

How to analyse incident and near-miss reports in aviation security

A practical method for reviewing events, identifying contributing factors and improving aviation security.





What is an incident or near-miss report?

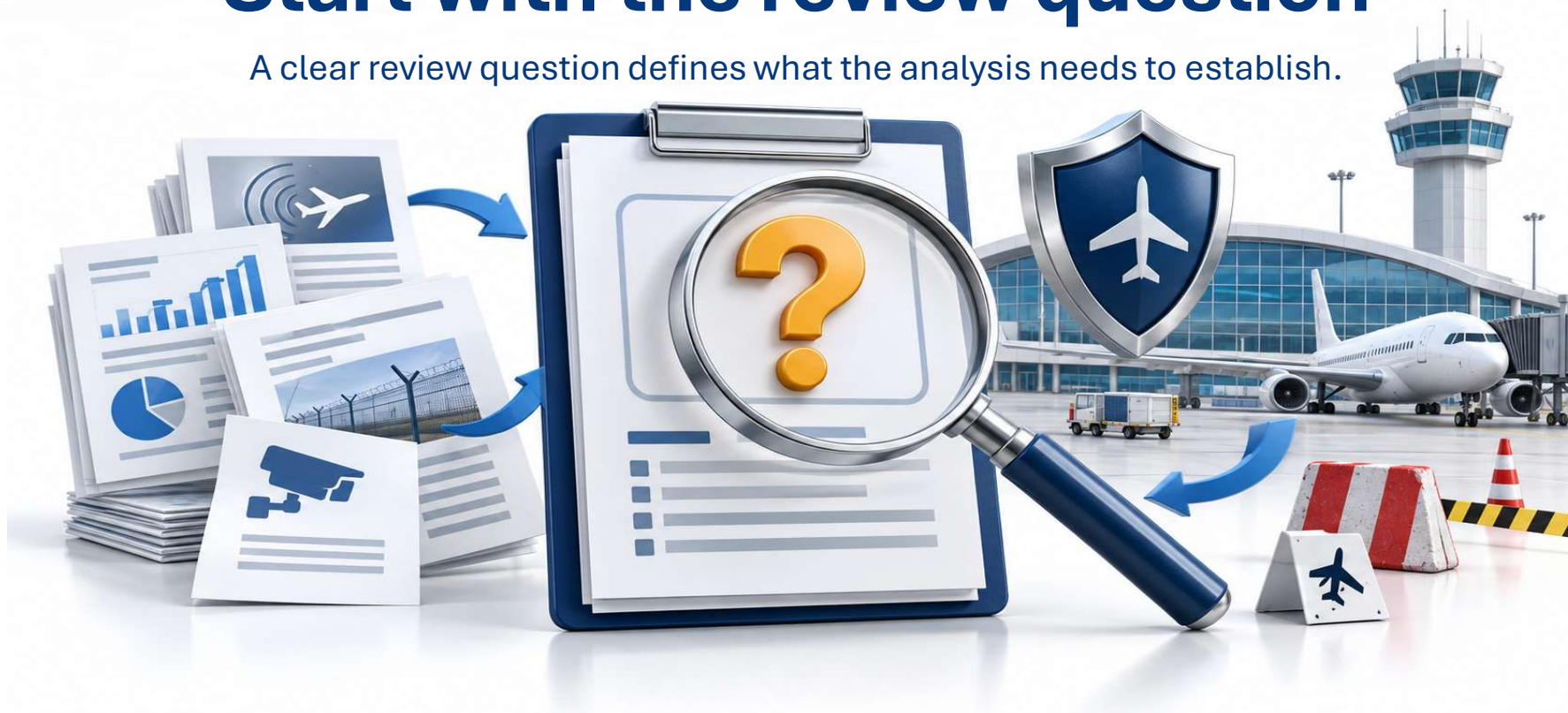
Reports provide structured information about what happened, what nearly happened and what may need to change.





Start with the review question

A clear review question defines what the analysis needs to establish.





Preserve the original report and context

Record the source, date, location, version and circumstances before interpreting the information.





Reconstruct the sequence of events

Establish what happened before, during and after the event.





Separate fact from interpretation

Distinguish what was directly observed from what is assumed, inferred or reported by others.





Identify the security barriers

Examine which controls were present, absent, bypassed, ineffective or successful.





Examine human and organisational factors

Consider workload, competence, procedures, supervision, resources, design and working conditions.





Analyse communication and escalation

Review how information was shared, understood, escalated and acted upon.





Compare incidents and near-misses

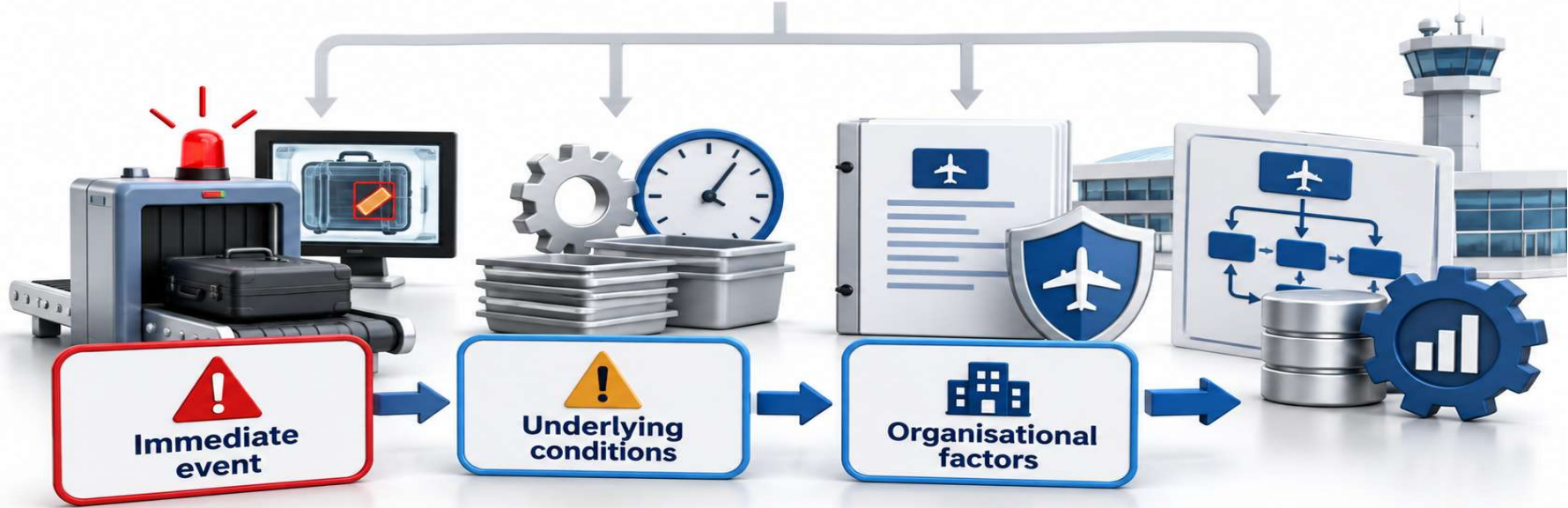
Look for recurring patterns across locations, teams, shifts, processes and suppliers.





Identify contributing factors

Consider the immediate, underlying and organisational factors that influenced the event.





Assess the risk and potential consequences

Consider what happened, what could have happened and whether existing controls remain adequate.





Turn findings into improvement actions

Convert evidence into proportionate actions, owners, timescales and measures of effectiveness.





The incident and near-miss review checklist

Good analysis connects the event, evidence, contributing factors, risk and organisational learning.

