Oman Transport Safety Bureau (OTSB)

Preliminary Report

OTSB Case File No: AIFN-003/05/2025

Tyre Failure and Loss of Hydraulics Oman Air Aircraft Boeing 737-800 MAX - A4O-ML at Muscat (MCT) International Airport (OOMS), Oman.

Operator: Oman Air
Make and Model: Boeing 737-800 MAX
Nationality and Registration Marks: Omani, A4O-ML

Location of the Occurrence: Muscat International Airport, 23°35'36'' N058°17'04'' E
State of Occurrence: Sultanate of Oman
Date of Occurrence: 31st May 2025, 05:22 UTC

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Purpose of the Investigation

The investigation is conducted by Oman Transport Safety Bureau (OTSB) pursuant to Civil Aviation Law (CAL) 76/2019 Chapter 10, and in compliance with the Civil Aviation Regulation CAR-13, Sub Part CAR 13.070: Instituting and Conducting of Investigations as State of Occurrence of Accidents or Incidents in the Sultanate of Oman.

The sole objective of the investigation is to prevent future aircraft accidents and incidents and not to apportion blame or liability. Oman Transport Safety Bureau issues the Preliminary Report in accordance with the National and International standards, and Industry best practice.

Unless otherwise mentioned, all times in this report are UTC. Local Time in the Sultanate of Oman is UTC plus (+) 4 hours. Photos and figures used in this report were taken from different sources and adjusted from the original for the sole purpose of improving clarity of the report.

The Preliminary Report is publicly available at: http://www.mtcit.gov.om

Abbreviations	Description
°	Degree
AAI	Air Accident Investigation
AAIS	Air Accident Investigation Section
ACARS	Aircraft Communication Addressing and Reporting System
ALT	Altitude
AME	Aircraft Maintenance Engineer
AMSL	Above Mean Sea Level
ANSIC	Air Navigation Service Incident Coordination
AOC	Air Operator Certificate
ATCO	Air Traffic Control Officer
ATC	Air Traffic Control
CAA	Civil Aviation Authority
CAL	Civil Aviation Law
C	Celsius
CPL	Commercial Pilot License
CRB	Crew Rest Break
CSN	Cycles Since New
CVR	Cockpit Voice Recorder
DFDR	Digital Flight Data Recorder
DGMET	Directorate General of Meteorology
ENG	Engine
FIR	Flight information Region
FO	First Officer
FL	Flight Level
FOD	Foreign Object Damage
FORDEC	Facts, Options, Risks and Benefits, Decision, Execution and Check
FT	Feet

HST	High Speed Taxiway
HYD	Hydraulic
HYD SYS	Hydraulic System
ICAO	International Civil Aviation Organization
IIC	Investigator-in-Charge
IR	Instrument Rating
KTS	Knots
LE	Leading Edge
MCC	Maintenance Control Centre
MCT	Muscat
MEP	Multi Engine Powerplant
METAR	Meteorological Routine Aerodrome Report
NM	Nautical Mile
NNC	Non Normal Checklist
NTSB	National Transportation Safety Board
OA	Oman Airports
OCC	Operations Control Center
OOMS	Muscat International Airport
OTSB	Oman Transport Safety Bureau
PF	Pilot Flying
PM	Pilot Monitoring
RWY	Runway
R/T	Radiotelephony
SOP	Standard Operating Procedures
TBA	To Be Advised
UTC	Universal Time Coordinate
Vapp	Approach Speed

Vref	Reference Speed for Landing
VHF	Very High Frequency

Synopsis

The serious incident occurred on 31st May 2025 at 05:22 UTC. Oman Transport Safety Bureau (OTSB) was notified of the occurrence by the Oman Airports (OA) via Informa Cast notification system, through OTSB email on 31st May 2025 at 11:49 AM Local Time. The serious incident was later reported to OTSB by Oman Air (OA) and Air Navigation Service Incident Coordination (ANSIC) on 2nd June 2025 at 08:33 AM LT and 3rd June 2025 at 09:30 AM LT respectively.

The serious incident involved Oman Air Boeing 737-800 MAX aircraft with registration marks A4O-ML. The aircraft was being operated as scheduled passenger aircraft OMA815, from Muscat International Airport (OOMS), Sultanate of Oman to Bangkok Suvarnabhumi International Airport (VTBS), Thailand. There were a total of 152 persons on-board the aircraft: 145 passengers, two flight crew members, and five cabin crew members.

