

# ALERT BULLETIN

AB 2022:13/3-11

6/3/2022

1888621, 1869048, 1750106

TO: Airbus Industries

INFO: FAA (AVP-1, AVP-200, AFS-200, AFS-100, AFS-260, AIR-720, AIR-360, SEA-AEG), 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 Green Hydraulics System Quantity 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 has received reports from A319 flight crews describing loss of green hydraulic system fluid quantity during cruise altitude.

(ACN 1888621) A319 flight crew reported a green hydraulic system fluid quantity loss in flight. The flight crew continued to their destination airport, landed normally, and the aircraft was towed to the gate as a precaution should steering or braking systems fail.

(ACN 1869048) A319 flight crew reported loss of green hydraulic system quantity while in cruise. After communication with Dispatch and Maintenance, they elected to request priority handling and continue to destination airport.

(ACN 1750106) A319 Captain reported a loss of green hydraulic system quantity during cruise as well as erratic readings through approach and landing sequences.

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 1888621****DATE / TIME**

Date of Occurrence 202204  
Local Time Of Day 1201 to 1800

**PLACE**

Locale ZZZ.ARTCC  
State US  
Altitude - MSL 36000

**ENVIRONMENT**

Flight Conditions VMC

**AIRCRAFT / EQUIPMENT X**

ATC / Advisory - Center ZZZ  
Make Model Name A319  
Operating Under FAR Part 121

**COMPONENT 1**

Aircraft Component Hydraulic Main System

**PERSON 1**

Function - Flight Crew Captain  
Function - Flight Crew Pilot Not Flying  
ASRS Report Number 1888621

**PERSON 2**

Function - Flight Crew First Officer  
Function - Flight Crew Pilot Flying  
ASRS Report Number 1888623

**EVENTS**

Anomaly Aircraft Equipment Problem - Critical  
Anomaly Deviation / Discrepancy - Procedural - Clearance  
Anomaly Ground Event / Encounter - Loss Of Aircraft Control  
Detector - Automation Aircraft Other Automation  
Detector - Person Flight Crew  
Result - General Flight Cancelled / Delayed  
Result - General Maintenance Action  
Result - Flight Crew Requested ATC Assistance / Clarification  
Result - Air Traffic Control Provided Assistance

**NARRATIVE 1**

Upon reaching cruise flight, after sequencing through the aircraft systems, the Green Hydraulic System quantity was noticeably lower than it normally is. Sent a maintenance message code requesting hydraulic servicing upon arrival in ZZZ. Just prior to starting descent, we received a HYD G RSVR LO LVL ECAM momentarily. It repeated and extinguished multiple times in the next 30-60 seconds, then illuminated steadily. Ran the QRH procedure, [requested priority handling], notified the FAs and passengers, and prepped the cabin for an evacuation. Contacted Dispatch and Maintenance Control through AIRINC. Prepared for a manual gear extension on approach but ultimately did not have to as the gear extended normally with enough residual hydraulic fluid in the system. Normal landing and clearing of the runway. Coordinated with station Operations to have the aircraft towed into the gate.

## **NARRATIVE 2**

Got a HYD G RSRV LO LVL ECAM shortly before planned descent into ZZZ. Ran ECAM; Referenced QRH.

Captain and I agreed continuing to original planned destination of ZZZ with VFR conditions and length of Runway XX was a good choice.

On base, when we were about to manually extend gear, the Expanded /ECAM approach procedure item of turning green pump on to try to re-pressurize the Green system and extend gear worked. Manual extension was not required. Enough residual fluid to Pressurize systems that were inop was available.

Previous ECAM Listed inop systems were extinguished and Status System pages were clean. Captain landed on Runway XX and cleared taxiway 1 uneventfully.

Captain and I agreed it best to be towed into gate in case we lost steering and/or normal brakes close to the gate.

After being Towed into gate, we offloaded passengers and debriefed Maintenance.

## **SYNOPSIS**

A319 flight crew reported green hydraulic system fluid quantity loss in flight. The flight crew continued to their destination airport, landed normally, and the aircraft was towed to the gate as a precaution should steering or braking systems fail.

