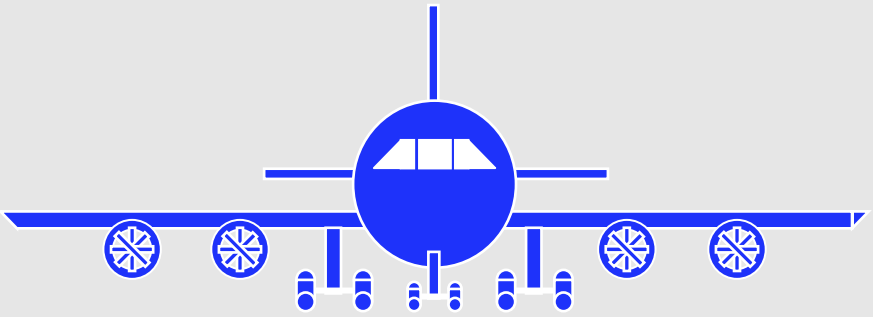
Unrestricted

Managing Runway Incursion

Key Risk Control Insights from IOSA 2024-2025



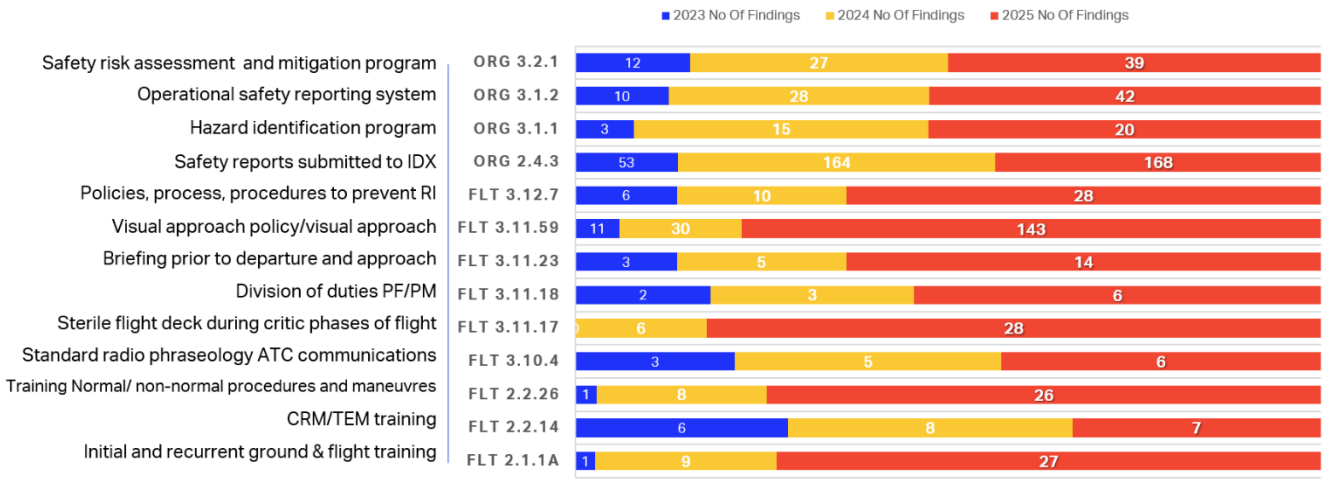
Introduction

The Global Action Plan for the Prevention of Runway Incursions (GAPPRI) represents the agreed, industry-recognised framework to mitigate and prevent runway incursions, providing specific recommendations to air operators and other operational stakeholders, including aerodrome operators and air navigation service providers.

From an IATA IOSA programme perspective, the GAPPRI recommendations addressed to air operators are closely aligned with existing IOSA safety standards (see the table below). As such, IOSA conformance data provides a meaningful insight into the level of implementation of GAPPRI recommendations.