The Aircraft lined up on Runway (RWY) 26L for departure, and clearance for take-off was given, the flight crew of WY815 commenced the takeoff process. After the aircraft lifted off the runway and while climbing, the flight crew contacted the Tower (TWR) Air Traffic Control Officer (ATCO) that the aircraft experienced low pressure engine (ENG) No.1 hydraulic (HYD) PUMP light. After flap retraction the flight crew got leading edge (LE) flaps transit light and gear disagree as left gear showed green and red light simultaneously. After takeoff the flight crew of followed the checklist and conducted Facts, Options, Risks and Benefits, Decision, Execution, and Check (FORDEC) and then decided to return to Muscat (MCT) and requested ATCO for holding pattern in order to burnout fuel to reduce Approach Speed (Vapp) and to avoid overweight landing.

At 13:27, Oman Airports Operations while conducting routine runway inspection, observed Foreign Object Damage (FOD) on the south RWY 26L and reported to ATCO. Few seconds later flight OMA231 which was rolling on the RWY 26L, reported that there were tire debris on the RWY. The FOD was later identified as coming from Oman Air flight OMA15, which had departed earlier at 13:23.

All debris were collected from the south RWY 26L. The flight crew of flight WY815 requested ILS approach to land. Runway Inspection was conducted and Air Traffic Control (ATC) activated northern RWY 26R/08L at 14:40. The southern RWY was reactivated for operations at 16:27 UTC. The incident flight WY815 landed safely.
Code 3 (Full Emergency) was activated at 15:49 and OMA815 landed safely at 16:12 on RWY 26R. The aircraft stopped and hold abeam taxiway Y4 for Engineer's inspection and evaluation. Following the inspection by the Engineer it was found that number 1 tire failed and there were also hydraulic pipes which were damaged.

Due to the damages sustain on the aircraft, the flight crew were unable to taxi the aircraft. The aircraft was towed to the stand number 308 and parked at 16:48.

OTSB instituted investigation and based on the information gathered, the occurrence was classified as a serious incident and decided to conduct an investigation. The following parties were notified:

- State of Design and Manufacturer of Aircraft, United State of America (USA), National Transportation Safety Board (NTSB);
- The State of Occurrence, Sultanate of Oman Civil Aviation Authority (CAA)

In line with OTSB Investigation procedures, the Director of OTSB appointed an Investigator-In-Charge (IIC) and investigation team to assist the IIC with the investigation. The following investigation authority is involved in the investigation by appointing accredited representatives and advisor to the investigation:

- State of Design and Manufacturer of Aircraft, United State of America (USA), National Transportation Safety Board (NTSB).

After the investigation is completed, OTSB will release and publish the Final Report. The Final Report will be made public at the below link:
http://www.mtcit.gov.om.

1. Factual Information.

1.1. History of the Flight.

1.1.1 On the 31st May 2025, Oman Air aircraft with registration marks A4O-ML, a Boeing 737-800 MAX departed from Muscat International Airport (OOMS), Sultanate of Oman, on a international passenger flight with intended destination Bangkok Suvarnabhumi International Airport (VTBS).

1.1.2 The approach (APP) Air Traffic Controller (ATCO) reported that Runway 26L was in use and there were 5 aircraft on the frequency.

1.1.3 At the time 05:23:13, the APP ATCO stated that the flight crew of aircraft OMA815 established contact with APP ATCO after departure. The aircraft OMA815 was radar identified and instructed by APP ATCO to climb to FL150 and turn right to heading 040°. Meanwhile, at the time 05:25, the APP ATCO instructed the flight crew of OMA815 to proceed direct to waypoint (WY) MUSRU and climb to FL250.

1.1.4 At the time 05:30 the flight crew of OMA231 shortly after airborne, reported to the APP ATCO that there is presence of tire debris on the runway.

1.1.5 At the time 05:31:12, the flight crew of OMA815 informed APP ATCO that the aircraft has a technical issue and they are requesting to hold at their present position and stop the climb at 12000 feet (FT). The APP ATCO approved the request. The APP ATCO informed about OMA231 report of the presence of tire debris on the runway. The TWR controller requested for a runway inspection and held all departing traffic.

