T-6B Emergency Procedures: Warnings, Cautions, and Notes

How to use:
“Read the text a few times. Then, use the lined text and make an attempt—use the text underneath to assist if you draw a blank. Get to the point where you’re not referring to the complete text at all. When you have a good flow going with the lined text, give it a shot from memory, referring to the lined text when needed. You’ll get it memorized in no time.”

ABORT START PROCEDURE
2 Notes

NOTE

N___ a__ r____ t_ m_____ t__ d_____ a__ d_____ o_ a__ o_____.

Note and report to maintenance the degree and duration of any overtemperature.

*** 1. PCL - OFF; or STARTER switch - AUTO/RESET**

NOTE

I_ s____ i_ i_____ w___ P__ i_ t__ O__ p_____, a____ b_ r_____ A___/R____ o_ t__ S_____ s_____. I_ s____ i_ i_____ w___ P__ o__ o_ t__ O__ p_____, b__ n__ p___ t__ I___ g___, a____ b_ p_____ t__ P__ t_ O__ o_ r_____ A___/R____ o_ t__ S_____ s_____. I_ t__ P__ i_ p___ t__ I___ g___, a____ b_ p_____ t__ P__ t_ O__.

If start is initiated with PCL in the OFF position, abort by reselecting AUTO/RESET on the STARTER switch. If start is initiated with PCL out of the OFF position, but not past the IDLE gate, abort by placing the PCL to OFF or reselecting AUTO/RESET on the STARTER switch. If the PCL is past the IDLE gate, abort by placing the PCL to OFF.

EMERGENCY ENGINE SHUTDOWN ON THE GROUND

*** 1. PCL – OFF**
*** 2. FIREWALL SHUTOFF HANDLE – PULL**
*** 3. Emergency ground egress - As required**

EMERGENCY GROUND EGRESS
5 Warnings 2 Notes

NOTE

I_ a s_____ r_____ i_____ g_____ e_____, t__ e_____ s_____ h__ t__ c_____ f__ _/_ e_____.

In a situation requiring immediate ground egress, the ejection system has the capability for 0/0 ejection.

*** 1. ISS mode selector – SOLO**

WARNING

F_____ t_ e_____ t___ t__ l__ m___ s_____ i_ s__ t_ S___ m__ r_____ i_ t__ i_____ e_____ o_ o__ o_ b___ s_____.

Failure to ensure that the ISS mode selector is set to SOLO may result in the inadvertent ejection of one or both seats.

*** 2. Seat safety pin - Install (BOTH)**

WARNING

F_____ t_ i_____ b___ e_____ s___ s_____ p___ (i_ o_____) b_____ g_____ e_____ m__ r_____ i_ i_____ a_____ o_ e_____ s_____ a__ s_____ i_____ o_ d_____ w___ p_____ e_____ g_____ e_____.

Failure to insert both ejection seat safety pins (if occupied) before ground egress may result in inadvertent activation of ejection sequence and subsequent injury or death when performing emergency ground egress.

*** 3. PARKING BRAKE - As required**
*** 4. Canopy – Open**

IF CANOPY CANNOT BE OPENED OR SITUATION REQUIRES RIGHT SIDE EGRESS:
*** 5. CFS handle safety pin - Remove (BOTH)**
*** 6. CFS handle - Rotate 90° counterclockwise and pull (BOTH)**

WARNING

I_ t__ c_____ f_____ s_____ m_____ i_ c_____ w___ a c_____ l____ f_____ i_ t__ l_____ p_____, e_____ m__ b_ t__ o___ o_____ r_____ t_ e___ t__ a_____. A_____ s____ r_____ t__ e_____ s___ s_____ p__ a__ e_____ s_____ s_____, l__ s_____, a__ l__ r_____ g_____ a__ s____ a_____ p____ t_ p_____ e_____ h_____.

If the canopy fracturing system malfunctions in conjunction with a canopy latch failure in the locked position, ejection may be the only option remaining to exit the aircraft. Aircrew shall remove the ejection seat safety pin and ensure shoulder straps, lap straps, and leg restraint garters are still attached prior to pulling ejection handle.

WARNING

T_ p_____ i_____, e_____ o_____ m___ i_ o_ a__ v____ i_ d___ p____ t_ a_____ t__ C__ s_____.

To prevent injury, ensure oxygen mask is on and visor is down prior to actuating the CFS system.

WARNING

E___ i_____ C__ h_____ a_____ o___ t__ C__ c_____ f__ t__ r_____ t_____. B___ i_____ C__ h_____ m___ b_ a_____ i_ o____ t_ f_____ b___ t_____ (i_ r_____).

Each internal CFS handle activates only the CFS charge for the respective transparency. Both internal CFS handles must be activated in order to fracture both transparencies (if required).

*** 7. Upper fittings, lower fittings, and leg restraint garters - Release (BOTH)**

NOTE

O_____ h___, e_____ o_____ h___, c_____ l____, a__ a___-G s___ h___ w___ p___ f___ w____ v_____ c_____ a__ l__ r_____ l____ w___ p___ t_____ l__ r_____ g_____ D r____ i_ r_____ w___ q____-r_____ l____.

Oxygen hose, emergency oxygen hose, communication leads, and anti-G suit hose will pull free while vacating cockpit and leg restraint lines will pull through leg restraint garter D rings if released with quick-release lever.

*** 8. BAT, GEN, and AUX BAT switches – OFF**
*** 9. Evacuate aircraft**

ABORT (Takeoff)
1 Warning

*** 1. PCL – IDLE**

*** 2. BRAKES - AS REQUIRED**

WARNING

A____ a s___ w____ r_____ m_____ e_____ b_____ a__ i_ o_____ b_____ a__ s_____, d_ n__ t___ i___ o_ p___ i_ a c_____ a___ u____ b_____ h___ h__ s_____ t___ t_ c___. D_ n__ s__ p_____ b____.

