#### AIRBUS A319/320/321 Flight Scenario Q and A 2006 – 2007 Updated : 10/09/06 PHB : 02-06 FOM : 1-06 Send corrections / comments to Bob Sanford, E-mail: busdriver@hky.com

#### Prior to Gate Departure

#### 1. <u>Safety</u> is the top priority at all times and at all levels. Reference: FOM 2.3

2. (TRUE or FALSE) The FOM does not and could not cover every contingency. The company expects its Captains to use common sense and good judgment, especially in those situations not specifically covered in the FOM. The Captain is in complete command of the aircraft and has authority over all assigned crewmembers from the time they report for duty until termination of the flight. This authority, however, does not include transportation to and from the layover facility. Reference: FOM 4.2.1

False – This DOES include transportation to and from the layover facility.

3. 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: PHB 2a.1.3

- Cabin-to-flightdeck communications
- Flightdeck entry/exit procedures
- Explanation of flight conditions
- Pilot announcement issues
- Review MELs that could affect cabin service
- Request flight attendants inform the captain promptly of items that should be entered into the aircraft logbook
- Any other considerations the captain deems necessary

### *4. Effective October 1, 2005, the company will no longer transport hazardous material except:* \_\_\_\_\_\_\_. *Reference: FOM FOB 4-05*

- Dry ice
- Wet non-spillable wheelchair batteries
- Dry cell wheelchair batteries

5. (TRUE or FALSE) On international flights only, airline crewmembers deadheading or vacationing in uniform may purchase alcoholic beverages during the flight, if the guidelines in FOM 4.3.2 can be adhered to. <u>False</u> Reference: FOM 4.3.2

### 6. (TRUE or FALSE) When operating in non-oceanic airspace it is the dispatchers responsibility to insure the filed routing remains within 162/100 nm of a shoreline. <u>True</u> Reference: FOM 4.3.4.

- Preflight Requirements: The controlling dispatcher is responsible for filing a route that remains within 162 NM of a shoreline.
- In-Flight Requirements: The captain will ensure route changes remain with 162 NM from a shoreline.

# 7. (TRUE or FALSE) The company provides training resources to all line pilots. These training aids include the CQT guide, FIL and FOB bulletins, and reference materials on the Hub. Only company authorized materials published by the company may be used by instructors, check airmen, and pilots. <u>True</u> Reference: FOM 4.3.16

Note: All materials contained within Airbusdriver.net are for entertainment purposes only, and shall only be used behind locked doors while in the privacy of your own home.

**8.** During the boarding process, a first class passenger informs the lead flight attendant that he has an article in his carry-on luggage, which is fragile. He asks if it is permissible to stow the fragile article in the cockpit, to ensure it does not get broken. The flight crew should: Reference: FOM 4.7.2

Passenger carry-on articles are *not* permitted on the flightdeck.

### 9. (TRUE or FALSE) Due to changes in TSA and FAA policy, it is now permissible for FAMs (Federal Air Marshals) to ride the cockpit jumpseat. <u>False</u> Reference: FOM 4.7.8

Federal Air Marshals are <u>not</u> authorized to occupy the flightdeck jumpseat.

10. (TRUE or FALSE) If a pilot's medical certificate requires the use of corrective lenses (contacts or eyeglasses) the pilot is required to carry a spare pair of corrective lenses. <u>True</u> Reference: FOM 5.1.1

11. (TRUE or FALSE) After boarding, the lead flight attendant will give the Captain a passenger count after departing the gate and prior to the safety demonstration/video. This passenger count is required by the FAA. <u>False</u> Reference: FOM 5.3.24

The FAA does not require a flight attendant passenger count for manifest or W&B purposes.

## 12. During the BEFORE START checklist, the crew is interrupted by a flight attendant. When the Captain elects not to accomplish an item on the checklist, he will state: <u>"Hold the checklist at <the item>"</u>. Reference: FOM 4.4.6

Note: The checklist will not proceed beyond an item until the item is accomplished and the proper response is given.

Continuing the Checklist: When the captain desires to continue the checklist, he will state: "Continue the checklist". The checklist will then resume with the item at which it was held. If there is any doubt regarding where the checklist was held, return to the last known completed item or start the checklist again.

