

IFE Level 4 Certificate in Fire Safety and Fire Science

Unit 4 – Aviation Fire Operations

Examiner Report – March 2016

Introduction

Only 30 scripts were submitted. 20% of the candidates who attempted the examination achieved a Pass.

Candidates generally performed best on question 7; there were many poor responses to questions 1, 2 and 8.

Many candidates did not answer the questions set and their scripts contained a great deal of irrelevant information. Although the irrelevant information provided was generally accurate, it was not possible to award marks where the information provided did not answer the question that had been set. It often appeared that candidates had focussed on only a word or phrase in the question and had written answers to demonstrate their knowledge around their chosen word or phrase.

At level, 4 candidates need to demonstrate a higher level of understanding; presentation of basic information without explanations or assessment linked back to the question asked will not secure high marks.

Question 1

When calculating the minimum number of qualified/competent personnel required to deliver an effective Airport Rescue Fire Fighting Service (ARFFS) to deal with an aircraft incident/accident, it is essential that a Task Resource Analysis (TRA) is carried out.

Describe the stages that should be considered by an airport operator when carrying out a TRA to determine the minimum number of qualified/competent personnel required to deliver an effective ARFFS. (20 marks)

Examiner Feedback

Many candidates did not appear to understand the processes involved in a task resource analysis. Some candidates focused on the words “qualified/competent” and wrote about the role of ARFFS personnel and the skills/qualities required by firefighters. This did not answer the question.

In order to achieve high marks for this question, candidates needed to focus their responses on the issues that needed to be considered in assessing “the minimum number of qualified/competent personnel required” by the airport operator.

Question 2

An integrated emergency plan is an essential pre-requisite for any flying display or air show and the Fire and Rescue Service is often invited to participate in the planning process.

- a) *Detail the different timescales for an event organiser to notify the emergency services of such an event taking place. (3 marks)*
- b) *Describe the specific Fire and Rescue Service requirements/recommendations that an event organiser should consider in the emergency plan for a large air show. (12 marks)*
- c) *The production of the event safety plan will involve risk assessment. Explain how you would apply the five stages of the risk assessment when developing the event safety plan. (5 marks)*

Examiner Feedback

This question was not answered well. Responses to parts a) and b) often lacked relevant information. However, many candidates provided a good response to part c).

Question 3

As the Senior Officer, you have been called to act as the Tactical (Silver Level) Commander at the scene of a helicopter crash.

- a) *Describe what you must do immediately upon your arrival at the incident. (5 marks)*
- b) *Once a decision has been made to take over as Incident Commander, describe what you must consider. (10 marks)*
- c) *Detail the specific hazards associated with helicopters that both the Incident Commander and all attending Airport Rescue Fire Fighting Service (ARFFS) personnel must consider. (5 marks)*

Examiner Feedback

Those candidates that appreciated the context of the question (ie a senior officer arriving at an incident that is already being dealt with by an incident commander) were able to identify appropriate actions.

However, many candidates wrote as though they were the incident commander dealing with the scenario as the first arriving vehicle. Candidates that took this approach pitched their response at an inappropriate level and failed to demonstrate the understanding required by the question.

Question 4

High Reach Extendable Turrets (HRET) and other recently-introduced technologies are becoming more common. Explain the benefits that can be gained from utilising HRETs and other new technologies along with any challenges/issues that they may present. (20 marks)

Examiner Feedback

This question provided candidates with the opportunity to assess the benefits and challenges of new technologies. Those candidates with relevant technical understanding were able to achieve good marks. However, many candidates appeared to lack a full appreciation of specific equipment.

Question 5

The airport manager has confirmed that as part of the airport expansion plan, finances have been allocated to enable the building of a new fire station. Studies of the operational requirement have emphasised the importance of correctly sited fire stations as a pre-requisite for the immediate and effective response by Airport Rescue Fire Fighting Service (ARFFS) personnel. Identify and explain the factors that you would take into account when deciding the design and construction of your new fire station. (20 marks)

Examiner Feedback

This question was a popular option for candidates and there were many good responses.

Question 6

- a) A co-ordinated communication network is of vital importance to any major operation involving multiple agencies at an emergency incident. Describe the requirements for communication networks for aerodromes. (10 marks)*
- b) An Emergency Operations Centre should be available to deal with emergency situations at each airport. Certain emergency situations will require a mobile command post at the scene, normally under the direction of the airport's on-scene Incident Commander. Describe the main features of mobile command posts. (10 marks)*

Examiner Feedback

This was a popular option for candidates. There were many good responses to part a) but some candidates failed to demonstrate understanding of the role of an Emergency Operations centre when responding to part b).

Question 7

The method of determining the rescue and firefighting requirements for aircraft is based on the concept of a critical area to be protected in any post-accident fire situation to enable the evacuation of the aircraft occupants.

- a) Describe in detail the concept of critical area for a heliport. (10 marks)*
- b) Define the meaning of "response times" for firefighting and rescue personnel at all types of heliports. (5 marks)*
- c) Helicopter crashes present situations that differ from those presented by fixed wing aircraft. Explain the particular features of helicopter crashes. (5 marks)*

Examiner Feedback

Candidates that attempted this question generally achieved good marks. Responses to part a) and part b) were often good and most candidates gained most (if not all) of their marks for this question from their responses to part a) and part b).

Question 8

Information compiled during the investigation following an aircraft incident attended by the Airport Rescue Fire Fighting Service (ARFFS) personnel can be useful in a number of ways.

Provide examples of information that would be recorded after an aircraft incident involving a passenger-carrying aircraft that crashed on a runway threshold following an unsuccessful landing. Explain how this information could be used throughout the ARFFS sector. (20 marks)

Examiner Feedback

This was a popular option for candidates but few candidates achieved high marks. Many candidates wrote about the role of attending ARFFS crews in preserving information and assisting in the collation of evidence whereas the question asked for the identification of information to be recorded after the event and an assessment of how information could be used (for example to improve understanding of the performance of equipment). This meant that there were many irrelevant answers and consequently candidates were unable to attain marks.