



# **Air Accident Investigation Unit Ireland**

**SYNOPTIC REPORT**

**SERIOUS INCIDENT**

**Avions de Transport Régional**

**ATR 72-212A, EI-FAV**

**Dublin Airport, Ireland**

**23 July 2015**



**An Roinn Iompair  
Turasóireachta agus Spóirt**

Department of Transport,  
Tourism and Sport

## 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.

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<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.



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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 23 July 2015, appointed Mr Leo Murray as the Investigator-in-Charge to carry out an Investigation into this Serious Incident and prepare a Report.

<b>Aircraft Type and Registration:</b>	ATR 72-212A, EI-FAV	
<b>No. and Type of Engines:</b>	2 x Pratt Whitney PW127M	
<b>Aircraft Serial Number:</b>	1105	
<b>Year of Manufacture:</b>	2013	
<b>Date and Time (UTC)<sup>4</sup>:</b>	23 July 2015 @ 10.15 hrs	
<b>Location:</b>	Dublin Airport (EIDW)	
<b>Type of Operation:</b>	Commercial Air Transport	
<b>Persons on Board:</b>	Crew - 4	Passengers - 57
<b>Injuries:</b>	Crew - Nil	Passengers - Nil
<b>Nature of Damage:</b>	None	
<b>Commander's Licence:</b>	Airline Transport Pilot Licence (ATPL) Aeroplanes (A), issued by the LBA <sup>5</sup>	
<b>Commander's Age:</b>	40 years	
<b>Commander's Flying Experience:</b>	6,523 hours, of which 2,882 were on type	
<b>Notification Source:</b>	Air Safety Office of the Operator	
<b>Information Source:</b>	AAIU Report Form	

<sup>4</sup> **UTC:** Co-ordinated Universal Time. All timings in this report are UTC; to obtain the local time add one hour.

<sup>5</sup> **LBA:** *Luftfahrt Bundesamt* (German Civil Aviation Authority).

## SYNOPSIS

During preparations for departure from Dublin Airport (EIDW) on a scheduled flight to Rennes (*Saint Jacques*) Airport, France (LFRN), the passenger baggage was placed in the aft aircraft baggage hold instead of the forward baggage hold. The Load Instruction Report (LIR) and the prepared loadsheet both indicated that the baggage had been loaded in the forward hold. The aircraft departed with the Centre of Gravity outside approved loading limits. The aircraft subsequently landed at its destination where the loading error was discovered.

## 1. FACTUAL INFORMATION

### 1.1 History of the Flight

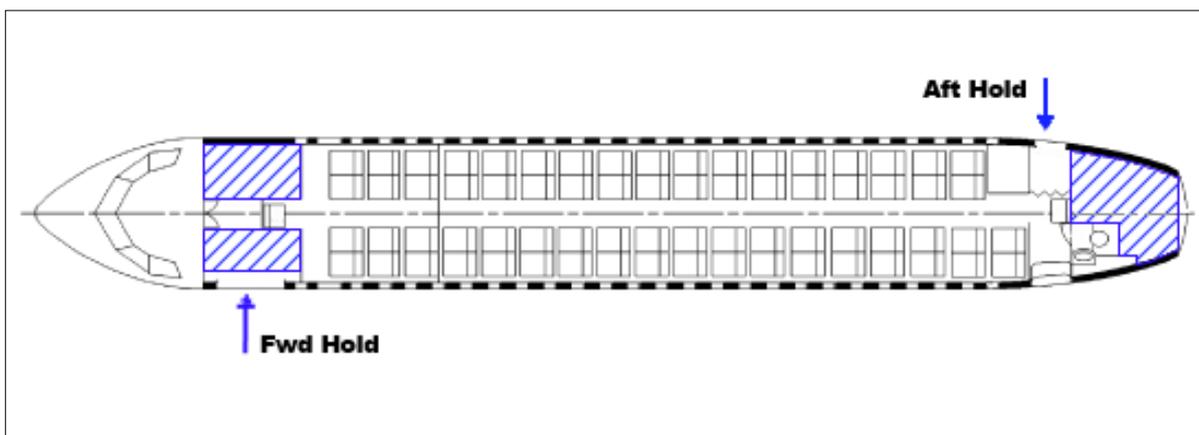
The aircraft was being prepared to operate a scheduled passenger service with 57 passengers and four crew from EIDW to LFRN and was towed onto Stand 131S at approximately 11.30 hrs prior to the flight. Loading of baggage commenced at 11.36 hrs. The LIR indicated that 421 kgs (32 pieces) of baggage were loaded in the forward hold; the computer generated loadsheet, which was presented to the Commander, recorded this loading. The flight pushed back from the stand on schedule at 11.45 hrs. The aircraft took off outside the certified Centre of Gravity (CG) limits (**Appendix A**).

