ONE ENGINE INOPERATIVE – OEI

1. Set MCT on Operating Engine (Auto throttles will Disengage)
2. Slow to L/D Max (SFC / FLPREF – Approx. VREF Flaps 0° + 10kt)

QRH / Engine Driftdown Charts / EB-16

Then, begin driftdown using FLCH to the OEI Cruise Alt.

FMS – PERF / S.E. RANGE (5R)

5NM Target Altitude is FL340
75000# Target Altitude is FL280
90000# Target Altitude is FL230

A Green and Amber Banana will be displayed on the Nav Display.
Green indicates the Bottom of Descent; Amber is the S.E. Ceiling

Simultaneously:

3. Turn on all exterior lights
4. Pre-Briefed Turn Left or Right at least 30° and Offset SNM
   (Consider OTS, Traffic, WX, Turn towards alternate airport)
5. Established on SNM offset, Climb / Descend

Caution

Diversion across the OTS at an offset FL is not recommended.
Before initiating any 180° turn-back, maintain a same direction
SNM offset. Climb above FL410 or expedite descent below FL290
prior to crossing adjacent tracks, and/or making a 180° turn-back.

ABOVE FL410 CLIMB or DESCEND 1000’
AT or BELOW FL410 CLIMB or DESCEND 500’

6. Verify or manually select CPDLC / Emergency:
   FMS – NAV / ATC / Emergency (1L)
7. Maintain extra vigilance for traffic (TCAS/Visual Lookout)
8. Advise nearby aircraft when time permits on 121.5/123.45
   (‘OEI Driftdown, position, FL and Intentions’)
9. Advise ATC when time permits
   (OEI Driftdown, position, FL and Intentions. Request clearance
   and proceed to alternate airport, or Direct if unable to obtain a clearance.)

FMS Procedure:

Select PROG / Page 3
Enter the appropriate Offset, LS or R5 (1R)
Verify the Offset and Flight Plan, then Activate (6R)
Monitor new route
Check Fuel and determine appropriate speed

All Engine Operating: CONTINUE & OFFSET

1. Turn on all exterior lights
2. Pre-Briefed Turn Left or Right at least 30° and Offset SNM
   (Consider OTS, Traffic, WX, Turn towards alternate airport)
3. Established on SNM offset, Climb/ Descend

Caution

Diversion across the OTS at an offset FL is not recommended.
Before initiating any 180° turn-back, maintain a same direction
SNM offset. Climb above FL410 or expedite descent below FL290
prior to crossing adjacent tracks, and/or making a 180° turn-back.

ABOVE FL410 CLIMB or DESCEND 1000’
AT or BELOW FL410 CLIMB or DESCEND 500’

4. Maintain extra vigilance for traffic (TCAS/Visual Lookout)

5. Advise nearby aircraft when time permits on 121.5/123.45
   (“OEI Driftdown, position, FL and Intentions”)
6. Advise ATC when time permits
   (Position, FL and Intentions. Request clearance and proceed to
   alternate airport, or Direct if unable to obtain a clearance)

FMS Procedure:

Select PROG / Page 3
Enter the appropriate Offset, LS or R5 (1R)
Verify the Offset and Flight Plan, then Activate (6R)
Monitor new route
Check Fuel and determine appropriate speed

DEPRESSURIZATION / EMERGENCY DESCENT

Manually perform the Emergency Descend Procedure
ONCE CREW IS ON O2

1. Crew and Passenger O2, DON/100%
2. If EDM Annunciated, Re-engage AP and select HDG/ALT
3. If Crossing Above OTS Turn Left or Right as required 30°
   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 SNM offset.
4. Altitude Selector – Set/Verify 15000ft
5. MAN Speed – MMO and FLCH
6. Deploy Speedbrakes
7. If EDM Annunciated, Verify “Emergency” on CPDLC /
   ADS. Review the info; add Persons on Board (POB) and
   Press SEND.
8. If EDM not displayed, Press NAV / ATC (R1) / ATC INDEX
   (L6) / EMERGENCY (1L) / MAYDAY to active ADS
   Emergency Mode
9. Turn on all exterior lights
10. Maintain extra vigilance for traffic (TCAS/Visual
    Lookout)
11. Advise nearby aircraft when time permits on
    121.5/123.45 (“Emergency Descent, position, FL and
        Intentions”)
12. Advise ATC when time permits (“Emergency Descent,
    position, FL and Intentions. Request clearance
    and proceed to alternate airport, or Direct if unable to obtain a clearance.”)