After a stop which required maximum effort braking and if overheated brakes are suspected, do not taxi into or park in a congested area until brakes have had sufficient time to cool. Do not set parking brake.

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF
(SUFFICIENT RUNWAY REMAINING STRAIGHT AHEAD)
2 Warnings 2 Notes

WARNING

I_ i_____ r_____ r_____ t_ l___ s_____ a____, c_____ i_____ e_____.

If insufficient runway remains to land straight ahead, consider immediate ejection.

WARNING

D_ n__ s_____ a_____ c_____ w____ t_____ o_ l_____ g___ w___ e_____ s_____.

Do not sacrifice aircraft control while troubleshooting or lowering gear with emergency system.

*** 1. AIRSPEED - 110 KNOTS (MINIMUM)**
*** 2. PCL - AS REQUIRED**

NOTE

T__ p____ s_____ s_____ l___ t_ u__ t__ i_____ d___ o_ t__ n__ y__ f_____ p_____ o_ s_____ O__ t_ r_____ t__ s___ r___.

The pilot should select IDLE to use the increased drag of the not yet feathered propeller or select OFF to reduce the sink rate.

*** 3. EMER LDG GR HANDLE - PULL (AS REQUIRED)**

NOTE

W___ a l___ o_ h_____ p_____, l_____ g___ a__ f____ c_____ b_ l_____ b_ n_____ m____.

With a loss of hydraulic pressure, landing gear and flaps cannot be lowered by normal means.

*** 4. Flaps - As required**

ENGINE FAILURE DURING FLIGHT
3 Warnings 3 Notes

NOTE

P_____ w___ n__ f_____ u_____ t__ P__ i_ f_____ i_ O__.

Propeller will not feather unless the PCL is fully in OFF.

*** 1. ZOOM/GLIDE - 125 KNOTS (MINIMUM)**
*** 2. PCL – OFF**
*** 3. INTERCEPT ELP**

WARNING

I_ a s_____ l_____ s_____ i_ a_____, t___ i_____ t_ i_____ t__ n_____ s_____ p____ o_ t__ E__. A__ d_____ c____ r_____ i_ i_____ g_____ d_____ t_ r____ a l_____ s_____.

If a suitable landing surface is available, turn immediately to intercept the nearest suitable point on the ELP. Any delay could result in insufficient gliding distance to reach a landing surface.

WARNING

D_ n__ d_____ d_____ t_ e____ b_____ 2___ f___ A__.

Do not delay decision to eject below 2000 feet AGL.

*** 4. Airstart - Attempt if warranted**

WARNING

A_____ p_____ i_ n__ r_____ b_____ 2___ f___ A__, a_ p_____ a_____ s_____ b_ t_ e____ o_ s_____ r_____ t__ a_____.

Airstart procedure is not recommended below 2000 feet AGL, as primary attention should

be to eject or safely recover the aircraft.

NOTE

C_____ N_ a_____ o____ e_____ i_____ t_ a_____ c_____ o_ e_____ a__ d_____ i_ a_ a_____ i_ w_____. A_ 1__ K___, a_ e_____ w_____ h__ f_____ o__ w___ r_____ b____ _% N_ a__ i_____ _% N_. T__ e_____ o__ p_____ i_____ m__ d_____ o__ p_____ u_ t__ _ p__ w___ o_ w_____ t__ e_____ s_____.

Crosscheck N1 against other engine indications to assess condition of engine and determine if an airstart is warranted. At 125 KIAS, an engine which has flamed out will rotate below 8% N1 and indicate 0% N1. The engine oil pressure indicator may display oil pressures up to 4 psi with or without the engine seized.

IF CONDITIONS DO NOT WARRANT AN AIRSTART:

*** 5. FIREWALL SHUTOFF handle – Pull**

*** 6. Execute Forced Landing or Eject**

IMMEDIATE AIRSTART (PMU NORM)
4 Warnings 3 Cautions

WARNING

A_____ a_____ o_____ o_ t__ a_____ e_____ m__ b_ u_____ o_ r_____ i_ e_____ o_____. C_____ s_____ b_ g____ t_ e_____ a_____ a__ a_____ w_____ t__ a_____ e_____ (1__-2__ K___ f__ s__ l____ t_ 1_,___ f___, o_ 1__- 2__ K___ f__ 1_,___ t_ 2_,___ f___).

Airstart attempts outside of the airstart envelope may be unsuccessful or result in engine overtemperature. Consideration should be given to ensure airstarts are attempted within the airstart envelope (125-200 KIAS for sea level to 15,000 feet, or 135-200 KIAS for 15,001 to 20,000 feet).

*** 1. PCL – OFF**

WARNING

D_ n__ d_____ e_____ w____ a_____ a_____ a_ l__ a_____ i_ b____ 2___ f___ A__.

Do not delay ejection while attempting airstart at low altitude if below 2000 feet AGL.

WARNING

P__ m___ b_ i_ O__ t_ f_____ t__ p_____, a__ e_____ p_____ s_____, i_____, b____ p___, a__ P___ o_____ d_____ a_____.

PCL must be in OFF to feather the propeller, and ensure proper starter, ignition, boost pump, and PMU operation during airstart.

CAUTION

E_____ P__ i_ i_ O__; o_____, f___ m__ b_ p_____ i_____ d_____ s____.

Ensure PCL is in OFF; otherwise, fuel may be prematurely introduced during start.

***2. STARTER SWITCH – AUTO/RESET**

CAUTION

I_ N_ d___ n__ r___ w_____ _ s_____, d_____ t__ a_____ a_____ a__ p_____ t_ I_ A_____ I_ U_____ d__ t_ s_____ m_____ f_____.