The Commander, who was Pilot Flying (PF) on that sector, stated that the aircraft felt tail heavy on take-off. Following departure, the Flight Crew checked the loadsheet and LIR both of which indicated that the aircraft had been loaded correctly, with all passenger baggage in the forward hold. In his report on the event, the Commander stated that during descent into Rennes, he briefed the Co-Pilot that the landing would be somewhat flat due to the 'tail-heavy' condition. The aircraft landed at its destination without further incident where it was subsequently discovered that all the baggage had actually been loaded in the aft hold. The Flight Crew notified the Company's Operations Department and a Mandatory Occurrence Report (MOR) was submitted to the Irish Aviation Authority (IAA). The Operator's Air Safety Office notified the AAIU of the occurrence.

### 1.2 Loading Procedures and Documentation

The aircraft is configured with two holds for passenger baggage and/or freight items. The holds are located forward and aft of the passenger cabin; the forward hold (No. 1) and the aft hold (No. 4). The forward hold is accessed via the cargo door on the left-hand side of the aircraft (looking forward) and the aft hold is accessed via the aft service door on the right-hand side (**Figure No. 1**).

The loading calculations and loading of the aircraft are performed by a Handling Company. The Handling Company produces an LIR indicating how the load should be distributed by the loading crew. The LIR should not be signed until all loading has been completed and verified that it is in accordance with the LIR. All figures must be reconciled with the Dispatcher. The loadsheet is presented to the Commander and reflects how the aircraft has been loaded. The Dispatcher signs the loadsheet to confirm that this is the case and the Commander countersigns the loadsheet when the Commander accepts it. The loadsheet is normally computer generated as in this case, but the Flight Crew may also complete a loadsheet manually if necessary.



**Figure No. 1:** Access and layout of the Fwd and Aft Holds  
(ATR 72-212A Weight and Balance Manual)

In this case, the computer-generated loadsheet presented to the Commander provided details of the traffic load masses (passengers, baggage and cargo) to be carried and how that load was to be distributed. The loadsheet showed a total of 57 passengers with 32 pieces of hold baggage and indicated that all hold baggage had been loaded in Hold 1 (the forward hold). In line with the Operator's procedures, authorised weights were used for both passengers and baggage. The calculated take-off weight of 21,810 kg was below the maximum limit. Loading of the baggage in Hold 1 would have produced a Laden Index<sup>6</sup> of 11.5 units — within the forward and aft limits of 8.8 and 14.2 units. A copy of the loadsheet prepared and presented to the Commander is reproduced in **Appendix B**.

### 1.3 Personnel Information

#### 1.3.1 Aircraft Commander

The aircraft Commander was the holder of an ATPL (A) issued by the German LBA on 13 January 2015. He held a Type Rating on the ATR 42/72 together with an Instrument Rating and had completed an Operator Proficiency Check (OPC) on 11 April 2015. His Medical Certificate (Class 1) was valid until 2 February 2016. At the time of the event, the Commander had 6,523 hours total flying time, of which 2,882 hours were on the ATR 42/72.

