

YOKOTA AERO CLUB CESSNA 172M N1840V / N22905

EMERGENCY CHECKLIST version 7.1 Date: 1 Feb 2014

**DO NOT REMOVE CHECKLIST
FROM AIRCRAFT**

NOTES

This emergency procedures checklist is intended to supplement the information contained in the Pilot's Operating Handbook (POH) and serve as a handy in-flight reference and instructional tool. Whenever time permits in an emergency situation, pilots should make use of all sources of information including the expanded text in the POH.

In any emergency situation the pilot's priorities should be

1. Maintain aircraft control.
2. Analyze the situation.
3. Take corrective action.

Procedures shown inside a dashed box are time critical steps that should be committed to memory so that they can be accomplished without referring to the checklist.

As time permits during the handling of an emergency the pilot should then use the checklist to confirm that all procedures in a dashed box have been accomplished.

"Land as soon as practicable" as used in this checklist means that the pilot should land at the nearest airfield that has a suitable runway (length, type surface) and weather appropriate for the pilot's proficiency and the type aircraft flown.

ENGINE FAIL DURING TAKEOFF ROLL
ENGINE FAIL IMMEDIATELY AFTER TAKEOFF
PARTIAL ENGINE LOSS
ENGINE FAIL DURING FLIGHT

EMERGENCY LANDING WITHOUT ENGINE POWER
PRECAUTIONARY LANDING WITH ENGINE POWER

DITCHING

ENGINE FIRE DURING START ON GROUND
ENGINE FIRE ON GROUND
ENGINE FIRE IN FLIGHT
WING FIRE

CABIN OR ELECTRICAL FIRE IN FLIGHT

LOW OIL PRESSURE WITH NORMAL OIL TEMP
LOW OIL PRESSURE WITH HIGH OIL TEMP
AMMETER INDICATES EXCESSIVE RATE OF CHARGE
AMMETER INDICATES DISCHARGE

LANDING WITH A FLAT MAIN TIRE SPIN
EMERGENCY DESCENT

CABIN DOOR OPEN IN FLIGHT AFTER EMERGENCY LANDING

RADIO FAILURE
ATC LIGHT SIGNALS

1. ENGINE FAILURE DURING TAKEOFF ROLL

1. THROTTLE IDLE
2. BRAKES APPLY
3. WING FLAPS RETRACT
4. MIXTURE CUT-OFF
5. IGNITION SWITCH OFF
6. MASTER SWITCH OFF

2. ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. AIRSPEED 80 MPH
2. MIXTURE CUT-OFF
3. FUEL SELECTOR VALVE OFF
4. IGNITION SWITCH OFF
5. WINGS FLAPS AS REQUIRED
6. MASTER SWITCH OFF

3. PARTIAL ENGINE LOSS

1. Fuel Selector Valve...SWITCH TO OPPOSITE TANK for 60 sec
2. Fuel Selector Valve.....SELECT

4. ENGINE FAILURE DURING FLIGHT

1. AIRSPEED **78 MPH**
2. PRIMER **CHECK IN**
3. IGNITION SWITCH **CHECK R, L, BOTH**
(START IF PROP IS STOPPED)
4. CARBURETOR HEAT **ON**
5. MIXTURE **FULL RICH**
6. FUEL SELECTOR VALVE **BOTH**
7. THROTTLE & MIXTURE **TRY DIFFERENT SETTINGS**

**If Power is Not Restored
Execute EMERGENCY LANDING
WITHOUT ENGINE POWER**

5. EMERGENCY LANDING WITHOUT ENGINE POWER

1. AIRSPEED **80 MPH**
 2. IGNITION SWITCH **OFF**
 3. MIXTURE **CUT-OFF**
 4. FUEL SELECTOR VALVE **OFF**
 5. SQUAWK **7700**
 6. RADIO CALL **MAYDAY**
 7. SEAT BELTS & HARNESSSES **TIGHTEN**
 8. CABIN DOORS . UNLATCH PRIOR TO TOUCHDOWN
- Once Landing is Assured**
9. ELT REMOTE SWITCH **ON**
 10. FLAPS **30° RECOMMENDED**
 11. FINAL APPROACH SPEED **69 MPH**
 12. MASTER SWITCH **OFF**
 13. TOUCHDOWN **SLIGHTLY TAIL LOW**
 14. BRAKES **AS REQUIRED**

