

# FINAL REPORT

INCIDENT OF SRILANKAN AIRLINES FLIGHT UL 163 A 320-211, REGISTRATION 4R-ABF ON 01<sup>ST</sup> JUNE 2007 AT BANDARANAIKE INTERNATIONAL AIRPORT COLOMBO- SRI LANKA





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Aircraft Incident Report

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#### AIRCRAFT INCIDENT REPORT

#### **SYNOPSIS:**

Operator : SriLankan Airlines

Level 22, East Tower,

World Trade Centre, Echelon Square

Colombo 01

Registered Owner : Wells Fargo Bank

Northwest National Association

79, South Main Street

Salt Lake City Utah 84111

USA

Aircraft Make and Model : Airbus, 320 - 211

Aircraft Nationality : 4R (Sri Lanka)

Aircraft Registration : ABF

Place of Accident : Parking Bay B - 14 at Bandaranaike International

Airport, Colombo – Sri Lanka

Date and Time : 01<sup>st</sup> June 2007 at 1456 UTC

(2026 Hrs local time)

The accident occurred at 1456 UTC on 01<sup>st</sup> June 2007 at Bandaranaike International Airport, Colombo - Sri Lanka. SriLankan Airlines Flight UL 163 was parked at Parking Bay Bravo 14 to prepare the aircraft for scheduled departure. While performing the Pre-departure maintenance check the maintenance engineer has observed that the right wheel of the Nose Landing Gear had deflated and prepared for replacement. While replacing the wheel, the aircraft has moved slightly towards right hand side at the nose wheel jack pivoting point.

The incident was notified to the Director General of Civil Aviation by the aerodrome operator – AASL through a telephone call. Accordingly, an investigation was initiated by a team appointed by the Director General of Civil Aviation. The incident site was immediately visited by the investigators.



#### 1. FACTUAL INFORMATION:

**1.1. History of Flight:** On 01<sup>st</sup> June, 2007, SriLankan Airlines Flight UL 163, Airbus A320, registration 4R-ABF, was parked at parking Bay Bravo 14 at Bandaranaike International Airport, Colombo, Katunayake. The aircraft prepared for its schedule flight while passengers were boarding and refuelling was underway. In the pre-departure maintenance check, it was observed that the nose wheel right hand tyre deflated and decided to replace.

While replacing deflated nose wheel tyre, the aircraft nose wheel Jack pedestal depressed into the concreted parking floor by shifting the aircraft slightly towards the right hand.

The passengers and crew suffered no injury. The aircraft was inspected for damages and released approximately fifty minutes later with the replaced right wheel of the Nose Landing Gear.

**1.2. Injuries to Persons:** There were no injuries to the crew or passengers.

**1.3. Damage to Aircraft:** There were no damages to the aircraft.

1.4. Other Damages: None.

#### 1.5. Personnel Information:

Ground Engineer : K.S.J. Gunewardene

Licence : The DGCA Sri Lanka issued

Aircraft Maintenance Licence (No.242)

Aircraft Ratings : A and C on A320 airframe/V2500 engines

Experience : A320 rating endorsed on 13<sup>th</sup> December

1994

Technicians : M.A.R. Maddumage (S/No 15847)

B.N. Ramanan (S/No C 2619)

B.A.D. Madanayake (S/No C 2642)

### 1.6. Aircraft Information:

Type and Model : Airbus, A 320- 211

Manufacture's Serial Number : 164 Year of Manufacture : 1991

Certificate of Registration : No.195, Registered in Sri Lanka Civil

Aircraft Register

Certificate of Airworthiness : Valid till 02<sup>nd</sup> July 2008

Total Airframe Hours : 53,836.19 hrs as of 17<sup>th</sup> June 2007

Total Cycles : 21,310 as of 17<sup>th</sup> June 2007

Engines : 02 numbers, V 2500 Turbine Engines



1.7. Meteorological Information: Not applicable

1.8. Aids to Navigation: Not applicable

**1.9. Communication:** Not applicable to the incident.

**1.10. Aerodrome Information:** Not applicable

**1.11. Flight Recorders:** Not applicable to the incident

1.12. Wreckage and Impact Information: None

1.13. Medical and Pathological Information: Not applicable

1.14. Fire: There was no fire

1.15. Survival Aspect: Not applicable.

**1.16. Test and Research:** Not applicable for this incident.

**1.17. Additional Information:** Not Applicable.

#### 2. ANALYSIS

#### 2.1. General:

The aircraft was in preparation for schedule flight UL 163. While re-fuelling is in progress, Certifying Engineer has performed Pre-departure check to release the aircraft in serviceable condition. When performing the Pre-departure check Certifying Engineer has observed that right hand wheel of Nose Landing Gear is deflated. The decision was taken to replace deflated tyre within shortest possible time to make ready the aircraft departure on time.

#### 2.2 . Night Curfew:

There was a restriction imposed by Airport Authorities to complete all departures before 1030pm in local time. The certifying engineer may have attempted to complete the task of wheel replacing to release the aircraft before the departure restriction without adhering to the warnings stipulated in Aircraft Maintenance Manual. Maintenance Manual warns not to change nose wheel when Chocks are not properly positioned, refuelling is carried out and passenger boarding is in progress.



#### 3. CONCLUSION

## 3.1. Findings:

- 1. The nose wheel jack used for wheel replacement was differ from the tools and equipment recommended by the Airbus industries for A320 nose wheel jacking.
- 2. Line Maintenance engineer deviated from 'Warning' and 'Cautions' recommended in Maintenance Practices 'Chapter 07-12- Jacking for wheel change' in Aircraft Maintenance Manual'.
- 3. The aircraft jacking was carried out while passenger boarding and refuelling was in progress.
- 4. The Landing Gear chocks were not appropriately positioned for aircraft jacking.

#### 3.2. Probable Cause:

Deviation from Maintenance Practices in the Aircraft Maintenance Manual and usage of improper tooling caused the jack to slip off.

#### 4. SAFETY RECOMMENDATIONS

- 1. The jack (UL01) used for nose wheel jacking to be removed immediately from service.
- 2. Airline should use manufacturer recommended (Airbus) tools and equipment for aircraft maintenance.
- 3. Airline maintenance should strictly adhere to 'Cautions' and 'Warnings' given in Aircraft Maintenance Manual while carrying out maintenance.
- 4. Aircraft should not be jacked without positioning the chocks as described in Aircraft Maintenance Manual.
- 5. Airline Quality Assurance should carry out audits on Line Maintenance to identify tools and equipment which are not recommended in the manufacturer's tooling and equipment list. For effective implementation of this, a schedule shall be prepared and findings, corrective actions must be kept in record.