Go-Around Procedure

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• Introduction

• Go-Around Preparation

• Why Go Around?

• Correct Go-around – how?

• Conclusions
Introduction

- Go-around: an essential safety manoeuvre for all pilots
- However, we have seen several examples where a safe go-around was not achieved so we must review the go-around....
- We regularly practiced in the simulator but often with engine failure and often from minima
- By contrast, most real-world go-arounds are
  - Light weight/High thrust/From any other point on the approach
- Pilots must be familiar and confident with all aspects of the go-around manoeuvre
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Go-Around Preparation

• Essential and normal part of approach preparation: Check and brief the missed approach

MISSED APCH: Climb on R-144 inbound to VOR to MAX 2000’, then turn LEFT climbing to 4000’ on R-305. At D10.0 TOU turn LEFT onto 252° climbing to 5000’ to intercept and follow 18 DME Arc TOU to SULIT.
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Why Go Around?

If:
- The approach is not properly stabilized
- You have doubts about your situational awareness
- A malfunction occurs
- Adequate visual cues are not obtained at minima
- Any GPWS/TCAS or wind-shear alert occurs

Then, apply the go-around procedure.
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Correct Go-around - how?

PF announces “Go-around… Flaps!” and simultaneously...

• Sets TOGA thrust
Correct Go-around - how?

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• If in manual flight, rotate to the go-around pitch target
Correct Go-around - how?

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- Sets TOGA thrust
- If in manual flight, rotates to the go-around pitch target
- Or monitors AP response
Correct Go-around - how?

PF announces “**Go-around... Flaps!**” and simultaneously...

- Sets TOGA thrust
- If in manual flight, rotates to the go-around pitch target
- Or monitors AP response
- Checks FMA

![Diagram showing flight controls and FMA]
Correct Go-around - how?

• Pitch?

A320 15°

A380 12.5°

A320 Single Engine 12.5°

Know your pitch target and fly it!
Why is pitch so important?

During a manual go-around, if the required pitch is not reached or maintained:

• Linear acceleration will result,
• This may cause a, “false climb illusion”

Fly the correct pitch
Why is pitch so important?

• During a manual go-around, if the correct pitch attitude is not maintained,
  - The aircraft will accelerate towards the flap limit
  - There is NO speed protection when the A/THR is blue, i.e. not active

Maintain the correct pitch attitude

NOTE: SPEED REFERENCE SYSTEM (SRS) pitch orders, when followed accurately, should ensure that the aircraft remains at the correct speed during the go-around
Role of PNF/PM

- The PNF must make callouts if flight parameters deviate from standard / safe values.
  - To enhance PF’s awareness of the situation
  - To trigger a corrective action by the PF

“PITCH!”
Correct Go-around - how?

- PNF retracts one step of FLAPS
Correct Go-around - how?

• PF orders “Gear up!”, when positive climb is confirmed
Correct Go-around - how?

- When reaching thrust reduction altitude
Rapid ALT* engagement – with autopilot

- Rapid sequence of events with early capture of altitude (ALT*)
  - Go-around initiated close to the selected FCU altitude
  - High rate of climb
- As soon as ALT* engages:
  - The autopilot lowers the aircraft pitch and the aircraft accelerates without any A/THR protections (A/THR blue)
  - “LVR CLB” flashes on FMA
  - THR LVRs must be set from TOGA to CL detent without delay to activate the A/THR
  - This enables A/THR protections
    - Providing flap overspeed protection

Set THR LVRs from TOGA to CL detent without delay
Correct Go-around - how?

Notes on lateral guidance:
• Latest A/C are fitted with automatic re-engagement of NAV at GA
• For older A/C

Heading, as cleared by ATC

NAV guidance For GA trajectory
GO-AROUND FROM INTERMEDIATE APPROACH ALTITUDE

To interrupt the approach, or to perform a go-around, from an intermediate altitude in the approach, and if TOGA thrust is not required, proceed as follows:

- SET the thrust levers to TOGA detent, then retard the thrust levers as required. This enables to engage the GO-AROUND phase, with associated AP/FD modes.

- SELECT the applicable AP/FD and A/THR modes on the FCU.
Go-Around Close to the Ground

• When close to the ground,
  - *Initiate a “Standard Go-Around”*
  - *Avoid rapid rotation and excessive pitch*
  - *Low go-around may result in a runway contact, if it does, continue with the standard go-around*
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Conclusion - recommendation

- FD re-engagement at Go-Around is now basic on all aircraft since Service Bulletin 22-1058.

- This modification restores FD at go-around engagement (*thrust levers set to TOGA*) regardless of the previous FD modes.

**AIRBUS recommends all operators to implement this Service Bulletin.**
Conclusions

• “Go-around: an essential safety manoeuvre for all pilots”

• All pilots must be familiar and confident with the go-around manoeuvre, from various initial conditions:
  • Light weight and heavy
  • Available thrust
  • High energy
  • Different configurations
  • From intermediate, decision and low altitude

• Familiarity and confidence will only come with practice

*We must train for different go-arounds to train for safety*
Conclusions

For a Safe Go-Around

PF

Know the pitch target
Set the pitch and TOGA
Maintain the pitch (follow SRS)
Check the FMA

PNF

Monitor the pitch and thrust
Call any deviations
Confirm the FMA

Know the pitch, set the pitch, keep the pitch!
Pitch and thrust – basic flying skills!