



THINKING SKILLS

Paper 4 Applied Reasoning

1 hour 45 minutes

You will need: Answer booklet (enclosed)

- Answer **all** questions.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

- The total mark for this paper is 50.
- The number of marks for each question or part question is shown in brackets [].

[Turn over

- 1 (a) State the main conclusion of the argument in Document 1. [1]
- (b) Analyse the structure of the reasoning in paragraph 3 of Document 1. [4]
- (c) Identify **three** intermediate conclusions in paragraph 5 of the argument in Document 1. [3]
- 2 (a) Identify and explain **three** flaws and/or weaknesses in the reasoning in paragraphs 4 to 6 of Document 1. [6]
- (b) Assess the extent to which **one** flaw or weakness in paragraph 3 of Document 1 reduces the strength of the reasoning in the argument as a whole. [3]
- 3 Document 4 contains two charts.
- (a) Identify **three** problems with the way the information in Chart A has been presented. [3]
- (b) Look at Chart B. Explain why the support for the claim “Public opinion supports the use of full body scanners on all air passengers” is weak. [3]
- 4 *You are advised to spend some time planning your answer before you begin to write it.*
- ‘We should reduce the security checking at airports.’
- Construct a reasoned argument to support **or** challenge this claim. In your answer you should make critical use of the documents provided. [27]

DOCUMENT 1

- 1 After the attack on the twin towers of the World Trade Center in New York on 11 September, 2001, caring governments have introduced legislation to make air travel safer by requiring airports to increase security checks for passengers boarding flights. Many airports around the world, and particularly in the US, have already introduced 'full body' scanners – these are the ones where you spread your legs and hold your hands above your head. All airports around the world ought to introduce these valuable tools to improve our safety. The more difficult you make it for someone to conceal weapons, the fewer terrorist attacks you will have.
- 2 Currently most air travellers are subjected to a minimal 'walk-through' scan that 'pings' if it detects a certain level of metal. If there is a ping, this is followed by a physical 'pat down' by a security guard, but there are a lot of problems with the current system.
- 3 Patting-down travellers relies only on feeling the shape of objects through clothing, but this can be difficult if they are wearing thick clothing. Furthermore, there are obvious privacy concerns about a security guard touching certain parts of a person's body. This offers a potential hiding place. Full-body scans are essential if we want to detect all concealed weapons.
- 4 Fewer people might object if all passengers were subject to 'pat-downs'. The suspicion is that people are, in fact, being targeted because of some kind of profiling, rather than selected either at random or on the basis of an initial 'ping'. Full-body scanners can search everyone without regard to race or religion, thus avoiding accusations of discrimination by airport security staff.
- 5 The scanners are not an invasion of privacy. Some objectors seem to think that the scan images can be sold to third parties and distributed on the internet, but this is ridiculous. Individuals are not identifiable from these scan images, so who would want to look at them? Also, the systems attached to these scanners can be modified so that any images are removed after a short period of time – say, after the flight has successfully reached its destination. Anyway, protecting life is more important than privacy. Civil liberties moaners who put their privacy above the lives of others should not underestimate the extent to which people would like to stay alive.
- 6 The vast majority of people, me included, would happily tolerate the minor inconveniences for a guarantee that we will reach our destination safely.

DOCUMENT 2

Does airport security work?

It has been announced that, in order to cope with a 'raised security threat', anyone travelling abroad this summer will be subjected to more airport security delays: searching electronic devices to make sure they do not contain bombs, body searches, removing shoes in case they also contain bombs, and even more queueing. This is in response to new intelligence that certain organisations have developed some frightening technology: clever explosives that can be soaked into clothing or concealed in body cavities; plastic explosives that can be made into briefcases. Genuine though these threats may be, will these security checks actually save us from attack?

Terrorists do not fear security checks – rather they relish them. What terrorists really fear is intelligence (in both senses of the word). In 2010 a cargo bomb was sent from Yemen to the UK. It passed through airport security that was using sniffer dogs, explosives detectors and X-rays. No bomb was detected. However, security services had reliable intelligence that a bomb had been placed on board; they removed the package, searched it thoroughly and found the bomb.

The terrorists are aware of the security procedures at airports and avoid them. The whole elaborate process is intended to reassure the public and to convince them that the current government has their best interests at heart. But terrorists do not get caught at airport check-ins. Everything we have to endure at airport security is for show. America has not detected a single bomb at an American airport since 9/11. People never seem to point out that the 9/11 atrocity did not involve bombs and would not have been stopped by any of the raft of security measures introduced since 9/11 – such as not being able to travel with more than 100ml of toothpaste!

