RYANAIR

FLIGHT TRAINING DEPARTMENT

PILOT ASSESSMENT BRIEFING PACK (CADET)

Simulator Assessment Purposes Only

Revision 6.2, 23rd December 2020

Dear Candidate,

Congratulations on being selected for a pilot interview and assessment with Ryanair. We hope you enjoy the experience and are successful. We will endeavour to be as helpful and as fair as possible.

The following brief will help you prepare for your simulator assessment. Please read it carefully before the assessment date. Should you have any queries you will have ample opportunity on the day to ask questions and seek clarification.

This briefing document will outline:

- Overview of the assessment
- Required documentation for interview
- Simulator Flight Instruments
- Simulator Assessment Exercises
- Your responsibilities in relation to checklists, Pilot Flying and Pilot Monitoring duties

Your simulator assessment will be on a Boeing 737-800 FTD simulator.

Your assessment will take place at one of our training centres. Location and times will be confirmed by the recruitment team in a separate email.

What to Bring

You must bring the following original documents and a copy of each with you on the day of the assessment:

- Your application form (completed) - please make sure all the questions are correctly answered
- Your CV (Curriculum Vitae) – should include breakdown of flight hours and full employment history (both aviation and non-aviation related)
- Original Flight Crew Licence - (Spanish licence holders must also bring the annex to the flight crew licence/ language proficiency) "please make sure that the ME/IR and language proficiency are current on your licence"
- Original Medical Certificate – please make sure it is current
- Passport (National ID cards cannot be accepted)
- EASA approved logbook with all flight hours logged - please copy the last 2 pages of your most recent logbook on A4 paper. (Please bring all original logbooks)
  - EASA approved electronic logbook with all flight hours logged can be accepted, pages will have to be signed & self-certified – please copy the last 2 pages of your most recent logbook on A4 paper
- Flight School report (Flight School Report is not accepted as a reference)
- ATPL results from the regulatory authority
- AUPRT (Advanced Upset Prevention and Recovery Training Certificate)
- MCC (Multi-Crew Cooperation Certificate)
- JOC (Jet Orientation Course) not compulsory
- A minimum of 2 written references in English signed & dated by the referee - please see below list of acceptable references:
  - Employment references
  - Person who knows you for the last 5 years or more (NB this cannot be written by a relative)
  - Reference from an educational body (high school or university)

ALL REFERENCES MUST BE MANUALLY SIGNED BY THE REFEREE!

If you have never been in employment a signed reference from a person who knows you for the last 5 years or more and a reference from an educational body will be sufficient. Please ensure the contact details of your referees are included with an email address and contact telephone number. References from a Flight School will not be accepted as a reference unless you are employed by them.

Please note: We require a flight school report and a minimum of two written references in English signed by the referee.

"If any of the required documents are not in English please get them officially translated by a translation agency"

Please note: All paperwork must be in English. Paperwork that is not in English will not be accepted.

Please bring a copy of each of the above applicable documentation along with the originals. The copies will be collected during the briefing.

For the avoidance of doubt a flight school report must be provided and should include the following information:

- Precise training you received at your flight school.
- Results of your ATPL exams **from the regulatory authority** and confirmation of how many attempts it took you to pass the exams
- Results of your CPL skills and IR tests and confirmation of how many attempts it took you to pass each exam.
- A comment on how you progressed through the course from day 1 to the end of training.
- A grade of your overall skill and a comment by the head of training

NB: Your application won't be processed unless you provide a flight school report
As all paperwork will need to be scanned into our system please do not use double sided paper or staple any documents together.
(ALL ON A4 PAPER)

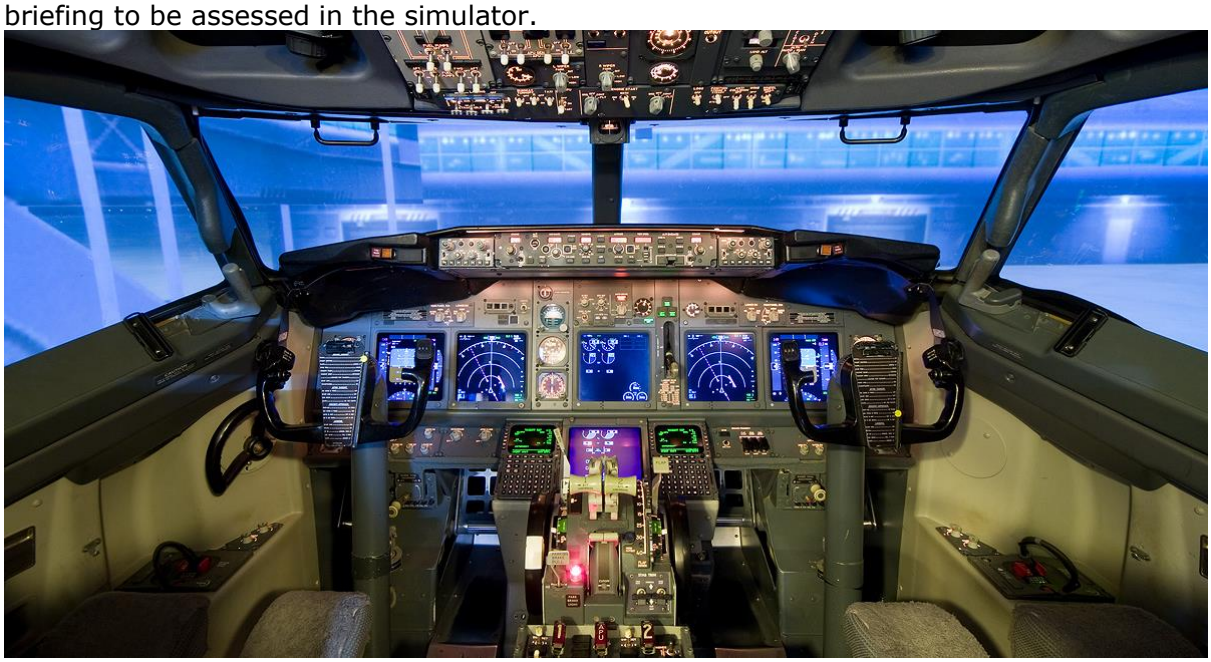
The Ryanair assessment will entail the following:

