AIRBUS A319/320/321
Flight Scenario Q and A
2007 – 2008

Updated : 04/01/07	PHB : 04-07	FOM : 3-07

Send corrections / comments to Bob Sanford, E-mail: busdriver@hky.com

Chapter 1 - Limitations

1. Safety is the top priority at US Airways at all times and at all levels. Reference: FOM 1.2.1

2. During the walk around you see maintenance servicing the number two engine with oil. The minimum oil quantity for both IAE and CFM engines is 13 quarts. Reference: Limitations 1.12.14

3. A new revised Minimum Flight Crew Oxygen Pressure table is located in the Limitations: Emergency Equipment section of the PH and should be consulted if the value has dropped below 1000 PSI. Reference: Limitations 1.15.3

4. The max 90 degree crosswind limitation for takeoff and landing is 29/G35 knots. Reference: Limitations 1.3.1

Chapter 2 - Normal Operations

1. TRUE or FALSE. The diamond symbol (♦), preceding an item on a flow or checklist indicates it is to be accomplished only on the first flight of the day (i.e., the first flight entered into the logbook under the current day using local time). Reference: PH 2.2.4

2. For all purposes of MEL repair intervals, times are intended to expire based on midnight to midnight local (Pittsburgh or Phoenix) time? Reference: MEL book page 10

3. The Crew Placarding Procedure enables the Flight Crew to accomplish all steps contained within an MEL condition. The Orange Placard is used for Repetitive items which means they have recurring inspections or actions prior to pushback or engine start and contain the letters FR which means what to the flight crew? "Follow-up Required." Reference: MEL

4. Upon taking the runway for a First Officer's takeoff, the Captain transfers control of the aircraft by stating: "My aircraft", followed by the First Officer's response: "Your aircraft". Reference: PH 2.5.1

5. The (PF or PM) verbally states an altitude callout at 1,000' prior to reaching the assigned altitude; (e.g. seven thousand for eight thousand, or seven for eight.) Reference: PH 2.8.2

6. TRUE or FALSE. Upon receiving a clearance to descend to 7,000' the selector knob on the FCU should be placed in the 1000 increment to select the correct altitude. Reference: PH 2.8.4

When selecting a new altitude above 10,000 feet AGL, the ALT knob may be set to 100 or 1000 at the pilot's discretion. Below 10,000 feet AGL the ALT selector knob should be set to 100.

7. TRUE or FALSE. When approaching coast line airports on offshore routines (i.e. KFLL) it is acceptable to exceed 250 knots below 10,000 feet. Reference: PH 2.7.1

Do not exceed 250 knots below 10,000 feet.
Exceptions:

- 200 knots in Class C or D airspace when at or below 2,500 feet AGL within 4 NM of the primary airport.
- 200 knots below the lateral limits of Class B airspace.
- Unless directed/requested by ATC (e.g. off-shore routing/international).

8. When should VHF frequency 121.5 be monitored? Reference: PH 2.5.11

Pilots are encouraged to monitor 121.5 while in-flight to assist in identifying possible ELT transmissions.

9. TRUE or FALSE. All crewmembers must carry a valid passport on every flight. The company will reimburse pilots for the cost of renewing of passports to include the cost of renewal, fee for expediting, and Fed-Ex shipping. Reference: FOM 13.1.6

All crewmembers must carry a valid passport on every flight.

Exception: A Chief Pilot may, under certain circumstances, authorize a pilot to report for duty without a passport and operate flights to destinations where a passport is not required.

Renewal: Pilots must begin the passport renewal process approximately 90 days before their passport expires.

10. You level off at cruise flight level for a 3 ½ hour flight. When are you required to make a Company Position Report? Reference: FOM 13.1.6 and CBS

- When requested by the dispatcher.
- ETA differs more than 10 minutes from ETA at takeoff or last revised ETA.
- Significant changes to the planned vertical or horizontal path of the aircraft jeopardizing fuel over destination.
- Weather conditions are encountered which may affect the safety of conduct of other flights.
- Moderate or severe icing.
- Moderate or severe turbulence.
- Winds aloft values, or other operational factors which vary significantly from the flight plan assumptions.

11. During flight, when returning to the flightdeck, what code is entered on the flightdeck door keypad for normal entry? Reference: FOM 1.7.3

To return to the flightdeck, the pilot will use the interphone followed by the keypad.
Note: For security reasons the code will not be posted in this document. See PHB.

Chapter SOPs - Standard Operating Procedures

1. TRUE or FALSE. There is no preference as to which pilot should program the MCDU for a particular flight segment. Reference: PH SOPs.3

- Enter FMS routing if PF.
- After the FMS routing is loaded, verify FMS routing correctly entered and executed/activated if PM.

