

# ALERT BULLETIN

AB 2024:7/3-4  
2/23/2024  
2072289, 2072253

TO: Boeing Commercial Airplane Company

INFO: FAA (AVP-1, AVP-200, AFS-200, AFS-900, AFS-260, AFS-100, AIR-720, AIR-780, AIR-360, SEA-AEG), A4A, ALPA, AMFA, ASAP, ATSG, CAPA, IAM, IBT, ICAO, ICASS, IFALPA, IPA, NTSB, PAMA, RAA, SWAPA, TWU

FROM: Becky L. Hooley, Director  
NASA Aviation Safety Reporting System

SUBJ: B737 MAX 8 Wing Anti-Ice Valve Issues

We recently received ASRS reports describing a safety concern that may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the following:

ASRS received a report from a B737 MAX 8 Captain expressing concerns about an apparent left wing anti-ice valve design issue. Reporter stated that during a preflight inspection he noted airframe icing on the leading edge of the left wing, while the right wing was clear. Maintenance advised him it was a known issue, and they had a procedure to clear the valve of ice on the ground, but there is no effective in-flight procedure. Reporter advocated for an AD to address the issue.

Report 2072253 describes an in-flight left wing anti ice failure resulting in a landing with ice accumulation on the wing. This report is also enclosed.

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Dr. Becky Hooley at (408) 541-2854 or email at [becky.l.hooley@nasa.gov](mailto:becky.l.hooley@nasa.gov).



Aviation Safety Reporting System  
P.O. Box 189 | Moffett Field, CA | 94035-0189



## ACN 2072289

### DATE / TIME

Date of Occurrence	202401
Local Time Of Day	1201 to 1800

### PLACE

Locale	ZZZ.Airport
State	US
Altitude - AGL	0

### AIRCRAFT / EQUIPMENT X

Make Model Name	B737 MAX 8
Operating Under FAR Part	121

### COMPONENT 1

Aircraft Component	Ice/Rain Protection System
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### PERSON 1

Function - Flight Crew	Captain
Function - Flight Crew	Pilot Flying
ASRS Report Number	2072289

### EVENTS

Anomaly	Aircraft Equipment Problem - Less Severe
Detector - Person	Flight Crew
Result - General	Maintenance Action

### NARRATIVE 1

During my preflight walkaround in ZZZ, I noticed large amounts of airframe rime icing on the leading edge of the left wing. The right wing was clear on anti-iced surfaces. When I discussed this with the inbound Crew, they told me they were making a logbook entry for a failed left wing anti-ice valve. The First Officer also informed me that they had received either a ROLL/YAW ASYMMETRY or a ROLL AUTHORITY annunciation during the approach, with the autopilot engaged, due to the asymmetric ice build up.

Local ZZZ Company Maintenance Control showed up and began working the issue. They informed me that this was a known issue with the left wing anti-ice valve on the MAX aircraft and their procedure was to cycle the Wing Anti-ice switch three times with the isolation valve closed using the APU bleed air valve. This procedure was supposed to un-freeze the stuck valve. They went on to say that due to the design angle of the left wing valve that it has a tendency to freeze up. The procedure was successful and we departed for ZZZ1 53 minutes late. During climbout I used the wing anti-ice and had no issues.

I have concerns with dispatching MAX aircraft into known icing conditions with a faulty designed valve and no flight crew guidance on how to unfreeze it in icing conditions. Maintenance Control has a procedure yet we don't. Our QRH procedures simply instruct us to avoid icing conditions yet fail to instruct us to cycle the valve up to three times as Maintenance Control does.

Boeing should issue an AD requiring a fix to this issue or a procedure should be given to flight crews to deal with this faulty valve.

## SYNOPSIS

B737 MAX 8 Captain reported, while conducting a pre-flight walk around, the left wing leading edge was coated in ice. Maintenance technicians arrived at the aircraft and informed the Captain they were performing a procedure to release a frozen left wing anti-ice valve.

## ACN 2072253

### DATE / TIME

Date of Occurrence 202401  
Local Time Of Day 1201 to 1800

### PLACE

Locale ZZZ.Airport  
State US  
Altitude - MSL 10000

### ENVIRONMENT

Flight Conditions IMC

### AIRCRAFT / EQUIPMENT X

ATC / Advisory - TRACON ZZZ  
Make Model Name B737 MAX 8  
Operating Under FAR Part 121

### COMPONENT 1

Aircraft Component Aerofoil Ice System

### PERSON 1

Function - Flight Crew First Officer  
Function - Flight Crew Pilot Flying  
ASRS Report Number 2072253

### PERSON 2

Function - Flight Crew Captain  
Function - Flight Crew Pilot Not Flying  
ASRS Report Number 2072279

### EVENTS

Anomaly Aircraft Equipment Problem - Less Severe  
Anomaly Inflight Event / Encounter - Weather / Turbulence  
Detector - Person Flight Crew  
Result - Flight Crew Overcame Equipment Problem

### NARRATIVE 1

Passing 10,000 ft. into ZZZ, both pilots noticed ice accumulation on the windshield wipers. The Captain then looked out his window and noticed a slight amount of ice on the left wing. He announced that he was turning on the Wing A/I. Upon further descent, somewhere between 8,000 ft. and 6,000 ft. the left-wing A/I light illuminated. We were being vectored for final but still had time to open the QRH. The Captain ran the QRH as directed, and we complied with the final step to get out of the icing condition. ATC advised us that they had icing reported all the way down to 5,000 ft. and we asked to get below that.

ATC then gave us a descent to 4,000 ft. where the ice accumulation abated. We flew the rest of the approach uneventfully and landed on Runway XXR. Once we got to the gate, the oncoming Captain began his walkaround. I met him in the jetway and advised him what happened and that my Captain had called maintenance and was writing up the Wing A/I System. That is when he notified me that there was significant ice on the left wing. I went to inspect the wing myself and noticed a significant, almost clear layer of ice on the middle of the left wing. The Captain completed the writeup and briefed the situation to maintenance. We

turned the aircraft over to the outbound crew. We did not know we had a problem until the Wing A/I failed while we were in icing conditions. Other than getting out of the icing condition per the QRH, it would be nice to know if there was a reset or way to know if the valve had actually failed.

## **NARRATIVE 2**

While being vectored for an ILS approach, at 8,000 ft. we encountered moderate rime ice. At that point I turned on the wing anti-ice switch. Shortly after doing so, a Master Caution light illuminated, indicating a left valve issue. We ran the appropriate QRH Checklist and realized we indeed had a failure of that system. We notified ATC that we were encountering moderate rime ice and were told that no icing was reported below 5,000 ft. We descended to 4,000 ft. There was no further accumulation of ice below 5,000 ft. and we continued the approach and landed without any further incident. After this incident I was informed that this may be a possible known issue with the MAX 8. Wing anti-ice (left valve) failed to work.

## **SYNOPSIS**

B737 MAX 8 crew reported the left wing anti ice failed and they landed with ice accumulation on the wing.