- Personnel and Technical interview
- Simulator Assessment (B737-800)
- English Language Assessment – (This will be assessed in the interview and the simulator. There is no written exam for this part of the assessment)

Please note there is no assessment De-Briefing. Candidates will be informed of the result of the assessment within one or two weeks of their assessment date.

Prior to the simulator detail/Interview a group briefing with all candidates will be conducted. Crews will be paired for the simulator assessment at this stage. Your simulator assessor (check pilot) will be present to answer questions or clarify anything relating to the simulator detail. It will be assumed you have studied this briefing document in detail beforehand.

Two candidates will be assessed at a time, so you may have to wait a while after the group briefing to be assessed in the simulator.



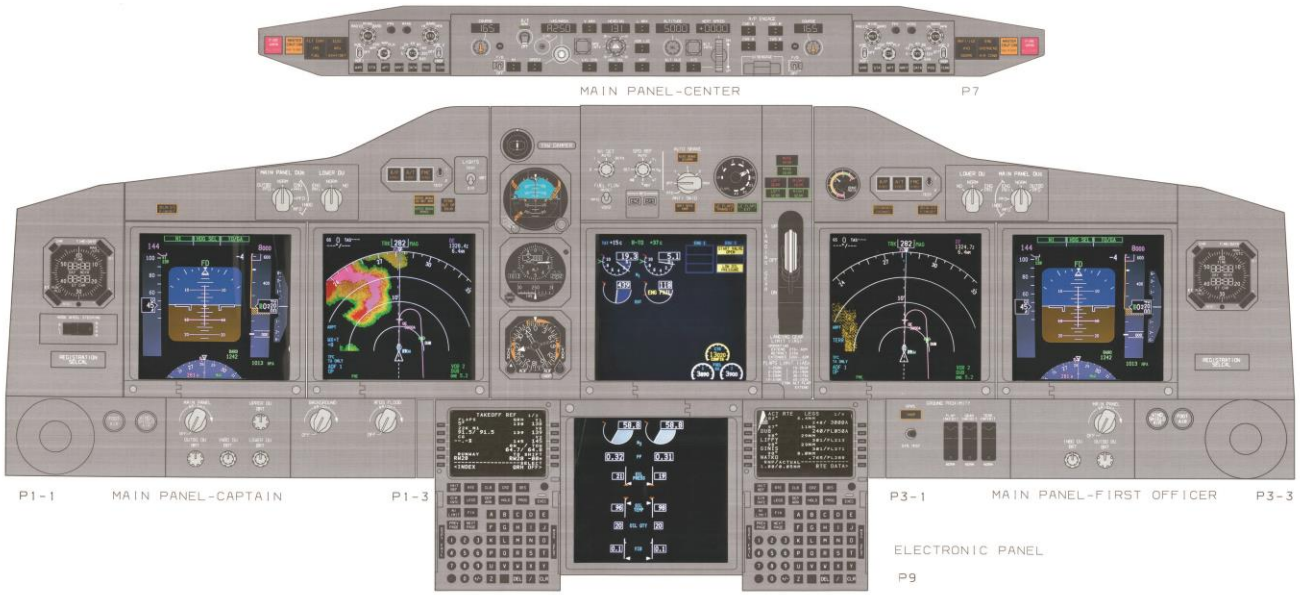
The Simulator

You will be advised on the day by the assessor which airfield you will be using, and will be provided with the appropriate charts on the day.

The simulator is a Boeing 737-800W FTD. The instruments will be setup in PFD/ND format. You may select any ND mode display setting (i.e. MAP/ Centre MAP/ Centre VOR etc.) that you are more familiar with.
Do not worry if you are unfamiliar with these terms. You are not expected to know anything about the Boeing 737-800 flight deck or procedures.

The information below provides guidance on the flightdeck layout and primary instrumentation.

Flightdeck Layout (PFD/ND mode)



Primary Flight Displays (PFDs)

The Primary Flight Displays (PFDs) present a dynamic colour display of all the parameters necessary for flight path control. The displays provide the following information:

- Airspeed
- Altitude
- Vertical speed
- Attitude
- ILS display
- Approach minimums
- Heading indications

Airspeed - The V speeds will be set for you to V1, Vr (rotate) and V2.