1.1.6 At the time 05:31:33, the APP ATCO informed the departing traffic to expect a delay due to a runway inspection being conducted. At the time 05:32:14, APP ATCO informed Tower (TWR) ATCO that aircraft OMA815 is experiencing a technical issue and the flight crew of OMA815 would hold to assess the situation and might return to Muscat. According to the Air Navigation Service Incident Coordination (ANSIC) transcript the flight crew of aircraft OMA815 started holding at the time 05:32:25.

1.1.7 At the time 05:37:40, TWR ATCO coordinated with APP ATCO, informing that the runway 26L was blocked due to an ongoing runway inspection to clear tire debris reported by a departing aircraft OMA231, which was suspected to be from aircraft OMA815. As a result, arrivals needed to be delayed until the runway inspection was completed and was confirmed clear. At the time 05:44:40, TWR ATCO confirmed to APP ATCO that the runway is clear.

1.1.8 At the time 06:26:09, APP ATCO contacted flight crew of aircraft OMA815 and asked about their expected duration of holding and the flight crew of aircraft OMA815 responded that they will take approximately one hour. At the time 06:39:39, TWR ATCO informed APP ATCO that the runway in use had been changed from 26L to 26R. At the time 07:57:51, the flight crew of informed APP ATCO that they were ready for the approach.

1.1.9 At the time 06:52:17, APP ATCO asked the flight crew of aircraft OMA815 if there were any hazardous materials on board and the crew of aircraft OMA815 responded that they were carrying chemical solutions, located in the lower compartment number 4.

1.1.10 At the time 06:55:53, the flight crew of OMA815 reported to APP ATCO that they had lost Hydraulic System A. The flight crew of aircraft OMA815 further mentioned that the aircraft had an issue with the landing gear and leading edge (LE) flaps and requested to use the north runway, as it would be more suitable. At the time 07:06:47, APP ATCO asked the flight crew of OMA815 about the status of the nose wheel, and the flight crew of OMA815 reported that all indications were normal.

1.1.11 At the time 06:08:00, the flight crew of OMA815 informed APP ATCO that the expected approach time is approximately two hours later after burning some fuel. The flight crew of OMA815 requested an ILS approach for RWY 08L or 26L, if possible, as they planned to perform a very high-speed approach. At the time 06:08:45, APP ATCO communicated all of the flight crew of OMA815 requests to TWR ATCO. At the time 06:39:39, TWR ATCO informed APP ATCO that the runway in use had been changed from 26L to 26R.

1.1.12 At the time 07:31:54, APP ATCO advised the flight crew of aircraft OMA815 to report when ready to return to MCT. The flight crew of aircraft OMA815 responded that they would be ready in approximately half an hour and APP ATCO informed TWR ATCO accordingly.

1.1.13 At the time 07:50:00, Oman Airports activated CODE 3 emergency signal due to fire risk. At the time 07:57:52, the flight crew of aircraft OMA815 reported that they were ready for approach and APP ATCO initiated the approach procedure. At the time 08:00:11, the flight crew of OMA815 reported to APP ATCO that the expected touchdown time will be at 08:11. At the time 08:05:00, APP ATCO updated the flight plan route and changed destination from VTBS to OOMS.

1.1.14 At the time 08:07:20, APP ATCO informed TWR ATCO that the flight crew of aircraft OMA815 would return to MCT, TWR ATCO confirmed the runway would be blocked when aircraft OMA815 lands until engineers conduct and assess the aircraft's condition for vacating.

1.1.15 At the time 08:08:24, the flight crew of aircraft OMA815 reported to the APP ATCO that they were established on the RWY26R localizer at 13 Nautical Miles (NM) and was subsequently transferred from APP frequency to the TWR frequency.

1.1.16 At the time 08:08:24, the flight crew of aircraft OMA815 contacted TWR ATCO at 11 NM maintaining 3000FT with ground speed of 183 Miles Per Hour (MPH). TWR ATCO cleared the flight crew of aircraft OMA815 to land and the flight crew was advised to expect to hold on the runway. The aircraft landed safely on RWY 26R and came to a full stop on the runway at 08:13:20.

1.1.17 At the time 08:14:14 TWR ATCO instructed the flight crew of aircraft OMA815 to contact fire brigade on frequency 121.6, the flight crew informed the TWR ATCO that they have shut down the engine and waiting for the engineer to conduct the inspection of the aircraft. Following the inspection of the aircraft by an engineer, the flight crew stated they were ready to taxi out of the RWY, TWR ATCO then cleared the flight crew to vacate the runway via taxiway Yankee (Y)4 left on Victor (V), Sierra (S) to stand 101.