#### 1.3.2 Co-pilot

The Co-pilot was the holder of a Commercial Pilot Licence (CPL) Aeroplanes (A) issued by the UK Civil Aviation Authority (CAA) on 23 March 2010. He held a Type Rating on the ATR 42/72 together with an Instrument Rating and had completed an OPC on 25 April 2015. His Medical Certificate (Class 1) was valid until 18 December 2015. At the time of the event, the Co-pilot had approximately 3,000 hours total flying time, of which 2,800 hours were on the ATR 42/72.

<sup>6</sup> **Laden Index:** A value used for setting the elevator trim for take-off control derived from the Centre of Gravity position expressed as a percentage of Mean Aerodynamic Chord (MAC).

### 1.3.3 Flight and Traffic Co-ordinator (Dispatcher)

The Dispatcher was employed by the Handling Company and reported to the Station Manager of that Company. The function of the Dispatcher was to supervise and monitor each turnaround and to liaise with relevant internal departments, customer airlines and service providers.

The Dispatcher's main tasks include *inter alia*: the planning of passenger, baggage and cargo load, respecting aircraft trim and weight limits, production of a LIR for the loading crew and ensuring that the Lead Agent fully understands the load plan. The Dispatcher then signs the LIR and the loadsheet before presenting the documentation to the Commander. A sample LIR is presented in **Appendix C**.

### 1.3.4 Lead Aircraft Service Agent (Lead Agent)

The Lead Agent was employed by the Handling Company and reported to the Ramp Supervisor. The function of the Lead Agent was to delegate tasks in a turnaround operation in order to achieve the safe and on time departure of customer aircraft, while ensuring the quick delivery of incoming passenger baggage. In particular, the Lead Agent should ensure that the LIR is completed correctly and then signs the LIR when loading is complete. The LIR is then returned to the Dispatcher for verification and signature.

### 1.3.5 2nd Service Agent (2nd Agent)

5

The 2nd Agent was employed by the Handling Company and carried out functions under the direction of the Lead Agent.

## 1.4 Report made by the Lead Agent to the Handling Company

On the day of the occurrence, the Lead Agent had previously handled a flight, parked on Stand 131S, which departed to Kerry at 11.17 hrs. The incident aircraft was then towed to this stand for a planned 11.45 hrs departure. At 11.15 hrs, when the Kerry flight was ready to depart, the Lead Agent drove to the baggage hall to collect the baggage for EI-FAV. En-route to the baggage hall, he called Ramp Control to advise that the aircraft had not yet been towed to stand.

The Lead Agent arrived back on Stand 131S with the outbound baggage as the aircraft was being towed onto the stand. A brief discussion was held with the Commander regarding the late tow. The Lead Agent was aware that the flight was due to depart at 11.45 hrs but could not recall whether the Dispatcher passed him the LIR before or after he went to collect the outbound bags. The Lead Agent permitted the catering to be loaded (via the aft service door) before the loading of the baggage was commenced. He believed that the baggage was to be loaded in Hold 4 (Aft hold) but acknowledged that he did not check the LIR. He was of the belief that the Dispatcher had told him to load all bags in the aft hold. He could not be absolutely sure of this as he had previously handled four other flights that morning and said he could have been mistaken.



The 2nd Agent assisted the Lead Agent to load the 32 bags in Hold 4 at 11.32 hrs. At approximately 11.40 hrs, the Lead Agent collected the LIR from the pushback tug and entered 32 bags in the 'Actual Loading' section and passed the LIR to the Dispatcher to complete the number of bags and weight per hold.

### **1.5 Report made by the Dispatcher to the Handling Company**

The Dispatcher reported that the LIR for the flight was prepared by the Station Controller on his behalf as he was delayed on a previous flight. All bags were planned for Hold 1. He checked the trim on the loadsheet based on his LIR and saw it to be well within limits. He arrived at Stand 131S before the arrival of EI-FAV under tow and had a briefing with the Lead Agent confirming the correct stand and aircraft registration. He reported that he handed the LIR to the Lead Agent verbally confirming all bags were to be loaded 'in the front'. During the turnaround, the Lead Agent asked the Dispatcher if the transfer bags were ok to load and he confirmed that they were. At this time the bags were on the ground near the forward hold and the Dispatcher stated that he 'had no reason to assume that they were not being loaded in the forward hold'. The Dispatcher proceeded to use the ground/aircraft headset as the aircraft was being fuelled while passengers were boarding. From this position he could not see the aft hold door.

