

ALERT BULLETIN

AB 2023:11/3-4

5/16/2023

1985346

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

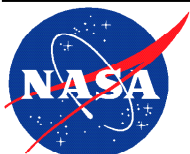
FROM: Becky L. Hooey, Director
NASA Aviation Safety Reporting System

SUBJ: B737 NG Cockpit Halon Fire Extinguisher Leak

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 NG flight crew describing a cockpit halon fire extinguisher leak. Reporter stated they were holding position awaiting takeoff clearance when they heard a loud noise followed by the sound of escaping gas. They discovered the cockpit halon extinguisher was leaking and they were unable to shut off the flow of gas. Both pilots experienced health consequences that continued in the days following the incident.

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 Hooey at (408) 541-2854 or email at becky.l.hooey@nasa.gov.



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



ACN 1985346**DATE / TIME**

Date of Occurrence 202303
Local Time Of Day 0601 to 1200

PLACE

Locale ZZZ.Tower
State US
Altitude - AGL 100

ENVIRONMENT

Flight Conditions VMC

AIRCRAFT / EQUIPMENT X

ATC / Advisory - Tower ZZZ
Make Model Name B737 Next Generation Undifferentiated
Operating Under FAR Part 121

COMPONENT 1

Aircraft Component Portable Extinguisher

PERSON 1

Function - Flight Crew Captain
Function - Flight Crew Pilot Not Flying
ASRS Report Number 1985346

PERSON 2

Function - Flight Crew Captain
Function - Flight Crew Pilot Flying
ASRS Report Number 1985327

EVENTS

Anomaly Aircraft Equipment Problem - Critical
Anomaly Flight Deck / Cabin / Aircraft Event - Illness / Injury
Anomaly Flight Deck / Cabin / Aircraft Event - Smoke / Fire /
Fumes / Odor
Anomaly Deviation / Discrepancy - Procedural - Clearance
Detector - Person Flight Crew
Result - General Flight Cancelled / Delayed
Result - General Maintenance Action
Result - General Physical Injury / Incapacitation
Result - Flight Crew Requested ATC Assistance / Clarification
Result - Flight Crew Returned To Gate
Result - Air Traffic Control Provided Assistance

NARRATIVE 1

We were a ferry flight with no Flight Attendants. While holding position on Runway XXR we heard a loud bang followed by the sound of escaping gas. We notified ATC we had a maintenance issue and needed to cancel our takeoff. ATC instructed us to taxi clear, I cleared the runway and set the parking brake. We investigated the situation and discovered that the flight deck halon fire extinguisher was discharging into the flight deck. We removed the extinguisher to try and shut it off. We were unable and then moved it to a first class seat. During this time, approximately 5 minutes, we were breathing halon gas. We informed ATC we needed to

return to the gate. Once at the gate, Maintenance discovered there was a leak at the neck of the extinguisher handle and the bottle. We were both experiencing headaches and light headedness and went to the local clinic. The company doctor examined us as advised we remove our self from the schedule for a minimum of 48 hours. I will be re-examined by the company doctor to determine my return to work status.

NARRATIVE 2

[The Captain] and I are both LCPs (Line Check Pilots) and I was giving him a supervised airport checkout and performing First Officer duties. I signed for the aircraft. While still at the gate our flight was cancelled due to poor weather at our destination. We were reassigned to ferry the empty aircraft without Flight Attendants. We decided I would be Pilot Flying as I needed the currency more. Gate operations and taxi out were normal. When holding for takeoff, we heard a loud bang followed by the sound of air escaping. We searched for a second from our control seats and suspected the halon fire extinguishing bottle behind my seat was the source of the sound. We notified ATC we had a mechanical issue and needed to taxi clear and address the problem. When asked if we needed assistance we said not at this time. We were instructed to make 3 right turns and hold short of the runway.

When [the Captain] set the parking brake, we confirmed the halon extinguisher was discharging into the flight deck. I left my seat and noticed the pressure gauge on the bottle had dropped down into the red and the bottle was cold to the touch. I unlatched it from its clasp and removed it from the flight deck. This was probably 5 minutes after the bottle failed. I placed it on a seat in first class noticing the pin and safety tie were still in place but the escaping halon, which was almost empty now, appeared to be coming from the neck of the bottle where a black rubber seal was visibly displaced outward which would normally not be visible. I returned to the flight deck and closed the flight deck door. We developed a plan to return to the gate not believing we needed any assistance. We coordinated with ATC, ramp control, maintenance, and operations.

Prior to taxi in we began discussing physiological effects to determine we were safe to operate the aircraft. Once at the gate we waited for a jetway driver and as the excitement died down, we both had headaches and light headedness. My eyes and throat had some irritation. We went directly to the local health clinic. We were examined and removed from duty for a minimum of 48 hours to be re-evaluated [later] by the clinic doctor to determine when we could return to work.

CALLBACK 1

Reporter stated the health effects were significant. No feedback as to the cause of the incident.

SYNOPSIS

B737 NG flight crew reported returning to the gate after the cockpit halon fire extinguisher began leaking. The flight crew was unable to stop the leak and was consequently removed from the flight due to inhalation of the halon agent.