1.1.17 At the time 08:22:27, the flight crew of aircraft OMA815 informed TWR ATCO that the aircraft could not be steered due to a nose wheel steering failure and requested a tow truck to assist in vacating the runway.

1.1.18 At the time 08:25:17, TWR ATCO informed APP ATCO that the south runway is now active for RWY 08R or 26L. At the time 08:27:00, TWR ATCO switched the runway in use from RWY 26R to RWY 26L after fire personnel reported an oil leak on RWY 26R.

1.1.19 The AME arranged for the tow truck and aircraft OMA815 was subsequently towed to stand 308 and parked at the time 08:48.

1.1.20 The estimated holding time until landing was approximately 2 hours, 40 minutes, and 20 seconds.

1.1.21 During the interview the flight crew reported that, after departure from OOMS during initial climb before flap retraction they got Low Pressure ENG no.1 HYD PUMP indication light and decided to clean up the aircraft and then to identify and fix the problem. After flap retraction, the flight crew got Leading Edge (LE) FLAPS transit light and gear disagree as left gear showed green and red light simultaneously.

1.1.22 The flight crew carried out Non-Normal Checklist (NNC) one by one, then they did after take-off checklist and Facts, Options, Risks and Benefits, Decision, Execution, and Check (FORDEC). Based on this assessment, the crew decided that the best option was to return back to OOMS, but according to LE FLAPS transit light NNC the approach should be Reference Speed for Landing (Vref) 15 Knots (KTS) plus 15° flaps, which was quite high with current weight of around 79 tons. The flight crew contacted the Air Traffic Control Officer (ATCO) and requested holding pattern to burnout fuel to reduce approach speed (Vapp) and to avoid overweight landing. The flight crew was also in contact with Oman Air Maintenance Control Centre (MCC) and Operations Control Center (OCC) through Aircraft Communication Addressing and Reporting System (ACARS) and Very High Frequency (VHF). The flight crew were cleared by the ATCO to hold over the way point (WP) MIGMO at 7000’ feet. While holding, the flight crew briefed both the cabin crew and passengers.

1.1.22 During the holding, the flight crew decided to extend the gears down to save time and to make fuel burnout faster. The flight crew stated that despite the Low Pressure ENG no.1 HYD PUMP indication light was confusing, the pressure in system A was ok, but hydraulic quantity was reading zero. The flight crew lowered the landing gear lever down and pressure in system A dropped to almost zero and landing gear were not confirmed down and locked. The flight crew decided to extend the landing gear manually as per the NNC. Landing gears were confirmed down and locked, then in order to increase fuel burnout rate the flight crew

decided to extend flaps to position 5° and to keep speed 220 KTS. Then ATCO was advised by the flight crew of the Estimated Time of Arrival (ETA) and requested to land on the North runway as it had precision approach system. ATCO changed the RWY in use to the North RWY 26 R and requested the flight crew to notify the ATCO when they are ready for approach.

1.1.23 During the interview the flight crew stated that passengers and cabin crew were updated about the situation and expected arrival time. After about two hours of holding and when landing weight became about maximum landing weight, the Captain briefed First Officer (FO), Cabin Crew and passengers were notified about the approach time and expected touchdown time. Approach for a landing was normal, however during the final approach the ATCO advised that the flight crew should stop on the runway after landing for inspection from ground staff with presence of fire brigade.

1.1.24 The flight crew stated that they stopped near the High-Speed Taxiway (HST) of taxiway Y4 and the ATCO instructed the flight crew to change to fire brigade frequency 121.6. The fire brigade asked the flight crew to shut down ENG no.1 to conduct the inspection. The flight crew started Auxiliary Power Unit (APU) and shut down ENG no.1. The inspection was completed. The flight crew stated that the ATCO asked if they were able to vacate the runway. Despite alternate (ALT) Nose Wheel Steering switch was on, the flight crew realized that system B hydraulic quantity was very low and therefore it was impossible to vacate the runway using steering wheel.

1.1.25 The flight crew requested a push back truck to the stand. Push back truck arrived quite fast, the flight crew shut down engine no.2 and the aircraft was towed to the stand. At the stand, the Aircraft Maintenance Engineer (AME) informed the flight crew that the root cause of the problem was the tire failure and it’s debris damaged hydraulic lines and leading edge (LE) flaps.