## 13. (TRUE or FALSE) In the Caribbean when operating from an airport without ACARS capability, all paperwork and communications routed through ACARS require manual handling. <u>True</u> Reference: FOM 4.6.3

14. If during the preflight exterior inspection, damage is identified, but not marked by an adhesive dot or noted in the Aircraft Damage file, the crewmember should: <u>contact maintenance for evaluation</u> <u>prior to flight</u>. Reference: FOM 5.3.8

**15.** Upon receipt of your aircraft, a logbook write-up has been entered and a MEL has been issued for a missing APU Fire Extinguisher Overpressure Indicator (red disk). Who is responsible for ensuring the maintenance FR procedure is accomplished and signed off? <u>The underpaid captain</u> Reference: FOM 5.3.8

16. MEL 26-2205A is repair category C. This item must be repaired within <u>10 consecutive calendar</u> <u>days</u>. Reference: MEL book D-5

MEL <b>FR</b> ITEM 26-2205A APU Fire Extinguishing Overpressure Indication (Red Disc)	REPAIR CATEGORY <b>C</b>	QUANTITY INSTALLED <b>1</b>	MINIMUM REQUIRED <b>0</b>			
May be missing.						
Maintenance Procedure – Accomplish during the initia 1. Press APU TEST p.b. on overhead FIRE panel. Vo operative.	Maintenance Procedure – Accomplish during the initial application of the MEL 1. Press APU TEST p.b. on overhead FIRE panel. Verify SQUIB light comes on to verify APU squib is operative.					
<ul> <li>Maintenance FR Procedure - Accomplish during the in the first flight of each day</li> <li>Verify the APU fire bottle pressure switch is operative as fol <ol> <li>Open the following circuit breakers</li> <li>APU / APU CTL circuit breaker 2KC</li> <li>APU / ECB SPLY circuit breaker 1KD</li> <li>Access and open door 314AR.</li> <li>Energize the aircraft electrical circuits.</li> <li>Insert 3/32 allen wrench into allen key test poin</li> <li>Turn approx. 10 degrees clockwise or counter cl</li> <li>On overhead FIRE panel 20VU, check APU AGEN</li> <li>Release wrench. The pressure effect must return</li> <li>On overhead FIRE panel 20VU, check APU AGEN</li> <li>Remove allen key from test point on the APU fir</li> <li>Close door 314R.</li> <li>Close circuit breakers opened above.</li> <li>Make a log book entry "APU fire bottle pressure procedure".</li> </ol></li></ul>	itial application of lows: t on the APU fire ex ockwise until you c IT p.b. DISCH light n the allen wrench t IT p.b. DISCH light e extinguisher bottl e switch verified op	of the MEL and pri ktinguisher bottle. an feel a force. illuminates. back to its original p extinguishes e. erative per MEL 26-	or to position. 2205A FR			
AMM CROSS REFERENCE INFORMATION Task Number Designation TASK 26-22-00-710-001 Operational Test of the APU Fire-Extinguishing Loop/Squib TASK 26-22-00-040-007 Bottle Pressure Switch Check						
<b>Operations Procedure – Accomplish each flight</b> 1. The APU fire bottle pressure switch must be verified operative prior to the first flight of each flight day. Verification will be a log book entry indicating "APU fire bottle pressure switch verified operative per MEL 26-2205A FR procedure".						
END	)					

### 17. (TRUE or FALSE) In order to expedite maintenance, the Captain is encouraged to make verbal communications with maintenance instead of written ME-100 entries. <u>False</u> Reference: FOM 5.3.8

Verbal communications do <u>not</u> substitute for written ME-100 entries. The "REMARKS" section may contain "information only" items notifying maintenance or follow-through flight crews of important information that is <u>not</u> a discrepancy.

### 18. MEL 26-2205A requires a logbook entry in the operations procedure. This entry must appear in the Aircraft Maintenance Log each flight day. How is "flight day" defined? \_\_\_\_\_ Reference: MEL D-6

Flight Day means a 24 hour period (from midnight to midnight) using the local time where Maintenance Control is located, during which at least one flight is initiated for the affected aircraft.

#### **19.** (TRUE or FALSE) Today's flight is a planned reposition of the aircraft after a charter. If the flight has no occupants in the cabin, it is permissible to leave the slides unarmed/disarmed. <u>True</u> Reference: PH 2a.5.2

For flights with no occupants traveling in the cabin, the crew has the option to arm the slides they consider necessary for the flight or leave the slides unarmed.

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. Checked "SLIDE ARMED" indication.

## 20. During the normal preflight inspection, a flight crew member observes a landing gear door open, and gear pins installed. The flight crew member should: <u>contact ground crew before applying</u> <u>hydraulic power</u>. Reference: PH 2a.2.1

21. During the Captain's preflight flow, he notices the ACCU PRESS indicator is out of the green band. Normal procedure requires him/her to: <u>use the YELLOW ELEC PUMP to recharge brake accumulators</u>. Reference: PH 2a.7.3

WARNING: Yellow and green hydraulic systems are pressurized from the yellow hydraulic pump through the PTU. Check with ground crew prior to activating the pump.

