ABNORMAL PROCEDURES

ENGINE LANE LIGHTS ON OR FLASHING

If one or both Engine Lane Lamps is On steady or if Both are Flashing, first try to reset the Lane by turning the Lane Switch Off and then On again. If the problem persists, a precautionary landing should be conducted.

NOTICE Reduce engine power setting to the minimum necessary and curry out precautionary landing.

The aircraft should be flown to the nearest available landing site if any of the following combinations of the EMS lamps arise:

- One lamp permanently on, one off.
- One lamp permanently on, one flashing.
- Both lamps permanently on.
- Both lamps flashing.

If one of the lamps is flashing while the other is off then limited flight operation are permitted up to a maximum of 10 hours.

LANE A	LANE B	Action
OFF	Flashing	Limited flight operation
Flashing	OFF	Limited flight operation
OFF	ON	Land the aircraft
Flashing	Flashing	Land the aircraft
Flashing	ON	Land the aircraft
ON	OFF	Land the aircraft
ON	Flashing	Land the aircraft
ON	ON	Land the aircraft

ON = permanently on

Irregular Engine RPM

1. Verify Lane A/B Switches - on.
2 Verify throttle position.
3. Verify engine and fuel quantity indicators.
4. Auxiliary electric fuel pump - on

If engine continues to run irregularly

5. Land as soon as possible.

Low fuel pressure

1. Check fuel quantity indicator.
2. Switch auxiliary electric fuel pump - on

If fuel pressure remains low

3. Decrease throttle setting if viable to do so.

If fuel pressure remains low

4. Land as soon as possible.

Low Oil Pressure

1. Check oil temperature.

If oil temperature is high or increasing

2. Set throttle to a setting which gives an aircraft speed of 72 KIAS (most efficient speed).

If oil pressure remains low or temperature remains high or increasing

3. Land as soon as possible and remain vigilant for impending engine failure.

In-Flight Engine Restart

1. Main & Aux Fuel pumps - on
2. Fuel selector - Select Fullest Tank
3. Throttle - set to middle position.
4. Master switch - check on.
5. Lane A/B - check both on.
6. Starter - engage.
7. Auxiliary fuel pump - off (after positive start).

If engine should fail to restart

8. Try steps 3-6 with ENG BKUP BATT On, if not, then:
9. Apply forced landing without engine power procedure

Precautionary landing

A precautionary landing is generally carried out in cases where the pilot may be disorientated, the aircraft has no fuel reserve or possibly in bad weather conditions.

1. Choose landing area, determine wind direction.
2. Report your intention to land and the landing location via radio.
3. Perform a low altitude pass into wind, over the right-hand side of the selected area, with flaps extended as required and thoroughly inspect the landing area.
4. Perform a circuit pattern.
5. Perform approach at increased idle with flaps fully extended.
6. Reduce power to idle when flying over the runway threshold and touch-down at the very beginning of the selected area.
7. After stopping the aircraft switch off all switches, shut off the fuel selector, lock the aircraft and seek assistance.

Landing with a flat tire / damaged wheel

1. If a main landing gear tire is flat or a wheel is damaged, perform touch-down at the lowest practical speed with the aircraft slightly banked towards the serviceable tire / wheel. Maintain directional control during the landing run and keep the flat tire / damaged wheel off the ground, just above or very lightly on the ground, until the lowest speed possible.
2. If the nose wheel is damaged / flat perform touch-down at the lowest practical speed and hold the nose wheel off the ground as long as possible, via elevator control.

Vibration

If any abnormal aircraft vibration occurs:

1. Set engine speed to a setting where the vibration is least, if viable.
2. Land on the nearest airfield or perform a precautionary landing

EFIS System Failure

If the EFIS system freezes, otherwise fails or reacts incorrectly in flight:

1. Maintain straight and level flight utilizing other instruments and ground references.
2. Switch the EFIS back-up battery and the EFIS main switch off (i.e. remove power from the EFIS).
3. Following a 3 second delay, apply power to the EFIS, maintaining straight and level flight at all times.
4. Maintain straight and level for at least another 15 seconds while the system boots up (when the system reboots, the navigation system(s) should remain active and any active routes (preceding the failure) should continue to be shown).

In case the system fails to re-boot properly:

5. Execute a precautionary landing at the first safe opportunity and have the instrument repaired.

Alternator / charge system failure

1. EFIS switch - off.
2. All non-critical electrical equipment - off. (navigation, strobe, taxi, landing lights etc.).
3. Auxiliary fuel pump - off.
4. Autopilot - off.
5. Set EFIS brightness to minimum.
6. Restrict / avoid the use of the elevator trim control. Restrict radio transmission to minimum / only that which is absolutely necessary.
7. Land as soon as possible.