Chapter 2a - Preflight

1. The briefing sets the tone for a positive working environment and as a minimum consists of introducing the crew and ensuring open communications regarding the operation. The mandatory briefing items are: 1) statement of Captain's focus on safety, 2) stress open communications, and 3) necessary items from the Flight Operations Update (when required). Consider including optional items such as (Reference: PH 2a.1.3):

- Cabin-to-flightdeck communications
- Flightdeck entry/exit procedures
- Pilot announcement issues
- Request flight attendants inform the captain promptly of items that should be entered into the aircraft logbook (e.g., cabin maintenance, seatback phones, etc.)
- Any other considerations the captain deems necessary

2. TRUE or FALSE. On the first flight of the day, an APU fire test is no longer necessary during the Safety & Power On Checklist. Reference: PH 2a.2.2 and 2a.7.3

Before starting the APU, ensure an APU FIRE TEST is accomplished.

3. TRUE or FALSE. The Flight Deck Preparation Flow will be accomplished; 1st flight of the day, following a crew change, prior to an oceanic flight, if maintenance has been performed in the flight deck, if the crew has been absent for an extended period of time or if there have been visitors to the flight deck without pilots being present. Reference: PH 2a.6.1

4. TRUE or FALSE. An alternate appears on the release if the dispatcher has determined one is required, however, if in the Captain's opinion the alternate may be deleted, he should contact the dispatcher even if the fuel is already on the aircraft. This contact may alert the dispatcher than an alternate is no longer required for the destination. Reference: FOM 10.1.1

5. TRUE or FALSE. It is required to warn any ground personnel whose headset may be connected to the service interphone system prior to performing a crew oxygen test due to the loud noise that is emitted which could endanger ground personnel. Reference: PH 2a.8.3

6. TRUE or FALSE. For flights without occupants traveling in the cabin (i.e., ferry or positioning flights, etc.) the crew has the option to arm the slides they consider necessary for the flight or to leave the slides unarmed. Reference: PH 2a.5

For flights with any occupants traveling in the cabin, the slides must be armed and checked. Check door bottle pressure and move door arming lever to ARMED position. Check "SLIDE ARMED" indication.

7. You arrive at an out station (non maintenance station) for an early morning departure. During the Flightdeck Prep flow you discover a mechanical discrepancy. Who you should you contact? Reference: FOM 1.3.2 (Old 11.2.3)

Coordinate with the controlling dispatcher to determine capabilities of on-call maintenance and to request the on-call mechanic.

8. Target arrival fuel for flight without any known delays and without MEL/CDL' s or contingency fuel will include the following holding fuel (Reference: FOM 10.2):

- ***30 minutes holding fuel if no alternate required***
- ***15 minutes holding fuel if alternate required***

Chapter 2b - Start

1. TRUE or FALSE. The proper After Start Flow trigger occurs when the CA verbally acknowledges the ground crew's wands up and the equipment is clear. Reference: PH 2b.12.1

Trigger: After the ground equipment is clear, the first officer verbally acknowledges the captain's wands up signal statement, and the engine(s) are stabilized.

2. On the First Officer's After Start Flow, the FO selects Engine Anti-Ice ON when the OAT is 10º C or below with visible moisture, or when snow, standing water, or slush is present on the ramp, taxiways, or runways. The Captain double checks that the appropriate Engine Anti-Ice selection was made during his/her After Start Flow. Reference: PH 2b.14.3

3. TRUE or FALSE. The A/SKID & N/W STRG switch should be selected OFF during the FO's Before Start Flow. Reference: PH 2b.3.3.

This is part of the Captain's Before Start Flow.

4. Until ready for the pushback the PARK BRK will be selected ON. Should the aircraft start to move due to a parking brake failure, immediately release the PARK BRK handle to restore braking by pedals. Brakes should never be used during pushback unless required due to an emergency. Reference: PH 2b.13

PARK BRK must be ON, confirmed by ECAM MEMO and BRAKES and ACCU PRESS indicator.

5. TRUE or FALSE. If the NW STRG DISC is not displayed on ECAM, but the ground crew confirms the steering selector bypass pin is in the towing position, pushback can still be conducted. Reference: PH 2b.7.3

Pushback must not be performed. Contact maintenance.

6. Before a pushback can commence without headset communications, it is required that the hand signal agent have a face-to-face meeting with the Captain. This can be accomplished via the Captain's open cockpit window, or if inclement weather or excessive noise prevents this communications from the open window the boarding bridge must be brought back up to the aircraft. Reference: PH 2b.10.2

7. TRUE or FALSE. During pushback, when being directed by hand signals only, you can start engines any time the ground crew determines conditions are acceptable. Reference: PH 2b.10.5.