#### 22. (TRUE or FALSE) It's important to warn any ground personnel whose headset may be connected to the service interphone system that a loud noise will be heard when performing a crew oxygen test. <u>True</u> Reference: PH 2a.7.3

### 23. When your flight is experiencing an unanticipated OAD (On Aircraft Delay), the Captain will: \_\_\_\_\_\_. Reference: FOM 5.3.29

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 15-20 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.

### 24. After selecting the APU MASTER Switch on it is important the flight crew waits <u>5</u> seconds before selecting APU START. Reference: PH 2a.2.2

### 25. If the departure release shows CTNGCY fuel, the flight crew should expect to see: <u>an explanation</u> from the dispatcher in the RMKS section\_. Reference: PH 3c.2.2

### **26.** (TRUE or FALSE) During preflight it is mandatory that at least one pilot verify the active route matches the ATC clearance. <u>False</u> Reference: PH 3.4.1

For all flights, **both** pilots must verify the active route matches the ATC clearance.

Please refer to the FMS 2 graphic below for questions 27 and 28:



### 27. The A/C STATUS page in the FMS 2 MCDU will show the active data base. According to this example the active data base runs from <u>28 AUG</u> to <u>25 SEP</u>. Reference: PH FIL – FMS 2, 2006 CQT GUIDE

28. In A/C STATUS page example, how can the flight crew be certain the data base is intended for use by US Airways? \_\_\_\_\_\_. Reference: PH FIL – FMS 2, 2006 CQT GUIDE

The data string adjacent to RSK 2R is preceded by USA.

**29.** The preflight altimeter check requires the altimeters to be within  $\pm 20$  feet of each other and within  $\pm 75$  feet of the field elevation. The flight crew should resolve indications of discrepancy or malfunction prior to <u>takeoff</u>. Reference: PH 2b.3.3

#### *30. (TRUE or FALSE) After engine start, the First Officer flow should be initiated; however the ANTI-SKID/NWS switch should remain OFF until the thumbs up signal.* <u>?</u> Reference: PH 2b.14.2

After the F/O verbally acknowledges the Captain's ground crew wave off, ground equipment is clear, and engine(s) are stabilized, the F/O initiates his After Start Flow.

Warning: Selecting A/SKID & N/W STRG ON prior to receiving "wands up" signal could result in injury to ground crews or damage to equipment.

#### Taxi and Takeoff

1. During taxi in icing conditions, the delay exceeds 30 minutes. The flight crew should accelerate the engine to approximately <u>70 %</u> N1 for at least <u>30</u> seconds, before operating at higher thrust, if airport conditions permit. It is important to not exceed <u>75</u> % N1 (A319/320) or <u>70</u> % (A321), on both engines with the parking brake ON. Reference: PH 2b.14.3

2. The flight crew should verify the THR/ACC altitudes. Normally these altitudes are <u>1,000/1,000</u> feet AFE domestically, and <u>1,500/3,000</u> feet AFE international. Reference: PH 2d.1.1

Туре	Operation	Climb thrust	Flap retraction
Distant	All domestic*	1,000 AFE	1,000 AFE
Close-In	All International	1,500 AFE	3,000 AFE
* Unless Airp	ort Advisory page indica	ites the Close-in pro	ocedure is to be used

3. During single engine taxi, when operating in congested areas, the flight should obtain clearance prior to operating the engines above <u>40</u>% N1. Reference: PH 2c.3.2

### **4.** If after gate departure (aircraft dispatched), the crew discovers a maintenance discrepancy. The flight crew should: \_\_\_\_\_\_\_. Reference: PHB 2c.1.1

Use these procedures for any aircraft discrepancy that occurs after dispatch but before takeoff. In addition, Airbus aircraft will use the procedure for any crew awareness ECAM or an ECAM where the system status is not returned to normal:

	Discrepancy – After Dispatch Before Takeoff				
Step	Action				
	Does the captain want to continue the flight?				
1	If no, go to Step 2				
	If yes, go to Step 3				
	Return for maintenance action.				
2	Enter the discrepancy in the Maintenance Logbook.				
	Obtain a new/amended Flight Release, if appropriate.				
2	Contact the controlling dispatcher via phone patch, relay through Operations,				
5	or ACARS to discuss flight issues.				
	Can the flight be safely executed?				
4	If no, return to Step 2.				
	If yes, go to Step 5				
5	Comply with any applicable MEL/CDL and supplemental/non-normal procedures prior to takeoff. Since an				
5	MEL is not applied once the aircraft is dispatched, an amended release is not required.				
	When time permits and not in a critical phase of flight				
6	Enter the discrepancy in the Maintenance Logbook, and				
0	<ul> <li>Send an ACARS message of the discrepancy using the</li> </ul>				
	procedures outline in FOM 5, "Mechanical Discrepancies In-Flight"				

### 5. What is the required visibility for taxi under company policies and procedures? \_\_\_\_\_. Reference: FOM 5.5.8

Taxi operations are authorized if the captain decides visibility is sufficient. Conduct checklists only when the aircraft is stopped or taxiing straight ahead without complex intersections.

