

performance in any complex and dynamic environment. Very often the pilots involved in accidents and incidents are unaware of the danger until it is (7) The ability of the flight crew to maintain situational awareness is a critical human factor in air safety. If the crew are aware of navigation system and monitor it properly, it will prevent or eliminate accidents. Various (8) can be used to help pilots maintain situational awareness. A Ground proximity warning system is an (9) It will alert a pilot if the aircraft is about to fly into the ground. Other aircraft warning devices are alerting lights, voice signals, which are used in Traffic Alert and Collision Avoidance System (10) and (11) warning system. Also, air traffic controllers (12) monitor flights from the ground and at airports.

A	broadly
B	controller's inattention
C	TCAS
D	too late
E	are count
F	aware of
G	constantly
H	on-board system
I	wind shear
J	pilot's fatigue
K	technical aids
L	decision making

C. Retell the text using the phrases given below:

according to - human factors – to count - 60-80% - controller's inattention – mechanic's carelessness - engineer's error - pilot's fatigue - situational awareness – to be aware of - the relative importance of everything observed - a constantly evolving picture - state of the environment – to be described broadly - a person's state of knowledge - important for - decision making – performance - complex and dynamic environment -the pilots involved in accidents and incidents – to be unaware of - too late - to maintain situational awareness - a critical human factor - navigation system – monitor – properly - prevent or eliminate accidents - various technical aids - to be used - maintain situational awareness -a Ground proximity warning system - an on-board system – alert –to be about to fly into the ground - aircraft warning devices - alerting lights - voice signals – to be used in – TCAS – wind shear warning system - air traffic controllers - constantly monitor flights

D. Could you give any examples of the incidents or accidents in aviation, the reason for which was the human factor?

Administrative Problems

There are numerous administrative problems, which pilots face quite frequently. They start with Diplomatic Clearances, which are needed for every foreign aircraft to fly over or to land on foreign territory. The request must be received at least five working days before the flight. The flight shall be conducted in conformity with applicable current rules and regulations.

In terms of administrative problems customs regulations should be mentioned as well. The restrictions on the import of spirits, tobacco and currency are in force until now. The following articles are prohibited from entry by law of many countries: drugs, books, drawings, carvings, and any other article, which injures public security or morals, firearms (pistols, rifles, machine guns, etc.), ammunition (bullets), and parts of firearms.

The submission of a Flight Plan can cause problems as well. If there is a delay for more than 15 minutes the crew is supposed to prolong their Flight Plan and explain to the controller why the flight has been postponed. Passenger Manifest can also present a trouble for the crew in case there is no conformity in the actual number of passengers and the number specified in the Manifest. The First Officer must invite the supervisor or air company representative to sort out this problem.

A. Find an odd word in each line:

0	There are numerous administrative problems, which can pilots face quite	CAN
1	frequently. They may can start with Diplomatic Clearances, which are	
2	needed for every foreign aircraft to fly over above or to land on foreign	
3	territory. The flight it shall be conducted in conformity with applicable	
4	regulations. In terms of administrative problems but customs regulations	
5	should be mentioned as well. The submission of a Flight Plan can be	
6	cause problems with as well. Passenger Manifest can also present a	
7	trouble for the crew in case of there is no conformity in the actual	
8	number of passengers and the number that specified in the Manifest. The	
9	First Officer must invite him the supervisor or air company	
10	representative to be sort out this problem.	

B. Find synonyms to the following words and phrases:

The word/the phrase	Synonyms
<i>Numerous</i>	<i>Many, several, multiple</i>
frequently	
start	
to conduct	
currency	
prohibit	
firearms	
to delay	
applicable	
to sort out	

C. Make up phrases combining words from the left column with the words from the right column:

1	administrative	A	territory
2	quite	B	the current rules
3	applicable	C	frequently
4	foreign	D	of spirits
5	according to	E	problems
6	customs	F	Flight Plan
7	the import	G	the problem
8	public	H	problems
9	cause	I	the actual number of passengers
10	to prolong	J	security
11	to sort out	K	current rules
12	conformity in	L	regulations

D. Retell the text using the phrases given below:

numerous administrative problems - to face quite frequently – Diplomatic Clearances – to be needed for - to fly over or to land - foreign territory – to receive a request - five working days - to conduct in conformity with - current rules and regulations -in terms of - administrative problems - customs regulations - to mention - the restrictions on the import of – spirits – tobacco - currency - to be in force – articles – to be prohibited – entry - by law – drugs – drawings – carvings - public security or morals - firearms - ammunition - the submission of a Flight Plan - cause problems - a delay for more than 15 minutes – to be supposed to - prolong the Flight Plan – explain – to be postponed - Passenger Manifest -to present a trouble - in case - conformity in the actual number of passengers - the number specified in the Manifest - the First Officer - invite the supervisor - air company representative - to sort out the problem.