If N1 does not rise within 5 seconds, discontinue the airstart attempt and proceed to IF AIRSTART IS UNSUCCESSFUL due to suspected mechanical failure.

*** 3. PCL - IDLE, ABOVE 13% N1**

WARNING

M_____ o_ t__ P__ a____ l___ b_____ N_ s_____ a_ a_____ 6_% w___ c____ a_ i_____ i_ f___ f___ w____ m__ c____ e_____ f_____ d__ t_ a s_____ l__ o_____.

Movement of the PCL above IDLE before N1 stabilizes at approximately 67% will cause an increase in fuel flow which may cause engine failure due to a severe ITT overtemperature.

CAUTION

I_ t____ i_ n_ r___ i_ l__ w_____ 1_ s_____ a____ f___ f___ i_____, p_____ t__ P__ t_ O__ a__ a____ t__ s____.

If there is no rise in ITT within 10 seconds after fuel flow indications, place the PCL to OFF and abort the start.

*** 4. Engine instruments - Monitor ITT, N1, and oil pressure**

IF AIRSTART IS UNSUCCESSFUL:
*** 5. PCL – OFF**
*** 6. FIREWALL SHUTOFF handle – Pull**
*** 7. Execute Forced Landing or Eject**

IF AIRSTART IS SUCCESSFUL:
*** 8. PCL - As required after N1 reaches IDLE RPM (approximately 67% N1)**
*** 9. PEL – Execute**

UNCOMMANDED POWER CHANGES/LOSS OF POWER/UNCOMMANDED PROPELLER FEATHER
2 Warning 3 Cautions 7 Notes

*** 1. PCL - MID RANGE**

NOTE

M__ r____ i_ a p_____ P__ a_____ t___ a_____ t__ m_____ p_____ b_____ l___ a__ M__.

Mid range is a physical PCL angle that approximates the midway position between IDLE and MAX**.**

NOTE

A P__ p_____ a____ l___ w___ p_____ t__ b___ c_____ f__ t__ e_____ t_ r_____.

A PCL position above IDLE will provide the best chance for the engine to recover.

NOTE

A m__- r____ P__ p_____ w___ m_____ t__ p_____ o_ e_____ o_____ a__/o_ o_____ w___ t__ P__ i_ t_____ O__.

A mid-range PCL position will minimize the potential of engine overtorque and/or overtemperature when the PMU is turned OFF.

*** 2. PMU SWITCH – OFF**

CAUTION

T____ i_ a p_____ f__ l__ l_____ t_ b_ e_____ i_ t__ P__ s_____ i_ t_____ O__ w___ l___ ≥ 8___°C.

There is a potential for ITT limits to be exceeded if the PMU switch is turned OFF with ITT ≥820 °C.

CAUTION

G_____ i___ w___ n__ b_ a_____ d_____ l_____ r_____ a__ t___. P___ f__ i_____ l_____ d_____ d__ t_ h_____ l___ N_ (a_____ __%).

Ground idle will not be available during landing rollout and taxi. Plan for increased landing distances due to higher IDLE N1 (approximately 67%).

*** 3. PROP SYS CIRCUIT BREAKER (left front console) - PULL, IF NP STABLE BELOW 40%**

NOTE

W___ c_____ a_____ a__ t_____, R__ c__ b_ c_____ s_____ i_ b_____ __% a__ n_ u_____ c_____ f__ a 3-s_____ p_____.

With constant airspeed and torque, RPM can be considered stable if below 40% and no upward change for a 3-second period.

NOTE

I_ N_ i_____ i_ d_____ r__ X's, s_____ t__ P__ t_ N___ a__ b___ O__ w___ r____ t__ P__ a__ s_____ r_____ t__ N_ i_____.

If NP indicator is displaying red X's, switching the PMU to NORM and back OFF will reset the PMU and should restore the NP indication.

NOTE

P_____ s_____ c___ o__ o_ f_____ w_____ 1_-2_ s_____.

Propeller should come out of feather within 15-20 seconds.

*** 4. PCL - As required**

WARNING

I_ r___ o_ d_____ (i_____ o_ t__ V__ w____ s_____ a_ 1__ K___ w___ g___, f____, a__ s____ b____ r_____ a__ _-_% t_____) i_ g_____ t___ 1___ f_/m__, i_____ t_____ a_ n_____ (u_ t_ ___%) t_ a_____ a_____ ____-____ f_/m___ r___ o_ d_____. I_ e_____ p____ i_ i_____ t_ p_____ a r___ o_ d_____ l___ t___ ____ f_/m__, s__ P__ t_ O__.

If rate of descent (indicated on the VSI while stabilized at 125 KIAS with gear, flaps, and speed brake retracted and 4-6% torque) is greater than 1500 ft/min, increase torque as necessary (up to 131%) to achieve approximately 1350-1500 ft/min rate of descent. If engine power is insufficient to produce a rate of descent less than 1500 ft/min, set PCL to OFF.

NOTE

T__ p_____ s_____ c_____ m_____ t___ P__ t_____ t__ f___ r____ o_ m_____ t_ d_____ p____ a_____.

The pilot should consider moving the PCL through the full range of motion to determine power available.

IF POWER IS SUFFICIENT FOR CONTINUED FLIGHT:

*** 5. PEL – Execute**

IF POWER IS INSUFFICIENT TO COMPLETE PEL:

CAUTION

C_____ s_____ b_ g____ t_ l_____ t__ e_____ o_____ w____ P__ a_ m__-r_____.

Consideration should be given to leaving the engine operating with PCL at mid range.