### 6. (TRUE or FALSE) Takeoffs made with higher flap settings provide better acceleration, higher climb rate, and earlier flap retraction, allowing for less fuel consumption. <u>False</u> Reference: PH 3c.4

Takeoffs made with *lower* flap settings provide better acceleration, higher climb rate, and earlier flap retraction, allowing for less fuel consumption. Close adherence to the flap retraction schedule also saves fuel. FLEX takeoffs result in lower maintenance costs, improved engine reliability, and long term fuel savings. Rolling takeoffs, when possible, are also more fuel efficient.

#### Please refer to the FMS 2 graphic below for questions 7 and 8:

	FROM TMPY		USA320<->	
		UTC	SPD/ALT	
1L	-MERIL	0128 BRG054	10100- 12NM	1R
2L	-FLOPS J51	0203 TRK039	.74/ 12200- 47	2R
3L	-FOZZY J51	0210	.79/ FL330- 45	3R
4L	-CREWE J51	0221	"" 36	4R
5L	-FAK	0231	""	5R
6L	TMPY <- ERASE		TMPY INSERT*	6R

7. The flight plan has been modified; if the flight crew chose to push the LSK #6L, (TMPY ERASE) the flight plan will <u>erase the temporary flight plan</u> Reference: PH FIL – FMS 2, 2006 CQT GUIDE

8. (TRUE or FALSE) By selecting the LSK #6R, the flight plan will be made permanent. <u>True</u> Reference: PH FIL – FMS 2, 2006 CQT GUIDE

## 9. (TRUE or FALSE) During taxi out, ATIS is reporting "light freezing drizzle", however over the last 15 minutes the crew has observed no precipitation. It is permissible for the flight crew to rely on visual cues to determine whether engine anti-ice is necessary? <u>False</u> Reference: PH 2-8

Caution: Do not rely on airframe visual icing cues to turn engine anti-ice ON. Use the temperature and visual moisture criteria specified below. Delaying the use of engine anti-ice until buildup is visible from the flight deck may result in severe engine damage and/or flameout.

Ground and takeoff:

- Outside Air Temperature (OAT) is 10°C (50°F) or below and
- visible moisture in any form is present (i.e., clouds, fog with visibility of 1 mile or less, rain, snow, sleet, or ice crystals), or
- when operating on ramps, taxiways, or runways where surface snow, standing water, or slush may be ingested by the engines or freeze on engines, nacelles, or engine sensor probes.

In flight:

- Total Air Temperature (TAT) is 10°C (50°F) or below **and**
- visible moisture in any form is present (i.e., clouds, fog with visibility of 1 mile or less, rain, snow, sleet, or ice crystals).

Engine anti-ice operation:

- Engine anti-ice must be ON during all ground and flight operations when icing conditions exist or are anticipated (except during climb and cruise when the temperature is below -40°C SAT).
- Engine anti-ice must be ON prior to and during descent in icing conditions (including temps below -40° SAT).

Wing anti-ice operation:

- Select WING ANTI ICE ON after thrust reduction altitude
- Normally, WING ANTI ICE should be selected OFF at the FAF
- If in severe icing conditions, WING ANTI ICE may be left ON for landing

Wing anti-ice is not permitted on the ground or in flight when the TAT exceeds 10°C.

#### Please refer to the FMS 2 graphic below for questions 10 and 11:



10. On the LAT REV FROM FLOPS page, what function does the 5R LSK serve? \_\_\_\_\_\_. Reference: PH FIL – FMS 2, 2006 CQT GUIDE

When a victor airway, a jet route, or any type of airway is desired, the AIRWAYS pushbutton should be selected.

#### 11. On the LAT REV FROM FLOPS page, how would the flight crew access the HOLD page? <u>Press 3L</u> <u>Kev</u> Reference: PH FIL – FMS 2, 2006 CQT GUIDE

12. What additional information should be given to the ground controller when operating an aircraft in the Star Alliance livery? Reference: FOM 4.6.7

- Name of the operating company
- Flight number
- Name displayed on the aircraft
- Aircraft type

Example: "USAir 123 - Star Alliance A320".