1.1.26 The Cabin Director (CD) stated that after takeoff everyone was seated and secured. While there were waiting for seatbelt sign to go off so that they can commence cabin service, suddenly they heard a sound of landing gear goes down it was abnormal. The CD informed all crew to secure themselves until further notice. Few minutes later, the Captain called the CD to the flight deck and informed the CD that there are technical issues on hydraulic system, landing gear and flaps. The Captain informed the cabin crew that they have to go back to MCT but first they have to burn some fuel for 3 hours to reduce the weight of the aircraft. Throughout the flight both the cabin crew and the passengers were briefed.

1.1.27 The CD stated that after 3 hours they landed in MCT; and were towed to the stand where they disembarked all passengers safely without any injuries. After disembarkation the cabin crew completed post flight duties and proceeded to crew rest break (CRB).

1.1.28 The Aircraft Maintenance Engineer (AME) who conducted the flight servicing on the aircraft before the serious incident, stated that the aircraft A4O-ML arrived to MCT from Riyadh, with chocks on at 07:05 local time at Bay 101. The AME conducted the walk around inspection

and completed the transit check and no anomalies were identified, the aircraft was deemed serviceable for continued operation.

1.1.29 After landing, AME stated that visual inspection was carried out after switching off left engine (LH ENG), the AME observed that wheel #1 was de-capped and HYD fluid was leaking from top of the LH main landing gear.

1.1.32 Both the left-hand main tire and the brakes for wheels No.1 and No.2 were replaced and the aircraft was towed to the hanger for further inspection.

1.2 Injuries to Persons

Injuries	Pilot	Cabin Crew	Passengers	**Total on Board**	Other
Fatal	-	-	-	-	-
Serious	-	-	-	-	-
Minor	-	**-**	-	**-**	-
No Injuries	2	5	145	**152**	-
Total	**2**	**5**	**145**	**152**	-

Note: Other, means people on ground.

1.3. Damage to Aircraft.

1.3.1 Damages were sustained on the tires, access panels, left hand inboard flap, Krueger flaps and hydraulic pipes.

Figure 1 showing damages on the left-hand main tire, HYD pipes as indicated by red cycle and broken access panel.

1.4. Other Damage.

1.4.1 No other damages were reported

1.5. Personnel Information:

1.5.1 Captain – Pilot Monitoring (PF):

Nationality	Ukrainian		
Medical validity	1st Apr 2026	Licence type	ATPL
Licence validity	28th Feb 2030	Type endorsed	B737
Ratings	B737, IR, MEP		
English Language Proficiency Level, Issue and Expiry Date	4, 26th Apr 2023, 20th Apr 2026		
LPC Issue Date	28th Mar 2025	OPC Issue Date	22nd Sep 2024
LPC Expiry Date	30th Apr 2026	OPC Expiry Date	31st Oct 2025
Restrictions	Nil		
Previous Accidents	Nil		

Flying experience:

Total Flying Hours	13163:27
Total Flying Hours as Captain	8149:21
Last 24 hrs	03.45
Last 7 days	21:22
Last 30 days	89:22
Last 90 days	201:41

1.5.2 First Officer (FO) – Pilot Flying (PM):

Nationality	Omani		
Medical valid	04th Aug 2025	Licence type	ATPL
Licence valid	31st Aug 2029	Type endorsed	B737
Ratings	B737, IR, MEP		
English Language Proficiency Level, Issue and Expiry Date	5, 22nd Oct 2020, 21st Sep 2026		
LPC Issue Date	03rd Mar 2025	OPC Issue Date	12th Sep 2024
LPC Expiry Date	31st Mar 2026	OPC Expiry Date	30th Sep 2025
Restrictions	Nil		
Previous Accidents	Nil		

Flying experience:

Total Flying Hours	2218:21
Last 24 hrs	03:45
Last 7 days	15:44
Last 30 days	34:37
Last 90 days	159:45

1.5.3 Cabin Director (CD)

Nationality	Omani		
Licence Type	FCA-12108		
Licence Valid	30th Apr 2026	Type endorsed	B737
Ratings	B737-B787-A330		
Medical Expiry Date	12th Feb 2026		
Restrictions	NIL		
Previous Accidents	NIL		

Flying experience:

Total Flying Hours	TBA
Total Flying Hours on Type	TBA
Last 24 hrs	03:48
Last 7 days	18:39
Last 30 days	84:10
Last 90 days	208:15

Aircraft Maintenance Engineer (AME): (Prior to the incident)

Nationality	Omani		
Licence type	CAT-B1		
Licence validity	21st Aug 2025	Type endorsed	B737-8(MAX)
Ratings	B737-8(MAX) / B737-800/900(NG)		

Aircraft Maintenance Engineer (AME): (After the incident)

Nationality	Omani		
Licence type	CAT-B1		
Licence validity	01st Apr 2026	Type endorsed	B737-8(MAX)
Ratings	B737-8(MAX) / B737-800/900(NG) / B787-8/9		

1.6 Aircraft Information:

1.6.1 The Boeing 737-8 MAX is a narrow-body, twin-engine jet airliner, representing a fourth generation evolution of the popular 737 family. It's known for its fuel efficiency, due to advanced engines and aerodynamics, and it also features a more comfortable interior with the Boeing Sky Interior. The 737-8 MAX is designed for both short domestic and long international flights. Key specifications include a length of 39.5 meters, a wingspan of 35.9 meters, and a maximum take-off weight of 82,190 kg. It typically seats 189 passengers in a single class configuration or 18 in business class and 150 in economy. The aircraft features the CFM LEAP-1B engine, advanced winglets, and the Boeing Sky Interior, enhancing both performance and passenger experience.

Airframe Information:

Manufacturer/Model	BOEING 737-8 MAX	
Serial Number	63360	
Year of Manufacture	26th April 2022	
Total Airframe Hours (At Time of Incident)	9694:57	
Last Inspection (Date & Hours (TSN))	31st May 2025	9688:36
Last Inspection Airframe Cycles (CSN)	4001	
Airframe Hours Since Last Inspection	6:21	
Type of inspection preformed	Aircraft Daily Check	
CRS Issue Date	31st May 2025	
C of A (First/initial Issue Date)	26th April 2022	
C of A (Expiry Date)	26th April 2026	
C of R (Issue Date) (Present Owner)	26th April 2022	
Type of Fuel Used	JET A-1	
Operating Category	Passenger Aircraft	
Previous Accidents	Nil	

Engine 1:

Manufacturer/Model	CFM / LEAP-1B
Serial Number	603344
Part Number	LEAP-1B27
Hours Since New	9694:57
Hours Since Overhaul	TBA
Hours since last shop visit	TBA
Cycles Available Before Next Shop Visit	543
Oil type	EASTMAN Turbo Oil 2197

Engine 2:

Manufacturer/Model	CFM / LEAP-1B
Serial Number	603347
Part Number	LEAP-1B27
Hours Since New	9694:57
Hours Since Overhaul	TBA
Hours since last shop visit	TBA
Cycles Available Before Next Shop Visit	706
Oil type	EASTMAN Turbo Oil 2197

1.6.2 Details and History of the Damaged Tire:

Details and History of Damaged Tire					
Part Number	Serial Number	Description	Tire Manufacturer	Last Repair	Cycles
APR04450	221AM457	H44.5X16.5R21	Bridgestone	16/12/2024	396

1.7 Meteorological Information:

1.7.1 METAR report for Muscat Airport OOMS shows stable weather conditions with clear skies over Muscat airport and across the region on 31st May 2025.

1.7.2 The weather information below was provided by the Directorate General of Meteorology (DGMET) - Meteorological Routine Aerodrome Report (METAR) on the 31st May 2025 at 05:50 UTC).

Wind Direction	020°	Wind Speed	03 kts	Visibility	CAVOK
Temperature	42°C	Cloud Cover	Sky Clear	Cloud Base	Sky Clear
Dew Point	18°C	QNH	1000HPA		

1.7.3 According to Directorate General of Meteorology (DGMET) office, satellite imagery indicates stable weather conditions with clear skies over Muscat FIR. No significant clouds or convection has been observed, therefore no warnings have been issued.