Scope	IOSA Standard	GAPPRI Recommendation
Safety Management	ORG 3.1.1	AO1
	ORG 3.1.2	AO1
	ORG 3.2.1	AO1
	ORG 2.4.3	AO3
Line Operations (Including Ground Ops, RWY operations, Approach Landing, and Work Management)	FLT 3.12.7	AO7,AO9, AO10, AO11, AO12, AO13, AO14, AO17, AO20, AO22, AO24, AO25, AO26, AO27, AO28, AO29, AO31.
	FLT 3.11.59	AO30
	FLT 3.11.23	AO31
	FLT 3.11.18	AO16
	FLT 3.11.17	AO11
	FLT 3.10.4	AO12, AO13
Training and qualifications	FLT 2.2.26	AO14
	FLT 2.2.14	AO8
	FLT 2.2.1A	AO4, AO5, AO6.

Since the introduction of Risk-Based IOSA, an increasing trend of non-compliance has been observed against the subset of IOSA standards directly related to runway incursion prevention. This trend motivated an analysis of common and recurring systemic weaknesses in runway incursion controls from the air operator's standpoint.



This document analyses non-compliance patterns to identify common gaps in the implementation of key runway incursion risk controls among some IOSA operators. It provides targeted safety intelligence and aims to raise awareness among safety and flight operations managers.

Findings summary

ORG 3.1.1 – GAPPRI AO1

Identified Gaps and Observations from a Safety Management Perspective

1. Hazard identification program documented but not effectively implemented

- The most recurrent finding is a documentation–implementation gap.
- Although operators documented a hazard identification program in the SMS Manual, auditors frequently found:
  - No demonstrable application in daily operations,
  - Hazard logs containing very few entries (e.g. only a handful of hazards over multiple years),
  - Reliance on theoretical descriptions rather than operational processes.
- Auditors consistently concluded that having a policy without demonstrable outputs does not meet IOSA intent.

2. Lack of proactive hazard identification methods

- A dominant non-compliance pattern was the absence or ineffective use of proactive methods, including:
  - Flight Data Analysis (FDA/FDM),
  - Quality assurance and internal audit findings,
  - Management of Change,
  - External safety information (e.g. SAFOs, industry alerts).
- In several cases, FDA programs were documented but not produce any hazards, even when trend data clearly indicated safety precursors (e.g. TCAS RAs, ground damage).

3. Hazard identification not integrated across the organization

- Auditors repeatedly identified fragmented implementation, with hazard identification:
  - Absent or ineffective in MNT, CAB, DSP, CGO, and GRH,
  - Limited to flight operations or a single department.
- Department-level hazard logs were often missing, outdated, or non-existent, preventing confirmation that the program was integrated throughout the organization, as required by the ISARP.

4. Occurrences managed as events, not converted into hazards

- Many operators treated safety reports as stand-alone occurrences:
  - Reports were investigated and corrective actions taken,
  - But associated hazards were not identified, recorded, or tracked.
- In some cases, hazard logs had not been updated for years, despite hundreds or thousands of reports being received annually.
- This undermines the systemic learning objective of hazard identification.

5. Weak risk evaluation and inconsistent severity assessment

- Auditors observed inadequate or inconsistent risk assessments, including:
  - Underestimation of hazard severity (e.g. CFIT, TCAS RAs), Failure to reassess risk after mitigation, and no aggregation or trend-based prioritization of hazards.
- This resulted in risk registers that did not reflect the true operational risk profile, weakening runway incursion and collision prevention defences.

ORG 3.1.2 – GAPPRI AO1

Identified Gaps and Observations from a Safety Management Perspective

1. Reporting system not implemented across all disciplines (sub-item i)

- A dominant pattern is partial or non-implementation in key areas.
- Evidence shows very low or zero reports over extended periods despite high operational activity, indicating the system does not encourage or facilitate reporting.
- Access limitations (e.g., reporting access restricted to managers) and unclear scope (who should report) further suppress reporting.

2. Low reporting rates inconsistent with operational scale (sub-item i)

- Auditors repeatedly assessed reporting volumes as not commensurate with size/complexity (e.g., tens of thousands of sectors with minimal reports).
- Existing forms/tools are reactive-occurrence focused, not conducive to voluntary hazard reporting, undermining hazard discovery relevant to runway safety.

3. Analysis and management action not consistently performed (sub-item iii)

- A pervasive backlog of open and overdue reports (hundreds to thousands) with no analysis, no root cause, or no corrective action.
- Reports assessed as requiring action (e.g., "yellow" risk) were closed without treatment, including runway-relevant events (misalignment/go-around, RTOs, hard landings, DG carriage).
- Trend analysis is generally absent; actions are not tracked to closure.

