYDAY giving location and intentions
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

Emergency Descent

1. Power Lever ..... IDLE
2. Mixture ..... AS REQUIRED
3. Airspeed ..... V_{NE} (200 KIAS)

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

Engine System

Oil Pressure Out of Range

OIL PRESS

1. Oil Pressure Gage ..... 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

1. Power ..... REDUCE
2. Airspeed ..... INCREASE
3. Oil Temperature Gage ..... MONITOR

   If temperature remains high:

4. Land as soon as possible.

Engine Speed High

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 Gage ..... CHECK

High Cylinder Head Temperature

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. Annunciations and Engine Temperatures ..... MONITOR

If Caution or Warning annunciation is still illuminated:

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

If Caution annunciation only remains illuminated:

a. Land as soon as practical.

If Warning annunciation remains illuminated:

a. Land as soon as possible.

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 practical.

Fuel System

Low Fuel Quantity

FUEL QTY

1. Fuel Quantity Gages.....CHECK

   If fuel quantity indicates less than or equal to 7 gallons:

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

   b. If In-Flight ..... LAND AS SOON AS PRACTICAL

   If fuel quantity indicates more than 7 gallons:

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

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

Fuel Imbalance

FUEL IMBALANCE Warning

FUEL IMBALANCE

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

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

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

   After switching tanks, message will remain until sensed imbalance is less than 9.5 gallons.

Electrical System

High Voltage on Main Bus 1

M BUS 1

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

If M Bus 1 Voltage is greater than 32 Volts:

3. ALT 1 Master Switch..... OFF
4. Perform Alt 1 Caution (Failure) Checklist (do not reset alternator)

High Voltage on Main Bus 2

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

If M Bus 2 Voltage remains greater than 32 Volts:

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

High or Low Voltage on Essential Bus

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* or *M Bus 2* Warning Checklists.

   If Essential Bus Voltage is less than 24.5 Volts:

4. Perform Alt 1 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 practical (Battery reserve only).

Integrated Avionics System

Attitude & Heading Reference System (AHRS) Failure

1. Verify Avionics System has switched to functioning AHRS

   If not, manually switch to functioning AHRS:

2. Failed AHRS Circuit Breaker ..... SET

   If open, reset breaker. If circuit breaker opens again, do not reset.

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

Air Data Computer (ADC) Failure

1. ADC 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 practical.

PFD Display Failure

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

Unusual Attitude

Inadvertent Spin Entry

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 keep hands off control yoke, use rudder to hold constant heading.
7. Exit IMC conditions as soon as possible.

Environmental System Emergencies

Carbon Monoxide Level High

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.

CAPS Deployment

• WARNING •

The maximum demonstrated deployment speed is 133 KIAS.

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-Alt Master Switches ..... OFF

   Turn the Bat-Alt 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.

Other Emergencies

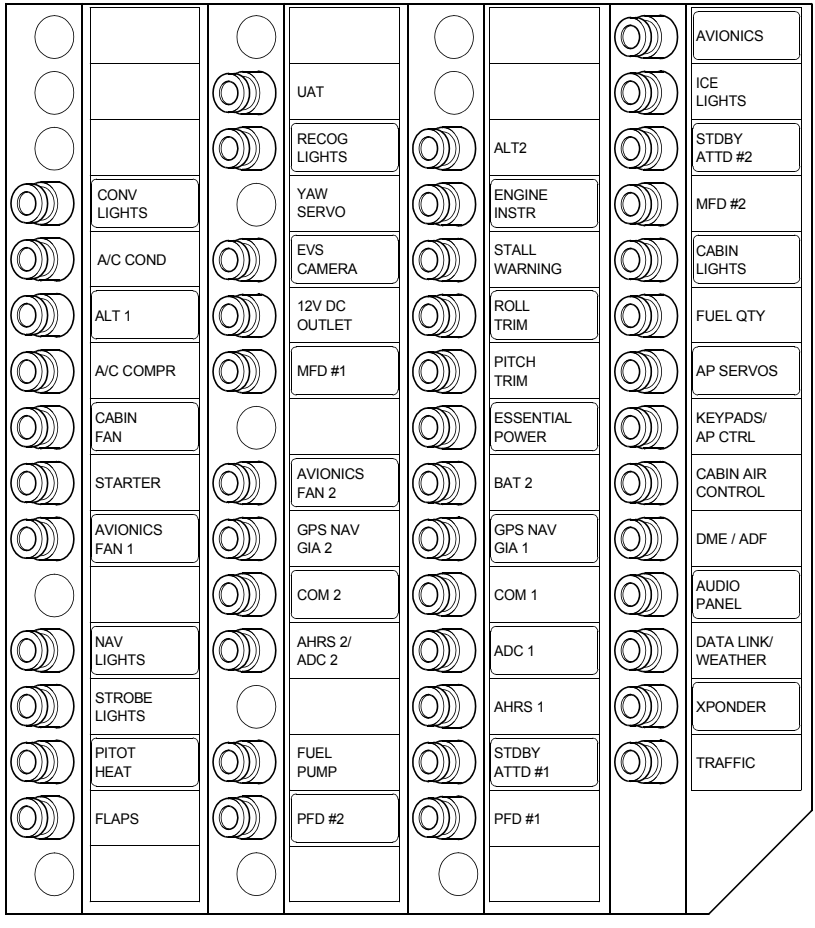
Power Lever Linkage Failure

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-Alt Master Switches ..... OFF

Circuit Breaker Panel



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