Following boarding, the Lead Agent passed the LIR to the Dispatcher. The total number of bags actually loaded by hold location was completed at the end of the LIR and no deviations from the plan were recorded. The Dispatcher entered the baggage weight of 421 kg (obtained from the DCS<sup>7</sup>) beside the 32 bags he had written in earlier for Hold 1 on the LIR but did not confirm with the Lead Agent that the bags were indeed loaded in Hold 1 nor did he visually check the holds before departure. The Dispatcher later commented that on closing the flight before departure the tail strut may have been close to the ground (10-15 cm) and that when he passed the load paperwork to the Commander through the access hatch, it seemed quite high but he stated that this did not give him any cause for concern at the time. The Dispatcher had checked the LIR against his loadsheet, which he had checked and found all to be in order.

6

### **1.6 Actions taken by the Handling Company**

On 7 August 2015, and as a result of this occurrence, the Handling Company issued a 'Safety Alert' memorandum on the subject of Hold Loading and LIR Completion to its Lead Agents and Dispatchers. The responsibilities of the Dispatcher and Lead Agent functions were reiterated:

- The Dispatcher is responsible for planning passenger, baggage and cargo load, respecting aircraft trim and weight parameters.
- The Dispatcher is responsible to communicate this plan with the LIR together with a verbal briefing to the Lead Agent who should verify understanding.
- The Lead Agent is responsible for the safe loading of the aircraft in accordance with the LIR and notifying the Dispatcher if any deviations are required.

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<sup>7</sup> DCS: Departure Control System (a centralised load control system used by the Handling Company).

## 1.7 Actions taken by the Aircraft Operator

The Operator took a number of safety actions following this occurrence. On 19 August 2015, a Crew Memo (No. 15 14) was issued regarding rear hold loading – visual inspection. On 25 August 2015, three Ground Crew Instructions (GCIs) were issued:

- 2015.04 Mandatory loadsheet checks.
- 2015.05 Visual check of holds after loading.
- 2015.06 Changes to LMC<sup>8</sup> procedure on the final loadsheet.

The LIR was redesigned with input from Flight Operations and the Handling Company involved. The new LIR was used for a one week trial period at Dublin, Cork and Southend airports before being implemented across the Operator's network.

From 19 January 2016, the following procedures were put in place, Cabin Crew Instruction CCI-15-15 and Crew Memo 16/01 refer:

- A passenger distribution card was to be completed on all flights.
- The No. 1 Cabin Service Attendant (CSA) to carry out a headcount and complete a distribution card.
- The Commander to check the actual loading against the loadsheet prior to closing the aircraft doors.

7

The Operator has also completed a review to identify areas of improvement. The Operator has reverted to the mandatory use of a manual LIR. The following procedures were added or further developed and communicated to crew:

- The introduction of the zone distribution cards.
- Visual check of holds by dispatcher.
- Visual check of Aft Hold by Cabin Crew and report to Commander.
- Crosscheck of paper work by crew.

Additional training material in relation to loading awareness was distributed to all ground handling providers. All stations were subject to a follow up visit by the Ground Operations Management to ensure that the significance of the event and the importance of the training material were understood. Safety awareness and promotional material (posters, leaflets, and other communications such as newsletters) in relation to loading errors were and continue to be, developed and disseminated.

An existing Working Group was developed into a dedicated Safety Action Group (SAG), meeting every six months. This meeting is attended by representatives from the Operator's management, supervisors, flight deck, cabin crew and representatives from all contracted Ground Handling Agencies over the Operator's network. Internally, regular meetings were established between the Flight Operations Manager and Ground Operations Manager, with increased frequency of in-house flight file checks from both Flight Operations and Ground Operations. This is monitored through on-going Compliance Monitoring Audits (CMA).

