

**PRELIMINARY**  
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**NATIONAL  
TRANSPORTATION  
SAFETY  
COMMITTEE**

**Aircraft Serious Incident Investigation Report**

**PT. Metro Batavia (Batavia Air)  
Boeing 737 - 300; PK-YVZ  
Supadio Airport, Pontianak, Kalimantan  
Republic of Indonesia  
22 November 2012**



**NATIONAL TRANSPORTATION SAFETY COMMITTEE  
MINISTRY OF TRANSPORTATION  
REPUBLIC OF INDONESIA  
2013**

This Preliminary Report was produced by the National Transportation Safety Committee (NTSC), Ministry of Transportation Building 3<sup>rd</sup> Floor, Jl. Medan Merdeka Timur No. 5, Jakarta 10110, INDONESIA.

The report is based upon the initial investigation carried out by the NTSC in accordance with Annex 13 to the Convention on International Civil Aviation Organization, the Indonesian Aviation Act (UU No.1/2009), and Government Regulation (PP No. 3/2001).

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## GLOSSARY OF ABBREVIATIONS

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AOC	Air Operator Certificate
ATC	Air Traffic Controller
ATPL	Air Transport Pilot License
BKN	Broken Cumulonimbus Clouds
C	Celsius
CPL	Commercial Pilot License
CVR	Cockpit Voice Recorder
FA	Flight Attendant
FDR	Flight Data Recorder
ft	Feet
Km	Kilometre
KNKT (NTSC)	<i>Komite Nasional Keselamatan Transportasi</i> (National Transportation Safety Committee)
LH	Left Hand (Left Position)
Mb	Millibars
NOTAM	Notice to Airman
PF	Pilot Flying
PM	Pilot Monitoring
QFE	Height above airport elevation based on local station pressure
QNH	Height above mean sea level based on local station pressure
UTC	Universal Time Coordinate
V <sub>1</sub>	Velocity (Speed) One
WIB	<i>Waktu Indonesia Barat</i> (Western Indonesian Time)

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## INTRODUCTION

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### SYNOPSIS

On 22 November 2012, a Boeing 737-300 aircraft registered PK- YVZ was operated by Batavia Air, as a scheduled passenger service as flight Y6-206 from Supadio Airport (WIOO / PNK) Pontianak, Kalimantan to Soekarno Hatta International Airport (WIII / CGK) Jakarta.

There were two pilots and four flight attendants with 112 passengers on board. The Captain was the Pilot Flying (PF) and the Copilot was the Pilot Monitoring (PM). It was the third flight of the three sectors total planned on that day.

At 11:04 UTC (18:04 WIB)<sup>1</sup>, the aircraft taxi to line up position runway 15.

From the initial take off roll phase until  $V_1$  everything was normal. Suddenly just about to lift off, the flight crew heard a “bang” sound followed by aircraft vibration and swung to the right. The Captain was decided to continue the take off phase while wondering what has just happened during the lift off. After selection of the landing gear handle to up position the flight crew noticed that the left hand (LH) main landing gear red light was still illuminated. The Captain asked the Copilot to recycle the landing gear by reselecting the landing gear handle to down position and back to up position. The Copilot effort to recycle the landing gear was unsuccessful to make the LH main landing gear red warning light extinguished.

Meanwhile, Flight Attendant (FA) 1 called the captain by interphone to inform that she heard a “bang” sound during take off followed by aircraft vibration. The Captain asked the FA 1 to call the engineer who onboard the aircraft as passenger to go inside the cockpit. The Captain explained the abnormal condition and indication of the LH main landing gear red light was still illuminated to the engineer. The engineer checked the LH main landing gear position through the viewing window in cabin area and found that visually the landing gear was in normal position with slightly light entered the wheel well area that normally dark except lighted by the light installed in main landing gear bay.

The Captain made a communication with Supadio Air Traffic Controller (ATC) to get information what has just happened to the aircraft during taxi roll and take off from Runway 15. The Supadio ATC informed that the aircraft has hit a deer during take off based on the evidence there was a deer’s meat and head found by the airport safety officer near the taxiway "D" of runway 15 - 33.