Intelligence catches terrorists long before they reach the airport. All these ritual checks distract resources from this effective intelligence work. The problem grows worse over time. The security checks, described by some as 'security theatre', increase with every government announcement. Once procedures are in place, they become politically very difficult for any government to dismantle. It is never in a politician's interest to argue for a relaxation of safety rules amid cries of a callous disregard for public safety from politicians from other parties. Queues at airports annoy people, but they don't lose you elections.

DOCUMENT 3**Time to increase security checks**

It is time for the aviation industry to stop whining about the costs of airport security checks, both direct and indirect, and react to the threat that new terrorist tactics pose. Aviation officials are understandably reluctant to increase security further – the security itself does not come free and there is always a fear that some travellers will be put off by the thought of long delays. One airline executive is even quoted as saying “There hasn’t been a breach of any European airport security” despite the fact that, in 2010, a cargo bomb sent from Yemen was discovered at East Midlands Airport in the UK. “These [bombs] haven’t been on passenger airplanes,” the airline chief went on to say. But this is not true – around half of all cargo packages are now transported on passenger jets.

The tendency among industry officials to downplay these threats is worrying. Industry calls for a reduction in security checks should be seen for what they are – short-sighted attempts to save money and increase passenger numbers. These measures are not there for fun – they are expensive, and we would not need them if they were not necessary. If the global terrorist threat reduces, then we can discuss an easing up of airport security. These threats are real, changing and on the increase.

People have forgotten the wave of “skyjackings” in the 1960s and 1970s. The airline response to this was the system of screening and basic ticketing and monitoring procedures we all became familiar, and satisfied, with until 2001. That system worked pretty well for a couple of decades, but when the nature of the threat changed, the old measures were not up to the job. After 2001, new measures were put in place and in the first 7 years following 9/11 there was only one reported incident of a terror group smuggling explosives onto a plane – the failed attempt by al-Qaeda shoe-bomber Richard Reid. However, since then the terrorist success rate has mushroomed. Al-Qaeda has successfully smuggled bombs on to at least four different aircraft. It has done so by developing bombs so advanced that our scanners and sniffer dogs are seemingly incapable of detecting them.

It’s regrettable that the best solution we have is to continue rolling out lengthy and invasive security checks, but that’s just it – it is the best solution we have. Expensive and inconvenient they may be, but they do help to protect us – as long as we keep updating them in response to the latest threats.

The development of liquid bombs has led to the recent development of liquid bomb scanners. Once these are perfected, we will once again be able to carry liquids in our hand luggage. Full body scanners, although sometimes controversial, are likely to be an effective response to the underpants bomb.

Individual measures can be dismissed as ineffective when taken in isolation. But taken as part of a suite of measures they remain our best and only safety net. As long as the terrorists continue to find gaps in our airport security, we must continue to plug them.

DOCUMENT 4

Some statistical information about airport security

Chart A

Official data about the cost of airport security over the last 40 years.

