WFS Global

HSSE Event Management and Investigation Manual

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Record of Revision

Edition	Page	Description of changes	Issue Date	Effective Date
1.3	All	Changes to immediate response to event	1 March 23	1 March 23
1.4	All	Updating Event management timelines & Accountability Review Process	1st Oct 23	1st Jan 24

Revisions to this edition are denoted by a horizontal orange line next to the revised or added sections.

Approvals

	Name / Title	Electronic Signature
Approved by	David Clark Global HSSE	12 Oct 2023
Written by	Scott Perchard & Peter Hunt Global HSSE	Peter Hunt (Oct 12, 2023 11:32 GMT+1)

1 Introduction

1.1 Purpose of HSSE Event Reporting and Investigation

The purpose of this document is to outline the minimum standard requirements of event management and investigations for WFS and its subsidiaries.

The purpose of a HSSE investigation is to determine why the event happened and to identify actions to prevent reoccurrence. Once the evidence is gathered, all the information should be analysed to identify 'what' happened and, more importantly, 'why' it happened. It is often easy to identify 'what' happened; the information should reveal this. The 'why' it happened can be more challenging, but this is where the real lessons and safety benefits are.

For every accident or serious incident, there will likely be hundreds of similar minor occurrences that predate it. Many of these may have had the potential to escalate to an accident so it is important that all reported events be reviewed and investigated as appropriate.

The WFS Health Safety and Security Management System requires all actual or potential issues to be reported into Pulse within a timely manner. This includes all reports raised by customers. As a rule, "if you're unsure whether to report or not then report it!" For a list of issues to report see Appendix 3 Examples of Issues to Report

2 Just Culture

WFS operates a 'Just Culture' where people are held accountable for their behavior or actions without being unduly blamed for events outside of their control. Employees need to be able to trust that when an incident occurs, they will be treated fairly and not unduly punished. If investigations place blame on individuals when external and organizational factors played a significant role in the event, the investigation runs the risk of alienating the workforce and undermining the safety culture that is crucial to creating and maintaining a safe working environment. The organization will also not effectively find the most efficient and reliable methods of preventing recurrence.

This document provides Just Culture guidance relevant to investigations. It is expected that all WFS employees receive awareness related to all aspects of Just Culture at WFS. The WFS Just Culture program is branded as 'ACT Fair.'

3 Event Management

3.1 Pulse – the Management System tool and database

Pulse has been implemented across all parts of WFS, to provide a central database where all Health, Safety, Security and Environment events are registered, assessed, and actioned. The system provides an analysis tool for the detection of trends, as well as ensuring both corrective and preventive actions are put in place to address individual events according to the seriousness. It provides a comprehensive and accurate safety picture of the entire company.

In addition to event management, records of Risk Assessments, Audits, Inspections, and the ability to track actions make Pulse a valuable source of evidence in investigations.

Throughout the documents you will see links titled "*How to…… in Pulse"* if you click on these links, it will take you to the WFS YouTube page for the Pulse How to video for that part of the process.

Click here to see the complete "Pulse How to…. Series"

3.2 Occurrence Investigation Process Flow

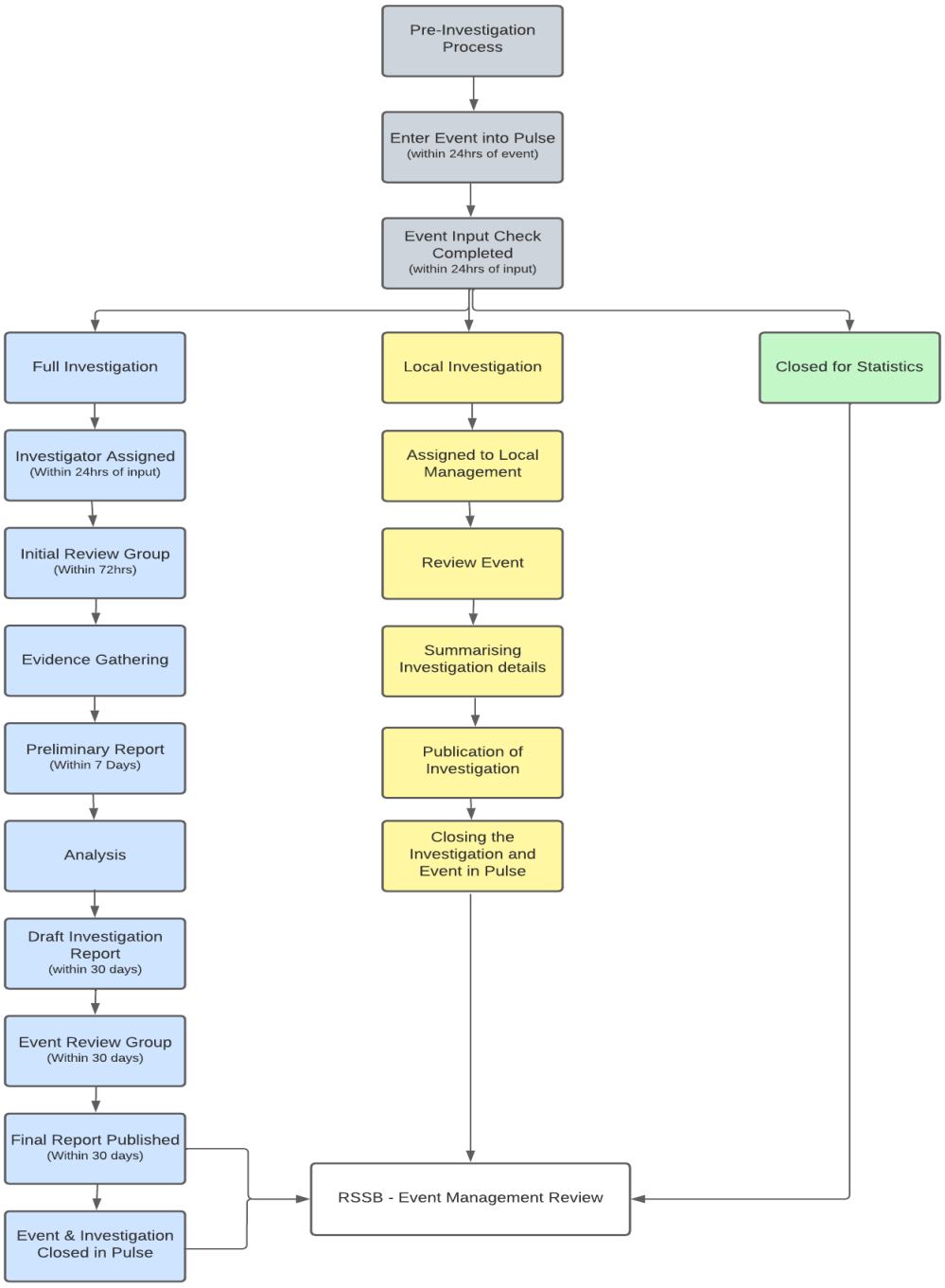


Figure 1 - Occurrence Investigation Process Flow

4 Pre-Investigation Process

When a serious event occurs, the person(s) involved in the event are required to immediately notify their supervisor or duty manager. An initial assessment will be undertaken by the person-in-charge. The primary goal at this phase is to ensure the welfare of those involved, preserve the scene, and determine if any immediate actions are required to prevent a further occurrence. If precautionary action is thought to be required, it will be discussed immediately with the Senior Management or their local management representative. In addition, the Initiating Investigator in conjunction with the Station Manager and Safety Officer will need to define the type of incident, which will in turn define the level of investigation required.

4.1 IMMEDIATE ACTIONS FOLLOWING AN INCIDENT

In all incidents/accidents and prior to any investigation being started, immediately complete the following steps:

IMMEDIATELY

- Provide care to the injured party and contact emergency personnel, if required.

SECURE the SCENE:

- Eliminate and control any hazards identified:
  - De-energize operating equipment, as required.
  - Light up the area.
  - Shore up equipment or facility, as required.
  - Ventilate, as required, in closed area.
- Take charge or assign a lead to manage the incident.
- Contact authorities and WFS HSSE.
- Take inventory of who and what, control the crowd.
- Isolate the incident scene.

FREEZE the SCENE:

- Secure the area of the incident, rope or barricade it off, and keep non-essential people out of the area.
- Protect the evidence until everything can be properly recorded.
- Take photos from all distances and all angles with scale references.

Once this has been accomplished it is important to note that some evidence is only available from scene of the event, such as layout of equipment, measurements, angles of impact, and configuration of equipment such as controls and tool position. This evidence will likely be lost once the scene is returned to the operation for clean up, so it is vital to the investigation that a through gathering of evidence is completed.

4.2 INVOLVED PERSONS

Following an incident there may be apparent or early indications suggesting that human factors contributed to the event. Taking prompt action to prevent recurrences and further harm to all involved parties is crucial. To achieve this, a temporary 'stand down' or removal from frontline duties for those involved in the incident is deemed necessary until more information is gathered to gain a clearer understanding of the root causes. This action is not intended to apportion blame but to ensure the well-being of those involved and allow time for effective interventions that prevent future occurrences.

WFS follows an industry-standard model for identifying human factors and implementing the associated interventions as part of our Just Culture management framework. This model, known as an accountability review (AR) based on the FAIR3 model. This is integrated into our investigation module in Pulse, which will be explained in greater detail later in this manual. Accountability reviews are conducted during the investigation process and their conclusions enable us to apply effective human factors solutions to events. The following diagram illustrates how the AR process progresses within the investigation.

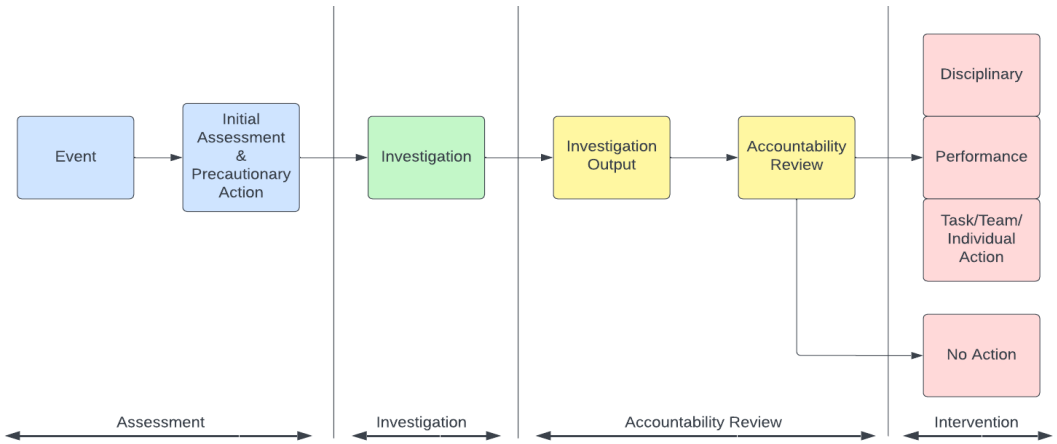


Figure 2- Accountability Review Model in Investigations

When conducting an accountability review it is important to note the result are based only upon the individual's actions during the event and limited to information strictly relevant to their safety performance. Its conclusions should not be viewed as a reflection upon their wider performance or be viewed as a disciplinary tool or used as such. The results are to provide effective interventions, through established frameworks, which are aimed at preventing recurrences. Where required, in the event of unacceptable behaviours being determined, details of the event should be passed to operational managers to process in accordance with country HR employee polices.

The following is guidance for immediate short term interventions post incident (and prior to investigation and AR completion) to prevent recurrence and protect involved staff.

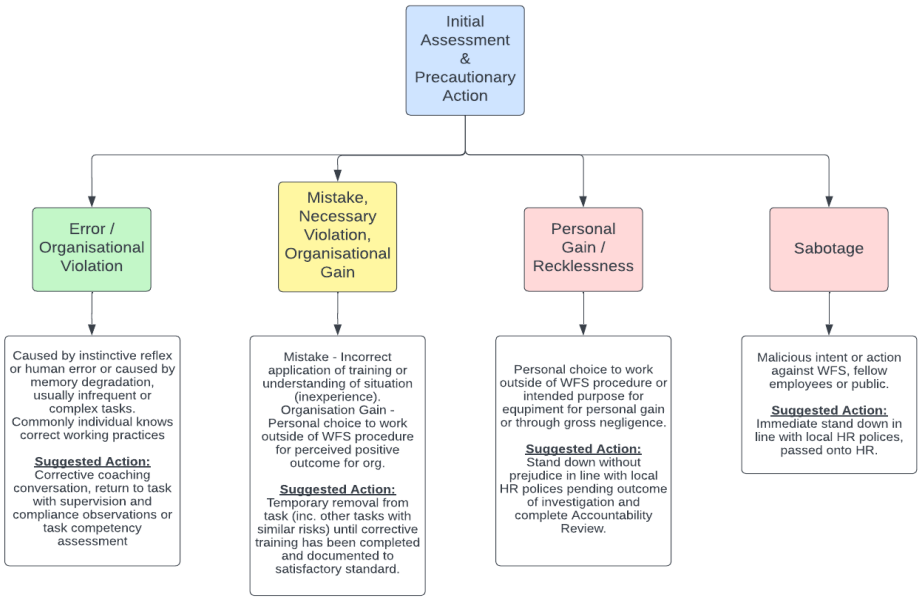


Figure 3 - Immediate interventions

Any post event actions with the involved people must consider the welfare of the individual, the possibility of recurrence and the safety of other colleagues. Decisions should be made that adopt a more cautious approach as during the early stages of an investigation not all information is available. Therefore, all immediate interventions need to adopt a 'without prejudice' approach until the full picture has been established through an investigation.

4.3 ENTER REPORT INTO PULSE

All events must be reported into Pulse within 24 hours of the event occurring, or within 24 hours of WFS being notified of the event. The event can either be reported using the Pulse Mobile App, creating a mobile event, or by directly entering it into Pulse. Pulse reports should include as much information as possible to ensure its accurate classification and severity.
How to Enter an event in Pulse video

4.3.1 PULSE INPUT CHECK

All reports need to be validated and classified within 24 hours of being entered into Pulse. Specific users identified as **Pulse Input checkers** (PIC) will:

- Ensure the correct event descriptors are used.
- Assess the event as per company Severity definitions.
- Edit the Title to meet title naming conventions (removing any names for GDPR requirements)
- Ensure confidentiality is maintained by removing any names from free text fields.
- Ensure that serious incidents are translated into English, if not already reported in English
- Create an Impact as appropriate for the event classification.
- Raise an Investigation based on severity of the event as per Table 1.7
- Request more information from original reporter if required.

How to Input Check an event in Pulse video
How to Create an Impact in Pulse
How to create an Investigation or Local Assessment in Pulse

4.3.2 EVENT FOLLOW-UP TABLE

Severity	Event Type	Detail	Follow-up	Impact Raised	Action Plan	Timeline to complete Follow-up
A & B	Serious	All Events	Full Investigation	Yes	Yes	30 days
A to D	Serious	All Aircraft Damage Events	Full Investigation	Yes	Yes	30 Days
C	Serious	Repetitive C Events	Full Investigation	Yes	Yes	14 days
C to D	Minor	All HSSE Except Damage	Local Assessment	Yes	Depending on results	14 days
E	Near-Miss	All	Closed for Statistics	No	No	Closed on Input Check
E	Near-Miss	Aircraft Damage or Injury	Closed for statistics	Yes	No	Closed on Input Check

Once the level of investigation is determined the PIC will raise the Investigation in Pulse and assign it to the relevant team accordingly.

4.4 Event Classification Table

Once submitted, events are categorized by severity and classified by event type Incident or near miss. All events shall be reviewed and investigated as per the Event Classification Table below.

