



# EAST AFRICAN SCHOOL OF AVIATION EXAMINATION

## FINAL EXAM

### IATA/SAFETY SECTION

### SUBJECT: COMMUNICATION

Stream: Flight Dispatch No.21

Duration: 2 Hrs

DATE: Monday: 16/09/2016

TIME: 2.00 – 4.00 PM

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#### INSTRUCTIONS TO CANDIDATE:

1. *This paper consists of **ELEVEN (11)** Printed pages.*
2. *This paper consists of **TWO SECTIONS***
3. *Answer the questions as per the instructions given*
4. *Examination rules and regulations shall apply*

**PART 1.**

1.  
The element of a position report transmitted in the correct order are:
  - A. Call-sign, position, heading, level, time, ETA next position.
  - B. Call-sign, position, time, level, the next position and ETA.
  - C. Call-sign, position, heading, level, conditions, ETA next position.
  - D. Call-sign, position, time, heading, conditions, Eta next position.
  
2. The correct transmission and pronunciation of the RTF frequency 125.875MHz would be:
  - A. 125.875 spoken as 'WUN HUNDRED AND TWENTY FIVE DAYSEEMAL AIT SEVEN FIFE'.
  - B. 125.875 spoken as 'WUN TOO FIFE DAYSEEMAL AIT SEVEN FIFE'.
  - C. 125.87 spoken as 'WUN HUNDREDAND TWENTY FIFE DAYSEEMAL AIT SEVEN'.
  - D. 125.87 spoken as 'WUN TOO FIFE DAYSEEMAL AIT SEVEN'.
  
3. VACATE LEFT' means"
  - A. immediately clear runway.
  - B. the next runway exit on the left.
  - C. turn left to vacate the runway.
  - D. execute a missed approach.
  
4. The meaning of the ATC instruction 'GO AROUND' is:
  - A. make a 360° standard turn to allow traffic ahead to clear the runway.
  - B. go around the aircraft ahead on the maneuvering area wing tip clearance is adequate.
  - C. do not descend below 50ft agl.
  - D. Oexecute a missed approach.
  
5. An aircraft commander wishing to file flight plan should do so via:
  - A. the LARS giving a service at that time.
  - B. the published FIR frequency for the area in which the aircraft is locate.
  - C. the nearest ATCU.
  - D. any air/ ground station providing a two-way radio communication service.
  
6. Which of the following multi-choice answers is the correct RTF terminology for YES?
  - A. 'WILCO'.
  - B. 'ROGER'.
  - C. 'AFFIRM'.
  - D. 'WILL DO'.

7. The meaning of a 'blind transmission' is:
- A. a transmission from one station to another in circumstances where two-way communication cannot be established but where it is believed that the called station is able to receive the transmission.
  - B. an aircraft in instrument meteorological conditions transmitted for a QDM to establish on a final approach to make a visual landing.
  - C. a transmission of information relating to the safety of air navigation to any station maintaining a listening watch on that frequency.
  - D. a transmission of information relating to the safety of air navigation by any aircraft in IMC unable to comply with the Visual flight Rules (VFR)
8. In relation to SSR transponder, 'SQUAWK IDENT' means:
- A. set the SSR code given on mode 'A' or 'C' instructed.
  - B. operate the special position identification button on the transponder.
  - C. set the SSR code and transmit your call-sign.
  - D. set the SSR code and transmit your position.
9. 'NO' in RTF terminology is transmitted as:
- A. 'NO'
  - B. 'DISREGARD'
  - C. 'UNABLE COMPLY'
  - D. 'NEGATIVE'
10. When reading back an ATC instruction, the message should be concluded with:
- A. the call-sign of the ground station that transmitted the instruction.
  - B. the aircraft call-sign.
  - C. the phrase 'WILL COMPLY'.
  - D. the phrase 'OVER'.
11. What is the meaning of 'VERIFY'?
- A. the message received is readable with difficulty.
  - B. check and confirm.
  - C. read back my last message.
  - D. make sure the content of your last transmission makes sense.
12. What details should be passed to an Air Traffic Control Unit by an aircraft in flight when requesting a Special VFR clearance?
- A. call-sign, type, position, heading, level, ETA at the entry point.
  - B. call-sign, altitude, heading, ETA at the entry point.
  - C. call-sign, type, intentions and ETA at the entry point.
  - D. call-sign, type, intentions and ETA at the entry point.