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<sup>8</sup> LMC: Last Minute Change.



From an industry point of view, the Operator attended and contributed an outline of actions to an ATR Operator Safety meeting in an effort to ensure best practice was being followed. The Operator also attended and contributed an outline of actions to date to the UK CAA GHOST<sup>9</sup> meetings in an effort to ensure best practice was being followed to address an industry issue identified in State and Agency Safety Plans.

## 1.8 Subsequent Events

Following this event, the Operator reported 16 occurrences up to September 2017 where baggage was placed in the wrong hold during loading. These events occurred at a variety of bases/destinations on the Operators network; in five cases the error occurred more than once and at one destination it occurred on four occasions.

In one case, a check of documentation post flight identified that an aircraft was loaded correctly but that the loading disposition on the loadsheet differed from the LIR. In all other cases incorrect loading was identified by the Commander pre-flight and the aircraft loads correctly re-positioned. In no case did an aircraft depart incorrectly loaded.

## 2. ANALYSIS

Operation of an aircraft outside its loading limits can, depending on the circumstances, seriously affect its handling during flight and could lead to loss of control. The loading error in the subject occurrence resulted in the aircraft being dispatched outside certified Centre of Gravity (CG) limits. Although the flight landed without further incident, the loading error was not identified before departure, despite a number of safety barriers being in place.

The loadsheet was correctly generated by the DCS. Following loading, the loadsheet and LIR both indicated that the aircraft had been loaded correctly. However, the aircraft had not been loaded in accordance with the LIR and the loadsheet.

The loadsheet is designed to reflect how the mass and balance for the specific load has been distributed, including the number of passengers, seating arrangement and fuel load. The loadsheet, signed by the Dispatcher, reflected a correct loading arrangement and was accepted by the Commander. The LIR was presented to the Lead Agent which correctly documented how the passenger baggage was to be loaded-in this case all baggage was to be placed in the forward hold.

The preparation and loading of the aircraft took place in a short timeframe, not least because the aircraft was towed onto stand later than expected. The Lead Agent was aware that the flight was due to depart at 11.45 hrs but could not recall whether the Dispatcher passed him the LIR before or after he went to collect the outbound bags.

The Lead Agent allowed the catering to be loaded before the loading of the baggage was commenced and this decision placed additional time pressure on him to complete the baggage loading.

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<sup>9</sup> GHOST: Ground Handling Operations Safety Team.

The Lead Agent had believed that the baggage was to be loaded in Hold 4 (Aft hold) but acknowledged that he did not check the LIR as per the required procedure and was under the belief that the Dispatcher had told him to load the baggage in the aft hold. He could not be absolutely sure of this as he had previously handled four other flights that morning and said he could have been mistaken.

In his statement, the Dispatcher commented that when he passed the load paperwork to the Commander through the access hatch, the hatch '*seemed quite high*' but he stated that this did not give him any cause for concern at the time. The nose-high attitude of the aircraft may have indicated that the aircraft was tail-heavy.

The Aircraft Operator took a number of initiatives following the event including a review of its loadsheet and LIR checks, changes to its LMC procedure and visual check of aircraft holds by the dispatcher following loading. The Operator has also reintroduced zone distribution cards which are cross-checked by the Commander against the loadsheet.

In this occurrence and the occurrences reported since this event, the documented procedures in place to ensure correct loading and verification of that loading, were not followed. In all but one case, that involved incorrect paperwork, the Flight Crew identified loading errors prior to dispatch.

The Investigation acknowledges the on-going initiatives by the Operator to prevent similar events occurring and accordingly does not identify any issues that would support the making of a Safety Recommendation.

### 3. CONCLUSIONS

#### 3.1 Findings

1. The loadsheet as presented to the Commander reflected the correctly planned loading of the aircraft but did not indicate the actual loading.
2. The aircraft arrived late on to stand, putting time pressure on the loading crew to achieve a scheduled departure.
3. The briefing between the Dispatcher and Lead Agent regarding the loading plan was not effective, in that the Dispatcher was responsible for communicating the loading plan to the Lead Agent who should have verified his understanding.
4. The Lead Agent did not consult or load the aircraft baggage according to the LIR.
5. The Commander was presented with documentation indicating that the aircraft had been loaded correctly.
6. The Commander felt the aircraft was '*tail heavy*' as it became airborne. A subsequent in-flight check of the loading documentation by the Flight Crew did not identify any anomaly.