WEATHER DEVIATION

1. Pilot develops the amended Route, Altitude and Speed required
   to avoid the weather.
   (If possible, deviate away from nearby routes, tracks, or traffic.
   Formulate request in Terms of Left or Right and #of NM from of
   cleared course)
2. Obtain ATC Clearance

NOTE

Indicate priority with
“WEATHER DEVIATION REQUIRED” or “PAN-PAN-PAN”

If unable to obtain a clearance or NO ATC COMM
3. Advise ATC:
   “I am deviating as requested and will employ the ICAO Weather
   Deviation Contingency at SNM using PIC Emergency Authority”
4. Maintain extra vigilance for traffic (TCAS/Visual Lookout)
5. Turn on all exterior lights

GVI
6. If deviating LESS than 5 NM remain at the current FL
7. If deviating 5 NM or MORE use the graphic below

SAND – South Ascend – North Descend

8. Keep Advising nearby aircraft at suitable intervals on 121.5/123.45, "Weather Deviation in-progress, position, FL and Intentions"
9. If more NM required, reference request from original cleared course
10. Once clear of weather, report “Clear of Weather, Request direct XXXXX and FL XXX”
11. If returning to original course, report “Clear of Weather, Returning to course”
12. When <5NM from original course, return to original cleared FL
13. When back on original course, report “Weather deviation complete. Back on course”

FMS Procedure:

**PROG, Page 3 / Enter Offset, LS or RS (1R) / ACTIVATE (6R)**

**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 source.
6. Check main and standby compass systems against flight 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. Pilot develops the amended Route, Altitude and Speed required to avoid known traffic.
2. Notify ATC “Total Navigation Failure”
3. Turn on all exterior lights
4. Maintain extra vigilance for traffic (TCAS/Visual Lookout)
5. Advise nearby aircraft at suitable intervals (Nose change?) on 121.5/123.45 “Navigation Failure in-progress, position, FL and Intentions”
6. Use plotting chart and Computer Flight Plan data required for Dead Reckoning along route.
7. Request nearby aircraft to read out winds and drift corrections
8. Use WX radar tilt/gain to show shoreline outline for orientation

**NAV RELATED CB’s**

<table>
<thead>
<tr>
<th>ALL NAV RECEIVERS ARE ON A SINGLE CB</th>
<th>NAV RCVR 1 POP F3</th>
<th>NAV RCVR 2 CPPOP F3</th>
</tr>
</thead>
</table>

**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 via 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 the route you received in your clearance and maintain your last cleared / assigned FL and Mach number
7. Rejoin FILED Route after exiting Oceanic Airspace
8. Continue attempts to regain communication

**COMM RELATED CB’s**

<table>
<thead>
<tr>
<th>PILOT ACP POP G-1</th>
<th>VHF COMM 1 POP F-4</th>
<th>HF CPLR 1 SSPC #2301</th>
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<tbody>
<tr>
<td>COPILOT ACP CPPOP G-1</td>
<td>VHF COMM 2 CPPOP F-4</td>
<td>HF CPLR 2 SSPC #2302</td>
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<tr>
<td>OBSERVER ACP CPPOP G-2</td>
<td>NAV/COM CPPOP G-4</td>
<td>HF RX/TX 1 SSPC #2303</td>
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<tr>
<th>SATCOM PRI SSPC #2311</th>
<th>SATCOM 425002</th>
<th>SATCOM 431603 Oceanic / 431602 Domestic</th>
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<tr>
<td>HF RX/TX 1 SSPC #2301</td>
<td>SATCOM 431613</td>
<td>+1-709-651-5324</td>
</tr>
<tr>
<td>HF RX/TX 2 SSPC #2302</td>
<td>SATCOM 425201 or 425002</td>
<td>+353-61-368-241</td>
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<tr>
<td>HF RX/TX 2 SSPC #2304</td>
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<td>SATCOM 425105</td>
<td>+354-568-4600</td>
</tr>
<tr>
<td>HF RX/TX 1 SSPC #2303</td>
<td>SATCOM 426305</td>
<td>+351-29-68-86-655</td>
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**OCEANIC CONTACTS**

Verify numbers on Jepp Chart

<table>
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<th>GANDER OCEANIC</th>
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</tbody>
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Reference Docs: ICAO DOC 4444, NAT DOC 007v-2019-1, ICAO Doc 10037 GOLD, G650ER QRH Rev. 7 / G650 QRH Rev.16

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