## **AIRBUS A320neo CHECKLIST**

Checklist version: v1.2-19AUG2020 --- Made for SimVersion: 1.7.12.0

It is based on Chuck's guide on mudspike.com.

I encourage you to read through the guide before using the checklist especially when you are new to flight simulators. I made some notes at the end of the document marked by (\*1) in the checklist. You should read them first too, so you know what they mean.

POWER UP THE AIRCRAFT	
BAT 1 & 2	ON
(ATC) Ground Power Unit (GPU)	Request and wait for "Avail"
EXT PWR	ON
PARKING BRAKE	ON
NAV & LOGO Light	ON
APU MASTER	ON
APU START	ON
Wait for APU START	Green "AVAIL"
APU BLEED	ON

MCDU / FMGC Setup (DIFRIP flow (*1))	
<b>D</b> ATA - Page	
Press A/C STATUS	
Check if database is correct (AIRAC) (optional because not updatable yet?)	

INIT -> Page A (1st page)	
Enter FROM/TO	XXXX/XXXX
Enter ALTN/CO RTE	XXXX
Enter COST INDEX	XX (I use 30 (Lufthansa standard))
	XXX (E.g. 360 - Temp is automatically
Enter CRZ FL/TEMP	calculated)

F-PLN	
The easiest way is to create a plan is on the world map in the menus.	
If you did this skip to the area marked with "###########" on the next page	
Select the departure airport	
Press DEPARTURE	
Select a RUNWAY	
Select a SID	
Press TMPY INSERT	

Select last SID waypoint in the list	
Press AIRWAYS	
Enter VIA (Airway)	
Enter TO (Waypoint)	
Repeat VIA and TO until done (Don't enter the	ne STAR yet)
Press TMPY INSERT	
Select the arrival airport	
Press ARRIVAL	
Select an approach	
Select a STAR	
Press TMPY INSERT	

##########	
Scroll through the list and delete the TIMECRUISE and TIMEDCENT	
Press TMPY INSERT	
Now delete all F-PLN DISCONTINUITY	

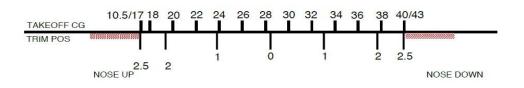
RAD NAV	
Enter ILS / FREQ	

INIT -> Page B (Arrow left/right to switch)	
Enter ZFW/ZFWCG (*2)	XX.X/XX.X
Enter BLOCK fuel	XX.X
Enter TAXI fuel	XX.X
Enter RTE RSV/% fuel	XX.X
Enter TRIP WIND average	XX.X (-XX.X when headwind)

<b>P</b> ERF	
Enter FLAP/THS (*3)	X/UPX.X (or X/DNX.X)
Press V1	Auto. calculates V1 (Decision speed)
Press VR	Auto. calculates VR (Rotation speed)
Press V2	Auto. calculates V2 (TO safety speed)
Enter FLEX TO TEMP	XX
Enter TRANS ALT	XXXXX (in feet MSL)
Enter THR RED/ACC	XXXX/XXXX (in feet AGL)

TO CG/TRIM	SET
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## TAKEOFF CG / TRIM POSITION



EFIS / FCU SETUP	
BARO	SET (Hotkey "B")
Flight Director (FD)	ON
ND (Navigation Display) mode	NAV
ND range scale	10 NM
Initial altitude	SET

ENGINE START-UP		
BEACON Light	ON	
(ATC) GPU	Disconnect	
EXT PWR	OFF	
All FUEL PUMPS	ON	
ENGINE MODE	IGN/START	
ENG 2 MASTER (*4)	ON	
Wait for engine idle (N1 approx. 20%, N2 approx. 60%)		
You should hear something that sounds like a barking dog when it is done. (*5)		
ENG 1 MASTER	ON	
Wait for engine idle (N1 approx. 20%, N2 approx. 60%)		
ENGINE MODE	NORM	

BEFORE TAXI	
PROBES/WINDOW HEAT	ON
APU BLEED	OFF
ANTI ICE (WING & ENGINES)	AS REQUIRED (ON when OAT <10°C (*14))
APU MASTER	OFF
Set TRANSPONDER FREQUENCY (*6)	XXXX (SQUAWK)
TRANSPONDER	AUTO
TRANSPONDER ALT RPTG	ON
AUTO BRAKE	MAX
SPEED BRAKE	ARM (Push up)
FLAPS	1 (AS REQUIRED)
A/SKID & N/W STRG	ON (UP)

TAXIING	
NOSE Light	TAXI
RWY TURN OFF Light	ON
PARKING BRAKE	OFF
Initiate PUSHBACK (*7)	HOTKEY or by ATC
Taxi to the runway	
Check brakes	
Weather Radar SYS / MODE	ON and SET