7. The flight was completed to its destination where the loading error was discovered when unloading the aircraft.
8. Following this serious incident, the aircraft Operator revised its procedures regarding mandatory loadsheet checks, visual checks of holds following loading, changes to LMC procedures and a redesign of the LIR.

### **3.2 Probable Cause**

Passenger baggage was loaded into an incorrect hold.

### **3.3 Contributing Factors**

1. The passenger baggage was not loaded in accordance with the Load Instruction Report (LIR).
2. The correct procedure for the completion of the LIR was not followed.
3. The loading was completed under time pressure.

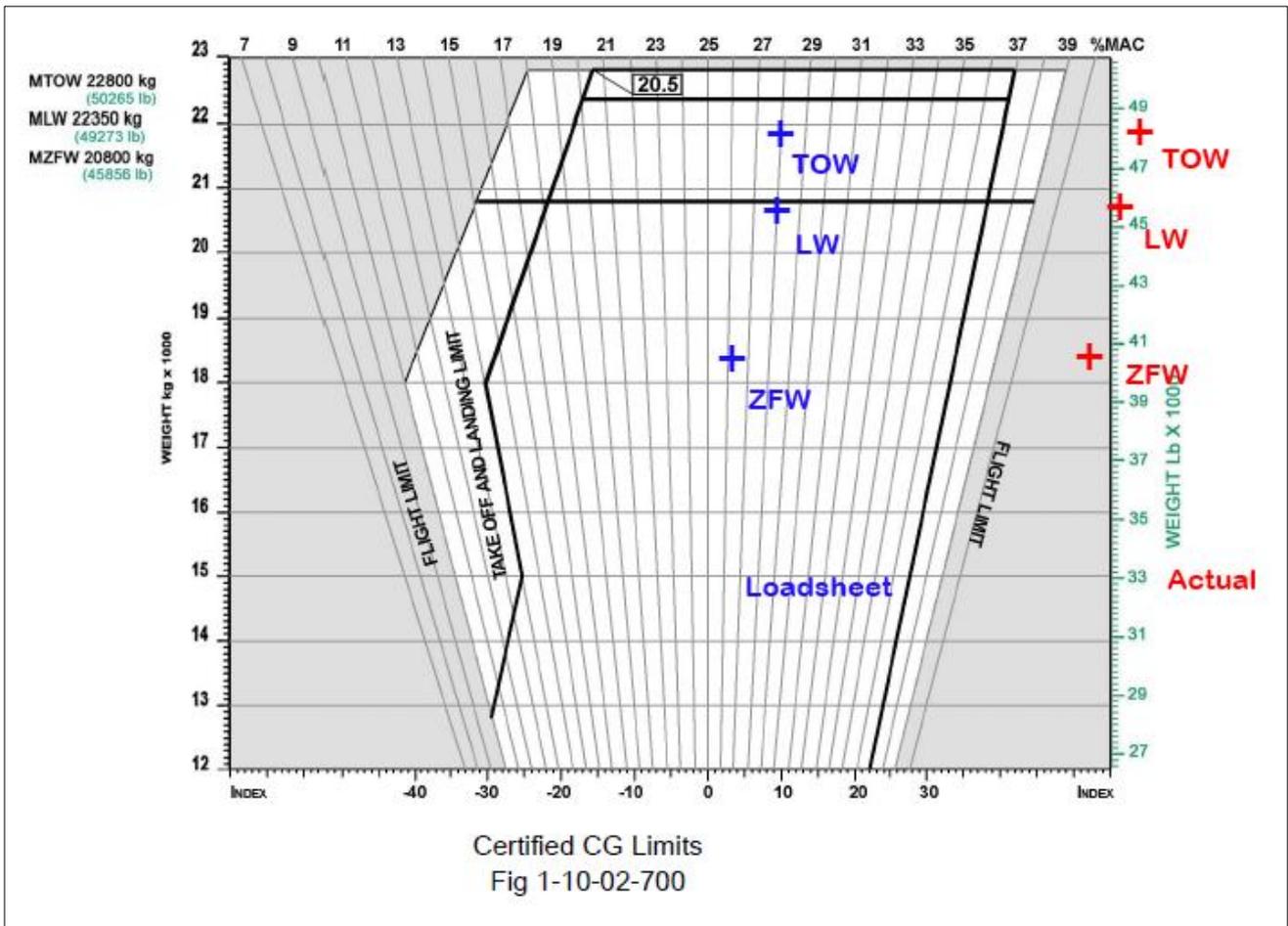
## **4. SAFETY RECOMMENDATIONS**

This Investigation does not sustain any Safety Recommendations.

- END -

## Appendix A

EI-FAV Weight and Balance planned and as dispatched on 23 July 2015



The certified Centre of Gravity (CG) envelope for the ATR 72 with Take-off Weight (TOW), Landing Weight (LW) and Zero Fuel Weight (ZFW); plotted in blue as per Loadsheet. The actual loading values are plotted in red and are outside the certified CG limits.

*(ATR 72-212A Weight and Balance Manual)*

**Appendix B**  
**Loadsheet EI-FAV (EIDW-LFRN) 23 July 2016 (redacted)**

LOADSHEET		ALL WEIGHTS IN KILOGS			EDNO
CHECKED		APPROVED (CAPT)			01
XXXX		CAPTAIN.....XXXX			
FROM/TO FLIGHT	A/C REG VERSION	CREW	DATE	TIME	