*** 6. PROP SYS circuit breaker - Reset, as required**

WARNING

W___ t__ P___ S__ c_____ b_____ p_____ a__ t__ P__ s_____ OFF, t__ f_____ d___ s_____ w___ n__ b_ p_____. T__ p_____ w__ f_____ a__ a s_____ r___ a_ o__ p_____ d_____ a__ t__ f_____ s_____ t____ e_____. G____ p_____ w___ b_ c_____ r_____ a__ i_ m__ n__ b_ p_____ t_ i_____ o_ f__ e_____ l_____ p_____.

With the PROP SYS circuit breaker pulled and the PMU switch OFF, the feather dump solenoid will not be powered. The propeller will feather at a slower rate as oil pressure decreases and the feathering spring takes effect. Glide performance will be considerably reduced and it may not be possible to intercept or fly the emergency landing pattern.

*** 7. PCL – OFF**
*** 8. FIREWALL SHUTOFF handle – Pull**
*** 9. Execute Forced Landing or Eject**

COMPRESSOR STALL
1 Warning 1 Note

*** 1. PCL - Slowly retard below stall threshold**
*** 2. DEFOG switch – ON**

NOTE

S_____ t__ D____ s_____ t_ O_ a_____ s_____ h___ b____ a__ i_____ a__ w___ a_____ b___ p_____ o_ t__ e_____ c_____.

Setting the DEFOG switch to ON automatically selects high bleed air inflow and will alleviate back pressure on the engine compressor.

*** 3. PCL - Slowly advance (as required)**

IF POWER IS SUFFICIENT FOR CONTINUED FLIGHT:
*** 4. PEL – Execute**

IF POWER IS INSUFFICIENT TO COMPLETE PEL:
*** 5. PCL – OFF**

WARNING

W___ t__ e_____ i_ s_ u_____ t___ h___ r____ o_ d_____ o____, a__ d____ i_ s_____ d___ t__ e_____ t_ f_____ t__ p_____ m__ r_____ i_ i_____ a_____ t_ r____ a s_____ l_____ s___.

When the engine is so underpowered that high rates of descent occur, any delay in shutting down the engine to feather the propeller may result in insufficient altitude to reach a suitable landing site.

*** 6. FIREWALL SHUTOFF handle – Pull**
*** 7. Execute Forced Landing or Eject**

INADVERTENT DEPARTURE FROM CONTROLLED FLIGHT
2 Warnings 1 Caution 1 Note

*** 1. PCL – IDLE**
*** 2. CONTROLS – NEUTRAL**

WARNING

I_____ p_____ t__ c_____ s____/e_____ a__ o_ t__ n_____ p_____ m__ s_____ d_____ o_ p_____ t__ a_____ f___ r_____ f___ a_ O__/s___ w____ c____ r_____ i_ l___ o_ a_____ a__/o_ c___.

Improperly positioning the control stick/elevator aft of the neutral position may significantly delay or prevent the aircraft from recovering from an OCF/spin which could result in loss of aircraft and/or crew.

NOTE

C_____ o_ c_____ p_____ o_ a_____ a_____ c_____ p_____ c__ a_____ a_____ m_____ a__ s_____ d____ r_____.

Cycling of control positions or applying antispin controls prematurely can aggravate aircraft motion and significantly delay recovery.

*** 3. ALTITUDE – CHECK**

WARNING

R_____ m_____ a_____ f__ e_____ i_ ____ f___ A__.

Recommended minimum altitude for ejection is 6000 feet AGL.

*** 4. Recover from unusual attitude**

CAUTION

P_____-o_ a__ i_____ d_____ o_ s____ w___ r_____ i_ h___ l____ o_ t__ e_____ a__ t_____ s____. I_ a_ i_____ o_ p____-o_ d_____ i_ e_____, l___ a_ s___ a_ c_____ p_____. T__ p____ s_____ s_____ p_____ e_____ d_____ a__ m__ e_____ u_____ e_____ o_____ a_____ b_ l__ o__ p_____ o_ C___ d_____ w_____. I_ a__ c____ o_ i_____ o_ p_____-o_ d_____, t__ e_____ s____ b_ i_____ b_ q_____ m_____ p_____ a____ f____.

Power-on and inverted departures or spins will result in high loads on the engine and torque shaft. If an inverted or power-on departure is encountered, land as soon as conditions permit. The pilot should suspect possible engine damage and may experience unusual engine operation accompanied by low oil pressure or CHIP detector warning. In all cases of inverted or power-on departures, the engine shall be inspected by qualified maintenance personnel after flight.

FIRE IN FLIGHT
4 Warnings

WARNING

I_____ o_ t__ f___ w_____ l____ a_____ b_ o__ o_ m___ o_ t__ f_____ i_____ i_ c_____ o_ a_ e_____ f___: s____; f_____; e_____ v_____; u_____ s_____; h___ l__; a__ f_____ o__ p_____, o__ t_____, o_ h_____ p_____.

Illumination of the fire warning light accompanied by one or more of the following indications is confirmation of an engine fire: smoke; flames; engine vibration; unusual sounds; high ITT; and fluctuating oil pressure, oil temperature, or hydraulic pressure.

IF FIRE IS CONFIRMED:
*** 1. PCL – OFF**
*** 2. FIREWALL SHUTOFF HANDLE – PULL**

IF FIRE IS EXTINGUISHED:
*** 3. Forced Landing – Execute**

IF FIRE DOES NOT EXTINGUISH OR FORCED LANDING IS IMPRACTICAL:
*** 4. Eject (BOTH)**

IF FIRE IS NOT CONFIRMED:
*** 5. PEL – Execute**

WARNING

A f___ w_____ l____ w___ n_ a_____ i_____ i_ n__ a c_____ f___. D_ n__ s___ d___ a_ e_____ f__ a_ u_____ f___.

A fire warning light with no accompanying indication is not a confirmed fire. Do not shut down an engine for an unconfirmed fire.