Type of Events	Severity	Event Descriptors	Investigation Level	Required Action and/or details
Serious	A or B	ALL HSSE categories	Full Investigation	Immediate action taken and HSSE Regional Head immediately notified (within 60mins). Reported ASAP
Serious	A to D	Aircraft Damage	Full Investigation	Immediate action taken and HSSE Regional Head immediately notified (within 60mins). Reported ASAP
Minor	C or D	All HSSE Categories excl Aircraft damage	Local Assessment	Reported within 24 hrs. of the incident or becoming aware of the event, e.g., Customer raised report
Near miss	E	All categories	Closed for Statistics	

If national or customer requirement dictates that an investigation is necessary for events that would not normally warrant an investigation, the investigation shall be treated as a Full Investigation and follow the process accordingly.

Events classified as Full Investigation may be cancelled or stood down with the agreement of the Senior HSSE Management team – (Regional Head of Safety and Security in conjunction with Global Head of Safety)

Events classified as Local Assessment can also be escalated to Full Investigation if the HSSE team decides that it would be beneficial, reasons to escalate could include multiple reports of a similar nature in a short space of time – or an event happening in unusual circumstances.

If the event is classified as a Serious event a Full Investigation is required.
Link to Full Investigation

If the event is classified as a Minor event a local assessment and follow-up of the event.
Link to Local Assessment

If the event is classified as a Near-Miss, no further action is required, and the report can be closed.
Link to Closed for Statistics

5 Incident – Full Investigation

In the event of a serious event, the Pulse Input Checker will discuss the investigation with the Regional HSSE management to assign an investigation team. The investigation must be sufficient to identify all the contributing factors, including the immediate and underlying causes of the event. The investigation will then recommend possible changes to working practices and equipment and include an action plan to ensure that the recommendations are implemented. Statements must be collected and entered into Pulse and any Impacts and associated costs must be recorded.

5.1 Full investigation Timeline

EVENT	RESPONSIBILITY	MAX TIME
Event Occurred	Station Management	0:00
Serious Event Notification	Station Management	1hr
Enter Event in PULSE	Station Management	Within 24hours of event
Event Input checked	Input Checker	Within 24hours of input
Lead Investigator Assigned	Regional HSSE Lead	Within 24hours of input
Initial Review Group	Regional Investigations Management Team & Investigator.	Within 3 days
Initial Preliminary Report	Regional Investigations Management Team & Investigator.	Within 7 Days of event
Safety Critical Recommendations	Investigator	At any stage prior to Final Report
Event Investigation completed and Draft Report released to ERG Group	Investigator	Within 30 days of event and 24hrs prior to ERG.
Event Review Group	Safety and Security Director	Within 30 days of event
Final Report Publication & Lessons Learnt	Investigator	Within 30 days of event

5.2 Investigation Team Identified

Any person(s) who are requested to become a member of an Investigation Team shall be released from their normal duties as required to support the investigation. During an investigation, the Lead Investigator may request assistance from another department to research and compile information for the investigation team. Anyone called to assist the investigation must be given appropriate time to assist.
During an investigation, at least two of the team members must be present when conducting interviews and making and allocating recommendations.

5.2.1 Assignment of the Lead Investigator

A trained Lead Investigator will be appointed by the Regional HSSE team upon recommendation from the Country/LOB HSSE head in line with the guidance in this manual. This decision will ensure the investigation is completed thoroughly in accordance with this Investigation manual and in a timely manner. The Lead Investigator has the authority to lead the investigation independently and deliver the investigation report. Operational managers and leaders have a responsibility to ensure their teams cooperate fully in with the investigation and implement any recommendations that fall under their responsibility. Circumstances may require that the appointment of a Lead Investigator from outside of the relevant country or business unit is required. This decision will be taken by the Global Head of HSSE and will be based on several factors including, severity, impact, complexity, subject matter experience and commercial sensitivity.

5.2.2 Requirements for Investigators:

- When investigating, the investigator is required to maintain independence from any influence that could compromise the integrity of the investigation. This includes being free from the influence of the management structure or hierarchy of the country, organization, or institution involved in the investigation.
    - Should be investigator believe that the support, transparency, or independence of the investigation is compromised then they **must** contact Regional/Global Safety.

- Suitable training for an appointed Lead Investigator would normally mean an Aviation Safety or Security or state Occupational Health & Safety investigation training course from a recognized industry or regulatory training provider. Regions & countries should hold a record of approved Investigators from which the lead investigator for full investigations is selected and be audited against.

- Training would normally cover areas such as conducting incident site visits, risk assessment analysis, document review, witness interviews, Root Cause Analysis tools, developing effective preventative and corrective Action Plans, and professional report writing.

- Investigation team members should be selected to ensure an open, transparent, thorough, and effective investigation is conducted, without any impediment due to potential conflict of interest.

- Events and Investigations can be closed once complete and the resultant action plans can processed according to the agreed timelines.

- An “Event Review Group” should be convened prior to publishing the final investigation report with the objective of reviewing and approving the draft investigation report, ensuring that it identifies all causal factors and has proposed appropriate Action Plans linked to each causal factor.

- The Event Review Group should also evaluate the Behavioral Classification of all employees involved in the incident to support HR and Line Management in making fair employee conduct and performance management interventions in accordance with ACT's fair Culture principles.

5.3 Commence Investigation

The investigation is led by the assigned Lead Investigator, initial steps include;

- Initial contact with those involved as quickly as possible to secure all relevant data
- Determining if personnel should be stood down from duty
- Commence the investigation ASAP to ensure that any safety issues are addressed
- Convene Initial Review Group meeting within 72hrs of event

The Lead Investigator is responsible for coordinating the investigation and generating the investigation report in Pulse. The Lead Investigator will ensure that the Investigation Team establish all the relevant facts relating to the incident and reports them in an unbiased manner. If an external entity such as the airport authority, the airline, a local regulator, or investigation body, are investigating the event, the Lead Investigator will ensure that the WFS investigation team co-operates accordingly.

The Lead Investigator must ensure that all reasonable risk reduction measures are taken, depending on the risk of the event it may be necessary to implement some immediate actions to reduce any identified risks.

The lead investigator will be responsible to update all the relevant tabs in Pulse related to the event as the investigation progresses.

5.3.1 Initial Review Group

The initial review group meeting should be held within 72 hours of the event. Regional Investigations Management Team, Regional & Country HSSE representatives, Station and operational managers, Investigation Team and any other relevant parties should attend. During this meeting the following should be discussed:

- An initial presentation of the event details and timeline.
- Impact and/or Involved parties and their current welfare.
- Initial plans for evidence gathering.
- Investigation Strategy
- Any immediate Safety or Security Actions to prevent recurrence.
- Resources required.

All information for this meeting must be recorded in Pulse and then presented using the PDF generated from the initial review report function.

5.3.1.1 When and Where did the event happen?

Identify the exact date and time the event occurred and the location that it happened. It's important to correctly identify the accident scene, e.g., JFK passenger ramp Parking Bay 31… as there could be specific hazards to each different work location.

5.3.1.2 Who was involved?

Identify who was involved in the event, the person(s) affected by the event and any witnesses that saw what happened. For more subtle events that don't specifically involve specific harm then include those involved in the process that led up to the process failure.

5.3.1.3 How did the event happen?

Describe the sequence of events leading up to and immediately after the event. Often, several chance occurrences and coincidences combine to create the circumstances in which an event happens. All these factors should be recorded here in chronological order. Work out the chain of events by talking to the injured person, eyewitnesses, line managers, health and safety representatives and fellow workers to find out what happened and who did what. Note the position of those injured, both immediately before and after the event.

5.3.2 Equipment involved.

Equipment and GSEs that had a direct bearing on the adverse event must be clearly identified. This information can usually be obtained from a nameplate attached to the equipment. Note all the details available, the manufacturer, model type, model number, machine number and year of manufacture and any modifications made to the equipment. Note the position of the machinery controls immediately after the event. This information may help you to spot trends and identify risk control measures.

5.3.3 Activities that were being carried out at the time. (Applicable Procedure)

The work that was being done just before the event happened can often cast light on the conditions and circumstances that caused something to go wrong. Provide a good description, including all the relevant details in the lead up to the event. Include details such as, the surroundings, the equipment or materials being used, the number of employees engaged in the various activities, the way they were positioned and any details about the way they were behaving etc.

5.3.4 Injury details

It is important to note the following:

- Which parts of the body have been injured,
- The nature of the injury e.g., bruising, crushing, burn etc.
- The mechanism of injury identifies how the injury occurred, e.g., Slip trip fall, hit by object, hit by moving vehicle
- The equipment involved in the injury, if any, e.g., forklift, cargo loader, cutters…

Facts such as whether the injured person was given first-aid or taken to hospital, either by ambulance or a colleague, should also be recorded.

5.3.5 Safety Critical Recommendations or Alerts

Throughout the investigation consideration must be made for the release of immediate safety critical recommendations. These must be considered when a procedure, normalised practice or piece of equipment can be linked directly to the cause of an incident. These recommendations are vital in preventing a recurrence and therefore may require an immediate correction or cessation of an activity or practice until a solution is discovered.

These recommendations must be presented to the investigations management team before publishing. Recommendations must follow the agreed regional procedure for communication of recommendations or Safety Alerts – see recommendations section.

5.4 Evidence Gathering

During this phase of the investigation, the objective is to collect as much data as possible to allow for an accurate and meaningful analysis of the event including sequence of events and a visual representation of the scene of event.

The following areas should the investigated as part of the investigation process, follow the leads identified as the investigation proceeds, it may also be necessary to investigate other areas as the investigation progresses.

- Eyewitness Accounts, Interviews and Gathering Statements
- Records: Training, Maintenance and Roster
- Workplace Environment
- Review SOPs
- Review of Pulse Data

All evidence collected should be scanned and uploaded to the Event in Pulse, Statements can be uploaded to the Statements section and all other evidence can be uploaded to the evidence tab. Once uploaded the evidence is available to be added to the Investigation report as required.

How to Add Evidence in Pulse
How to Add a Statement in Pulse

5.4.1 Eyewitness Accounts, Interviews and Gathering Statements

Initial eyewitness statements should be gathered immediately following the event, and key witnesses and personnel involved should be identified and interviewed as soon as possible following the event. Consideration should be given to separate witnesses to avoid corroborating stories. It is required that all individuals participating in the event must be interviewed by a member of the investigations team. Every effort should be made to complete a face-to-face interview, however in the unusual circumstances that it is not possible, every effort should be made to attempt phone, TEAMS interview or obtain a signed statement.

If the employee is unable to attend an interview due to physical or psychological conditions, the Lead Investigator shall postpone the interview until the employee is deemed medically fit for the interview to be performed. The interview can be conducted at a mutually convenient location, and the employee is entitled to have compassionate support (e.g., family, colleague etc.) during the interview. The interview shall be conducted in an empathetic manner that is suitable to the employees physical and psychological condition, and if required conducted over several visits.

WFS recommends the GEMC interview model of Greet, Explaining, Mutual Activity, Account and Closure. Appendix 6.4 provides guidance on the GEMC interview technique and Appendix 6.5 is a blank proforma for note taking along with a completed example.

It is required that all interview notes (with names redacted) are uploaded as evidence in the Pulse Investigation.

5.4.2 Timeline of Events

Documenting the event in the form of a timeline is a required component of a full investigation. This timeline should the sequence of events that had a direct, indirect, or cumulative effect upon the incident. These events could be immediately prior and post event or could have occurred months or year prior. Pulse provides a tool to record and display a basic representation of these events. A more detailed proforma, using the ATSB model, found in appendix 6.6 and is available to download in Pulse. This allows for timeline & causation analysis to aid your 5Whys. Once completed it can be uploaded back into pulse as evidence / analysis and used in the ERG.

5.4.3 Applicable Procedure

What was the procedure being carried out at the time of the event? This should be referred to a CHM/GOM/GSS reference which is catalogued in pulse for selection.

5.4.4 Applicable Risk Assessment

All WFS processes will be covered by a risk assessment and analysis of the effectiveness of the controls documented within the risk assessment will be pivotal in preventing future reoccurrences.

5.4.5 Resource Scheduling

Shift rosters of any personnel involved should be reviewed to identify if there were any potential fatigue related issues that could have contributed to the event. Long shifts, excessive overtime, shifts through circadian lows, less than 12 hours time-off between shifts and second jobs could all have influenced the person performance at the time of the event. Remember fatigue can have similar effects human on performance as alcohol and drugs.

5.4.6 Records: Training and Rosters

All training records of personnel involved are to be reviewed pertinent to functions performed during the incident to ensure all staff involved were adequately trained and licensed. Any gaps in training should be noted accordingly and the reasons for the gaps understood.

5.4.7 Drug and alcohol testing & Medical Records

Depending on local requirements, a mandatory drug and alcohol test may have been conducted immediately following the event. If a drugs and alcohol test was performed, review the results and follow-up accordingly with the employees Local Management and Human Resources, as applicable in accordance with company and national requirement or regulations.

In accordance with local regulations, review any historical company medical records for personnel involved to establish if there were any pre-existing conditions that may have contributed towards the incident.

5.4.8 CCTV or photographic evidence:

CCTV and photographic evidence are key evidence and vital to analysis, all efforts should be made to secure it and document it within the investigation. The investigation team should identify if any photographic evidence or any potential CCTV footage that may have been captured the event. This could include cameras operated by the airport authority, airport building owners or cargo warehouse cameras etc. Any footage showing the event must be reviewed including any post event footage to assist the investigation. Depending on the local authorities it may not be possible to physically obtain a copy of the CCTV, however it is usually permissible to view the CCTV footage. In this is the case, summarise in words the footage. Upload all obtained pictures or footage to the evidence tab in Pulse. Note: Pulse is a password restricted confidential platform, all users have access limited to their scope and role. Any questions relating to GDPR should be raised with Legal and the Pulse management team.

5.4.9 Description of Event Location & Surface Conditions:

Record all relevant physical and external factors that impacted the event. Physical factors include the environment, such as weather visibility and temperature. Surface conditions include the surface where the event occurred, record any spills, FOD, or other contaminants. Physical factors could also Include any issues related to signage or the lack of signage. Any corroborating evidence to support the existence of external factors is to be documented and recorded as evidence in Pulse.

5.4.10 Description of Equipment Serviceability Records

Any GSE involved shall be removed from service and sent for inspection. The investigation team shall review the GSE post incident report for anomalies and to determine the serviceability of the equipment at the time of the event.

Gathering of the serviceability records of equipment involved in the event allows for the analysis of their impact on the sequence of events. The investigation should widen the scope should issues be identified in compliance.

5.4.11 Inspections & Observations

Has the station/facility completed all the required inspections and observations acted upon? Are there any trends identified in the inspection detail to be explored during analysis?

5.4.12 Simulations of key events:

Depending on the event, it may be necessary to reconstruct and simulate the event to provide a better understanding of the sequence of events and the conditions under which they may have occurred. This may help to determine important factors like speed or identify any physical obstacles or hazards that may have contributed to the event. It is very important that during any simulations of the event necessary precautions are taken to ensure that the simulation is conducted in a safe controlled manner.

5.4.13 Was there anything unusual or different?

Adverse events often happen when something is different, when faced with a new situation, employees may find it difficult to adapt quickly. If working conditions or processes were different to normal, describe what was new or different. Was there an SOP in place for this situation and were the people involved aware and following it? If not, why not? Were there any temporary changes temporary in place and were these a factor? Were the workers and supervisors aware that things were different and sufficiently trained and experienced to recognise and adapt to the changing circumstances? And importantly, what prevented them from stopping?

5.5 Preliminary 7 Day Report

Within 7 days from the recording of the event a Preliminary Report is to be distributed. The purpose of this report is to disclose the key details of the evidence collected and initial findings along with request for further support and any further investigation paths to be identified. It should be accompanied by a meeting between the investigation team, operational management, and regional investigation team.

