

The Investigative Process

Priorities for investigating

The AAID's primary focus is on enhancing safety with respect to fare paying passengers, and in particular, those transport safety matters that may present a significant threat to public safety and are the subject of widespread public interest. The AAID therefore needs to direct significant attention to identifying systemic failures in aviation that have the potential to result in catastrophic accidents and which are often characterized by large numbers of fatalities and serious injuries.

In addition, the AAID has observed that many accidents involve repetition of past occurrences where the contributing factors are similar and the safety issues are well known. In these circumstances, the likely safety benefits and lessons may not always justify allocating significant resources. In those cases, the AAID may undertake a limited fact-gathering investigation only; if so, it will outline the reasons an extensive investigation has not been conducted. Equally, there is often as much or more to be learned from serious incidents or patterns of incident as there is from accidents and where appropriate, the AAID will give priority to these sorts of investigation.

The following broad hierarchies for aviation occurrences reflecting the priorities described above, must be taken into account when deciding whether to investigate and when determining the level of investigation response.

Aviation broad hierarchy

In applying these guidelines, the AAID will allocate its resources in line with the following broad hierarchy of operation types:

1. Passenger transport - large aircraft.
2. Passenger transport - small aircraft:
3. Commercial (that is, fare paying) recreation (for example, joy flights).
4. Aerial work with participating passengers

5. Flight training.
6. Other aerial work:
 - non-passenger carrying aerial work (for example, agriculture, cargo)
 - private transport/personal business.
7. High risk personal recreation/sports aviation/experimental aircraft operations.

Level of response

The level of investigation response is determined by resource availability and such factors as detailed below. These factors are presented in no particular order and may, depending on the circumstances, vary in the degree to which they influence the AAID's decision to investigate and the level of response.

- anticipated safety value of an investigation, including the likelihood of furthering the understanding of the scope and impact of any safety system failures
- likelihood of safety action arising from the investigation, particularly of national or global significance
- existence and extent of fatalities/serious injuries and/or structural damage to transport vehicles/other infrastructure
- obligations or recommendations under international conventions and/or codes
- nature and extent of public interest, in particular the potential impact on public confidence in the safety of the transport system
- existence of supporting evidence or requirements to conduct a special investigation based on trends
- relevance to an identified and targeted safety program
- the extent of resources available and projected to be available in the event of conflicting priorities
- the risks associated with not investigating including consideration of whether, in the absence of an AAID investigation, a credible safety investigation by another party is likely
- timeliness of notification
- training benefit for AAID investigators.

Initiation of an investigation

To prevent future transport safety occurrences—especially those with the potential for a large-scale loss of life or serious injury to the travelling public—the AAID directs its investigation resources to those incidents and accidents with the greatest potential of identifying systemic issues in aviation operations.

With increasing resource pressure, initiation of a full investigation can only be done by the Chief Inspector of Air Accidents in consultation with the relevant Permanent Secretary and the Minister of Tourism, Aviation & Bahamasair. The Chief Inspector of Air Accidents can initiate short investigations.

The size and scope of an investigation also impacts its expected timeframe. Time frames for the completion of an investigation are an estimate, based the initial facts of the occurrence. Time frames can change as the investigation progresses and its level of complexity is revealed.

Fatal accidents not investigated

The AAID's justification for electing not to investigate a notifiable fatal accident will be documented in the database record for that occurrence.

Trend monitoring

Occurrences that may fit the definition of an aviation safety accident or incident but that in isolation do not represent a risk to safe aviation do not require individual investigation.

Such occurrences may be referenced during trend monitoring of occurrences with similar factors. All occurrences are entered into the AAID's database for such purposes.

Classifying

This section provides information on the classification process.

Introduction

The objective of the classification process is to quickly identify and manage appropriately, including the allocation of resources, those occurrences that:

- require detailed investigation
- need to be recorded by the AAID for future research and statistical analysis
- need to be passed to other agencies for further action
- do not contribute to transport safety.

Three ways to action

Transport safety matter reports can be actioned in one of three ways to contribute to the Department's functions.

1. A report of an occurrence that suggests that a safety issue may exist should be investigated immediately. Investigation may lead to the identification of the safety issue, including its significance, and provide the justification for safety action.
2. A report of an occurrence that may not warrant a full investigation but which would benefit from additional fact gathering for future safety analysis to identify safety issues or safety trends.
3. Basic details of an occurrence, based primarily on the details provided in the initial occurrence notification, can be recorded in the database to be used in future safety analysis to identify safety issues or safety trends.