The flight crew analyzed and assessed the condition and came into a decision to continue flight to Jakarta. The Captain informed the situation and coordinated with the Soekarno Hatta ATC and Batavia Flight Operation Cengkareng Base that the aircraft has hit a deer during take off from Pontianak and request assistances to anticipate the unexpected condition during landing.

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<sup>1</sup> The 24-hours clock in Universal Time Coordinated (UTC) is used in this report to describe the local time as specific events occurred. Local time is UTC+7 hours.

During descent and approach Jakarta, the Soekarno Hatta ATC offered any assistance to the pilot during landing. After flight assessment by the captain, everything was still under control that the ATC offers was not needed.

At 12:15 UTC the aircraft landed normally on Runway 25L Soekarno Hatta Airport than the aircraft decelerated normally using thrust reverser, auto deployment of speed brake and auto brake in manual mode due to antiskid problem. As soon as the aircraft rolled down the runway the aircraft experienced heavy vibration and aircraft moved left and right of the centerline. After the aircraft came to full stop in the end of Runway 25L, the fire fighter assistances were available. The Engineer on board disembarked and conduct a visual inspection of the aircraft condition. The engineer stated there was no damage visible.

The flight crew planned to disembark the passengers as soon as possible, than request access stairs and buses to the Batavia Flight Operation Cengkareng Base. After 35 minutes waiting, the passenger stairs and busses did not available. The pilots decided to pull the aircraft to the terminal using a push-back tractor with passengers were still on board the aircraft.

About 12:50 UTC a push-back tractor towed the aircraft to parking stand. The engineer on board is walking on the left side of aircraft to ensure the aircraft condition, following by the fire fighter car behind the aircraft.

The aircraft stop and conducted shutdown procedures on parking stand no. C-13 than all passengers disembarked normally.

All occupants were no injured and the aircraft was minor damaged.



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# **1 FACTUAL INFORMATION**

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## **1.1 HISTORY OF THE FLIGHT**

On 22 November 2012, a Boeing 737-300 aircraft registered PK- YVZ was operated by Batavia Air, as a scheduled passenger service as flight Y6-206 from Supadio Airport (WIOO / PNK) Pontianak, Kalimantan to Soekarno Hatta International Airport (WIII / CGK) Jakarta.

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The flight crew analyzed and assessed the condition and came into a decision to continue flight to Jakarta. The Captain informed the situation and coordinated with the Soekarno Hatta ATC and Batavia Flight Operation Cengkareng Base that the aircraft has hit a deer during take off from Pontianak and request assistances to anticipate the unexpected condition during landing.

During descent and approach Jakarta, the Soekarno Hatta ATC offered any assistance to the pilot during landing. After flight assessment by the captain, everything was still under control that the ATC offers was not needed.

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At about 12:50 UTC a push-back tractor towed the aircraft to parking stand. The engineer on board is walking on the left side of aircraft to ensure the aircraft condition, following by the fire fighter car behind the aircraft.

The aircraft stop and conducted shutdown procedures on parking stand no. C-13 than all passengers disembarked normally.

All occupants were no injured and the aircraft was minor damaged.



**Figure 1 Batavia Boeing 737-300 PK-YVZ Aircraft after the Serious Incident**

## 1.2 INJURIES TO PERSONS

Injuries	Flight crew	Passengers	Total in Aircraft	Others
Fatal	-	-	-	-
Serious	-	-	-	-
Minor/None	6	112	118	Not applicable
TOTAL	6	112	118	-

## 1.3 DAMAGE TO AIRCRAFT

The aircraft was damaged as follows:

- Main wheel no. 1 and no. 2 damage;
- Left main gear shimmy damper broken;
- Left main gear lower torsion link broken;
- Left main gear inner door missing;
- Left main gear center broken;
- Left inboard spoiler dent
- Left main gear anti skid harness broken;
- Lower wing access panel and support panel broken.

## 1.4 OTHER DAMAGE

There was no other damage.