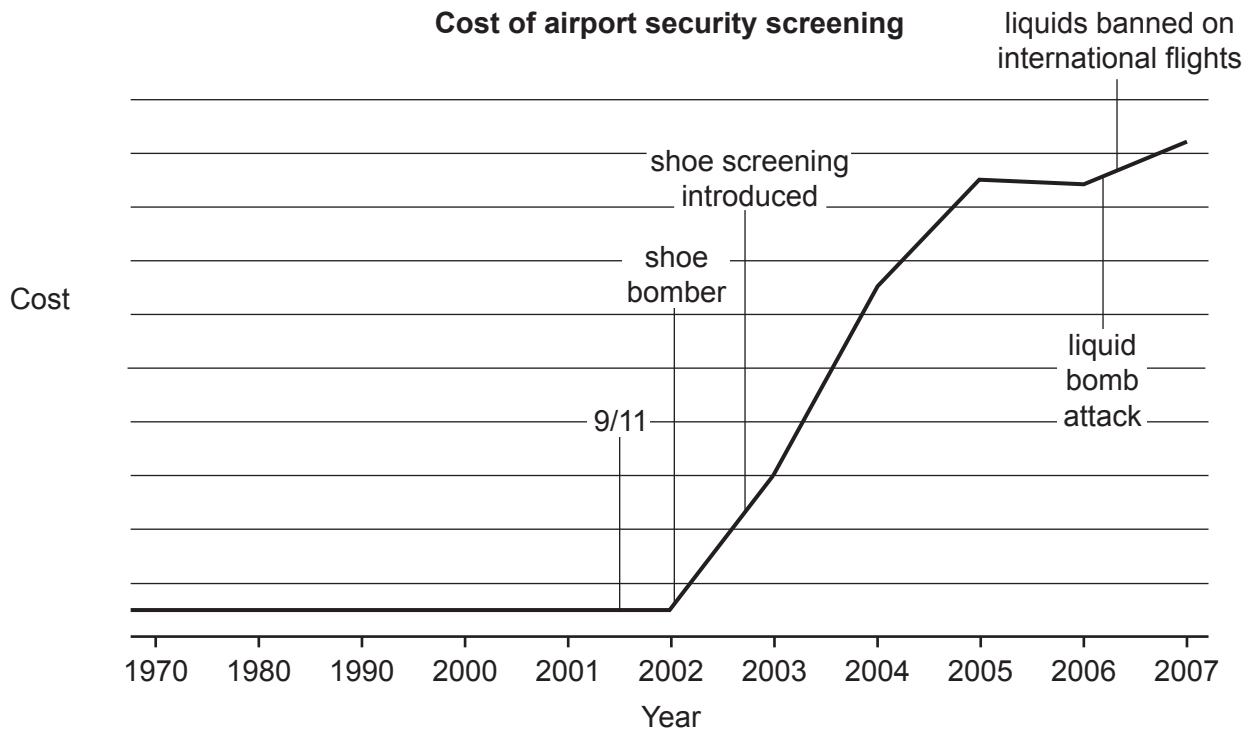
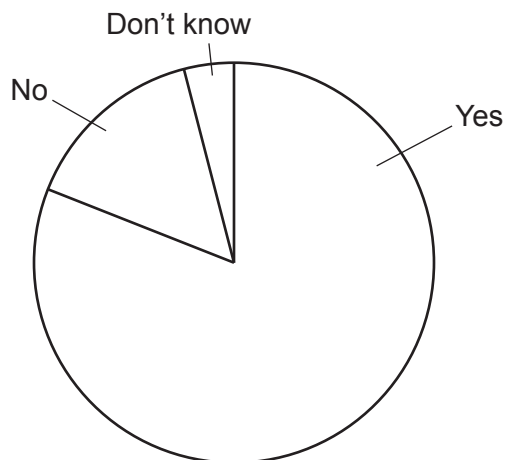


Chart B

Results of a poll published in a national newspaper accompanied by the headline 'Public opinion supports the use of full body scanners on all air passengers'.

Should airports use full body scanners?