### 13. (TRUE or FALSE) Unless directed by an MEL, dispatch with fuel in the center tank is prohibited, if wing tanks are not full. <u>True</u> Reference: PH 1.6.4

14. During the First Officer's flow and prior to the Taxi checklist, the AUTO/BRK pb should be selected to MAX. What precaution is associated with this action? Reference: PH 2c.9.3

Press the pb firmly for at least 1 second to ensure the autobrake system arms.

15. During taxi for an international flight, the lead flight attendant informs the flight crew via interphone that the General Declaration has inadvertently been left at the gate. Is it permissible for the flight to continue, or must they return to the gate? Reference: FOM 17b.2.4

Due to extenuating circumstances, the General Declaration can be faxed to the downline station to prevent a flight delay, if the Customer Service supervisor verifies with the crew the General Declaration will be delivered electronically.

16. (TRUE or FALSE) A pre-departure announcement from the flightdeck prior to all flights departing from non-U.S. locations to the United States is required. The scripted announcement should be read verbatim, and is found in the FOM. <u>True</u> Reference: FOM 17b.2.9

#### **Climb and Cruise**

1. After takeoff the max rate of climb is desired, this speed is defined as <u>250 kts / 0.65M</u>. Reference: PH 18.4.2

Maximum Rate: 250 kts / 0.65M Maximum Climb Gradient: Green Dot

<sup>2.</sup> During cruise flight the Captain should periodically review system display pages and check: Reference: PH 3.10

PAGE	СНЕСК
ENG	Oil pressure and temperature
BLEED	BLEED parameters
ELEC	Parameters, GEN loads
	Quantity and pressure
HYD	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
FUEL	Fuel distribution
	Duct temperature compared with zone temperature.
COND	Avoid large differences for passenger comfort.
DOORS	Oxygen pressure
	Control surfaces
FLICIL	Note any unusual position of control surfaces.

*3.* When initially established in cruise flight, crosscheck each PFD altimeter and the standby altimeter. Record the results for use in contingency situations. The two (2) PFD altimeters must agree within <u>200</u> feet at all times with RVSM airspace. Reference: PH 3.10 4. When immediate, decisive and correct control of aircraft path is required, the lowest level of automation, hand flying without flight director guidance may be necessary. Such instances would include upset or unusual attitudes. This is an example of level <u>1</u> automation. Reference: FOM 4.3.6

- Level 1: All automation OFF
- Level 2: Autopilot OFF, Optional use of FD
- Level 3: Autopilot, FD, ATHR ON (FCU Selected)
- Level 4: Autopilot, FD, ATHR ON (FMGS Managed)

## 5. (TRUE or FALSE) During a medical emergency, Medlink is contacted. Additionally, the crew is informed that a doctor is aboard the flight. Is it permissible for the physician to enter the cockpit to communicate with the Medlink doctor? <u>False</u>. Reference: FOM 4.10.1

Communication will be via interphone.

#### 6. What is the definition of MAYDAY, and when would it be used? <u>Aircraft in distress communication</u> Reference: JEPP EMERGENCY 5.1

### 7. What is the definition of PAN, PAN, PAN? <u>Radiotelephony Urgency Communication</u> Reference: JEPP EMERGENCY 5.1

The radiotelephony distress signal MAYDAY and the urgency signal PAN shall be used at the commencement of the first distress and urgency communication respectively.

## 8. (TRUE or FALSE) During flight with either an IRO, or a jumpseat rider, the Captain needs to use the lavatory. Because there is an additional qualified crewmember in the cockpit, coordination with the flight attendants is not required. <u>False</u> Reference: FOM 4.10.3

A flight attendant should maintain a presence between passengers and the flight deck door while it is open, therefore coordination would be required.

### 9. (TRUE or FALSE) In Latin American operations it is acceptable to exceed 250 knots below 10,000 feet. <u>False</u> Reference: FOM 4.10.16

### 10. Many departures in the TOLA require the flight crew to climb at "maximum climb gradient". This speed is defined as: <u>Green Dot</u>. Reference: PH 18.4.2

### 11. (TRUE or FALSE) Enroute if during an ECAM procedure LAND ASAP is written in either amber or red, the crew must land at the nearest suitable airport. <u>True</u> Reference: FIL 08-03

Landing at the nearest suitable airport is also required for the following non-normal conditions that do not generate a LAND ASAP message on the ECAM:

- Cabin smoke/fire which cannot immediately and positively be determined to be eliminated/extinguished.
- One AC power source available (i.e., engine or APU)
- Any situation the crew feels makes safety of continuing the flight questionable.

