

G450 / G550 Oceanic Contingency Procedures

ONE ENGINE INOPERATIVE

- 1 Set MCT on Operating Engine (**Auto throttles will Disengage**)
- 2 Slow to L/D Max (SMC- FLTREF - V_{REF} Flaps 0 + 10 knots)
Then begin drift down using FLC to the One Engine Inop Cruise Alt. FMS - Press **PERF – S.E. RANGE**

70000# Target Altitude is FL300

80000# Target Altitude is FL260

86000# Target Altitude is FL235

A Green and Amber Banana will be displayed on the ND. Green indicates Bottom of Descent Amber is the Single Engine Ceiling

-Simultaneously-

- 3 Perform the applicable offset and diversion procedure

- Do Not Delay -

- 4 Verify or manually select CPDLC-Emergency
- 5 Consider starting APU when at / below **FL 390**

OTS: CONTINUE & OFFSET

- 1 Advise ATC when time permits - Turn on all exterior lights
- 2 Determine which way to turn (Consider OTS, Traffic, WX, Turn towards alternate airport)
- 3 Turn Left or Right as required at least 45° and Offset 15NM
- 4 Once clear of assigned route by 10NM Climb or Descend to an Offset Altitude

ABOVE FL410 CLB or DES 1000'

AT FL410 DES 500' or CLB 1000'

BELOW FL410 CLB or DES 500'

FMS Procedure

Press PROG, Page 3
Insert Offset (L15 or R15)
Verify the Offset and Flight Plan
Monitor new route
Check Fuel and determine appropriate speed

OTS: RETURN & OFFSET

Before initiating any 180° turn-back, consider maintaining a same direction 15NM offset. Expedite climb above or descend below the vast majority of NAT traffic FL410-280 prior to crossing adjacent tracks or making a 180° turn-back.

- 1 Advise ATC when time permits - Turn on all exterior lights
- 2 Determine which way to turn (Consider OTS, Traffic, WX, Turn towards alternate airport)
- 3 Turn Left or Right as required 45° from present course to intercept and establish a 15NM offset
- 4 Once established on the 15NM offset expedite climb above or descend below NAT HLA airspace (FL410-280)

ABOVE FL410 CLB or DES 1000'

AT FL410 DES 500' or CLB 1000'

BELOW FL410 CLB or DES 500'

- 5 Turn Left or Right as required 180° to 225° from present course to intercept and re-establish yourself on the offset course.

NOTE: This procedure assumes you have built a contingency based turn-back flight plan during your Pre-flight.

FMS Procedure

Select HDG Mode
Press NAV and select FPL LIST
Line Select your correct Flight Plan
Place the flight plan into SHOW FPL
Select FPL SEL
Select INVERT / ACTIVATE
Confirm Replacing – Select YES
Press PROG, Page 3 – Insert Offset L15 or R15 Use caution to select the correct offset. The new course line should be very close to your current position.
Verify Routing on PFD and Engage LNAV
Check Fuel and determine appropriate speed

DIVERSION: ACROSS PRIMARY TFC FLOW (OTS)

If drifting down or descending, DO NOT cross tracks until level at an appropriate altitude for crossing tracks. Maintain established offset and expedite Climb above or Descend below the OTS (FL410-280). Utilize one of the previous procedures until clear of the organized track system.

- 1 Advise ATC when time permits - Turn on all exterior lights
- 2 Confirm you are level at an appropriate Offset Altitude

ABOVE FL410 CLB or DES 1000'

AT FL410 DES 500' or CLB 1000'

BELOW FL410 CLB or DES 500'

- 3 Request a clearance and proceed to alternate airport as per your reclearance or, direct if unable to obtain a clearance.
- 4 Check Fuel & Determine appropriate speed
- 5 Maintain extra vigilance for traffic
- 6 Broadcast FL & Position to nearby traffic on 121.5/123.45

DEPRESSURIZATION / EMERGENCY DESCENT

Manually performing the Emergency Descend Procedure Once crew is on O₂ may be the safest course of action in Oceanic Airspace. Monitor for nearby traffic on TCAS.

NOTE: Difference in non-NAT HLA and NAT HLA procedures (3)

- 1 Crew and Passenger O₂ DON/100%
- 2 Autopilot Disconnect if EDM Annunciated / Re-engage AP and select HDG and ALT
- 3 **NON-North Atlantic HLA** – Turn Left or Right as required 90° from present course to quickly intercept and establish a 15NM offset
North Atlantic HLA – Turn Left or Right as required 90° from present course to quickly intercept a point midway between a pair of tracks prior to entering the OTS from above. If not above tracks establish a 15NM offset
- 4 Set 15000' in Altitude Selector, MAN Speed MMO and FLC
- 5 Deploy Speedbrakes
- 6 Datalink "Verify Emergency" will automatically display on FMS if EDM is activated. Review the info (add POB) and Press send. If not displayed Select Press NAV Select ATC (R1) Select ATC INDEX (L6) Select Emergency and Mayday to active ADS Emergency Mode
- 7 Advise ATC when time permits - Turn on all exterior lights
- 8 Maintain extra vigilance for traffic. Monitor TCAS
- 9 Broadcast FL & Position to nearby traffic on 121.5/123.45

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WEATHER DEVIATION

Obtain ATC Clearance if possible. Indicate priority with "WEATHER DEVIATION REQUIRED" or "PAN-PAN-PAN". If ATC advises "Unable due Traffic, State your Intentions" consider Declaring an Emergency prior to utilizing this procedure.

