

A310 MEMORY ITEMS

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1. Emergency Descent:

- Crew Oxygen Mask – ON
- Crew Communication (Headsets) – Establish
- Turn – Initiate
- Descent – Initiate
 - It is recommended to descend with AP engaged:
 - FCU ALT – Decrease
 - LVL / CH – Engage
 - SPD / MACH – Select SPD
- Throttles – Idle
- SPD BRK – Full
- SPD – Adjust as required

Caution: Descent at maximum appropriate speed or reduce speed if structural damage is suspected.

Note: Fuel and Time to Destination at FL 100/140 given in Special Operations (Ref: 2.18.20)

2. a) Loss of Both Generators:

b) Flight on BATT only:

- Ignition – Continuous Relight

3. Smoke / Fumes:

- If Smoke / Fumes become greatest threat:
 - PROC: Smoke / Fumes Removal – Consider
- If situation unmanageable – Land ASAP

4. Smoke / Fumes Removal:

- Oxygen Masks – 100% / EMERG / ON
- Goggles – ON
- Crew Communication (Headsets) – Establish

5. Cargo Compartment Smoke:

Warning on Ground with Cargo Door Open:

- Agent – Do Not Discharge
- Ground Crew – Inform

6. a) Slats System 1 and 2 Fault / Slats Stuck: b) Flaps System 1 and 2 Fault / Flaps Stuck: c) Flap Vane Jam

- Slats / Flaps Lever – Cycle

7. a) Abnormal Pitch Behavior: b) Pitch Trim Runaway:

- Control Wheel – Hold Firmly
- Trim Wheel – Hold Firmly
- AP (if engaged) – Disconnect
- Pitch Trim Levers – Check Both OFF
- Pitch Trim – Manual

8. Loss of Braking at Landing:

- If No Braking Available:
 - Max Reverse – Apply
 - Brake Pedals – Release
 - BRK / ANTI SKID – ALT / OFF
 - Brake Pedals – Press
 - MAX Brake Pressure – 1000 psi
- If Still No Braking:
 - Parking Brake – Use

9. GPWS Alerts:

Simultaneously:

- Auto Pilot – Disconnect
- Pitch Attitude – Initially 20 deg Nose Up (stick shaker boundary is upper limit of pitch)
- A / THR – Disconnect
- Throttles – Full Forward
- Speed Brakes Lever – Check Retracted
- Bank – Wings Level or adjust

10. TCAS Warnings:

- AP (if engaged) – Disconnect
- A / THR (if engaged) – Disconnect

Respond promptly and smoothly to an RA by adjusting or maintaining the thrust manually and the vertical speed, as required, to reach the green arc and/or avoid the red arc of the vertical speed scale.

11. Both Engine Flameout:

- Land ASAP
- Ignition – Cont Relight
- RAT – ON
- Throttles – Idle

12. Engine Stall - GE:

- Throttle – Idle
- Ignition – Cont Relight

13. Engine Stall – P&W:

- On Ground
 - Fuel Lever – OFF

- In Flight
 - Throttle – Idle
 - Ignition – Cont Relight
 - Engine Parameters – Check
 - If EGT Approaching Red Line and Increasing – Fuel Lever OFF

14. Engine Over Limit:

GE	Normal	Max		PW	Normal	Max
N1	117.5 %	124 %		N1	111.4 %	117 %
N2	112.5 %	114 %		N2	104 %	110.3 %
EGT	960 °C	1000 °C				

15. Engine REV UNLK:

- Throttle Affected Engine – Idle
- Max Speed – 300

16. Start Valve Fails to Open:

- Engine Start Selector – OFF

17. Premature Start Valve Closure:

- Fuel Lever – OFF

18. Start Valve Fails to Close (Ground):

- Engine Start Selector – OFF
- Open Light – Check Extinguished

19. No “N2” During Engine Start (Ground):

- HYD ENG PUMP LO PR Lights (affected side) – Check
- Engine Start Selector – OFF

20. No Light Up During Engine Start (Ground):

- Fuel Flow – Check
- Fuel Lever – OFF
- Engine Motoring – 30 Seconds

21. Hung Start (Ground):

- Indications:
 - Abnormally slow engine acceleration after light up
 - N2 hanging below idle
 - FF normal or low
 - EGT within limit
- Engine Primary Parameters – Note for Analysis
- Fuel Lever – OFF
- If Starter Disengaged (valve closed)
 - When N2 at / or below 30% – PRESS ENG START Pushbutton
- Engine Motoring – 30 Seconds
- Engine Start Selector – OFF

Note: The UNDERLINED part is mentioned in the P&W checklist only.