6. PRECAUTIONARY LANDING WITH ENGINE POWER

1. SEAT BELTS & HARNESSSES TIGHTEN
 2. SQUAWK 7700
 3. RADIO CALL MAYDAY
 4. ELT REMOTE SWITCH ON
 5. WING FLAPS 20°
 6. AIRSPEED **70 MPH**
 7. SELECTED FIELD ... OVER FLY AND INVESTIGATE
 8. WING FLAPS UP WHEN SAFE TO DO SO
 9. AVIONICS POWER & ELECTRICAL SWITCHES OFF
- Once Landing is Assured**
10. FLAPS 40° ON FINAL APPROACH
 11. FINAL APPROACH SPEED **69 MPH**
 12. MASTER SWITCH .. OFF PRIOR TO TOUCHDOWN
 13. CABIN DOORS UNLATCH PRIOR TO TOUCHDOWN
 14. TOUCHDOWN SLIGHTLY TAIL LOW
 15. IGNITION SWITCH OFF AT TOUCHDOWN
 16. MIXTURE IDLE CUT-OFF AT TOUCHDOWN
 17. BRAKES AS REQUIRED

7. DITCHING

1. SQUAWK 7700
 2. RADIO CALL MAYDAY
 3. ELT REMOTE SWITCH ON
 4. LOOSE OBJECTS SECURE OR JETTISON
 5. SEAT BELTS & HARNESSSES TIGHTEN
- Approach**
6. HIGH WINDS, HEAVY SEAS INTO THE WIND
 7. LIGHT WINDS, HEAVY SWELLS PARALLEL TO SWELLS
 8. FLAPS 20° - 30°
 9. THROTTLE 300'/MIN DESCENT AT @ 70 MPH*
 10. *If engine power is not available, approach at 80 mph with flaps up or 70 mph with 10° flaps
- Touchdown**
11. CABIN DOORS UNLATCH PRIOR TO TOUCHDOWN
 12. TOUCHDOWN LEVEL ATTITUDE - MINIMIZE DESCENT
 13. FACE CUSHION AT TOUCHDOWN
- Evacuation**
14. AIRPLANE EVACUATE
 15. LIFE VESTS INFLATE

8. ENGINE FIRE DURING START ON GROUND

1. STARTER CONTINUE CRANKING
2. THROTTLE FULL OPEN

If Fire Continues

3. POWER 1700 RPM FOR A FEW MINUTES
4. ENGINE SHUTDOWN

If Engine Fails to Start

5. THROTTLE FULL OPEN
6. MIXTURE IDLE CUT-OFF
7. CRANKING CONTINUE
8. MASTER SWITCH OFF
9. IGNITION SWITCH OFF
10. FUEL SELECTOR VALVE OFF
11. ABANDON AIRCRAFT AND USE FIRE EXTINGUISHER

9. ENGINE FIRE WHILE ON GROUND

1. FUEL SELECTOR VALVE OFF
2. MIXTURE IDLE CUT-OFF
3. IGNITION SWITCH OFF
4. MASTER SWITCH OFF
5. ABANDON AIRCRAFT AND USE FIRE EXTINGUISHER

10. ENGINE FIRE IN FLIGHT

1. MIXTURE IDLE CUT-OFF
2. FUEL SELECTOR VALVE OFF
3. MASTER SWITCH OFF
4. CABIN HEAT / AIR OFF
5. AIRSPEED **110 MPH**

**Execute EMERGENCY LANDING
WITHOUT ENGINE POWER**

11. WING FIRE

1. LANDING/TAXI LIGHTS OFF IF LEFT WING AFFECTED
2. PITOT HEAT SWITCH OFF IF LEFT WING AFFECTED
3. NAVIGATION LIGHT SWITCH OFF
4. STROBE LIGHT SWITCH OFF
5. Slip to keep flames away from fuel tanks and cabin