Do not start an engine until pushback is complete when aircraft is being directed by hand signals only.

8. A pack flow setting of (HI or LO) is recommended when the number of passengers is less than 90 or for long-haul flights. Reference: PH 2b.3.3

PACK FLOW Selector (A319/320)
- LO in number of passengers is less than 90 or for long-haul flights.
- HI for abnormally hot and humid conditions.
- NORM for all other operating cases.

ECON FLOW Selector (A321)
- ON: ECON FLOW if number of passengers is less than 140.
- OFF for normal flow.

Note: If the APU is supplying bleed air for air conditioning, pack controllers select high flow (A319/320) or normal flow (A321) automatically, regardless of selector position.

Chapter 2c - Before Takeoff

1. TRUE or FALSE. During taxi, when approaching an entrance to an active runway, both pilots will ensure compliance with hold short or crossing clearances by discontinuing non-monitoring tasks, programming, ACARS, company radio calls, etc. Reference: PH 2c.2.3

Additionally:
- Both pilots will have the airport diagram/taxi chart in view and will crosscheck the diagram/chart against the aircraft heading and airport signage.
- Minimize heads down time. The first officer will advise captain when accomplishing non-monitoring tasks (FMS programming, ACARS, company radio calls, etc.).

2. TRUE or FALSE. When using the new FMS2, when a runway change is made the message; CHECK TAKEOFF DATA will appear in the scratchpad. It is very important to confirm T/O data prior to selection of FLEX or TOGA for takeoff. Reference: Bulletin

A CHECK TO DATA message appears if the takeoff runway is entered or changed after V speed insertion. Previous V speed entries are displayed immediately to the right of the V speed prompt boxes. The crew may either CONFIRM TO DATA (line select [6R]), or manually enter new speeds referencing TPS of final W&B documents. CONFIRM TO DATA will transfer previous V speed entries to the prompt boxes.

3. TRUE or FALSE. In the newest version of FMS2, on the INIT B page ZFWCG (zero fuel weight center of gravity) and ZFW (zero fuel weight) are the only weight entry accepted. GW (gross weight) and CG (center of gravity) information are NOT pilot modifiable. Reference: Bulletin

4. TRUE or FALSE. On the First Officer's Taxi Flow, selection of AUTO BRK pb to MAX is accomplished immediately following the FLT CONTROL check due to a recent Airbus Directive. Reference: PH 2c.9.3

Press the pushbutton firmly for at least 1 second to ensure the autobrake system arms. Arming of the AUTOBRK must not take place until after the flight control checks have been accomplished.

5. (YES or NO) During taxi out, the tower advises the initial heading and altitude for departure has changed. Since the Departure Briefing was completed at the gate, is there a requirement to re-brief after details of the amended clearance are set in the FCU when responding to the Departure Briefing on the Taxi Checklist? Reference: PH 2c.13.1

Review any items that have changed since the Departure Briefing was accomplished during the Before Start Flow.

6. When responding to the Takeoff Data item on the Taxi Checklist, regarding takeoff V speeds and thrust settings, V_1 is read from the PFD, V_R is read from the PERF page, V_2 is read from the PFD, and Flex temp/TOGA is read from the upper ECAM screen. Reference: PH 2c.13.1

7. TRUE or FALSE. "Below The Line" on the Taxi Checklist should now be called for and accomplished approximately 1 - 3 minutes prior to takeoff in order to notify the flight attendants to be seated. Reference: PH 2c.12.3

If the flight attendants are not ready, then they will notify the flight deck crew immediately by interphone.

8. If the fuel on board is less or anticipated to be less than "T.O MIN" fuel when cleared for takeoff, an Amended Flight Release or more fuel is required prior to beginning takeoff roll. Reference: PH 2c.13.1

9. On the FO's Before Taking the Runway Flow, the FO selects (NORM or IGN) on the ENG MODE selector if the runway is contaminated with standing water, slush, snow, or if heavy rain or moderate turbulence is expected. Reference: PH 2c.12.3
10. During taxi for departure a crew awareness ECAM message is displayed. You feel the discrepancy will not impact the flight and want to continue. Who, if anyone, must you contact? Reference: PH 2c.1 and FOM 1.3.2

Contact the controlling dispatcher via phone patch, relay through operations, or ACARS to discuss flight issues.

11. During taxi out you arrive at the queue to enter the deicing pad. Due to the number of aircraft ahead of you it is apparent you will encounter at least a 30 minute delay prior to deicing. What policy must be complied with in regards to PA announcements? Reference: FOM 2.2.14

The captain will contact the controlling dispatcher and local station personnel, discussing viable options with passenger comfort as the primary goal. After conferencing with dispatch, station personnel, and his crew, the captain decides if the flight should return to the gate.