If unable to obtain a clearance

- 1 If possible, deviate away from nearby routes, tracks, or traffic
- 2 Broadcast FL, Position and Intentions to nearby traffic on 121.5/123.45
- 3 Maintain extra vigilance for traffic – Turn on all ext. lights
- 4 If deviating **LESS** than 10NM remain at current FL
- 5 If deviating **MORE** than 10NM use the table below.

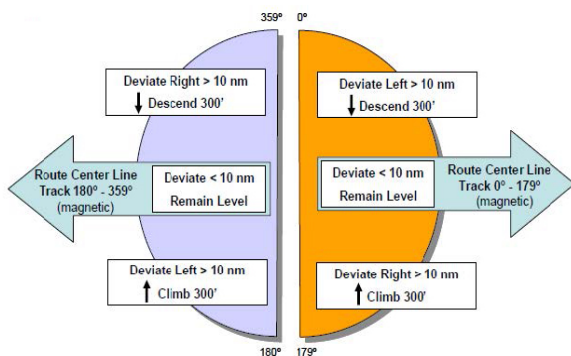
SAND – South Ascend – North Descend

EASTBOUND	Deviating Left	Descend 300'
	Deviating Right	Climb 300'
WESTBOUND	Deviating Left	Climb 300'
	Deviating Right	Descend 300'

- 6 Return to Cleared FL when within 10NM of course
- 7 Continue broadcasting FL and Position
- 8 Continue to attempt contact with ATC and advise them of your weather deviation.

FMS Procedure

Press PROG, Page 3 - Insert Offset (LXX or RXX)



ONE REMAINING NAV SOURCE

- 1 Assess prevailing circumstance:
 - a. Performance of remaining NAV source
 - b. Remaining portion of flight in NAT/HLA Airspace
- 2 Exercise good judgement w/ respect to current situation
 - a. Request clearance above or below NAT/HLA
 - b. Reverse course
 - c. Divert to use Special Routes (Blue Spruce)
- 3 Consult ATC as to the most suitable action
- 4 Obtain a clearance prior to any deviation from route
- 5 Ensure monitoring and crosscheck of remaining NAV src.
- 6 Check main and stby compass systems against flt plan
- 7 Attempt visual sighting of other aircraft for position confirmation
- 8 Contact aircraft in vicinity to obtain useful info: Current Winds, Mag Heading, Drift, etc.

TOTAL NAV FAILURE

- 1 Notify ATC
- 2 Make best use of procedures specified above
- 3 Turn on all exterior lights
- 4 Maintain extra vigilance for traffic
- 5 All data required for Dead Reckoning along route is available on Computer Flight Plan.

COMM FAILURE

- 1 Check the following:
 - a. Communications panels (3)
 - b. Volume
 - c. Circuit Breakers (See list below)
 - d. Replace microphone and or headset
 - e. Try different frequency
 - 2 Attempt communications on SATCOM
 - 3 Attempt contact vis Datalink (ADS-C/ CPDLC)
 - 4 Squawk 7600
 - 5 Broadcast in the Blind on 121.5/123.45
- Remain clear of Oceanic Airspace if able**
- 6 If failure occurs within the Oceanic airspace:
 - a. **NAT/HLA** fly route you received in your clearance and maintain your last cleared/assigned flight level and Mach
 - b. **PACIFIC OCA** maintain the last assigned speed and level for **60 mins** after the last **compulsory reporting** point since the failure. **THEN** adjust speed and Altitude in accordance with the **FILED Flight Plan**
 - 7 Rejoin FILED Route after exiting Oceanic Airspace
 - 8 Continue to attempts regain communication

COMM RELATED CB's

PILOT ACP LEER D-17	VHF COMM 1 POP F-6	HF CPLR 1 LEER E-18
COPILOT ACP REER D-6	VHF COMM 2 CPOP F-6	HF CPLR 2 REER E-6
OBSERVER ACP REER D-7	NAV/COM CPOP G-6	HF RX/TX 1 LEER F-18
		HF RX/TX 2 REER-F6
SATCOM PRI SSPC #2311		

OCEANIC CONTACTS

Verify numbers on Jepp Chart	
OAKLAND	SATCOM 436697 +1-510-745-3415 or 3416
GANDER OCEANIC	SATCOM 431603 Oceanic / 431602 Domestic +1-709-651-5324
GANDER RADIO	SATCOM 431613 +1-709-651-5328
SHANWICK OCEANIC	SATCOM 423201 or 425002 +353-61-368-241
SHANWICK RADIO	SATCOM 425002 +353-61-471-199
NEW YORK OCEANIC (NAT)	SATCOM 436695 +1-631-468-1495
NEW YORK OCEANIC (WATRS)	SATCOM 436696 +1-631-468-1495
REYKJAVIK ATC	SATCOM 425103 +354-568-3035
ICELAND RADIO	SATCOM 425105 +354-568-4600
SANTA MARIA RADIO	SATCOM 426305 +351-29-68-86-655