22. Hot Start – GE:

- Indications:
 - Rapid EGT rise likely to exceed the starting EGT limit
 - N2 increases below normal rate
 - FF normal or high
 - Tailpipe burning may be reported by ground crew
- If EGT exceeds 870° C or is above 750° C for more than 40 seconds
- Fuel Lever – OFF
- Engine Motoring – 30 Seconds
- Engine Start Selector – OFF

23. Hot Start – P&W:

- Indications:
 - Rapid EGT rise likely to exceed the starting EGT limit (535° C)
 - N2 hanging at approximately 30% N2
 - FF normal or high
 - Tailpipe burning may be reported by ground crew
- Fuel Lever – OFF
 - If EGT reaches 400° C before N2 has reached 30% anticipate a possible hot start and be prepared to select the fuel lever to OFF to prevent a hot start.*
- If Starter Disengaged (valve closed)
 - When N2 at / or below 30% – PRESS ENG START Pushbutton
- Engine Motoring – 30 Seconds

Note: Differences between the two hot start checklists (GE and P&W) are UNDERLINED

24. Engine Tailpipe Fire – On Engine Start:

- Indications:
 - EGT increases rapidly when fuel lever is set to ON
 - Internal tailpipe fire reported by ground crew
- Fuel Lever – OFF

25. Engine Tailpipe Fire – On Engine Shut Down:

- Indications:
 - EGT fails to decrease when fuel lever is set to OFF
 - Internal tailpipe fire reported by ground crew
- Fuel Lever – Check OFF

26. Unreliable Airspeed:

- All Airspeed Indications – Disregard
- AP / FD (except in level flight), A / THR – Disconnect

	Thrust		Pitch	
To CLIMB	GE 100 % PW 90%		Slats Extended	12.5° NU
			Slats Retracted Below FL 100	7.5° NU
			Above FL 100	5° NU
To LEVEL OFF Maintain Level Flight at Safe Altitude	Below FL 100	GE 70% PW 62%	2° NU	
	FL100 to FL250	GE 80% PW 72%		
	Above FL250	GE 90% PW 82%		
To DESCEND	Idle		1.5° ND	

27. Stall Recovery:

When any stall indication (aural, stick shaker or buffet) is recognized, apply the immediate actions:

❖ During Any Flight Phase Except at Lift Off:

- AP – Disconnect
- A/THR – Disconnect
- Nose Down Pitch Control – Apply
- Nose Down Pitch Trim – As Needed

Note: In case of lack of pitch down authority, reducing thrust may be necessary

- Bank – Wings Level

➤ When out of Stall (i.e. No Stall Indications):

- Thrust – Increase smoothly as needed

Note: With one engine inop, progressively compensate thrust asymmetry with rudder

- Speedbrakes – Check Retracted
- Flight Path – Recover Smoothly

➤ If in Clean Configuration and below 20,000 feet:

- Slats – Extend

Note: If a risk of ground contact exists, when clearly out of stall (i.e. no stall indications), establish smoothly a positive climb gradient.

❖ At Lift Off:

- A/THR – Disconnect
- Throttles – Full Forward
- Pitch Attitude – 12.5 degrees
- Bank – Wings Level

Note: After achieving and maintaining a safe flight path and speed, if stall warning is still activated, consider it as a spurious stall warning and refer to the procedure “Inadvertent Stick Shaker (QRH 6.04)”

Miscellaneous References:

Topic	Reference	
Flight without Cabin Pressurization	2.18.20	Special Operations
Fluid Contaminated Runway Operation	2.18.50	
ETOPS	2.18.70	
APU Fuel Consumption	2.17.10	Flight Planning
TAT versus SAT and Mach Number	2.08.10	Operating Data
FPA Correction for Cold Weather		
Severe Turbulence	QRH 13.00 MISC	Procedures and Techniques 2.2.13
VMO/MMO Exceedance		
Heavy Rain, Hail or Sleet		
Icing Condition		
Volcanic Ash		
Mach Buffet	2.2.13	Procedures and Techniques
Operation in Loose Abrasive Particles		
Cold Weather Operation		
Operation in Windshear		
Ice on Upper Wing Surface		
Crosswind		
Weather Avoidance		
Flight Instruments and IRS	2.2.15	
Unreliable Airspeed / Bomb on Board	13.00	QRH MISC
Forced Landing / Ditching		
Cockpit Window Arcing / Cracking		
Door problems		
Tail Strike / Overweight Landing		
FWS Fault / Advisory Conditions		
Tripped CB Re-engagement and System Reset		

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