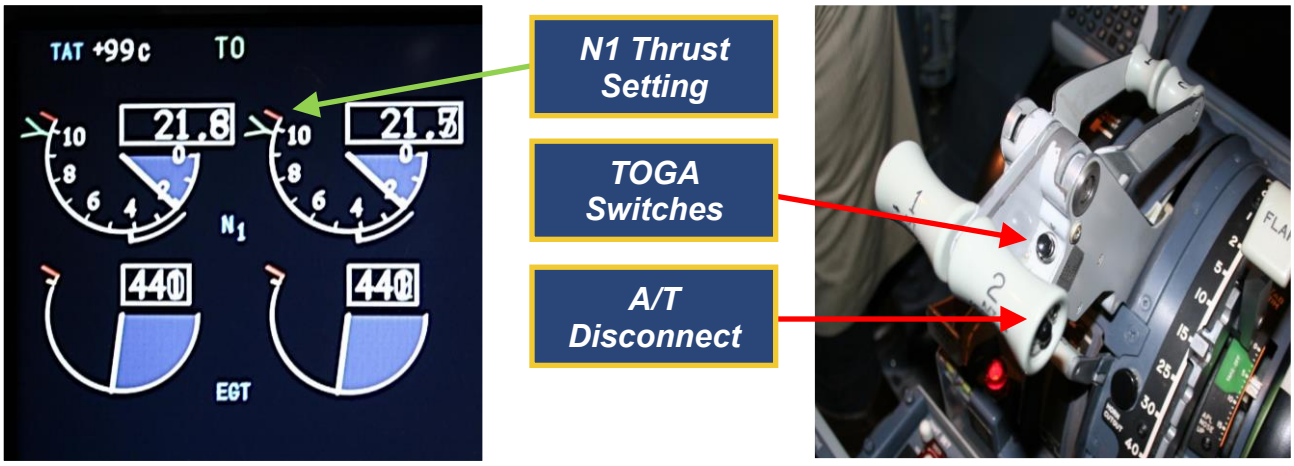
Attitude Indicator - NOTE: the bank angle indicator ('sky pointer') at the top of the instrument moves in the opposite direction to the aircraft symbol. The Localiser and Glide slope indications are integrated in this instrument.

Navigation Display

The Navigation Display (ND) will be configured as a VOR compass rose. The instrument has a course selector function. The left (no.1) ND is connected to NAV 1 (left) and the right ND is connected to NAV 2.

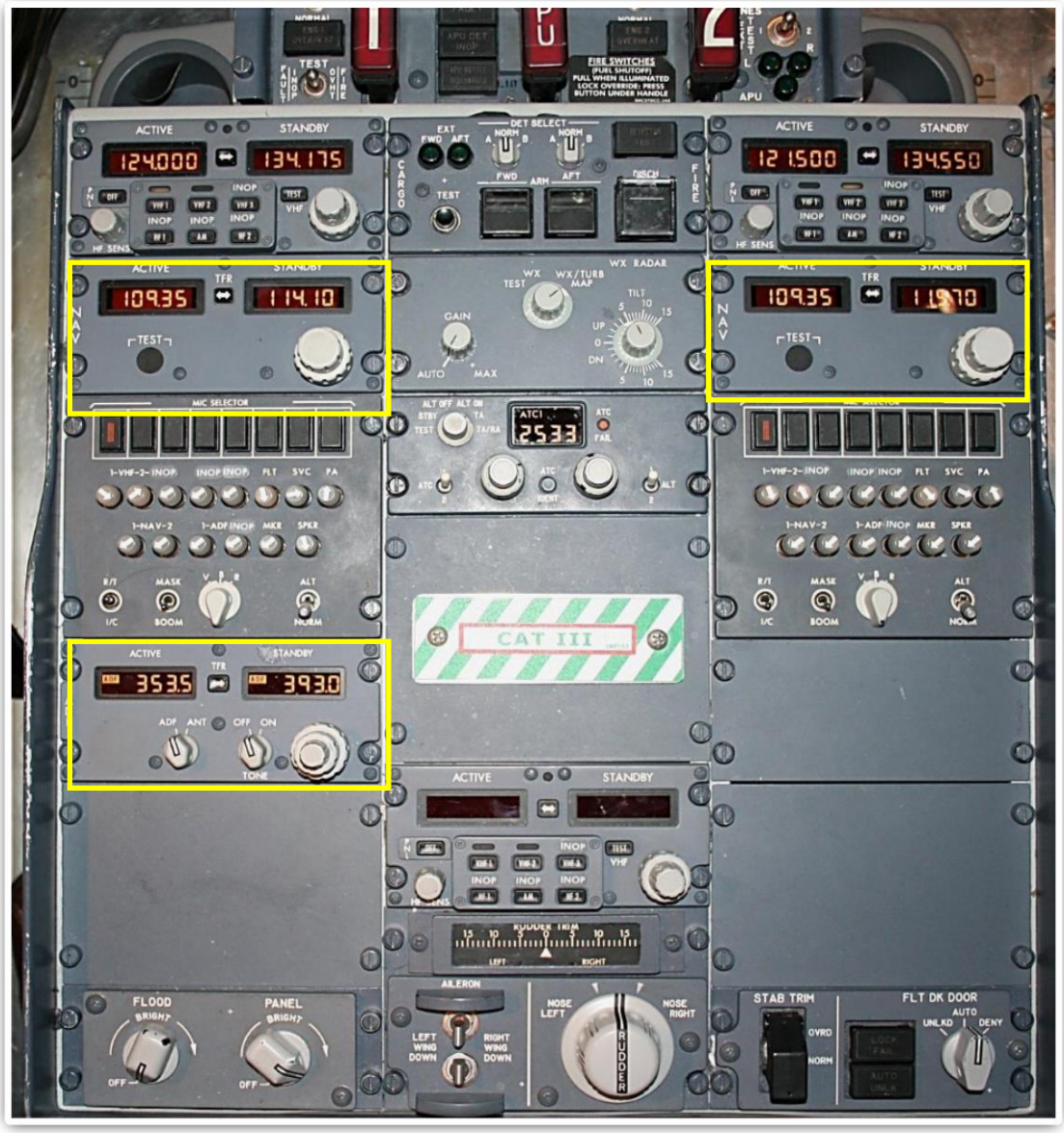
It also has an integral localiser and glide slope indication when an ILS frequency is tuned.