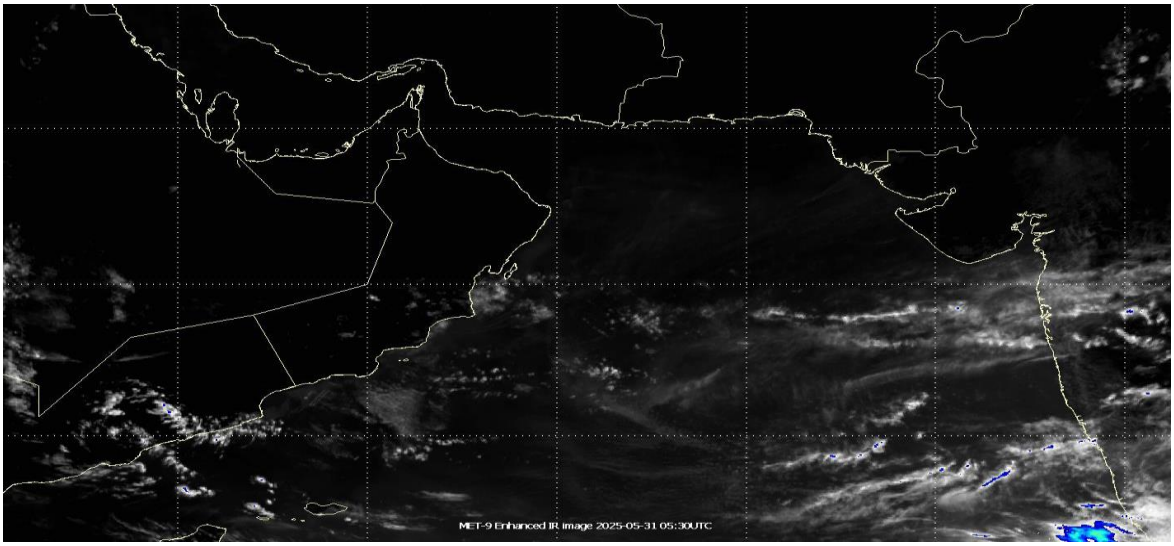

Figure 2 showing satellite image at 05:30Z on 31st May 2025 at OOMS (Source: DGMET)

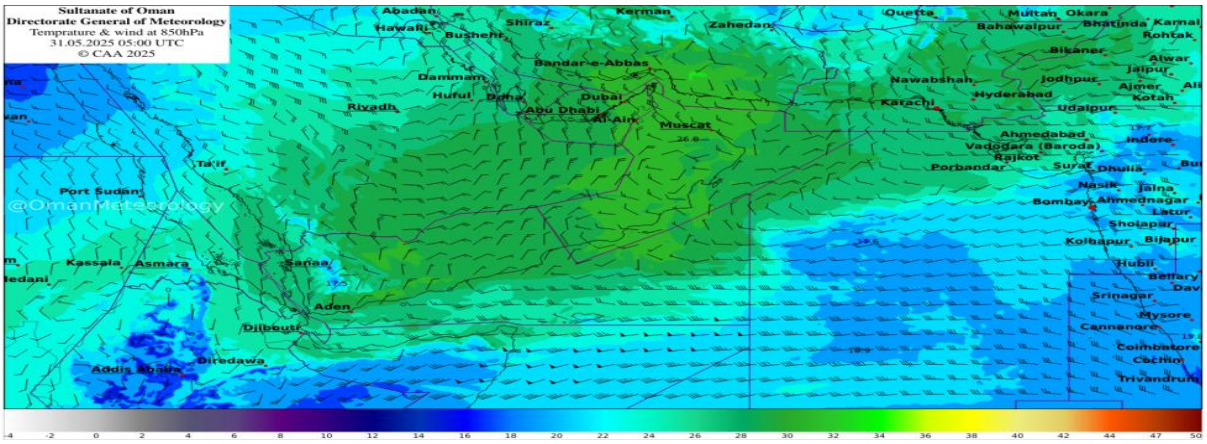

Figure 3 showing wind and temperature at 850hpa at 05:00Z on 31st May 2025 at OOMS (Source: DGMET)

1.8 Aids to Navigation.

1.8.1 The aircraft was equipped with standard navigational equipment as approved by the Sultanate of Oman CAA. There were no records indicating that the navigation system was unserviceable prior to the serious incident.

1.9 Communications.

1.9.1 The aircraft was equipped with standard communication systems as approved by the Sultanate of Oman CAA. There were no records indicating that the communication system was unserviceable prior to the serious incident.

