

ALERT BULLETIN

AB 2021:22/3-9

12/20/2021

1842442

TO: Airbus Industries

INFO: FAA (AVP-1, AVP-200, AFS-200, AFS-100, AFS-280, AIR-720, AIR-360, SEA-AEG, AQS-230), A4A, ALPA, AOPA, APA, ASAP, ATSAP, ATSG, CAPA, IAM, AMFA, IBT, IATA, ICAO, ICASS, IFALPA, IPA, NATCA, NBAA, NTSB, RAA

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

SUBJ: A319 Rudder Pedal Adjustment Issue

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 reports from an A319 flight crew describing difficulty with the rudder pedal lock system. The First Officer stated the rudder pedals moved during rudder application on the takeoff roll, and would not lock in position. This reporter further stated they experienced this anomaly on several other occasions on other A319 aircraft.

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.



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



ACN 1842442**DATE / TIME**

Date of Occurrence	202109
Local Time Of Day	0601 to 1200

PLACE

Locale	ZZZ.Airport
State	US
Altitude - AGL	0

AIRCRAFT / EQUIPMENT X

Make Model Name	A319
Operating Under FAR Part	121

COMPONENT 1

Aircraft Component	Rudder Control System
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COMPONENT 2

Aircraft Component	Rudder Pedal
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PERSON 1

Function - Flight Crew	Captain
Function - Flight Crew	Pilot Flying
ASRS Report Number	1842442

PERSON 2

Function - Flight Crew	First Officer
Function - Flight Crew	Pilot Flying
ASRS Report Number	1842444

EVENTS

Anomaly	Aircraft Equipment Problem - Less Severe
Detector - Person	Flight Crew
Result - Flight Crew	Overcame Equipment Problem
Result - Flight Crew	Regained Aircraft Control

NARRATIVE 1

We were departing ZZZ Runway XY. I was the PM and the FO was the PF. After getting clearance to line up and wait, I taxied the aircraft onto the runway, stopped, and handed control to the FO. I said "your brakes, my radios". The FO assumed control by stating "my aircraft" but subsequently realized that the rudder pedals were not locking in position when she applied pressure with her feet. She tried to make an adjustment and it again did not lock. I assumed that she was having problems securing the pedals, and knowing that my rudder pedals were secure, I stated "my aircraft" and stated something to the effect that I would do the takeoff. I planned to takeoff and hand controls in cruise, but then decided that since I did the takeoff that I would do the landing and she would fly the next leg of the sequence. The takeoff was uneventful. During cruise she tried to secure the rudder pedals and had no issues. After landing while taxiing to the gate, she asked me if she could check the pedals. The pedals again were not staying in position when she tried to lock them. I wrote a maintenance entry in the logbook describing the fact that the FO rudder pedals could not be secured. The FO during cruise had expressed concerns about the rudder pedals on the older Airbus 319 as this had been her 2nd or 3rd flight where the pedals could not be secured.

The FO's before takeoff flow does not include a rudder check as the CA does. The only time that the FO notices that the rudder pedals cannot be secured (if not checked at the gate prior to pushback) is when control is handed over prior to the takeoff roll. A suggestion would be to include a rudder position/adjustment check during preflight as it would be difficult to do an FO rudder check during taxi the way the check is done by depressing the button on the tiller.

NARRATIVE 2

Date 1

This morning we were departing from ZZZ to ZZZ1. I was the pilot flying departing on Runway XY. I began the takeoff and had my feet on the rudder pedals.

The rudders moved and I tried to quickly adjust them. They slipped again and I told the Captain. He quickly took the controls and continued the takeoff roll with normal rudder control on his side.

At this point the thought was I had not properly locked the rudder pedals in place when I set them.

Once in cruise I started to think about some previous experiences I have had with the rudder pedals over the last year.

In-flight I repeatedly pressed on the rudders and confirmed they were in fact locked in place. Although it appeared there was no issue with my pedals at this point the captain continued to be the pilot flying. During taxi in ZZZ1 I asked if I could check my rudders to see if in fact the issue was resolved but once again they would not lock in place I could push them forward and aft freely. A similar scenario happened to me on two other occasions with a different aircraft.

Date 2

From ZZZ2-ZZZ

Same scenario however it occurred at V1/R so I rotated and gave the Captain the controls. After passing through 10,000 feet it appeared that my pedals were again working correctly so I became the pilot flying again and continued for landing at ZZZ. On touchdown the position of the pedals went from 1-2 all the way to 12. The Captain took control of the aircraft. We wrote up the malfunction in the logbook and asked maintenance to come out so we could explain what had happened.

Date 3

I arrive at work to fly another turn to ZZZ3 from ZZZ and immediately checked the logbook.

I found that the rudder pedal position was on MEL for positions 0 to 3.

Since I set my rudder pedals within that position, I asked the Captain to refuse the aircraft citing safety concerns.

I have pictures of the write ups and logbook entries.

Date 4

ZZZ4-ZZZ

Same aircraft as Date 2 and similar situation. Just prior to starting the Departure roll the rudders slipped in position and I quickly corrected them for takeoff. The remainder of that takeoff was normal. However, I was certain that I had properly set my rudder pedals back at the gate and checked them.

I went back to my records and realized this was the same aircraft I had a problem with approximately six months prior. I briefed Captain on my previous experience. In cruise the pedals remain locked in place as normal. I was the pilot flying and on touchdown on Runway XY in ZZZ as I applied brake pressure the rudder pedals again went all the way to 12.

Once again, we entered all the information in the logbook and requested maintenance come to the gate so we could explain the situation. The Captain requested follow up through a report but to my knowledge he had never received any.

This morning almost 11 months from the original time this happened and in a different aircraft. I did not expect it to be the same problem. Initial I thought I had made a mistake and not locked the pedals. Unfortunately, it appears it is the same problem as on the other aircraft and I am quite concerned. This is potentially serious malfunction that has happened on two different aircraft. I am happy to provide any further information that could assist in making sure this safety concern does not happen again.

Some additional notes

- I understand from my systems knowledge there is no difference in the positioning of the rudder pedals whether in the air or on the ground. However, all three times the pedals seem to stay locked in place in the air.

- At the gate when I reset my rudder position, I always push on them to confirm they are locked in place. A suggestion my Captain had was to possibly add a rudder check for the first officer during taxi. This added check may be another barrier for the crew.

[Suggest] Inspections of malfunctioning item that has caused this in two of our aircraft that I am aware of.

SYNOPSIS

A319 flight crew reported the First Officer on multiple occasions was not able to lock the rudder pedals in position. The rudder pedal problem, in each event, was not discovered until the takeoff roll was started. The Captain in each case took control of the aircraft and completed each takeoff. Reportedly, this type of event has happened on multiple A319 aircraft.