



**PRELIMINARY REPORT ON SERIOUS INCIDENT INVOLVING AIRBUS A330-343 AIRCRAFT OPERATED BY TURKISH AIRLINES INC. WITH NATIONALITY AND REGISTRATION MARKS TC-LOL WHICH OCCURRED ON RUNWAY 21, PORT HARCOURT INTERNATIONAL AIRPORT (DNPO), PORT HARCOURT, RIVERS STATE, NIGERIA ON THE 31ST OF DECEMBER 2019**

<b>Aircraft Accident Report No.:</b>	TURKISH/2019/12/31/D
<b>Registered Owner:</b>	Sky High IV Leasing Designated Activity Company
<b>Registered Operator:</b>	Türk Hava Yollari A.O. (Turkish Airlines Inc.)
<b>Aircraft Type and Model:</b>	Airbus A330-343
<b>Manufacturer:</b>	Airbus Industrie
<b>Year of Manufacture:</b>	2010
<b>Nationality and Registration Marks:</b>	TC-LOL
<b>Serial Number:</b>	1098
<b>Location:</b>	Runway 21, Port Harcourt Intl. Airport, Rivers State, Nigeria.
<b>Date and time:</b>	31st December 2019 at about 03:30 h

*All times in this report are local time (UTC +1) unless otherwise stated*

## **INTRODUCTION**

The Accident Investigation Bureau (AIB) was notified of the occurrence by the Nigerian Civil Aviation Authority (NCAA) on 31st December, 2019; the day of the occurrence. Investigators were dispatched to the scene the next day to commence post occurrence



assessments, under the provisions of the Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 2019 and International Civil Aviation (ICAO) Annex 13.

All relevant stakeholders were notified. The purpose of this preliminary report is to provide details of the initial facts, discussions and findings surrounding the occurrence; it includes information gathered from witness statements, flight recorders, Air Traffic Control (ATC) reports, recordings, transcript, weather reports, and preliminary inspection of the scene and the incident aircraft.

**The investigation is ongoing.**

## **1.0 FACTUAL INFORMATION**

### **1.1 History of the Flight**

On 30th December 2019 at about 20:46 h, an Airbus A330-343 aircraft with nationality and registration marks TC-LOL operated by Turkish Airlines Inc. departed Istanbul Airport (LTFM), Istanbul; Turkey for Port Harcourt International Airport (DNPO), Rivers State; Nigeria, as a scheduled flight THY3WJ operating on Instrument Flight Rules (IFR) flight plan in Instrument Meteorological Condition (IMC). The flight had 295 persons on board including 11 crew members. The Captain was the Pilot Flying (PF), while the Co-Pilot was the Pilot Monitoring (PM).

According to the crew statements, the flight was delayed for two hours before departure. The crew added that at the time of initial contact with Port Harcourt Approach (APP), they noticed that the Automatic Terminal Information Service (ATIS), was off the air.

At 03:10 h, THY3WJ established two-way contact with Port Harcourt Approach reported descending to FL220 on-course NAPVA. APP acknowledged and cleared THY3WJ to Port Harcourt VOR (POT) FL220 and to expect no delay for ILS Approach runway 21, and to stand by for a full meteorological report. The crew requested for further descent and was further cleared to 2,400 ft. APP subsequently passed 02:00 UTC meteorological report to the crew as follows: "WIND IS CALM, VISIBILITY 5KM IN HAZE, NO SIGNIFICANT CLOUD, TEMPERATURE 24°C, DEW POINT 28°C, QNH 1009." The clearance was acknowledged by the crew.

At 03:22 h, THY3WJ was handed over to Port Harcourt Tower by APP. At 03:26 h, THY3WJ established contact with Port Harcourt Tower, THY3WJ reported that it was established on the Localizer (LOC) runway (RWY) 21. Thereafter, Port Harcourt Tower acknowledged and cleared THY3WJ for landing RWY 21 in calm wind.

The PM stated that at 400 ft AGL, the PF disengaged the auto pilot and flew the aircraft manually. The crew further stated that the approach was stable before passing 1,000 ft AGL and to touchdown.

