



LOSA's observe natural crew behavior on 200-300 normal missions or tasks.

Observers capture the external threats challenging mission success, as well as the errors occurring everytime a crew goes from point A to point B or a specific task like loading an aircraft, recovering an aircraft, etc. A LOSA documents the consequences and how the issues were resolved or if they led to an undesirable aircraft state.

LOSA Characteristics

1. Conducted during normal operations; no line checks, training flights, QC inspections, debriefings or post-flight interviews about what happened.
2. Anonymous, confidential, non-punitive data collection; no names, flight numbers, or other identifying info. Observer identity kept anonymous.
3. Voluntary crew participation; personnel have the right to decline a LOSA observation.
4. Trusted and trained observers: experienced personnel from outside the organization.
5. Standardized (tailored to community); observation tool based on Threat-Error Management.
6. Secure data collection repository; third party, contracted.
7. Data verification roundtables; threat error management data checked for accuracy and consistency with standard operating procedures.
8. Data-derived targets for enhancement; LOSA adopts a "Measure, change, measure again" approach.
9. Feedback to crews! Published and viewable in AFSAS.



LOSAs identify the strengths and vulnerabilities in your everyday operations.

Contact Us

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LOSA

A **Line Operations Safety Audit** is a non-punitive, identity-protected, peer-to-peer observation program that employs a standardized methodology to provide leaders and aircrews with information to assist in managing systemic operational risk. **LOSA** is not a compliance audit, it is a data source that provides "lead indicators" for mishap prevention purposes.

LOSA is a proactive safety program used to collect safety-related data during normal operations by identifying the threats personnel face, the standard errors made, and practices employed by them to trap, mitigate and manage those threats and errors.



Threat / Error Management

Threats:

- External events or errors that occur outside the influence of the flight crew but require their attention to maintain adequate safety margins, i.e. weather, airfield, ATC.

Errors:

- Observable crew action or inactions that leads to a deviation from "organizational" or flight crew expectations, i.e. checklist, communication, CRM.

Undesirable Aircraft States:

- Crew-error induced aircraft state that increases risk and decreases safety margins, i.e. unstable approaches, speed deviations, firm landing.

Process

Observations are documented in a safety report that identifies threats and errors impacting everyday operations and provides recommendations for fleet-wide risk mitigation. LOSAs are safety studies, not mishaps, therefore, the reports are not privileged. For over a decade, the program has mitigated hundreds of hazards, produced dozens of reports, and created over 500 mishap-preventing recommendations.

The benefits of using LOSA are vast and include, but are not limited to, systematically and scientifically identifying the strengths and weaknesses of normal operations, decreasing the frequency of undesirable events, detecting inappropriate techniques, identifying design issues, and detecting normalization of deviance in the form of workarounds and shortcuts used by aircrew, air traffic controllers and dispatchers.

The Air Force Safety Center believes that LOSA can be used with great results in all airfield operations, maintenance and dispatch communities.



Purpose

LOSA identifies the threats and errors impacting successful mission accomplishment and how crews manage those challenges. Key to understanding and vital to the LOSA's final outcome is understanding the crew's response to each and the eventual outcome. The end result of a LOSA is implementation of fleet-wide risk mitigations to enable the mission.

- LOSAs are their own category in AFSAS defined as a type of safety study, per DAFI 91-204. A LOSA is not privileged.
- Effective LOSA programs reoccur every 2-4 years to measure mitigation efforts and assess new hazards in that community.