WARNING

H___ e_____ c_____ t_____ r_____ f___ a b____ a__ l___ m__ c____ i_____ o_ t__ f___ w_____ l____. R_____ t__ P__ s_____ t_____ l___ w___ d_____ t__ a_____ o_ b____ a__ a__ p_____ e_____ t__ f___ w_____ l____; h_____, a_____ t__ P__ m____ b_ r_____ t_ i_____ t__ E__. R_____ o_ r_____ o_ a_____ t__ P__, c_____ t_ i_____ f__ i_____ c_____ a_ e_____ f___.

High engine compartment temperatures resulting from a bleed air leak may cause illumination of the fire warning light. Reducing the PCL setting towards IDLE will decrease the amount of bleed air and possibly extinguish the fire warning light; however, advancing the PCL might be required to intercept the ELP. Regardless of reducing or advancing the PCL, continue to investigate for indications confirming an engine fire.

WARNING

I_ t__ f___ c_____ b_ c_____, t__ f___ w_____ s_____ m__ b_ a_ f____ a__ s_____ b_ t_____ a_ c_____ p_____. I_ o___ o__ f___ l___ a_____ i_ i_____ (t__ o_ b_____ h___ o___), a f____ f___ i_____ m__ e____ i_ t__ o____ l___ t____ g___.

If the fire cannot be confirmed, the fire warning system may be at fault and should be tested as conditions permit. If only one fire loop annunciator is illuminated (top or bottom half only), a false fire indication may exist if the other loop tests good.

SMOKE AND FUME ELIMINATION/ELECTRICAL FIRE
1 Warning 1 Note

WARNING

U____ v_____ c_____ o_ f____ a__/o_ s____ w____ a_____ c_____ i_ j_____, t__ p____ h__ t__ o_____ o_ a_____ C__ o_ e_____.

Under varying conditions of fire and/or smoke where aircraft control is jeopardized, the pilot has the option of actuating CFS or ejecting.

NOTE

I_ a f_____ c_____ c__ b_ i_____ a_ t__ s_____ o_ s____ a__ f____, t___ d_____ u___ o__ o_ p___ r_____ c_____ b_____. C_____ b_____ f__ i____ o_ t__ h__ b_____ b__ a__ n__ a_____ i_ f_____.

If a faulty component can be identified as the source of smoke and fumes, turn defective unit off or pull respective circuit breaker. Circuit breakers for items on the hot battery bus are not accessible in flight.

*** 1. OBOGS - CHECK (BOTH)**

- **a. OBOGS supply lever - ON**
- **b. OBOGS concentration lever - MAX**
- **c. OBOGS pressure lever – EMERGENCY**

CHIP DETECTOR WARNING
1 Caution

*** 1. PCL - Minimum necessary to intercept ELP; avoid unnecessary PCL movements**

CAUTION H_____ p____ s_____ m__ a_____ t__ e_____ c_____. Higher power settings may aggravate the existing condition.

*** 2. PEL – Execute**

OIL SYSTEM MALFUNCTION OR LOW OIL PRESSURE
1 Caution 4 Notes

NOTE

U__ t___ p_____ f__ a__ o_ t__ f_____: r__ O__ P_ a_____ i_____, a____ O__ P_ a_____ i_____, o__ p_____ f_____, o__ t_____ o__ o_ l_____, o_ v_____ c_____ l_____ o__ f___ t__ a_____.

Use this procedure for any of the following: red OIL PX annunciator illuminated, amber OIL PX annunciator illuminated, oil pressure fluctuations, oil temperature out of limits, or visibly confirmed leaking oil from the aircraft.

NOTE

I_ O__ P_ w_____ i_____ a__ o__ p_____ i_____ <_ p__, c____ O__ T__ c_____ b_____ o_ t__ b_____ b__ c_____ b_____ p____ (l___ f____ c_____). I_ t__ c_____ b_____ i_ o___, i_ m__ b_ r____.

If OIL PX warning illuminates and oil pressure indicates <5 psi, check OIL TRX circuit breaker on the battery bus circuit breaker panel (left front console). If the circuit breaker is open, it may be reset.

NOTE

D__ t_ t__ s_____ o_ t__ s_____ c_____ u___, a s_____, m_____ i_____ o_ t__ a____ O__ P_ c_____ w____ m_____ i_ p_____ b__ m__ n__ i_____ a m_____.

Due to the sensitivity of the signal conditioning unit, a single, momentary illumination of the amber OIL PX caution while maneuvering is possible but may not indicate a malfunction.

NOTE

I_____ o_ b___ r__ a__ a____ O__ P_ m_____ w____ t__ o__ p_____ g___ i_____ n_____ p_____ i_____ a_ S__ f_____.

Illumination of both red and amber OIL PX message while the oil pressure gage indicates normal pressure indicates an SCU failure.

IF ONLY AMBER OIL PX CAUTION ILLUMINATES:

*** 1. Terminate maneuver.**
*** 2. Check oil pressure; if oil pressure is normal, continue operations**

IF RED OIL PX WARNING ILLUMINATES AND/OR
AMBER OIL PX CAUTION REMAINS ILLUMINATED FOR 5 SECONDS,
OIL PRESSURE FLUCTUATIONS,
OR OIL TEMPERATURE OUT OF LIMITS:

*** 3. PCL - Minimum necessary to intercept ELP; avoid unnecessary PCL movements**

CAUTION

H_____ p____ s_____ m__ a_____ t__ e_____ c_____.

Higher power settings may aggravate the existing condition.

*** 4. PEL – Execute**

LOW FUEL PRESSURE
1 Caution 1 Note

*** 1. PEL – Execute**

NOTE

I_ t__ F___ P_ w_____ r_____ i_____, t__ e_____-_____ h___ p_____ f___ p___ i_ s_____ f_____. E_____ o_____ w___ h___ p_____ p___ s_____ f_____ i_ l_____ t_ __ h____.
If the FUEL PX warning remains illuminated, the engine-driven high pressure fuel pump is suction feeding. Engine operation with high pressure pump suction feeding is limited to 10 hours.

