



ANGLAIS

National Airlines Flight 102

National Airlines Flight 102 was a cargo flight operated by *National Airlines* between Camp Bastion in Afghanistan and Al-Maktoum Airport in Dubai, with a fuel supply stop at Bagram Airfield, Afghanistan. On 29 April 2013, the Boeing 747-400 operating the flight crashed moments after taking off from Bagram, killing all seven American crew members on board. No one on the ground was injured.

At the time of the crash, the airline had been operating between Camp Bastion and Dubai for a month. The accident flight had originated in Camp Bastion, where it had been loaded with five heavy armoured vehicles, and had stopped at Bagram Airfield to refuel. A dashboard camera on a car in the vicinity of the runway end recorded the crash, which shows the aircraft pitching up, falling into a stall, and then sharply banking right after a slight bank to the left, indicating asymmetrical lift. The plane soon righted itself and then crashed at a shallow angle on the ground. *CNN* stated that a government official speaking on the condition of anonymity confirmed the video's authenticity.

On 2 June 2013, investigators from the Ministry of Transport and Civil Aviation of Afghanistan confirmed the load shift hypothesis as the starting point: the cargo of five mine-resistant, ambush-protected vehicles (three Cougars and two Oshkosh M-ATV's), totaling 80 tons of weight, had not been properly secured. At least one armored vehicle had come loose and rolled backward, crashing through the airplane's rear bulkhead, damaging it. In the process, it crippled key hydraulic systems and severely damaged the horizontal stabilizer components—most notably breaking its jackscrew, which rendered the airplane uncontrollable. Control of the aircraft was therefore lost, with the abnormal pitch-up rotation, stall, and crash to the ground ensuing. The damage made it impossible for the crew to regain control of the aircraft.

The National Transportation Safety Board (NTSB) determined that the probable cause of this accident was "National Airlines' inadequate procedures for restraining special cargo loads, which resulted in the loadmaster's improper restraint of the cargo." One of the key recommendations was to mandate training for all loadmasters. The Canadian TV series *Mayday* (also known as *Air Disasters* and *Air Emergency* in the US, and *Air Crash Investigation* in the UK and the rest of the world) covered Flight 102 in Episode 10 of Season 16, called "Afghan Nightmare" and first broadcast in 2017.

Adapted from https://en.wikipedia.org/wiki/National_Airlines_Flight_102

I. READING COMPREHENSION (10 marks)

A) Read paragraphs #1 and 2. Then choose option a), b), or c) to answer questions 1-3. (01.5 marks)

1. The National Airlines Flight 102 connected

- a) two cities in two countries;
- b) three cities in two countries;
- c) three cities in three countries.

2. At the time of recording the crash, the car with the dashboard camera was in...

- a) Al-Maktoum;
- b) Camp Bastion;
- c) Bagram Airfield.

.../...2

3. "The plane soon righted itself" (line 11), means...

- a) it changed direction to the right;
- b) it made a right-angle inclination;
- c) it went back to normal flight position.

B) Quote from paragraphs #2, 3 and 4 to decide whether the following statements are TRUE or FALSE. (03 marks)

4. A famous TV channel produced the video recording of the crash.



5. The load shift hypothesis referred to vehicle displacement onboard the aircraft.



6. Finally, the loadmaster was designated responsible for the disaster.



C) Find English equivalents of these French phrases in the paragraphs indicated. (02.5 marks)

7. Paragraph#1: « escale de ravitaillement »: _____

8. Paragraph#2: « à proximité de la piste »: _____

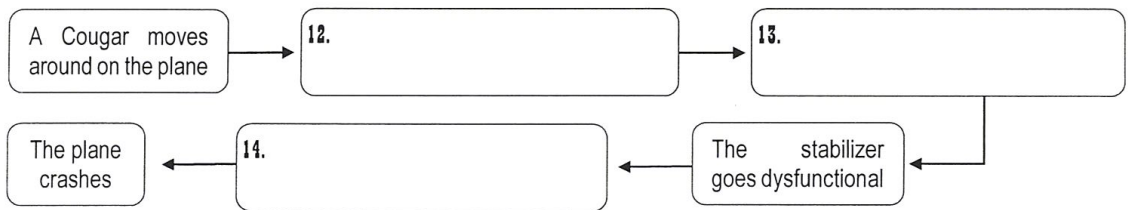
9. Paragraph#3: « correctement arrimé (e) »: _____