13. Approach a MATZ, two radio communicate should be established with the MATZ controller when within a particular distance or time from the zone boundary. The distance and time are:
- 15nm or 5minutes whichever is greater.
  - 10nm or 10 minutes whichever is greater.
  - 5nm or 5 minutes whichever is greater.
  - 10nm or 5minutes whichever is greater.
14. An in-flight request to cross the base of an airway should include details of:
- identification, TAS, magnetic heading, place and estimate time of crossing and desired crossing level.
  - identification, type, place and estimated time of crossing, present position and intended destination.
  - call-sign, type, position, heading, level, flight conditions together with the position, level and estimated time of crossing.
  - call-sign, type, point of departure, flight conditions, place and estimated time of crossing, and intended destination.
15. During a straight in approach on an airfield that involves being established on a long final leg, an aircraft commander must report both long final and final at which of the following distances from the runway threshold?
- |    | Long Final | Final |
|----|------------|-------|
| A. | 2nm        | 1nm   |
| B. | - 4nm      | 2nm   |
| C. | - 6nm      | 3nm   |
| D. | - 8nm      | 4nm   |
16. A pilot who receives an ATC instruction which cannot be carried out should transmit:
- 'UNABLE COMPLY'.
  - 'CANNOT COMPLY'.
  - 'WILL NOT COMPLY'.
  - 'STAND BY'.
17. A pilot transmitted for direction finding (DF) should end the transmission with:
- 'will comply'.
  - the aircraft call-sign.
  - the call-sign of the DF station.
  - QDM, QDM, QDM.
18. The accuracy of a class 'B' VDF bearing is:
- +/-10°
  - +/-2°
  - +/-15°
  - +/-5°

19. The accuracy of a Class 'A' VDF bearing is:
- A.  $\pm 2^\circ$
  - B.  $\pm 5^\circ$
  - C.  $\pm 10^\circ$
  - D.  $\pm 3^\circ$
20. The purpose of a request by ATC to the commander of an aircraft whose is selected to ALT to 'confirm your level' would be"
- A. to verify the aircraft's position.
  - B. verify the altimeter sub-scale setting.
  - C. check accuracy of the mode 'C' Flight level displayed on the controller's radar plot.
  - D. verify the transponder is working.
21. When is the 'Take-off' used by a pilot?
- A. to request take-off when aircraft is at the holding point.
  - B. to request take-off when the aircraft is lined up on the runway.
  - C. only when the aircraft is cleared to take-off.
  - D. Only after the aircraft has entered the runway.
22. When a pilot hears a distress messages/ he should:
- A. immediately acknowledge the message and offer to relay messages if required.
  - B. change another frequency as radio silence will be imposed on that frequency.
  - C. request another frequency from ATC to the emergency RT traffic on that frequency.
  - D. maintain radio silence but monitor that frequency to ensure assistance is provided.
23. A call-sign that is prefixed 'TYRO' means"
- A. The pilot in distress lacks experience.
  - B. the following transmission is a practice emergency.
  - C. the aircraft is experiencing difficulty but not in need immediate assistance.
  - D. the pilot of the aircraft in distress intends to ditch.
24. The emergency frequency 121.5:
- A. may be used to practice emergency procedures including simulated urgency or distress situations.
  - B. may be used to practice emergency producers including simulated urgency but not distress situations.
  - C. may not be used to practice emergency producers.
  - D. may be used to practice distress situations but not urgency procedures.
25. The abbreviation of an aircraft call-sign by a pilot is only permissible:
- A. after two-way communication with the ground station has been established.

- B. when it has established that confusion will not occur due to other aircraft having similar call-sign using the same FREQUENCY.
  - C. after it has been abbreviated by the aeronautical ground station on the frequency in use.
  - D. after it has been agreed by the pilot and controller in two-way radio communication.
26. A pilot in two-way communication with an aerodrome whose call-sign suffix is either 'Radio; or 'information' should respond to a call 'G-BGGA, take-off at your discretion, no known traffic to affect your departure.
- A. 'Clear for take-off at discretion, G-BGGA'.
  - B. 'Clear for taking off G-BGGA'
  - C. 'GBGGA; or taking off G-BGGA'.
  - D. 'take –off at my discretion, G-BGGA'.
27. A controller requested to provide a lower Rader Service (LARS) will require to know:
- A. call-sign, A/C type, estimated position, airspeed, level, intentions, type of service required.
  - B. call-sign, A/C type , estimated position, heading, level, intentions, type of service required.
  - C. call-sign , A/C type, estimated position, destination, airspeed, level, type of service required.
  - D. call-sign, A/C type, estimated position, track, level of service required.
28. The meaning of the word 'CORRECT' is:
- A. read back my last instruction correctly.
  - B. that is correct.
  - C. the phrase or message following the last part of my transmission is correct.
  - D. you will correct your last instruction.
29. An initial free call to an ATCU should comprise:
- A. call-sign, destination and type of service required.
  - B. call-sign, aircraft type, heading level, destination and ETA net waypoint and type of service required.
  - C. call-sign, and type of service required.
  - D. call-sign, point of departure and destination.
30. When all pre-departure checks are complete, and you are ready to advance beyond the holding and line up on the active runway, you inform ATC using the RTF call:
- A. 'ready for take-off'.
  - B. 'ready for departure'.
  - C. 'ready at the hold'.
  - D. 'ready to line up'.