DUB RNS XXXX /23	EIFAV Y72	2/2	23JUL15	1100	
LOAD IN COMPARTMENTS	WEIGHT	DISTRIBUTION			
	421	1/	421	A	
PASSENGER/CABIN BAG	4212	24/ 27/ 6/	0 TTL	57	
		PAX 0/ 57	SDC 0/0		
		BLKD 0/0			
TOTAL TRAFFIC LOAD	4633				
DRY OPERATING WEIGHT	13717				
ZERO FUEL WEIGHT ACTUAL	18350	MAX	20800	ADJ	
TAKE OFF FUEL	3460				
TAKE OFF WEIGHT ACTUAL	21810	MAX	22800	L ADJ	
TRIP FUEL	1056	B			
LANDING WEIGHT ACTUAL	20754	MAX	22350	ADJ	
BALANCE AND SEATING CONDITIONS			LAST MINUTE CHANGES		
BII 8.1	DOII 7.6	DEST SPEC	CL/CPT 1	- WEIGHT	
LIZFWI 10.5	MACZFW 26.2	RNS + ICBAJ			
LITOWI 11.5	MACTOW 28.0				
STAB TO 0.97 NOSE UP			C		
SEAT ROW TRIM					
A13.B26.C18.					
ZFW INDEX LIMITS	FWD 7.0	AFT 13.0			
TOW INDEX LIMITS	FWD 8.8	AFT 14.2	D		
UNDERLOAD BEFORE LMC	990	LMC TOTAL	-		
LOADMESSAGE AND CAPTAINS INFORMATION BEFORE LMC					
-RNS, 24/27/6/0, T421, 1/421, PAX/0/57, PAD/0/1					
SI PAN131					
AG/131					
-RNS B 32/421 M O C O					
*****PL TEXT ADDITION*****					
CAPTAIN.....					
CAPTAIN:.....					
PANTRY CODE B					
MAIN TANK FUEL 3460					
AIRCRAFT SECURITY CHECKS COMPLETE.					
AUTHORISED WEIGHTS USED FOR PASSENGERS					
AUTHORISED WEIGHTS USED FOR BAGGAGE					

- A:** Indicating load in compartment 1 of 421 kg.
- B:** Indicating take-off weight (21,810 kg).
- C:** Indicating Laden Index (Take-off Weight) of 11.5 units.
- D:** Indicating the AFT Index limit of 14.2 units at Take-off weight.

