**Cessna 182S-CHECKLIST PROCEDURES**

# PREFLIGHT INSPECTION

## ① CABIN

1. Pitot Tube Cover -- REMOVE (if installed) and check for stoppage
2. Pilot's Operating Handbook – AVAILABLE IN THE AIRPLANE
3. Airplane Weight and Balance – CHECKED
4. Parking Brake – SET
5. Control Wheel Lock – REMOVE
6. Ignition Switch – OFF
7. Avionics Power Switch – OFF

**WARNING**

**WHEN TURNING ON THE MASTER SWITCH, USING AN EXTERNAL POWER SOURCE, OR PULLING THE PROPELLER THROUGH BY HAND, TREAT THE PROPELLER AS IF THE IGNITION SWITCH WERE ON. DO NOT STAND, NOR ALLOW ANYONE ELSE TO STAND, WITHIN THE ARC OF THE PROPELLER, SINCE A LOOSE OR BROKEN WIRE OR A COMPONENT MALFUNCTION COULD CAUSE THE PROPELLER TO ROTATE.**

8. Master Switch – ON
9. Fuel quantity Indicators – CHECK QUANTITY ( L Low Fuel R) and ENSURE LOW FUEL ANNUNCIATORS ARE EXTINGUISHED
10. Avionics Master Switch – ON
11. Avionics Cooling Fan – CHECK AUDIBLY FOR OPERATION
12. Avionics Master Switch – OFF
13. Static Pressure Alternate Source Valve – OFF
14. Annunciator Panel Switch – PLACE AND HOLD IN TST POSITION and ensure all annunciators illuminate

15. Annunciator Panel Test Switch – RELEASE Check that appropriate annunciators remain on.

**NOTE**

When Master Switch is turned ON, some annunciators will flash for approximately 10 seconds before illuminating steadily. When panel TST switch is toggled up and held in position, all remaining lights will flash until the switch is released

16. Fuel Selector Valve – BOTH
17. Flaps – EXTEND
18. Pitot Heat – ON (check that pitot heater is warm to the touch within 30 seconds with battery and pitot switches on)
19. Pitot Heat – OFF
20. Master Switch – OFF
21. Baggage door – CHECK (lock with key)

**EMPENNAGE**

1. Rudder Gust Lock – REMOVE
2. Tail Tie Down – DISCONNECT
3. Control Surfaces – Freedom of movement and Security
4. Trim Tab – CHECK Security
5. Antennas – CHECK for security of attachment and general condition

**RIGHT WING Trailing Edge**

1. Aileron – CHECK freedom of movement and security
2. Flap – CHECK for security and condition

**RIGHT WING**

1. Wing Tie Down – DISCONNECT
2. Fuel Tank Vent Opening – CHECK for Stoppage
3. Main Wheel Tire – CHECK for proper inflation and general condition (weather checks, tread depth and wear)

**WARNING**

**IF, AFTER REPEATED SMAPLING, EVIDENCE OF CONTANIMATION STILL EXISTS, THE AIRPLANE SHOULD NOT BE FLOWN. TANKS SHOULD BE DRAINED AND SYSTEM PURGED BY QUALIFIED MAINTENANCE PERSONNEL. ALL EVIDENCE OF CONTAMINATION MUST BE REMOVED BEFORE FURTHER FLIGHT.**

4. Fuel Tank Sump Quick Drain Valves -- DRAIN at least a cupful of fuel (using sampler cup) from each sump location to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from all fuel drain points until all contamination has been removed. If contaminants are still present, refer to above WARNING and do not fly airplane
5. Fuel Quantity – CHECK VISUALLY for desired level
6. Fuel Filler Cap – SECURE and VENT UNOBSTRUCTED