Thrust Levers and Indications



Glare Shield Panel (MCP – Mode Control Panel)

Centre Aisle Panel



Pre Flight

You may fly the simulator detail from the left or right seat. This is your choice. In the simulator the assessor will sit behind you at the instructor's panel. You will operate as Pilot Flying (PF) and also as Pilot Monitoring (PM) (i.e. Pilot Not Flying) during the detail.

Remember that your Pilot Monitoring skills will be assessed when you are not flying.

When Pilot Flying assume you are Commander of the aircraft.

The aircraft will be positioned on the runway threshold

- With the engines running.
- Flaps 5 selected (Take off flap setting).
- Call for the appropriate checklist during the flight detail. The assessor will take responsibility for these checks.

However, prior to take off, the PF will need to brief the PM. This briefing should include the following:

- Specific departure clearance received (SID).
- All navigation aid selections including the indicator selection on the RMI (VOR or ADF needles selected) and the cleared altitude. This altitude is set in the altitude selector on the glare shield panel.
- The Thrust Lever (Throttles) handling procedure on take-off (who sets the thrust and who handles the Thrust Levers on take-off). Please brief whatever you are comfortable with or what you were taught in your MCC course.
- The Vertical profile and speeds to be flown (see below).

Once in the simulator, the assessor will 'act' as an 'Air Traffic Controller' (ATC), Cabin Crew/Attendant etc. They will issue you with all ATC instructions. These must be read back by the PM using standard ICAO R/T. Treat the ATC instructions as you would a real flight/aircraft.

Take Off Profile

Take-off and initial climb to Flaps up (F0) – Pilot Flying

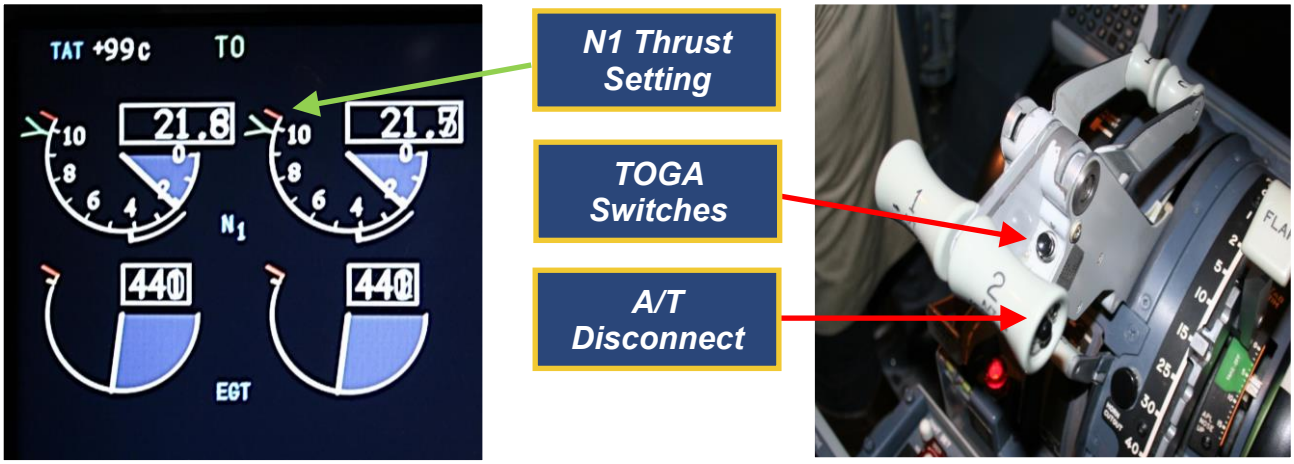
The take-off, SID and initial climb will be flown manually.
(NO autopilot, with flight directors ON).

You can expect a departure clearance to a cleared altitude/flight level. The primary thrust setting instrument is the N1 gauge. It is the top instrument on the engine instrument panel, located ahead of the thrust levers.