31. 'DISREGARD' means:
- A. disregard the last part of my last message.
  - B. consider that transmission as not sent.
  - C. unverified information.
  - D. the last message was inappropriate and will be replaced.
32. What are the three main categories provided by the aeronautical communication service?
- A. Tower, Approach and Radar.
  - B. LARS, information, and approach.
  - C. ATC, information, and approach.
  - D. ATC, AFIS and aerodrome air/ ground (A/G) communication service.
33. The two categories of emergency message are:
- A. PAN and MAYDAY.
  - B. urgent and emergency.
  - C. emergency and distress.
  - D. urgency and distress.
34. An example of a conditional clearance passed to an aircraft is:
- A. Goldwing 759 after the landing aircraft line-up runway 23.
  - B. GGP take-off at your discretion.
  - C. GGA you are number 3 in traffic, report final.
  - D. GGA exit left after passing the intersection on your right.
35. After initial contact with a MATZ controller, the commander of an requiring MATZ penetration, when asked to do so should pass:
- A. Call-sign, A/C type, position ,ETA Matz boundary, heading, level and intensions.
  - B. Call-sign, A/C type, heading, level, and ETA matz boundary.
  - C. -call-sign, A/C type, position, heading altitude and intensions.
  - D. Call-sign, A/C type, heading and ETA Matz boundary.
36. A controller providing a Radar information service (RIS) WILL PASS:
- A. both the bearing and distance of conflicting traffic together with its altitude if known but will not pass avoiding action.
  - B. bearing , range and altitude of conflicting traffic operation under visual flight rules together with avoiding action.
  - C. Bearing, range and altitude of conflicting traffic operation under instrument flight rules but will not pass avoiding action.
  - D. bearing, range, altitude and speed of conflicting traffic operating under any flight rules together with avoiding action.

37. The abbreviation of a ground station call-sign by a pilot is only permissible:
- A. after two-way communication has been established.
  - B. when satisfactory communication has been established and providing it will not confusing, the name of the location or the call-sign suffix may be omitted.
  - C. after it has been abbreviated by the commander on the frequency in use.
  - D. after it has been agreed by the pilot and controller in two-way radio communication.
38. En-route, you are instructed to make a procedural position report, for instance at your next waypoint. The correct content and sequence of that would be:
- A. call-sign, position, time level, next position and ETA.
  - B. call-sign, position, ATA, and ETA next position.
  - C. call-sign squawk code, position and ATA, level and ETA next position.
  - D. call-sign, squawk code, ATA at the reporting point and level.
39. A condition clearance consists of for specific elements. Which represents the correct order in which those elements should be transmitted.
- A. call-sign, identification of the subject of the condition, the instruction, the condition.
  - B. call-sign, the condition, identification of the subject of the condition, the instruction.
  - C. call-sign, the instruction, the condition identification of the subject of the condition.
  - D. Call-sign the instruction, identification of the subject of the condition, the condition
40. Which of the following represents the correct of priority of messages handled by the aeronautical mobile service.
- A. metrological, flight regularly, distress, direction finding, urgency, flight safety.
  - B. flight regularly, distress, direction finding, urgency, flight safety, metrological.
  - C. distress, urgency, direction finding, flight safety, metrological, flight regularly.
  - D. distress, direction finding, urgency, flight safety, flight regularly, meteorological.
41. In the correct of search and rescue, 'distress phrase' means:
- A. a flight requires the assistance of the emergency services.
  - B. a 'pan pan' call has been transmitted.
  - C. there is apprehension concerning the safety of an aeroplane and its occupants and possible immediate assistance is required.
  - D. an aircraft and its occupants are threatened by grave and imminent danger and of requiring immediate assistance.