1.9.2 There were no issues with the ATCO radio frequency communication at the time of the serious incident.

1.10 Airport Information.

1.10.1 Departure / Destination Aerodrome:

ICAO designation	Muscat International Airport (OOMS)	
Aerodrome co-ordinates	23°35′36″N 058°17′04″E	
Aerodrome elevation	25 feet (ft) Above Mean Sea Level AMSL	
Runway designations	08R/26L	08L/26R
Runway dimensions	4080 x 60 M	4000 x 60 M
Runway used	26L	
Surface of Runway Used	Asphalt	
Category for Rescue Fire Fighting	10	
Approach facilities	ILS, RNP, VOR, Runway Lights, PAPI's	
Aerodrome status	Licensed	

1.11 Flight Recorders.

1.11.1 The aircraft was fitted with both the Flight Data Recording (FDR), the Cockpit Voice Recorder (CVR) and Flight Data Monitoring (FDM). All were downloaded and made available to OTSB.

1.12 Wreckage and Impact Information.

1.12.1 The flight crew of aircraft OMA815 took off from RWY 26L shortly after airborne, the flight crew of aircraft OMA231 reported to APP ATCO that there were presence of tire debris on the runway. The aircraft OMA815 sustained damages on the wheel tires of wheel 1 only and there were reported structural damages to the following: main wheel No.1 de-capped, access panel above left hand (LH) landing gear, hydraulic lines were also broken and ruptured, the left hand inboard (LH INBD) FLAP, Krueger flap also damaged and the left-hand engine cowling, inboard tire and brake No.1 were also damaged.

Figure 4: showing evidence of Main Wheel tire number 1 de-capped threat from the tire (Source: Oman Airports).

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Figure 6: showing evidence of Main Wheel tire debris after tire de-capping (Source: Oman Airports).

Figure 7: showing evidence of damaged access panel above left hand (LH) (Source: Oman Airports).

1.13 Medical and Pathological Information.

1.13.1 Not relevant to the serious incident.

1.14 Fire.

1.14.1 Not relevant to the serious incident.

1.15 Survival Aspects.

1.15.1Not relevant to the serious incident.

1.16 Tests and Research.

1.16.1 To be discussed in the final report, the damage tire will be sent to the tire manufacturer for inspection and examination.

1.17 Organizational and Management Information.

1.17.1 Oman Air:

1.17.1.1Flight WY815 was scheduled international passenger flight.

1.17.1.2The operator, Oman Air was issued an Air Operating Certificate (AOC) by the State of Registry and State of Operator, the Sultanate of Oman CAA and issued on 20th October 2022. The AOC is valid until suspended or revoked as per the Sultanate of Oman Regulations. The certificate certifies that the Oman Air (S.A.O.C) is authorized to perform commercial air operations as defined in the operations specifications, in accordance with the operations specifications, in accordance with the operations manual and the CAR-OPS-1of the Sultanate of Oman Regulations. The aircraft have valid Certificates of Airworthiness (CoA) issued on 26th April 2025 valid until 25 April 2026 and Certificate of Registration (CoR) issued on 26th April 2022, at the time of the serious incident.

1.17.1.3The Operator implemented Safety Management System (SMS), whereby occurrences are reported to the relevant authorities as and when they occur and they are reviewed, categorized, classified and investigated to identify the need for any gaps, risk assessment and risk management, remedial action that are required to be taken by the organization.

1.17.2 **Oman Airports (OA):**

1.17.2.1The Oman Airports as the Aerodrome Operator have implemented Safety Management System (SMS) which includes all its operations, whereby occurrences are reported to the relevant authorities as and when they occur and they are reviewed, categorized, classified and investigated to identify the need for any gaps, risk assessment and risk management and remedial action that are required to be taken by the organization.

1.17.3 **Directorate General Air Navigation (DGAN):**

1.17.3.1The DGAN as air navigation service provider have implemented Safety Management System (SMS) which includes all its ATS units, whereby occurrences are reported to the relevant authorities as and when they occur and they are reviewed, categorized, classified and investigated to identify the need for any gaps, risk assessment and risk management and remedial action that are required to be taken by the organization.

1.18 Additional Information

1.18.1 To be discussed in the final report.

1.19 Useful or Effective Investigation Techniques.

1.19.1 To be discussed in the final report.

2. Safety Recommendations

2.1 The investigation is on-going and will be looking into other aspects of this serious incident investigation which may or may not have safety implications.

3. APPENDIX

3.1 Not applicable.

This Preliminary Report is issued by:
Oman Transport Safety Bureau (OTSB)
The Sultanate of Oman