Note: In the third approach, the occurrence is not investigated immediately, but may be the subject of a future investigation.

Pros/cons first approach

The advantages of the first approach are a quick identification of a safety issue, and a thorough investigation of all the data relating to the occurrence.

The disadvantage in this approach is that a full investigation uses considerable resources and time.

Pros and cons of the second approach

The advantage of the second approach is that a richer data set for a greater number of occurrences is generated with minimal resource overhead, which in turn, is likely to result in improved future research and statistical analysis outcomes.

These short, fact gathering investigations also provide an opportunity to upgrade to a full investigation when the initial fact gathering suggests that the issues are more complex and warrant more detailed examination and analysis.

Pros/cons third approach

The advantage of the third approach is that it can be used for a large number of occurrences using far fewer resources than the first two approaches.

The major disadvantage is that a safety issue may not be identified until after a considerable period of time.

Who classifies?

Classifying a transport safety matter is normally the task of the Safety Officer; however, the Administration Assistant and Confidential Reporting needs to liaise with the Chief Inspector of Air Accidents who make any decision regarding investigation, in consultation with the Minister where necessary.

AAID controlled accident sites

The Air Accident Investigation Department is responsible for ensuring the occupational health and safety of personnel entering accident sites that it controls. Recent on-site accident investigations have brought to our attention that some personnel wishing to enter accident sites are not appropriately or adequately equipped to be on the site.

In order for the AAID to meet its primary duty of care as far as reasonably practicable, personnel wishing to enter an AAID controlled accident site must be appropriately equipped and have a record of inoculations.

Dependent on the hazardous nature of the site, personnel may also be required to provide evidence of having completed a Bio-Hazard Awareness course, which is accepted by the USA Federal Aviation Administration, the Bahamas Civil Aviation Authority or the AAID equivalent qualification, before being permitted to handle anything on the site. The AAID recognizes that some aviation professionals may have legitimate reasons for wishing to enter accident sites. The AAID will, as far as possible, accommodate such requests, but has the ultimate decision over accident sites under its control.

The following minimum current vaccination record is required:

- Hepatitis B
- Tetanus toxoid

The following minimum Personal Protective Equipment is required:

- Boots steel toed
- Overalls including disposable overalls
- Boot covers or gumboots (preferably steel toed)
- Latex/Nitrile/Rubber Gloves
- Leather riggers gloves
- Safety Glasses/Goggles/Face Shield
- Hearing Protection (Ear plugs)
- Hard hat
- Breathing protection apparatus
- Breathing apparatus needed may range from paper nose and mouth guard, to a respiratory mask.

Some sites may be contaminated by bio-hazards. Accordingly, in such cases the investigator in charge has a duty of care to require evidence of successful completion of a Blood Borne Pathogens bio-hazard course approved by either the US Federal Aviation Administration, or some other approved industry training or an AAID equivalent qualification before allowing anyone onto an AAID controlled site.

These requirements are necessary to ensure that the AAID meets its statutory obligations.

Primary duty of care

The AAID believes and is bound by the following duty of care:

1) A person conducting a business or undertaking must ensure, so far as is reasonably practicable, the health and safety of:

a) workers engaged, or caused to be engaged by the person; and

b) workers whose activities in carrying out work are influenced or directed by the person; while the workers are at work in the business or undertaking.

2) A person conducting a business or undertaking must ensure, so far as is reasonably practicable, that the health and safety of other persons is not put at risk from work carried out as part of the conduct of the business or undertaking.

3) A person conducting a business or undertaking must ensure, so far as is reasonably practicable:

and safety; and a) the provision and maintenance of a work environment without risks to health

b) the provision and maintenance of safe plant and structures; and

c) the provision and maintenance of safe systems of work; and

d) the safe use, handling and storage of plant, structures and substances; and

carrying out work for e) the provision of adequate facilities for the welfare at work of workers in those facilities; and the business or undertaking, including ensuring access to

necessary to f) the provision of any information, training, instruction or supervision that is work carried out as part of protect all persons from risks to their health and safety arising from the conduct of the business or undertaking; and

the purpose g) that the health of workers and the conditions at the workplace are monitored for of the business or of preventing illness or injury of workers arising from the conduct .undertaking