**NOSE**

1. Static Source opening (right side of fuselage) – Check for blockage
2. Fuel Strainer Quick Drain Valve (Located on bottom of fuselage) – DRAIN at least a cupful of fuel (using sampler cup) from valve to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from all fuel drain points until all contamination has been removed
3. Reservoir Quick Drain Valve and Fuel Selector Quick Drain Valve -- DRAIN at least a cupful of fuel (using sampler cup) from valve to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is

observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from all fuel drain points until all contamination has been removed

4. Engine Oil Dipstick/Filler Cap – CHECK oil level, then check dipstick/filler cap SECURE. Do not operate with less than four quarts. Fill to nine quarts for extended flight
5. Engine Cooling Air Inlets – CLEAR of obstructions
6. Propeller and Spinner – CHECK for nicks and security
7. Air Filter – CHECK for restrictions by dust or other foreign matter
8. Nose Wheel Strut and Tire – CHECK for proper inflation of strut and general condition (weather checks, tread depth and wear of tire)
9. Left Static Source Opening – CHECK for stoppage

**LEFT WING**

1. Fuel Quantity – CHECK VISUALLY for desired level
2. Fuel Filler Cap – SECURE and VENT UNOBSTRUCTED
3. Fuel Tank Sump Quick Drain Valves -- DRAIN at least a cupful of fuel (using sampler cup) from each sump location to check for water, sediment, and proper fuel grade before each flight and after each refueling. If water is observed, take further samples until clear and then gently rock wings and lower tail to the ground to move any additional contaminants to the sampling points. Take repeated samples from all fuel drain points until all contamination has been removed. If contaminants are still present, refer to WARNING on page 4-9 and do not fly airplane
4. Main Wheel Tire – CHECK for proper inflation and general condition (weather checks, tread depth and wear)

**LEFT WING Leading Edge**

1. Pitot Tube Cover -- REMOVE (if installed) and check for stoppage
2. Fuel Tank Vent Opening – CHECK for Stoppage
3. Stall Warning Opening – CHECK for stoppage. To check the system, place a clean handkerchief over the vent opening and apply suction; a sound form the warning horn will confirm system operation
4. Wing Tie Down – DISCONNECT
5. Landing/Taxi Light(s) – CHECK for condition and cleanliness of cover

**LEFT WING Trailing Edge**

1. Aileron – CHECK for freedom of movement and security
2. Flap – CHECK for security and condition

## BEFORE STARTING ENGINE

1. Preflight Inspection – COMPLETE
2. Passenger Briefing -- COMPLETE
3. Seats, Seat Belts and shoulder harness – ADJUST AND LOCK
4. Brakes – TEST AND SET
5. Circuit Breakers – CHECK IN
6. Electrical Equipment – OFF

**CAUTION**

**THE AVIONICS POWER SWITCH MUST BE OFF DURING ENGINE START TO PREVENT POSSIBLE DAMAGE TO AVIONICS.**

7. Avionics Power Switch – OFF
8. Autopilot -- OFF
9. Cowl flaps -- OPEN
10. Fuel Selector Valve – BOTH
11. Avionics circuit Breakers – CHECK IN

## STARTING ENGINE (With Battery)

1. Throttle – OPENING ¼ INCH
2. Propeller – HIGH RPM
3. Mixture – IDLE CUT OFF
4. Propeller Area – CLEAR
5. Master Switch – ON
6. Auxiliary Fuel Pump Switch – ON
7. Mixture – ADVANCE to obtain 3 to 4 seconds fuel flow, then return to IDLE CUT OFF position

**NOTE**

If engine is warm, omit priming procedure of step 7 above

8. Ignition Switch – START (release when engine starts)
9. Mixture – ADVANCE smoothly to RICH when engine fires

**NOTE**

If engine floods, turn off auxiliary fuel pump, place mixture
In idle cutoff, open throttle ½ to full, and crank engine.
When engine fires, advance mixture to full rich and retard
throttle promptly

10. Oil Pressure – CHECK
11. Auxiliary Fuel Pump – OFF
12. Navigation Lights and Flashing Beacon – ON as required
13. Avionics Power Switch – ON
14. Radios – ON
15. Flaps – RETRACT