E. Have you ever faced any administrative problems before the flight? How did you manage to solve them?

Collisions

Collision is a crash between two objects, two vehicles. In aviation we differentiate between ground collisions and mid air collisions. In ground collisions two vehicles, aircraft, persons or animals are involved. Collision is an accident or even a disaster. At level crossings sometimes aircraft collide. Due to the velocity and mass of an aircraft it needs a long distance to react on pilots' input. For that reason the traffic collision avoidance system is installed on all passenger aircraft. The world's mid-air collision with the highest number of fatalities was in 1996, when Saudia Flight and Air Kazakhstan Flight crashed over India. It was mainly the result of the Kazakh pilot flying lower than the altitude his aircraft was given clearance for. 349 passengers and crew died from both aircraft. As a consequence it was recommended to create "air corridors" to prevent planes from flying in opposite directions at the same altitude.

The worst ground collision in aviation history was in Tenerife with the highest number of fatalities. In this disaster, 583 people died when a KLM Boeing 747 attempted take-off without clearance and collided with a taxiing Pan Am 747 at Los Rodeos Airport. Pilot error, communications problems, fog, and airfield congestion (due to a bomb threat at another airport) all contributed to this catastrophe.

A. Find antonyms to the words and phrases given below:

Words/phases	Antonyms
inattention	attentiveness, advertence
sometimes	
long	
install	
passenger aircraft	
the highest	
prevent	
opposite	
take-off	

B. Give the explanation of the following words in English:

- A. crash
- B. vehicle
- C. flight path
- D. fatality
- E. air corridors
- F. ground collision
- G. airfield congestion
- H. fog
- I. level crossings
- J. contributed to

C. Fill in the gaps using the phrases given below the text:

Collision is a crash between two objects, two vehicles. In aviation we (1) ground collisions and (2) collisions. In ground collisions two vehicles, aircraft, persons or animals are involved. Collision is an accident or even a disaster. At (3) sometimes aircraft collide. Due to the velocity and mass of an aircraft it needs a long distance to react to pilots' (4) For that reason the

(5) is installed on all passenger aircraft. The world's mid-air collision with the highest number of (6) was in 1996, when Saudia Flight and Air Kazakhstan Flight crashed over India. It was mainly the result of the Kazakh pilot flying at a (7) than he was instructed. 349 passengers and crew died from both aircraft. As a consequence it was recommended to create (8) to prevent planes from flying in (9) directions at the same altitude. The worst (10) collision in aviation history was in Tenerife with the highest number of fatalities. In this disaster, 583 people died when a KLM Boeing 747 attempted take-off without clearance and collided with a (11) Pan Am 747 at Los Rodeos Airport. Pilot error, communication problems, fog, and airfield (12) (due to a bomb threat at another airport) all contributed to this catastrophe.

A	level crossings
B	fatalities
C	lower altitude
D	differentiate between
E	inputs
F	taxiing
G	congestion
H	air corridors
I	ground
J	opposite
K	traffic collision avoidance system
L	mid air

D. Retell the text using the phrases given below:

collision - a crash between two objects – vehicles - to differentiate between – ground collisions - mid air collisions – ground collisions – to be involved - an accident - a disaster - level crossings – collide - due to - velocity - mass of an aircraft - long distance - to react on pilots' input - the traffic collision avoidance system – to be installed - passenger aircraft - mid-air collision - the highest number of fatalities – 1996 - Saudia Flight - Air Kazakhstan Flight – to crash - the result of - to fly lower than the altitude – to be given clearance for - as a consequence - to recommend - to create "air corridors" - to prevent planes from flying in opposite directions - the same altitude - the worst ground collision - aviation history – Tenerife - the highest number of fatalities - to attempt take-off without clearance – to collide with - pilot error - communications problems – fog - airfield congestion - to contribute to - catastrophe.

E. Could you give any examples of the collision accidents? Do you think all of these accidents could have been prevented from happening?