The flight crew will provide customers with updated delay status approximately every 15 minutes. The announcement should include the current status, reason for the delay, forecasted weather, ETD, and any other pertinent information (including if there is no new information).

Make an announcement authorizing use of PEDs.

Chapter 2d - Takeoff

1. On the Taxi Checklist the flight crew verifies THR/ACC altitudes on the PERF page of 1000/1000 feet AFE which is a (DISTANT or CLOSE IN) setting. Reference: PH 2d.1.1

	Climb Thrust	Flap Retraction
Distant	1,000 AFE	1,000 AFE
Close-in	1,500 AFE	3,000 AFE

2. In the event of a Rejected takeoff, the Captain assumes control of the aircraft and will callout "Reject, My Aircraft". Reference: PH 2d.7

3. Following a Rejected Takeoff, once the aircraft is stopped, the (CA or FO) will make the PA announcement stating; "This is the captain, remain seated". Reference: PH 2d.7

Advise cabin of intentions.

4. TRUE or FALSE. Takeoffs made with a lower flap setting provides better acceleration, higher climb rate, and earlier flap retraction, allowing for less fuel consumption. Reference: PH

5. The Pilot flying will advance the thrust levers to 1.05 EPR for IAE and 50% N1 for CFM engines, allowing the engines to stabilize momentarily before positioning thrust levers to the FLEX or TOGA detent. Reference: PH 2d.1.2

Takeoff thrust should be set by 40 knots.

6. TRUE or FALSE. To aid in the Go/NO Go decision, during takeoff roll, The PM makes the "V1" callout five knots before V1 to compensate for reaction time. Reference: PH 2d.6.2

7. Tail strikes during takeoff roll can result from early rotation, over rotation and excessive pitch. Critical Pitch Altitudes during takeoff for the A319 is ___degrees, A320 is ___degrees and A321 is ___ degrees. Reference: PH 2d.3.1

	A319	A320	A321
Critical Pitch Attitude (Struts extended)	15.5º	13.5º	11.2º
Critical Pitch Attitude (Struts Compressed)	13.9º	11.7º	9.7º
Demonstrated Lift-off Pitch Attitude	12.5º	9.5º	8.5º

8. After takeoff, do NOT make turns below 400 feet AFE unless operationally required for air traffic purposes or for specific Engine Failure During Takeoff or Missed Approach procedures. Reference: PH 2d.3.3

9. With a loss of thrust at or above V1, the PF must fly the aircraft and not be distracted trying to analyze the problem while the aircraft is in a critical phase of flight. Normally the safest course of action is to accomplish the applicable ECAM/QRH procedure(s) after the flaps are up and the desired climb speed has been attained. However, under compelling circumstances such as severe vibration, adverse flight characteristics, etc., it may be necessary to accomplish the ECAM/QRH procedure(s) as early as 400 ft. AFE. Reference: PH 2d.8.1

10. Departing from an international airport, a (close-in or distant) takeoff is normally used. When performing this takeoff, the thrust reduction is 1500 AFE. V2 + 10 to 15 knots is maintained until the acceleration altitude of 3000 AFE, then the pitch is reduced to accelerate and retract the flaps on schedule. Reference: PH 2d.3.5

11. On climb out, at the THR RED ALT (LVR CLB flashing) on the FMA, the PF positions the thrust levers to the climb detent and calls; "Climb" followed by the PM's verification and a response of "Climb Set". Reference: PH 2d.4

12. After takeoff, spoilers are disarmed by the PM after the Flaps are selected up. Reference: PH 2d.4

13. What automation must be used when accomplishing an RNAV 1 SID or STAR? Reference: PH 2d.10

A flight director and autopilot in NAV mode must be used for flight guidance while operating on RNAV paths.

Chapter 2e - Climb, Cruise, Descent

1. TRUE or FALSE. The PM's After Takeoff Flow is triggered after flap retraction and before 10,000 ft and includes new checks of the AIR COND to ensure the aircraft's bleed system is properly configured and the Cabin Vertical Speed to affirm rate of climb and aircraft pressurization. Reference: PH 2e.1

Ensure aircraft bleed system is properly configured (e.g., APU BLEED OFF if used for takeoff).

2. TRUE or FALSE. Out of 10,000 feet, the callout by the PM when accomplishing the Climbing Through 10,000 Feet Flow is; "10,000" followed by a response of "10,000" from the PF. Reference: PH 2e.5.2 and 2e.6.2

After the PM calls "10,000", the PF accomplishes Climbing Through 10,000 Feet Flow.

