

Bridgewater State College

Cessna 172

EMERGENCY Procedures Checklist

7/30/2009 ISSUE

V/R ENGINE FIRE DURING START

Ignition.....CONTINUE CRANKING

IF ENGINE STARTS.....1700 RPM for 1 MINUTE

Fuel Shutoff Valve.....OFF

Mixture.....IDLE CUTOFF

Throttle.....FULL FORWARD

IF ENGINE DOES NOT START

Throttle.....FULL FORWARD

Mixture.....IDLE CUTOFF

Fuel Shutoff Valve.....OFF

Aircraft.....EVACUATE

Checklist.....COMPLETE

V/R ENGINE FIRE DURING TAKEOFF (BEFORE V_R)

Directional Control.....MAINTAIN

Throttle.....IDLE

Brakes.....APPLY

Mixture.....IDLE CUTOFF

Fuel Shutoff Valve.....OFF

Master Switch.....OFF

Ignition.....OFF

Stop.....STRAIGHT AHEAD

Aircraft.....EVACUATE

Checklist.....COMPLETE

V/R ABORTED TAKEOFF (BEFORE V_R)

Directional Control.....MAINTAIN

Throttle.....IDLE

Brakes.....APPLY

Stop.....STRAIGHT AHEAD

Checklist.....COMPLETE

V/R ENGINE FAILURE BEFORE V_R (USABLE RUNWAY)

Directional Control.....MAINTAIN

Throttle.....IDLE

Brakes.....APPLY

Stop.....STRAIGHT AHEAD

Shutdown.....EXECUTE

Checklist.....COMPLETE

V/R ENGINE FAILURE AFTER V_R (USABLE RUNWAY)

Airspeed.....ESTABLISH BEST GLIDE

Directional Control.....MAINTAIN

Mixture.....IDLE CUTOFF

Fuel Shutoff Valve.....OFF

All Switches (except Master).....OFF

Land.....STRAIGHT AHEAD

Stop.....STRAIGHT AHEAD

Checklist.....COMPLETE

V/R ENGINE FAILURE AFTER V_R (OUT OF USABLE RUNWAY)

Airspeed.....ESTABLISH BEST GLIDE

Directional Control.....MAINTAIN

RESTART (Time Permitting).....ATTEMPT

IF NO TIME / NO RESTART:

Mixture.....IDLE CUTOFF

Fuel Shutoff Valve.....OFF

All Switches (except Master & Avionics).....OFF

Radio.....MAYDAY

ON CURRENT FREQUENCY OR 121.5

Transponder.....SQUAWK 7700

Flaps.....AS REQUIRED

Master Switch.....OFF

Doors.....UNLATCH

Seatbelts/Shoulder Harnesses.....SECURED

Landing.....MINIMUM AIRSPEED

Checklist.....COMPLETE

V/R ENGINE POWER LOSS IN FLIGHT

Airspeed.....ESTABLISH BEST GLIDE

Heading.....NEAREST AIRPORT

Throttle.....CHECK FULL FWD

Fuel Shutoff Valve.....ON

Mixture.....RICH

Fuel Selector.....BOTH

Auxiliary Fuel Pump.....ON

Ignition.....CHECK BOTH ON

Land.....AS SOON AS POSSIBLE

Checklist.....COMPLETE

V/R LOW OIL PRESSURE

Throttle.....MINIMUM REQUIRED

Heading.....NEAREST AIRPORT

Land.....AS SOON AS POSSIBLE

Checklist.....COMPLETE

V/R ENGINE FAILURE IN FLIGHT/AIR RESTART

Airspeed.....ESTABLISH BEST GLIDE

Fuel Shutoff Valve.....ON

Fuel Selector.....BOTH

Auxiliary Fuel Pump.....ON

Mixture.....RICH

Throttle.....OPEN ¼ INCH

Master Switch.....ON

Ignition.....CHECK BOTH ON

(Engage If Propeller Stopped)

IF NO RESTART:

Forced Landing Checklist.....EXECUTE

Checklist.....COMPLETE

V/R ENGINE FIRE IN FLIGHT

Mixture.....IDLE CUTOFF

Throttle.....IDLE

Fuel Shutoff Valve.....OFF

Auxiliary Fuel Pump.....OFF

Ignition Switch.....OFF

Master Switches.....OFF

Cabin Air Vents.....CLOSED

Emergency Descent.....EXECUTE

Forced Landing Checklist.....EXECUTE

Checklist.....COMPLETE

V/R CABIN FIRE IN FLIGHT

Master Switches.....OFF
All Other Switches (except Ignition).....OFF
Cabin Heat.....CLOSED
Cabin Air Vents.....CLOSED
Fire Extinguisher (If Installed).....ACTIVATE
Cabin Air Vents (Fire Extinguished).....OPEN
Windows.....OPEN

