

CLASSIFICATION OF AVIATION EVENT - AVIATION SERVICES & FACILITIES

OVERVIEW:

The classification of an aviation event is a five-step process in which **actual** and **potential** consequences of the event are considered. Minimum classifications (from CLASS A to CLASS D) are assigned at steps 1 to 3 for the Personal Injury Level (1), Aircraft Damage Level (2) and Perceived Risk Level (3). Step 4 involves selecting the highest classification from steps 1-3. This is the overall classification for the event. Step 5 prompts users to review the event classification should additional information become available.

AVIATION SAFETY EVENT - AVIATION SERVICES & FACILITIES

Use this fact sheet to classify an aviation safety event that relates to Aviation Services & Facilities. This includes:

- Air Navigation Service Providers (DASR ANSP)
- Air Battle Management (DASR ABM)
- Aerodromes (DASR 139)
- Air Cargo Delivery (DASR ACD).

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PERSONAL INJURY LEVEL (PIL)

PIL indicates the **actual** injuries that are the outcome of an aviation safety event. Using the descriptors below, identify the most severe injury sustained by an individual as a direct outcome of the aviation event.

	FATAL	SERIOUS	MINOR*	NO INJURY
PIL description	The highest level of injury was fatal.	The highest level of injury was a serious injury or illness as defined under the WHS Act.	The highest level of injury/exposure was minor.	No injuries were sustained.
Minimum event classification	CLASS A	CLASS B	CLASS C	CLASS D

NOTE:
If an injury was sustained as a direct consequence of an aviation event, ensure the Sentinel WHS stream within the ASR has been activated.
*Minor injury/illness: As a direct result of the aviation safety event, a person(s) was injured or exposed to a hazardous substance/material, but does not meet the serious definition.

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AIRCRAFT DAMAGE LEVEL (ADL)

ADL indicates the **actual** damage that an aircraft experienced as an outcome of an aviation safety event. Using the descriptors below, identify the highest level of damage the aircraft sustained as a direct outcome of the aviation event.

	DESTROYED	SUBSTANTIAL DAMAGE	MODERATE DAMAGE	NO DAMAGE OR MINOR DAMAGE
ADL description	Aircraft destroyed, missing, unrecoverable or sustained damage to such an extent that it is unrepairable or uneconomical to repair.	Aircraft sustained substantial damage or structural failure that requires extensive inspection but is economically repairable.	Aircraft sustained moderate damage that is repairable without extensive inspection, including engine change.	Aircraft sustained either: 1. no damage; or 2. minor damage that is repairable within two days
Minimum event classification	CLASS A	CLASS B	CLASS C	CLASS D

NOTE:

- Where multiple aircraft are assigned to a single event, ADL identifies the highest level of damage.
- For ADL determination of Certified Category Uncrewed Aircraft, use the 'Classification of Aviation Event - Flight Operations' fact sheet.
- For ADL determination of Specific and Open Category Uncrewed Aircraft, use the 'Classification of Aviation Event - UAS Operations' fact sheet.

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PERCEIVED RISK LEVEL (PRL)

The PRL describes the potential consequences of an event by providing an indication of the risk that the event poses to aviation safety. The PRL is a subjective judgement determined by answering two questions in the provided matrix regarding the most negative credible consequence and the effectiveness of the remaining risk controls.

QUESTION 1:
If the aviation safety event had escalated, what would have been the most negative credible consequence?

NOTE:

- Each event takes place in a unique context with various factors interacting to cause its outcome.
- Thoroughly consider the factors/circumstances that existed at the time of the event and how these could have interacted and escalated the consequence.
- The escalation could be due to actions by the people involved or how the event sequence could have developed in different ways.
- Determine the credible/plausible consequence(s) that could have happened if the event had escalated.
- Do not worry about the probability of the consequence(s) at this stage. Question 2 will take probability into account by considering the effectiveness of remaining risk controls.
- If you identify more than one negative credible consequence, select the one that is considered to be the most negative.
- If it was extremely unlikely that the event could have escalated into a negative consequence, then select 'No Consequence'.

Select the corresponding row using the below descriptors.

