



3. EMERGENCY PROCEDURES # 1/2

3.2 Indicated Airspeeds for performing emergency procedures

Airspeed for the best gliding ratio (flaps retracted)

57 KIAS 66 mph 106 km/h

Precautionary landing (engine running, flaps in landing pos. 50°)

52 KIAS 60 mph 96 km/h

Emergency landing (engine stopped, flaps in landing pos. 50°)

52 KIAS 60 mph 96 km/h

3.3 Engine failure

3.3.1 Engine failure at take-off run

- | | |
|-------------------|--------------|
| 1. THROTTLE lever | idle |
| 2. Brakes | as necessary |
| 3. FUEL SELECTOR | OFF |
| 4. Ignition | OFF |
| 5. Master switch | OFF |

3.3.2 Engine failure at take-off

- | | |
|---|---|
| 1. Gliding speed | with flaps in take-off position (15°):
min. 52 KIAS / 60 mph / 96 km/h
with flaps retracted (0°):
min. 57 KIAS / 66 mph / 106 km/h |
| 2. Altitude: | |
| - Land in take-off direction if below 150 ft: | |
| - Land in take-off direction or you can perform turn up to 90° if altitude is 150 - 400 ft: | |
| - You can try start engine if altitude is above 250 ft | |
| - You can perform turn up to 180° if altitude is above 400 ft: | |
| 3. THROTTLE lever | idle |
| 4. Flaps | as needed |
| 5. FUEL SELECTOR | OFF |
| 6. Ignition | OFF |
| 7. ATC | report |
| 8. Master switch | OFF |
| 9. After touch down | brake as needed |

3.3.3 Engine failure in flight

- | | |
|---|--------------------------------|
| 1. Gliding speed | 57 KIAS / 66 mph / 106 km/h |
| 2. Altitude | take a decision and carry out: |
| - Engine starting in flight - paragraph 3.4 | |
| - Emergency landing - paragraph 3.8.1 | |

3.4 Engine starting at flight

NOTE

It is possible to start the engine by means of the starter within the whole range of operation speeds as well as flight altitudes. The engine started up immediately after switching the ignition to START position. If the engine is shut down, the altitude loss during engine starting can reach up to 1000 ft.

- | | |
|-------------------------------------|--|
| 1. Gliding speed | 57 KIAS / 66 mph / 106 km/h |
| 2. Altitude | check |
| 3. Master switch | ON |
| 4. Unnecessary electrical equipment | switch off |
| 5. FUEL SELECTOR | LEFT |
| 6. Choke | as needed |
| 7. THROTTLE lever | idle (choke opened) or increased idle (closed) |

The propeller is rotating:

- | | |
|-------------|------|
| 8. Ignition | BOTH |
|-------------|------|

3.3.4 Engine starting at flight (contin.)

The propeller is not rotating:

- | | |
|--|-------|
| 9. Ignition | START |
| 10. If engine starting does not occur, increase gliding speed up to 108 KIAS (124 mph IAS) (see NOTE), so that air-flow turns the propeller and engine will start. | |
| 11. Ignition | BOTH |
| 12. If engine starting is unsuccessful, then continue according to paragraph 3.8.1 Emergency landing. | |

3.5 Engine fire

3.5.1 Fire on the ground

- | | |
|---------------------------------------|-------|
| 1. FUEL SELECTOR | OFF |
| 2. Brakes | brake |
| 3. THROTTLE lever | full |
| 4. HOT AIR knob (if installed) | push |
| 5. After the engine stops: | |
| 6. Ignition | OFF |
| 7. Master switch | OFF |
| 8. Airplane | leave |
| 9. Manual extinguisher (if available) | use |

3.5.2 Fire during take-off

- | | |
|--------------------------------|-----------------------------|
| 1. FUEL SELECTOR | OFF |
| 2. THROTTLE lever | full |
| 3. Airspeed | 62 KIAS / 71 mph / 115 km/h |
| 4. HOT AIR knob (if installed) | push |

After the engine stops:

- | | |
|--|----------------------------|
| 5. Gliding speed | 52 KIAS / 60 mph / 96 km/h |
| 6. Ignition | OFF |
| 7. Master switch | OFF |
| 8. Land | |
| 9. Airplane | leave |
| 10. Manual extinguisher (if available) | use |

3.5.3 Fire in flight

- | | |
|--------------------------------|-----------------------------|
| 1. FUEL SELECTOR | OFF |
| 2. THROTTLE lever | full |
| 3. HOT AIR knob (if installed) | close |
| 4. Gliding speed | 57 KIAS / 66 mph / 106 km/h |
| 5. Ignition | OFF |
| 6. ATC | report if possible |
| 7. Master switch | OFF |

NOTE

For extinguishing the engine fire, you can perform slip under assumption that you have sufficient altitude and time.