42. Following mayday prefix of a distress message the next transmitted element is;
- The call sign of the station being addressed if known and circumstances permitting
  - The aircraft callsign
  - The nature of emergency
  - Number of persons on board.
43. In respect of the above question, what is the clearance limit?
- 2000ft
  - The zone boundary.
  - Long Eaton
  - There is no limit to such a clearance
44. One element of a distress message is that the pilot should transmit the aircraft position in the context of:
- a direction finding heading and range to the direction finding the station.
  - present or last known position, level and heading.
  - The last position passed by the secondary service radar operator
  - Time and course followed from the last positive position fix.
45. When flying through a military aerodrome traffic zone (MATZ), vertical separation between aircraft within the MATZ is achieved by all aircraft using the same altimeter sub-scale setting, which is?
- 1013.2hpa so that all traffic may use different flight levels.
  - The military aerodrome QNH with vertical position reported as altitude
  - The military aerodrome QFE with vertical position reported as height.
  - The military aerodrome standard aerodrome pressure setting with vertical-al position reported as level.
46. An aerodrome located at Blackwood has an aerodrome flight information service which is identified by the call sign-
- Blackwood traffic
  - Blackwood radio
  - Blackwood information
  - Blackwood ATIS.
47. The commander of aircraft G-BGGA wishing to obtain a 'true bearing' from VDF station to be plotted directly on a chart should use the following RT protocol;
- QDR, QDR, G-BGGA requests QDR, G-BGGA
  - true bearing, true bearing, G-BGGA request true bearing G-BGGA
  - QTEQTE, GBGGA request, QTE, G-BGGA
  - QDM, QDM, G-BGGA requests, QDM, G-BGGA

48. There are Secondary Surveillance Radar (SSR) transponder (codes designated for emergency use). Which of these codes should be used for (i) emergency and (ii) radio failure respectively?

- A. 7700 and 7600
- B. 7700 and 7500
- C. 7600 and 7700
- D. 7600 and 7500

49. Consider the following ATIS message;

G-BGGP after departure you are cleared to leave the zone via long Eaton not above 2000ft squawk 3714.

This may be described as;

- A. a conditional clearance
- B. a takeoff clearance
- C. a zone clearance
- D. an ATC route clearance

50. The correct prefix of an emergency transmission is either 'MAYDAY' or 'PAN' which should be transmitted----- prior to the 'urgency' or 'distress message.

- A. once
- B. twice
- C. three times
- D. Twice using 'Pan' and three times when using 'Mayday'

## PART 2.

1. Define **any three** of the following words or phrases.

- i. Broadcast
- ii. Air- ground communication
- iii. Blind Transmission
- iv. Distress condition
- v. Aeronautical station

**(9 marks)**

2. List in their order of priority **the six types** of messages that are handled by the aeronautical mobile service

**(8 marks)**

3. List, in their order the specific actions that an aircraft station would take in an event that it fails to establish communication with an aeronautical station on the designated frequency.

**(8marks)**

4. What standard phraseologies would be used in the following cases

- a) You have come to an end of a transmission and expect a response.
- b) I understand your message and will comply with it.
- c) If an error can best be made by repeating the entire message.

- d) When you are not sure of a response to a message but you will check and call back.
- e) When you want to indicate the separation between messages transmitted to different aircraft in a very busy environment.
- f) When you want to authorize a person to proceed under the conditions specified.

(6 marks)

5. List the six important information items that an aircraft wishing to transmit distress or urgency message should inform the controlling unit (5 marks)

6. Study the following message and answer the questions that follow

QS LHRFFKQ JNBOOBA BAKKDAR EBBKKQU  
 NBOCMKL 92230  
 MVT  
 KQ 432/09 .5Y BET EBB .  
 AD 2205/2217 EA 0230 FCO  
 DL21/0045  
 SI BAD WX  
 PAX 90/125

- i. The message was sent from the Kenya airways commercial department in Nairobi (**True or False**)
- ii. Is the priority appropriate for the text (**Yes/No**)
- iii. Mention **three** important items in the message that are **missing**
- iv. Indicate the meaning of the codes **DL 21/0045** as appears in line six
- v. The flight KQ 432 originated from either **NBO** or **EBB** or **FCO** ( choose the correct one)
- vi. Decode the **5<sup>th</sup> line** of the message i.e. **AD 2205/2217 EA 0230 FCO** (14 marks)