3. Out of 10,000 ft ATC requests the max rate or best rate of climb. This speed is defined as 260 KIAS/.76M (319/320), 280 KIAS/.76M (321). Reference: PH 2e.3.3

4. The EXPED pb may produce a rapid change in altitude but is not intended for normal use and should be avoided above FL 250. Reference: PH 2e.3.2

5. Climbing through a transition altitude of 18,000 the PF and PM Transition Altitude Flow is used to set the altimeters of STD/29.92 followed by a callout of "Transition Standard" by the PM and a response of "Standard" by the PF. Reference: PH 2e.7.3

6. (YES or NO) During cruise, for crossing traffic ATC gives you the option of climbing or descending to a different altitude. While the higher choice may increase fuel savings you notice it is your REC MAX Altitude which requires you to ask if there are any ride reports at that altitude and they respond it has been reported as having moderate turbulence. Can you accept the clearance to climb higher? Reference: PH 2e.8.6

Under no circumstances will REC MAX altitude be used when moderate or greater turbulence is present.

7. During cruise, Periodic System Checks are required approximately every hour and at a minimum include a check of the following systems: Reference: PH 2e.8.3

Page	Check
HYD	Quantity and pressure • Fluid contraction during cold soak can be expected. A slight decrease in quantity is normal. • Following landing gear retraction, green system quantity is lower than on the ground.
ELEC	Parameters, GEN loads
FUEL	Fuel quantity and distribution
DOORS	Oxygen pressure
ENG	Oil pressure and temperature

8. When established in cruise flight, at or above FL 290, cross-check each PFD altimeter and the standby altimeter. Record the results for use in contingency situations. The two (2) PFD altimeters must agree within 200 feet at all times with RVSM airspace. Reference: PH 2e.8.1

9. TRUE or FALSE. In flight, should one pilot need to vacate the flightdeck for physiological or operational needs notification of the FA via the interphone is required who will coordinate which FA will enter the cockpit and will assign a second FA to maintain a presence between the passengers and the flightdeck door while it is open. Reference: FOM 1.7.3

10. TRUE or FALSE. Regarding the requirement to brief Landing Performance during the Approach Briefing, for an approach to a runway with braking action reported as Medium (Fair), you would consult the QRH Landing Distance tables and locate the appropriate chart for your aircraft type to ensure the runway length is adequate for your GW and the reported conditions. Reference: QRH

11. TRUE or FALSE. When loading landing data into the MCDU PERF APPR page, the crew may only modify VAPP if required by a non-normal procedure, ice accretion, or anticipated windshear. There are no provisions for adjustments or additives to ever be made to the wind speed/velocity. Reference: PH 2e.9.2,

12. CFM aircraft downlinks In-Range reports automatically, however, if on an IAE aircraft, or if the automatic function on the CFM aircraft is inoperative, a voice in-range report should be accomplished during Approach Preparation. Reference: PH 2e.18.3

13. A full Approach Briefing is required if in night conditions or when weather is less than 2000/3. Reference: PH 2e.9.3

14. TRUE or FALSE. Approach preparation requires review, and if necessary modification of the THR RED/ACC and ENG OUT ACC fields of PERF GO AROUND page. Reference: PH 2e.9

Enter/verify a value of 1000 feet AFE in the THR RED/ACC and ENG OUT ACC fields.

15. The PF and PM Transition Level Flow is used to configure the aircraft to the appropriate transition altitude. For example; if the current altimeter setting was 29.89 the PM calls; "Transition, 29.89" while the PF responds; "29.89" Reference: PH 2e.11.3

16. Descending through 18,000 ft the PM calls "18,000" which triggers the PF to call for the "Descent-Approach Checklist". Reference: PH 2e.13.2

17. If the transition altitude is at 15,000 feet, the crew would accomplish the "Descent - Approach Checklist" at 18,000 feet. Reference: PH 2e.13.2

18. Climbing through 3000' you encounter an engine flame out. Using the applicable non-normal procedures the relight attempt is unsuccessful and the engine is secured. You have declared an emergency with ATC and are returning to the departure airport for a precautionary landing. What signal should you use to establish communication with the flight attendants and brief them on the situation? Reference: FOM 4.3.4

To notify the flight attendants when an emergency exists:

- Use 2 bells when a normal landing is planned.
- Use 6 bells when an emergency could require an evacuation (e.g., smoke, fire, landing gear malfunction, ditching, etc).