# AUTOPILOT
# NORMAL PROCEDURES

PREFLIGHT (PERFORM PRIOR TO EACH FLIGHT)

1. GYROS – Allow time for the turn coordinator to come up to speed, as evidence by the turn coordinator flag being pulled
2. AVIONICS MASTER – ON
3. POWER APPLICATION AND SELF TEST
   A Power application is performed upon power application to the computer. This test is a sequence of internal checks that validate proper system operation prior to allowing normal system operation. The sequence is indicated by "PFT" (pre-flight test) with an increasing number for the sequence steps. Successful completion of self test is identified by all display segments being illuminated (Display Test) and the disconnect tone sounding
4. AUTOPILOT – ENGAGE by pressing AP button
5. FLIGHT CONTROLS – MOVE left and right to verify that the autopilot can be overpowered

**NOTE**

Normal use will not require the autopilot to be overpowered

6. A/P DISC Switch – PRESS Verify that the autopilot disconnects and tone sounds.

BEFORE TAKEOFF:

Autopilot – OFF

## STARTING ENGINE (With External Power)

1. Throttle – OPEN ¼ INCH
2. Propeller – HIGH RPM
3. Mixture – IDLE CUT OFF
4. Propeller Area – CLEAR
5. External Power – CONNECT to airplane receptacle
6. Master Switch – ON
7. Auxiliary Fuel Pump Switch – ON
8. Mixture – ADVANCE to obtain 3 to 4 seconds fuel flow, then return to IDLE CUT OFF position

**NOTE**

If engine is warm, omit priming procedure of step 8 above

9. Ignition Switch – START (release when engine starts)
10. Mixture – ADVANCE smoothly to RICH when engine fires

**NOTE**

If engine floods, turn off auxiliary fuel pump, place mixture
In idle cutoff, open throttle ½ to full, and crank engine.
When engine fires, advance mixture to full rich and retard
throttle promptly

11. Oil Pressure – CHECK
12. Auxiliary Fuel Pump – OFF
13. External Power – DISCONNECT from airplane receptacle
14. Navigation Lights and Flashing Beacon – ON as required
15. Avionics Power Switch – ON
16. Radios – ON
17. Flaps – RETRACT

## BEFORE TAKEOFF

1. Parking Brake – SET
2. Passenger Seat Backs – MOST UPRIGHT POSITION
3. Seats and Seat Belts – CHECK SECURE
4. Cabin Doors – CLOSED AND LOCKED
5. Flight Controls – FREE AND CORRECT
6. Flight instruments – CHECK and SET
7. Fuel Quantity – CHECK
8. Mixture – RICH
9. Fuel Selector Valve – RECHECK BOTH
10. Elevator Trim – SET FOR TAKEOFF
11. Throttle – 1800 RPM
    a. Magnetos – CHECK (RPM drop should not exceed 150 RPM on either magneto or 50 RPM differential between magnetos)
    b. Propeller – cycle from HIGH to LOW RPM. Return to HIGH RPM (full in)
    c. Suction Gage – CHECK
    d. Engine Instruments and Ammeter – CHECK
12. Annunciator Panel – Ensure no annunciators are illuminated
13. Throttle – 800-1000 RPM
14. Throttle Friction Lock – ADJUST
15. Strobe Lights – AS DESIRED
16. Radios and Avionics – SET
17. Autopilot (if installed) – OFF
18. Wing Flaps – SET for Takeoff (0°- 20°)
19. Cowl Flaps -- OPEN
20. Brakes – RELEASE

## TAKEOFF

### NORMAL TAKEOFF

1. Wing Flaps -- 0° - 20°
2. Power – FULL THROTTLE and 2400 RPM
3. Mixture – RICH (mixture may be leaned to MAX Power Fuel Flow Placard)
4. Elevator Control – LIFT NOSE WHEEL (at 50-60 KIAS)
5. Climb Speed – 70 KIAS--20°, 80 KIAS -- 0°
6. Wing Flaps -- RETRACT

