

**CIAIAC,
Spanish Safety
Investigation
Authority**

**Falls from aircraft
integrated stairs
during disembarking**

EASA CASIA, 9-10 May 2023

SUBSECRETARÍA

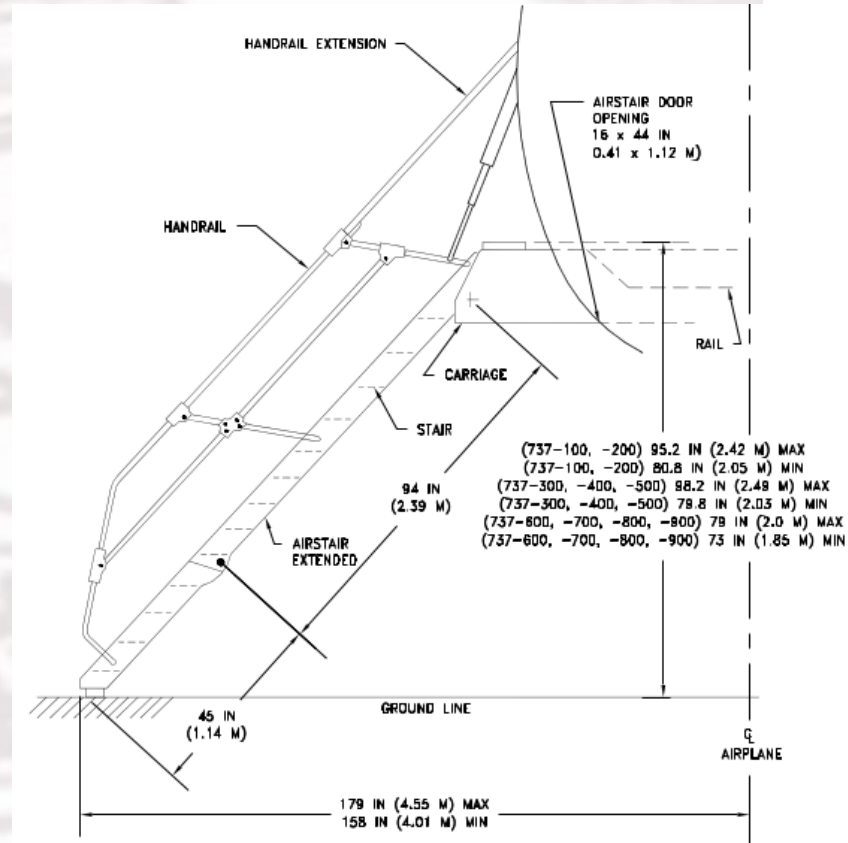


MINISTERIO
DE TRANSPORTES, MOVILIDAD
Y AGENDA URBANA

COMISIÓN DE INVESTIGACIÓN DE
ACCIDENTES E INCIDENTES DE
AVIACIÓN CIVIL

AIRCRAFT INTEGRATED STAIRS

- Some **Boeing 737** series aircraft have retractable stairs on forward left side of cabin to allow for boarding & disembarking of passengers without the need for ground support equipment.
- The stairs have a **handrail** on each side. Their steps are narrower & thinner & their handrails are lighter than external stairs provided by airport handling services.
- In particular, the **height** of the stairs on the 800 model ranges **from 1.85 m to 2 m**, and the **length** is **3.53 m**. The **width** is approximately **0.62 m**.

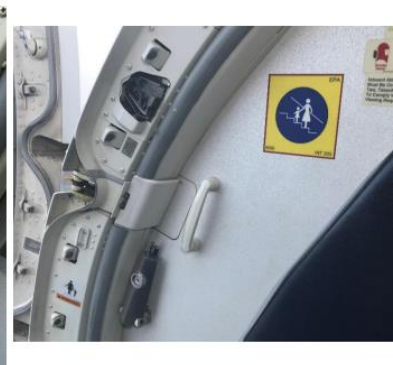


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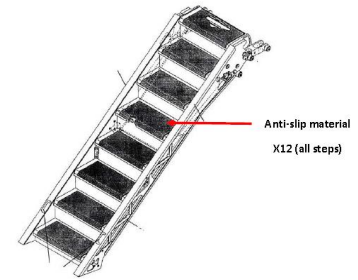
AIRCRAFT INTEGRATED STAIRS

- **No FARs requirements**, however...
- In 2007, after 4 incidents in which small children fell down the stairs, FAA issued **Special Airworthiness Information Bulletin NM-07-47** to owners and operators of Boeing 737 aircraft equipped with integrated stairs:
 - **warning signs** advising passengers travelling with young children to hold their hands,
 - **anti-slip material** on the upper platform & side handrails.
- Boeing also revised **Flight Attendant Manual**, advising that special attention be paid to passengers with special needs or those travelling with young children.



RYANAIR' ADDITIONAL SAFETY MEASURES

1. Stair treads are covered with a **non-slip material**, 3M Safety Walk 710 - Coarse



2. In June 2010, retractable, high-visibility **safety barriers** installed at forward Lav A bulkhead & cabin side wall next to & beneath 1ABC:



3. In December 2010, **detachable airstairs rails (DAR)** attached to support strut fixed to cabin floor at door L1 & integrated stair rail.