- A presentation of the event details and timeline.
- Update on Involved parties and welfare.
- Evidence gathering and any further plans.
- Initial Findings.
- Future analysis.
- Immediate Actions

All information for this meeting must be recorded in Pulse and the presented using the PDF generated from the Preliminary 7 Day Report function. The information held within the 7-day report typically holds customer requested event information for factual explanation of events.

5.6 Analysing the Information

The purpose of this section is to identify the steps to be followed in the analysis process, by following the questions below will ensure consistency across all investigations and provide a natural flow to identify the immediate and underlying contributing factors. Follow-up on any missing information by going back and asking additional questions or acquiring additional information, follow the leads until the complete sequence of events is known.

An analysis involves examining all the facts, determining what happened and why. All the detailed information gathered should be assembled and examined to identify what information is relevant and what information is missing. The information gathering and analysis are performed side by side. As the analysis progresses, further lines of enquiry requiring additional information will develop. To ensure the analysis is free from bias, the analysis must be carried out in a systematic way and consider all the possible causes and consequences of the event.

How to Complete a Full Investigation in Pulse

5.6.1 Terminology

It's essential for investigators to use clear and precise language when describing the likelihood of various findings in an investigation report. This helps readers understand the strength of the evidence and the level of confidence in the conclusions drawn from it. Additionally, investigators should avoid making absolute statements when the evidence is inconclusive or when they cannot reach a firm conclusion. Instead, they should present the available evidence objectively and accurately, allowing the readers to assess the findings themselves.

In the investigation language terminology should reflect the likelihood, probability or possibility of certain events or conclusions. The following is guidance on terms and investigations language must reflect this.

- **Very Likely**: Indicates a strong probability or a high chance that a particular event, causation link or conclusion is true or has occurred. It suggests that the evidence strongly supports the claim.
- **Likely**: Suggests a reasonable probability or likelihood based on the available evidence. It indicates that there is supporting evidence but may not be as strong as in the case of "high likelihood."
- **Probably**: Implies a balance of probabilities the being true or having occurred. It suggests that there is some supporting evidence to back up the claim.
- **Possibility**: Suggests that a particular event or conclusion could happen or be true, but there may not be enough evidence to confirm or refute it definitively.
- **Plausible**: Indicates that a certain event or conclusion is logically consistent with the available evidence, although there is little available to provide a definitive link.
- **Unlikely**: Suggests that a particular event or conclusion is improbable or not very likely to be true based on the evidence at hand.
- **Not Supported**: Indicates that there is insufficient or no evidence to back up a particular claim, making it unlikely to be true.
- **Inconclusive**: Suggests that the available evidence does not provide a clear basis for reaching a definitive conclusion, leaving the matter uncertain.

5.6.2 Were there adequate procedures and were they followed?

Adverse events often happen when people work outside of the procedures. It may be that there are procedures in place, but they are inadequate or incorrect, or they were just not followed. During interviews, comments such as '…we've been doing it that way for years and nothing has ever gone wrong before…' or '…he has never had a problem building cargo before and never checks the manual…' are a good indication as to peoples' use of procedures and their adequacy.

Determine what was it about the normal practice that proved inadequate? Was the procedure in place and was it being followed? If not, why not? Was there adequate supervision and were the supervisors themselves aware of the procedures or any issues with the procedures, were the supervisors sufficiently trained and experienced?

All relevant procedures relating to the event shall be reviewed to ensure the employee actions were correct and the SOP was sufficient for the safe operation of the function being performed. Any deviations from the SOP should be understood to determine why the SOP was not followed. Any recent amendments need to be assessed to determine any impact on the event.

5.6.3 Have similar adverse events happened before, both locally and Globally?

Pulse data should be reviewed to determine any trends related to the event. Investigators should analyse relevant event and investigation data, Inspections and Audit results including actions taken for SOP deviations or systemic issues related to the event.
If there have been similar events in the past? Ensue you look at the global picture not just the station or building where the event happened. Why has this event been able to happen again? The fact that such events are still occurring should be a spur to ensure that action is taken quickly.

5.6.4 Were the people involved competent and suitable?

It is essential to identify if the people involved have received adequate training and have sufficient experience for the functions being completed. A lack of training and experience may lead to tasks being improperly completed. Without appropriate training, employees will not be able to understand associated risks with the tasks being performed or with the workplace and surroundings.

5.6.5 Was the risk known and was it adequately controlled?

Has a Risk Assessment been performed for the activity that was taking place when the event occurred? If so, what was the outcome? Were hazards appropriately controlled and mitigated? How did any changes made contribute towards this event? The associated Pulse Risk Assessment should be attached as evidence to the investigation.
A review of the relevant hazard lines is a requirement in the investigation process along with the controls documented to control the risk. The investigation should review these controls, their effectiveness and make recommendations, if required, about their improvement.

5.6.6 Was maintenance and cleaning sufficient?

Lack of maintenance and poor housekeeping are common causes of adverse events. Was the state of repair and condition of the workplace and equipment such that they contributed to or caused the adverse event?

Were the brakes on the forklift truck in good working order? Were spills dealt with immediately? Was the site so cluttered and untidy that it created a slipping or tripping hazard? Was there a programme of preventative maintenance? What are the instructions concerning good housekeeping in the workplace? Have conditions deteriorated over time? Attention should be paid to the event site to identify conditions at the time of the event. Badly maintained equipment or tools may mean an employee is exposed to excessive vibration or noise and has to use increased force, a noisy environment may prevent employees hearing instructions correctly; uneven surfaces may make movements including vehicle movements hazardous; badly maintained lighting may make carrying out the task more difficult; poorly stored materials on the floor in and around the work area will increase the risk of tripping; ice, dirt and other contaminants make it easier to slip and fall; Equipment & tools not in immediate use should be stored appropriately and not left lying around.

5.6.7 Did environmental factors including the workplace layout influence the event?

Work environments such as the airport and ramp areas are often outside of our direct control however, it remains our responsibility to ensure operations are conducted in a safe manor. It is important to identify specific hazards associated with the physical layout and surroundings of the environment where the event occurred and to understand how these factors impacted on the event. Incorrect signage, uneven surfaces, tight working conditions etc. can all influence safe operations.

5.6.8 DID THE EQUIPMENT INVOLVED INFLUENCE THE EVENT?

Was any equipment involved in the event? Equipment including safety equipment such as Personal Protective Equipment, Ground Service Equipment such as forklifts, cargo loaders, tugs etc., or by the commodities being handled including equipment and tools used for buildup.

5.6.9 DID OTHER CONDITIONS INFLUENCE THE ADVERSE EVENT?

Were there any other contributing factors that affected the event that may not have been covered above? Examples could include disagreements or misunderstandings between people, weather related issues, unauthorised interference in a process or job task, deliberate acts such intentional deviations or sabotage etc.

5.6.10 WHERE THERE ANY ORGANISATIONAL FACTORS THAT INFLUENCED THE EVENT?

Organisational factors and influences set the tone for how work is done at a particular location. Standards of supervision and on-site monitoring of working practices may vary and be different between locations. Lack of skills or knowledge may mean that nobody intervenes. Inappropriate local working procedures may mean certain steps in procedures are omitted or are different from other locations. Lack of planning may result in some tasks being skipped, completed late, or done in the wrong order; employees' actions and priorities may be a consequence of the way in which they are paid or rewarded; On-time Performance and Cargo Cut-off Times may result in process steps being missed and employees working at too fast a pace to get the job done!

5.7 5 WHY ANALYSIS

How to add Causes and the 5 Why Process in Pulse

The causes of adverse events often relate to one another in a complex way, sometimes only influencing events and at other times having an overwhelming impact, due to their timing or the way they interact. The analysis must consider all possible causes. Keep an open mind. Do not reject a possible cause until you have given it serious consideration. The emphasis is on a thorough, systematic, and objective look at the evidence.
The first step in understanding what happened and why is to organise the information you have gathered and then use the "5 Why Technique". Asking "Why" 5 times should allow you to drill into reasons an event sufficiently and once you get to the fifth why – you should have identified why the top event occurred and what contributed to the event and why the event was not captured before resulting an a more serious event.

5.7.1 STEP 1: PROBLEM STATEMENT

Write a problem statement which includes the following three elements;

- the person that was injured or the item that was damaged, or the process that was impacted,
- the hazard that led to the bad outcome
- the circumstances that brought them together

Example 1	Person Injured
Person Injured	Warehouse agent
Hazard	Falling from height
The Circumstances	Injured person fell backwards whilst loading boxes into a container
Problem Statement	Warehouse agent fell backwards out of container whilst building up cargo into a container.

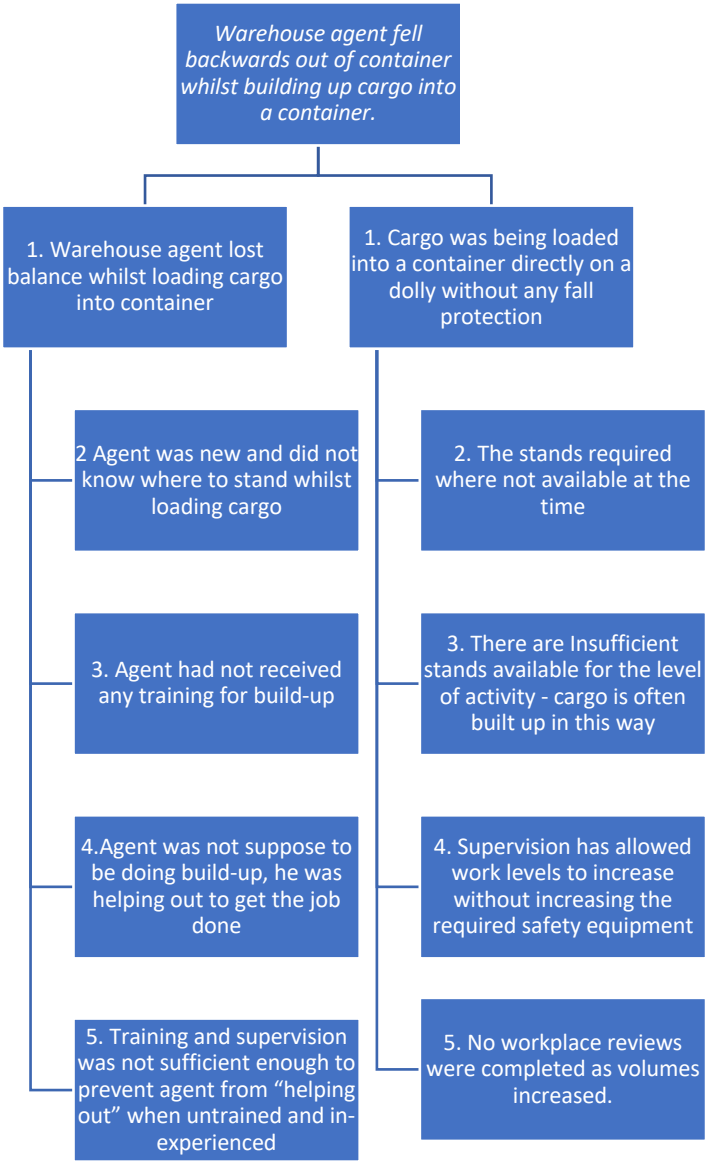
Example 2	Aircraft Damaged
Item Damaged	Aircraft / Cargo Loader
Hazard	Positioning equipment near an aircraft without the use of an active marshaller
The Circumstances	Cargo loader positioned onto aircraft without use of an active marshaller
Problem Statement	Aircraft damaged whilst cargo loader positioning onto rear hold without the use of an active marshaller

Example 3	Dangerous Goods shipped incorrectly
Process Impacted	Dangerous goods Regulations
Hazard	Shipment of a dangerous goods outside of regulations
The Circumstances	Cargo Agent did not identify a state variation and manifested a DG shipped outside of regulation
Problem Statement	Dangerous Goods shipped to a destination not in compliance with a state variation

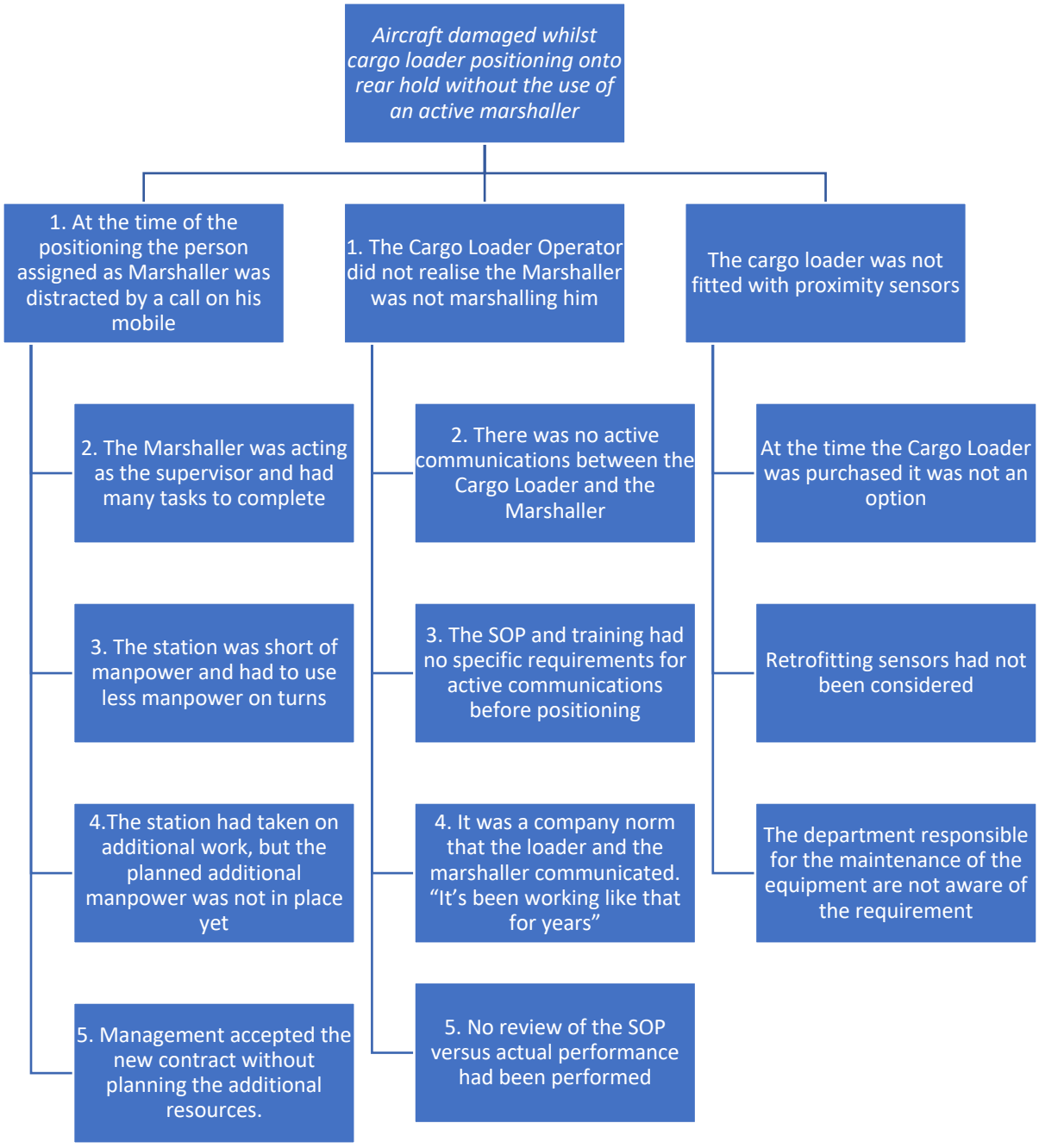
5.7.2 STEP 2: THE 5 WHY'S

Take you problem statement and start asking Why, once you get to the 5th why you should have identified a series of contributing factors which can then be divided into Immediate and Underlying factors. Event sequences can be complex so it might be necessary to create several different branches to follow-up on the different themes that emerge. See the examples below. The idea is that you identify all the different elements at play and start to understand how they interact with one and other.

