



# **Air Accident Investigation Unit Ireland**

**FACTUAL REPORT**

**ACCIDENT**

**Avions de Transport Régional  
ATR 72-212A, EI-FAT  
Cork Airport**

**26 May 2017**



## Foreword

This safety investigation is exclusively of a technical nature and the Final Report reflects the determination of the AAIU regarding the circumstances of this occurrence and its probable causes.

In accordance with the provisions of Annex 13<sup>1</sup> to the Convention on International Civil Aviation, Regulation (EU) No 996/2010<sup>2</sup> and Statutory Instrument No. 460 of 2009<sup>3</sup>, safety investigations are in no case concerned with apportioning blame or liability. They are independent of, separate from and without prejudice to any judicial or administrative proceedings to apportion blame or liability. The sole objective of this safety investigation and Final Report is the prevention of accidents and incidents.

Accordingly, it is inappropriate that AAIU Reports should be used to assign fault or blame or determine liability, since neither the safety investigation nor the reporting process has been undertaken for that purpose.

Extracts from this Report may be published providing that the source is acknowledged, the material is accurately reproduced and that it is not used in a derogatory or misleading context.

---

<sup>1</sup> **Annex 13:** International Civil Aviation Organization (ICAO), Annex 13, Aircraft Accident and Incident Investigation.

<sup>2</sup> **Regulation (EU) No 996/2010** of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation.

<sup>3</sup> **Statutory Instrument (SI) No. 460 of 2009:** Air Navigation (Notification and Investigation of Accidents, Serious Incidents and Incidents) Regulations 2009.



AAIU Report No: 2017 - 018  
 State File No: IRL00917029  
 Report Format: Factual Report  
 Published: 28 December 2017

In accordance with Annex 13 to the Convention on International Civil Aviation, Regulation (EU) No 996/2010 and the provisions of SI No. 460 of 2009, the Chief Inspector of Air Accidents on 26 May 2017, appointed Paul Farrell as the Investigator-in-Charge assisted by Kate Fitzgerald to carry out an Investigation into this Accident and prepare a Report.

<b>Aircraft Type and Registration:</b>	ATR 72-212A, EI-FAT	
<b>No. and Type of Engines:</b>	2 x Pratt & Whitney PW127M	
<b>Aircraft Serial Number:</b>	1097	
<b>Year of Manufacture:</b>	2013	
<b>Date and Time (UTC)<sup>4</sup>:</b>	26 May 2017 @ 17.58 hrs	
<b>Location:</b>	Cork Airport (EICK)	
<b>Type of Operation:</b>	Commercial Air Transport	
<b>Persons on Board:</b>	Crew - 4	Passengers - 65
<b>Injuries:</b>	Crew - Nil	Passengers - 1
<b>Nature of Damage:</b>	Nil	
<b>Commander's Licence:</b>	Airline Transport Pilot License (ATPL) Aeroplane (A) issued by the state of Austria	
<b>Commander's Age:</b>	35 years	
<b>Commander's Flying Experience:</b>	3,610 hours, of which 2,260 were on type	
<b>Notification Source:</b>	Aircraft Operator	
<b>Information Source:</b>	Notification by Operator AAIU Pilot Report Form	

<sup>4</sup> UTC: Co-ordinated Universal Time. All timings in this report are quoted in UTC. Local time is UTC + 1 hour.

## SYNOPSIS

At 17.55 hrs on the 26 May 2017, the ATR 72 aircraft landed at Cork Airport (EICK) following a scheduled flight from Manchester (EGCC). During disembarkation a passenger fell from the top of the passenger door stairs to the ground. The passenger sustained head, knee and shoulder injuries.

## NOTIFICATION

The Operator notified the AAIU soon after the event occurred.

## 1. FACTUAL INFORMATION

### 1.1 History of the Occurrence

On the 26 May 2017 at 17.55 hrs, following a scheduled flight from EGCC, the ATR 72 aircraft landed at EICK and taxied to Stand 8 where disembarkation commenced. During disembarkation a passenger fell from the top of the passenger door stairs and landed on the ground. The passenger sustained head, knee and shoulder injuries.