4. Fragmented tools and inconsistent processes (sub-items i & iii)

- Multiple parallel reporting tools/databases create duplication, data loss, and inconsistent handling.
- Documented methodologies (e.g., ARMS/TEM) are not applied consistently, and responsibilities for post-holder management action are unclear.

5. Mandatory reporting requirements not clearly ensured (sub-item ii)

- Lists of mandatory reportable events are missing or not documented for some scopes; staff awareness is inconsistent.
- In some Instances, mandatory reports are handled outside the operator's SMS or by third parties, weakening control and traceability

ORG 3.2.1 – GAPPRI AO1

Identified Gaps and Observations from a Safety Management Perspective

1. Hazard analysis not performed or not traceable to risks (sub-item i)

- A dominant pattern is the absence of effective hazard analysis, largely driven by upstream failures in ORG 3.1.1.
- Hazards identified (e.g. runway crossings, DG carriage, laser interference, unruly passengers) were not analyzed to determine corresponding safety risks.
- Risk registers omitted high-risk items or contained generic hazards lacking specificity, preventing meaningful analysis.

2. Risk assessment incomplete, incorrect, or inconsistently applied (sub-item ii)

- Auditors repeatedly found that:
  - Risk assessments were not completed for a significant portion of reports/hazards.
  - Severity was incorrectly reduced after mitigation, even when mitigation could only affect likelihood.
  - Multiple, inconsistent risk matrices were in use (manual vs. software), with no guidance on applicability.
- In several cases, initial and residual risk levels were identical, indicating no effective assessment.

3. Risk mitigation actions not developed, implemented, or tracked (sub-item iii)

- One of the strongest non-compliance drivers.
- Even when assessments required mitigation ("management attention"), actions were:
  - Not defined,
  - Not implemented in operations,
  - Not tracked to closure or reviewed for effectiveness.
- Databases showed large backlogs of overdue mitigation actions (some several years old), undermining risk control.

4. Program not implemented or integrated across the organization

- Risk assessment and mitigation were fragmented by discipline:
  - Weak or absent in DSP, CGO, GRH, CAB, and MNT.
  - Often centralized within the Safety Department, with limited operational management ownership or acceptance.
- Departmental hazard/risk registers were missing or uncontrolled, preventing organization-wide integration.

5. Governance, tools, and responsibilities unclear

- Auditors identified:
  - Misalignment between documented processes and electronic tools.
  - Lack of clarity on who conducts assessments, approves risk tolerability, and owns mitigation actions.
  - Time-based criteria for mitigation not followed, and effectiveness not monitored.
- This indicates a systemic governance and competency gap in SRM execution

ORG 2.4.3 – GAPPRI AO3

Identified Gaps and Observations from a Safety Management Perspective

1. Absence of a documented IDX reporting process (primary non-compliance driver)

- The most repetitive finding is that operators do not document a formal process to ensure safety and security occurrences are submitted to IATA IDX.
- Even where participation in IDX was verified (signed agreement, platform access, uploaded data), no controlled procedure defined:
    - Scope of reportable events, Responsibilities, Timelines, Quality checks.
- Auditors consistently concluded that implementation without a documented process does not meet IOSA intent.

2. Process documented but not implemented

- A second dominant pattern involved operators that:
    - Documented IDX reporting in manuals (SMS, Safety, or Compliance manuals),
    - But had not commenced submissions, or could not demonstrate actual data uploads.
- This was frequently observed where IDX participation was "planned," "in progress," or contractually agreed, but not operationalized at the time of audit.

3. Partial or selective reporting across operational areas (sub-items i–iv)

- Many operators submitted only a subset of occurrences, most commonly:
    - Bird strikes or ground handling events.
- Reports from flight operations, cabin operations, and engineering/maintenance were often missing or explicitly excluded.
- In several cases, security occurrences were not submitted, despite safety reports being uploaded, resulting in incomplete compliance with the ISARP scope.

4. Lack of defined roles, responsibilities, and timelines

- Where IDX reporting was taking place, auditors noted:
    - No defined accountable postholder,
    - No internal timelines aligned with the formal IDX reporting process,
    - No internal review or validation mechanism before submission.
- This created inconsistent, ad-hoc reporting, dependent on individual initiative rather than system assurance.