TAKEOFF		
STROBE Light	ON	
NOSE Light	ТО	
BRAKE	PRESS AND HOLD	
THRUST LEVER	50% N1 – Check normal	
BRAKES	RELEASE	
THRUST LEVER	FLEX/MCT (TOGA for max power)	
Hold centerline		
At VR SPEED rotate smoothly to 15°		
Follow the Flight Director (FD) on the PFD		
Positive Climb	Check	
LANDING GEAR	UP	
AP1 (Autopilot)	ON	
Set V/S and activate selected mode (*8)	2500ft/min	
When LVR CLB flashes in PFD (At THR (Thrus	t Reduction Altitude) as set in MCDU)	
THRUST LEVERS	CL (CLIMB)	
At F Speed (Does not appear in Flaps 1 TO)	FLAPS 1	
S Speed	FLAPS 0	
SPEED BRAKE	Disarm	
RWY TURN OFF Light	OFF	
NOSE Light	OFF	

CLIMB		
Above 5000ft		
V/S - Rate of climb	2000ft/min	
ND (Navigation Display) mode	ARC or NAV	
ND range scale	AS REQUIRED	
At TA (Transition Altitude) (FL180 or other country specific altitude)		
BARO	STD	
Above FL100 (10000 ft)		
LANDING Light	OFF / RETRACT	
ANTI ICE	AS REQUIRED	
Above FL150 (15000 ft)		
V/S - Rate of climb	1400ft/min	
ANTI ICE	AS REQUIRED	
Above FL240 (24000ft)		
V/S - Rate of climb	1000ft/min	

	Initial Climb (below 5000ft)	Climb (below FL150)	Climb (below FL240)	MACH Climb (above FL240)	Cruise	Initial descent (above FL240)	Descent (below FL240)	Descent (below FL100)
Speed	175kts	290kts	290kts	0.78 Mach	450kts	0.78 Mach	290kts	210kts
RoC	+2500	+2000	+1400	+1000	0.79	-1000	-3500	-1500
RoD	ft/min	ft/min	ft/min	ft/min	Mach	ft/min	ft/min	ft/min

CRUISE	
Monitor all displays for faulty systems	
Plan the descent (before Top of Descent)	
Get the weather data (METAR) (*9)	
AUTOBRAKE	AS REQ (LO: Long RWY, MED: Short RWY)
MCDU (FMGC) -> PERF	
Press NEXT PHASE until you reach APPR Pha	se. DO NOT ACTIVATE IT YET!
Enter QNH	
Enter TEMP	
Enter MAG/WIND	
Enter TRANS FL (*10)	Can be found in the airport charts
Enter MDA or DH	Can be found in the airport charts
Check VAPP (Approach speed)	
Check LDG CONF	CONF3 FULL

DESCENT		
When contacted by the ATC follow the orders to sink and change heading		
Above FL240		
V/S - Rate of descent	1000ft/min	
Below FL240		
V/S - Rate of descent	3500ft/min	
Below TL (Transition Level (*10))		
BARO	SET (Hotkey "B" or manual)	
Below FL100		
V/S - Rate of descent	1500ft/min	
LANDING Lights	ON	
While flying the STAR		
LS Button (Autopilot panel) ON		
ILS (when available) should be visible on the PFD now		
You can turn the Navigation Display mode to LS if you want		

	Initial Climb (below 5000ft)	Climb (below FL150)	Climb (below FL240)	MACH Climb (above FL240)	Cruise	Initial descent (above FL240)	Descent (below FL240)	Descent (below FL100)
Speed	175kts	290kts	290kts	0.78 Mach	450kts	0.78 Mach	290kts	210kts
RoC	+2500	+2000	+1400	+1000	0.79	-1000	-3500	-1500
RoD	ft/min	ft/min	ft/min	ft/min	Mach	ft/min	ft/min	ft/min

Activate the APPR Phase in the MCDU. Sometimes it is already active.		
MCDU (FMGC) -> PERF		
Press arrow left key until you see "Activate APPR PHASE"		
Press ACTIVATE APPR PHASE		
Press CONFIRM		

While flying toward the final course you will hear something like "Fly straight in" from		
the ATC		
Wait for "Fly straight in"		
APPR Mode (Autopilot panel)	ON	
AP1 & AP2 (*11)	ON	
Wait for LOC captured (on PFD) (*12)		
FLAPS	1	
Wait for G/S captured (on PFD) (*12)		
FLAPS	2	
When 1500ft AGL (Above ground)		
LANDING GEAR	DOWN	
FLAPS	FULL	
SPEED BRAKE	ARM (Push up)	
NOSE Light	ON	
RWY TURN OFF Light	ON	