*** 2. BOOST PUMP switch – ON**

CAUTION

U_____ a g_____ e_____ e_____, d_ n__ r____ B____ P___ c_____ b_____ (l___ f____ c_____) i_ o___.

Unless a greater emergency exists, do not reset BOOST PUMP circuit breaker (left front console) if open.

HIGH FUEL FLOW
1 Warning

IF FUEL FLOW IS 800 PPH OR GREATER:
*** 1. PEL – Execute**

WARNING

H_____ p____ s_____ a_____ b_ h___ l__ m__ a_____ t__ e_____ c_____. H_____, i_ l__ i_ w_____ l_____ r_____ p____ c___ r_____ i_ e_____ f_____.

Higher power settings accompanied by high ITT may aggravate the existing condition. However, if ITT is within limits reducing power could result in engine flameout.

OBOGS FAILURE/OVERTEMP/PHYSIOLOGICAL SYMPTOMS
2 Warnings 2 Cautions 5 Notes

CAUTION

I_____ o_ t__ O____ T___ m_____ i_____ a f_____ o_ t__ O____ h___ e_____, a__ i_ c_____ a f_____ o_ t__ O____ s_____.

Illumination of the OBOGS TEMP message indicates a failure of the OBOGS heat exchanger, and is considered a failure of the OBOGS system.

*** 1. GREEN RING - PULL (AS REQUIRED) (BOTH)**

WARNING

E_____ o_____ b_____ p_____ a_____ 1_ m_____ o_ o_____. I_ a_____ p_____ a_____ i_ a____ 1_____ f___ M__, e_____ t__ a_____ r_____ a_ a_____ o_ 1_____ f___ M__ o_ l____ p____ t_ e_____ o_ t__ e_____ o_____ s_____ o_ t__ e_____ o_ h_____ m__ i_____ t__ c___.

Emergency oxygen bottle provides approximately 10 minutes of oxygen. If aircraft pressure altitude is above 10,000 feet MSL, ensure the aircraft reaches an altitude of 10,000 feet MSL or lower prior to exhaustion of the emergency oxygen supply or the effects of hypoxia may incapacitate the crew.

WARNING

T__ O____ c_____ m__ m_____ r_____ i_ z_____ d___ i_ t__ b_____ s_____ w_____ a_ i_____ o_ t__ O____ F___ l____. I_____ o_ t___ m_____ i_____ r_____ i_____, c_____, o_ t__ p_____ o_ w____ d___ i_ t__ o_____ m___. I_____ o_ z_____ d___ s_____ b_ a_____.

The OBOGS concentrator may malfunction resulting in zeolite dust in the breathing system without an illumination of the OBOGS FAIL light. Indications of this malfunction include respiratory irritation, coughing, or the presence of white dust in the oxygen mask. Inhalation of zeolite dust should be avoided.

CAUTION

W___ b_____ o_____ u____ i_____ p_____, b_____ a_ a r___ a__ d____ s_____ l___ t___ n_____ t_ p_____ h_____.

When breathing oxygen under increased pressure, breathe at a rate and depth slightly less than normal to preclude hyperventilation.

NOTE

I_ p_____ s_____ a__ r_____, i_____ a_____ t_ a p___ a__ s_____ s_____ o_ o_____ i_ t__ b___ c_____ o_ a_____ t_ e_____ r_____. I_ t__ c_____ a_____ i_ a____ 1_____ f___, p_____ t__ G____ R___ i_ r_____ s____ a_____ c_____ a__ c_____ i_____ o_____ p_____ t_ s_____ p_____ r_____. A_ a c_____ a_____ o_ 1_____ f___ o_ b____, p_____ t__ G____ R___ i_ o_____ a_ a_____ c_____ a__ c_____ s_____ o_____ p_____ t_ s_____ p_____ r_____.

If physiological symptoms are recognized, immediate access to a pure and secure source of oxygen is the best course of action to expedite recovery. If the cockpit altitude is above 10,000 feet, pulling the GREEN RING is required since ambient cockpit air contains insufficient oxygen pressure to support physiological requirements. At a cockpit altitude of 10,000 feet or below, pulling the GREEN RING is optional as ambient cockpit air contains sufficient oxygen pressure to support physiological requirements.

NOTE

W___ t__ e_____ o_____ s_____ i_ a_____, h___ p_____ a__ m__ m___ v_____ c_____ w___ t__ o____ c_____ o_ A__ m___ d_____.

When the emergency oxygen system is actuated, high pressure air may make verbal communication with the other crewmember or ATC more difficult.

NOTE

O___ a_____, e_____ s___ e_____ o_____ c_____ b_ s___ o__ a__ w___ p_____ o_____ f___ u____ t__ c_____ i_ d_____ (1_ m_____). S____ t__ e_____ o_____ s_____ i_ n__ r_____, i_ i_ n_____ f__ p_____ t_ g_____ d_____ t_ t__ p____ i_ f____ l___ t__ o_____ i_ d_____ b_____ r_____ 1_ m_____ o_ u__, h_____ o_____ i_ s____ b____ s_____.

Once activated, ejection seat emergency oxygen cannot be shut off and will provide oxygen flow until the cylinder is depleted (10 minutes). Since the emergency oxygen system is not regulated, it is normal for pressure to gradually decrease to the point it feels like the oxygen is depleted before reaching 10 minutes of use, however oxygen is still being supplied.

NOTE

S_____ p___ t__ g____ r___ u_ a__ a__ t_ a_____ t__ e_____ o_____ s_____. S_____ u_ a__ a__ p___ a_____ m__ b_ r_____ t_ f____ a_____ o_____ f___.

