

Flight Safety News Letter

- **In Focus-** Conducted ERP Mock Drill on 28th February 2024
- **Meetings/ Engagements**
- **Upcoming Events:** SRBM (Safety Review Board Meeting) in March 2024
- **Case Study:** Windshield Crack Incident

Kindly Contact :- Flight Safety

Phone & Email ID :- 01125671574 & aasl.flightsafety@allianceair.in

Kindly Contact :- ERP

Phone & Email ID:- 01125672289, 08800744303, 09871149284 & emergency.response@allianceair.in

In Focus

Mock Drill on 28th
February 2024

Conducted Mock Drill for smooth operation of Emergency Response Procedure on 28th February 2024

A/C Regn. : VT-ABC

Flight No : 9I-XYZ

A/C Type: ATR 72-600

Station of Incident : Lengpui Airport (Aizawl)

Date of Incident/Accident : 28-02-2024

Time of Incident : 14:00 (IST)

Sector : VEGT-VELP

ATD : 1300 (IST) from VEGT ATA : 1400 (IST) At VELP

Total Crew Details on Board:-

P1 :- Capt. Dipankar

P2 :- FO Sanjay C

CC1 :- Ms. Betty

CC2 :- Mr. Zeeshan

Onbd Engg: Mr. Dilp Kumar

Incident Details :

Flight 9I-XYZ, ETA was 1420 (IST) landed at 1400 (IST) Overshoot the RWY 17. As per initial report from ATC , the Flight was high on approach and instead of making a go around attempted to land. Aircraft touched down after loosing almost half of the RWY and landed near Taxiway A intersection and could not stop the aircraft within the RWY and however could managed to stop the aircraft within RESA.

In Focus

Mock Drill on 28th
February 2024

KEY CHALLENGES

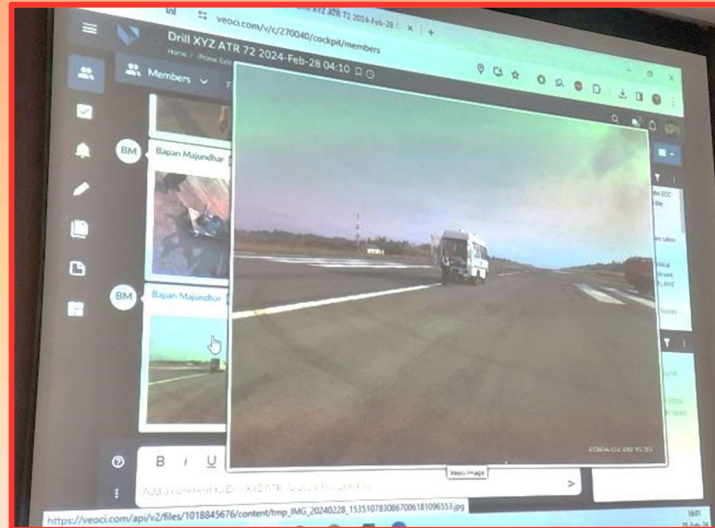
- Establish and retainment of emergency procedure.
- Retaining and updation of important contact stations and contact phone numbers.
- Alternative plans.
- Timely involving associate agencies.
- Providing early first aid medical support & hospitalisation.
- Quick effective action.
- Forming site team and backup office for quickest assistance to victims.
- Timely reporting to appropriate authorities.
- Early response recovery and closing.

POST INCIDENT / ACCIDENT ACTION

- Flight information to the station.
- Flight planning for transferring go team to the station.
- Creating team around nearby station for assistance.
- Provide all assistance in coordination with ECC and Emergency Response Team.
- Coordinating with finance department for sanction of Emergency fund
- Procurement of Pax manifest and trim for the incident flights.
- Securing all documents for investigation.
- Coordinate for recovery of the aircraft and assist the investigation team.

Meetings/Engagements

Mock Drill on 28th
February 2024



Meetings/Engagements

Mock Drill on 28th
February 2024



Upcoming Events

SRBM (Safety Review Board Meeting)

Scheduled in March 2024

Case Study

Occurrence of Windshield Crack

Synopsis : There were four cases of Windshield crack reported during 2023 in Alliance Air fleet from different stations. They were reported in different phase of flight in different aircraft like taxi out, climb and cruise.

Design of Windshield : Windshields of aircraft contain two layers of thick glass with a middle layer of plastic used to conduct heat. If one layer of glass should crack or break, the second layer of glass is designed to maintain air pressure within the cockpit.

Causes of Windshield crack : Aircraft windshield damage is caused by various factors – from negligence to environmental hazards. While some damage is beyond human control, other damage can be mitigated by following manufacturer guidelines.

(i) Improper Cleaning Products

Using unapproved cleaning products, such as paper towels or shop rags, can scratch the surface of the windshield. Always refer to the manufacturer's guidelines for properly cleaning and maintaining your aircraft's windshield.

Case Study

Occurrence of Windshield Crack

(ii) Interlayer Heat Systems

Aircraft windshields feature a heating system to prevent icing on the glass during flight. Heating systems should be on during the whole flight. Turning the heating system on while in flight to combat icing can cause thermal shock. The drastic temperature change may result in the windshield cracking or delaminating.

If the heating system short circuits, it may cause uneven temperature distribution and result in cracking the windshield's outer layer.

You may be able to repair or replace the system rather than replace the windshield if the interlayer heating system fails. If the windshield is damaged, then it may need to be replaced.

(iii) Environmental Elements

Environmental factors may cause damage. For instance, hail can crack the windshield, or volcanic ash, lingering in the upper atmosphere, can cause abrasions to the windshield's surface. Refer to the AMM for guidance on environmental damage.

Case Study

Occurrence of Windshield Crack

(iv) Moisture Between Layers

Moisture may enter between laminated layers if there are gaps along the window edges. Trapped moisture could turn to ice while flying in colder temperatures. If the moisture turns to ice, it will expand, causing the windshield to delaminate or crack.

Inspect windshield edges and “hump seals” for cracks or gaps to avoid moisture from getting between the layers.

(v) Bubbles Between Layers

Bubbles may be present between the laminated windshield layers, which can happen during manufacturing. The amount and placement of the bubbles may be within allowable limits. If the bubbles exceed the limits, the windshield must be replaced.

(vi) Bird Strikes

Bird strikes may also damage aircraft windshields. The extent of the damage depends on the size of the bird. Generally, bird strikes happen during take-offs, landings, or while the aircraft is at a low altitude.

Case Study

Occurrence of Windshield Crack in 2023

- **Number of Cases** : 04
- **Aircraft Details** : VT-AIY, VT-AIV & VT-AIX (Twice)
- **Date of Incident** : 14-10-2023, 25-10-2023, 15-12-2023 & 19-12-2023.
- **Possible Reason** : During the PIB meeting, it was discussed that a Windshield may be crack due to incorrect heating. The aircraft has electronically heated windows that sometimes crack due to a short-circuit. This causes uneven temperatures in the glass. The age of the aircraft and the number of flight cycles can also be a factor due to stress levels put on the glass over a long period of time.
- During the PIB, Windshield heat controllers were suspected as a contributory factors for the events.
- During maintenance for all the incident cases windshield along with windshield heat controller replaced.

Our Fleet

ATR 72-600



ATR 42-600



HAL Do-228





सादर/ Regards,

विकास शर्मा / Vikas Sharma

उड़ान संरक्षा प्रमुख/ Chief of Flight Safety, Head-ERP

एलाइंस एअर / Alliance Air

Flight Safety Department, AAAL