

Maintenance LOSA Observation – Threat Codes

Instructions for Use:

1. The following categories provide a number for the “Threat Code” column in the Maintenance LOSA Observation Form.
2. Select a letter and number combination (e.g., Mx/B1= Equipment/ Tools/ Safety Equipment – Defective)
3. More than 1 code per item is possible

Definitions:

Threat -- any condition that increases complexity of the operations and if not managed properly can decrease the safety margin.

Error – a mistake that is made when threats are mismanaged.

Mx/A. Information	2
Mx/B. Equipment / Tools / Safety Equipment	2
Mx/C. Aircraft Design / Configuration / Parts	2
Mx/D. Job / Task.....	2
Mx/E. Knowledge / Skills.....	3
Mx/F. Individual Factors	3
Mx/G. Environment / Facilities	3
Mx/H. Organizational Factors.....	4
Mx/I. Leadership / Supervision.....	4
Mx/J. Communication	4
Mx/K. Quality Control.....	4
Mx/L. Other Contributing Factors.....	4
Acronyms.....	5

Mx/A. Information (e.g. work cards, maintenance manuals, service bulletins, maintenance tips, non-routines, IPC, warning/signal, etc.)

- Mx/A1. Not understandable
- Mx/A2. Unavailable or inaccessible
- Mx/A3. Incorrect
- Mx/A4. Inadequate (e.g., missing graphics)
- Mx/A5. Uncontrolled (e.g., outdated)
- Mx/A6. Too much conflicting information
- Mx/A7. Update process is too long or complicated
- Mx/A8. Incorrectly modified manufacturer's Maintenance Manual/Service Bulletin
- Mx/A9. Information not used
- Mx/A10. Other (explain in remarks)

Mx/B. Equipment / Tools / Safety Equipment

- Mx/B1. Defective
- Mx/B2. Unsafe
- Mx/B3. Unreliable
- Mx/B4. Layout of controls or displays
- Mx/B5. Miscalibrated
- Mx/B6. Unavailable
- Mx/B7. Incomplete
- Mx/B8. Inappropriate for the task
- Mx/B9. Cannot use in intended environment
- Mx/B10. No instructions
- Mx/B11. Too complicated
- Mx/B12. Incorrectly labeled
- Mx/B13. Incorrectly used (including unsafely)
- Mx/B14. Inadequate
- Mx/B15. Not used (e.g., personal protection equipment)
- Mx/B16. Other (explain in remarks)

Mx/C. Aircraft Design / Configuration / Parts

- Mx/C1. Complex
- Mx/C2. Inaccessible
- Mx/C3. Aircraft configuration variability
- Mx/C4. Parts unavailable
- Mx/C5. Parts incorrectly labeled/certified
- Mx/C6. Easy to install incorrectly
- Mx/C7. Parts not used
- Mx/C8. Other (explain in remarks)

Mx/D. Job / Task

- Mx/D1. Repetitive/monotonous
- Mx/D2. Complex/confusing
- Mx/D3. New task or task change
- Mx/D4. Different from other similar tasks
- Mx/D5. Other (explain in remarks)

Mx/E. Knowledge / Skills

- Mx/E1. Technical skills
- Mx/E2. Computer skills
- Mx/E3. Teamwork skills
- Mx/E4. English proficiency
- Mx/E5. Task knowledge
- Mx/E6. Task planning
- Mx/E7. Company process knowledge
- Mx/E8. Aircraft system knowledge
- Mx/E9. Other (explain in remarks)

Mx/F. Individual Factors

- Mx/F1. Physical health (including hearing and sight)
- Mx/F2. Fatigue
- Mx/F3. Time pressure
- Mx/F4. Peer pressure
- Mx/F5. Complacency
- Mx/F6. Body size/strength
- Mx/F7. Personal event (e.g., family problem, car accident)
- Mx/F8. Workplace distractions or interruptions during task performance
- Mx/F9. Memory lapse (forgot)
- Mx/F10. Visual perception
- Mx/F11. Assertiveness
- Mx/F12. Stress
- Mx/F13. Situational awareness
- Mx/F14. Not properly dressed (e.g., for weather)
- Mx/F15. Other (explain in remarks)

Mx/G. Environment / Facilities

- Mx/G1. High noise levels
- Mx/G2. Hot
- Mx/G3. Cold
- Mx/G4. Humidity
- Mx/G5. Rain
- Mx/G6. Snow
- Mx/G7. Lightning
- Mx/G8. Illumination
- Mx/G9. Wind
- Mx/G10. Jet blast
- Mx/G11. Vibrations
- Mx/G12. Cleanliness
- Mx/G13. Hazardous or toxic substances
- Mx/G14. Contaminated surfaces
- Mx/G15. Power sources
- Mx/G16. Inadequate ventilation
- Mx/G17. Slippery
- Mx/G18. Uneven work surface
- Mx/G19. Restricted/confined work area
- Mx/G20. Elevated work space
- Mx/G21. Marking
- Mx/G22. Labels/placards/signage
- Mx/G23. Other (explain in remarks)

Mx/H. Organizational Factors

- Mx/H1. Quality of internal support from technical organizations (e.g., engineering, planning, technical pubs)
- Mx/H2. Quality of external support from technical organizations (e.g., manufacturer)
- Mx/H3. Company policies
- Mx/H4. Not enough staff
- Mx/H5. Corporate change / restructuring
- Mx/H6. Labor action
- Mx/H7. Work process / procedure
- Mx/H8. Work process / procedure not followed
- Mx/H9. Work process / procedure not documented
- Mx/H10. Work group normal practice (norm)
- Mx/H11. Team building
- Mx/H12. Other (explain in remarks)

Mx/I. Leadership / Supervision

- Mx/I1. Planning / organization of tasks
- Mx/I2. Prioritization of work
- Mx/I3. Delegation / assignment of task
- Mx/I4. Unrealistic attitude / expectations
- Mx/I5. Availability of supervision
- Mx/I6. Other (explain in remarks)

Mx/J. Communication

- Mx/J1. Between departments
- Mx/J2. Between mechanics
- Mx/J3. Between shifts
- Mx/J4. Between maintenance crew and lead
- Mx/J5. Between lead and management
- Mx/J6. Between flight crew and maintenance
- Mx/J7. Other (explain in remarks)

Mx/K. Quality Control

- Mx/K1. Missing proper documentation
- Mx/K2. NDT (non destructive test) processes, specify _____
- Mx/K3. RII (required inspection) / designee
- Mx/K4. Improper quality control procedures
- Mx/K5. Other (explain in remarks)

Mx/L. Other Contributing Factors (explain in remarks)

Acronyms:

LOSA – Line Operation Safety Assessment

MX – Maintenance

NDT – Non Destructive Test

RII – Required Inspection