Chapter 2f – Approach

1. When intercepting the final approach course on an ILS and the localizer comes alive, the PM will call out; "Course Alive". Reference: PH 2f.5

2. On approach, the (PF or PM) arms spoilers and calls for the Landing Checklist after flaps are positioned by the PM to the FLAPS 3 position. Reference: PH 2f.14.1

3. Use of the autopilot is now required for all CAT I approaches and when visibility is below 4000 RVR. Reference: PH 2f.4.1

4. When flying a non-precision approach with an MDA of 520, the Derived Decision Altitude or (DDA) is obtained by adding 50 feet to the MDA value and is entered into the MDA field of the PERF page, provided there is no note authorizing use of VNAV in lieu of MDA. Reference: PH 2f.9.3

- MDA is the lowest altitude, expressed in feet MSL, to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure where no electronic glideslope is provided.
- DA – RNAV approaches with LNAV/VNAV minimums depicted are always based on a barometric altimeter decision altitude (DA). RNAV approaches with only LNAV minimums are flown to a derived decision altitude (DDA).
- DDA – See question 4 text.

5. TRUE or FALSE. When conducting an ILS PRM Approach, TCAS should be positioned to the TA mode only. Reference: PH 2f.8.1

Leave the TCAS in TA/RA. If an RA is received without an ATC Traffic Alert, accomplish TCAS Warning RA procedure.

6. Pilots will plan to be stabilized on all approaches by 1000 feet RA in both IMC and VMC. Reference: PH 2f.1

7. On final at 500 ft, if approach parameters are all stabilized at V_{APP} + 5 the PM callout would be; "Stable, Target+5, Sink 700". Reference: PH 2f.2.8

8. The 500' stable callout (IS / IS NOT) made during non-precision approaches? Reference: PH 2f.10

9. TRUE or FALSE. For all instrument approaches the PF's callout at 100 above minimums is "Continuing." Reference: PH 2f.5

10. During visual approaches, if the autopilot and FD's are selected OFF on an approach it is recommended that the Flight Path Vector be selected on. Reference: PH 2f.2.1

11. AUTO THRUST may be selected OFF on approach providing it is briefed in advance and the following conditions exist: Reference: PH 2f.2.6

- Day VMC Conditions
- Must be pre-briefed
- PF should notify the PM when engaging or disengaging the autothrust

Chapter 2g - Go Around And Landing

1. TRUE or FALSE. A selection of AUTOBRAKES to LO is normal procedure for landings with a crosswind component greater than 10 knots. Reference: PH 2g.12.8

Use of the autobrake system, if available, in MED or LOW is normal procedure for:

- All landings on wet and slippery runways
- When landing rollout distance is limited
- When aircraft configuration requires use of higher than normal approach speeds
- A crosswind component greater than 10 knots.
- All CAT II/III landings

When LO is selected, autobraking begins four seconds after the ground spoilers are deployed and two seconds after deployment if MED is selected.

2. Once established inbound on a managed, non precision VOR approach, a go around is required if raw data indicated on the PM's ND differs by more than +/- 5 degrees from the charted inbound approach course, (except for station passage.) Reference: PH 2g.8.1

3. Flaps 3 landings are more fuel efficient because they sustain more energy, create less drag, and increase landing roll by no more than approximately 500 ft. Reference: PH 2g.12.9

4. TRUE or FALSE. A go-around can be accomplished by initially moving the thrust levers to the TOGA detent and then returning them to the CL detent when TOGA is not required, and after verifying that MAN TOGA-SRS-GA TRK is annunciated on the FMA. This procedure should not be used during an engine-out go-around or for any go-arounds initiated below 1000 feet AFE. Reference: PH 2g.2.3

5. In reference to go-around callouts, callouts by the PF of "GO AROUND" and "TOGA" require a response of "TOGA SET" by the PM before the PF commands "GO AROUND FLAPS". In the event flaps had been FULL at the time of the go around, the correct response by the PM to "GO AROUND FLAPS" would be; "Flaps 3". Reference: PH 2g.3

Note: Go-around flap setting is one notch up.

6. TRUE or FALSE. During a single engine go-around, the PF will call for HDG ___ or NAV at or above 400 ft AFE, unless a specific "Engine Failure- Missed Approach" procedure dictates otherwise. Reference: PH 2g.4

Chapter 2h - Parking and Post Flight

1. TRUE or FALSE. After landing, the flight crew should preempt a HOT BRAKE ECAM by turning the BRK FANS on immediately so as to minimize any duration of time the BRK FANS would run. Reference: QRH, ECAM EXCEPTIONS and PH 2h.4.3

Brake fan selection should be delayed for at least 5 minutes or arrival at the gate, whichever occurs first.

2. Upon clearing the runway the CA calls for "Flaps-Up" which triggers the CA and FO After Landing Flows. Reference: PH 2h.2.2

Note: The captain's call for "Flaps Up" may be modified due to contaminated runway/taxi conditions or other operational considerations. The captain will call for the desired flap setting.

