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RGT



EMERGENCY PROCEDURES CHECKLIST

NOT INTENDED FOR REAL FLIGHTS.



AIRSPEED FOR EMERGENCY OPERATION

Engine Failure After Takeoff:

Wing flaps up	70 KIAS
Wing flaps down	65 KIAS

Maneuvering Speed:

3100 Lbs	112 KIAS
2550 Lbs	101 KIAS
2000 Lbs	89 KIAS

Maximum glide:

3100 Lbs	80 KIAS
2550 Lbs	72 KIAS
2000 Lbs	64 KIAS

Precision Landing with Engine Power	65 KIAS
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Landing without engine power:

Wing flaps up	75 KIAS
Wing flaps down	65 KIAS

OPERATIONAL CHECKLIST

ENGINE FAILURES

ENGINE FAILURE DURING TAKE OFF RUN

1. Throttle – IDLE
2. Brakes – APPLY
3. Wing flaps – RETRACT
4. Mixture – IDLE CUTOFF
5. Ignition Switch – OFF
6. Master Switch – OFF



ENGINE FAILURE IMMEDIATELY AFTER TAKE OFF

1. Airspeed – 70 KIAS (Flaps up)
65 KIAS (Flaps down)
2. Mixture – IDLE CUTOFF
3. Fuel Selector Valve – OFF
4. Ignition switch – OFF
5. Wing Flaps – AS REQUIRED (40° recommended)
6. Master Switch – OFF

ENGINE FAILURE DURING FLIGHT

1. Airspeed – 80 KIAS
2. Carburetor Heat – ON
3. Fuel Selector Valve – BOTH
4. Mixture – RICH
5. Ignition Switch – BOTH (or START if propeller is stopped)
6. Primer – IN and LOCKED

FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

1. Airspeed – 70 KIAS (flaps UP)
65 KIAS (Flaps Down)
2. Mixture – IDLE CUTOFF
3. Fuel selector Valve – OFF
4. Ignition Switch – OFF
5. Landing gear – DOWN (UP if terrain is rough or soft)
6. Wing Flaps – AS REQUIRED (40° recommended)
7. Doors – UNLATCH PRIOR TO TOUCHDOWN
8. Master Switch – OFF when landing is assured
9. Touchdown – SLIGHTLY TAIL LOW
10. Brakes – APPLY HEAVILY.



PRECAUTIONARY LANDING WITH ENGINE POWER

1. Airspeed – 65 KIAS
2. Wing flaps – 20°
3. Selected field – FLY OVER, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed.
4. Electrical Switches – OFF
5. Landing gear – DOWN (UP if terrain is rough soft)
6. Wing flaps – 40° (on initial approach)
7. Airspeed – 65 KIAS
8. Doors – UNLATCH PRIOR TO TOUCHDOWN
9. Avionics Power and Master Switches – OFF
10. Touchdown – SLIGHTLY TAIL LOW
11. Ignition Switch – OFF
12. Brakes – APPLY HEAVILY

DITCHING

1. Radio – TRANSMIT MAYDAY on 121.5 MHz, giving location and intentions
2. Heavy Objects (in baggage area) – SECURE OR JETTISON
3. Landing gear – UP
4. Flaps – 20° -40°
5. Power – ESTABLISH 300FT/MIN DESCENT at 60 KIAS
6. Approach – High Winds, Heavy seas – INTO THE WIND
Light Winds, Heavy Swells – PARALLEL TO SWELLS

NOTE

When the nose wheel is lifted, the gear motor may run 1-2 seconds to restore hydraulic pressure.

7. Cabin Doors – UNLATCH
8. Touchdown – LEVEL ATTITUDE AT ESTABLISHED DESCENT.
9. Face – CUSHION at touchdown with folded coat
10. Airplane – EVACUATE through cabin doors. If necessary, open windows and flood cabin to equalize pressure so doors can be opened.
11. Life vest and raft – INFLATE



FIRES

DURING START ON GROUND

1. Cranking – CONTINUE, to get a start which would suck the flames and accumulated fuel through the carburetor and into the engine

If engine starts:

2. Power – 1700 RPM for a few minutes
3. Engine – SHUTDOWN and inspect for damage

If engine fails to start:

4. Throttle – FULL OPEN
5. Mixture – IDLE CUTOFF
6. Cranking – CONTINUE
7. Fire Extinguisher – OBTAIN (Have ground attendants obtain if not installed)
8. Engine – SECURE
 - a. Master Switch – OFF
 - b. Ignition Switch – OFF
 - c. Fuel Selector Valve – OFF
9. Fire – EXTINGUISH using fire extinguisher, wool blanket, or dirt.
10. Fire Damage – INSPECT, repair damage or replace damaged components or wiring before conducting another flight.

ENGINE FIRE INFLIGHT

1. Mixture – IDLE CUTOFF
2. Fuel Selector Valve – OFF
3. Master Switch – OFF
4. Cabin heat and 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 – EXECUTE (as described in Emergency Landing without Engine Power)

ELECTRICAL FIRE IN FLIGHT

1. Master Switch– OFF
2. Avionics Power Switch – OFF
3. All others Switches (Except ignition switch) – OFF
4. Vents/Cabin Air/Heat -- CLOSED
5. Fire Extinguisher – ACTIVATE (if available)

WARNING

After discharging an extinguisher within a closed cabin, ventilate the cabin.
If fire appears out and electrical power is necessary for continuance of flight.