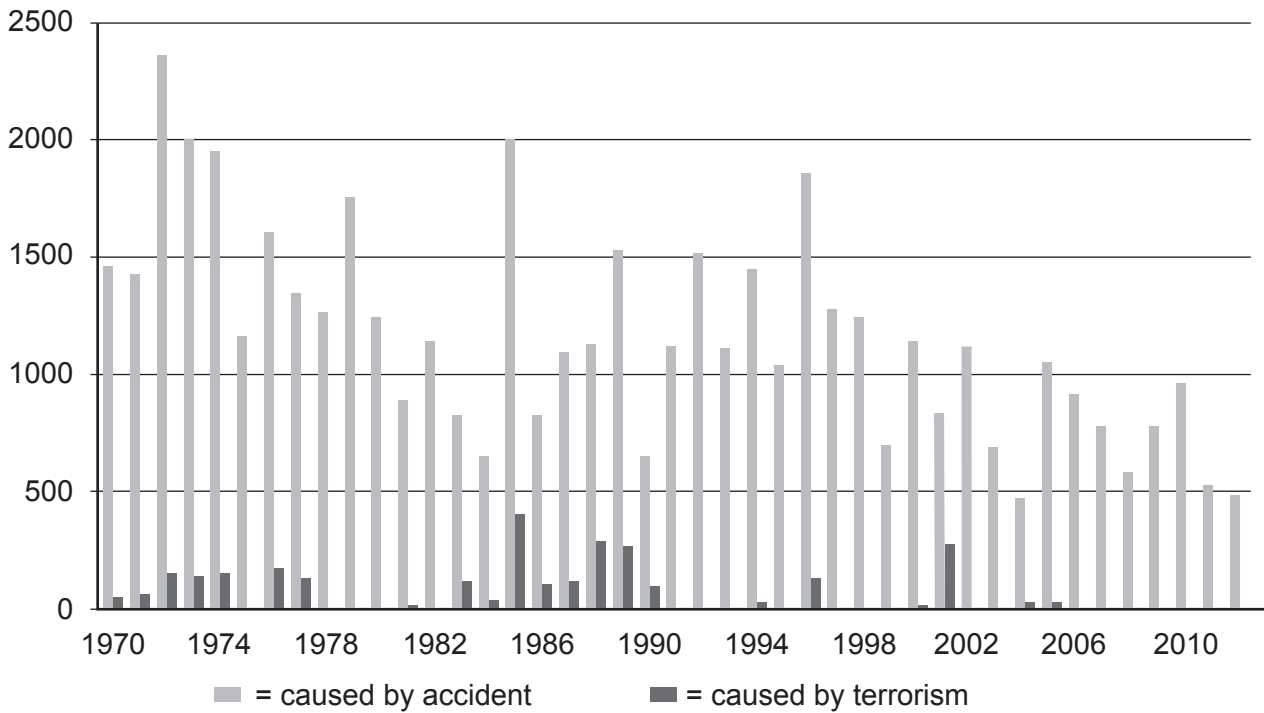


The poll was undertaken by a respected polling company. Respondents were selected at random and contacted by telephone and asked the question 'Should airports use full body scanners?'

DOCUMENT 5

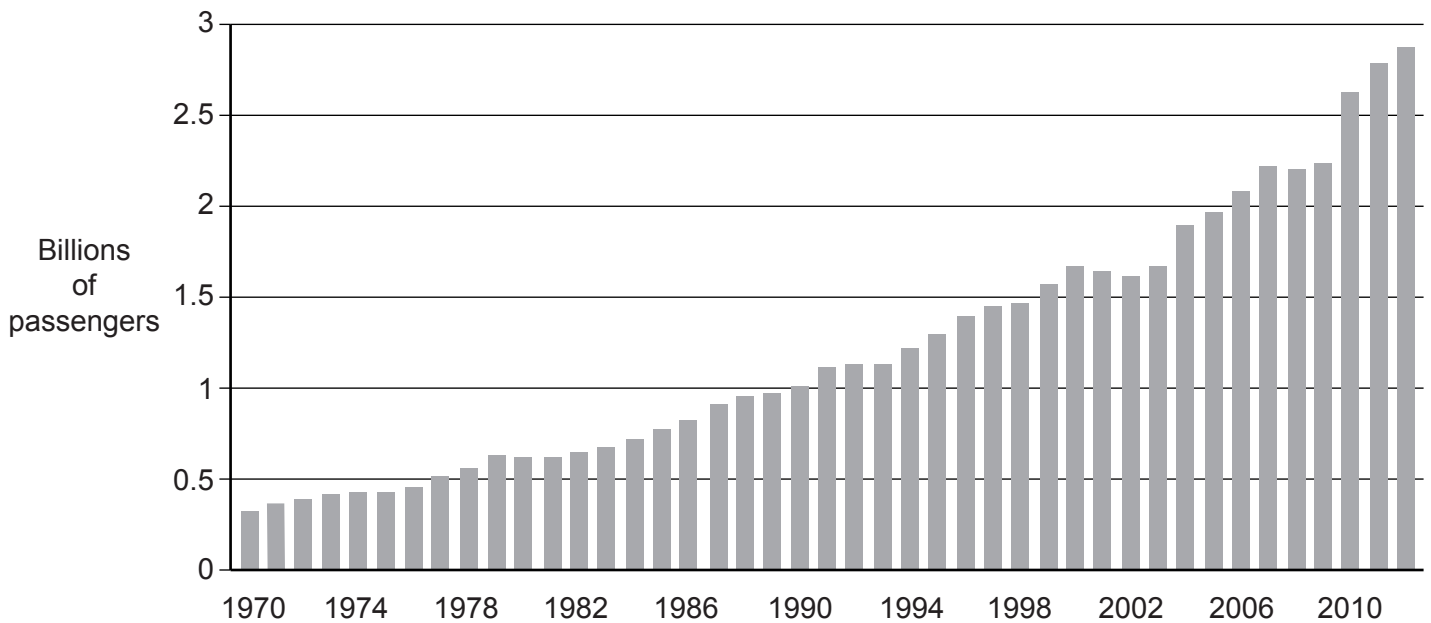
Some graphs about air travel over time

Airline passenger and crew casualties*



*ground casualties not included

Airline passengers



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