

1. 次の英文を読み、それに続く設問 A-1 から A-5 までに答えなさい。解答は、それぞれの設問に続く選択肢 1 から 3 までの中から、答えとして最も適切なもの一つずつ選び、その番号のマーク欄を塗りつぶしなさい。

In 1989, all four engines of a Boeing 747 flying over Alaska broke down after the plane flew into a cloud of volcanic ash. The crew was able to restart the engines, but the incident showed why hundreds of flights every year are diverted around such hazards.

A volcano can blow huge amounts of material into the sky, making the weather cooler and producing spectacular red and orange sunsets. The recent eruption in Iceland caused great disruption to air travel. Such a huge effect on airline schedules is unusual, because ash clouds usually appear well away from the most crowded airspaces. This eruption blew ash over northern Europe, threatening most routes from the U.S. East Coast to Europe.

Volcanic ash can stay in the air for days and travel far. Of the more than 20 aircraft damaged by ash from the 1991 eruption of Mount Pinatubo in the Philippines, most were flying more than 900 km from the volcano. The tiny particles are invisible to the weather radar on airplanes and cannot be seen at night. So, volcano monitoring is serious business in the United States.

Volcanic ash can damage a jet's windshield, block fuel nozzles, contaminate the oil system and electronics and plug the tubes that sense air speed. But the most immediate danger is to the engines. "Jet engines are like giant vacuum cleaners. If they're in a volcanic ash cloud, they're just sucking in all that ash, and that damages the engines," Tom Murray, director of the U.S. Geological Survey's Volcano Science Center, said.

The most immediate hazard happens after ash melts or vaporizes in the extreme heat of the engine's combustion chamber, said Michael Fabian of Embry Riddle Aeronautical University. The melted ash can then stick to the blades of the engine's turbine "like spray paint," he said. This blocks the normal flow of air through the engine, causing engines to lose thrust or shut down.

<注> divert (進路を) 変える、迂回させる disruption 混乱、中断 windshield 風防窓 vaporize 蒸発する、
気化する combustion chamber (エンジンの)燃焼室

(設問)

A-1 What happened to the Boeing 747 in 1989?

1. The plane crashed after it flew into a cloud of volcanic ash.
2. The engines on the plane stopped working but the pilots were able to restart them.
3. The aircraft was lost after a volcano suddenly erupted in Alaska.

A-2 Why was the disruption to air traffic caused by the eruption in Iceland so unusual?

1. The ash from this volcano blew across some busy air traffic routes.
2. The weather was unusually hot at that time.
3. The eruption happened at the busiest time of year for air traffic.

A-3 What do we know about the aircraft damaged by the 1991 eruption of Mount Pinatubo?

1. Most of the damage occurred in the first few minutes after the eruption.
2. A lot of serious damage happened to aircraft flying over the United States.
3. Many of the damaged aircraft were flying a long way from Mount Pinatubo.

A-4 According to the article, what is the most serious concern for aircraft flying into volcanic ash?

1. Ash clouds can cause an aircraft's engines to shut down.
2. Volcanic ash can damage the windshield and make it difficult for pilots to see.
3. The electronic systems in an aircraft may be badly damaged by the ash.

A-5 How does volcanic ash affect jet engines?

1. The ash from volcanoes is very hot and this can cause a fire inside the engine.
2. Volcanic ash scratches the spray paint on the blades in the engine turbines.
3. The ash obstructs the normal flow of air inside the engines.

2. 次の英文 A-6 から A-9 までは、航空通信に関する国際文書の規定文の趣旨に沿って述べたものである。この英文を読み、それに続く設問に答えなさい。解答は、それぞれの設問に続く選択肢 1 から 3 までの中から、答えとして最も適切なものを一つずつ選び、その番号のマーク欄を塗りつぶしなさい。

A-6 After contact has been established, continuous two-way communication shall be permitted without further identification or call until termination of the contact.

(設問) At what point is further identification or call required once contact has been established?

