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Solutions

Introduction

Writing an investigative report is one of the hardest tasks an investigator undertakes. But, because it's an important showcase of the professionalism of the investigation, you can't skimp on this critical investigation step. Your investigative report reflects on you and your investigation, so make sure it's as clear, comprehensive, accurate and polished as possible.

An investigative report will:

- Satisfy the remit. The remit is the reference document for the lead investigator's guidance in carrying out the investigation. An investigation cannot be considered to have been completed successfully unless it meets the parameters of the remit.
- Follows a clear and logical structure, an example of which is shown below.
- Identifies whether system improvements are necessary to eliminate or mitigate the risk from adverse events by addressing the likelihood of recurrence and/or their consequences. It is the aim of all transport operators to improve safety. By mitigating or removing the risk from adverse events, improvements in safety will be achieved. Transport operators are responsible for considering and implementing recommendations concerning those issues within the scope of their safety certificates and those involving their contractors and suppliers.
- Specifically directs each recommendation to the appropriate transport operator(s). It is important to recognise which organisation is the subject of each recommendation. This adds clarity to the process of implementing control measures.
- The investigation report is also a record of the steps of the investigation. It can be used to prove that your investigation was timely, complete and fair.

Note: The information contained in the investigation report may be cited in any legal action, so it's important that the report is detailed and accurate, but does not include unnecessary detail that can get the company into trouble.

The process of writing the investigation report can sometimes clarify your thinking and can even uncover additional questions that provide new insight into a case. And finally, the investigation report provides valuable data that can be used to implement control and preventive measures in your company.

Plain English

It was Winston Churchill who said once, Madam I apologise for the length of this report for I did not have time to write a shorter one! The key message here being don't feel that investigation report has to run to many pages, a short well-structured investigation report is quite capable of delivering the message needed.

Although doubtless a technical report will have a fair degree of technical jargon and information it is important that you write your report in plain English. Plain English is a style of reporting that removes many unnecessary words and speaks more clearly, and this gets the facts across quicker. We have a fact sheet which also has some English exercises on it that is worth undertaking if you are not familiar with English report writing.

One point of note about plain English is that many textbooks suggest writing for business in the second person for example this document is written mostly in the first and second person , using words like I

and we. An investigation report should always be more formally written in the third person. More details on what these words mean can be found in the fact sheet on plain English if required.

Report rules

Before you begin, it's important to understand the three critical tasks of a workplace investigative report.

- It must be organized in a way that anybody internally or externally can understand it without having to reference other materials. Use simple English and be grammatically correct.
- It must document the investigative findings objectively and accurately and provide decision makers with enough information to determine whether they should take further action.
- It must indicate whether the allegations were substantiated, unsubstantiated or whether there's something missing that is needed to come to a conclusion.

Executive summary

The executive summary should be a concise overview of the investigation from beginning to end. It should not contain any information that is not already in the investigation report. Classic advice for investigation report executive summaries are they should be written in the active voice, I/We, not in the third person. Engineering investigation reports are almost exclusively written in the third person, and we would advise that approach for the executive summary too.

Lasting no more than a side or two of A4, the executive summary must give the reader an overview of the incident, the investigation the conclusions and any recommendations. Given this, is it best to write the executive summary after you have completed the report, not at the beginning, where it is physically placed.

This may be the most important component of the investigation report. Many readers will never need to go beyond this section. High-level stakeholders get an overall picture of the allegations, investigation and outcome, and can channel the necessary resource is to rectify the situation.

The report layout

There should be a logical flow of threads running through the report. For example, 'factors for consideration' is based on the 'summary of events' which in turn is based on the evidence described in the 'summary of evidence' before it. The conclusions, including the immediate and underlying causes, are based on the issues discussed in the 'factors for consideration' and, finally, the 'recommendations' are linked back to the preceding items and specifically to the conclusions and the relevant immediate and underlying causes.

Many companies have standardised layouts for reports, and the more serious the event the more support and guidance is advised. Your report may end up in court after all. A standard template for most reports is as follows:

- Title page – a simple and graphically pleasing page, often with a picture and the report title, and often the senior investigator
- Investigation leading particulars – This is a factual sheet stating details of the date of incident, persons involved, investigator, timelines, governance etc.
- Executive summary – see above

- Factual information – see below
- Analysis – clear simple explanation of the route the analysis has taken giving any assumptions and clarity
- Recommendations and actions – often presented as a list
- Appendices – where any detailed information that is relevant is attached – note it is an appendix not an annex

Investigation leading particulars

This section can go either before or after the executive summary. This section captures the preliminary case information in a concise format, without too much detail. Record such things as:

- Your name and investigator identification number, if you have one
- Case number
- The date the incident occurred
- How the incident was reported, i.e. Employee hotline, email to HR Manager, verbal report.
- The date that the case was assigned
- Key personnel involved
- Employment level
- Job code
- Hire date
- Location
- Employee identification number
- Department identification number
- Date the incident was reported
- Date of the incident

If you are reporting a Health and Safety incident there will be other factual information required, such as the outcome, if the person was injured, loss of time at work etc.

Factual information

This is the main body of the report, sometimes called the summary of evidence, and it is worth giving it some structure to allow the reader to understand the information easily. Depending on the severity of the incident and the requirement to report externally or to the company board for example, then the report will have most of the sections. More simple investigations might have sections removed, but personally I always include the heading, and add the words, 'not applicable' or 'not required'. This is so that the reader knows you have considered this aspect, not just ignored it. The following structure is a good guideline:

- Incident summary – history of the flight/service, include the refences to maintenance. This is a short section that details all the facts of the incident, the time, weather conditions etc. It is good to include a summary of the incident in a readable format rather than simply just having a list of facts.
- Injuries to persons – this section allows the reader to see the severity of the accident. If it was fatal then significant external reporting will be required for example. Follow your company guidance on this aspect but normally lost time incidents are to be recorded here.