10. Paragraph#3: « recula après s'être détaché »: _____

11. Paragraph#4: « rendre une/la formation obligatoire »: _____

D) Read paragraph #3 and complete the chronological order of the following events. (03 marks)

The jackscrew is broken ☹ The plane crashes ☹ Control of the plane is lost ☹ The stabilizer goes dysfunctional ☹ The rear bulkhead is hit ☹ A Cougar moves around on the plane ☹



II. LINGUISTIC and COMMUNICATIVE COMPETENCE (06 marks)

E) Complete each sentence beginning in Column X with its correct continuation in Column Y. (02 marks)

Column X: Sentence Beginnings	Column Y: Sentence Continuations
15. On hitting the ground, the aircraft...	a) two mechanics, and a loadmaster.
16. Sadly, this sudden and violent landing resulted...	b) filming the plane in its tragic descent.
17. The seven crew members included four pilots...	c) exploded into a giant fireball.
18. At the time of the accident, a thunderstorm was...	d) brewing, shifting the wind by 120 degrees.
	e) in the deaths of all the aircraft's occupants.

Answer Box			
15.	16.	17.	18.

Adapted from <https://simpleflying.com/national-airlines-flight-102-load-shift-crash/>

F) Choose the right options from the suggestions in parentheses to complete the passage below. (02 marks)

On April 29th, 2013, a Boeing 747-400, operating on behalf of the USAF's Mobility Command, crashed shortly after taking off from Bagram Airfield in Afghanistan. Because no permission (19) _____ (was ☉ had ☉ could) obtained to fly through Pakistani airspace, the flight was routed to Bagram to refuel and then continue on to the United Arab Emirates. As established, five armored vehicles were among the flight's most notable (20) _____ (overload ☉ fret ☉ cargo). According to the Aviation Safety Network, two of these cars (21) _____ (weighed ☉ weighted ☉ weight) 12 tons each, with the other three clocking in at 18 tons each. All in all, the Boeing had 94,119 kg of shipment onboard. After refueling, the aircraft took (22) _____ (off ☉ of ☉ up) at 15:30 local time and was climbing through 1,200 feet when its nose suddenly rose up. The sudden movement caused the plane to stall and bank to the right, only leveling off just before hitting the ground and taking fire.

Adapted from <https://simpleflying.com/national-airlines-flight-102-load-shift-crash/>

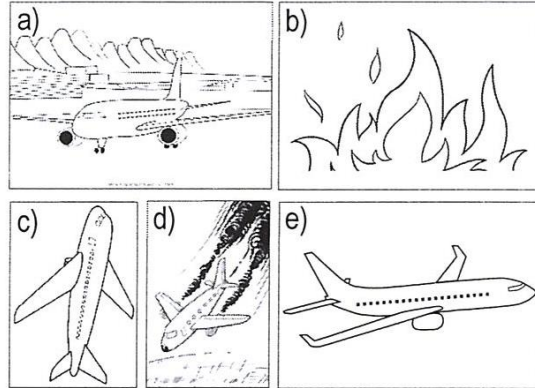
G) Indicate which description (23-26) corresponds to what picture (a-e). (02 marks)

23. Like on a normal day, the Boeing 474 was evacuating military equipment from Bagram to Al-Maktoum.

24. Shortly after departure, the plane abruptly and inexplicably pitched up, like a rocket gaining altitude.

25. Then, in a complete reverse of this movement, it went out of control and plunged into the ground, on fire.

26. On hitting the ground, the plane triggered an earth-shaking explosion and turned the accident site into a burning field of wreckage.



Answer Box			
23.	24.	25.	26.

III. WRITING (04 marks)

Choose ONE topic and write between 150 and 200 words about it.

Topic 1: Aircraft crashes are very seriously scrutinized by aviation experts and investigators who want to find out causes and minimize consequences. Should a similar approach be applied to decrease the terribly high number of deadly accidents on Senegalese roads? State your reasons.

Topic 2: African airlines (Air Senegal, Tunisair, Sudan Airways, etc.) do not perform as efficiently as their counterparts in Europe (Air France, British Airways, KLM, Lufthansa, etc.) and America (Delta Airlines, United Airlines, Cape Air, etc.). Can you suggest ways and means of reversing this tendency?