Main bus power failure

1. The EFIS should automatically switch over to the EFIS back-up battery supply , provided that the EFIS battery back-up switch is on (if not, switch on the EFIS battery back-up switch) and the back-up battery contains adequate charge.
2. Land as soon as possible.

EMERGENCY PROCEDURES (Sling 912iS)

Engine Failure During Takeoff Run

1. Throttle - idle.
2. Lane A/B - off.
3. Brakes - apply as needed.
4. Master switch - off.

With airplane under control –

5. Fuel selector valve - off.
6. Main & Aux Fuel pumps - off

Engine Failure after Takeoff

1. Speed - best glide speed of 72 KIAS.
2. Find a suitable place on the ground to land safely. The landing should be planned straight ahead with only small changes in direction not exceeding 45 degrees to either side, unless sufficient altitude exists to turn back to the runway (min 700' AGL)
3. Flaps - as needed (plan to land as slowly as possible).

Before touch down

4. Lane A/B - off.
5. Master - off.
6. Fuel selector valve - off.
7. Main & Aux Fuel pumps - off

Emergency landings

Emergency landings are generally carried out in the case of engine failure during which the engine cannot be re-started. Other reasons for an emergency landing may, however, arise.

Engine-off emergency landing

1. Speed - best glide speed of 72 KIAS.
2. Trim - trim for best glide speed.
3. Landing location - locate most suitable landing location, free of obstacles and preferably into wind.
4. Safety harness - tighten.
5. Engine restart - if time permits and if appropriate attempt to identify reason for engine failure and attempt restart (try engine BKUP BATT On)
6. Flaps - extend as needed.
7. Communications - report your location to third parties if possible.
8. Passenger - brief.

Immediately before touchdown-

9. Fuel selector - shut off.
10. Main & Aux Fuel pumps - off
11. Lane A/B - off.
12. Master switch - off.

Smoke and Fire

Engine fire on ground during engine start

1. Starter - release.
2. Fuel selector - close.
3. Main & Aux Fuel pumps - off
4. Throttle - idle.
5. Lane A/B - off.
6. Master switch - off.
7. Retrieve fire extinguisher if possible.
8. Exit the airplane.
9. Extinguish fire by fire extinguisher or call for fire service if you cannot do it.

Engine fire on ground with engine running

1. Cabin heat - close.
2. Fuel selector - close.
3. Main & Aux Fuel pumps - off
4. Throttle - idle.
5. Lane A/B - off.
6. Master switch - off.
7. Retrieve fire extinguisher if possible.
8. Exit the airplane.
9. Extinguish fire by fire extinguisher or call for fire service if you cannot do it.

Engine fire during take-off run

1. Throttle - idle.
2. Brakes - stop the aircraft.
3. Cabin heat - close.
4. Fuel selector - close.
5. Main & Aux Fuel pumps - off
6. Lane A/B - off.
8. Master switch - off.
9. Retrieve fire extinguisher if possible.
10. Exit the airplane.
11. Extinguish fire by fire extinguisher or call for fire service if you cannot do it.

Engine fire in flight

1. Cabin Heat - close.
2. Fuel selector - close.
3. Throttle - full power.
4. Lane A/B - switch off after engine has shut down.
5. Main & Aux Fuel pumps - off
6. Emergency landing area - select
7. Emergency landing - perform
8. Retrieve fire extinguisher if possible.
9. Exit the airplane.
10. Extinguish fire by fire extinguisher or call for fire service if you cannot do it.

Electrical fire in flight

An electrical fire is often characterized by white smoke and an acrid smell.

1. Master switch - off (see NOTE below).
2. Cabin heat - close.
3. Use the fire extinguisher (if possible).
4. Ventilate cabin if required / applicable (open air vents on instrument panel).
5. If fire is extinguished consider executing a precautionary landing / land as soon as practical.
6. If fire does not extinguish land immediately.

Cabin fire

1. Cabin heat - close.
2. Use the fire extinguisher (if possible).
3. Ventilate cabin if required / applicable (open air vents on instrument panel).
4. If fire is extinguished consider executing a precautionary landing / land as soon as practical.
5. If fire does not extinguish land immediately.

Recovery from unintentional spin

The aircraft is unlikely to enter an unintentional spin unless extreme control are applied.

Unintentional spin recovery technique:

1. Throttle - idle.
2. Lateral control - ailerons neutral.
3. Rudder pedals - full rudder in direction opposite to spin
4. Longitudinal control - neutralize control column or push forward if necessary to lower nose, then recover from dive ensuring VNE and load factor limitations are not exceeded.
5. Rudder pedals - neutralize rudder immediately when rotation stops.