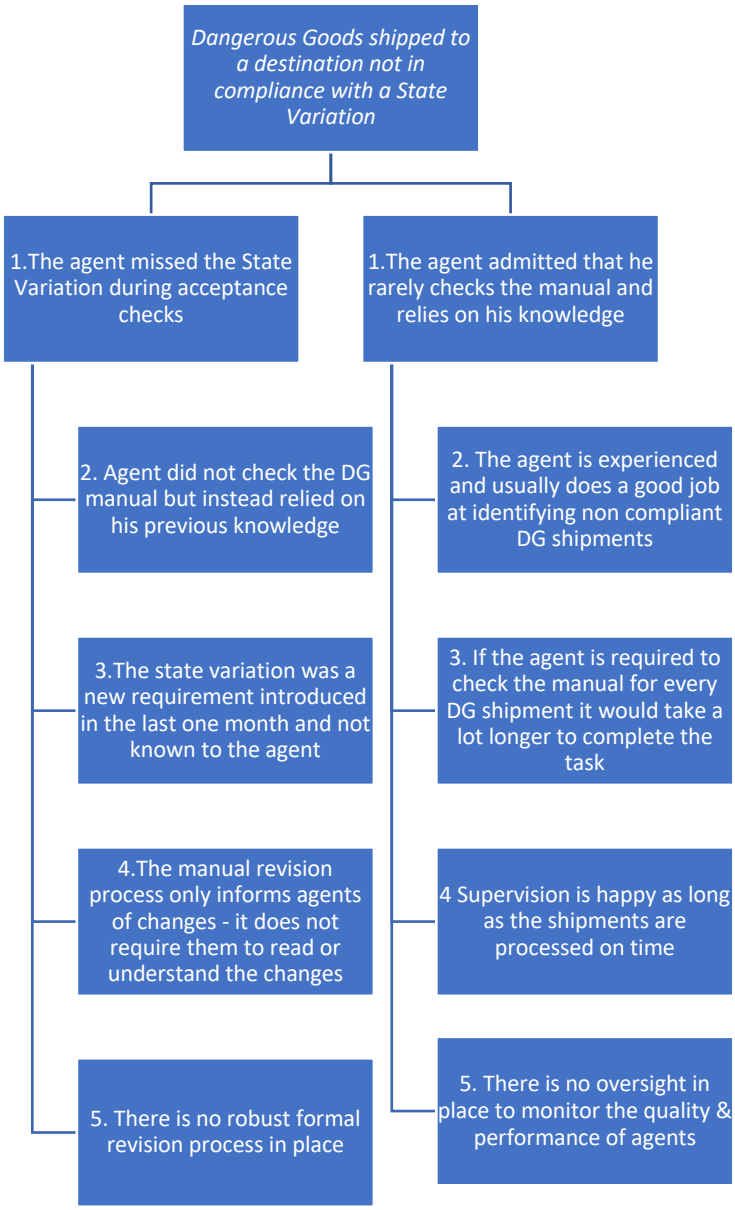
Example 1: Person Injured during Cargo buildup.



Example 2: Aircraft Damage during loading


Aircraft damaged whilst cargo loader positioning onto rear hold without the use of an active marshaller
1. At the time of the positioning the person assigned as Marshaller was distracted by a call on his mobile
2. The Marshaller was acting as the supervisor and had many tasks to complete
3. The station was short of manpower and had to use less manpower on turns
4.The station had taken on additional work, but the planned additional manpower was not in place yet
5. Management accepted the new contract without planning the additional resources.
1. The Cargo Loader Operator did not realise the Marshaller was not marshalling him
2. There was no active communications between the Cargo Loader and the Marshaller
3. The SOP and training had no specific requirements for active communications before positioning
4. It was a company norm that the loader and the marshaller communicated. "It's been working like that for years"
5. No review of the SOP versus actual performance had been performed
The cargo loader was not fitted with proximity sensors
At the time the Cargo Loader was purchased it was not an option
Retrofitting sensors had not been considered
The department responsible for the maintenance of the equipment are not aware of the requirement

Example 3 Dangerous Goods shipped outside of Regulations



***Note**: In each of the examples there are two or three different themes or lines of question identified, you can include up to five different themes in Pule to identify all the issues that came together to lead up to the event.*

5.7.3 STEP 3 IDENTIFY THE IMMEDIATE AND UNDERLYING CAUSES

Using the statements identified in step 2 complete the Investigation Analysis Form, complete the How/Why section to identify the sequence of events and then identify all the Immediate causes. For each immediate cause, identify the underlying cause(s) which may have allowed the immediate causes to exist.

Immediate cause: the most obvious reason why an event happens, e.g. the equipment malfunctions; the employee slips or falls etc. There may be several immediate causes identified in any one event.
Underlying cause: the less obvious 'system' or 'organisational' reason for an event happening, e.g. daily GSE checks are not performed; the hazard has not been adequately considered by a risk assessment; OTP pressures are too great etc.

Example 1: Person Injured during Cargo buildup

How / Why

1. Agent completed his duties and decided to help with cargo build-up
2. The agent was not trained or qualified to load cargo
3. No one stopped the agent from "helping out"
4. Cargo was being loaded into a container located on a cargo dolly
5. No support stands were used during the loading to aid the loading agent's footings as required by the SOP.
6. The agent lost his balance during loading and fell backwards to the floor hitting his head

Immediate Causes

1. The agent was not trained or qualified to build-up cargo
2. The access stand required by the SOP was not used
3. The agents lost his balance during the loading process and fell

Underlying Causes

1. The agent was not aware of the hazards associated with buildup
2. Supervision was not in control of the tasks being completed
3. There were insufficient access stands available to complete the tasks
4. Cargo volumes had increased without any additional equipment purchased to manage the extra activities
5. Insufficient risk assessments had been performed to identify potential hazards

Example 2 Aircraft Damage during loading

How / Why

1. Due to lack of manpower, the Marshaller was assigned multiple roles for the aircraft turn -around.
2. The Cargo Loader and Marshaller did not actively communicate prior to movement of the Cargo Loader
3. The Marshaller was distracted when the the Cargo Loader operator started to position the Cargo Loader
4. The Cargo loader misjudged the gap between the Loader and the aircraft and impacted the aircraft
5. The Cargo loader was not fitted with any proximity sensors that would have prevented the impact

Immediate Causes

1. The Marshaller was distracted at the time
2. The Cargo Loader Operator and Marshaller did not communicate prior to the movement of the loader
3. The Cargo Loader Operator misjudged the gap and impacted the aircraft

Underlying Causes

1. The station had taken on additional work without the required resources resulting in a lack of manpower
2. The SOP and Training did not identify the requirements for active communications prior to movement of equipment
3. “Company Norm” for Loader and Marshaller to communicate
4. No review of performance verses the SOP conducted to identify hazards
5. The cargo loader did not have any proximity sensors fitted when purchased
6. The GSE maintenance department had not been requested to retrofit proximity sensors

Example 3 Dangerous Goods shipped outside of Regulations

How / Why

1. A state variation was not applied and a dangerous goods shipment flew outside of the DGR
2. The agent who manifested the shipment did not check the DGR during the acceptance checks instead he relied upon existing knowledge
3. There was an amendment to the DGR one month prior to the incident including this new requirement
4. An email informing the agent of an update to the DGR had been sent prior to the event.

Immediate Causes

1. The agent did not check the DGR during the acceptance process

Underlying Causes

1. The agent was experienced and routinely does not check the DGR during the acceptance process as per the SOP
2. The manual revision process does not ensure that agents have read and understood changes - it only informs them of the change
3. There is no oversight in place to monitor the performance of the agents completing DG acceptance
4. Agents perform under time pressures to complete acceptance and get shipments out
5. Supervision does not review the quality of the work completed

5.8 Establishing Human Factors through Accountability Reviews

The objective of an investigation is multifaceted: to extract valuable lessons and to implement preventive measures by effectively controlling risks. To ensure the efficacy of new control measures, they must be directly linked to the root causes of the event. This necessitates a comprehensive understanding of individual actions and the reasons behind them. The underlying premise is that people do not intentionally go to work to make mistakes or cause harm.

At WFS, a 'Just Culture' is fostered, wherein individuals are held accountable for their actions without being unfairly blamed for circumstances beyond their control. It is vital for employees to trust that incidents will be handled fairly and without undue punishment. If investigations unjustly assign blame to individuals when external or organizational factors played a more significant role in the event, there is a risk of alienating the workforce and undermining the safety culture that is crucial for establishing and sustaining a secure working environment. By striking a balance between accountability and fair treatment, WFS can continue to prioritize safety and cultivate a culture of learning and improvement.

Distinguishing between errors, mistakes, and violations is crucial for investigators to gain a deeper understanding of how human elements contributed to the events and effectively address the highlighted risks. Investigators can identify the specific nature of human involvement in the incident. Errors might result from unintentional slips or lapses, while mistakes could arise from misconceptions or lack of knowledge. Violations, on the other hand, involve intentional deviations from established procedures or norms.

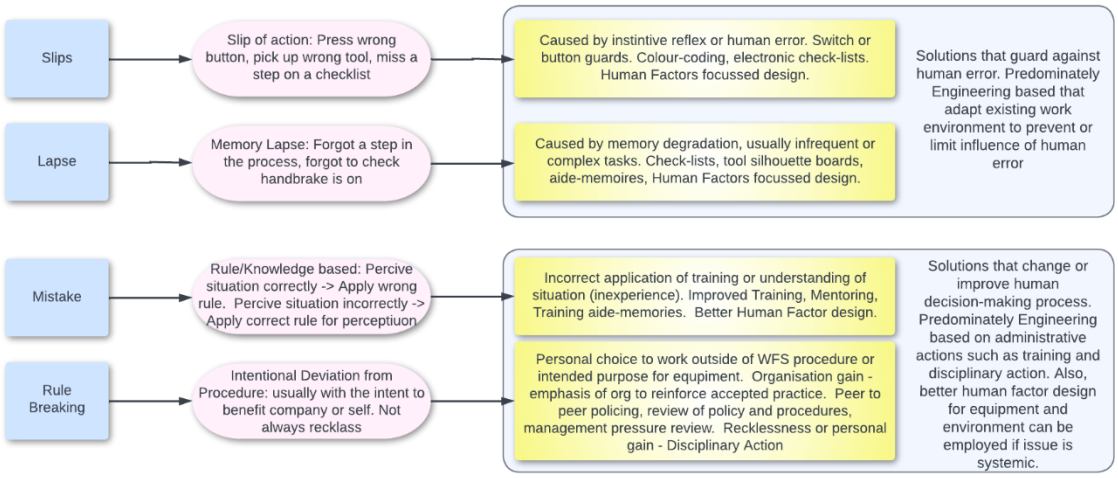


Figure 4 - Key Human behaviours and corrective measures

It is essential for investigators to engage with those directly involved in the incident. Through these conversations, investigators can gain valuable insights into the immediate causes of the event and potentially uncover deeper-rooted issues that contributed to the occurrence. Understanding both the individual and contextual factors that led to the incident allows for targeted actions to mitigate risks effectively.

By adopting this approach, investigations move beyond simply attributing blame and instead focus on learning from the event to prevent similar occurrences in the future. This fosters a culture of continuous improvement and enhances the organization's ability to manage and minimize risks effectively.

5.8.1 The Behaviour Identification Flow Chart

To gain a comprehensive understanding of the factors leading to an event and to focus proposed actions correctly for organizational change or human performance improvement, the behavior indicator flow chart (figure 5) should be utilized. This flowchart serves as a valuable tool for classifying behavior and delving deeper into the reasons behind actions or failures to act.

It is essential to apply the flowchart methodically, assessing acts or failures to act on an individual basis, one at a time. This can be accomplished within the causes section of the pulse investigation module. By doing so, multiple accountability reviews can be created for each identified problem, allowing for a thorough analysis of various actions associated with the event.

It is important to recognize that the flowchart may need to be employed multiple times for a single individual to assess several actions contributing to the event fully. Not every individual involved in the incident necessarily needs to go through the entire model. Instead, the assessment should extend to all levels of seniority and roles within the WFS, including those beyond the individuals immediately adjacent to the active failure.

Supervisory actions that occurred before the event should also be considered, as they can influence the actions of individuals. Factors such as resource management, operational pressure, and direct requests to deviate from established working instructions should be included in the investigation and covered by an accountability review for the supervisors or managers involved.

By utilizing the behavior indicator flow chart and conducting thorough accountability reviews, the investigation process becomes more insightful, facilitating targeted actions for improvement and organizational change. This approach contributes to enhancing overall safety, performance, and risk management within the WFS.

How to Guide: Conducting to conducting Accountability Review in Pulse (requires Pulse login)

Figure 5 - The Behaviour Identification Flow

In answering each of the questions, the following should be considered:

Was there a conscious and substantial and unjustifiable disregard for risk?

Did the individual knowingly take a significant and unjustifiable risk whilst ignoring the potential for harm that could be caused? This decision should be based on the situation experienced at the time by the individual concerned, not based on beliefs after the event now there is greater understanding about the situation and the outcome.

Was there malicious intent?
Did the individual deliberately set out to cause harm or damage?

Were the rules intentionally broken?
Did the individual knowingly contravene rules or not follow procedures? Remember people don't usually break the rules because they are bad people, they often do so because they think the action is necessary, or that their action will benefit the organisation in some way.

Was the action intended?
Did the individual consciously choose to engage in the incorrect action in the situation or was it a result of a slip of attention or lapse in memory?

In the circumstances were all applicable rules and resources available, workable, intelligible, and correct?
In the circumstances of the event, was it possible to complete the task in line with all applicable rules or procedures? Has the investigation taken due account of rules and procedures that are ambiguous or difficult to apply in practice?

Was the action intended to benefit the organisation?
Did the individual consider that their actions were for the good of the organisation or were they driven by self-interest?

Was the situation at the time of the event outside of normal practice?
Did the individual find themselves in a situation which differed considerably from the expected operating scenario?

Following the path of the behavioural identification flowchart will provide you with an initial classification based on the questions you have considered. The following table gives more detail on those outcomes:

5.8.2 Behavioural Classification Definitions

Error	An error is the failure of a planned action to achieve its desired goal, where this occurs without some unforeseeable or chance intervention. In other words, the plan of action was appropriate, but the resulting performance was not as intended. Errors are associated with familiar activities that require little conscious effort: they are simple, frequently performed physical actions that go wrong, and are caused by recognition failures (misidentifying information or not detecting critical information) For example, inadvertently flipping on the windscreen wipers when you meant to use the indicators, writing down the wrong digits when recording a telephone number, making your colleague a cup of tea when they asked for coffee, or forgetting to complete a step of a task because of an interruption or distraction.