#### Please refer to the FMS 2 graphic below for questions 12, 13, 14 and 15:

		DIR TO		
	WAYPOINT	UTC	DIST	
1L	<mark>FAK</mark> F-PLN WPTS	0210	132	1R
2L	<-FAK	DIREC	CT TO H	2R
3L	<-OTT	ABEA RADIAL	M PTS-> . IN	3R
4L	<-JAYBO	218 RADIAL	-> _ OUT	4R
5L	<-HEDGE DIR TO	[ ] DIR	* TO	5R
6L	<-ERASE	11	NSERT *	6R

12. In the DIR TO example, FAK has been selected as the DIR TO fix. In order to make the DIR TO active the flight crew would select <u>DIR TO INSERT \* (6R)</u>. Reference: PH FIL – FMS 2, 2006 CQT GUIDE

13. If the DIR TO waypoint JAYBO is selected and the pilot would like to see the ABEAM points, which line select key should be chosen? <u>3R ABEAM PTS</u> Reference: PH FIL – FMS 2, 2006 CQT GUIDE

14. (TRUE or FALSE) If after selecting a DIR TO, along with ABEAM PTS, as long as the abeam position is within 100 nm of the original course, all wind data will be automatically transferred. <u>True</u> Reference: PH FIL – FMS 2, 2006 CQT GUIDE

15. (TRUE or FALSE) If a DIR TO is desired immediately after takeoff (no nav departure), it is permissible for the flight crew to enter the DIR TO prior to takeoff. <u>False</u> Reference: PH FIL – FMS 2, 2006 CQT GUIDE

The flight crew should never enter or leave a DIR TO pending while on the ground prior to takeoff.

#### Please refer to the FMS 2 graphic below for questions 16 and 17:



## 16. By referring to the CRUISE PROG page, the flight crew can determine the OPT is <u>FL350</u> and the REC MAX is <u>FL390</u>. REC MAX with all engines running is the maximum certified altitude that meets the following conditions: Reference: PH FIL – FMS 2, 2006 CQT GUIDE

The recommended maximum altitude based on present GW and deviation from ISA. It gives the aircraft a 0.3g buffet margin, a minimum rate of climb at MAX CL thrust, and level flight at MAX CRZ thrust. It is limited to FL 390. With an engine out, it shows the recommended maximum EO altitude, computed for long-range cruise, antiicing off.

The optimum flight level indicates the most economic flight level for a given cost index, weight, and weather data and is continuously updated in flight. It is a compromise between fuel and time saving, and may show steps due to slight GW, ISA, or wind changes. As a consequence, the pilot may observe jumps in optimum flight level.

#### 17. (TRUE or FALSE) Extreme care should be exercised if ever using the UPDATE AT function in flight. <u>True</u> Reference: PH FIL – FMS 2, 2006 CQT GUIDE

The UPDATE AT provides exactly the same function as the present FMS system, and should be used only when a gross FMS position error has been detected and confirmed.

#### Please refer to the FMS 2 graphic below for question 18:



### 18. (TRUE or FALSE) When viewing the HOLD page, it can be determined that there is a database hold available for FAK. <u>True</u> Reference: PH FIL – FMS 2, 2006 CQT GUIDE

The small arrow to the right of DATABASE confirms the availability of a database hold.

### 19. The best, most fuel efficient method for reducing airspeed in all flight phases is by <u>reducing the cost index.</u> Reference: FOM 3c.6

The crew may adjust airspeed, altitude, or route of flight to maximize cost savings where possible. The dispatcher can help in this assessment.

- If the ETA is more than 10 minutes early, operate the flight so as to minimize fuel consumption, while ensuring that the flight will arrive at or before the scheduled arrival time.
- If the ETA is within 5 minutes of the scheduled time, adhere to the flight plan.

The best method to reduce airspeed in all flight phases is by reducing the cost index. Reduce the cost index gradually to allow the FMGC to recalculate the ETA and EFOB at the destination. This way, the crew can compare ETAs and fuel consumptions.

### 20. In TOLA operations if not assigned a transponder code in a non-radar environment, set the transponder to <u>2000</u>. Reference: FOM 17b.3.1

21. (TRUE or FALSE) International non-oceanic pilots are bound by the 162/100 mile restriction. The Captain of these flights will ensure route changes remain within this restriction. Deviations are authorized for inflight emergencies or to avoid hazardous weather. <u>True</u> Reference: FOM 17b.3.5

#### Descent, Approach, Landing, and Taxi to the Gate

### 1. (TRUE OR FALSE) In case of one engine inoperative, it is a good practice to use the autopilot for approach especially when assigned a non-precision approach <u>False</u>. Reference: PH 2.13.1

In case of one engine inoperative, use of the autopilot is not allowed when performing non-precision approaches in FINAL APP, NAV/VS, and NAV/FPA modes. Use of the FD remains authorized.