- Damage to asset and facilities etc.
- Personnel information – training, experience, competence etc. Consider training records and experience, this starts to indicate the expected level of performance and actions taken by the person concerned.
- Asset information – this gives information about the asset, its age, use, the previous service history, if it has known failures of this sort, the last time maintenance was undertaken etc. This is often a big section as it contains significant factual evidence.
- Recorded information – OTMR, HFMT, etc. It is always worth considering what electronic facts have been captured. Most modern assets have telemetry, aircraft have cockpit voice recorders (CVR) and trains have on-board train monitoring recorder (OTMR). These recording can reveal significant supporting evidence. Document those factual searches in this section.
- Organisational and management information – having considered the direct facts, then we turn to the organisational aspects. For example if there is reported a blame culture and the subject hid their mistake it gives rise to questions that need to be addressed organisationally.
- Interview reports – in this section you give a summary of the interviews, rather than a full record of every interview. The latter is not often recorded, although the key subject interview transcripts might be added to an appendix.

Analysis

The purpose of this section is to bring together all the factual information and indicate the finding that the evidence has suggested. In most cases you will be presenting the evidence in a fashion that leads to an exact conclusion, but sometimes you have to give a balance of probabilities review. This section is not long, keep the analysis succinct, but include all relevant details.

Recommendations

This section contains any improvements (for example to infrastructure, vehicles, procedures etc.) which the investigation proposes, to address the causes and to prevent a recurrence or to mitigate the risk from a recurrence. An effective investigation is productive to the extent that causes are accurately identified and linked to the recommendations.

The quality, relevance and practicability of the recommendations are of importance rather than the number of recommendations. In terms of the Swiss Cheese Model linking recommendations to causes and framing them to prevent the recurrence means the recommendations either add another slice of cheese (an additional layer of defence) or eliminate or make the hole in an existing slice smaller.

In terms of good practice, recommendations:

- Are clearly and succinctly worded.
- Are designed to address one or more of the issues identified in the conclusions
- section.
- Are achievable and realistic.
- Are clear in their objectives.
- Indicate the intended outcome of implementation.
- Indicate a suggested timescale for implementation.
- Acknowledge any changes which have already been made, or are planned to be

◆ made, following the adverse event.
◆ Are directed at an organisation, or group of organisations.

Care is required to make sure that a recommendation is directed to the correct organisation. For example, a recommendation relating to the use of ladders by a painting and decorating company is not directed at the company itself, but instead at the transport operator which contracted them to carry out the work.

Local Investigations may specify who in their organisation is responsible for undertaking each recommendation. This should be by specific role rather than by name. It is good practice for the lead investigator to consult the intended recipient(s) prior to making the recommendation.

In choosing to which transport operator(s) a recommendation is to be addressed, the investigation team may wish to consider the following:

◆ Which transport operator(s) owns the issue or directly controls the risk at which the recommendation is directed, for example, railway undertakings directly control the risk associated with traction and rolling stock.

◆ Whether to address the recommendation to a particular transport operator that has participated in the investigation and has responsibility for applying the measures that are recommended to be changed.

◆ Whether the recommendation may initiate a submission to RSSB for a proposal to change a standard.

◆ In addition to transport operators, it may be appropriate to direct recommendations to other parties (for example Rolling Stock owners, or contractors) that would have a significant role in implementing those recommendations. This is because the transport operator needs their cooperation in accordance with Regulation 22 of the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS). In these situations, it is the transport operator who is responsible for the risk and for gaining support of those parties.

Recommendations might also propose further work to be carried out, such as more in- depth or wider investigation, or research.

Example:

The Production Manager should instigate a review all working at height activities in the facility. Given the small number of these and the severity of the injuries suffered this should be completed at the earliest opportunity.

Not all investigations will result in recommendations being made. It is not necessary to write recommendations for the sake of it. If the investigation does not make any recommendations, then this can be stated in this section, along with reasons.

Appendices and annexes

An annex can stand alone. If you are attaching additional documents to the end of your investigation report but they would make complete sense and provide important information even outside the context of your paper, you can categorize them as annexes.

An appendix tends to be more closely connected than an annex to the main body of the paper. An appendix would not be as informative or valuable outside the context of your paper. While an appendix enhances or expands upon your investigation report by adding details like illustrations or case studies, it is never presented to readers by itself.

The appendices are used for additional information that is required to fully understand the report. Other evidence can be held in the investigation file. The appendices and their significance to the main body of the report are referred to at the appropriate point in the report.

Particular care is taken when reproducing documents in appendices, as some documents (such as witness statements, training records, competence development plans) are likely to contain personal details which will need to be redacted.

Finalising the report

It is important that the completed report be measured against the initial remit to determine whether it has been met. This is ideally by the author of the remit. It is also important to make sure the report is proofread to ensure that all spelling and grammar errors are removed in the first instance , and secondly, to ensure that any descriptions that are given, make sense. It is worth having two people proofread it; one who perhaps understands the technical content and one who is not technically competent but he's very good at English grammar.

In respect of investigations involving more than one investigator, under the leadership of a lead investigator, the agreement of each panel member can be obtained using a sign-off sheet, or via email. It is considered good practice to circulate the report amongst all of the transport operators who were involved in the adverse event by way of a formal consultation, prior to its being finalised and published.