To commence Takeoff

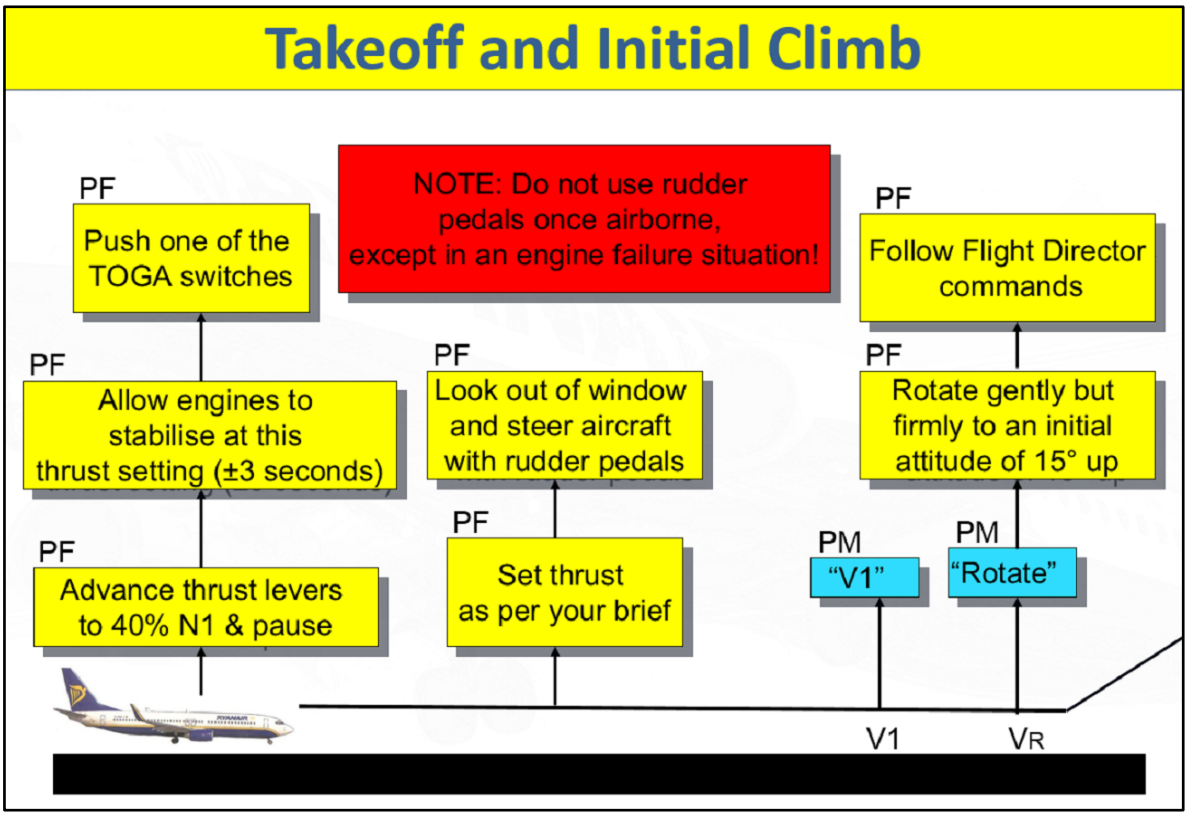
- Advance the Thrust Levers to the 40% (12 o'clock position) and pause.
- Allow the engines stabilise at this thrust setting (about 3 seconds).
- Select TOGA (Take off, Go around). TOGA is selected by pressing one of the two buttons on the back of the Thrust Levers, this will engage the A/T. The assessor will point these out, if required.
- Then set the thrust as per your brief to your colleague (above).

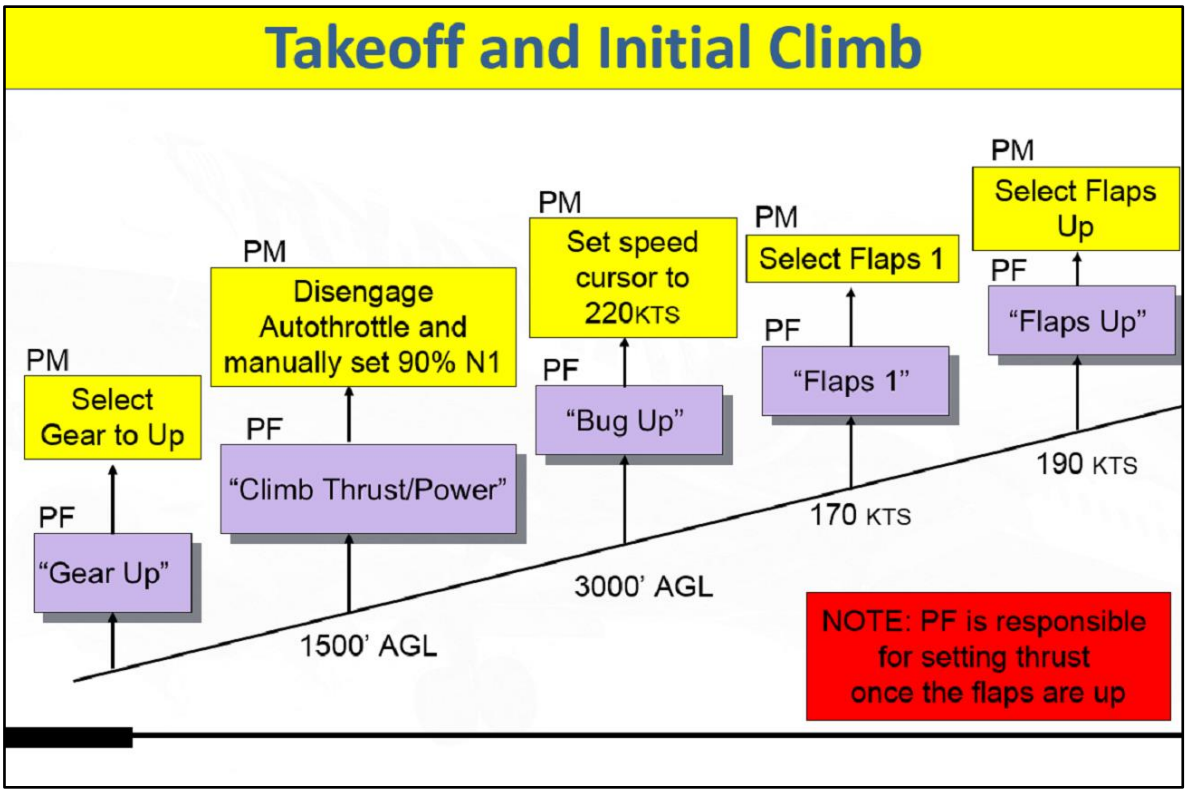
Thrust Levers and Indications



Look out the window and steer the aircraft down the runway with the rudder pedals.

