

Maintenance Error Decision Aid (MEDA) Results Form

Section I—General Information

| | |
|--|--|
| Reference #: _____ | Interviewer's Name: _____ |
| Airline: _____ | Interviewer's Telephone #: _____ |
| Station of Maintenance System Failure: _____ | Date of Investigation: ____/____/____ |
| Aircraft Type: _____ | Date of Event: ____/____/____ |
| Engine Type: _____ | Time of Event: __:__ am pm |
| Reg. #: _____ | Shift of Failure: _____ |
| Fleet Number: _____ | Type of Maintenance (Mx) (circle one): |
| ATA #: _____ | 1. Line -- If Line, what type? _____ |
| Aircraft Zone: _____ | 2. Base --If Base, what type? _____ |
| Ref. # of previous related event: _____ | Date Changes Implemented: ____/____/____ |

Section II—Event

Please select the event (check all that apply)

1. Operations Process Event

- () a. Flight Delay __ days __ hrs. __ min.
 () b. Flight Cancellation
 () c. Gate Return
 () d. In-Flight Shut Down
 () e. Air Turn-Back

- () f. Diversion
 () g. Smoke/fumes/odor event
 () h. Other (explain below)

() 2. Aircraft Damage Event

() 3. Personal Injury Event

- () 4. Rework (e.g., did not pass Ops check/inspection)

() 5. Airworthiness Control

() 6. Found during Maintenance

() 7. Found during Flight

() 8. Other Event (explain below)

Describe the incident/degradation/failure (e.g., could not pressurize) that caused the event.

Section III—Maintenance System Failure

Please select the maintenance system failure(s) that caused the event:

1. Installation Failure

- () a. Equipment/part not installed
 () b. Wrong equipment/part installed
 () c. Wrong orientation
 () d. Improper location
 () e. Incomplete installation
 () f. Extra parts installed
 () g. Access not closed
 () h. System/equipment not reactivated/deactivated
 () i. Damaged on remove/replace
 () j. Cross connection
 () k. Mis-rigging (controls, doors, etc.)
 () l. Consumable not used
 () m. Wrong consumable used
 () n. Unserviceable part installed
 () o. Other (explain below)

() b. Unapproved

- () c. Incomplete
 () d. Other (explain below)

4. Fault Isolation/Test/Inspection failure

- () a. Did not detect fault
 () b. Not found by fault isolation
 () c. Not found by operational/functional test
 () d. Not found by task inspection
 () e. Access not closed
 () f. System/equipment not deactivated/reactivated
 () g. Not found by part inspection
 () h. Not found by visual inspection
 () i. Technical log oversight
 () j. Other (explain below)

7. Personal Injury

- () a. Slip/trip/fall
 () b. Caught in/on/between
 () c. Struck by/against
 () d. Hazard contacted (e.g., electricity, hot or cold surfaces, and sharp surfaces)
 () e. Hazardous substance exposure (e.g., toxic or noxious substances)
 () f. Hazardous thermal environment exposure (heat, cold, or humidity)
 () g. Other (explain below)

8. Maintenance Control Failure

- () a. Scheduled task omitted/late/incorrect
 () b. MEL interpretation/application/removal
 () c. CDL interpretation/application/removal
 () d. Incorrectly deferred/controlled defect
 () e. Airworthiness data interpretation
 () f. Technical log oversight
 () g. Airworthiness Directive overrun
 () h. Modification control
 () i. Configuration control
 () j. Records control
 () k. Component robbery control
 () l. Mx information system (entry or update)
 () m. Time expired part on board aircraft
 () n. Tooling control
 () o. Mx task not correctly documented
 () p. Not authorized/qualified/certified to do task
 () q. Other (explain below)

2. Servicing Failure

- () a. Not enough fluid
 () b. Too much fluid
 () c. Wrong fluid type
 () d. Required servicing not performed
 () e. Access not closed
 () f. System/equipment not deactivated/reactivated
 () g. Other (explain below)

5. Foreign Object Damage/Debris

- () a. Tooling/equipment left in aircraft/engine
 () b. Debris on ramp
 () c. Debris falling into open systems
 () d. Other (explain below)

6. Airplane/Equipment Damage

- () a. Tools/equipment used improperly
 () b. Defective tools/equipment used
 () c. Struck by/against
 () d. Pulled/pushed/drove into
 () e. Fire/smoke
 () f. Other (explain below)

3. Repair Failure (e.g., component or structural repair)

- () a. Incorrect

() 9. Other (explain below)

Did the Maintenance System Failure "fly" on the aircraft? () Yes () No

Describe the specific maintenance failure (e.g., auto pressure controller installed in wrong location).