Sharply pull the green ring up and aft to activate the emergency oxygen system. Several up and aft pull attempts may be required to fully activate oxygen flow.

NOTE

P___ f____ t_ a_____ t__ e_____ o_____ s_____ m__ b_ a_ h____ a_ 4_ p_____.

Pull force to activate the emergency oxygen system may be as high as 40 pounds.

*** 2. DESCENT BELOW 10,000 FEET MSL – INITIATE**
*** 3. OBOGS SUPPLY LEVER - OFF (BOTH)**

EJECT
3 Warnings 1 Note

*** 1. EJECTION HANDLE - PULL (BOTH)**

WARNING

T_ a____ i_____, g____ h_____ a__ p___ s_____ t_____ a_____, k_____ e_____ a_____ t__ b___.

To avoid injury, grasp handle and pull sharply toward abdomen, keeping elbows against the body.

WARNING

T__ e_____ e_____ s_____ i_____ a_ e_____ c_____ f_____ s____. T__ f____ o_ d_____ b____ n_____ s_____ a__ s____ f_____ o_____ f___ t__ c_____ a__ i___ t__ c_____. S___ m_____ f_____ m__ b_ e_____ h__ a__ m__ c____ b____ u___ c_____ w___ t__ s___. A_____ s_____ e_____ e_____ s___ i_ c_____, t__ o_____ m___ i_ o_, a__ v____ i_ d___ p____ t_ e_____ o_ a_____ t__ C__ s_____ t_ p_____ i_____ f___ s_____ a__ h__ f_____.

The emergency escape system incorporates an explosive canopy fracturing system. The force of detonation blows numerous shards and small fragments outward from the canopy and into the cockpit. Some metallic fragments may be extremely hot and may cause burns upon contact with the skin. Aircrew should ensure exposed skin is covered, the oxygen mask is on, and visor is down prior to ejection or actuating the CFS system to prevent injury from shards and hot fragments.

WARNING

W___ e_____ o___ m_____ t_____ e_____ ____ f___ M__, t__ m_____ o_____ (M__) h_____ s____ b_ u___ t_ m_____ s_____ f___ t__ s___ a__ d_____ t__ p_____.

When ejecting over mountainous terrain exceeding 8000 feet MSL, the manual override (MOR) handle should be used to manually separate from the seat and deploy the parachute.

NOTE

I_ e_____ a_ l__ s_____, o__ o_ b___ s___ o_ r_____ m__ r_____ v_____ t_____ f_____ s___ s_____. T___ m__ c_____ a s_____ i_____ i_ d_____ r___ a__/o_ a_ u_____ t___. M_____ s_____ t__ r_____ i_ t___ p_____. T__ s_____ l____ (t_____) a__ l_____ o_ t__ b_____ o_ e___ o_ t__ f____ r_____. T_ c_____ a__ i_____ t____, u_____ t__ o_____ s_____ l___ o_ u__ r_____ f__ c_____.

If ejecting at low speed, one or both sets of risers may remain velcroed together following seat separation. This may create a slight increase in descent rate and/or an uncommanded turn. Manually separate the risers if time permits. The steering lines (toggles) are located on the backside of each of the front risers. To counter any uncommanded turns, unstow the opposite steering line or use risers for controllability.

FORCED LANDING
5 Warnings 2 Cautions 4 Notes

WARNING

A_____ m__ f____ w____ a_____ t_____ w___ t__ p_____ f_____
m___ t___ o_____ w____ c_____ p_____ f_____ l_____ a_ _-_% t_____.
E_____ m_____ i_ c_____ t_ a_____ t_____ t_____ p_____.
L_____ g_____ r___ d_____ w___ i_____ w___ t__ p_____ f_____.

Aircraft may float while approaching touchdown with the propeller feathered more than observed while conducting practice forced landing at 4-6% torque. Energy management is critical to achieving targeted touchdown position. Landing ground roll distance will increase with the propeller feathered.

WARNING

L_____ o_ a_ u_____ s_____ m__ c____ s_____ d_____ m_____i_
i_____ t_ o___ t__ c_____ o_ f_____ i_ u____ t__ C__.

Landing on an unprepared surface may cause structural damage making it impossible to open the canopy or fracture it using the CFS.

WARNING

E_____ f_____ o_ s_____ w___ c_____ d_____ t__ b____ a__ s____.
D_____ o_ e_____ c_____, t___ m__ c____ s_____ c_____ i____
a__/o_ f_____, a__ s_____ h_____ v_____, e_____ f___ t__ r___ c_____.

Engine failure or shutdown will completely disable the bleed air system. Depending on environmental conditions, this may cause significant canopy icing and/or fogging, and severely hamper visibility, especially from the rear cockpit.

CAUTION

E_____ i_ r_____ i_ a s_____ l_____ a___ i_ n__ a_____. I_ c_____ d_____ a_ e_____ l_____ a__ e_____ i_ n__ p_____ o_ t__ e_____ s_____ m_____, t__ p____ m__ p_____ a_ E__ t_ a_ u_____ s_____ o_ d____ t__ a_____. T__ a_____ s_____ c__ s_____ e_____ t___ o_ f_____ l_____; h_____, t__ r___ o_ i_____ i_____ s_____ d__ t_ c____ l____ a__ t__ c_____ o_ g_____ o_ w____ e_____.

Ejection is recommended if a suitable landing area is not available. If circumstances dictate an emergency landing and ejection is not possible or the ejection system malfunctions, the pilot may perform an ELP to an unprepared surface or ditch the aircraft. The aircraft structure can survive either type of forced landing; however, the risk of injury increases significantly due to crash loads and the complexity of ground or water egress.

CAUTION

I_____ y__ (s___ s_____) w___ a k____ e_____/o__ m_____ c____ r_____ i_ i_____ w_____ v_____ d__ t_ o__ l_____ s_____ o___ t__ w_____.