LANDING		
Your speed should be around 135-150kts no	w. Managed by Autothrust (A/THR)	
Turn off the Autopilot 500ft above the groun	nd (optional (*13))	
Fly manually with only little inputs. Use the PAPI/VASI Lights to stay on the glideslope.		
At approx. 30ft FLARE (Pull up nose gently)		
THRUST LEVER	IDLE	
Normally it's not needed to brake manually with AUTOBRAKE active		
THRUST LEVER REVERSE (If required)		
Before 20kts	AUTOBREAK OFF	
Come to a stop or slow down to taxi speed and leave the runway as soon as possible		

TAXI		
FLAPS	0	
SPEED BRAKE	DISARM	
LANDING Light	OFF / RETRACT	
NOSE Light	TAXI	
Weather Radar SYS	OFF	
Taxi to the gate (Ask the ATC if available to get guidance)		
PARKING BRAKE	SET	
ENG 1 MASTER	OFF	
ENG 2 MASTER	OFF	

## **REMARKS and ADDITIONS:**

- (\*1): I use the DIFRIP flow to remember in which order I have to set up the MCDU/FMGC D = DATA, I = INIT A, F = F-PLN, R = RAD NAV, I = INIT B, P = PERF
- (\*2): Write down ZFW and ZFWCG while in the menus "weight & balance" screen. <u>Empty all fuel</u> and write down your "Total weight" in kilograms and the %MAC. That is the best you can get at the moment. Total weight = ZFW, %MAC = ZFWCG

You might have to use a unit converter from Lbs -> Kg because the A320 uses Kilogram.

- (\*3): FLAP/THS is based on the "Gross Weight Center of Gravity" (CG%). Write it down while <u>cargo</u> <u>and fuel</u> is loaded (%MAC). This is also the best you can get now. Then look at the takeoff trim scale attached below. Use it to read your FLAP/THS value. When your CG% is 26 you got 0.5 on the NOSE UP side. So your /THS is "UP0.5". You would have to enter "1/UP0.5" where 1 is the flap setting you use to takeoff.
- (\*4): ENG 2 is normally started first because it powers the yellow hydraulic system which pressurizes the parking brake and some other systems.
- (\*5): The barking sound is the Power Transfer Unit (PTU) which is performing a self-test.
- (\*6): Clear the standard frequency with the CLR button. Then type in the SQUAWK you get from the ATC. Squawk 1200 (USA) and 7000 (Europe) are for VFR flying only. Then there are emergency codes 7500 (hijacking), 7600 (Radio failure) and 7700 (Emergency)
- (\*7): Set the hotkey for PUSHBACK in the controls menu.
- (\*8): Use the V/S Mode to stop the aircraft from climbing 6000ft/min. For the recommended values I used an A320neo performance document which I can't find anymore...
- (\*9): To get the weather data you can use the ATIS (ATC) or look them up on the internet when using live weather. Not 100% correct but should be roughly the same. I use the data that "<u>LittleNavmap</u>" shows me.
- (\*10): The "Transition Level" (TL) is different from the "Transition Altitude" (TA) which is used in climb. You find them in the charts. I use TA+1000ft because I am too lazy most of the time.
- (\*11): You need to activate AP1 and AP2 for this. This is buggy at the moment. I turn of AP1 and then press the Hotkey to activate the AP. Both AP will now turn active. Now press APPR again. The aircraft will guide itself to and on the glideslope of the ILS.
- (\*12): When localizer is captured LOC will light up in the PFD. You can check by how much you deviate from it on the Navigation Display. When glide slope is captured it shows G/S in the PFD.
- (\*13): You should turn off the Autopilot because Autoland is not that good yet. Also, it's more fun to fly the last seconds by hand ②. If you want, you can also disengage the A/THR so you have to apply manual thrust.
- (\*14): ANTI ICE should be turned ON if the Outside Air Temperature (OAT) is 10°C/50°F or less and visible moisture is present in any form (clouds, fog, rain, snow, etc.) or water, snow, ice or slush is present on the ramps, taxiways or runways.

This is a checklist for the Airbus A320neo in Microsoft Flight Simulator.

It's based on a guide of the FSLabs A320 written by Chuck from mudspike.com. I have made this checklist to help some flight sim newbies and people that never or rarely fly an A320. There might be some mistakes in it, and it is highly possible that it's not "how you fly a real aircraft". It's based on the guide with a flavor of "how I learned it". I hope it helps some people to get the A320neo flying.

Credits go to Chuck from the Mudspike forums for his awesome guide. Thank you!

Thanks for all the feedback on the <u>checklist thread</u> in the forums!

Version: v1.2-19AUG2020

First version: v1.0-20APR2020 was made by TomMaverick

## **Updates:**

- v1.1-22APR2020: Added a few things and changed the order of some items to match the real A320. Corrected mistakes. Some layout and visual changes.

- v1.2-19AUG2020: Release for the MSFS Version 1.7.12.0. Some minor changes.