ATC Light Signals

COLOR/TYPE OF SIGNAL	AIRCRAFT ON GROUND	AIRCRAFT IN FLIGHT
Steady Green —————	Cleared for takeoff	Cleared to land
Flashing Green - - - - -	Cleared for taxi	Return for landing (to be followed by steady green)
Steady Red —————	STOP	Give way to other aircraft and continue circling
Flashing Red - - - - -	Taxi clear of runway in use	Airport unsafe, do not land
Flashing White - - - - -	Return to starting point on airport	Not applicable
Alternating Red / Green - - - - -	Exercise extreme caution	Exercise extreme caution

Acknowledge all light signals by flashing landing light or rocking wings.

Transponder Codes

- 1200 VFR
 - 7500 HIJACK
 - 7600 LOST COMMUNICATION
 - 7700 EMERGENCY
- "MAYDAY-MAYDAY-MAYDAY"
"PAN – PAN – PAN"

Lost Procedure

- CLIMB
- CONSERVE
- COMMUNICATE
- CONFESS
- COMPLY

VFR Diversion

1. Determine position
2. Determine approx. heading to new destination using VOR compass rose
3. Turn to heading and note time
4. Climb or descend based on new magnetic course
5. Measure distance from present position to new destination
6. Calculate ground-speed and WCA based on planned TAS (convert wind-drift to magnetic)
7. Determine ETE based on GS and distance
8. Calculate fuel burn based on ETE and remaining fuel
9. Communicate new destination, ETE and fuel remaining to FSS

CROSSWIND COMPONENT CHART Reference Checklist Supplement

YOKOTA AB (042-552-2510)

BASE OPERATION...225-7214 (EXT 5-7214)
AERO CLUB.....225-8988 (EXT 5-8988)
VICTOR ARZUAGA CELL...090 9594 3683

12. CABIN OR ELECTRICAL FIRE WHILE IN FLIGHT

1. MASTER SWITCH..... OFF
 2. WING ROOT VENTS CLOSED
 3. CABIN AIR / HEAT OFF
 4. VENTS & CABIN AIR/HEAT OPEN WHEN FIRE IS OUT
 5. LAND AS SOON AS PRACTICABLE
- If Fire Appears Out and Electrical Power is Necessary for Continued Flight**
6. ALL SWITCHES BUT IGNITION OFF
 7. CIRCUIT BREAKERS.....CHECK (Do NOT RESET)
 8. MASTER SWITCH.....ON
 9. ELECTRICAL SWITCHES ON, ONE AT A TIME

13. LOW OIL PRESSURE WITH NORMAL OIL TEMPERATURE

1. Throttle...Make Minimum Power Changes
2. Conserve Altitude Until Landing is Assured
3. Land as Soon as Practicable

14. LOW OIL PRESSURE WITH HIGH OIL TEMPERATURE

1. THROTTLE REDUCE POWER TO MINIMUM NECESSARY
2. EXECUTE .. PRECAUTIONARY LANDING WITH POWER

15. AMMETER INDICATES EXCESSIVE RATE OF CHARGE

1. ALTERNATOR CIRCUIT BREAKER PULL
2. NONESSENTIAL EQUIPMENT OFF
3. FLIGHT TERMINATE AS SOON AS PRACTICAL

16. AMMETER INDICATES DISCHARGE

1. AVIONICS SWITCH OFF
2. ALTERNATOR CIRCUIT BREAKER . CHECK/RESET
3. MASTER SWITCHES OFF THEN ON
4. AMMETER..... CHECK BATTERY IS CHARGING
5. AVIONICS SWITCH ON

If Low-Voltage Light Remains On
or

6. AMMETER Still Indicates Discharge
7. NONESSENTIAL EQUIPMENT OFF
7. LAND AS SOON AS PRACTICABLE

Note: If Master Switch is turned OFF after battery has drained below current level to activate battery contactor, subsequent activation of Master Switch will be ineffective.