IV. Chronological Summary of the Event, including how some Contributing Factors lead to additional Contributing Factors

V. Summary of Recommendations

Section VI—Contributing Factors Checklist

N/A ____

A. Information (e.g., work cards, maintenance manuals, service bulletins, maintenance tips, non-routines, illustrated parts catalogs, etc.)

- | | | |
|--|---|--|
| <input type="checkbox"/> 1. Not understandable | <input type="checkbox"/> 4. Too much/conflicting information | <input type="checkbox"/> 7. Information not used |
| <input type="checkbox"/> 2. Unavailable/inaccessible | <input type="checkbox"/> 5. Update process is too long/complicated | <input type="checkbox"/> 8. Inadequate |
| <input type="checkbox"/> 3. Incorrect | <input type="checkbox"/> 6. Incorrectly modified manufacturer's MM/SB | <input type="checkbox"/> 9. Uncontrolled |
| | | <input type="checkbox"/> 10. Other (explain below) |

Describe specifically how the selected information factor(s) contributed to the system failure.

Recommendations to correct the Contributing Factors listed above.

N/A ____

B. Ground Support Equipment/Tools/Safety Equipment

- | | | |
|--|--|--|
| <input type="checkbox"/> 1. Unsafe | <input type="checkbox"/> 6. Inappropriate for the task | <input type="checkbox"/> 11. Not used |
| <input type="checkbox"/> 2. Unreliable | <input type="checkbox"/> 7. Cannot use in intended environment | <input type="checkbox"/> 12. Incorrectly used |
| <input type="checkbox"/> 3. Layout of controls or displays | <input type="checkbox"/> 8. No instructions | <input type="checkbox"/> 13. Inaccessible |
| <input type="checkbox"/> 4. Out of calibration | <input type="checkbox"/> 9. Too complicated | <input type="checkbox"/> 14. Past expiration date |
| <input type="checkbox"/> 5. Unavailable | <input type="checkbox"/> 10. Incorrectly labeled | <input type="checkbox"/> 15. Other (explain below) |

Describe specifically how selected ground support equipment/tools/safety equipment factor(s) contributed to the system failure.

Recommendations to correct the Contributing Factors listed above.

N/A ____

C. Aircraft Design/Configuration/Parts/Equipment/Consumables

- | | | |
|--|---|--|
| <input type="checkbox"/> 1. Complex | <input type="checkbox"/> 5. Parts/equipment incorrectly labeled | <input type="checkbox"/> 9. Consumable unavailable |
| <input type="checkbox"/> 2. Inaccessible | <input type="checkbox"/> 6. Easy to install incorrectly | <input type="checkbox"/> 10. Wrong consumable used |
| <input type="checkbox"/> 3. Aircraft configuration variability | <input type="checkbox"/> 7. Not used | <input type="checkbox"/> 11. Expired consumable used |
| <input type="checkbox"/> 4. Parts/equipment unavailable | <input type="checkbox"/> 8. Not user friendly | <input type="checkbox"/> 12. Other (explain below) |

Describe specifically how the selected aircraft design/configuration/parts/equipment/consumables factor(s) contributed to system failure.

Recommendations to correct the Contributing Factors listed above.

N/A ___

D. Job/Task

- | | | |
|---|--|---|
| <input type="checkbox"/> 1. Repetitive/monotonous | <input type="checkbox"/> 3. New task or task change | <input type="checkbox"/> 5. Other (explain below) |
| <input type="checkbox"/> 2. Complex/confusing | <input type="checkbox"/> 4. Different from other similar tasks | |

Describe specifically how the selected job/task factor(s) contributed to the system failure.

Recommendations to correct the Contributing Factors listed above.

N/A ___

E. Knowledge/Skills

- | | | |
|--|--|---|
| <input type="checkbox"/> 1. Technical skills | <input type="checkbox"/> 4. Airline process knowledge | <input type="checkbox"/> 7. Teamwork skills |
| <input type="checkbox"/> 2. Task knowledge | <input type="checkbox"/> 5. Aircraft system knowledge | <input type="checkbox"/> 8. Computing skills |
| <input type="checkbox"/> 3. Task planning | <input type="checkbox"/> 6. English language proficiency | <input type="checkbox"/> 9. Other (explain below) |

Describe specifically how the selected knowledge/skills factor(s) contributed to the system failure.