5. Non-participation or misunderstanding of the IDX requirements

    - A significant number of operators did not participate in IDX at all, or believed national mandatory occurrence reporting satisfied the requirement.
- Auditors assessed this as a misinterpretation of IOSA intent, which requires active contribution to IATA's global safety data exchange, independent of State reporting obligations

FLT 3.12.7 – GAPPRI AO7,AO9, AO10, AO11, AO12, AO13, AO14, AO17, AO20, AO22, AO24, AO25, AO26, A027, AO28, AO29, AO31.

Identified gaps and observations from a Line Operations Perspective

1. **Systemic documentation deficiency in the operations manual (all sub-items i–v)**
   - Auditors repeatedly concluded that runway incursion prevention guidance was not fully documented, not centrally published, or not referenced in the OM.
   - Where guidance existed, it was fragmented across multiple OM chapters, difficult to locate, and did not present a coherent, end-to-end policy and procedure set covering taxi, take-off, and landing.
   - Several findings note that implementation was observed, but documentation did not meet ISARP intent, resulting in non-compliance despite operational practice.

2. **Mismatch between documented policy and observed implementation (recurrent across i–iv)**
   - Auditors observed routine non-adherence to documented flight crew actions, including:
     - Absence of runway designator cross-checks and traffic scans in the simulator or line operations.
     - Failure to verbally coordinate and agree on the assigned runway despite OM requirements.
     - Distractions during taxi (e.g., headset troubleshooting while the aircraft was moving).
   - This pattern indicates ineffective embedding of procedures into training, checking, and line operations, undermining compliance with sub-items (i) and (ii).

3. insufficient situational awareness guidance (sub-item i)
   - Multiple findings highlight that instructions for flight crew situational awareness, particularly in the air relative to the airport surface, were:
     - Not documented, or
     - Inconsistently implemented.
   - There was limited evidence of standardized expectations for runway verification, positional awareness, or monitoring during critical phases (line-up, crossing, landing rollout).

4. Incomplete coverage of high-risk scenarios and airport-specific threats (sub-items ii & iv)
   - Operators frequently failed to document:
     - Operating policies for periods of high runway incursion risk (complex taxi layouts, intersections, construction, peak traffic).
     - Identification of higher-risk airport surface areas (hotspots), despite evidence that crews briefed hotspots informally.
   - Auditors consistently assessed this as implementation without documentation, which does not satisfy IOSA requirements.

5. Reduced visibility and LVO policies missing or incorrectly excluded (sub-item v)
   - The most repetitive and consistent non-compliance driver.
   - Even when operators were not authorized for LVO, auditors expected:
     - Documented reduced-visibility procedures applicable to CAT I or degraded visibility conditions.
   - Many operators incorrectly treated “no LVO authorization” as “N/A”, leaving no guidance for low-RVR taxi, line-up, or landing scenarios, contrary to IOSA intent.

FLT 3.11.59 – GAPPRI AO30

Identified gaps and observations from a Line Operations Perspective

1. Stabilized approach policy not fully documented to IOSA intent (all sub-items i–v)

- The most recurrent finding is partial or incomplete documentation of stabilized approach policies.
- While stabilized approaches were consistently observed as implemented, policies were often written as *recommendations* rather than *requirements*, lacked authority approval/acceptance statements, or omitted key sub-items.
- Auditors consistently concluded that implementation alone does not compensate for missing or incomplete documentation, resulting in non-compliance.

2. Incomplete or ambiguous stabilization criteria (sub-item i)

- Frequent gaps in criteria defining a stabilized condition, notably:
  - Missing or inconsistent vertical speed limitations (i)(d).
  - Undefined or incomplete speed and thrust tolerances (i)(c), often inconsistent across fleets and manuals.
  - Lack of acceptable vertical and lateral deviation criteria for non-ILS, RNAV, visual, circling, and 2D approaches (i)(e).
  - Checklist completion requirements (i)(b) not explicitly linked to stabilization gates.
- Several policies used obsolete tables, conflicting definitions, or vague terms (e.g. "correct configuration"), creating ambiguity and inconsistent interpretation by flight crews.