3. If the OAT is greater than 38°C or 100°F, the flaps should remain in the FLAPS 1 detent until configuring for the next flight to avoid "AIR L(R) WING LEAK" caution on ECAM. Reference: PH 2h.3.3

4. When should the Y ELEC PUMP be turned on during taxi in? Reference: PH 2h.4.3

Prior to shutting down an engine (#2 preferred).

5. During the FO's After Landing Flow, TCAS should be left in STBY and the Predictive Windshear Switch should be turned to OFF to prevent the radar from energizing on the ground which would pose a risk to ground personnel. Reference: PH 2h.3.2

6. Single engine taxi to the gate can be accomplished after the engine has operated at or near idle for 3 minutes with a minimum of 1 minute if approaching the gate. Reference: PH 2h.4.3

7. TRUE or FALSE. Prior to selecting ENG 2 MASTER to OFF for Single Engine Taxi inbound to the gate, the FO will verbally communicate with the CA to ensure no brake or steering inputs are being made. Reference: PH 2h.4.3

8. TRUE or FALSE. Upon gate arrival, pilots no longer need to verify slides are disarmed because of a new verification procedure FA's have adopted that provides an additional crosscheck. Reference: PH 2h.8.1

Warning: Warn cabin crew if any of the slides are not disarmed. Verify 4 slides disarmed on ECAM DOOR page, 1L/1R & 2L/2R (A319/320) or 1L/1R & 4L/4R (A321). Armed slides are identified on the ECAM by a white SLIDE indication next to the doors listed above.

9. FO's now accomplishes the IRS drift and residual ground speed, (ADRS check), as part of the FO Shutdown Flow either at the gate, after the aircraft is stopped, OR, if delays are incurred during taxi inbound when aircraft is stopped prior to gate arrival. In either case, the check must be performed within two minutes of aircraft stop. Reference: PH 2h.7.3

10. The Secure Checklist is normally accomplished as a "Read and Do" by the (CA or FO) while the (CA or FO) completes the post flight walk around. Reference: PH 2h.9.1, 2h.10.1

11. TRUE or FALSE. In the event of an evacuation, selection of the EVAC COMMAND push button has been eliminated from the Captain's Evacuation Checklist and an "If" statement has been added to the First Officer's Checklist to first determine "IF" MAN CAB PR is in use, and if so, then select MAN V/S CTL FULL UP. Reference: QRH EVACUATION CHECKLIST

Chapter 2i – In-flight Maneuvers

1. TCAS issues a Corrective Resolution Advisory Announcement "DESCEND, DESCEND" and you respond promptly within 5 seconds of the alert by selecting AUTOPILOT-OFF, and stating "FLIGHT DIRECTORS OFF", and adjust the vertical speed as required to remain within the green area of the vertical speed scale. Reference: PH 2i.5.2

2. TRUE or FALSE. Following a TCAS, when the "CLEAR OF CONFLICT" announcement is issued, you should expeditiously return to the previously assigned ATC clearance when the traffic conflict is resolved and resume normal navigation with a focus on returning the aircraft's automation to the highest applicable level. Reference: PH 2i.5.2

3. TRUE or FALSE. When in flight, each time the Seatbelt Sign is placed ON or OFF, a Flightdeck crewmember is required to make the appropriate announcement instructing passengers to keep their seat belts fastened. Reference: FOM 1.6.10

- ON: When the fasten seatbelt sign is illuminated in flight, a flightdeck crewmember will make an announcement instructing passengers to return to their seats and remain seated with their seat belts fastened. A flight attendant may call the flightdeck for additional information.
- OFF: When the seatbelt sign is turned off, a flightdeck crewmember will make an announcement advising passengers to keep their seatbelts fastened at all times when seated.

4. During an onboard medical emergency requiring contact with Medlink, due to the removal of seatback GTE Airfones, and because Medical practitioners may not enter the flightdeck, communications will need to be relayed via the interphone. Reference: FOM 5.3.3

5. After completing any ECAM actions, the QRH Cautions and Warnings Requiring QRH Follow-Up should be consulted to determine if any follow up actions are required. Reference: QRH

6. TRUE or FALSE. For all QRH and Non Normal references it is essential to pay close attention when using applicable charts/procedures to ensure it corresponds to your engine type.
Reference: PHASE 4 Distance Learning

INTERNATIONAL OPERATIONS

1. When operating in Latin America or the Caribbean, should you experience any in-flight emergency that would require you to give notice of difficulties which compel you to land without requesting immediate assistance, the flightcrew states; "PAN, PAN". Reference: EMERGENCY (LATIN AMERICA) 2.5.2.1

- Mayday – Grave and imminent danger threatens, and immediate assistance is requested.
- Pan – Aircraft has a very urgent message to transmit concerning the safety of the aircraft.

