

Super Decathlon C-GKXD Emergency Checklist

ENGINE FIRE DURING START

If fire is confined to intake or exhaust (due to flooding engine):

1. Continue cranking engine with starter
2. Mixture control – IDLE CUT-OFF
3. Throttle – FULL OPEN
4. Fuel shut-off valve – OFF
5. Electrical, Master and Magnetos - OFF
6. EXIT Aircraft
7. AME must inspect prior to next flight

If fire persists or not limited to intake or exhaust system:

1. Mixture control – IDLE CUT-OFF
2. Throttle – FULL OPEN
3. Fuel shut-off valve – OFF
4. Electrical, Master and Magnetos - OFF
5. EXIT Aircraft
6. When engine stops, direct fire extinguisher through the nose cowl or cowl access door
7. AME must inspect prior to next flight

ENGINE FIRE IN FLIGHT

1. Mixture - IDLE CUT-OFF
2. Fuel Shut-off Valve – OFF
3. Electrical, Master and Magnetos - OFF
4. Cabin Heat and Air – CLOSE
5. Use fire extinguisher
6. Land immediately - Forced landing procedure

ELECTRICAL FIRE IN FLIGHT

1. Master Switch - OFF
2. All switches (except MAGS) - OFF
3. Cabin Heat and Air – CLOSE
4. Use fire extinguisher if necessary
5. Only vent if necessary for smoke removal
6. Land as soon as practical
7. If fire continues, land immediately

If fire appears out and electrical power is necessary for continuance of flight:

1. Master Switch – ON
2. Required Radio/Electrical Switches – ON
one at a time, with delay after each until short circuit is localized
3. Faulty switch/circuit - OFF
4. Land as soon as practical

ALTERNATOR / ELECTRICAL FAILURE

Steady discharge on the ammeter:

1. Master Switch – CYCLE OFF/ON
2. If excessive discharge continues, turn OFF nonessential electrical equipment
3. Land as soon as practical

NOTE – Engine operation is unaffected by an electrical system failure with the exception of engine starter.

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ENGINE FAILURE DURING TAKEOFF ROLL

1. Throttle — IDLE
2. Brakes — AS REQUIRED
3. Mixture — IDLE CUT OFF
4. Fuel Shut-off Valve – OFF
5. Mags — OFF

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. Airspeed:
1950 lbs – 61 MPH IAS
1800 lbs – 58 MPH IAS
1650 lbs – 56 MPH IAS
 2. Mixture — IDLE CUT OFF
 3. Fuel Shut-off Valve – OFF
 4. Mags - OFF
 5. Master Switch – OFF
- If airborne and insufficient runway remains, select most favourable landing area ahead.
 - Maintain flying speed at all times.
 - Do not attempt to turn back toward the runway unless sufficient altitude has been achieved.
 - Attempt engine restart if altitude permits.
 - Land in preselected area using FORCED LANDING procedure.

ENGINE FAILURE IN FLIGHT / AIR RESTART

1. Airspeed – 75 MPH IAS
2. Emergency Fuel pump – ON
3. Alternate Air – FULL ON
4. Mixture – RICH or leaned as required
5. Fuel shut-off valve – CHECK ON
6. Mags – BOTH ON
7. Prop – FULL IN
8. Attempt Restart

FORCED LANDING - WITHOUT ENGINE POWER

1. Airspeed – 75 MPH IAS
2. Mixture — IDLE CUT OFF
3. Fuel Shut-off Valve - OFF
4. Master – ON
5. Radio MAYDAY, Activate ELT
6. 360 overhead approach if possible
7. Electrical – ALL OFF
8. Door — unlatch prior to touchdown.
9. Final Approach Airspeed:
1950 lbs – 61 MPH IAS
1800 lbs – 58 MPH IAS
1650 lbs – 56 MPH IAS
10. Touchdown — 3pt FULL STALL
11. Brakes — Apply as required

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PRECAUTIONARY LANDING

1. Airspeed – 75 MPH IAS minimum
2. Inform ATC, Activate ELT
3. Select field — Fly over, note terrain and obstructions, select safe altitude and airspeed
4. Radio and Electrical Switches — OFF
5. Prop – FULL IN
6. Final Approach Airspeed:
1950 lbs – 61 MPH IAS
1800 lbs – 58 MPH IAS
1650 lbs – 56 MPH IAS
7. Master Switch — OFF
8. Door — UNLATCH prior to touchdown
9. SLIP as required
10. Touchdown — 3pt FULL STALL
11. Brakes — Apply as required
12. Mixture — IDLE CUT OFF
13. Fuel Shut-off Valve - OFF
14. Mags — OFF

PARTIAL POWER LOSS/ROUGH RUNNING

1. Airspeed – 75 MPH IAS minimum
2. Follow engine air restart procedure
3. Land as soon as practical

ABNORMAL OIL PRESSURE/TEMPERATURES

1. Crosscheck engine instruments to determine source of problem
 - High oil temp – reduce engine power while maintaining cruise speed, mixture RICH
 - Low oil pressure – use minimum power, plan for precautionary landing if required
2. Land as soon as practical

LOSS OF PROPELLOR CONTROL

In the event of loss of oil pressure, propeller will go to the LOW RPM (FULL OUT) position

1. Throttle may be used with caution to climb or maintain level flight
2. Land as soon as practical, plan for precautionary landing if required

SEVERE TURBULENCE

1. In severe turbulence, do not exceed V_a
Manoeuvring V_a (1950 lbs) 107 MPH IAS
 V_a (1800 lbs) 132 MPH IAS
2. Maintain constant pitch attitude rather than altitude or airspeed

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STALL RECOVERY

1. LOWER NOSE and add FULL POWER simultaneously
2. Use rudder to maintain lateral control
3. Do not allow aircraft to stall unless sufficient altitude exists for safe recovery

SPIN RECOVERY

1. Throttle – CLOSED
2. Ailerons – NEUTRAL
3. Elevator – POSITIVE FORWARD TO NEUTRAL
4. Rudder – FULL DEFLECTION opposite direction of rotation
5. Rudder – NEUTRALIZE when rotation stops and positive control and flying speed restored
6. Nose Attitude – RAISE smoothly to level flight attitude
7. Throttle – only after recovery from dive, then as required

INVERTED SPIN RECOVERY

1. Throttle – CLOSED
2. Ailerons – NEUTRAL
3. Elevator – POSITIVE REARWARD TO NEUTRAL
4. Rudder – FULL DEFLECTION opposite direction of rotation
5. Rudder – NEUTRALIZE when rotation stops and positive control and flying speed restored
6. Nose Attitude – RAISE smoothly to normal upright level flight attitude
7. Throttle – only after recovery from dive, then as required

WARNING – during spin recovery, airspeed will build very rapidly with a nose low attitude. Smooth but positive recovery from the dive is important to avoid an overspeed condition.

Do not use full or abrupt elevator control movements after recovery to avoid secondary stall-spin.

INFLIGHT OVERSTRESS

If airspeed or load factor limits are exceeded, or controls are misused, aerobatics should be terminated immediately.

Fly at reduced airspeed (70 – 80 MPH) to a suitable landing site.

DO NOT make large control movements or “g” loadings above that required for straight & level flight. Report circumstances – aircraft must be inspected by AME prior to the next flight.