Inducing yaw (side slipping) with a known engine/oil malfunction could result in impaired windshield visibility due to oil leakage spraying onto the windshield.

*** 1. Airspeed - 125 KIAS prior to extending landing gear**
*** 2. EMER LDG GR handle - Pull (as required)**

WARNING

I_ l_____ o_ a_ u_____ s_____ o_ d_____, d_ n__ e_____ t__ l_____ g____. F____ w___ n__ b_ a_____ w_____ e_____ g____ e_____.

If landing on an unprepared surface or ditching, do not extend the landing gear. Flaps will not be available without emergency gear extension.

NOTE

N_____ s___ i_____ w___ e_____ p____, w___ t__ e_____ e_____ s_____ h__ b___ u___ t_ l____ t__ g___, a__ t__ g____ m___ g___ l_____, t__ r__ m___ d___ l_____, g____ n___ g___ l____, a__ r__ l____ i_ h_____.

Normal safe indications with electrical power, when the emergency extension system has been used to lower the gear, are two green main gear lights, two red main door lights, green nose gear light, and red light in handle.

*** 3. Airspeed - 120 KIAS minimum until intercepting final; 110 KIAS minimum on final**
*** 4. Flaps - As required**

WARNING

D_ n__ l____ f____ L__ u____ l_____ i_ a_____. D___ w___ i_____ d_____ o___ l_____ f____ a__ l_____.

Do not lower flaps LDG until landing is assured. Drag will increase dramatically once landing flaps are lowered.

NOTE

S_____ e_____ T_ o_ L__ f____ w___ e_____ t__ f____ t_ t__ c_____ p_____ i_ t__ l_____ h__ b___ e_____ u____ t__ e_____ e_____ s_____ a__ i_ b_____ p_____ i_ a_____.

Selecting either TO or LDG flaps will extend the flaps to the commanded position if the landing gear has been extended using the emergency extension system and if battery power is available.

NOTE

L_____ g___/f___ r_____ i_ n__ p_____ w___ t__ e_____ e_____ s_____ h__ b___ u___.

Landing gear/flap retraction is not possible when the emergency extension system has been used.

NOTE

N___ w____ s_____ i_ u_____ w___ a_ i_____ e_____. M_____ d_____ c_____ w___ r_____ a__ d_____ b_____.

Nose wheel steering is unavailable with an inoperative engine. Maintain directional control with rudder and differential braking.

PRECAUTIONARY EMERGENCY LANDING (PEL)
4 Warnings 2 Cautions

WARNING

I_ t__ e_____ s_____ f___ w____ f_____ t__ P__, r____ t_ t__ E_____ F_____ D_____ F_____ c_____, a__ t_____ t_ t__ F_____ L_____ p_____.

If the engine should fail while flying the PEL, refer to the Engine Failure During Flight checklist, and transition to the Forced Landing procedure.

WARNING

I_ r___ o_ d_____ (i_____ o_ t__ V__ w____ s_____ a_ 1__ K___ w___ g___, f____, a__ s____ b____ r_____ a__ __-__% t_____) i_ g_____ t___ 1___ f_/m__, i_____ t_____ a_ n_____ (u_ t_1__%) t_ a_____ a_____ 1___ t_ 1___ f_/m__ r___ o_ d_____. I_ e_____ p____ i_ i_____ t_ p_____ a r___ o_ d_____ l___ t___ 1___ f_/m__, s__ P__ t_ O__.

If rate of descent (indicated on the VSI while stabilized at 125 KIAS with gear, flaps, and speed brake retracted and 4 to 6% torque) is greater than 1500 ft/min, increase torque as necessary (up to131%) to achieve approximately 1350 to 1500 ft/min rate of descent. If engine power is insufficient to produce a rate of descent less than 1500 ft/min, set PCL to OFF.

WARNING

O___ o_ p_____, i_ e_____ i_ v_____ e_____, o_ i_ i_____ o_ f_____ a__ i_____, s__ P__ t_ O__.

Once on profile, if engine is vibrating excessively, or if indications of failure are imminent, set PCL to OFF.

WARNING

E_____ f_____ o_ s_____ w___ c_____ d_____ t__ b____ a__ s_____.
D_____ o_ e_____ c_____, t___ m__ c____ s_____ c_____
i____ a__/o_ f_____, s_____ h_____ v_____, e_____ f___ t__ r___
c_____.

Engine failure or shutdown will completely disable the bleed air system. Depending on environmental conditions, this may cause significant canopy icing and/or fogging, severely hampering visibility, especially from the rear cockpit.

CAUTION

I_____ y__ (s___ s_____) w___ a k____ e_____/o__ m_____ c____ r_____ i_
i_____ w_____ v_____ d__ t_ o__ l_____ s_____ o___ t__ w_____.

Inducing yaw (side slipping) with a known engine/oil malfunction could result in impaired windshield visibility due to oil leakage spraying onto the windshield.

CAUTION

A_ h_____ t_____ a__ p_____ a_____, p____ r_____ w___ b_ d_____.
A_____ b____ 1__ K___ o_ E__ f____, i_ c_____ w___ t_____ t_ a
h___ f____, m__ l___ t_ a h___ l_____ r_____ i_ l_____ g___ c_____ f_____.

At higher temperature and pressure altitudes, power response will be delayed. Airspeeds below 110 KIAS on ELP final, in combination with transitioning to a high flare, may lead to a hard landing resulting in landing gear component failure.

*** 1. Turn to nearest suitable field**
*** 2. Climb or accelerate to intercept ELP**
*** 3. Gear, flaps, speed brake - UP**

C____ B__ D_____ D_____ R_____ L____ R_____
(Check BIP Determine Deliver Reduce Lower Report)