Battery Master.....ON, If Possible
Land.....AS SOON AS POSSIBLE
Checklist.....COMPLETE

V/R WING FIRE IN FLIGHT

Pitot Heat.....OFF
Navigation Lights.....OFF
Strobe Lights.....OFF
Landing/Taxi Lights.....OFF

Sideslip.....EXECUTE
Land.....AS SOON AS POSSIBLE
Checklist.....COMPLETE

V/R FUEL PRESSURE DROP/LOSS

Auxiliary Fuel Pump.....ON
Fuel Selector.....BOTH
Land.....AS SOON AS PRACTICAL
Checklist.....COMPLETE

V/R ALTERNATOR FAILURE

ALT Circuit Breaker.....CHECK – IN
Ammeter.....CHECK FOR DISCHARGE
If Circuit Breaker IN.....CYCLE ALT SWITCH
If Circuit Breaker OUT (Tripped)

Time.....NOTE
All Electrical/Master Switches.....OFF 15 SEC
ALT Circuit Breaker.....RESET

If ALT Circuit Breaker Fails to Reset

Battery Voltage.....CHECK
Electrical Load.....REDUCE
ALT CTL/GRD FAULT Brkrs.....PULL

Land.....AS SOON AS PRACTICABLE
Checklist.....COMPLETE

V/R LOW VOLTAGE INDICATION

Ammeter.....CHECK FOR DISCHARGE
ALT Circuit Breaker.....CHECK
If Circuit Breaker IN.....CYCLE ALT SWITCH
Electrical Load.....REDUCE
ALT CTL/ALT GRD FAULT Brkrs.....PULL
ALT Master Switch.....RECYCLE

If Voltage Drop Continues:

Land.....AS SOON AS PRACTICAL
Checklist.....COMPLETE

V/R EMERGENCY DESCENT

Mixture.....RICH
Throttle.....IDLE
Airspeed.....AS REQUIRED
Checklist.....COMPLETE

Maximum Glide.....65 KIAS

V/R FORCED LANDING

Airspeed.....ESTABLISH BEST GLIDE
Mixture.....IDLE CUTOFF
Fuel Shutoff Valve.....OFF
Radio.....MAYDAY
ON CURRENT FREQUENCY OR 121.5
Transponder.....SQUAWK 7700
ELT (If Off Airport).....ACTIVATE
All Electrical Switches (Except Master).....OFF
Flaps.....AS REQUIRED

Master Switch.....OFF

WHEN LANDING ASSURED
Seatbelts/Shoulder Harnesses.....SECURED
Loose Items.....SECURED
Doors.....UNLATCH

Approach to Landing Area.....STABILIZED
Touchdown.....MINIMUM AIRSPEED
Checklist.....COMPLETE

V/R LANDING W/ FLAT MAIN TIRE

Radio.....TRANSMIT CONDITION/INTENTIONS
Approach.....FLY NORMAL APPROACH
Land.....SIDE OF RWY OPPOSITE FLAT TIRE

Touchdown.....GOOD MAIN TIRE FIRST
Directional Control.....MAINTAIN
Normal Shutdown.....EXECUTE, DO NOT TAXI

NOTE

If a flat tire or tire separation occurs during takeoff and an aborted takeoff is not possible, land as soon as practicable.

V/R LANDING W/ FLAT NOSE TIRE

Radio.....TRANSMIT CONDITION/INTENTIONS
Approach.....FLY NORMAL APPROACH
Land.....CENTER OF RWY
Touchdown.....SOFT-FIELD TECHNIQUE
Directional Control.....MAINTAIN
Normal Shutdown.....EXECUTE, DO NOT TAXI

V/R DITCHING

Radio.....MAYDAY
ON CURRENT FREQUENCY OR 121.5
Transponder.....SQUAWK 7700
Loose Objects.....SECURE, KEEP EXITS CLEAR
Seatbelts/Shoulder Harnesses.....SECURE
Doors/Windows.....UNLATCH
Flaps.....FULL DOWN, if possible
ELT.....ACTIVATE

Descent.....300 ft/min @ 55 KIAS
Approach.....PARALLEL SWELLS (If Possible)
Touchdown.....Landing Attitude @ MIN. AIRSPEED
Aircraft.....EVACUATE
Life Vests/Raft (If Installed).....INFLATE

NOTE

The above ditching procedures have not been demonstrated in the aircraft.