The rudder is only used on the ground for take-off and landing. It is not used in the air, except in an engine failure situation. Avoid the temptation to use rudder like on a small aircraft. You will rapidly induce 'Dutch roll'.


Takeoff and Initial Climb
PF
Push one of the TOGA switches
NOTE: Do not use rudder pedals once airborne, except in an engine failure situation!
PF
Follow Flight Director commands
PF
Allow engines to stabilise at this thrust setting (±3 seconds)
PF
Look out of window and steer aircraft with rudder pedals
PF
Rotate gently but firmly to an initial attitude of 15° up
PF
Advance thrust levers to 40% N1 & pause
PF
Set thrust as per your brief
PM
"V1"
PM
"Rotate"
V1
VR


Takeoff and Initial Climb
PM
Select Gear to Up
PF
"Gear Up"
PM
Disengage Autothrottle and manually set 90% N1
PF
"Climb Thrust/Power"
1500' AGL
PM
Set speed cursor to 220KTS
PF
"Bug Up"
3000' AGL
PM
Select Flaps 1
PF
"Flaps 1"
170 KTS
PM
Select Flaps Up
PF
"Flaps Up"
190 KTS
NOTE: PF is responsible for setting thrust once the flaps are up

The sequence of events and calls on take-off will be:

- PM will call the speeds (`***Vee One'*** and ***'Rotate'***).
- At the call ***'Rotate',*** rotate the aircraft gently but firmly to an initial attitude of 15° up, and then follow the Flight Director (F/D) commands. These will be set to command runway heading and the correct climb-out speed.
- Next call for ***'Gear Up'***. The PM will select Gear to up. To do this pull the lever out and then up.
- At 1500 feet AGL call for ***'Climb Thrust/Power'***. The PM will set climb thrust of **90% N1** for you. You should keep both hands on the control column until the Flaps are up (F0).
- At 3000 feet AGL call ***'Bug Up'.*** The PM will set the speed cursor to the 220 knots. The F/D will command an acceleration. Follow these commands (pitch down).
- At 170 knots call for ***'Flaps one'*** (F1).
- At 190 knots call for ***'Flaps up'*** (F0).
- **Once you call for *'Flaps up'* you are responsible for setting thrust.** In other words you handle the Thrust Levers for the remaining detail (A/T Disconnected).

Ensure you **do not let the speed accelerate above 220 knots unless cleared otherwise.**

This will require a significant thrust/power reduction by you on levelling off.

You, the Pilot Flying, are responsible for the setting the thrust once the Flaps are up.

The aircraft has an electric (stabiliser) trim operated by a 'thumb' switch on the control column. It is quite powerful, so use only in short 'bursts'.

Once the aircraft is 'clean' and flying level the assessor will issue further instructions. The assessor will give you some climbs, turns and/or descents to allow you familiarise yourself with the characteristics of the aircraft.

Be aware the aircraft has the following pitch characteristics:

'Pitch & Thrust'. The Boeing 737-800 has under-wing mounted engines. This means when thrust is increased the aircraft will pitch up noticeably and vice versa. Ensure every time you change thrust you correct for this pitch tendency and **re-trim the aircraft.**

'Pitch & Speed'. The swept wing characteristics of the aircraft mean that as the aircraft accelerates it pitches up. When you slow up the aircraft it will pitch down. Ensure every time you change airspeed you correct for this pitch tendency and **re-trim the aircraft.**

The assessor will put you through some 'upper air exercises' which are intended to assess the following:

1) Application of Procedures
2) Aircraft Flight Path Management - Manual
3) Communication
4) Knowledge
5) Leadership and Teamwork
6) Problem Solving and Decision Making
7) Situation Awareness
8) Workload Management
9) English language proficiency (minimum ICAO Level 4).

These exercises will include a 'Non Normal' or Emergency event. You will be expected to operate as a two Pilot crew (as you were taught in MCC training). **Treat this situation as if it were a real aircraft and ensure you apply yourself accordingly, whether you are the Pilot Flying or the Pilot Monitoring.** Call for the appropriate checklist applicable to your aircraft. Once you do this the assessor will facilitate as required, but **you need to call for it**.

We are obliged under Part-FCL regulations to ensure pilots have English Language Proficiency ICAO Level 4. This will primarily be done during this exercise, so ensure you brief all parties comprehensively (ATC, Cabin Crew, your colleague etc.). If you are the Pilot Monitoring ensure you apply good MCC & CRM principles. **You will be assessed in your Pilot Monitoring duties.**

Once this exercise is complete the assessor will intervene and 'return' the aircraft to normal operation.