**SHORT FIELD TAKEOFF**

1. Wing Flaps -- 20°
2. Brakes – APPLY
3. Power – Full Throttle and 2400 RPM
4. Mixture – RICH (mixture may be leaned to MAX Power Fuel Flow placard
5. Brakes – RELEASE
6. Elevator Control – SLIGHTLY TAIL LOW
7. Climb Speed – 58 KIAS (until all obstacles are cleared)
8. FLAPS – retract slowly after reaching 70 KIAS

**ENROUTE CLIMB**

1. Airspeed – 85-95 KIAS
2. Power – Power 23 in. Hg. or Full throttle, (whichever is less) and 2400 RPM
3. Mixture – 15 GPH or Full Rich (whichever is less)
4. Fuel Selector Valve – BOTH
5. Cowl Flaps – OPEN

**MAX PERFORMANCE CLIMB**

1. Airspeed -- 80 KIAS at Sea level to 72 KIAS at 10,000 feet
2. Power – Full Throttle and 2400 RPM
3. Mixture -- mixture may be leaned to MAX Power Fuel Flow Placard
4. Cowl Flaps – OPEN
5. Fuel Selector Valve -- BOTH

## CRUISE

1. Power – 15-23 In Hg. 2000-2400 RPM (No more than 80% is recommended)
2. Elevator and Rudder Trim – ADJUST
3. Mixture – LEAN
4. Cowl Flaps -- CLOSE

## DESCENT

1. Power – AS DESIRED
2. Mixture – ENRICH as required
3. COWL FLAPS -- CLOSE
4. Fuel Selector Valve – BOTH
5. Flaps – 0-10° (140 KIAS and below), 10-20° (120 KIAS and below), 20-Full (100 KIAS and below)

## BEFORE LANDING

1. Pilot and Passenger Seat Backs -- MOST UPRIGHT POSITION
2. Seats and Seat Belts –SECURED AND LOCKED
3. Fuel Selector Valve – BOTH
4. Mixture – RICH
5. Propeller – HIGH RPM
6. Landing/Taxi Lights – ON
7. Autopilot (if installed) – OFF

## LANDING

### NORMAL LANDING

1. Airspeed – 70-80 KIAS (flaps UP)
2. Flaps – 0-10° (140 KIAS and below), 10-20° (120 KIAS and below), 20-Full (100 KIAS and below)
3. Airspeed – 60-70 KIAS (flaps DOWN)
4. Power -- REDUCE to idle as obstacle cleared
5. Trim – ADJUST as desired
6. Touchdown – MAIN WHEELS FIRST
7. Landing Roll – LOWER NOSE WHEEL GENTLY
8. Braking – MINIMUM REQUIRED

**SHORT FIELD LANDING**

1. Airspeed – 70-80 KIAS (flaps UP)
2. Wing Flaps – Full DOWN (below 100 KIAS)
3. Airspeed – 60 KIAS (until flare)
4. Trim – Adjust as desired
5. Touchdown – MAIN WHEELS FIRST
6. Brakes – APPLY HEAVILY
7. Wing Flaps – RETRACT

**BALKED LANDING**

1. FULL THROTTLE and 2400 RPM
2. Wing Flaps – RETRACT TO 20°
3. Climb Speed – 55KIAS
4. Wing Flaps -- RETRACT slowly after reaching safe altitude and 70 KIAS
5. Cowl Flaps – OPEN

## AFTER LANDING

1. Wing Flaps – UP
2. Cowl Flaps -- OPEN

## SECURING AIRPLANE

1. Parking Brake – SET
2. Throttle -- IDLE
3. Avionics Power Switch, Electrical Equipment , Autopilot (if Installed) – OFF
4. Mixture –IDLE CUT OFF (pull full out)
5. Ignition Switch – OFF
6. Master Switch – OFF
7. Control Lock – INSTALL
8. Fuel Selector Valve—LEFT or RIGHT to prevent cross feeding

# AIRSPEEDS

## AIRSPEEDS FOR NORMAL OPERATION

Unless otherwise noted, the following speeds are based on a maximum weight of 3100 pounds and may be used for any lesser weight.