## 1.5 PERSONNEL INFORMATION

### 1.5.1 Pilot in Command

Gender : Male  
Age : 48 years  
Nationality : Indonesian  
Date of joining company : 25 October 2010  
License : ATPL  
Date of issue : 08 March 1993  
Valid to : 31 May 2013  
Type rating : Fokker F-27, Boeing 737 -200,  
-300, -400 and -500

Date of last medical	:	25 June 2012
Last line check	:	14 November 2012
Last proficiency check	:	14 November 2012
FLIGHT TIME		
Total time	:	16, 325 hours 41 minutes
This make & model	:	10,587 hours 41 minutes
Last 90 days	:	239 hours 18 minutes
Last 30 days	:	52 hours 6 minutes
Last 24 Hours	:	5 hours 17 minutes
This Flight	:	2 hours 17 minutes

### 1.5.2 First Officer

Gender	:	Male
Age	:	41 years
Nationality	:	Indonesian
Date of joining company	:	24 June 2009
License	:	CPL
Date of issue	:	11 October 1993
Valid to	:	31 August 2013
Type rating	:	Fokker F-27, Boeing 737 -300, -400 and -500
Date of last medical	:	13 July 2012
Last line check	:	08 August 2012
Last proficiency check	:	08 August 2012
FLIGHT TIME		
Total time	:	information not provided
This make & model	:	information not provided
Last 90 days	:	201 hours 6 minutes
Last 30 days	:	71 hours 6 minutes
Last 24 Hours	:	5 hours 17 minutes
This Flight	:	2 hours 17 minutes

## 1.6 AIRCRAFT INFORMATION

### 1.6.1 General

Registration Mark	: <b>PK-YVZ</b>
Manufacturer	: Boeing Company
Country of Manufacturer	: United States of America
Type/ Model	: 737-300
Serial Number	: 23317
Date of manufacture	: 23 April 1986
Certificate of Airworthiness	
Issued	: 21 July 2012
Validity	: 20 July 2013
Certificate of Registration	
Issued	: 05 April 2011
Validity	: 04 April 2014
Category	: Transport
Time Since New	: 68,063 hours 34 minutes
Cycles Since New	: 51,682 cycles
Last Major Check	: "C" Check seq. 17 at 66,904 flight hours
Last Minor Check	: "A" Check seq. 7 at 68,098 flight hours

### 1.6.2 Engines

Manufacturer	: General Electric
Type/Model	: CFM56-3B2
Serial Number Engine #1	: 724 533
▪ Time Since New	: 53,095 hours 37 minutes
▪ Cycles Since New	: 36,569 cycles
Serial Number Engine #2	: 720 355
▪ Time Since New	: 47,107 hours 41 minutes
▪ Cycles Since New	: 32,914 cycles

### **1.6.3 Main Landing Gear**

Manufacturer : Boeing Company

#### Left Main Landing Gear

- Part Number : 65-73761-107
- Serial Number : C90286
- Time Since New : Unknown
- Cycles Since New : 66,390 cycles

#### Right Main Landing Gear

- Part Number : 65-73761-110
- Serial Number : SS0043
- Time Since New : Unknown
- Cycles Since New : 17,591 cycles

## **1.7 METEOROLOGICAL INFORMATION**

Weather forecast for Soepadio Airport (WIOO) valid on 22 November 2012:

Surface wind : calm  
Visibility : 4 km  
Present weather : Haze  
Cloud : BKN 6000 ft

Weather forecast for Soekarno Hatta Airport (WIII) valid on 22 November 2012:

Surface wind : 220 / 5 knots  
Visibility : 5 km  
Present weather : Haze  
Cloud : FEW 2300 ft

## **1.8 AID TO NAVIGATION**

Not relevance to this serious incident.

## 1.9 COMMUNICATIONS

All communication between aircraft, Supadio ATC, Soekarno Hatta ATC and Batavia Flight Operation Cengkareng Base were established and reported in good condition.