2. If during approach and landing a windshear is encountered, and the windshear recovery maneuver is needed, the PF callout is <u>"WINDSHEAR TOGA"</u>. The PM should monitor the flight path and callout <u>information on flight path (e.g., "300 FEET DESCENDING; 400 FEET CLIMBING", etc</u>. Reference: PH 18.8.4

Predictive Windshear Procedures				
	ADVISORY	CAUTION	WARNING	
INDICATIONS:				
ND		Windshear icor	1	
PFD		<u>Amber</u> W/S AHEAD	Red W/S AHEAD	
AURAL	(N/A)	"MONITOR RADAR DISPLAY"	"WINDSHEAR AHEAD" (Twice on takeoff) "GO AROUND WINDSHEAR AHEAD" (On approach)	
PHASE OF FLIGHT:				
Aligned for Takeoff		Delay the takeoff until the alert	no longer exists.	
Prior to V1	TOGA. <u>Continue</u> the takeoff	Reject the takeoff if sufficient runway remains.		
At or Above V1	TOGA     Rotate no I     Follow SRS     Retract gea     If a PWS Warning of     aircraft performance	TOGA Rotate no later than 2,000 feet of runway remaining Follow SRS commands Retract gear and flaps on schedule Warning occurs – roll wings level <u>unless terrain is a factor</u> in order to maximize performance.		
During Approach	<u>Continue</u> the approach	<ul> <li>Execute a normal <u>go-around</u> using TOGA thrust.</li> <li>Retract gear and flaps on schedule.</li> <li>If a PWS Warning occurs – roll wings level <u>unless terrain is a factor</u> in order to maximize aircraft performance.</li> </ul>		

3. During a windshear recovery the aircraft enters ALPHA FLOOR. What is the procedure for recovery from TOGA LK? <u>Disconnect the autothrust</u> Reference: PH 14.1.12

### *4. (TRUE OR FALSE) Is it permissible for the First Officer to fly a PRM approach if he has at least 100 hours SIC in the Airbus A319/320/321? <u>False</u> Reference: PH 18.6.22*

The captain assumes PF duties prior to commencing the approach.

### 5. If the aircraft operating limitations are exceeded, for example flap overspeed, or overweight landing, the Captain should: <u>file an ASAP form and make a logbook entry</u> Reference: FOM 7.9.2

#### 6. When holding is required, the flight crew can improve fuel efficiency by: Reference: PH 3c.8

- Slowing the airplane as soon as possible when a hold is expected (advise ATC).
- Using the longest holding legs possible (holding in straight and level flight reduces fuel consumption by approximately 5%).
- Keeping the airplane in clean configuration.
- Flying the FMGC calculated holding airspeed. (FMGC holding speeds may exceed FAA max holding speeds. Advise/request ATC approval).

### 7. (TRUE or FALSE) It is permissible to make an auto land on a CAT 1 runway as long as ATC is notified and the ILS critical area is protected. Reference: FOM 5.11.4, PH 18.6.9

Airbus aircraft are authorized to conduct autolands on CAT I runways provided the restrictions contained in the pilot handbook are met.

### 8. During approach in IMC, the first pilot recognizing unstable conditions calls <u>"unstable"</u>, and the PF will <u>perform the go around</u>. Reference: FOB 3-06

9. (TRUE or FALSE) The flight crew should perform an overweight landing when a condition causes it to be safer to land overweight than to continue flight until at or below maximum certified landing weight. <u>True</u> Reference: PH 2.2.2

10. (TRUE or FALSE) In the TOLA operation, it is permissible to fly an approach in the NAV DATABASE, but for which the crew does not have an approach chart. <u>False</u> Reference: FOM 5.10.1, PH 3.12

The approach chart must be referenced during the approach briefing.

11. (TRUE or FALSE) During approach in the Caribbean, while in radar contact, is the crew required to adhere to the altitude verification procedure? <u>True</u> Reference: TOLA 17d.7

12. Outside of the United States the MSA (minimum sector altitudes) gives <u>1,000</u> feet of terrain clearance. Reference: TOLA 17d.4

*13. Is it permissible for non-oceanic pilots to accept a clearance on an AR route? <u>Only in non-oceanic airspace</u> Reference: TOLA 17a.3.2* 

14. Is it a requirement to brief all sectors of the MSA for the approach planned? <u>No – only the highest</u> <u>MSA</u> Reference: FOM 5.10.1

15. What is the maximum altitude for conducting an automatic landing in the Airbus A320? <u>2,500' MSL</u> Reference: PH 1.10.2

Please refer to the graphic in the CQT Guide to answer questions 16 and 17.