At 03:30 h, THY3WJ landed right of the runway centreline, where the right main wheel crossed the runway edge line and continued along the runway shoulder. The tyre tracks showed that the right main wheel returned to the runway centreline.

At 03:56 h, the crew reported to the Tower that they had a flat main wheel tyre and requested post landing inspection of the runway.

At 04:26 h, the Tower informed the crew that there were only three (03) edge lights to the right of the runway after the after the rapid exit 03.

During post-incident inspection, the aircraft tyre marks were found on the runway indicating that the touched down point was right of the runway centreline, at about 612 m from the threshold. The right main wheel crossed the runway edge line onto the runway shoulder at a distance of about 27 m from the touchdown point, impacted and damaged three runway edge lights, and returned to the runway at a distance of about 1,037 m, from the threshold. The tyre marks further indicated that the aircraft returned to the runway centreline at about 1,478 m from the threshold.

The incident occurred at night.

## 1.2 Injuries to Persons

<b>Injuries</b>	<b>Crew</b>	<b>Passengers</b>	<b>Total in the aircraft</b>
<b>Fatal</b>	Nil	Nil	Nil
<b>Serious</b>	Nil	Nil	Nil
<b>Minor</b>	Nil	Nil	Nil
<b>None</b>	11	284	295
<b>Total</b>	11	284	295

### **1.3 Damage to Aircraft**

The aircraft was slightly damaged.

### **1.4 Other Damage**

Three runway edge lights were damaged.

### **1.5 Personnel Information**

#### **1.5.1 Captain (Pilot Flying)**

Nationality:	Turkish
Age:	43 years
Licence Type:	ATPL (A)
Licence Validity:	31st January, 2020
Aircraft Ratings:	B737-300/900, A330, A350
Medical Certificate Validity:	16th July, 2020
Instrument Rating Validity:	31st January, 2020
Simulator Validity:	7th January, 2020
Proficiency Check:	15th January, 2019
Route/line Check:	14th June, 2019
Total Flying Time:	11,538:08 h
Total on type:	694:03 h
Total on type (PIC):	694:03 h
Last 90 days:	178:23 h
Last 28 days:	28:04 h
Last 7 days:	20:37 h
Last 24 hours:	10:12 h

## 1.5.2 Co-pilot (Pilot Monitoring)

Nationality:	Turkish
Age:	42 years
Licence Type:	ATPL (A)
Licence Validity:	30th September, 2020
Aircraft Ratings:	A330, A350
Medical Certificate Validity:	23rd November, 2020
Instrument Rating Validity:	31st September, 2020
Simulator Validity:	13th February, 2020
Proficiency Check:	14th August, 2019
Route/line Check:	25th February, 2019
Total Flying Time:	2,726:33 h
Total on type:	1,752:02 h
Total on type (PIC):	695:13 h
Last 90 days:	45:07 h
Last 28 days:	45:05 h
Last 7 days:	28:18 h
Last 24 hours:	06:33 h

## 1.6 Aircraft Information

### 1.6.1 General Information

Type:	A330-343
Manufacturer:	Airbus Industrie
Year of Manufacture:	2010
Serial Number:	1098
Certificate of Airworthiness Validity:	26th December, 2020
Certificate of Insurance:	15th of November, 2020
Certificate of Registration:	Issued 26th of December, 2019



Noise Certificate: Issued 26th of December, 2019  
Airframe time: 33,413 h  
Cycles Since New (CSN): 6647

### 1.6.2 Powerplant

Engine model: Rolls-Royce, Trent 772B-60

	<b>No. 1</b>	<b>No. 2</b>
<b>Serial Number</b>	41735	41027
<b>Time Since New</b>	30,267	64,252
<b>Cycles Since New</b>	6,033	22,449
<b>Year of Manufacture</b>	2009	1995