Takeoff:

Normal Climb Out……..70-80 KIAS

Short Field Takeoff, Flaps 10°, Speed at 50 Feet……58 KIAS

Enroute Climbs, Flaps Up:

Normal, Sea Level……85-95 KIAS

Best Rate-of-Climb, Sea Level……80 KIAS

Best Rate-of-Climb, 10,000 Feet……..72 KIAS

Best Angle-of-Climb, Sea Level……63 KIAS

Best Angle-of-Climb, 10,000 Feet……66 KIAS

Landing Approach: (2950 pounds)

Normal Approach, Flaps Up……70-80 KIAS

Normal Approach, Flaps Full……...60-70 KIAS

Short Field Approach, Flaps Full……....60 KIAS

Balked Landing: (2950 pounds)

Maximum Power, Flaps 20°……..55 KIAS

Maximum Recommended Turbulent Air Penetration Speed:

3100 Lbs……110 KIAS

2600 Lbs……101 KIAS

2100 Lbs……88 KIAS

Maximum Demonstrated Crosswind Velocity:

Takeoff or Landing……15 KNOTS

# EMERGENCY PROCEDURES

# AIRSPEEDS

## AIRSPEEDS FOR EMERGENCY OPERATION

Engine Failure after Takeoff:
- Wing Flaps Up……75 KIAS
- Wing Flaps Down……70 KIAS

Maneuvering Speed:
- 3100 Lbs……110 KIAS
- 2600 Lbs……101 KIAS
- 2100 Lbs……88 KIAS

Maximum Glide:
- 3100 Lbs……75 KIAS
- 2600 Lbs……70 KIAS
- 2100 Lbs……62 KIAS

Precautionary Landing With Engine Power……70 KIAS

Landing Without Engine Power:
- Wing Flaps Up……75 KIAS
- Wing Flaps Down……70 KIAS

# EMERGENCY PROCEDURES CHECKLIST

Procedures in the Emergency Procedures Checklist portion of this section shown in **bold faced** type are immediate action items which should be committed to memory

## ENGINE FAILURES

### ENGINE FAILURE DURING TAKEOFF ROLL

1. **Throttle – IDLE**
2. **Brakes – APPLY**
3. Wing Flaps – RETRACT
4. Mixture – IDLE CUT OFF
5. Ignition Switch – OFF
6. Master Switch – OFF

### ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. **Airspeed – 75 KIAS (flaps UP)**
   **70 KIAS (flaps DOWN)**
2. Mixture – IDLE CUT OFF
3. Fuel Selector Valve – push down and rotate to OFF
4. Ignition Switch – OFF
5. Wing Flaps – AS REQUIRED. (Full Recommended)
6. Master Switch – OFF
7. Cabin Door – UNLATCH
8. Land – STRAIGHT AHEAD

### ENGINE FAILURE DURING FLIGHT (Restart Procedures)

1. **Airspeed – 75 KIAS. (Best Glide Speed)**
2. **Fuel Selector Valve – BOTH**
3. **Auxiliary Fuel Pump Switch – ON**
4. **Mixture – RICH (if restart has not occurred)**
5. Ignition Switch – BOTH (or START if propeller is stopped)

# FORCED LANDINGS

## EMERGENCY LANDING WITHOUT ENGINE POWER

1. Passenger Seat Backs – MOST UPRIGHT POSITION
2. Seats and Seatbelts – SECURE
3. Airspeed – 75 KIAS (flaps UP)
   70 KIAS (flaps DOWN)
4. Mixture – IDLE CUTOFF
5. Fuel Selector Valve – Push down and rotate OFF
6. Ignition Switch – OFF
7. Wing Flaps – AS REQUIRED (Full recommended)
8. Master Switch – OFF (when landing is assured)
9. Doors – UNLATCH PRIOR TO TOUCHDOWN
10. Touchdown – SLIGHTLY TAIL LOW
11. Brakes – APPLY HEAVILY

