



FAA  
Aviation Safety

## SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: SW-18-04  
Date: November 16, 2017

**SUBJ:** Engine Oil Drainage System

*This is information only. Recommendations aren't mandatory.*

### Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts owners, operators, maintainers, and certificated repair facilities of Airbus Helicopters Deutschland (Airbus Helicopters) Model MBB-BK 117 C-2 helicopters of possible blockage of the engine oil drainage system.

At this time, this airworthiness concern is under investigation by the FAA. The results of the investigation may result in the FAA determination of an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39. The actions recommended by this SAIB are not mandatory and may be different from any corrective actions mandated by a future AD.

### Background

On January 26, 2017 an operator of a BK117 C-2 experienced an in-flight engine fire and made an emergency landing in Sioux Falls, South Dakota. Although still under investigation, the engine fire could be related to engine oil coke chips plugging the return scavenge line for the rear bearing of the gas generator. On September 8, 2017 a BK117 C-2 helicopter was destroyed when it crashed near Hertford, North Carolina. The NTSB preliminary investigation found that the number 2 engine rear turbine shaft bearing exhibited discoloration consistent with overheating and lack of lubrication. Through the course of inspecting the engine issue for scavenge line blockage, a BK117 C-2 operator discovered a separate, airframe-related issue. The operator detected various levels of coking blockage of engine drain lines. Airbus Helicopters prescribes a general visual inspection of the bearing compartment area. There are no prescribed inspections of the drain tube or drain collector to check for blockage. A blocked drain line may, under certain circumstances, present a risk for an engine fire and/or inflight shutdown of the affected engine.

### Recommendations

The FAA recommends the actions below for all owners, operators, and maintainers of Airbus Helicopters BK117 C-2 helicopters. The actions should be performed for each engine at intervals not to exceed 100 hours time-in-service (TIS). Refer to Fig. 01 in Airbus Helicopters AMM 71-71-01, dated March 1, 2016 and to Figure 1 of this SAIB.

1. Disconnect the rear bearing lines part numbers AE709636-1 (hose), 117-600381.III (hose), and 117-600381.105 (hose) from the drain collector part number B717M1028801 or 117-602061 (drain collector) and disconnect the drain collector from the engine deck.
2. Visually check the drain collector and hoses for obstructions. These obstructions may include carbon and coke deposits. Contact Airbus Helicopters for recommended cleaning procedures if there are any obstructions.
3. If there are no obstructions or after performing the above actions, reconnect the drain collector to the engine deck and reconnect the drain/vent lines to the drain collector per approved maintenance instructions.

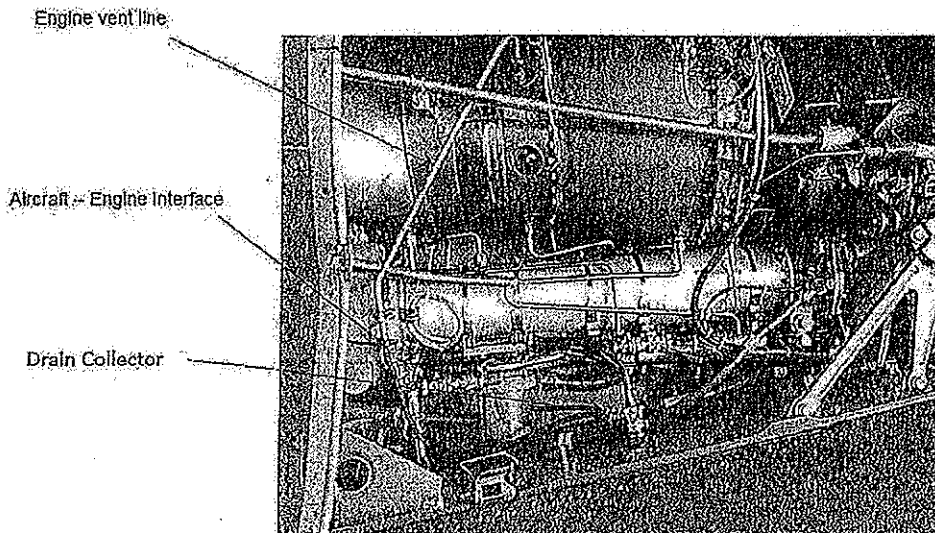


Figure 1

The FAA also recommends that you provide the following information to the individual listed below within 10 days of each inspection:

- a. Hours TIS since last inspection for vent drain blockage,
- b. Amount (approximate percentage) of blockage, if any found, and
- c. Location of blockage, if any found.

Under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the OMB has approved the information collection contained in this SAIB, and assigned OMB Control Number 2120-0731.

**For Further Information, Contact**

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For questions pertaining to the engine, please contact your Safran support office.