1. Once contact has been established, there is no need for any further identification or call until the end of that contact.
2. Contact is only permitted to continue after the second identification or call.
3. Further identification or call is permitted to indicate the termination of the contact.

A-7 If the receiving operator is in doubt as to the correctness of the message received, he shall request repetition either in full or in part.

(設問) How should a receiving operator respond if he is not sure that a message is correct?

1. Operators must correct all messages received either in full or in part so there can be no doubt about a message's correctness.
2. The receiving operator must request that all of a message be repeated when he doubts its correctness.
3. A receiving operator should ask for either the whole message or just a part of it to be repeated when he is not sure of its correctness.

A-8 When an aircraft station fails to establish contact with the appropriate aeronautical station on the designated channel, it shall attempt to establish contact on the previous channel used and, if not successful, on another channel appropriate to the route.

(設問) What should an aircraft station do if it is unable to establish contact with an aeronautical station on the designated channel?

1. The aircraft station must request other aeronautical stations to listen on those channels.
2. The aircraft station should first attempt to make contact on the channel used most recently.
3. The aircraft station must change the route and establish contact with an appropriate aeronautical station.

A-9 When an aeronautical station receives calls in close succession from several aircraft stations, it decides on the order in which these stations may transmit their traffic. Its decision shall be based on the priority in Article 44.

(設問) How should an aeronautical station respond when it receives several calls from different aircraft stations at about the same time?

1. The aeronautical station must respond to calls in the order that they are received.
2. The aeronautical station should use Article 44 to decide the order of communication.
3. When an aeronautical station receives several calls from an aircraft, the station must inform that aircraft of the order of communication.

3. 次の設問 B-1 の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢 1 から 9 までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を塗りつぶしなさい。

（設問）

B-1 私にとって、外国旅行の楽しみの一つはその土地の料理を食べることであるが、しばらくすると、日本食が無性に恋しくなり、和風レストランで寿司などを食べている。

One of the things I enjoy when traveling (ア) is tasting the local (イ) but I do come to (ウ) Japanese food after (エ) and then find myself buying something (オ) sushi at a Japanese-style restaurant as well.

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|------------|------------|-----------|
| 1. a while | 2. aboard | 3. abroad |
| 4. alike | 5. cuisine | 6. like |
| 7. miss | 8. replace | 9. times |

4. 次の設問 B-2 の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢 1 から 9 までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を塗りつぶしなさい。

（設問）

B-2 IATA(国際航空運送協会)加盟会社には、2008 年6月 1 日から電子航空券の利用が義務づけられた。乗客は、航空券を購入すると、従来の紙の航空券の代わりに今は航空会社や旅行会社から発行されるeチケットレシートまたはeチケットアイテナリー(旅程表)が渡される。チェックインの手続きは、これをチェックインカウンターに見せるだけで終了する。

It has been (ア) for IATA (International Air Transport Association) members to offer electronic tickets since June 1, 2008. Passengers reserving a seat with an airline now (イ) an e-ticket receipt or e-ticket itinerary (ウ) by the airline or travel agency (エ) of the old paper ticket. All they have to (オ) to check in is show it at the check-in counter.

- | | | |
|------------|--------------|--------------|
| 1. accept | 2. agreeable | 3. do |
| 4. instead | 5. issued | 6. mandatory |
| 7. receive | 8. register | 9. written |

5. 次の設問 B-3 の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢 1 から 9 までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を塗りつぶしなさい。

（設問）

B-3 パイロットは、航行中の航空機に火災や重大な故障あるいは構造的な損傷、燃料の欠乏、飛行を継続できないような悪天候その他の緊迫した事態に直面したならば、ためらわずに緊急事態を宣言して支援を要請すべきである。

A pilot should declare (ア) and request assistance without (イ) when (ウ) an imminent situation (エ) aircraft fire, (オ) failure, structural damage, fuel shortage or adverse weather which impairs flight operations.

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|------------------|-----------------|---------------|
| 1. an emergency | 2. avoiding | 3. distress |
| 4. embarrassment | 5. encountering | 6. hesitation |
| 7. significant | 8. so-called | 9. such as |