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SUBJ: Water/Waste: Freezing Potable Water Lines

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts you of an airworthiness concern on **all Boeing Model 737 airplanes** relating to the potential failure of certain potable water couplers during freezing weather conditions. The failure of the couplers could result in water spraying and freezing around the outflow valve, rendering the valve inoperative. If enough ice forms, the performance of the outflow valve will be very limited. This could result in difficulty controlling cabin pressure.

Background

We have received reports of several instances of potable water systems leaking due to damaged couplers around the potable water storage tank. These instances occurred during winter seasons. When the potable water tank is not properly drained during overnight parking in below freezing temperatures, the potable water lines can freeze. The frozen water expands and breaks the couplers. During flight, the area around the couplers and water lines remains above freezing (35-40° F). Therefore, the freezing is taking place on the ground with long-term exposure to sub-freezing temperatures.

Consequently, during morning flights, the pressurized potable water lines spray water, which creates ice around the outflow valve. If enough ice forms, the performance of the outflow valve will be very limited. This could result in difficulty controlling cabin pressure.

Recommendations

We highly recommend that operators adhere to Boeing Aircraft Maintenance Manuals (AMM), specifically 737NG AMM 12-33-01 and 737NG AMM 12-33-02. These sections provide instructions on draining the potable water tanks if the airplane is to be grounded overnight during freezing conditions.

For Further Information Contact

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For Related Service Information Contact

The Boeing Company, P.O. Box 3707, Seattle, WA 98124, or through the following website:
<http://www.myboeingfleet.com/ReverseProxy/Authentication.html>