17. LANDING GEAR – FLAT MAIN TIRE

Use Fuel Selector to Reduce Weight on the Side of the Flat Tire
If Practicable, Land with Crosswind From the Side Opposite the Flat Tire

1. FLAPS AS DESIRED
2. ALIGN WITH THE SIDE OF THE RUNWAY OF THE GOOD TIRE
3. TOUCHDOWN SLIGHTLY WING-LOW ON SIDE OF GOOD TIRE
4. LOWER NOSE WHEEL FOR DIRECTIONAL CONTROL
5. AILERON...WEIGHT OFF FLAT TIRE AS LONG AS POSSIBLE
6. BRAKING ON GOOD WHEEL ONLY

18. LANDING GEAR – FLAT NOSE TIRE

1. FLAPS 30° (FULL DOWN)
2. TOUCHDOWN.....ON RUNWAY CENTERLINE
3. YOKE... FULL AFT - MINIMIZE WEIGHT ON NOSE WHEEL
4. BRAKING MINIMUM REQUIRED

19. SPIN

1. THROTTLE IDLE
2. AILERONS NEUTRAL
3. RUDDER FULL OPPOSITE DIRECTION OF THE SPIN
4. CONTROL WHEEL FORWARD – BREAK STALL
5. RUDDER . NEUTRALIZE WHEN ROTATION STOPS
6. ELEVATOR RECOVER SMOOTHLY FROM ENSUING DIVE

20. EMERGENCY DESCENT

1. CARB HEAT ON
2. THROTTLE IDLE
3. MIXTURE FULL RICH
4. FLAPS DOWN
5. AIRSPEED..... 100 MPH

21. CABIN DOOR OPEN IN FLIGHT

1. Fly the Airplane This is not an emergency
2. Land Close Door After Aircraft Stops
If Landing is Impractical
3. CLIMB SAFE ALTITUDE W/AIRCRAFT UNDER CONTROL
4. AIRSPEED..... 70 MPH
5. CABIN VENTS CLOSED
6. WINDOW OPEN
7. PUSH DOOR OPEN THEN SLAM IT CLOSED

22. AFTER EMERGENCY LANDING

1. MASTER SWITCH..... CONFIRM OFF
 2. ELT ACTIVATE
 3. ABANDON AIRCRAFT UNTIL ALL DANGER OF FIRE IS PASSED
- When it is safe to return to the aircraft**
4. ELT REMOVE AND INSTALL ANTENNA – TURN ON
(ELT is behind the rear panel in the baggage area)
 5. MAKE PERIODIC MAYDAY CALLS AND MONITOR 121.5 FOR INSTRUCTIONS

23. AUTOPILOT FAILURE

1. AUTOPILOT MASTER SWITCH OFF
2. AUTOPILOT CIRCUIT BREAKER PULL

23. RADIO FAILURE

1. AUDIO CONTROLS CHECK VOLUME/SQUELCH/ALL
2. GARMIN 650 CONFIRM AUTOSQUELCH ON
3. CIRCUIT BREAKERS..... CHECK

Allow breakers to cool 3 minutes before resetting. Never reset a breaker more than ONCE

4. ALL CONNECTIONS..... CHECK
5. ATTEMPT CONTACT ON ANOTHER FREQUENCY
6. SPEAKER..... ON
7. TRANSPONDER 7600
8. CONTINUE TRANSMISSIONS (ONLY RECEIVER MAY BE INOP)

1. Monitor Airport Traffic Pattern activity.
2. Descend and maintain 1500 feet MSL.
3. Enter midpoint west side downwind leg.
4. Wait for light signals from Tower.

IF ANY DISCREPANCIES ARE FOUND, PLEASE NOTIFY THE AERO CLUB STAFF AND ANNOTATE DISCREPANCIES ON MAINTENANCE FORM AND DISPATCH PROGRAM.

