1/24/2024 **FOR YOUR INFORMATION** 2024-6/3-3

2058249

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

Re: B737 MAX 8 Fire Detection Loop Test Issues

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 enclosed deidentified report.

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 2058249

DATE / TIME	
Date of Occurrence	202311
Local Time Of Day	No Local Time Of Day Stated
PLACE	
Altitude - AGL	0
AIRCRAFT / EQUIPMENT X	
Make Model Name	B737 MAX 8
Operating Under FAR Part	121
PERSON 1	
Function - Maintenance	Technician
ASRS Report Number	2058249
EVENTS	
Anomaly	Deviation / Discrepancy - Procedural - Maintenance
Anomaly	Deviation / Discrepancy - Procedural - MEL / CDL
Anomaly	Deviation / Discrepancy - Procedural - Published Material / Policy
Detector - Person	Maintenance
Result - General	None Reported / Taken

NARRATIVE 1

The maintenance section of the MEL is vague. Operative detector loops are verified to operate normally once each flight day. Once each flight day, verify each operative detector loop operates normally. Apply heat from an appropriate heat source to a detector element in the loop. The substitute test heat device must not produce heat greater than 450 degrees F. The temperature limit should be observed in the event fuel vapors exist in the area. It goes on to what to expect during the heat test.

I found that the MEL can be interpreted as meaning to check each and every segment in the loop or the loop in total. If to check it in total, it does not say where or provide a maintenance reference for the Aircraft Maintenance Manual to use to prove this test. It offers no approved tool to use to increase the temperature of the probe into the test range. If you are to check each and every loop segment that is part of the full loop individually, this task is near impossible in the turn environment it was provided to me in. In speaking with Maintenance Control they said you just test the loop anywhere. But my concern there is that you could have multiple faults that compromised much more than one area. When you look in the Illustrated Parts Catalog, each segment of the major loop is called a loop unto itself. So without an approved Aircraft Maintenance Manual procedure for this heat task it leaves far too much to interpretation that I believe it should.

I would have a specific Aircraft Maintenance Manual or Work Order listed that compels the Technician onto what the intended procedure, and what tooling approved to use for this.

SYNOPSIS

B737 MAX 8 Technician reported the MEL procedure on testing the fire detection loop was vague and needs to provide more information and direction.