### 1.2 Aircraft

<sup>3</sup>  
EI-FAT is an ATR 72-212A, 600 series, turbo-prop, passenger aircraft. It was first registered in Ireland on the 25 July 2013.

### 1.3 Damage to Aircraft

There was no damage to the aircraft.

### 1.4 Inspection of Stairs

Immediately after the occurrence the Operator's maintenance staff carried out an inspection of the aircraft stairs. The Investigation reviewed the paperwork associated with this task. The line maintenance engineer did not identify any faults with the stairs and noted the non-slip covering was in a satisfactory condition.

The aircraft was later inspected by two Inspectors from the AAIU. The Investigation found that the stairs (**Photo No. 1**) were serviceable; the handrails were functioning correctly and the non-slip covering was in good condition. The Inspectors also noted that there were hazard markings on the edge of each stair and on the handrails.



**Photo No. 1:** ATR 72-212A 600 series Passenger Stairs

## **1.5 Witness Statements**

The Investigation received written statements and conducted interviews with several witnesses to the occurrence. Each witness had a slightly different recollection of the timing of the event and this has been included in the paragraphs below.

### **1.5.1 Passenger Statement**

Following the occurrence the Passenger facilitated the Investigation by giving an account of the event by telephone. The Passenger recalled that whilst leaving the aircraft she fell from the top of the aircraft steps, trying unsuccessfully to grab the handrail to arrest the fall. She did not recall any trip or stumble which may have initiated the fall. At the time she was holding two pieces of hand luggage, and was wearing 'deck' type shoes.

The Passenger reported injuries including a broken shoulder, a badly bruised left knee and hip, and a head injury which has caused on-going headaches and dizziness. The Passenger believed that the time from the fall to being taken by ambulance to hospital was approximately one and a half hours. The weather at the time was described as cold and wet.

### 1.5.2 Airport Police Officer Statement

At the time of the occurrence a police officer from the Airport Police Fire Service (APFS) was at the Aircraft parking stand. In his statement the Officer said that at approximately 17.58 hrs he saw the Passenger lose balance at the top of the aircraft steps, fall and land on the ground below. He immediately called for both an ambulance and assistance from colleagues in the APFS. The Officer's colleagues arrived shortly thereafter and an initial assessment was carried out. Due to the passenger's injuries a decision was taken not to move her until she had been assessed by ambulance personnel. The APFS then tried to make the Passenger comfortable and monitored her condition until the ambulance arrived at 18.50 hrs. The APFS officer understood that the passenger had travelled to Ireland from Australia.

### 1.5.3 Ground Handlers' Statements

Two of the ground handlers' employees were in the vicinity of the aircraft at the time of the occurrence and witnessed the event. The first of these witnesses stated that the passenger was holding onto the handrails during disembarkation and he recalled that she was carrying a small amount of hand luggage which included a handbag and possibly another small plastic bag. The witness also said that the passenger was one of the first passengers to disembark and noted that the steps were not wet at this stage. The witness stated that the passenger *'stumbled and fell from the third or fourth step'*. He noted that the APFS were at the scene and the passenger was immediately assessed and wrapped in blankets. This witness also noted that the ambulance arrived at approximately 18.50 hrs, just under an hour after the occurrence.

5

The second witness recalled seeing the passenger *'trip and tumble down the steps'*.

### 1.5.4 Operator Statement

The Investigation received written statements from the Crew of the Aircraft at the time of the accident. Neither the Cabin Crew nor the Flight Crew witnessed the occurrence, but it was noted that it took approximately an hour for an ambulance to arrive.