3. Reduced stabilization heights without supporting safety risk assessment (sub-item ii)

- A dominant non-compliance pattern involved stabilization heights below 1000 ft / 500 ft AAL, particularly:
  - 300 ft for circling or special approaches.
  - 400–500 ft for ATC-constrained or sidestep approaches.
- Although operators frequently referenced operational necessity or local practice, documented SRAs in accordance with Table 2.9 were absent, incomplete, or generic, and not specific to each reduced height.
- Auditors also noted unclear applicability (IMC/VMC) and a lack of justification for lateral-only stabilization exceptions.

4. Go-around policy and deviation management not explicitly linked (sub-items iii & iv)

- Many operators did not document:
  - A clear requirement to abandon the approach unless stabilization criteria are met at the defined gates and maintained until touchdown (iii).
  - Mandatory pre-planning and special briefing requirements for deviations during unique approaches or abnormal conditions (iv).
- In several cases, SOPs required verbal acknowledgment of "unstable" without defining who calls, what action follows, or management support for go-around decisions, weakening the safety barrier.

5. Human factors and SRM integration deficiencies (sub-item v and note)

- A recurring systemic weakness was the absence of documented PF/PM roles, responsibilities, and countermeasures to human error within the stabilized approach policy.
- Additionally, auditors consistently found that:
  - Stabilized approach policies were not subjected to formal SRM processes.
  - Unstable approach events identified via FDM/FDA were not systematically analyzed, trended, or fed back into policy, training, or risk controls.
- This disconnect undermined assurance that an acceptable level of safety risk was being actively monitored and maintained, as required by the Note to FLT 3.11.59.

FLT 3.11.23 – GAPPRI AO31.

Identified gaps and observations from a Line Operations Perspective

1. Absence of structured, centralized briefing guidance in the OM (all sub-items)

- Auditors repeatedly concluded that operators do not have structured guidance defining the conduct and content of required pre-departure and approach briefings.
- Where requirements existed, they were generic, dispersed across SOPs, or difficult for crews to locate, resulting in a finding that the ISARP requirement is not adequately documented.
- In several cases, all three sub-items were implemented in practice, but the lack of explicit, consolidated guidance resulted in non-compliance.

2. Technical status of aircraft not explicitly required in briefings (sub-item i)

- A frequent pattern was the absence of a documented requirement to include the technical status of the aircraft in departure or approach briefings.
- Mandatory Observations identified instances where:
  - MEL/CDL logs were not reviewed prior to briefing.
  - Aircraft defects (e.g. INOP labels, windshield damage) were not captured in the PIC briefing.
- Although implementation was often confirmed through crew interviews and observations, auditors assessed that documentation does not clearly mandate this briefing element, leaving ambiguity as to when and how it must be addressed.

3. Incomplete documentation of normal and non-normal considerations (sub-item ii)

- Operators often failed to explicitly define normal and non-normal departure and approach considerations as required briefing elements.
- While landing or approach briefings were observed, no documented standard existed specifying minimum content aligned with the ISARP.
- This resulted in inconsistent briefing depth and reliance on individual crew technique rather than a standardized, auditable requirement**.**

4. Systemic weakness in jump seat occupant safety briefings (sub-item iii)

- Sub-item (iii) generated the highest number of repetitive findings, driven by:
  - Jump seat briefings not conducted during Mandatory Observations, despite being documented.
  - Briefings conducted but incomplete, omitting emergency equipment, exits, evacuation procedures, or sterile cockpit requirements.
  - Absence of a checklist or briefing card to standardize delivery.
- In several cases, operators referenced incorrect OM sections (e.g. cabin supernumerary briefings) that did not apply to flight deck jump seat occupants, creating misalignment between intent and documentation.

5. Implementation not sustained or embedded after documentation changes

- Auditors noted cases where operators had recently revised OM sections to address jump seat briefings, yet:
  - Crews were unaware of the changes.
  - Required briefings were not delivered during observed flights.
- This pattern indicates weak change management, training, and communication, undermining the effectiveness of corrective actions and resulting in continued non-compliance.