Recommendations to correct the Contributing Factors listed above.

N/A ___

F. Individual Factors

- | | | |
|---|---|---|
| <input type="checkbox"/> 1. Physical health (including hearing and sight) | <input type="checkbox"/> 5. Complacency | <input type="checkbox"/> 10. Visual perception |
| <input type="checkbox"/> 2. Fatigue | <input type="checkbox"/> 6. Body size/strength | <input type="checkbox"/> 11. Assertiveness |
| <input type="checkbox"/> 3. Time pressure | <input type="checkbox"/> 7. Personal event (e.g., family problem, car accident) | <input type="checkbox"/> 12. Stress |
| <input type="checkbox"/> 4. Peer pressure | <input type="checkbox"/> 8. Task distractions/interruptions | <input type="checkbox"/> 13. Situation awareness |
| | <input type="checkbox"/> 9. Memory lapse (forgot) | <input type="checkbox"/> 14. Workload/task saturation |
| | | <input type="checkbox"/> 15. Other (explain below) |

Describe specifically how the selected individual factors contributed to the system failure.

Recommendations to correct the Contributing Factors listed above.

N/A ___

G. Environment/Facilities

- | | | | |
|---|--------------------------------------|--|--|
| <input type="checkbox"/> 1. High noise levels | <input type="checkbox"/> 5. Rain | <input type="checkbox"/> 9. Vibrations | <input type="checkbox"/> 13. Inadequate ventilation |
| <input type="checkbox"/> 2. Hot | <input type="checkbox"/> 6. Snow | <input type="checkbox"/> 10. Cleanliness | <input type="checkbox"/> 14. Markings |
| <input type="checkbox"/> 3. Cold | <input type="checkbox"/> 7. Lighting | <input type="checkbox"/> 11. Hazardous/toxic substance | <input type="checkbox"/> 15. Labels/placards/signage |
| <input type="checkbox"/> 4. Humidity | <input type="checkbox"/> 8. Wind | <input type="checkbox"/> 12. Power sources | <input type="checkbox"/> 16. Confined space |
| | | | <input type="checkbox"/> 17. Other (explain below) |

Describe specifically how the selected environment/facilities factor(s) contributed to the system failure.

Recommendations to correct the Contributing Factors listed above.

N/A ___

H. Organizational Factors

- | | |
|--|---|
| <input type="checkbox"/> 1. Quality of support from technical organizations (e.g., engineering, planning, technical pubs) | <input type="checkbox"/> 6. Work process/procedure |
| <input type="checkbox"/> 2. Company policies | <input type="checkbox"/> 7. Work process/procedure not followed |
| <input type="checkbox"/> 3. Not enough staff | <input type="checkbox"/> 8. Work process/procedure not documented |
| <input type="checkbox"/> 4. Corporate change/restructuring | <input type="checkbox"/> 9. Work group normal practice (norm) |
| <input type="checkbox"/> 5. Union action | <input type="checkbox"/> 10. Team building |
| | <input type="checkbox"/> 11. Other (explain below) |

Describe specifically how the selected organizational factor(s) contributed to the system failure.

Recommendations to correct the Contributing Factors listed above.

N/A ___

I. Leadership/Supervision

- | | | |
|--|--|---|
| <input type="checkbox"/> 1. Planning/organization of tasks | <input type="checkbox"/> 4. Unrealistic attitude/expectations | <input type="checkbox"/> 6. Amount of supervision |
| <input type="checkbox"/> 2. Prioritization of work | <input type="checkbox"/> 5. Does not assure that approved process/procedure is followed | <input type="checkbox"/> 7. Other (explain below) |
| <input type="checkbox"/> 3. Delegation/assignment of task | | |

Describe specifically how the selected leadership/supervision factor(s) contributed to the system failure.

Recommendations to correct the Contributing Factors listed above.

N/A ____

J. Communication

- | | | |
|---|---|---|
| <input type="checkbox"/> 1. Between departments | <input type="checkbox"/> 4. Between maintenance crew and lead | <input type="checkbox"/> 7. Other (explain below) |
| <input type="checkbox"/> 2. Between mechanics | <input type="checkbox"/> 5. Between lead and management | |
| <input type="checkbox"/> 3. Between shifts | <input type="checkbox"/> 6. Between flight crew and maintenance | |

Describe specifically how the selected communication factor(s) contributed to the system failure.

Recommendations to correct the Contributing Factors listed above.