



The process of implementing LOSA to maintenance

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What is LOSA?

- The first thing for risk management
 - Identification and interpretation of hazards.
- Accident investigation
 - Find out the association between the risk and hazards.
 - Focus on failure of the system.
- Early signs pointing to the hazards and its consequent risk: weak and ambiguous.



What is LOSA?

- Limitation of self-reporting system
 - Personal biases may resulting in overlooking significant actions
- Line Operation Safety Audit (LOSA)
 - Originate from flight deck audition
 - A tool for collecting safety data, both in the technical and human performance
 - Monitoring the routine operation
 - From a neutral point of view



The characteristics of LOSA

- “Fly on the wall” observations by **peers** during normal maintenance operations.
- Anonymous, confidential, and non-punitive data collection.
- Voluntary participation.
- Trusted, trained, and calibrated observers who come from the maintenance staff.
- Joint management/union sponsorship.



The characteristics of LOSA

- Targeted observation instrument.
(Maintenance LOSA Observation Forms).
- Data verification roundtables to find data inaccuracies.
- After a series of observations, the data are analyzed and presented to crews and management.
- Data-derived targets for improvement.



The characteristics of LOSA

- Feedback of results to the maintenance crews.



The benefits of LOSA

- Identify and manage of threats.
 - Understanding the shortcuts
 - Identify the design/equipment problems
- Identify and manage errors.
- Assess training effectiveness.
- Check the quality and usability of procedures.
- Involve employee groups.



The benefits of LOSA

- Complements existing safety & QA programs.
- Assess safety margins.
- Baseline for organizational change.



LOSA implementation

- Preparation phase
- LOSA infrastructure development phase
- Activity implementation phase
- Continuous LOSA application phase



LOSA implementation

- Preparation phase
 - Obtain senior management buy-in.
 - Form an implementation team.
 - Market LOSA.
 - Integrate with existing safety programs



LOSA implementation

- LOSA infrastructure development phase
 - Construct LOSA database.
 - Conduct train-the –trainer training.
 - LOSA website.
 - Observer training.



LOSA implementation

- Active implementation phase
 - Conduct LOSA observations.
 - Validate LOSA data & populate database.
 - Compile a LOSA report.
 - Feedback to the employees.



Next step for LOSA

- Complement existing safety programs in SMS.
- Analyze return on investment (ROI).
- Focus on evaluating the implementation outcomes
 - Identifying commonalities and trends.
 - Tracking corrective actions.
 - Monitoring repetitive finds to assess the effectiveness of prescribed corrective actions.



Conclusion

- Critical success factors for LOSA
 - Senior leadership support and drive for change.
 - Early stakeholder engagement.
 - Communication and promotions.
 - Non-jeopardy observations.
 - Managing change process.



Thank you