FLT 3.11.18 - GAPPRI AO16

Identified gaps and observations from a Line Operations Perspective

1. Breakdown of PM/PF task segregation during abnormal operations (sub-items i, ii, iii)

- Simulator observations repeatedly showed both pilots simultaneously heads-down, conducting non-normal checklist actions or aircraft preparation, contrary to defined PM/PF task segregation.
- Instances were observed where the PF manually flew the aircraft while simultaneously manipulating the Flight Guidance Panel (FGP), indicating ineffective prioritization of flight path control.
- These observations demonstrate practical erosion of task division under workload, a key IOSA concern for runway incursion and loss-of-control risk.

2. Incomplete or missing documentation of PM/PF duties (sub-items ii & iii)

- Auditors consistently identified that PM/PF duties were:
  - Not fully documented for all phases of flight, particularly during abnormal and emergency situations.
  - Inadequately defined for communication, cross-checking, and monitoring roles.
- Although crews demonstrated familiarity during interviews and simulator sessions, the absence of formal documentation resulted in non-compliance.

3. Checklist use requirements not fully addressed (sub-item i)

- Recurrent findings showed:
  - Checklist items omitted during observed operations (e.g. OEB verification during preflight).
  - Policies did not explicitly define checklist usage during abnormal operations, despite normal operation guidance being present.
- This created a gap between procedural intent and execution, particularly under time pressure or abnormal conditions.

4. Lack of defined flight and cabin crew coordination duties (sub-item iv)

- One of the most consistent non-compliance patterns was the absence of documented coordination procedures between flight and cabin crew for:
  - Emergency evacuation,
  - Medical emergencies,
  - Incapacitated flight crew member scenarios.
- In several cases, no policy existed, and in others, policies addressed cabin crew actions only, without defining flight crew roles and interfaces.

5. Implementation observed but not standardized or assured

- Across multiple findings, auditors noted that:
  - Required task division and coordination were observed in practice during line or simulator operations.
  - However, operators were unable to provide clear OM references supporting these practices.
- This recurring documentation–implementation mismatch led auditors to conclude that compliance is not assured or repeatable, particularly during high-workload scenarios

FLT 3.11.17 - GAPPRI AO11

Identified gaps and observations from a Line Operations Perspective

1. **Sterile flight deck policy incomplete or not clearly defined (all sub-items)**
   - A recurrent finding was the absence of a fully defined sterile flight deck policy, including unclear or missing definitions of:
     - Start and end points of the sterile phase,
     - Applicability across climb, descent, and approach.
   - In several cases, auditors observed correct crew behavior, yet concluded non-compliance due to lack of documented policy or inconsistent definitions across manuals (OMA, OMB, CSPM).

2. Lack of a defined protocol for flight–cabin crew communication (sub-item ii)
   - One of the most frequent non-compliance drivers.
   - Operators often lacked documented procedures specifying:
     - When and how cabin crew may contact the flight deck during sterile phases,
     - Distinction between emergency-related and safety-related communications.
   - In some cases, generic guidance existed ("contact cockpit for safety reasons"), but no structured protocol was defined, resulting in ambiguity and inconsistent application.

3. Mandatory use of headsets below the transition level not documented or misaligned (sub-item iii)
   - Repeated findings highlighted that operators:
     - Documented headset use below 10,000 ft only, rather than below the transition level/altitude as required.
     - Did not document headset use at all, despite clear evidence of implementation during Mandatory Observations.
   - In multi-fleet operators, requirements were inconsistently applied across aircraft types, further weakening compliance.

4. Non-essential activities observed during sterile phases (sub-item iv)
   - Mandatory Observations identified crews engaging in non-essential activities (e.g. laptop use, passenger announcements) during sterile phases.
   - Although a general policy existed to restrict activities, procedural controls and monitoring were insufficient to prevent erosion during line operations.