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RYANAIR' ADDITIONAL SAFETY MEASURES

Ryanair's disembarkation procedure:

*“Ladies and Gentlemen, you may now disembark the aircraft using both the forward and rear doors. **All passengers should use the handrail** provided when walking down the stairs. For passengers travelling with children, please hold their hands as you walk down the stairs and until you are inside the terminal building. Walk around the wing and not under the wing. Thank you and good morning/afternoon/evening”*

Announcement is made in **English**.

SUBSECRETARÍA

CIAIAC' INVESTIGATIONS

1.- A-020/2021

2.- A-025/2021

3.- IN-053/2021

4.- A-013/2022

5.- A-022/2022



- REC 01/22
- REC 02/22

Reference: <https://www.mitma.gob.es/organos-colegiados/ciaiac/investigacion>

After that, 2 occurrences were reported in February 2023, but neither met criteria to be considered an accident or serious incident, under Regulation (EU) 996/2010.

CIAIAC' INVESTIGATIONS: A-020/2021

Date & hour: 12 May 2021, 23:30 h (21:30 UTC)

Flight: from Gothenburg Airport (ESGG) to Alicante Airport (LEAL)

MET info: No rain or wind

Passenger age & nationality: 65 years, Swedish

Brief description: The passenger got one of the two suitcases he was carrying caught on the stairs & lost his balance. Being unable to grab the handrail, he fell from the top of the stairs & hit another passenger at the bottom of the stairs. The passenger who fell sustained serious injuries.

Causes/contributing factors: Passenger's decision to disregard disembarkation instructions & descend stairs with one suitcase in each hand.

Width of the stairs (0.62 m) is sufficient to allow passengers to hold 1 suitcase. However, it may not be enough to carry 2 suitcases, especially if they are separated a certain distance from the body.

Moreover, anyone carrying 2 suitcases would be unable to grasp handrail should they lose their balance.

SUBSECRETARÍA

CIAIAC' INVESTIGATIONS: A-025/2021

Date & hour: 13 June 2021, 23:21 h (21:23 UTC)

Flight: from Belgium's Charleroi Airport (EBCI) to Málaga Airport (LEMG)

MET info: No rain or wind

Passenger age & nationality: 70 years, Belgian

Brief description: The passenger fell from the penultimate step. He was unable to explain how it had happened. The person travelling with the passenger reported that, sometimes, the medication he takes for a heart condition can cause dizziness, and she believed this caused him to fall.

Causes/contributing factors: Undetermined

SUBSECRETARÍA

CIAIAC' INVESTIGATIONS: IN-053/2021

Date & hour: 10 December 2021, 13:25 h (12:25 UTC)

Flight: from Valencia Airport (LEVC) to Santiago Airport (LEST)

MET info: No rain or wind

Passenger age & nationality: -, Spanish

Brief description: The passenger, who was carrying a suitcase in one hand & a coat in the other, fell down the last three steps of the staircase.

Causes/contributing factors: Passenger descending stairs with a suitcase in one hand & a coat in the other, which was not in accordance with operator's disembarkation instructions

SUBSECRETARÍA

CIAIAC' INVESTIGATIONS: A-013/2022

Date & hour: 3 March 2022, 21:45 h (20:45 UTC)

Flight: from Barcelona Airport (LEBL) to Ibiza Airport (LEIB)

MET info: No rain or wind

Passenger age & nationality: 78 years, French

Brief description: The passenger fell down the last two steps onto the apron.

Causes/contributing factors: The fall occurred by chance.

SUBSECRETARÍA

CIAIAC' INVESTIGATIONS: A-022/2022

Date & hour: 26 April 2022, 19:08 h (17:08 UTC)

Flight: from Manchester Airport (EGCC) to Almería Airport

MET info: No rain or wind

Passenger age & nationality: 64 years, British

Brief description: The passenger fell down the last few steps onto the apron.

Causes/contributing factors: The fall occurred by chance.

SUBSECRETARÍA

CIAIAC' INVESTIGATIONS: REC 01/22 & REC 02/22

REC 01/22: It is recommended that Ryanair modify its **disembarkation procedure** to provide the **warning** concerning the use of the handrail when descending the stairs **in the official languages of the departure & destination countries**, as well as in English.

REC 02/22: It is recommended that Ryanair reinforce its **disembarkation procedure** to stipulate that if a member of the **cabin crew** observes a passenger intending to descend the forward stairs without a free hand, they **should remind** them that they must **use the handrail** when descending stairs.

Ryanair's OMA SEP updated on 18th August 2022, in particular:

2.4.9 Before Disembarking

"...All passengers should use the handrail provided when walking down the stairs..."

Including 2 notes:

Note 1: *The announcement shall be completed when disembarkation begins.*

*It must be immediately followed by the same announcement in the **language of departure & arrival country** on all aircraft where the announcement is available on PRAM.*

Note 2: *Passengers intending to descend the forward stairs without a free hand should be reminded to use the handrail when descending the stairs.*

Additional language announcements are currently being uploaded to fleet PRAM system.

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Thank you for
your attention!

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