WARNING

After extinguishing the engine fire start engine only if it necessary to safe landing. Fuel leak in engine compartment could cause Fire and fire could restore again.

- | | |
|---|--|
| 8. If you start engine again, switch off all switches, switch on the Master switch, and then subsequently switch on only equipment necessary to safe landing. | |
| 9. Emergency landing | carry out according to paragraph 3.8.1 |
| 10. Airplane | leave |
| 11. Manual extinguisher (if available) | use as needed |



3. EMERGENCY PROCEDURES # 2/2

3.6 Fire in the cockpit (if manual extinguisher available aboard)

1. Fire source identify
2. Master switch in case that the source of fire is electrical equipment. OFF
3. Manual extinguisher use
4. After fire extinguishing aerate the cockpit
5. Carry out safety landing according to 3.8.2

WARNING

Never again switch the defective system.

NOTE

If a defective electrical system circuit was detected as the fire source, then switch off appropriate circuit breaker and switch over Master switch to ON position.

3.7 Gliding flight

NOTE

Gliding flight can be used for example in case of engine failure.

Wing flaps position	Retracted (0°)	Take-off (15°)
Airspeed	57 KIAS 66 mph 106 km/h	52 KIAS 60 mph 96 km/h

3.8 Emergency landing

3.8.1 Emergency landing - with non-operating engine

1. Airspeed 57 KIAS / 66 mph / 106 km/h
2. Landing area choose, determine wind direction
3. Safety harness tighten up
4. Flaps landing position (50°)
5. Airspeed 48 KIAS / 55 mph / 89 km/h
6. Radiostation notify situation to ATC if possible
7. FUEL SELECTOR OFF
8. Ignition OFF
9. Master switch OFF before touch down

3.8.2 Safety landing - with engine operating

1. Area for landing choose, determine wind direction, carry out passage flight with speed of 59 KIAS/ 68 mph/ 109 km/h, flaps in take-off position (15°)
2. Radiostation notify situation to ATC - if possible
3. Safety harness tighten up
4. Flaps landing position (50°)
5. Airspeed 48 KIAS / 55 mph / 89 km/h
6. Landing carry out

3.8.3 Landing with burst tire

CAUTION

When landing at holding, keep the wheel with burst tire above the ground as long as possible by means of ailerons. In case of nose wheel by means of elevator.

1. At running hold airplane direction by means of foot control and brakes

3.8.4 Landing with damaged landing gear

1. In case of nose landing gear damage touch down at the lowest possible speed and try to keep the airplane on main landing gear wheels as long as possible
2. In case of main landing gear damage touch down at the lowest possible speed and if possible keep direction at running

3.9 Unintentional spin recovery

NOTE

The airplane has not, when using normal techniques of pilotage, tendency to go over to spin spontaneously.

Standard procedure of recovery from spin:

1. THROTTLE lever idle
2. Control stick ailerons - neutral position
3. Pedals kick the rudder pedal against spin rotation
4. Control stick direction push forward and hold it there until rotation stops
5. Pedals immediately after rotation stopping, set the rudder to neutral position
6. Control stick recover the diving

CAUTION

Altitude loss per one turn and recovering from the spin is 500 up to 1000 ft.

3.10 Other emergency procedures

3.10.1 Vibration

1. If abnormal vibrations occur on the airplane then:
2. Set engine RPM to the mode in which the vibrations are the lowest
3. Land on the nearest possible airport, possibly perform safety landing according to par. 3.8.2. Safety landing.

3.10.2 Carburettor icing

Carburettor icing happens when air temperature drop in the carburettor occurs due to its acceleration in the carburettor and further cooling by evaporating fuel. Carburettor icing mostly happens during descending and approaching for landing (low engine RPM). Carburettor icing shows itself by engine power decreasing and by engine temperature increasing. Recommended procedure for engine power regeneration is as follows:

1. CARBURETTOR PREHEATER ON (if installed)
2. THROTTLE lever set idle and cruising power again

NOTE

Ice coating in the carburettor should be removed by decrease and reincrease of engine power.

3. If the engine power is not successfully increased, then carry out landing at the nearest suitable airport or, if it is not possible, carry out precautionary landing according to par. 3.8.2 Precautionary landing.