2. Outside of the United States, the MOCA (Minimum Obstacle Clearance Altitude) is denoted on the enroute navigation chart with a "T" and protects you within 4 NM of centerline. Reference: FOM International Operations Latin America 17b PG-2

Minimum Altitudes			
	Terrain Protective Coverage	*Found where?*	*Nav Coverage*
MEA	Along airway centerline	In magenta on the airway (e.g., 10,000)	Yes
MOCA	4 NM of airway centerline	In magenta on the airway with "T" (e.g., 12,000T)	No
Route MORA	10 NM of airway centerline	In magenta on the airway with "a" (e.g., 13,000a)	No
Grid MORA	Within sector	Near center of latitude & longitude grid	No
MSA	In a 25 NM radius centered on the defined radio aid or location	On Approach plate, SID, or STAR	No

3. When flying near mountainous areas with the Terrain on ND feature in use, a plan view image of surrounding terrain showing a red return indicates the terrain in that area is at least 2000 ft above aircraft elevation. Reference: FOM International Operations Latin America

The terrain appears in different colors and densities according to its relative height. The reference altitude is projected downward from the actual aircraft altitude to provide a 30 second advanced display of terrain when descending at more than 1000 FPM.

EGPWS Terrain Display	
Color and Density	**Altitude of Terrain**
No display of terrain	More than 2000’ below A/C altitude
Light density green dots	Between 2000'-1000' below A/C altitude
Medium density green dots	Between 250’ (LG DN) or 500’ (LG UP) to 1000’ below A/C altitude.
Medium density yellow dots	Between -250’ (LG DN) or -500’ (LG UP) to 1000’ above A/C altitude.
High density yellow dots	Between 1000' above - 2000' above A/C altitude
High density red dots	More than 2000' above A/C altitude
Solid bright yellow	Terrain within caution area
Solid bright red	Terrain within warning area
Magenta (rare case)	No data in terrain data base

ADDITIONAL MEMORY LIMITATIONS

OPERATION LIMITS

Structural Weight Limits	A319	A320	A321
Maximum Takeoff	**166,400 LBS**	**169,700 LBS**	**205,000 LBS**
Maximum Landing	**137,800 LBS**	**142,200 LBS**	**171,500 LBS**

Maximum 90 degree crosswind component for takeoff and landing: **29/G35 knots**
Maximum 90 degree crosswind component (including gusts) for Autoland: **20 knots**
Maximum 90 degree crosswind component (including gusts) for CAT II/III approaches: **15 knots**
Maximum tailwind component for takeoff (A320 with IAE engines): **10 knots**
Maximum tailwind component for takeoff (All A319/321 and A320 with CFM engines): **15 knots**
Maximum tailwind component for landing: **10 knots**
Maximum operating altitude: **39,000 feet**

SPEED LIMITS

Maximum operating airspeed (V_{MO}): **350 KIAS**
Maximum operating mach number (M_{MO}): **0.82M**
Maximum taxi speed: 30 knots
Maximum taxi speed for 90 degree turn: 10 knots
Maximum gear extension speed (V_{LO}): 250 KIAS
Maximum gear retraction speed (V_{LO}): 220 KIAS
Maximum gear extended speed (V_{LE}): 280 KIAS/0.67M

Maximum Flaps/Slats Extended Speeds (V_{FE})					
FLAPS	1	1+F	2	3	4
A319/320 V_{FE}	230 KIAS	215 KIAS	200 KIAS	185 KIAS	177 KIAS
A321 V_{FE}	235 KIAS	225 KIAS	215 KIAS	195 KIAS	190 KIAS

Turbulence Penetration Speeds	A319/320	A321
At or above 20,000 feet	275 KIAS/.76M	300 KIAS/.76M
Below 20,000 feet	250 KIAS	270 KIAS

ICE & RAIN PROTECTION

Engine Anti-ice ON when OAT (Ground) / TAT (Flight): **10º C or below**
(except during climb and cruise when the temperature is **below –40º C SAT**)

Engine anti-ice must be ON prior to and during descent in icing conditions
(including temperatures **below –40º C SAT**)

FUEL

Operational maximum fuel imbalance will be indicated by an ECAM advisory condition.

HYDRAULICS, BRAKES, & LANDING GEAR

Maximum landing gear extension altitude: **25,000 feet**

FLIGHT CONTROLS

Maximum operating altitude with slats, or flaps and slats extended: **20,000 feet**

AUTO FLIGHT SYSTEM

Autopilot Engaged – Minimum Height: **100 feet AGL** After Takeoff in SRS mode.

Maximum Winds for Automatic Approach, Landing, and Rollout	
Headwind	**30 knots**
Tailwind	**10 knots**
Crosswind other than CAT II/III	**20 knots**

POWERPLANT

Minimum oil quantity for dispatch: 13 quarts