Mistake	Mistakes are deficiencies or failures in judgement, the individual is aware of the issue and has chosen an action that is incorrect. Mistakes can be **rule-based** or **knowledge-based** in origin. **Rule-based mistakes** include misapplying a good rule (assumptions) or applying a bad rule (habits). Misapplying good rules can happen in circumstances that share common features for which the rule was intended but where significant differences are overlooked. For example, using known good information based on knowledge of one aircraft type but on a new type of aircraft where it is no longer applicable. **Knowledge based mistakes** are the result of new problems or novel situations in which the individual finds themselves. For example, planning an unfamiliar route with an out-of-date road atlas.
Violations	Violations are deliberate acts where people mean to break the rules or not comply with procedures, though they generally do not intend for the bad outcomes that sometimes result. Violations can be subdivided further into **necessary violations**, **exceptional violations,** and **violations for personal gain**.
Necessary violation / Organisation gain	Where deliberately not following the rules was the only way to complete the task i.e., it was necessary to violate the rules to finish the job with the resources available. Individuals may assert that, given the circumstances in which they found themselves, the only way to get the task done was to break the rules. For example, using incorrect equipment during an aircraft turn because the correct equipment was unserviceable at the time, or Forklift drivers speeding to complete the planned cargo build to get the cargo out on time
Exceptional violation	These are created by exceptional, unusual, or one-off events, where staff feel they must improvise because of a lack of clear instructions specific to that circumstance.
Violation for personal gain	Deliberately not following rules with the aim of benefiting the individual in some way. 'Thrill-seeking' as a means of alleviating boredom or as a demonstration of ability or skill. For example, not completing a task properly to get away from work on time; not using the correct equipment because it requires effort to obtain or driving at excessive speeds to meet a personal deadline. Practical jokes or initiation rites are prevalent forms of these violations.
Recklessness	A conscious and substantial and unjustifiable disregard of visible and significant risk. Whilst there is no intent to do harm to others, recklessness implies that an individual knowingly ignored the potential consequences of their actions. For example, coming into work under the influence of alcohol or knowingly working a shift in an excessively fatigued state having voluntarily not rested.
Sabotage and attempted sabotage	Malicious or wanton intent to cause damage or harm. To determine whether an individual's actions constitute sabotage there needs to be intent for both the actions and the consequence to cause damage, harm or disrupt operations. Sabotage is often a criminal act and should therefore be investigated by an appropriate authority.

5.8.3 Apply the Additional Tests

Now that individual behaviours have been identified, some additional test can be performed to establish if the behaviours identified would be normal within the workforce or if they are specific to those individuals involved.

These tests and activities are designed to help the investigator & ERG confirm or modify the results of the Behaviour Identification Flowchart. The Additional tests need to be answered prior to the ERG, as ERG members do not have immediate access to the individual's peers and do not necessarily understand the local culture in which the individual was working within. Therefore, the substitution and routine tests must be carried out by the investigator prior to the ERG meeting. The results should be provided to the ERG stating which part of the organisation was consulted and how many people were interviewed, and the number of supporting statements received.

Test 1 - The Substitution Test

Would another person with the same levels of professional education, training and experience behave in the same way in the same circumstances?

This test is used to assess whether a peer might have reasonably followed the same course of action under similar circumstances. The term peer in this context means somebody of a similar grade, rank and/or certification capability and level of experience as the individual under review.

If the answer is yes, the recommended interventions need to primarily address systemic weaknesses in the organisation; they may also need to focus on the culture within the area involved.

Test 2 - The Routine Test

Has this event happened before to either the individual or to the organisation?

This test requires an evaluation of existing safety data and/or reference to other information either from the original investigation or undertaken on behalf of the Safety Manager. The response to the routine test helps to verify the findings of the Substitution Test.

If the organisation has experienced similar occurrences previously and remedial actions were put in place, then we need to ascertain why they have failed to prevent reoccurrence. If the event has happened before to this individual that does not instantly mean that the individual is at fault or incompetent. It is important to assess the situation, task, etc. and understand why this individual has not performed as expected.

Test 3 – Proportionality Test

What safety value will administrative or disciplinary action have? How supportive in terms of reporting, investigation and accepting of its findings was the individual?

This is an opportunity to consider how interventions taken will have an impact on the wider safety culture and the individual's engagement with future safety programmes.

Test Results

Evaluating the results of both the Substitution and Routine Tests will have a direct influence upon determining the most appropriate interventions and may diminish the level of individual accountability.

5.8.4 ACCOUNTABILITY MATRIX

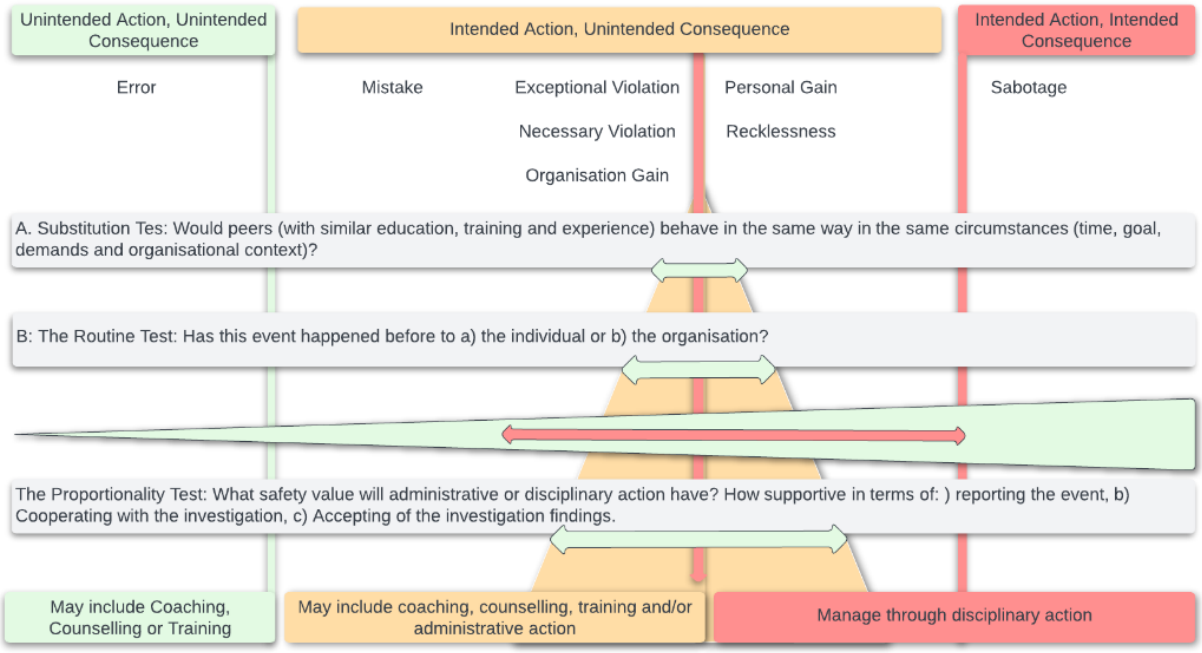


Figure 6 - Accountability Matrix

5.8.5 BEHAVIOURAL INTERVENTIONS & EFFECTIVE ACTIONS

Behavior Type	Effective Intervention / Action
Error	**System** - Review task for human performance issues esp. if errors occur regularly. Look at the system defences and conditions that are not optimised for human performance. What can be done to reduce the likelihood of the error or capture the error when it does happen. **Individual** - Console.
Mistake	**System** - Look at the training and education system, understand why the individual lacked the correct knowledge or did not know how to apply it in the circumstances and address those issues. **Individual** - Address through performance management and training.
Necessary violation / Organisational Gain	**System** - Find and follow the goal conflicts. Assess discordance between management priorities and staff understanding. Ensure management goal priorities are clearly and fully presented to all appropriate staff. Review processes and procedures as required. **Individual** - Address through organization-wide performance management and training.
Exceptional violation	**System** - Why was this situation unexpected? Ensure that appropriate procedures, equipment, and training are in place for similar future occurrences. Brainstorm other potential but realistic unusual circumstances and develop processes and procedures for staff to deal with them and test them.

	Individual - Address through training.
Violation for personal gain	**System** - Understand the context and underlying causes, address these to prevent reoccurrence with other staff. **Individual** – Manage through appropriate disciplinary action.
Recklessness	**System** - Understand the context and underlying causes, address these to prevent reoccurrence with other staff. **Individual** - Manage through appropriate disciplinary action.
Sabotage and attempted sabotage	**System** - Understand the context and underlying causes, address these to prevent reoccurrence with other staff. **Individual** - Manage through appropriate disciplinary action.

Note: Actions for Violation for Personal Gain, Recklessness and Sabotage/attempted Sabotage.

When individuals display behaviors that fall within these classifications identified in the behavior indicator flow chart, it is advisable for operational teams, who would apply the interventions, to consult with Human Resources (HR) department for appropriate courses of action. It is essential to note that the Accountability Reviews conducted are not intended to directly determine disciplinary actions. Instead, the purpose of these reviews is to assess the behaviour and accountability during the event. This enables application of local employment procedures based on their interpretation of the evidence provided and any other historic performance or behavioural events, either positive or not. The other classifications would not normally require disciplinary action. The overall aim of an accountability review is to allow the fair and consistent treatment of individuals while addressing any safety or security concerns effectively. By following these procedures, WFS can maintain a balance between fostering a just and accountable culture and upholding the necessary standards of conduct and performance.

5.9 Effective Actions

5.9.1 Identifying Effective Actions

The analysis of the event will have identified several Immediate and Underlying Causes that led to the event, some of the causes will relate to current risk controls that either failed, were not followed, or didn't work as intended and some will identify areas where additional controls are needed to prevent reoccurrence.

The investigator should now consider what actions need to be taken to address the Immediate and Underlying contributing factors. To help in identifying the right action for the behaviour involved, use the Behavioural Interventions and Effective Actions table. The aim is to have an action plan for each of the Immediate and Underlying Contributing factors identified in the 5 Why exercise, and for the action to be tailored to the reason for the Immediate / Underlying factors based on the behaviour flowchart. Behaviours that are identified to be systemic should be addressed by organisational changes, behaviours that were individual focused should be addressed towards the individual, if the behaviours identified were Violations for personal gain, Recklessness, or Sabotage and attempted sabotage, these should be identified to the ERG for follow-up separately with the individuals Line Manager and Human Resources

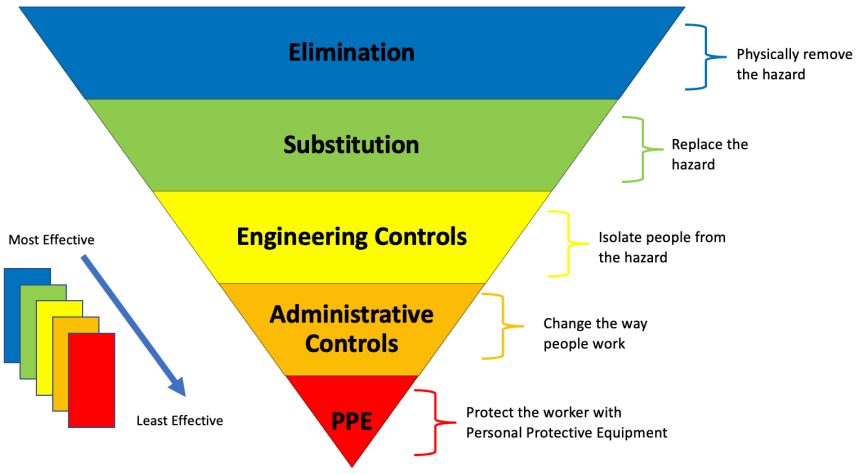
How to add actions in Pulse

5.9.2 Creating Effective Actions

Identify action plans that eliminate or reduce the risk to 'As Low as Reasonably Practicable' (ALARP). When identifying the action plans, some of the control measures may be more complicated or difficult to implement or some may take more time and resources to implement than others, for the purpose if the investigation, include all necessary actions at this stage, they will be reviewed and agreed as part of the ERG process.

In deciding which risk control measures to recommend and their priority, you should choose measures that reduce the exposure to the risk as much as possible, elimination of the risk is far more effective than administrative controls and PPE. Use the Hierarchy of Controls Fig XX to help decide what type of control to include in the action plans.

5.9.3 Hierarchy of Controls



In general terms, measures that rely on engineering risk control measures are more reliable than those that rely on people. Consult with the HSSE team and local management to establish which actions could be implemented and a potential timeline required to implement them.

5.9.4 Writing Effective Actions

The recommended actions should be written using the SMART principles, importantly action should be clear and concise. It is better to create multiple actions rather than group actions together, especially if different actions require different people to implement different things. The ERG will review the actions and suggest any changes or additions.

5.9.5 SMART Definition

SMART	Definition
Specific	Ensure the recommended action is clear and specific. The action should include a clear statement that identifies what needs to be done, when and by whom. **Effective**: They need to address the actual problem to prevent re-occurrence or minimise its likelihood.
Measurable	Is it clear when this action will be complete; have you made it quantifiable?
Assignable	The action needs an owner. This should be the person who is accountable for ensuring the action is implemented.
Realistic	Ensure the intervention is achievable, within the scope of the action, and that they have adequate time to complete it. **Efficient**: If they eliminate the problem but the 'cost' to the business is that it cannot realistically operate then the recommendation needs to be reviewed.
Time	Bounded: Ensure that there is a time frame within which the intervention should be completed and then check that it has been. **Sustainable:** The recommendation should not be a quick fix that will be forgotten in 6 months' time, or when staff leave, and new staff arrive

It is crucial that a specific person, preferably SVP/Director or Country Manager is made responsible for ensuring that the action plan is put into effect. This person doesn't necessarily have to do the work him or herself but he or she should monitor the progress of the action plan.

5.10 Action Plan & Risk Assessment Review

All relevant risk assessments should be reviewed following the investigation of an event. The findings of your investigation should indicate areas of your risk assessments that need improving. It is important that you take a step back and ask what the findings of the investigation tell you about your risk assessments in general. Are they suitable and sufficient?

Any action plan should increase the effectiveness of the hazard controls breeched in the event or where appropriate, add a new control. This will reduce the risk of the hazard identified through decreasing the likelihood of the event recurring or mitigating its severity. As such this must be identified in the Risk Assessment associated to this task through a through risk assessment review. Risk Assessments are reviewed yearly and therefore action plan effectiveness is demonstrated through these yearly reviews. The Pulse Risk Assessment module also allows for the linking of events, actions plans and hazard lines to make this process easier. More information on Risk Assessment, including their conduct and review can be found in the Global Risk Assessment Manual.

5.11 Do similar risks exist elsewhere? If so, what, and where?

Having concluded the investigation of the event, consider the wider implications: could the same thing happen elsewhere in the organisation? What steps can be taken to avoid this? Adverse events might not have occurred at other locations yet but make an evaluation as to whether the risks are the same and the same or similar risk control measures are appropriate. The ERG will review the global impact of this event and may suggest that a Global Action Plan is created to mitigate the risks elsewhere in the organisation. A Global Action plan in Pulse can be created for any scope size. It could be certain buildings or types or operation or could include all entities.

5.12 Draft Investigation Report

Once the analysis stage of the investigation is complete, the draft investigation report can be created and issued to the ERG. The draft investigation report is generated in Pulse and populated by updating all the relevant fields and tabs related to the Investigation. Before generating the investigation report, review all the fields in Pulse to ensure that they contain the correct information, that the spellings are correct, and the language used is appropriate for the investigation report audience, avoid the use of negative or pejorative language, keep it factual and to the point. Refer to Appendix 1 for General Tips for Investigation Report writing, for more details about investigation report writing.

5.13 Event Review Group (ERG)

An Event Review Group (ERG) is mandatory review meeting for any Event which resulted in a Full Investigation. It allows a thorough discussion on the investigation amongst functional and operational senior managers and is designed to ensure that causal factors have been fully identified and associated action plans developed. Ultimately the ERG should make sure that the Event does not re-occur, so as is reasonably practicable.

The ERG also allows an opportunity to use a structured assessment of the level of accountability of those involved in the event and make a clear recommendation to the relevant line management and HR teams on appropriate interventions, thus ensuring fair treatment of all employees in accordance with the WFS Group HSSE policy statement and Just Culture principles.