Fuel type used: Jet A-1

### 1.7 Meteorological Information

**Time: 0100 UTC**

Wind: Calm  
Visibility: 5 km  
Weather: Slight haze  
Cloud: No significant cloud  
Temperature: 24/23°C  
QNH: 1009 hPa

**Time: 0200 UTC**

Wind: Calm  
Visibility: 5 km  
Weather: Slight haze  
Cloud: No significant cloud

Temperature: 24/23°C  
QNH: 1009 hPa

**Time: 0300 UTC**

Wind: Calm  
Visibility: 5 km  
Weather: Slight haze  
Cloud: No significant cloud  
Temperature: 21/20°C  
QNH: 1009 hPa

## **1.8 Aids to Navigation**

Instrument Landing System (ILS) was available and serviceable at the time of the incident.

## **1.9 Communications**

There was effective communication between the aircraft and the Air Traffic Control.

## **1.10 Aerodrome Information**

Port Harcourt International Airport with location indicator DNPO has a bi-directional runway with designation 03/21. Runway 21 was the runway in use for the approach. The runway has a dimension of 3000 m by 60 m. Aerodrome Reference Point is 05°00'55.6545"N 006°56'38.3168"E while the elevation is 91 ft.



### 1.11 Flight Recorders

The aircraft was fitted with Solid-State Flight Data and Cockpit Voice Recorders.

	<b>Flight Data Recorder</b>	<b>Cockpit Voice Recorder</b>
<b>Manufacturer</b>	L3 Communications, USA	L3 Communications, USA
<b>Model</b>	FA2100	FA2100
<b>Part number</b>	2100-4045-00	2100-1025-02
<b>Serial number</b>	000617546	000591433

The Flight Recorders were downloaded at the Turkish Airlines flight safety facility under supervision of the Turkish Transport Safety Investigation Centre, with the consent of the Accident Investigation Bureau, Nigeria (AIB-N). The files were sent to the AIB-N for analysis and transcription.

### 1.12 Wreckage and Impact Information

Nos. 3 and 7 main wheel tyres were scuffed. No. 8 Main wheel tyre was found deflated with shredded plies. The right inboard flap was dented on its lower surface. A dent was observed to the internal fan cowl of engine No. 2. Debris from the tyres was found on the runway.



**Figure 1:** Photo of the aircraft parked at the apron on the day of the occurrence



**Figure 2:** Photo of the No. 8 main wheel tyre



**Figure 3:** Photo of No. 2 engine



**Figure 4:** A close-up photo of the observed damaged area (circled)





**Figure 5:** Photo of one of the damaged runway edge lights



**Figure 6:** A photo of the tyre marks from the right main wheel tyres on the runway shoulder

### **1.13 Medical and Pathological Information**

No medical or pathological tests were conducted on the flight crew.

### **1.14 Fire**

There was no pre- or post-impact fire.

### **1.15 Survival Aspect**

The aircraft was structurally intact and taxied under its own power to the apron at the international wing of the airport, where the crew and passengers disembarked normally, using the passenger exit doors.

### **1.16 Test and Research**

Not applicable.

## **Initial Findings**

1. The flight crew were certified and qualified to conduct the flight in accordance with relevant regulations.
2. The Pilot was the Pilot Flying while the Co-pilot was the Pilot Monitoring.
3. At the time of initial contact with Port Harcourt Approach (APP), they noticed that the Automatic Terminal Information Service (ATIS), was not functional.
4. During the final approach, visibility diminished and runway was sighted at the decision altitude (DA)
5. There were no runway centreline marks on the runway touchdown zone
6. Post-occurrence inspection showed that the aircraft touched down right of the runway centreline about 611 m from the threshold, veered onto the runway shoulder and recovered to the centreline.
7. The No. 3, 7 and 8 main wheel tyres were damaged.
8. Three runway edge lights were damaged.
9. Debris from the tyres and runway edge lights were found on the runway during post-incident inspection.
10. The PM reported that auto pilot was disengaged at 400 ft AGL and the aircraft was flown to touchdown manually

## **Further investigative actions**

1. Examination of the engine condition.
2. Analysis and transcription of the flight recorder files.