Following the Accident, the Operator also informed the Investigation that as part of the Cabin Safety Procedures Manual which is a Standard Operating Procedure (SOP), the Cabin Crew are required to make an announcement after landing advising passengers to *'.....take care when disembarking the aircraft and use the handrails provided.'*

## 2. AAIU COMMENT

### 2.1 General Industry-wide Considerations

On an annual basis the absolute number of reported occurrences on aircraft steps is relatively small, as are the numbers of other passenger injuries (e.g. scalding with hot liquids, impact with overhead luggage, etc.). However, the time that an individual passenger spends on steps is also very small (typically a minute or less) compared to the amount of time the passenger spends on the aircraft for the rest of their flight (typically 90 minutes or more).



Consequently, on a pro-rata basis, the time a passenger spends on the steps is a time of higher risk of injury, than the remainder of their flight.

Aviation Safety Management Systems (SMS) will capture details of stair falls and these will usually be reported by flight crew or ground staff at an airport. However, slips and trips which do not cause serious injury might not be reported by passengers and therefore might not be captured in an SMS. A consequence of such non-reporting is that the aviation industry as a whole cannot assess the full extent of the risk posed to passengers by aircraft stairs.

By design, many aircraft do not have integrated stairs. Consequently, there are no EASA Certification Specifications to guide the design of such integrated stairs, except that where they exist; they must not impede the emergency evacuation of the aircraft. In other industries, typical stair design features include having suitable handrails, non-slip coverings and clearly marked edges on stairs, all of which were present in this case.

In addition, it is prudent to avoid activities such as rushing, use of hand-held devices and carrying items, any of which could prove hazardous whilst using aircraft stairs. Unfortunately, most of these activities are synonymous with modern air travel e.g. passengers are often rushing to make a connection, carrying luggage, checking messages after a flight. During a flight passengers are also seated for long periods of time, and when they stand up to disembark they may find normal movements more difficult. Accordingly, continued vigilance is required by air operators to ensure that passengers are advised and supported in minimising their risk whilst using aircraft stairs. The Investigation notes that the Operator in this accident does advise passengers to *'.....take care when disembarking the aircraft and use the handrails provided'* after each landing, and that this is part of the Operator's Cabin Safety Procedures Manual.

## 2.2 Considerations Specific to this Occurrence

The Investigation noted the length of time taken for the ambulance to arrive at EICK. Notwithstanding the fact that the APFS were on the scene immediately and were monitoring the Passenger, the Investigation considers that an hour is a significant time for a person with potentially serious injuries to be lying on the ground at an international airport. The Irish Health Information and Quality Authority (HIQA) sets out recommended response times<sup>5</sup> for the National Ambulance Service. In cases where there are, *'Patients with serious but not life-threatening conditions which require an immediate response,'* the target is to have a patient-carrying vehicle at the scene within eighteen minutes fifty nine seconds. However, management at Cork Airport informed the Investigation that the ambulance response time for this particular accident was not in line with their experience, and that the normal response time is significantly shorter.

- END -

---

<sup>5</sup> HIQA, 2012 *'Pre-Hospital Emergency Care Key Performance Indicators for Emergency Response times,'* Cork, HIQA

In accordance with Annex 13 to the Convention on International Civil Aviation, Regulation (EU) No. 996/2010, and Statutory Instrument No. 460 of 2009, Air Navigation (Notification and Investigation of Accidents, Serious Incidents and Incidents) Regulation, 2009, the sole purpose of this investigation is to prevent aviation accidents and serious incidents. It is not the purpose of any such investigation and the associated investigation report to apportion blame or liability.

A safety recommendation shall in no case create a presumption of blame or liability for an occurrence.

Produced by the Air Accident Investigation Unit

AAIU Reports are available on the Unit website at [www.aaiu.ie](http://www.aaiu.ie)



**An Roinn Iompair  
Turasoireachta agus Spóirt**

**Department of Transport,  
Tourism and Sport**

Air Accident Investigation Unit,  
Department of Transport Tourism and Sport,  
2nd Floor, Leeson Lane,  
Dublin 2, D02TR60, Ireland.  
Telephone: +353 1 604 1293 (24x7): or  
+353 1 241 1777  
Fax: +353 1 604 1514  
Email: [info@aaiu.ie](mailto:info@aaiu.ie)  
Web: [www.aaiu.ie](http://www.aaiu.ie)