Approach speeds

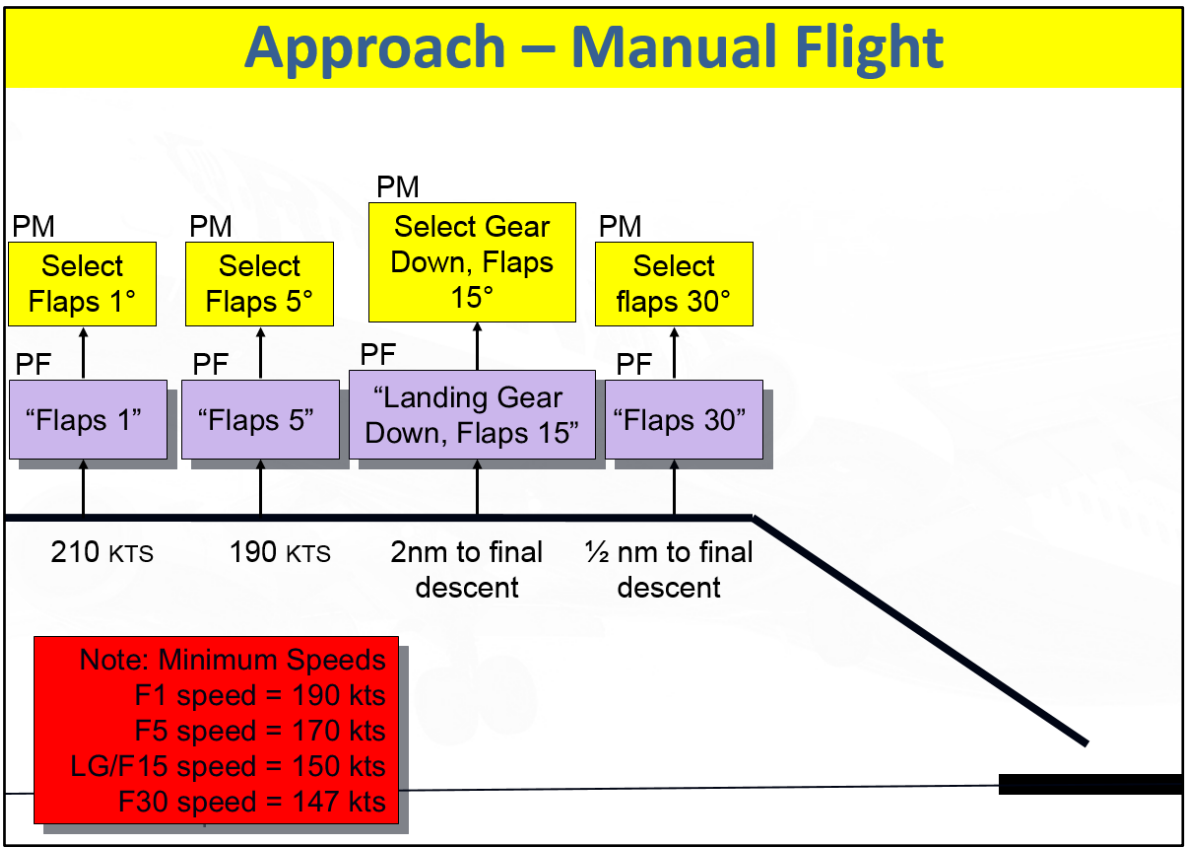
Following this phase of the detail the assessor will 'freeze' the simulator and ask you to set approach/landing speeds. Landing Flap is Flaps 30.

The Vref (reference) and Vfly speeds will be entered by the assessor. You will be advised which approach to fly and allowed brief and set up the navigations aids.

A navigation exercise will follow which may involve intercepting a radial to/from a beacon, a hold entry and/or flying the arrival routing (STAR).

Approach – Manual flight

The next exercise will be a procedural **Raw data ILS Approach (two engines, Autopilot OFF, Flight Director OFF)**. This will culminate in a Landing or Go-around (missed approach). You will be responsible for briefing the approach, setting the navigation aids and course selections on the ND and the selections on the ND.



The Flap & Landing Gear schedule for the approach is as follows:

- Minimum clean speed is 210 knots. The thrust setting required in level flight is roughly 55% N1.
- Approaching minimum clean speed call for *'Flaps one'* (Flaps 1), decelerate towards Flaps 1 speed (190kts).
- Approaching 190kts call for 'Flaps five' (Flaps 5), decelerate towards Flaps 5 speed (170kts).
- Flaps 5 minimum speed is 170 knots. Fly the initial and intermediate approach at Flaps 5 and 170 knots minimum.
- At 2NM to final descent, call for *'Landing Gear Down, Flaps Fifteen'* (LG, Flaps 15). Fly 150 knots minimum. The thrust required will increase to approximately 70% N1.
- At 0.5NM to final descent, call for *'Flaps Thirty'* (Flaps 30). Fly the VREF speed set by the assessor. This is the final approach fly speed. The thrust setting required on final approach is roughly 58% N1.

FLAPS	FLY SPEED – MINIMUM	CALL FOR
F0	210KTS	F1
F1	190KTS	F5
F5	170KTS	Gear Down/F15
Gear Down/F15	150KTS	F30
F30	VRef	---

You will be responsible for selecting the correct navigation aids and course indication on the HSI. The navigation aids selected by you will auto-identify, so there is no need to aurally/manually identify beacons selected.

Landing

The approach will culminate with a Landing or Go-around (Missed Approach). Once 'visual' ensure you maintain a stable approach. Avoid the temptation to over-control and de-stabilise the aircraft. Maintain correct speed, the runway centreline and the vertical path (PAPI's/Glideslope).

In summary you will need to **'look out' as well as 'look in'**.

