YOKOTA AERO CLUB
CESSNA 172 T-41
N4972R / N5241F

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.

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 ..... 86 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 ..... **86 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 ..... **86 MPH**
2. Ignition Switch ..... **OFF**
3. Mixture ..... **CUT-OFF**
4. Fuel Selector Valve ..... **OFF**
5. Squawk **7700**
6. Radio Call ..... **MAYDAY**
7. Seat Belts & Harnesses ..... **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 ..... **70 MPH**
12. Master Switch ..... OFF
13. Touchdown ..... **Slightly Tail Low**
14. Brakes ..... **AS REQUIRED**

6. PRECAUTIONARY LANDING WITH ENGINE POWER

1. Seat Belts & Harnesses ..... Tighten
2. Squawk 7700
3. Radio Call ..... MAYDAY
4. ELT Remote Switch ..... ON
5. Wing Flaps ..... 20°
6. Airspeed ..... **76 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 ..... 30° On Final Approach
11. Final Approach Speed ..... **70 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 & Harnesses ..... 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 @ 76 MPH*
10. *If engine power is not available, approach at 86 mph with flaps up or 81 mph with 10° flaps

Touchdown

11. Cabin Doors Unlatch Prior to Touchdown
12. Touchdownlevel 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
Ammeter Still Indicates Discharge

6. 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. **RudderFull 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 DECSENT

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 AirplaneThis 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..... **76 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)

If Radio is Still Operative

5. Make Periodic Mayday Calls and Monitor **121.5** for instructions

23. AUTOPILOT FAILURE

1. Autopilot Master Switch ..... OFF
2. Autopilot Circuit Breaker .....PULL

24. RADIO FAILURE

1. Audio Controls ..... Check volume/squelch/all
2. Garmin 430..... 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.

AERO CLUB
FLIGHT TRAINING CENTER