## PRECAUTIONARY LANDING WITH ENGINE POWER

1. Passenger Seat Backs – MOST UPRIGHT POSITION
2. Seat and Seat Belts – SECURE
3. Airspeed – 75 KIAS
4. Wing Flaps -- 20°
5. Selected field – FLY OVER, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed
6. Avionics Power Switch and Electrical Switches – OFF
7. Wing Flaps -- Full (on final approach)
8. Airspeed – 70 KIAS
9. Master Switch – OFF
10. Doors – UNLATCH PRIOR TO TOUCHDOWN
11. Touchdown – SLIGHTLY TAIL LOW
12. Ignition Switch – OFF
13. Brakes – APPLY HEAVILY

### DITCHING

1. Radio – TRANSMIT MAYDAY on 121.5 MHz, giving location and intentions and SQUAWK 7700
2. Heavy Objects (in baggage area) – SECURE OR JETTISON (if possible)
3. Passenger Seat Backs – MOST UPRIGHT POSITION
4. Seats and Seat Belts – SECURE
5. Wing Flaps -- 20° to 30°
6. Power – ESTABLISH 300 FT/MIN DESCENT AT 65 KIAS

**NOTE**

If no power is available, approach at 70 KIAS with flaps up or at 65 KIAS with 10° flaps

7. Approach – High Winds, Heavy Seas – INTO THE WIND
   Light winds, Heavy Swells – PARALLEL TO SWELLS
8. Cabin Doors – UNLATCH
9. Touchdown – LEVEL ATTITUDE AT ESTABLISHED RATE OF DESCENT
10. Face – CUSHION at touchdown with folded coat
11. ELT – Activate
12. Airplane – EVACUATE through cabin doors. If necessary, open window and flood cabin to equalize pressure so doors can be opened
13. Life Vests and Raft – INFLATE WHEN CLEAR OF AIRPLANE

## FIRES

### DURING START ON GROUND

1. **Cranking – CONTINUE** to get a start which would suck the flames and accumulated fuel into the engine

If engine starts:

2. Power – 1700 RPM for a few minutes
3. Engine – SHUTDOWN and inspect for damage

If engine fails to start:

4. **Throttle – FULL OPEN**
5. **Mixture – IDLE CUT OFF**
6. **Cranking – CONTINUE**
7. **Fuel Selector Valve – Push down and rotate to OFF**
8. **Auxiliary Fuel Pump – OFF**
9. Fire Extinguisher – OBTAIN (have ground attendants obtain not installed)
10. Engine – SECURE
    a. Master Switch – OFF
    b. Ignition Switch – OFF
11. Parking Brake – RELEASE
12. Airplane – EVACUATE
13. Fire – EXTINGUISH using fire extinguisher, wool blanket, or dirt
14. Fire Damage – INSPECT repair damage or replace damaged components or wiring before conducting another flight

## ENGINE FIRE IN FLIGHT

1. **Mixture – IDLE CUT OFF**
2. **Fuel Selector Valve – Push down and rotate to OFF**
3. **Auxiliary Fuel Pump Switch – OFF**
4. **Master Switch – OFF**
5. Cabin Heat and Air – OFF (except overhead vents)
6. Airspeed – 100 KIAS (if fire is not extinguished, increase glide speed to find an airspeed – within airspeed limitations – which will provide an incombustible mixture)
7. Forced Landing – EXECUTE (as described in Emergency Landing without Engine Power)

## ELECTRICAL FIRE IN FLIGHT

1. **Master Switch – OFF**
2. **Vents, Cabin Air, Heat – CLOSED**
3. **Fire Extinguisher – AVTIVATE** (if available)
4. Avionics Power Switch – OFF
5. All Other Switches (except ignition switch) – OFF