## 1.10 AERODROME INFORMATION

Airport Name	: Supadio Airport
Airport Identification	: WIOO / PNK
Airport Address	: Jl. Adi Sucipto KM. 17 Pontianak
Airport Certificate	: 014/SBU-DBU/VII/2010
Airport Operator	: PT. Angkasa Pura II (Persero)
Coordinate	: 00° 09' 02" S, 109° 24' 15" E
Elevation	: 10 feet
Runway Direction	: 15 – 33
Runway Length	: 2,250 meters
Runway Width	: 30 meters
Surface	: Asphalt concrete

## 1.11 FLIGHT RECORDERS

The aircraft was equipped with a Flight Data Recorder (FDR) and Cockpit Voice Recorder (CVR).

### **Flight Data Recorder (FDR)**

Manufacturer	: Fairchild, USA
Type	: Solid Stated
Part Number	: S 603-1000-00
Serial Number	: 00328



**Figure 2 PK-YVZ Flight Data Recorder**

**Cockpit Voice Recorder (CVR)**

Manufacturer	:	L3 Communication, USA
Type	:	Solid Stated
Part Number	:	2100-1020-02
Serial Number	:	000532512



**Figure 3 PK-YVZ Cockpit Voice Recorder**



Both recorders were recovered from aircraft at Soekarno Hatta Airport by Batavia Air personnel. The day after tomorrow of the serious incident, the NTSC investigator take over and sent these recorders to the NTSC laboratory. The NTSC have been successfully downloaded.

The analysis of the FDR and CVR will be mention in the final report..

## **1.12 WRECKAGE AND IMPACT INFORMATION**

There a deer's meat and head found by the airport safety officer near the Taxiway "D" of Runway15 Supadio Airport, after the Batavia Y6-206 PK-YVZ took off. The airport safety officers conducted a sweep and cleans operation. They found about 75% of deer body included deer head.

It likely the deer come from brushes between runway 15-33 and Indonesia Air Force Base (see Figure 4).

The further inspection conducted by Batavia in their hangar facility found that main wheel no. 1 and no. 2 damage; left main gear shimmy damper broken; left main gear lower torsion link broken; left main gear inner door missing; left main gear center broken; left inboard spoiler dent; left main gear anti skid harness broken and lower wing access panel and support panel broken.

