EMERGENCY PROCEDURES

1986 Cessna 172P – N9345L

Avcon 180 HP Conversion

STC SA2800CE

Engine Failure During Takeoff Roll

1. **Throttle..... Idle**
2. **Brakes .....Apply**
3. Flaps ..... Retract
4. Mixture ..... Idle Cut Off
5. Ignition Switch .....Off
6. Master Switch……Off

Engine Failure Immediately After Takeoff

1. **Airspeed .....**
   70 KIAS (Flaps Up)
   65 KIAS (Flaps Down)
2. Mixture..... Idle Cut Off
3. Fuel Selector.....Off
4. Ignition .....Off
5. Wing Flaps..... As Required
6. Master Switch .....Off

Engine Failure During Flight (Restart)

1. **Airspeed ..... 75 KIAS**
2. **Carb Heat.....On**
3. **Fuel Selector ..... Both**
4. Mixture..... Rich
5. Ignition ..... Both (or START if propeller is stopped)
6. Primer .....In & Locked

Forced Landing Without Engine Power

1. Seats, Belts, Harness..SECURE
2. Airspeed.....70 KIAS (Flaps Up)
   65 KIAS (Flaps Down)
3. Mixture ..... Idle Cut Off
4. Fuel Selector ..... Off
5. Ignition ..... Off
6. Wing Flaps..... As Required (30° Recommended)
7. Master Switch..... Off
8. Doors ..... Unlatched Prior To Touchdown
9. Touchdown.....Slightly Tail Low
10. Brakes .....Apply Heavily

Precautionary Landing With Engine Power

1. Seats, Belts, Harness..SECURE
2. Wing Flaps.....20°
3. Airspeed..... 65 KIAS
4. Select Field .....Perform Fly Over Inspection
5. Avionics Power Switch & Electrical Switches ..... Off
6. Flaps ..... 30° on Final Approach
7. Airspeed..... 65 KIAS
8. Master Switch ..... Off
9. Doors ..... Unlatched Prior To Touchdown
10. Touchdown .....Slightly Tail Low
11. Ignition Switch..... Off
12. Brakes .....Apply Heavily

Engine Fire During Start

1. **Continue Cranking Engine**
2. If Engine Starts:..... Power 1700 RPM for a few minutes
3. Engine.... Shutdown and Inspect

If Engine Fails to Start:

4. **Throttle..... Full Open**
5. **Mixture ..... Idle Cut Off**
6. **Cranking .....Continue**
7. **Fire Extinguisher .....Obtain**
8. **Master/Ignition/Fuel ..... Off**
9. **Fire ..... Extinguish**
10. Fire Damage.....Inspect

Engine Fire in Flight

1. **Mixture ..... Idle Cut Off**
2. **Fuel Selector..... Off**
3. Master Switch..... Off
4. Cabin Heat & Air ..... Off (Except Overhead Vents)
5. Airspeed..... 100 KIAS (If fire is not extinguished, increase glide speed to find an airspeed, which will provide an incombustible mixture.)
6. Forced Landing w/o Engine Power .....Execute

Electrical Fire in Flight

1. **Master Switch.....Off (Leave Ignition On)**
2. **Avionics Power Switch….OFF**
3. **All Other Switches (Except Ignition) ..... Off**
4. **Vents/Cabin Air/Heat . Closed**
5. **Fire Extinguisher.....Activate**

Warning
After discharging an extinguisher within a closed cabin, ventilate the cabin.

If fire is extinguished & electrical power is necessary

6. Master Switch.....On
7. Circuit Breakers..... Check for Faulty circuit (Do Not Reset)
8. Radio Switches……OFF
9. Avionics Power Switch…ON
10. Radio/Electrical Switches on one at a time w/ delay after each to locate short.
11. Vent cabin when assured fire is extinguished

Cabin Fire

1. **Master Switch .....Off (Leave Ignition On)**
2. **Vents/Cabin Air/Heat . Closed**
3. **Fire Extinguisher ..... Activate**

Warning
After discharging an extinguisher within a closed cabin, ventilate the cabin.

4. Land...As soon as possible and inspect for damage

Wing Fire

1. **Navigation Lights.....Off**
2. **Strobe Lights .....Off**
3. **Pitot Heat.....Off**
4. **Landing/Taxi Lights.....Off**

Note

Sideslip to keep flames away from the fuel tank and cabin, and land as soon as possible using flaps only as required for final approach and touchdown.

Icing

1. Pitot Heat.....On
2. Turn back or change altitude to obtain an outside air temp that is less conducive to icing.
3. Pull cabin heat control to full out and open defroster outlet to obtain maximum windshield defroster airflow.
4. Open the throttle to increase engine speed and minimize ice build-up on propeller blades
5. Watch for signs of carburetor air filter ice and apply carburetor heat as required. An unexplained loss in engine speed could be caused by carburetor ice or air intake filter ice. Lean the mixture if carb heat is used continuously.
6. Plan a landing at the nearest airport. With an extremely rapid ice build-up, select a suitable "off airport" landing site.
7. With ice accumulation of ¼ inch or more on the wing leading edges, be prepared for significantly higher stall speed.
8. Leave wing flaps retracted. With a severe ice build-up on the horizontal tail, the change in wing wake airflow direction caused by wing flap extension could result in a loss of elevator effectiveness.
9. Open left window and if practical scrape ice from a portion of the windshield for visibility in landing approach.
10. Perform landing approach using a forward slip, if necessary, for improved visibility.
11. Approach at 80 to 90 KIAS depending upon the amount of accumulation.
12. Perform a landing in level attitude.

Ditching

1. Radio..... Transmit Mayday on 121.5 giving location and intentions and squawk 7700.
2. Heavy Objects.....Secure or Jettison.
3. Seats, Seat Belts, Shoulder Harnesses.....Secure
4. Approach
   High winds, heavy seas..... Into the Wind.
   Light winds, heavy swells ..... Parallel to swells.
5. Flaps .....20º to 30º
6. Power.....Est. a 300 FPM descent at 55 KIAS.

   Note

   If no power is available, approach at 70 KIAS with flaps up or at 65 KIAS with 10º flaps.
7. Cabin Doors ..... Unlatch
8. Touchdown.....Level attitude at established descent rate.
9. Face..... Cushion at touchdown with folded coat or seat cushion.
10. Airplane..... Evacuate through Cabin doors. If necessary, open window and flood cabin to equalize pressure so doors can be opened.
11. Life vests and raft ..... Inflate

For all other Emergency Abnormal Procedures. See the POH Section 3.

Airspeeds for Emergency Operations

Engine Failure After Takeoff:
Wing Flaps Up -- 70 KIAS
Wing Flaps Down -- 65 KIAS

Maneuvering Speed:
2550 Lbs – 105 KIAS
2150 Lbs – 95 KIAS
1750 Lbs – 85 KIAS

Maximum Glide:
2550 Lbs – 68 KIAS
2150 Lbs – 62 KIAS
1750 Lbs – 56 KIAS

Precautionary Landing With Engine Power – 65 KIAS

Landing Without Engine Power:
Wing Flaps Up – 70 KIAS
Wing Flaps Down – 65 KIAS

This checklist is a guide to coordinate Pilot Operating Handbook and STC data applicable to this particular aircraft only. The applicable Pilot Operating Handbook and STC installations remain the official documentation for this aircraft.
The pilot in command is responsible for complying with all items in the Pilot Operating Handbook and applicable STCs.

I certify this checklist has been reviewed for accuracy.

12/20/05

Wing Director of Maintenance **Date**

N9345L **060109**