**WARNING**

**AFTER DISCHARGING FIRE EXTINGUISHER AND ASCERTAINING THAT FIRE HAS BEEN EXTINGUISHED, VENTILATE THE CABIN**

6. Vents/Cabin Air/Heat – OPEN when it is ascertained that fire is completely extinguished

If fire has been extinguished and electrical power is necessary for continuance of flight to nearest suitable airport or landing area

7. Master Switch –ON
8. Circuit Breakers – CHECK for faulty circuit, do not reset
9. Radio Switches – OFF
10. Avionics Power Switch – ON
11. Radio/Electrical Switches – ON one at a time, with delay after each until short circuit is localized

## CABIN FIRE

1. **Master Switch – OFF**
2. **Vents/Cabin Air/Heat – CLOSED** (to avoid drafts)
3. **Fire Extinguisher – ACTIVATE** (IF AVAILABLE)

**WARNING**

**AFTER DISCHARGING FIRE EXTINGUISHER AND ASCERTAINING THAT FIRE HAS BEEN EXTINGUISHED , VENTILATE THE CABIN**

4. Vents/Cabin Air/Heat – OPEN when it is ascertained that fire is completely extinguished
5. Land the airplane as soon as possible to inspect for damage

## WING FIRE

1. **Landing/Taxi Light Switches – OFF**
2. **Navigation Light Switch – OFF**
3. **Strobe Light Switch – OFF**
4. **Pitot Heat Switch – OFF**

## STATIC SOURCE BLOCKAGE (Erroneous Instrument Reading Suspected)

1. **Static Pressure Alternate Source Valve -- PULL ON**
2. Airspeed – Consult appropriate calibration tables in Section 5

## LANDING WITH A FLAT MAIN TIRE

1. Approach – NORMAL
2. Wing Flaps – Full
3. Touchdown – GOOD MAIN TIRE FIRST, hold airplane off flat tire as long as possible. With aileron control
4. Directional Control – Maintain using brake on good wheel as required

## LANDING WITH A FLAT NOSE TIRE

1. Approach – NORMA
2. Flaps – AS REQUIRED
3. Touchdown – ON MAINS, hold nose wheel off the ground as long as possible
4. When nose wheel touches down, maintain full up elevator as airplane slows to stop

# ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTIONS

## AMMETER SHOWS EXCESSIVE RATE OF CHARGE (Full Scale Deflection)

1. Alternator – OFF
2. Nonessential Electrical Equipment – OFF
3. Flight – TERMINATE as soon as practical

## LOW VOLTAGE ANNUNCIATOR (VOLTS) ILLUMINATES DURING FLIGHT (Ammeter Indicates Discharge)

**NOTE**

Illumination of “VOLTS” on the annunciator panel may occur during low RPM conditions with an electrical load on the system such as during low RPM taxi. Under these conditions, the light will go out a t higher RPM. The master switch need not be recycled since an overvoltage condition has not occurred to deactivate the alternator system

1. Avionics Power Switch – OFF
2. Alternator Circuit Breaker – CHECK IN
3. Master Switch – OFF (both sides)
4. Master Switch – ON
5. Low Voltage Annunciator – CHECK OFF
6. Avionics Power Switch – ON

If low voltage illuminates again:

7. Alternator – OFF
8. Nonessential Radio and Electrical Equipment – OFF
9. Flight – TERMINATE as soon as practical

**VACUUM SYSTEM FAILURE**
**(Left Vacuum or Right Vacuum Annunciator Light (L VAC R) Illuminates).**

**CAUTION**

**IF VACUUM IS NOT WITHIN NORMAL OPERATING LIMITS, A FAILURE HAS OCCURRED IN THE VACUUM SYSTEM AND PARTIAL PANEL PRECOEDURES MAY BE REQUIRED FOR CONTINUED FLIGHT**

1. **Suction Gage – CHECK** to ensure vacuum within normal operating limits