Q1. MOST NEGATIVE CREDIBLE CONSEQUENCE

- An airspace services attributable accident. For example: collision between aircraft; collision between aircraft and obstacles; Controlled Flight Into Terrain; loss of control in flight due to meteorological conditions and VORTEX (ANSP & ABM only). - Total inability to provide safe ATM service (ANSP & ABM only). - A runway incursion that results in a collision or near collision. - Complete unplanned aerodrome closure (Aerodromes only). - Incident having a significant effect on aviation safety (for example incident manifests on aircraft during take-off, flight or landing) (ACD only).	CATASTROPHIC	Class C (Medium)	Class C (Medium)	Class B (High)	Class B (Very High)					
- An airspace services attributable incident involving circumstances indicating that an accident nearly occurred. Note: the difference between an accident and a serious incident lies only in the result. For example: critical near collision between aircraft; critical near collision between aircraft and obstacles; critical near Controlled Flight Into Terrain; critical near loss of control in flight due to meteorological conditions and VORTEX (ANSP & ABM only). - Serious inability to provide safe ATM service, where the ability to provide ATM services is severely compromised and has the potential to impact many aircraft safe operations over a significant period of time (ANSP & ABM only). - A runway incursion in which separation decreases and there is a significant potential for collision, which may result in a time-critical corrective/evasive response to avoid a collision. - Major unplanned disruption to aerodrome operations, or, major unplanned aerodrome operations limitations (for example runway closure) (Aerodromes only). - Reduction on the aerodrome's ability to deal with adverse conditions (Aerodromes only). - Incident having a major effect on aviation safety (for example incident manifests on aircraft during loading or prior to take-off) (ACD only).						MAJOR	Class D (Low)	Class C (Medium)	Class C (Medium)	Class B (High)
- An airspace services attributable incident associated with the operation of an aircraft, in which safety of aircraft may have been compromised, having led to a near collision between aircraft, with ground or obstacles. For example: near collision between aircraft; near collision between aircraft and obstacles and near Controlled Flight Into Terrain (ANSP & ABM only). - Partial inability to provide safe ATM service (ANSP & ABM only). - A runway incursion where there is ample time and/or distance to avoid a collision. - Minor unplanned aerodrome operations limitations (for example taxiway closure) (Aerodromes only). - Minor incident involving the use of aerodrome emergency procedures (Aerodromes only). - Incident having a limited effect on aviation safety. (for example incident manifests prior to aircraft loading) (ACD only).						MINOR	Class D (Very Low)	Class D (Low)	Class C (Medium)	Class C (Medium)
- An airspace services attributable incident involving circumstances indicating that an accident, a serious or major incident could have occurred, if the risk had not been managed within safety margins, or if another aircraft had been in the vicinity. For example: situations where collision/near collision could have occurred in other conditions (ANSP & ABM only). - Ability to provide safe but degraded ATM service (ANSP & ABM only). - A runway incursion with no immediate safety consequences. - Negligible or no effect on aviation safety (Aerodromes & ACD only).	NO CONSEQUENCE	Class D (Very Low)	Class D (Very Low)	Class D (Low)	Class D (Low)					

QUESTION 2:
How effective were the remaining risk controls in preventing the aviation safety event from escalating to the most negative credible consequence?

NOTE:

- Some risk controls try to **prevent** an undesirable operational state and others try to **recover** the system into a safe state.
- Consider both the number and robustness of the remaining risk controls between this event and the most negative credible consequence identified in Question 1. Ignore risk controls that have already failed.

Select the corresponding column using the below descriptors.

Q2. EFFECTIVENESS OF REMAINING RISK CONTROLS

HIGHLY EFFECTIVE	MOSTLY EFFECTIVE	BARELY EFFECTIVE	NOT EFFECTIVE
The remaining risk controls were highly effective typically consisting of several good safety barriers.	The remaining risk controls were mostly effective with a considerable safety margin remaining. It is improbable that the event could have escalated into the most credible consequence.	Some risk controls were still in place, but their total effectiveness was minimal.	The only thing separating the event from the negative credible consequence was luck or exceptional skill, which is not trained or expected.

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FIND THE OVERALL EVENT CLASSIFICATION

Event classifications range from CLASS A to CLASS D. After establishing the event classification for the PIL, ADL and PRL, **select the highest of the three values**. This is the overall event classification.

NOTE: If Class A or B, contact the DFSB Duty Officer on (02) 6144 9199 or DFSB.investigations@defence.gov.au

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REVIEW

Changes should be made to the PIL, ADL and PRL (and subsequent event classification) if more information becomes available. This ensures that an accurate classification is recorded and key learnings are captured.