- Bottoming:  
- 17c 14026  
A/Loor.

NR.1 XXXX / 23JUL DUB A76 EIFAV

STD 1145 ETD CON OF 72Y  
RNS PX 0/57 C O M O

\*\*\*\*\*

HOLD 1 C M B BAGS 32 @ 421 E  
RNS 469\*ALL

\*\*\*\*\*

HOLD 4 C M B BAGS NIL F  
RNS NIL

\*\*\*\*\*

CHECK FOR MAIL AND COURIER BAGS  
OTHER LOAD ITEMS  
NONE  
SERVICE WEIGHT ITEMS  
NONE  
\*\*\*\*\*  
DEVIATIONS

\*\*\*\*\*  
\*\*\*\*\*  
THIS AIRCRAFT HAS BEEN LOADED IN ACCORDANCE WITH THESE  
INSTRUCTIONS INCLUDING THE DEVIATIONS RECORDED.  
LOAD SECURED IN ACCORDANCE WITH COMPANY REGULATIONS.  
LOADING SUPVR...XXXX..... TOTAL BAGS BY DEST 321... 215

XXXX 23JUL DUB INBOUND CONNECTING PAX DEP 1145S  
BOOKED ACTUAL  
FLT. FROM TO- F Y TTL PAX BAGS ARR STATUS  
TOTAL 000 000  
END NAMES

E: Indicating Hold 1 with 32 bags at 421 kg.  
F: Indicating Hold 4 with Nil bags.

**Appendix C**  
**Sample Load Instruction Report (LIR) (redacted)**

**XXXXXX LOADING INSTRUCTION REPORT (LIR)**

(Shall be used for flights operated by XXXXXX)

Flight no:	Date:	Registration:	Destination:
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FWD Hold Planned Bags	Pieces		AFT Hold Planned Bags	Pieces	
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**ACTUAL LOADING**

FWD Hold	No	Weight (KG)	AFT Hold	No	Weight (KG)
Bags		KG	Bags		KG
Cargo		KG	Cargo		KG
Ballast		KG	Ballast		KG
COM/EXP		KG	COM/EXP		KG
<b>Total</b>		<b>KG</b>	<b>Total</b>		<b>KG</b>

Aft Stowage Cabinet	No	Weight (KG)
<b>Total</b>		

LMC ±		KG	LMC ±		KG
<b>Total after LMC</b>		<b>KG</b>	<b>Total after LMC</b>		<b>KG</b>

**Notes**

1. Prior to commencement of loading/offloading, the tail prop must be in place (ATR72)
2. For the OFFLOAD, bags must be offloaded from the AFT hold first and then the FWD hold.
3. For the ONLOAD, bags must be loaded in the FWD hold first and the AFT hold last.
4. Bags tagged at the boarding gate and on the aircraft should be recorded on the LMC section and new totals provided.
5. Nets have been closed in all holds even if there are no items loaded.
6. The load does not exceed the height in the hold marked as Maximum Loading Height.

**I confirm:**

- This aircraft has been loaded in accordance with these instructions including the deviations recorded. Load secured in accordance with company regulations.

Signed: \_\_\_\_\_ (Agent responsible for loading)

Printed: \_\_\_\_\_

Signed: \_\_\_\_\_ (Dispatcher/Turnaround Coordinator)\*

Printed: \_\_\_\_\_

\* Cannot be the agent responsible for loading

**Instructions**

1. XXXXX requires this LIR to be used for all departures (excluding stations that produce computerised loadsheets).
2. Each section must be completed.
3. Loadsheets must be signed by both the Agent responsible for loading and the Dispatcher/Turnaround Coordinator.
4. First copy should be given to the flight crew and the second copy should be kept in the post flight paperwork.
5. On E1XXX & E1-XXX ONLY if the Aft Stowage Cabinet is used this section should be completed.

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

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