

Docket No. SA-542

Exhibit No. 2-G

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

Operational Factors Group Chairman's Factual Report
Attachment 6 – SWA B737NG Non-Normal Quick Reference Card
(3 Pages)

Factual Report – Attachment 6
SWA B737NG Non-Normal Quick Reference Card

OPERATIONAL FACTORS

DCA18MA142

B737NG Non-Normal Quick Reference Card

CABIN ALTITUDE WARNING or
Rapid Depressurization

- 1 Don oxygen masks and set regulators to 100%.
- 2 Establish Crew communications.
- 3 Pressurization mode selector..... MAN
- 4 Outflow VALVE switch.....Hold in CLOSE until the outflow VALVE indication shows fully closed
- 5 If cabin altitude is **uncontrollable**:
Passengers signs..... ON
PASS OXYGEN switch ON
▶ ▶ Go to QRC Emergency Descent checklist
- 6 If cabin altitude is **controllable**:
Continue manual operation to maintain correct cabin altitude.
When the cabin altitude is at or below 10,000 feet:
Oxygen masks may be removed.
- ▶ ▶ Go to QRH Ch. 2 CABIN ALTITUDE WARNING or Rapid Depressurization checklist

Emergency Descent

- 1 Advise Flight Attendants and ATC of the emergency descent.
- 2 Passenger signs..... ON
- 3 **Without delay**, descend to the lowest safe altitude or 10,000 feet, whichever is higher.
- 4 ENGINE START switches (both) CONT
- 5 Thrust levers (both) Reduce thrust to minimum or as needed for anti-ice
- 6 Speedbrake FLIGHT DETENT
- 7  Set target speed to M_{MO}/V_{MO} .
- Caution! (-700) When gross weight is greater than 143,000 lbs, speed brake will autostow to 50% flight detent if airspeed exceeds 320 knots. Do not override autostow function unless airspeed is less than 320 knots.**
- 8 **When** approaching the level off altitude:
Smoothly lower the SPEED BRAKE lever to the DOWN detent and level off. Add thrust and stabilize on altitude and airspeed.
- 9 Crew oxygen regulators Normal
Flight Deck Crew must use oxygen when cabin altitude is above 10,000 feet. To conserve oxygen, move the regulator to Normal.
- 10 ENGINE START switches (both) As needed
- 11 The new course of action is based on weather, oxygen, fuel remaining, and available airports. Use of long range cruise may be needed.

WARNING HORN (INTERMITTENT) or
WARNING LIGHT - CABIN ALTITUDE OR
TAKEOFF CONFIGURATION

- 1 If the intermittent warning horn sounds or a CABIN ALTITUDE light (if operative) illuminates **in flight** at an aircraft flight altitude above 10,000 feet MSL:
Don the oxygen masks and set the regulators to 100%. Establish Crew communications.
▶ ▶ Go to QRC CABIN ALTITUDE WARNING or Rapid Depressurization checklist
- 2 If the intermittent warning horn sounds or a TAKEOFF CONFIG light (if operative) illuminates **on the ground** when advancing the thrust levers to takeoff thrust:
Ensure correct aircraft takeoff configuration.

Runaway Stabilizer

- 1 Control column..... Hold firmly
- 2 Autopilot (if engaged)..... Disengage
Do **not** re-engage the autopilot.
Control aircraft pitch attitude manually with control column and main electric trim as needed.
- 3 Autothrottle (if engaged)..... Disengage
Do **not** re-engage the autothrottle.
- 4 If the runaway **stops** after the autopilot is disengaged.
- 5 If the runaway **continues** after the autopilot is disengaged:
STAB TRIM CUTOUT switches (both) CUTOUT
If the runaway continues:
Stabilizer trim wheel Grasp and hold
- 6 Stabilizer..... Trim manually
- 7 Anticipate trim requirements.
- ▶ ▶ Go to QRH Ch. 9 Runaway Stabilizer checklist

Airspeed Unreliable

- 1 Autopilot (if engaged)..... Disengage
- 2 Autothrottle (if engaged)..... Disengage
- 3 F/D switches (both) OFF
- 4 Set the following gear up pitch attitude and thrust:
Flaps extended 10° and 80% N1
Flaps up 4° and 75% N1
- ▶ ▶ Go to QRH Ch. 10 Airspeed Unreliable checklist

AUTOMATIC UNLOCK

- 1 FLT DK DOOR lock selector.....Rotate to DENY and hold for 1 second

B737NG Non-Normal Quick Reference Card

ENGINE OVERHEAT

- 1 Autothrottle (if engaged)..... Disengage
 - 2 Thrust lever (affected engine) Confirm.....Close
 - 3 If the ENG OVERHEAT light **stays illuminated**:
 - ▶ ▶ **Go to QRC ENGINE FIRE or Engine Severe Damage or Separation checklist**
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 - 4 If the ENG OVERHEAT light **extinguishes**:
 - Run the engine at reduced thrust to keep the light extinguished.
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- ▶ ▶ **Go to QRH Ch. 8 ENGINE OVERHEAT checklist**

Loss of Thrust on Both Engines

- 1 ENGINE START switches (both) FLT
 - 2 Engine start levers (both) CUTOFF
 - 3 **When** EGT decreases:
 - Engine start levers (both).....IDLE detent
 - 4 If EGT reaches a redline or there is no increase in EGT within 30 seconds:
 - Engine start lever (affected engine).....Confirm.....CUTOFF, then IDLE detent
 - If EGT again reaches a redline or there is no increase in EGT within 30 seconds, repeat as needed.
- Note:** If the aircraft reverts to standby power there are no M_{MO}/V_{MO} protections.
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- ▶ ▶ **Go to QRH Ch. 7 Loss of Thrust On Both Engines checklist**

Engine Limit or Surge or Stall

- 1 Autothrottle (if engaged)..... Disengage
 - 2 Thrust lever (affected engine) Confirm ..Retard until engine indications stay within limits or the thrust lever is closed
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- ▶ ▶ **Go to QRH Ch. 7 Engine Limit or Surge or Stall checklist**

Smoke, Fire or Fumes

- 1 Diversion may be needed.
 - 2 Don oxygen masks and set regulators 100%.
 - 3 Don smoke goggles, as needed.
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- ▶ ▶ **Go to QRH Ch. 8 Smoke, Fire or Fumes checklist**

ENGINE FIRE or Engine Severe Damage or Separation

- 1 Autothrottle (if engaged)..... Disengage
 - 2 Thrust lever (affected engine) Confirm..... Close
 - 3 Engine start lever (affected engine) .. Confirm...CUTOFF
 - 4 Engine fire switch (affected engine) .. Confirm.....Pull
 - To manually unlock the engine fire switch, press the override and pull.
 - 5 If the engine fire switch or ENG OVERHEAT light is illuminated:
 - Engine fire switch.....Rotate to the stop and hold for 1 second
 - If after 30 seconds the engine fire switch or ENG OVERHEAT light stays illuminated:
 - Engine fire switch..... Rotate to the other stop and hold for 1 second
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- ▶ ▶ **Go to QRH Ch. 8 ENGINE FIRE or Engine Severe Damage or Separation checklist**

APU FIRE

- 1 APU fire switch Confirm..... Pull, rotate to the stop, and hold for 1 second
 - 2 APU switch..... OFF
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- ▶ ▶ **Go to QRH Ch. 8 APU FIRE checklist**

Aborted Engine Start

- 1 Engine start lever (affected engine) CUTOFF
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- ▶ ▶ **Go to QRH Ch. 7 Aborted Engine Start checklist**