Requirements:

- The Lead Investigator shall ensure that an ERG call is arranged within 30 days of the Event
- The Regional Head of HSSE shall Chair the ERG call
- The call should be in Microsoft Teams format and be set up for 60 minutes per Event although this can be reduced or extended in consultation with the Global Head of HSSE
- Invites should be issued to:
    - Country MD (EMEAA) or Business Line SVP (Americas)
    - Global Head of HSSE
    - Regional Head of HSSE (Chair)
    - General/Station Manager of the concerned Warehouse/Station
    - Lead Investigator
    - Any other attendees as required
- The Lead Investigator shall issue the Pulse investigation report at least 24 hours before the ERG call in PDF format
- During the call the Lead Investigator shall talk through the key points of the investigation in the order of the Pulse investigation report, concluding with the Causal Factors and (proposed) Action Plans
- The Lead Investigator may choose to show relevant photographs, videos, or diagrams to explain the Event and investigation, and should prepare these in advance
- The ERG should discuss and accept or reject the Findings, Causal Factors and Action Plans
- The ERG may recommend further Action Plans beyond those already proposed and the Lead Investigator should add these in Pulse as soon as possible
- The ERG shall also review the Behavioural Classification(s) proposed by the Lead Investigator for each person involved in the Event and approve or reject the recommended course of action proposed to Line Management and HR (e.g., No Action, Performance Management, Disciplinary).
- After the ERG call the Lead Investigator should send a short summary of the agreed actions after the ERG and update Pulse accordingly.
- The Lead Investigator should keep the Pulse ERG fields in the investigation form up to date including Planned ERG Date, Completed ERG Date and ERG Comments
- The final 10 minutes of any ERG should be dedicated to the agreement of a summarising of the event and any required 'lessons learned' communications.

For more guidance on managing the ERG meeting see Appendix 2 ERG Guidance

5.14 Lessons Learnt

To facilitate the sharing of investigations findings and learnings there is an additional report in Pulse that allows for the creation of a 'Lessons Leant' PDF tool. This document is for distribution to HSSE country leads for information purposes only, and through their discretion can be further distributed to operational leads. Should a wider awareness campaign be required then the Global communications team must be contacted to produce through their process and templates.

The document is designed to be in the form of a newsflash with limited space in each of the fields and the requirement of an annotated picture. Location, date, and region are automatically populated. The editable fields are as follows.

Title – A clear event title

Did you know – Fact about the process being conducted at time of event

What? – Brief and concise explanation of the event along with the consequences.

How/Why? – Short explanation of how the event caused the consequences and why it was able to occur.

Lessons Learnt – What the investigation concluded was the corrective actions required to prevent this event occurring again.

Uploaded Photo – Use a photo that best explains the event and links to the lessons learnt to prevent a recurrence.

The document is created through the same process of creating the PDF investigation report, instead selecting 'Lessons Learnt'.

5.15 Final Report and Issue of Proposed Actions

After the ERG has concluded, there may be some additional areas to be investigated, additional analysis required or changes to the actions. Once all the items have been addressed, the relevant investigation fields updated and the actions formalised, the Final Investigation report can be generated and Issued to all relevant interested parties.

There are two Investigation report options in Pulse, an internal version for use within WFS and an External Investigation report that can be sent to the Customer, a Regulator or interested external parties.

The Internal Final Investigation report should be sent to the following.

- All involved parties identified in the report
- The local management teams
- The regional Safety / Security teams
- The Senior Management team for the location and Line of Business
- The EVP for the Region
- The SVP Safety / Security
- The Global Head of Safety & Security
- Quality Manager for the region / Country
- Anyone else identified as requiring a copy…

5.16 Closing the Investigation and Event in Pulse

Once the Final Investigation Report has been distributed and the actions have all issued to the persons responsible for implementing them, the event including the investigation can be validated by the appropriate Regional Head of Safety & Security and Closed in Pulse. The actions will remain open and be tracked independently of the event until action closure.

5.17 Review of Actions and their Effectiveness

Progress on the action plan should be regularly reviewed and included as part of the Regional Safety and Security boards. Any significant departures from the plan should be explained. Its good practice to update Affected employees and their representatives of the progress of any actions.

6 Incident Classified – Local Assessment

If the event is minor event, the PIC will raise an Impact after saving the event and then open an assessment on the Investigation Tab and assign it to the relevant GM at the building / station for follow-up.

6.1 Local Assessment by GM

The GM and local team will be notified of the event report and the need to perform a local assessment. The aim of the assessment is to understand the event, what happened and why, and then to implement any necessary local actions to mitigate any risks identified. The principles, evidence and techniques outlined in a full investigation should be employed, where appropriate, to identify immediate and underlying causes. The 5 Whys tool is available in local assessments to guide the investigation.

How to Complete a Local Assessment in Pulse

6.2 Assessment follow-up

After interviewing the people involved identify any systemic deficiencies and an action plan to mitigate any risks. Details should be uploaded into Pulse in the evidence and Investigation tab under Local Assessment tab within the event. Actions should be created to manage any planned mitigations.

6.3 Assessment Closure

Once the assessment details have been entered the event can be closed locally by the GM or the Local HSSE representative.

7 Incident Classified – Closed for Statistics

If the event is classified as a Near-miss, the event will be automatically closed once the PIC saves the report at the input check phase. No additional processing is required for these reports. However, these reports will be used for statistical purposes and monitored through dashboards and KPIs. If trends indicate an increase in the reporting of specific event descriptors, additional analysis can be completed and if needed events can be escalated to an Assessment or Full investigation if deemed necessary.

8 Regional Safety & Security Board follow-up.

8.1 Event Reports

All HSSE reports are used as part of the RSSB dashboards to report on Reporting Rates / Aircraft Damage Events and LTIs. The RSSB dashboards will be enhanced overtime to include more details on specific event descriptors and relevant KPIs.

8.2 Investigation Reports

All Level 1 Investigations will be reviewed as part of the RSSB. The investigator and local management will present the outcome of the investigations and the action plan to mitigate the risks identified.

8.3 Action Plan – Serious Events

All action open action plans related to Serious events will be reviewed as part of the RSSB. Action due dates and progress need to be monitored to ensure actions are implemented in a timely manner.

9 Appendix

9.1 Appendix 1 - General Tips for Investigation Report writing

General Report Writing

- Reports should be readable, unambiguous, and concise. To enhance readability:
- Sentences should be direct
- Use the active voice
- Keep it short and simple (KISS)
- One sentence, one point
- Similarly, paragraphs should be kept short and to the point
- Sub-headings should be used to summarise content
- To create a readable report takes time and effort, it is a skill that takes time to acquire so do not be overly critical of investigators when reviewing their reports. You do not want to demoralise or demotivate a good investigator because their written work could do with some improvement. Provide helpful criticism and supportive concern. Don't be tempted to correct all their faults in one go and overwhelm them, drip feed them advice so they improve consistently over time.

Investigation-Specific Report Writing

- The report should only contain non-judgemental information and data, on which intelligent findings, conclusions and recommendations have been based
- Do not assume
- Do not speculate
- Be careful of your own unconscious biases
- And ensure that the investigator did likewise, if in doubt ask them to explain their logic of how they reached a certain decision. Remember collecting and recording witness opinions is data, investigators own opinions are not

Three Key Questions

- All investigation reports should clearly address three questions:
- **What happened?**
- Does it describe information relevant to the occurrence?
- Does it include a sequence of events, or timeline?
- Can you clearly understand from the report alone what happened, or do you need to ask the investigator lots of questions? IF the latter then more work is required on the draft report

Why did it happen?

- Is the analysis based on the information alone, or have they started 'filling in gaps'?
- Does it clearly layout and explain the factors that led to the event
- Does the report contain pejorative or judgemental language such as;
- X Failed to follow procedures?
- X lost situational awareness.
- X is a poor communicator?
- The report's language should be anodyne, impartial, and concise

How can we reduce the likelihood of reoccurrence?

- Recommendations should have a causative link relating them back through the conclusions and findings to the initial evidence collected
- Ensure that each recommendation is linked to at least one causal factor or observation

- Ensure that each recommendation is addressed to and therefore owned by a specific and appropriate individual
- Ideally recommendations should start with a verb such as “introduce, write, review…”
- Avoid verbs such as ‘consider’ as these are not measurable

9.2 Appendix 2 - ERG Guidance Document

Before the ERG

- Preparation
- Where will the ERG be sitting?
- When is it scheduled to start?
- Have you cleared sufficient time in your diary/calendar? (Expected it to take at least 2 hours, longer if it’s a particularly complex scenario)
- Are you expected to act as a chairman?

Reading the report

- Make sure that you have sufficient time to read and digest the report before the ERG sits, the day before is too late!
- Is it clear what happened?
- Except for the odd detail does the report explain things clearly or do you have to make assumptions?
- Do you have all the information you need?
- Pictures?
- Photographs?
- Maps?
- Document/manual extracts?
- Etc.
- Do you need to have a look a facility/piece if equipment beforehand?
- Do the reports recommendations address of the Causal & Contributory Factors? Have the Observations been addressed where necessary?
- DO you understand all the acronyms and abbreviations used?
- Have you made any assumptions in your understanding? If so, make a note of them and ask the lead investigator to address them during his brief at the ERG.
- Don’t discuss your thoughts with other board members before sitting as a board
- REMEMBER your primary aim is to prevent reoccurrence; is this your focus?
- If you are not happy with the report for any reason do not be afraid to air your concerns and ask for the ERG to be delayed if necessary.

During the ERG

Chairman's Responsibilities

- It is extremely helpful to introduce the board to one another, and other attendees before starting proceedings
- The chairman should brief the need for confidentiality to everybody in the room
- The chairman should brief that observers in the room are purely that and do not have a speaking part. Anybody who persistently interrupts should be asked to leave
- If/when SMEs are brought into the room introduce them to the process and explain what is expected of them
- Inform SMEs that they are mot on a trail or being assessed in any way
- It is very easy to get drawn down the rabbit holes od interesting discussions that have no or little relevance to the investigation being discussed. It is essential, therefore, that the chairman that you control the discussions and raise observations as required so that incidental issues can be reviewed outside of the ERG.

Recommendations

Reviewing Recommendations

When reviewing recommendations keep the following pneumonic in mind:

- R – Realistic in solving the issue(s)
- E – Evidence Based
- C – Clear (and concise)
- O – Ownership/actioner (should be 'addressed' to the appropriate area)
- M – Measurable
- M – Money (calculate a potential 'return on investment' estimate if required)
- E – End User (consult end-users to see how effective and efficient the draft recommendation might be)
- N – Neutral language
- D – Doing word (use a verb, preferably at the beginning of the recommendation)

Each individual recommendation needs to be:

- **Specific** goals and actionees need to be explicitly stated (by post title).
- **Measurable** will it be clear when the recommendation has been completed?
- **Achievable** can be the recommendation be physically achieved by the actioner in the time frame specified?
- **Realistic** bearing in mind other constraints and the importance of this action
- **Timely/time-bounded** ensure there is a deadline by which the action should be competed. The timeframe should be dictated by the action's importance, and its difficulty of completion
- When considering recommendations, you can so one of four actions:
- **Accept** the recommendation as it stands.
- **Reject** the recommendation in its entirety

Rewrite the recommendation (careful with this one!) ensuring the investigator is content with the new working you are attributing to them. If it's a significant rewrite it is probably better to reject it and write a new one.
Raise a new recommendation useful for complex rewrites and areas that you feel have not been addressed by the existing recommendations

Do the final set of recommendation:
Contain each issue i.e. isolate the harm?
Correct each issue?

Prevent reoccurrence of each issue later to somebody else?
In the time it takes to investigate the occurrence and convene the ERG it is likely that the 'contain' and 'correct' actions have already been implemented before the ERG sits. However, it is worth reviewing each issue as immediate actions can sometimes be superficial or localized and do not address the broader problems across the business.

Psychological Biases

During your reading of the report and particularly if/when considering culpability, take time to think about each of the following common psychological biases and ask yourself to what degree is my opinion being affected by these biases:

Fundamental Attribution Error

We tend to think of our own erroneous behaviour as driven by outside events and the erroneous behaviour of others as caused by internal process i.e., their inherent personality. Think about being late for a meeting: if you're late there are always good reasons or extenuating circumstances, if someone else is late we tend to blame them for now getting their act together and being disorganised (although not always vocally!) When considering the actions of an individual try to imagine yourself in his/her position, without the information you now must hand, try to put your own emotions about the situation to one side.

Confirmation Bias

We seek out and pay particular attention to information that supports our existing beliefs and ignore or ridicule information that does not fit in – to improve your decision making try considering the reasons against as well as for your decisions.

Hindsight Bias

Investigations aim to explain part of the past, yet they are conducted in the present, and thus, they are inevitably influenced by it. One of the safest bets you can make as an investigator is that you know more about the accident than those people caught up in it, thanks to hindsight. You know all the events that were taking place and where poor decisions were made that led to an outcome you now know about. Hindsight biases your view, and it will permanently impact your ability to look objectively at people's behaviour since you know:

- What the danger signs were
- Which cues and indications were critical in the light of the outcome

(Try watching the film 'The Sixth Sense' twice on the second viewing the file has a very different fee, and you can never put yourself back into the position you were in when you first watched it!) By being aware of this bias, it can help to lessen its effect.

Outcome Bias

We tend to judge a past decision by its ultimate outcome, instead of judging it on the quality of the decision at the time it was made and given what was known at that time, it was made and given what was known at that time. Error occurs because no decision at the time it was made and given what was known at that time. Error occurs because no decision maker ever knows whether a calculated risk will turn out for the best. The actual outcome of the decision will often be determined by unforeseen factors, with some risks working out and other not. Individuals whose judgements are influenced by outcome bias are seemingly holding decision makers responsible for events beyond their control. Is your decision of culpability based on the size of the outcome? Big crashes are rarely caused by big errors, bad things don't only happen to bad people!
To avoid the influence of outcome bias, try to evaluate a decision by ignoring information available to the individual concerned after the decision was made, so try and establish what information the individual knew at the time of the occurrence irrespective of the outcome
Guard yourself against mixing your reality with the reality of the people you are investigating. Being aware of this bias helps minimize its effect, so try to put yourself in the position of those involved at the time, with the information they had to hand.

Groupthink

Many people think that groups make more conservative decisions thank individuals alone, but cohesive groups have been shown to make more polarised decision than individuals. A particularly extreme form of group polarisation is Groupthink I which an illusion of total consensus takes over. Preconditions for groupthink include close-knit and like-minded group members, forceful leaders who make their position known, and the group being shut off from other influences and opinions. It is for this reason that board membership should change between investigations (don't keep calling on the same three people. Members should also be from different professional disciplines, and SMEs are brought into ERGs to give alternative opinions and advice.
To minimize the effects of groupthink culpability decisions should be made individually before any discussion on culpability takes place.

Attribution

In social psychology attribution is the process of inferring the causes of events or behaviours to people or thinks. In real life, attribution is something we all do every day, usually without any awareness of the underlying processes and biases that lead to our inferences. Over the course of a typical day, you probably make numerous attributions about your own behaviour as well as that of the people around you. For example, when my wife can't find her keys, I assume it is because she is careless. When I can't find my keys, I naturally put I down to somebody else moving them, being too busy, bad luck, or some external circumstance. The curious thing is that she always assumes the opposite – she's unlucky, and I'm careless! Attribution plays a major role in how we see and interpret the world, influencing out feelings towards, as well as how we think and relate to other people. However, the way we attribute causality is prone to several cognitive biases and errors because our perceptions of events are distorted by our past experiences, our expectations, and our own psychological needs.

When considering our own behaviour:

Think about the last time you received a good score in an exam or test. Chances are that you attributed your success to *internal* factors, "I did well because I am clever" or "I did well because I studied hard and was well-prepared". What happens when you receive a poor grade, though? Psychologists have found that in these situations we are ore likely to attribute our failure to *external* forces. "I failed because the questions were poorly worded" or "The classroom was so hot that I couldn't concentrate". Notice that both explanations lay the blame on outside forces rather than accepting personal responsibility. Psychologists refer to this phenomenon as the **self-serving bias.** So why are we more likely to attribute our success to our personal characteristics and blame outside variables for our failures? Researchers believe that blaming external factors for failures and disappointments helps protect self-esteem.