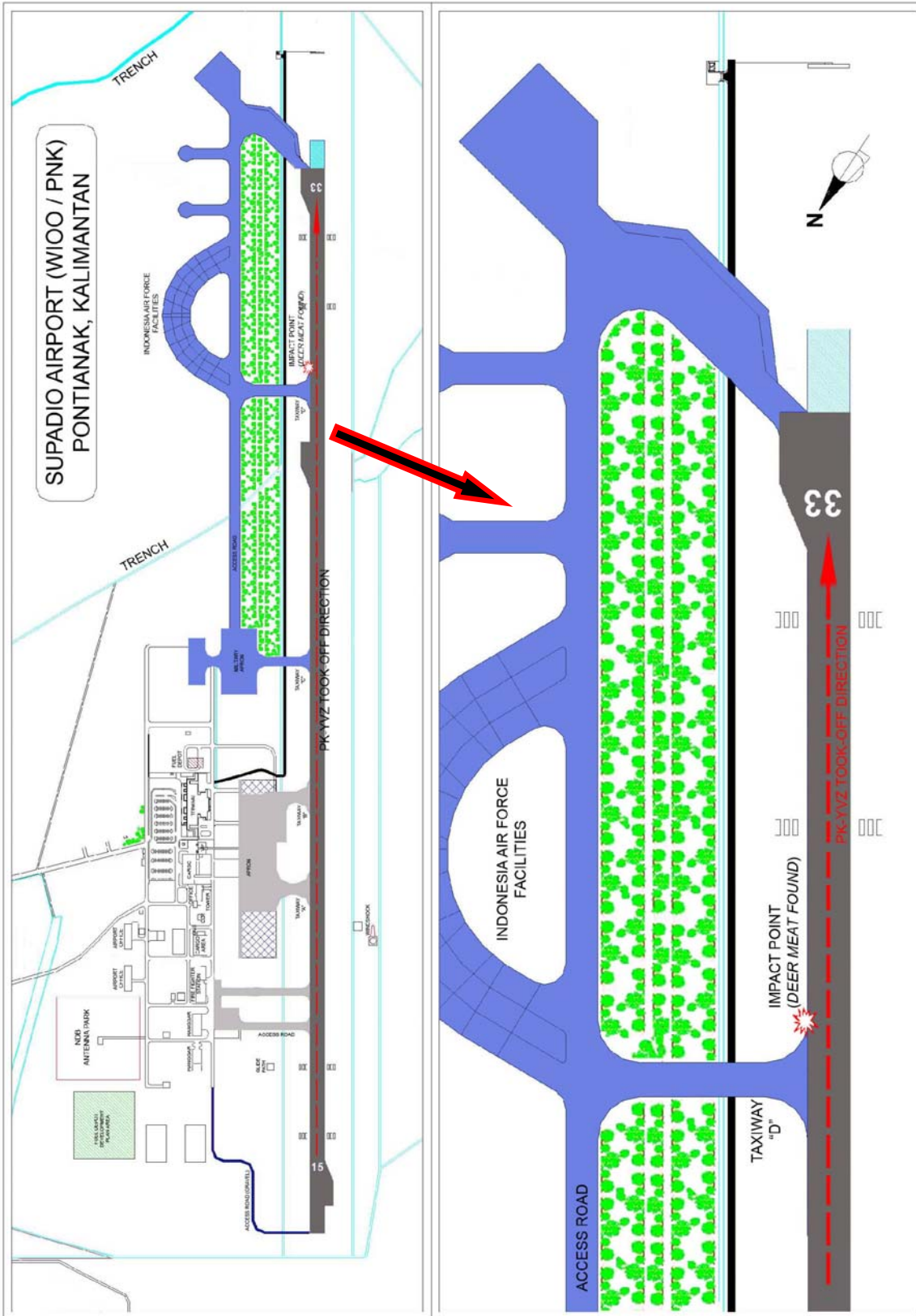


Figure 4 PK-YVZ Occurrence Sketch

### **1.13 MEDICAL AND PATHOLOGICAL INFORMATION**

Not relevance to this serious incident.

### **1.14 FIRE**

There was no evidence of fire in flight or after the aircraft impact.

### **1.15 SURVIVAL ASPECT**

It was a survivable occurrence.

### **1.16 TESTS AND RESEARCH**

Where appropriate will be included in the final report.

### **1.17 ORGANISATIONAL AND MANAGEMENT INFORMATION**

#### **1.17.1 Aircraft Operator**

Aircraft Owner : PT. Metro Batavia (Batavia Air)  
Aircraft Operator : PT. Metro Batavia (Batavia Air)  
Address : Jl. Ir. H. Juanda No. 15  
Jakarta Pusat, Indonesia  
AOC Number : AOC 121/007

#### **1.17.2 Airport Operator**

Airport Name : Supadio Airport  
Airport Operator : PT. Angkasa Pura II (Persero)  
Airport Address : Jl. Adi Sucipto KM. 17 Pontianak  
Kalimantan Barat, Indonesia  
Airport Certificate : 014/SBU-DBU/VII/2010

## **1.18 ADDITIONAL INFORMATION**

The investigation is continuing and will include an analysis of the flight data and cockpit voice recorders during the flight, and airport's operational documentation and procedures with respect to airport sterilization area and any other relevant information.

## **1.19 USEFUL OR EFFECTIVE INVESTIGATION TECHNIQUES**

The investigation was conducted in accordance with NTSC-approved policies and procedures, and in accordance with the standards and recommended practices of Annex 13 to the Chicago Convention.

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## **2 ANALYSIS**

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To be included in the final report.

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### **3 CONCLUSION**

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To be included in the final report

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## **4 RECOMMENDATION**

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According to factual information and initial finding, the National Transportation Safety Committee issued the following recommendations to address safety issues identified in this preliminary report.

### **4.1 Recommendation to PT. Metro Batavia (Batavia Air)**

- To improve the company emergency response plan regarding to post-incident handle procedure.

### **4.2 Recommendation to PT. Angkasa Pura II Supadio Airport**

- To ensure the air side of the Supadio Airport is sterilize from any un-authorized personnel, foreign objects or wildlife.