6. Master Switch – ON
7. Circuit Brakers – CHECK for faulty circuit, do not reset.
8. Radio Switches – OFF
9. Avionics Power Switch – ON
10. Radio/Electrical Switches – ON one at time, with delay after each until short circuit is localized
11. Vents/Cabin Air/ Heat – OPEN when it is ascertained that fire is completely extinguished.

CABIN FIRE

1. Master Switch – OFF
2. Vents/Cabin Air/Heat – CLOSED (To avoid drafts)
3. Fire Extinguisher – ACTIVATE (if available)

WARNING

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

4. Land the airplane as soon as possible to inspect the damage.

WING FIRE

1. Navigation light Switch – OFF
2. Strobe light switch (if installed) – OFF
3. Pitot heat switch (if installed) – OFF

NOTE

Perform a sideslip to keep the 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

INADVERTENT ICING ENCOUNTER

1. Turn pitot heat switch ON (if installed)
2. Turn back or change altitude to obtain an outside air temperature that is less conducive to icing.
3. Pull cabin heat control full out and rotate defroster control clock-wise to obtain maximum defroster air flow
4. Increase engine speed to minimize ice build-up on propeller blades
5. Watch for sings of carburetor air filter ice and apply carburetor heat as required. An unexplained loss in manifold pressure could be caused by carburetor ice or air instake filter ice. Lean the mixture if carburetor heat is used continuously.
6. Plan a landing at the nearest airport, with an extremely rapid ice buildup, select a suitable “off airport” landing site.
7. With an ice accumulation of $\frac{1}{4}$ inch or more on the wing leading edges, be prepared for significantly higher stall speed.
8. Leave wing flaps retracted. Eith a severe ice build-up on the horizontal tail, tha change in wing wake airflow direction caused by wing flaps extension could result in a loss of elevator effectiveness
9. Open the window and if practical, scrape ice form a portion of the windshield for visibility in the landing approach
10. Perform a landing approach using a forward slip, if necessary, for improved visibility
11. Approach at 85 to 95 KIAS, depending upon the amount of ice accumulation.
12. Perform a landing in level attitude.

STATIC SOURCE BLOCKAGE

(Erroneous Instrument reading suspected)

1. Alternate Static source Valve – PULL ON
2. Airspeed – Consult appropriate table in Section 5
3. Altitude – Cruise 50 feet higher and approach 30 feet higher than normal

LANDING GEAR MALFUNCTION PROCEDURES

LANDING GEAR FAILS TO RETRACT

1. Master switch – ON
2. Landing gear lever – CHECK (lever full up)
3. Landing gear and gear pump circuit breakers – IN
4. Gear up light – CHECK
5. Landing gear lever – RECYCLE
6. Gear motor – CHECK operation (ammeter and noise)

LANDING GEAR FAILS TO EXTEND

1. Landing gear lever – DOWN
2. Emergency hand pump – EXTEND HANDLE, and PUMP (perpendicular to handle until resistance becomes heavy – about 20 cycles)
3. Gear down lights – ON
4. Pump handle – STOW

GEAR UP LANDING

1. Landing gear lever – UP
2. Landing gear and gear pump circuit breakers – IN
3. Runway – SELECT longest hard surface or smooth sod runway available
4. Wing flap – 40° (on final approach)
5. Airspeed – 65 KIAS
6. Doors – UNLATCH PRIOR TO TOUCHDOWN
7. Avionics power and master switches – OFF when landing is assured
8. Touchdown – SLIGHTLY TAIL LOW
9. Mixture – IDLE CUTOFF
10. Ignition switch – OFF
11. Fuel selector valve – OFF
12. Airplane – EVACUATE

LANDING WITHOUT POSITIVE INDICATION OF GEAR LOCKING

1. Before landing check – COMPLETE
2. Approach – NORMAL (full flap)
3. Landing gear and gear pump circuit breakers – IN
4. Landing – TAIL LOW as smoothly as possible
5. Braking – MINIMUM necessary
6. Taxi – SLOWLY
7. Engine – SHUTDOWN

LANDING WITH A DEFECTIVE NOSE GEAR (Or flat nose Tire)

1. Movable load – TRANSFER to baggage area
2. Passenger – MOVE to rear seat
3. Before landing checklist – COMPLETE
4. Runway – HARD SURFACE or SMOOTH SOD
5. Wing flaps – 40°
6. Cabin doors – UNLATCH PRIOR TO TOUCHDOWN
7. Avionics power and master switches – OFF when landing is assured
8. Land – SLIGHTLY TAIL LOW
9. Mixture – IDLE CUT OFF
10. Ignition Switch – OFF
11. Fuel selector valve – OFF
12. Elevator Control – HOLD NOSE OFF GROUND as long as possible
13. Airplane – EVACUATE as soon as it stops

LANDING WITH A FLAT MAIN TIRE

1. Approach – NORMAL (full flap)
2. Touchdown – GOOD TIRE FIRST, hold airplane off flat tire as long as possible with aileron control
3. Directional control – MAINTAIN using brake on good wheel as required

ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTIONS

OVER-VOLTAGE LIGHT ILLUMINATES

1. Avionics Power Switch – OFF
2. Master Switch – OFF (Both sides)
3. Master Switch – ON
4. Over voltage light – OFF
5. Avionics Power switch – ON

If over voltage light illuminates again

6. Flight – TERMINATE as soon as practical

AMMETER SHOWS DISCHARGE

1. Alternator – OFF
2. Non essential Radio/Electrical Equipment – OFF
3. Flight – TERMINATE as soon as practical