The aircraft will issue an aural call at 50, 40, 30, 20 and 10 feet above the runway. When you hear the *'twenty'* call gently pitch up a couple of degrees and close the Thrust Levers. The aircraft should 'sink' nicely onto the runway.

Smooth landings are NOT a criteria of the assessment.

The requirement is to be:

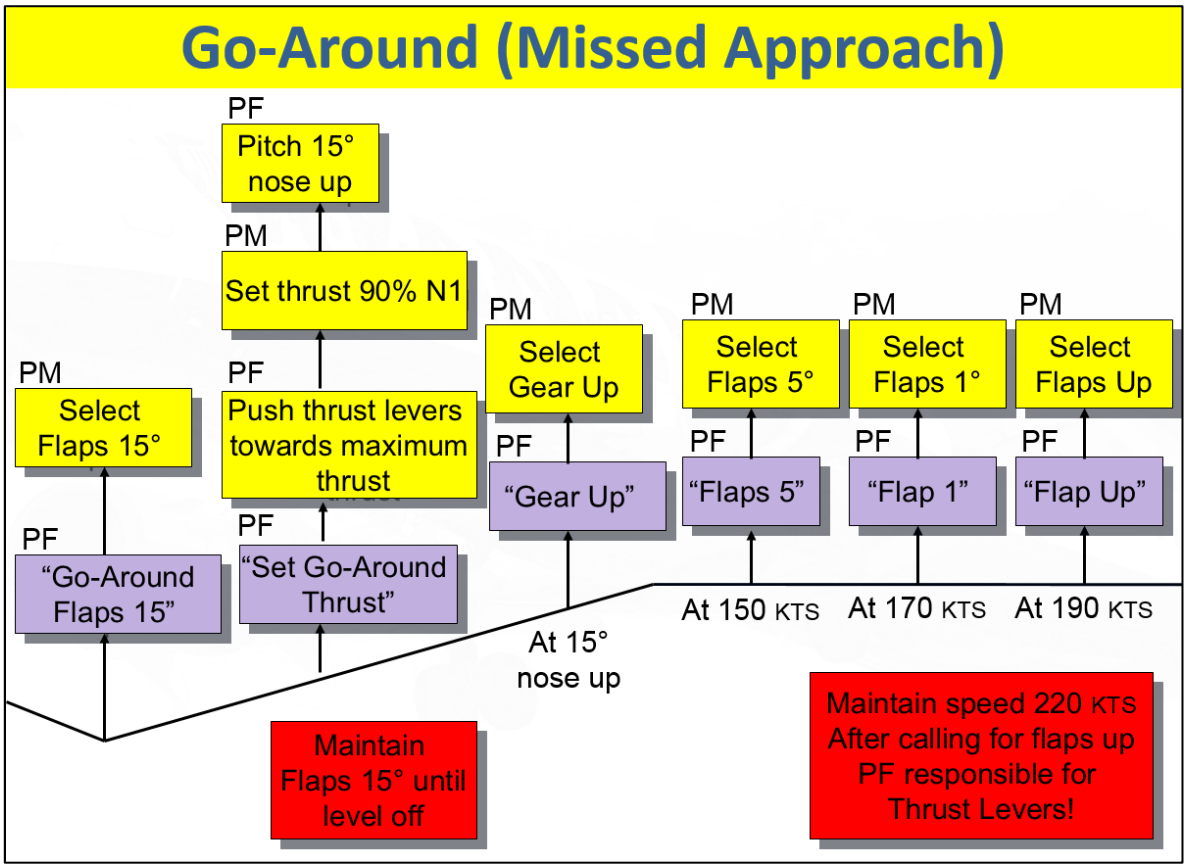
- On the runway centre line
- Wings level
- Within the touchdown zone
- At the correct speed and with the
- Vertical speed under control.

Once you land the aircraft, stop on the runway centreline. Use the Rudder Pedals to steer and the toe brakes to stop. Use Reverse Thrust if you are familiar with it. However this is not compulsory.

The detail is now finished.

Go around (Missed Approach)

Should you not become 'visual' by MDA or should the approach become de-stabilised at any point you must Go-around. This will be your decision, so good airmanship and decision making are necessary. Avoid the temptation to 'press on' with an approach when a Go-around is a better option.



Should you decide to Go-Around:

- Call *'Go-Around, Flaps Fifteen'* (GA, F15). The PM will select the Flaps to 15.
- Call 'Set Go-Around Thrust'. Push the Thrust Levers towards maximum thrust (full arm length action required on the Thrust levers).
- Then immediately put both hands on the control column. The PM will set the Thrust to 90% N1.
- Pitch to 15° up (the aircraft will attempt to pitch up even further)
- Fly the Approach VRef speed as a minimum. At 15° nose up the aircraft will accelerate
- Next call *'Gear Up'.* The PM will select the Gear up.
- Maintain F15 until levelling off. The Flap retraction schedule is the opposite to the extension schedule (above)…..at 150 knots call *'Flaps 5'*…at 170 kts call *'Flaps 1'*…. at 190 knots, call *'Flaps up'*.
- On calling *'Flaps up'* you have responsibility for the Thrust levers
- Fly 220 knots maximum unless advised otherwise. The PM may have to manually set the speed bug to 220 knots.

Remember, once you call for *'Flaps up'* you are responsible for the Thrust Levers.

The Go-around is complete when the flaps are up and the aircraft is stabilised in level flight at 220 knots. The detail will either finish at this point or the assessor will advise you to fly another approach.

Finally we wish you the best of luck with your assessment