5. Implementation exists but is not assured or standardized
   - A consistent pattern across findings was implementation without documentation:
     - Crews used headsets correctly.
     - Cabin crew coordination occurred informally.
   - However, auditors concluded that compliance is not assured, repeatable, or auditable without clear, centralized, and standardized procedures supported by training and oversight

FLT 3.10.4 - GAPPRI AO12, AO13

Identified gaps and observations from a Line Operations Perspective

1. **Documentation does not fully address iosa sub-requirements (all sub-items)**
   - The most consistent finding is implementation without adequate documentation.
   - Operators frequently demonstrated correct operational behavior during line and simulator observations; however, OM guidance did not explicitly include all IOSA-mandated elements, leading to non-compliance.
   - In several cases, guidance existed but was incomplete, outdated, or not aligned with standard ICAO phraseology

2. Missing or incomplete requirement for call sign usage (sub-item i)
   - Auditors repeatedly identified that:
     - The mandatory use of call signs during ATC communications was not documented, despite being applied in practice.
     - In some cases, related requirements (e.g. reporting crossing level) were documented but not consistently implemented during Mandatory Observations.
   - This creates ambiguity regarding when call sign usage is required and how compliance is monitored.

3. Lack of documented two-crew monitoring and confirmation of clearances (sub-item ii)
   - One of the strongest non-compliance drivers.
   - Operators often failed to document a requirement for both flight crew members to monitor, cross-check, and confirm critical ATC clearances.
   - Mandatory Observations highlighted unsafe scenarios, such as:
     - Altitude clearances acknowledged by one pilot while the other was distracted or not monitoring the frequency.
     - Cleared altitudes not being set or verified in the altitude selector window.
   - Even where procedures were known and applied informally, auditors concluded that mutual understanding is not assured without formalized policy.

4. Clarification of atc clearances not explicitly required (sub-item iii)
   - A recurrent documentation gap involved the absence of an explicit requirement to query or clarify ATC clearances whenever doubt exists.
   - Multiple findings note that:
     - Clarification was performed in practice.
     - There was no documented trigger or obligation for flight crew members to seek clarification.
   - This weakens the defensive barrier against misunderstood or missed clearances, particularly during high-workload or complex taxi/approach phases.

5. Breakdown between phraseology guidance and clearance management
   - Some operators documented standard phraseology; however:
     - Guidance did not fully integrate readback discipline, confirmation, monitoring, and clarification into a single, coherent process.
     - Observations showed clearances accepted but not entered, confirmed, or re-verified, increasing the risk of altitude deviations or runway incursions.
   - This indicates procedural fragmentation rather than a robust end-to-end clearance management concept

FLT 2.2.26 - GAPPRI AO14

Identified gaps and observations from a Training and Qualifications Perspective

1. Training implemented but not adequately documented (all sub-items i–v)

- The dominant non-compliance driver was the absence of clear documentation demonstrating that flight crew training explicitly covers all required elements (i) to (v).
- Auditors repeatedly confirmed, through observations, interviews, and partial records, that training was being conducted, yet:
  - Syllabi, OM references, or training manuals did not explicitly list or map the IOSA sub-items.
  - Coverage was implied through check profiles or instructor briefings rather than formally documented requirements.
- This resulted in a consistent conclusion that compliance could not be assured or verified.

2. Incomplete coverage across training phases (initial, conversion, recurrent)

- Several findings identified that required elements were:
  - Addressed only in recurrent or procedures & maneuvers training, but
  - Absent from initial or conversion/transition syllabi.
- In particular, positive transfer of aircraft control (ii) and task prioritization (iv) were frequently missing from initial or transition training programs, undermining consistency across the training lifecycle.

3. Recurrent training requirements not explicitly defined

- A recurring pattern was the lack of documented recurrent training requirements specifying that training must address:
  - PM/PF task sharing,
  - Checklist philosophy,
  - Task prioritization,
  - Use of automation.
- In multiple cases, auditors noted that recurrent training was delivered and evidenced in practice, but not mandated in the recurrent training program documentation, leading to non-compliance.

4. Inconsistent evidence and record-keeping

- Auditors frequently reported:
  - Missing or unavailable training records during the audit,
  - Inability to demonstrate that recurrent training was completed within required timeframes.
- Where records existed, they often did not clearly show which sub-items (i–v) were trained, preventing traceability and verification.

5. Observed training outcomes not always aligned with policy

- In some Mandatory Simulator Observations, auditors noted that:
  - Checklist use and task prioritization were not applied in accordance with documented policy, despite those concepts being described in manuals.
- This indicates a disconnect between training intent, policy, and observable crew behavior, weakening the safety barrier against runway incursions during high-workload scenarios.