Explaining other people's behaviour:

When it comes to other people, we have a general tendency to attribute the causes of negative behaviour to internal factors such as personality characteristics and ignore or minimize external variables. This phenomenon tends to be widespread, among individualistic (Western) cultures. Psychologists refer to this tendency as the **fundamental attribution error;** even though situational variables are very likely present, we bias our attribution to the internal characteristics of the individual, largely ignoring external factors. The fundamental attribution error explains why people often blame other people for things over which they usually have no control. The term **blaming the victim** is often used by social psychologists to describe a phenomenon in which people blame innocent victim of crimes for their misfortune. In such cases, people may accuse the victim of failing to protect themselves from the event by behaving in a certain manner or not taking specific precautionary steps to avoid or prevent the event. Examples of this include accusing rape victim, domestic violence survivors and kidnap victims of behaving in a manner that somehow provoked their attackers. Researchers suggest that **hindsight bias** causes people to mistakenly believe that victims should have been able to predict events and therefore take steps to avoid them.

9.3 Appendix 3 Examples of Events to Report

Aviation is an inherently risky business, and it is essential for the continued safe operations that events are reported in a timely manner and followed up accordingly. The WFS HSSE Policy requires any actual or potential Health, Safety Security or Environment (HSSE) issue to be reported to the local supervisor and reported into Pulse. This also includes any HSSE reports received from Customers.

The following list provides an example of issues that must be reported – it is not an exhaustive list, and the general rule is if there is any doubt whether to report or not then report!

1. **Airport Operations**
   - Passenger Acceptance
   - DG in Cabin Baggage
   - DG in Checked Baggage
   - Baggage Security and Reconciliation
   - Passenger Security
   - Passenger Injury
   - Passenger Illness
   - Unruly Passenger

2. **Ramp Operations**
   - Loading Errors
   - Water or Snow Ingress
   - ULD Issues
   - ULD Movement and Transport
   - ULD Storage and Handling - Ramp
   - Ground Support Equipment Operation
   - Ground Service Non-Compliance
   - Arrival / Departure Checks
   - Ramp Environmental Issues
   - Door Operation
   - Engine Hazard
   - Pushback and Towing
   - Aircraft Security Search
   - ULD Storage and Handling - Baggage
   - Ramp Transfer
   - ULD Storage and Handling – Baggage

3. **Loadsheet or Load Instruction Report**
   - Loadsheet / Load Instruction report compilation issues
   - Ramp clearance issues

4. **Warehouse**
   - Cargo issues – Acceptance / documents/ damage issues / Prohibited items
   - Mail - Acceptance / documents / damage issues / Prohibited items
   - ULD Storage and Handling - Warehouse
   - Build Up of ULD
   - Trucking issues
   - Special Cargo Handling issues
   - Operations & Compliance

- Live Animal Handling
- Dangerous Good
- Warehouse Safety Behaviour
- Cargo Security

5. Airport Management / Infrastructure

- Ramp
- Runway or Taxiway
- Service and Facilities Deficiencies

6. Physical Security

- Unlawful Threat or Interference
- Unauthorised Access
- Security Screening
- Criminal Acts
- CCTV
- Customs and Border Protection

7. Injuries

- Injury
- Illness
- COVID-19

8. Damage

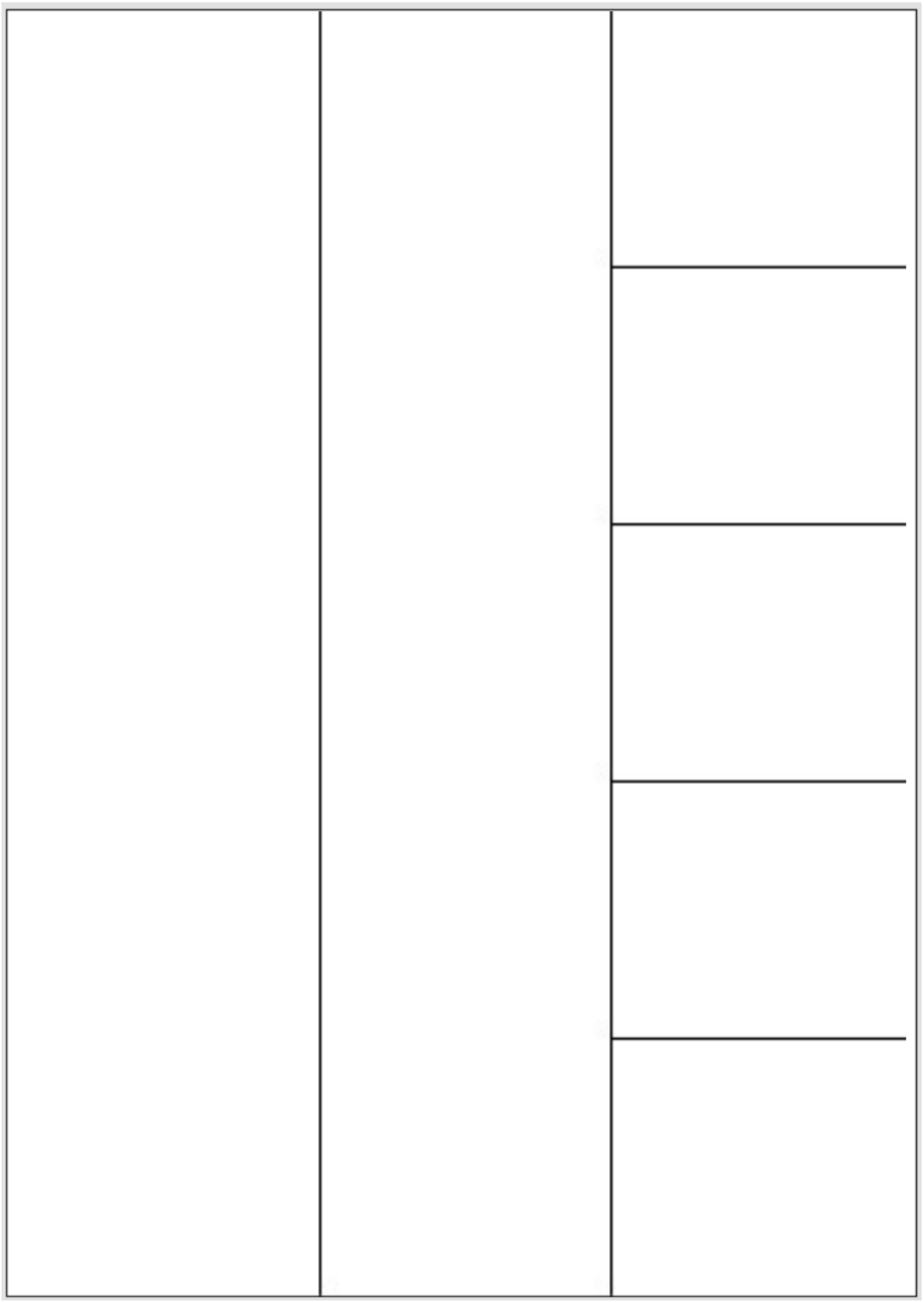
- Aircraft Damage
- Cargo Damage
- Property or Facility Damage
- Pallet or Container Damage
- Damage Equipment or GSE
- Vehicle Damage
- Fire

9.4 Interview Guidance - GMEC technique

Greeting	Greet and personalise the interview ; Name preference Establish rapport – Develop through conversation; Build confidence in you and your credibility; Build trust, Deal with issues that the witness has. Open ended framing. **Positive first impression**
Explaining	**Role:** Explain your role, organisation and reasons for and objective of the investigation, (Determine the cause of the accident, learn lessons, prevent something similar from happening again, improve design or procedures, not to apportion blame) **Recording:** "We would like to record the interview" [**Deal with concerns and objections, maintain trust**] **Reasons:** For the interview, what you are hoping to achieve by speaking to the witness; What aspect of the incident you are looking at with this witness; How much time this will take, are there any time pressures for the witness? **Route-map:** stages of the interview "Get your version of events"; "Go through this in great detail"; "Questionless interview, you will be doing most of the talking"; "Check back with you what I have" **Routines:** Things you will be doing; "Listening to you"; "taking notes"; "referring to notes"; "perhaps asking you to draw a diagram" ; "May use some methods to help you remember"; "My colleague may also need to ask some questions" **Expectations:** 'Contract to disclose' – checking back comprehension after each element of the contract: "**Tell me absolutely everything you can remember, even if you think it is trivial or irrelevant, if you think it, say it"** "To give detail"; "Ask questions or for explanation at any time" "OK to say 'don't know' and 'don't understand" "OK to make mistakes, OK to correct mistakes" "OK to remember partial details" "I need you to concentrate hard; "To take time"; "You will be doing most of the talking [**Transfer control**; Questionless Interview]; "Focus on specific 'pictures' in your mind, Overall check back "Any questions?"

Mutual Activity	**[Remember: You are aiming for a 'questionless' Interview – Transfer control]** Context reinstatement, Initiate a free report, Open-ended questions, Pauses and no interruptions. Obtain Initial account. [Review objectives, if necessary develop account to meet objectives] Select Topics from Initial Account [Use grid or other notes to identify, themes and episodes] **Questioning** Report everything ; Activate and probe an image Interviewee-compatible questioning [Follow order of report/themes/episodes]; OK to say 'don't know' and 'don't understand'; Open and closed questions. If appropriate; Varied and extensive retrieval; Change the temporal order; Change perspectives; Focus on all senses Investigatively important questions, "previously unmentioned, mentionable" **Summary**
Closure	Leave the interviewee in a **positive frame of mind** Gradually return to the neutral topics discussed in the rapport phase. Thank the interviewee for his/ her co-operation and effort Any questions? Prolong the interviews functional life by, for example, providing a contact name and telephone number, email etc. Gather demographic and procedural information if required **It is important to leave the interviewee with a positive last impression of the interview and you as the interviewer.** This point has important repercussions, one of which is that a well managed interview can positively influence industry relations and the perception of your organisation and its investigative role

9.5 Interview Guidance - Proforma



9.6 Timeline Proforma

Safety or Security Indicators

Factors that describe the problem associated with individual actions or local conditions that are not generally safety issues themselves but may provide indications that safety issues exist.

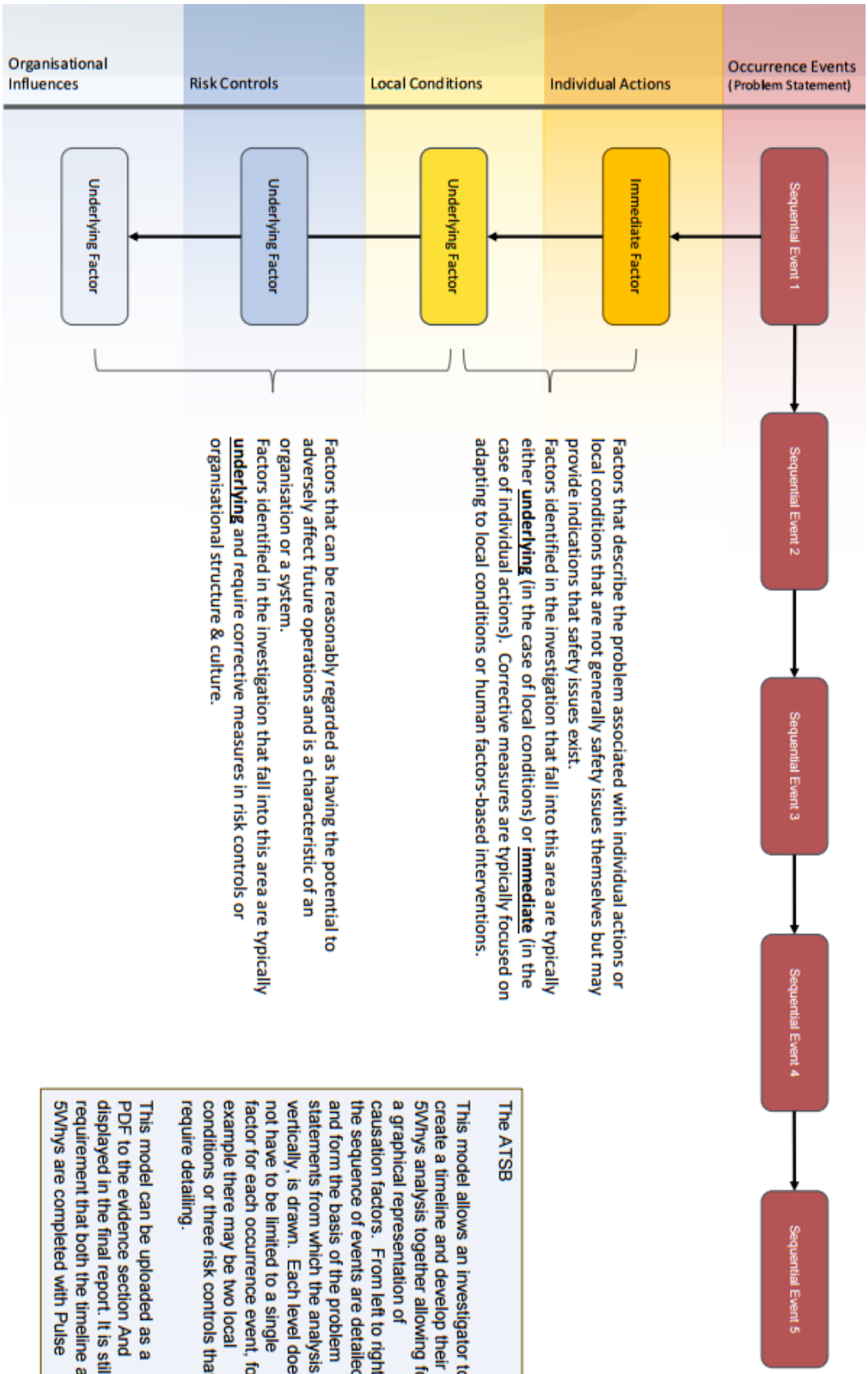
Factors identified in the investigation that fall into this area are typically either underlying (in the case of local conditions) or immediate (in the case of individual actions). Corrective measures are typically focused on adapting to local conditions or human factors-based interventions.