## ACN 1869048

### DATE / TIME

Date of Occurrence 202201  
Local Time Of Day 0601 to 1200

### PLACE

Locale ZZZ.ARTCC  
State US  
Altitude - MSL 34000

### ENVIRONMENT

Flight Conditions VMC

### AIRCRAFT / EQUIPMENT X

ATC / Advisory - Tower ZZZ  
Make Model Name A319  
Operating Under FAR Part 121

### COMPONENT 1

Aircraft Component Hydraulic Main System

### PERSON 1

Function - Flight Crew First Officer  
Function - Flight Crew Pilot Not Flying  
ASRS Report Number 1869048

### PERSON 2

Function - Flight Crew Captain  
Function - Flight Crew Pilot Flying  
ASRS Report Number 1869054

### EVENTS

Anomaly Aircraft Equipment Problem - Critical  
Anomaly Deviation / Discrepancy - Procedural - Clearance  
Anomaly Deviation / Discrepancy - Procedural - Published  
Material / Policy  
Detector - Person Flight Crew  
Result - General Flight Cancelled / Delayed  
Result - General Maintenance Action  
Result - Flight Crew Landed in Emergency Condition  
Result - Flight Crew Requested ATC Assistance / Clarification  
Result - Air Traffic Control Provided Assistance

### NARRATIVE 1

Approximately one hour from ZZZ on Aircraft X from ZZZ1 to ZZZ we encountered a green system low hydraulic quantity and low pressure ECAM. We performed the action items and turned off the PTU (power transfer unit) and green system engine driven pump. The Captain informed Dispatch, Maintenance, and briefed the lead Flight Attendant. We agreed with the concurrence of Dispatch that the best course of action was to continue to ZZZ. We requested priority handling and received traffic priority to ZZZ. On final approach, we performed the alternate gear extension checklist and landed on the longest runway (XXR). We stopped straight ahead due to no nose wheel steering and waited for the tug to tow us back to the gate. We completed the after landing flows, tow in checklist, and parking checklist back at the gate.

The reason for my fatigue call to the Chief Pilot and scheduling following our incident was due to minimal broken sleep from the previous evening at the layover hotel. The hotel was hosting a fraternity convention and my sleep was disrupted from 1-3 am due to the occupants of the room next door. I called the front desk and they notified security to silence the fraternity party. Following the minimal disrupted rest and the stress associated with the hydraulic emergency, I felt I was not fit to continue duty and called in fatigue!

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## **NARRATIVE 2**

We were approximately 1 hour from ZZZ when we were alerted by a master caution and subsequent ECAM indicating a loss of green system hydraulics both quantity and pressure. I continued flying and had my first officer accomplish the ECAM and subsequently the QRH. We requested priority handling with ATC and I then contacted Dispatch and Maintenance Control, it was decided that given the situation our best option was to continue on to ZZZ. At this point I had our lead flight attendant come up to the flight deck and briefed him on the situation and provided him with the required information. I then made a PA to the passengers explaining the situation and what to expect.

We were provided expedited handling by ZZZ ATC and were able to accomplish all remaining clean up items on the QRH in an orderly and efficient manner. A non eventful and smooth landing was performed in ZZZ and we were able to maintain center line where we brought the aircraft to a stop and were meet by CFR and airport operations who towed us back to the gate.

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## **SYNOPSIS**

A319 flight crew reported loss of green hydraulic system while in cruise. After communication with dispatch and maintenance, they elected to request priority handling and continue to destination airport.

**Time**

Date: 202007

Local Time Of Day: 1801-2400

**Place**

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

**Aircraft 1**

Make Model Name: A319

**Component 1**

Aircraft Component: Hydraulic Main System

**Person 1**

Function.Flight Crew: Captain

Function.Flight Crew: Pilot Flying

ASRS Report Number: 1750106

**Events**

Anomaly.Aircraft Equipment Problem: Less Severe

Anomaly.Deviation - Procedural: Published Material / Policy

Detector.Person: Flight Crew

Result.General: Maintenance Action

Result.Flight Crew: Landed in Emergency Condition

Result.Air Traffic Control: Provided Assistance

**Narrative 1**

During a cruise check we noticed the green hydraulic system quantity was low but the indication was green. Shortly after the indication was even lower and amber. I made an AML entry to ensure the quantity was serviced and sent a message to dispatch (could not find an appropriate arms code). We were starting to descend now and began getting an ECAM caution for low green system quantity. This caution appeared for approximately one second then disappeared 12-15 times. The caution then stayed on long enough to complete the ECAM procedure, which turns off all pumps to the green system. Green system pressure remained normal (3000 psi).

The green system pressure dropped to zero and returned to normal 3-4 times before landing. As we were configuring to land green system pressure was normal. We decided to continue with the original ECAM procedure which calls for gravity landing gear extension and no nose-wheel steering because the pressure might drop to zero at any moment. I landed the airplane and had enough control to clear the runway and stop. We were towed to the gate. During descent and approach we [requested priority handling], coordinated with ZZZ Operations and Maintenance for a tow, briefed the flight attendants for a precautionary landing and completed multiple landing assessments, checklists, ECAM procedures, etc. We were told the next day, by a mechanic, that the aircraft had a hydraulic fluid leak.

**Synopsis**

A319 Captain reported a loss of green hydraulic system quantity, as well as erratic readings through approach and landing sequences.