FLT 2.2.14 - GAPPRI AO8

Identified gaps and observations from a Training and Qualifications Perspective

1. CRM facilitator qualification not documented or not assured (primary non-compliance driver)

- The most frequent finding was the absence of documented requirements and processes to ensure CRM facilitators are trained in human performance and human factors (HP/HF).
- In multiple cases, auditors verified through certificates or interviews that facilitators had received HP/HF training, but the operator:
  - Did not document this requirement, or
  - Could not produce standardized evidence during the audit.
- This resulted in repeated conclusions that compliance could not be assured, regardless of actual facilitator competence.

2. CRM delivered without qualified facilitators (CBT / LMs-only models)

- Several operators delivered CRM training via CBT or LMS platforms only, without facilitator involvement.
- IOSA auditors assessed that:
  - CRM/TEM requires facilitated discussion and interaction, and
  - CBT-only delivery does not meet the intent of FLT 2.2.14 unless explicitly supported by qualified facilitators.
- This was considered a systemic misunderstanding of the ISARP requirement.

3. Incomplete CRM training coverage across training phases

- Recurrent patterns showed that:
  - CRM footprints were documented for recurrent training, but
  - Initial, conversion, or transition CRM training was missing, not documented, or not implemented.
- In some cases, joint crew CRM training was documented but not delivered as such, weakening crew coordination and TEM effectiveness.

4. Threat and error management (TEM) not explicitly integrated

- Multiple findings noted that TEM was not documented as an integral component of CRM training, even when operational TEM practices were observed.
- Where TEM was implemented in simulator programs or line operations, auditors still concluded non-compliance due to lack of formal documentation and syllabus integration.

5. Weak evidence, records, and evaluation traceability

- Auditors frequently reported:
  - Missing or incomplete CRM training records,
  - Inability to confirm training periodicity,
  - CRM facilitator assessment checklists documented but not implemented.
- This undermined the operator's ability to demonstrate ongoing compliance, effectiveness, and oversight of CRM training

FLT 2.1.1A - GAPPRI AO4, AO5, AO6.

Identified gaps and observations from a Training and Qualifications Perspective

1. Incomplete or weakly documented training program structure (all sub-items)

- A dominant pattern is that operators conduct training in practice, but do not fully document the structure of the training and evaluation program in OM.
- Key program elements (initial, recurrent, re-qualification, upgrade, specialized training) were often:
  - Partially documented,
  - Dispersed across documents, or
  - Not clearly linked to authority approval or acceptance.
- This resulted in auditors concluding that program compliance cannot be assured, even where training occurs.

2. Re-qualification requirements not defined or incomplete (sub-item iii)

- One of the most recurrent non-compliance drivers.
- Operators frequently lacked a documented re-qualification program addressing:
  - Absence from flight duties for defined periods,
  - Regulatory re-currency requirements beyond basic takeoff/landing recency.
- In several cases, re-qualification was implemented case-by-case, but not standardized or formally approved, which auditors assessed as non-compliant.

3. Upgrade to pic and specialized training not ensured (sub-items v & vi)

- Auditors repeatedly identified that:
  - Command (PIC) upgrade training was not documented or not implemented.
  - Specialized training (e.g. RNP, RNP-AR, EFB, variant training, AOC-authorized operations) was either undocumented or not delivered.
- In some cases, training was "in progress" or limited to instructors/administrators, which did not satisfy the requirement for operational flight crew competency.

4. Joint or cross-operator training conducted without documentation or approval

- Multiple findings highlighted joint training and evaluations between affiliated operators:
  - Evidence of implementation existed,
  - However, no documentation in either operator's manuals,
  - No authority approval for joint programs.
- Auditors assessed this as a governance and oversight failure, regardless of training quality.

5. Training records, currency control, and approval discipline weak

- Recurrent issues included:
  - Missing or incomplete training records (dates, signatures, course identification),
  - Training conducted outside defined validity periods (e.g. SMS, recurrent),
  - Syllabi approvals not meeting internal or authority-defined timelines.
- These weaknesses undermined the operator's ability to demonstrate control, traceability, and ongoing competency assurance.