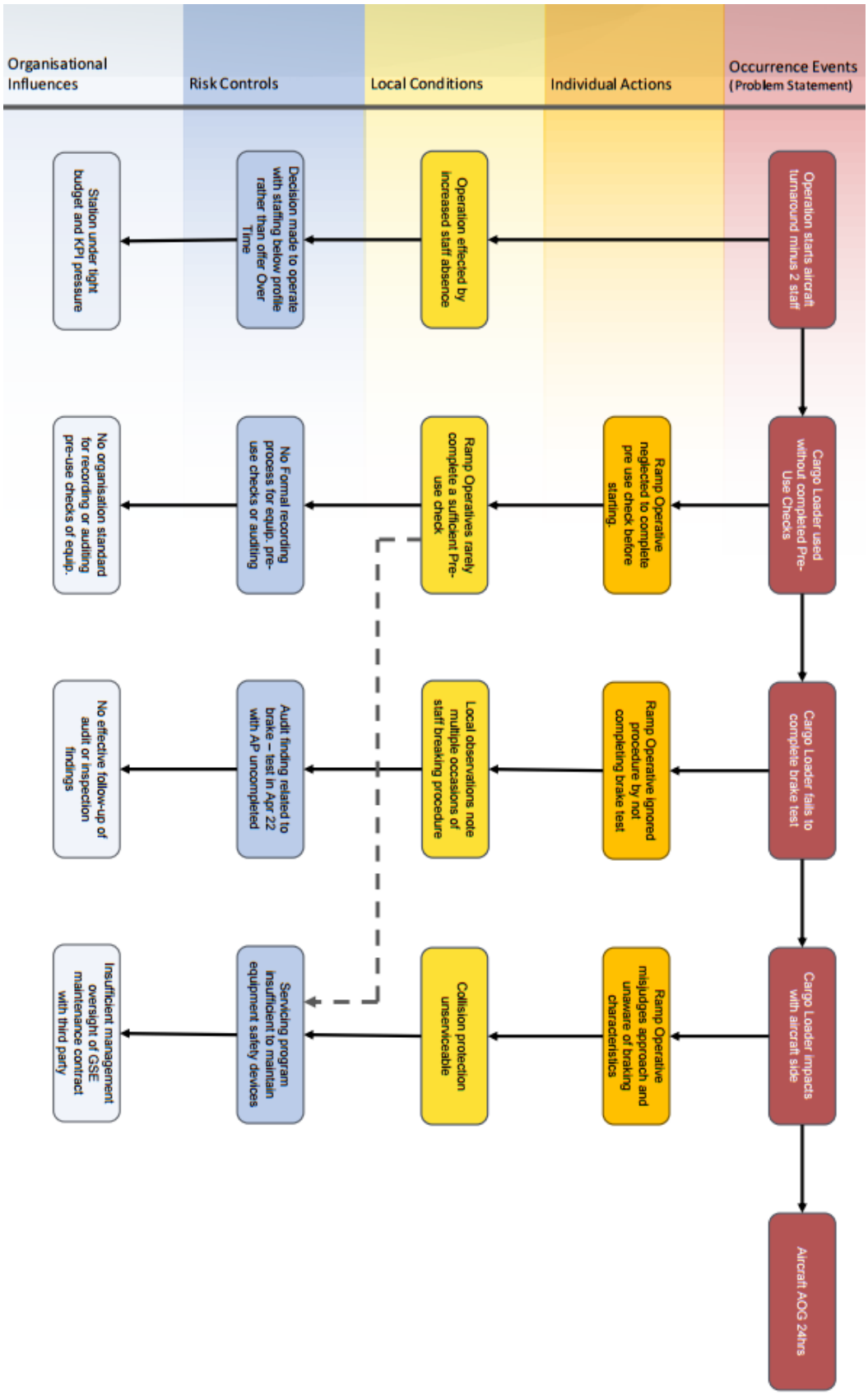
Safety or Security Issue

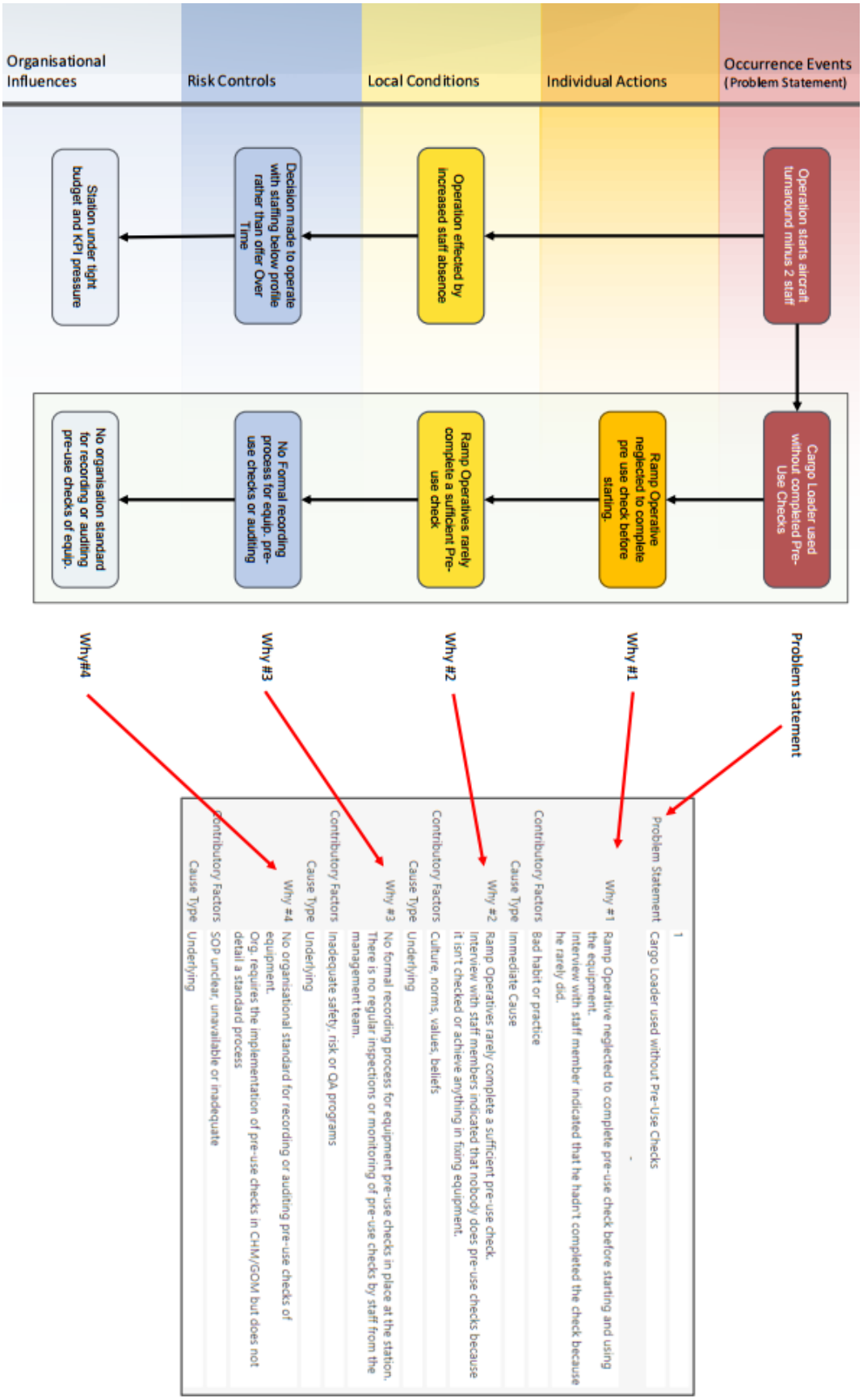
Factors that can be reasonably regarded as having the potential to adversely affect future operations and is a characteristic of an organisation or a system.

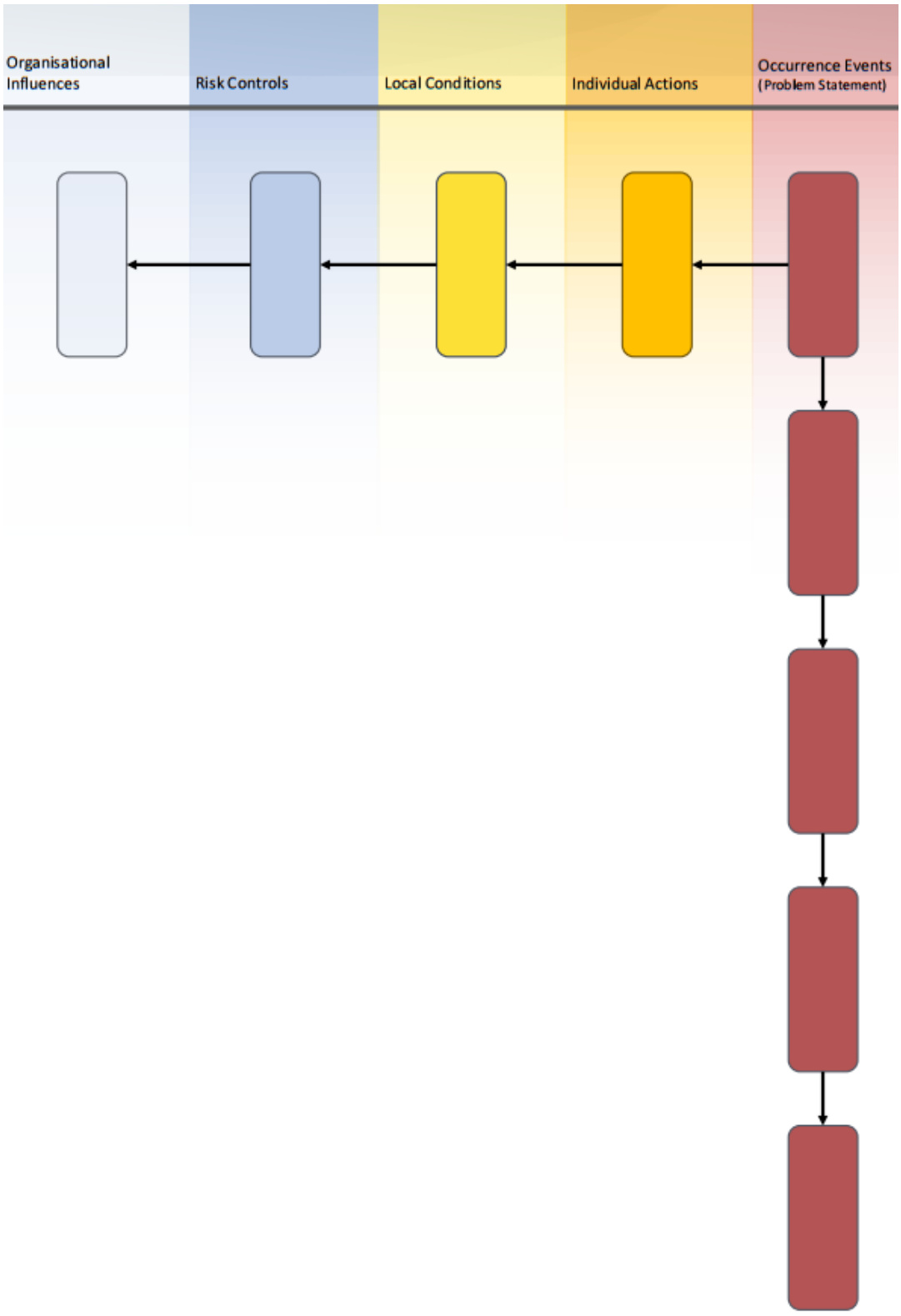
Factors identified in the investigation that fall into this area are typically underlying and require corrective measures in risk controls or organisational structure & culture.

Occurrence Events (including Technical problems) (Events that best describe the sequence of the occurrence)	
Individual Actions (What Individual actions increased the safety or Security risk?)	Incorrect operation or handling of equipment Skill-based Errors Misjudge distance, speed, clearance Incorrect equipment Inappropriate procedure or response Bad habit or practice Exceeded ability Inappropriate use of automation or equipment Omission of step or checklist item Violations Inadequate knowledge or information Situational Awareness Inadequate experience for situation
Local Conditions (What aspects of the local environment may have influenced the individual actions / technical problems?)	Slippery surface or floor Poor design of equipment or tools High level of noise or vibration Fatigue Task saturation Inadequate lighting or Visibility Technological Environment Equipment Failure Distraction Complacency or boredom Inadequate ventilation Poor housekeeping or cleanliness Inappropriate equipment or tools Poor teamwork Presence of hazardous or toxic substance Airport facilities Mental fatigue Physical limitation Workload management
Risk Controls (What could have been in place to reduce the likelihood or severity of the problems at the operational level?)	Inadequate supervision Untrained supervisor Failed to correct inappropriate behaviour Inadequate training or qualification Inappropriate employee scheduling or rest period Inadequate Drugs and alcohol policy or testing Procedures and Job Design Failed to report a hazard or problem Inadequate task delegation or prioritisation SOP unclear, unavailable or inadequate Lack of accountability Failed to track performance or qualifications Inadequate Policies Human Resourcing & Training
Organisational Influences (what could have been in place to minimise problems with the risk controls?)	Resource Management Inappropriate goals or policies Organisational Culture Culture, norms, values, beliefs Failure to correct known design flaws in equipment, process or policy Change management process inadequate Conflicting goals or information Inadequate Revision process Inadequate prioritisation Industrial or union issues Poor planning Lack of funding or excessive cost-cutting Unstable workforce (hiring, retention or renumeration)


Organisational Influences
Risk Controls
Local Conditions
Individual Actions
Occurrence Events (Problem Statement)
Sequential Event 1
Sequential Event 2
Sequential Event 3
Sequential Event 4
Sequential Event 5
Immediate Factor
Underlying Factor
Underlying Factor
Underlying Factor
Factors that describe the problem associated with individual actions or local conditions that are not generally safety issues themselves but may provide indications that safety issues exist.
Factors identified in the investigation that fall into this area are typically either underlying (in the case of local conditions) or immediate (in the case of individual actions). Corrective measures are typically focused on adapting to local conditions or human factors-based interventions.
Factors that can be reasonably regarded as having the potential to adversely affect future operations and is a characteristic of an organisation or a system.
Factors identified in the investigation that fall into this area are typically underlying and require corrective measures in risk controls or organisational structure & culture.
The ATSB
This model allows an investigator to create a timeline and develop their 5Whys analysis together allowing for a graphical representation of causation factors. From left to right, the sequence of events are detailed and form the basis of the problem statements from which the analysis, vertically, is drawn. Each level does not have to be limited to a single factor for each occurrence event, for example there may be two local conditions or three risk controls that require detailing.
This model can be uploaded as a PDF to the evidence section And displayed in the final report. It is still a requirement that both the timeline and 5Whys are completed with Pulse


Organisational Influences
Risk Controls
Local Conditions
Individual Actions
Occurrence Events (Problem Statement)
Station under tight budget and KPI pressure
Decision made to operate with staffing below profile rather than offer Over Time
Operation effected by increased staff absence
Operation starts aircraft turnaround minus 2 staff
No organisation standard for recording or auditing pre-use checks of equip.
No Formal recording process for equip. pre-use checks or auditing
Ramp Operatives rarely complete a sufficient Pre-use check
Ramp Operative neglected to complete pre use check before starting.
Cargo Loader used without completed Pre-Use Checks
No effective follow-up of audit or inspection findings
Audit finding related to brake – test in Apr 22 with AP uncompleted
Local observations note multiple occasions of staff breaking procedure
Ramp Operative ignored procedure by not completing brake test
Cargo Loader fails to complete brake test
Insufficient management oversight of GSE maintenance contract with third party
Servicing program insufficient to maintain equipment safety devices
Collision protection unserviceable
Ramp Operative misjudges approach and unaware of braking characteristics
Cargo Loader impacts with aircraft side
Aircraft AOG 24hrs


Organisational Influences
Risk Controls
Local Conditions
Individual Actions
Occurrence Events (Problem Statement)
Operation starts aircraft turnaround minus 2 staff
Operation effected by increased staff absence
Decision made to operate with staffing below profile rather than offer Over Time
Station under tight budget and KPI pressure
Cargo Loader used without completed Pre-Use Checks
Ramp Operative neglected to complete pre use check before starting.
Ramp Operatives rarely complete a sufficient Pre-use check
No Formal recording process for equip. pre-use checks or auditing
No organisation standard for recording or auditing pre-use checks of equip.
Problem statement
Why #1
Why #2
Why #3
Why#4
1
Problem Statement
Cargo Loader used without Pre-Use Checks
Why #1
Ramp Operative neglected to complete pre-use check before starting and using the equipment.
Interview with staff member indicated that he hadn't completed the check because he rarely did.
Contributory Factors
Bad habit or practice
Cause Type
Immediate Cause
Why #2
Ramp Operatives rarely complete a sufficient pre-use check.
Interview with staff members indicated that nobody does pre-use checks because it isn't checked or achieve anything in fixing equipment.
Contributory Factors
Culture, norms, values, beliefs
Cause Type
Underlying
Why #3
No formal recording process for equipment pre-use checks in place at the station. There is no regular inspections or monitoring of pre-use checks by staff from the management team.
Contributory Factors
Inadequate safety, risk or QA programs
Cause Type
Underlying
Why #4
No organisational standard for recording or auditing pre-use checks of equipment.
Org. requires the implementation of pre-use checks in CHM/GOM but does not detail a standard process
Contributory Factors
SOP unclear, unavailable or inadequate
Cause Type
Underlying


Organisational Influences
Risk Controls
Local Conditions
Individual Actions
Occurrence Events
(Problem Statement)