16. Your aircraft has been received the following clearance, "fly heading 085 degrees, intercept the RNAV course inbound, cleared the RNAV 19 approach". At this position, after pushing the APPR pushbutton, will the aircraft intercept the course? <u>No</u> Reference: PH FIL – FMS 2, 2006 CQT GUIDE

When on a heading to intercept the final course inbound, but outside the IAF, FMS 2 will NOT intercept the course.

#### 17. With the same clearance as question 16 (above) what three options would the flight crew have? Reference: PH FIL – FMS 2, 2006 CQT GUIDE

- Request and proceed DIR TO the IAF, or
- Request and turn the aircraft so the intercept will occur between the IAF and FAF, or
- Select DIR TO the IAF and build a RADIAL IN.

#### 18. What procedure should the flight crew use, if after gear extension, residual pressure is indicated on the BRAKE and ACCU PRESS indicator? Reference: PH 3.13

- Press the brake pedals several times to zero the residual alternate pressure.
- If residual pressure remains, select AUTO BRK MED mode to cancel residual pressure at touchdown.
- Do not switch OFF the A/SKID & NWS.

Residual pressure may indicate that the parking brake was selected ON. If the PARK BRK handle is inadvertently selected ON in flight it will be accompanied by an amber "PARK BRK" ECAM memo. No ECAM warning or caution will be provided.

Note: Beware of possible braking asymmetry after touchdown, which can be controlled using brake pedals.

### 19. If the airport advisory page identifies your destination airport as ASDE-X equipped, during taxi in the transponder should be set to <u>AUTO</u>. Reference: PH 3.6

20. (TRUE or FALSE) If turnaround times are short or brake temperatures are likely to exceed 500° C, use the brake fans disregarding any potential oxidation phenomenon. <u>True</u> Reference: QRH page 61

### 21. (TRUE or FALSE) The flight crew should always consult the QRH ECAM Exceptions prior to performing the HOT BRAKE procedure. <u>True</u> Reference: FOM Volume II

Pilots should be familiar with the ECAM exceptions listed on the front cover of the A319/320/321 QRH as they include five situations where the QRH contains additional procedures which MUST be referenced PRIOR to following the associated ECAM procedure. These five exceptions are:

- AVIONICS SMOKE
- BRAKES HOT
- ENG DUAL FAILURE
- FUEL (L or R) WING TANK LO LVL
- SMOKE (FWD or AFT) CARGO SMOKE (ON GROUND ONLY)

### 22. What normal flap setting for landing provides more energy and less drag, and better fuel efficiency? <u>CONFIG 3</u> Reference: PH 3a.3.5

#### 23. When should the Y electric pump be turned off, during taxi in? Reference: PH 3.16

Y ELEC PUMP must be selected ON for single-engine taxi operations to limit PTU operation. The PTU will cycle on under high hydraulic loads. Select the Y ELEC PUMP OFF during two-engine taxi, or during the PARKING & SECURING checklist flow upon arrival at the gate during single-engine taxi.

### 24. (TRUE or FALSE) During approach if the PF calls "LANDING", the PM should continue to monitor and call "100 ABOVE, and MINIMUMS". <u>False</u> Reference: PH 18.6.7

25. (TRUE or FALSE) Crews with overnights at international locations who experience an acute medical condition should contact MedLink for professional guidance and/or referral to an accredited medical facility. <u>True</u> Reference: FOM 8.5.4

1		ADDITIONAL	. MEMORY LI	<b>IMITATIONS</b>
	OPERATION LIMITS			
	Structural Weight Limits	A319	A320	A321
	Maximum Takeoff	166,400 LBS	169,700 LBS	205,000 LBS
1	Maximum Landing	137.800 LBS	142,200 LBS	171.500 LBS

Maximum 90 degree crosswind component (including gusts) for takeoff and landing: **29 knots** Maximum 90 degree crosswind component (including gusts) for CAT II/III approaches: **15 knots** Limiting tailwind component for takeoff: **15 knots**; 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 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 <sub>FE</sub> )					
FLAPS 1 1+F 2 3 4					
A319/320 V <sub>FE</sub>	230 KIAS	215 KIAS	200 KIAS	185 KIAS	177 KIAS
A321 V <sub>FE</sub>	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): 10 degrees C or below (except during climb and cruise when the temperature is **below** –40 degrees C SAT)

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

FUEL

Usable Fuel Tank Quantity		
A319/320 A321		
Wing Tanks	27,500 lb	27,500 lb
Center Tank	14,500 lb	14,500 lb
ACT	-	10,500 lb
TOTAL	42,000 lb	52,500 lb

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 (if SRS is indicated)

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

#### POWERPLANT

Minimum oil quantity for dispatch: 13 quarts