

MISHAP INVESTIGATION PROCESS

When an accident occurs in the Air or Space Force, how do we respond? This page provides a breakdown of an Air or Space Force mishap investigation.

HOW A MISHAP INVESTIGATION WORKS

STEP 1: A MISHAP OCCURS

This could be a full on aircraft crash or an ankle sprain at work. Any unintended occurrence in the Air or Space Force that results in death, injury, illness or property damage is considered a **mishap** and requires an investigation.

STEP 2: THE INTERIM SAFETY BOARD STARTS THE INVESTIGATION

The commander of the regular Air Force installation nearest to the mishap immediately appoints an Interim Safety Board (ISB) to begin an investigation. This board, typically consisting of safety-trained members from the mishap base, will collect and preserve as much evidence as possible until the official Safety Investigation Board (SIB) arrives on scene and takes over.

The ISB investigation usually only lasts a day or two, but is crucial because the quality of witness statements and environmental evidence can deteriorate quickly.

STEP 3: THE MISHAP IS ASSIGNED A CLASS

Every mishap is assigned a Class A through E with A being the most severe and E being the least (see infographic below). The class is based on the extent and monetary cost of damage and/or injury.

The mishap class largely dictates the number, rank and experience of personnel appointed to the SIB. Usually, Class A SIBs have several high ranking personnel and a Safety Center (AFSEC) representative in direct support while Class E SIBs consist of just a single investigator.

STEP 4: THE SAFETY INVESTIGATION BOARD INVESTIGATES

The meat and potatoes; this step consumes most of the investigation timeline. Once the SIB reaches the mishap location and receives the investigation handover from the ISB, it will investigate for approximately one to three months. Specialists, such as pilots, doctors or materials scientists, will often be pulled on board to provide technical expertise.

A SIB's sole purpose is mishap prevention. It aims to discover the root causes of a mishap and recommend steps for preventing a reoccurrence. Frank and open communication is required from both witnesses and SIB members to achieve this goal. All mishap investigation reports are therefore protected by safety privilege and are exempt by case law from disclosure outside the DoD safety community. Safety privilege ensures that a SIB's analyses, conclusions and recommendations are shared only on a need-to-know basis for mishap prevention. They cannot be used for disciplinary action, public release or any other non-mishap prevention purpose. In some cases, investigators may offer a promise of confidentiality to witnesses to help give safety investigators an unimpeded path to the truth.



Mishap Definition

An unplanned event or series of events that results in damage to DoD property; occupational illness to DoD personnel; injury to on or off-duty DoD military personnel; injury to on-duty DoD civilian personnel; or damage to public or private property, or injury or illness to non-DoD personnel, caused by DoD activities.

Ref: DoDI 6055.07

A mishap investigation is just one of five types of safety investigations. The other four types are Nuclear Surety, Incident, Hazard, and Safety Study.

Read more about these in DAFI91-204.

If deemed necessary, a separate Accident Investigation Board investigation may run alongside a Safety Investigation and the findings of that board may be released to the public or used for adverse administrative or disciplinary action. Like all legal matters, this is complex. Read more about safety privilege, promises of confidentiality and Accident Investigation Boards below.

STEP 5: THE SIB PRESENTS ITS CASE TO THE CONVENING AUTHORITY

Once it has completed its investigation, the SIB presents its findings and recommendations to the **convening authority**. The CA is typically the MAJCOM commander for Class A mishaps and the numbered Air Force commander for Class B mishaps; wing commanders convene Class C and below. Upon hearing the results of the investigation, the CA can do one of three things: accept those results, request further investigation, or order a new SIB to restart the investigation.

STEP 6: THE RECOMMENDATIONS ARE CARRIED OUT

After an investigation has been accepted by the CA, each **recommendation** is passed along to the party capable of implementing it - the office of primary responsibility (OPR). Upon receipt, the OPR must “close out” the recommendation in one of three ways; carry it out as written, take an alternate action, or accept the risk and close the recommendation with no action. This process can take weeks to years, depending on the extent and complexity of the recommendation. Changes to maintenance procedures, new inspection criteria or a complete overhaul of an aircraft part are all examples of possible recommendations borne from a mishap.

[Collapse All](#) [Expand All](#)**CLASS A MISHAP**

A mishap resulting in one or more of the following:

- Direct mishap cost totaling \$2,500,000 or more.
- A fatality or permanent total disability.
- Destruction of a Department of Defense aircraft.
- Permanent loss of primary mission capability of a space vehicle.

**CLASS B MISHAP****CLASS C MISHAP**

A mishap resulting in one or more of the following:

- Direct mishap cost totaling \$60,000 or more but less than \$600,000.
- Any injury or occupational illness that causes loss of one or more days away from work not including the day or shift it occurred.
- An occupational injury or illness resulting in permanent change of job.
- Permanent loss or degradation of tertiary mission capability of a space vehicle.

**CLASS D MISHAP****CLASS E EVENTS**

Convening Authority

The commander who bears overall investigative responsibility. The CA is the MAJCOM/FC commander of the organization owning the damaged asset or injured personnel unless:

- (1) AF/SE assumes investigative responsibility
- (2) CA responsibility is transferred to another MAJCOM/FC commander or
- (3) CA responsibility is delegated to a lower level commander (common for off-duty Class A mishaps and Class B-E mishaps).

Ref: DAFI 91-204 Sec5.2



Recommendations

When developing recommendations, SIBs will follow the system safety “order of precedence” concept (design changes, safety devices, warning devices, and then training and procedures) which recognizes that not all risk mitigation alternatives are equal. DAFI 91-204 Sec 8.9.2

Aviation Safety Fun Fact

In FY21, OPRs closed a total of 841 recommendations, with 79% carried out as written and 21% closed with alternate or no action.

Ref: Flying Safety Quarterly EOY Report 2021



References

To learn more, refer to [DODI 6055.07 Mishap Notification, Investigation, Reporting, and Record Keeping](#), [AFPD 91-2 Safety Programs](#), and [DAFI 91-204 Safety Investigations and Reports](#), and [AFI 91-202 US Air Force Mishap Prevention Program](#)

MISHAP LEGAL QUESTIONS

WHAT IS SAFETY PRIVILEGE?	+
WHAT INFORMATION IS PRIVILEGED?	+
WHAT IS PROMISE OF CONFIDENTIALITY?	+
WHEN CAN THE PROMISE OF CONFIDENTIALITY BE OFFERED?	+
WHAT IS AN ACCIDENT INVESTIGATION BOARD?	+
WHAT ARE AIB REPORTS USED FOR?	+



SAFETY NEWS

Solar Eclipse: Apocalyptic, but not in ways you might expect

A total solar eclipse is nearly upon us, and it comes with some serious safety threats beyond the obvious risk of damage to your eyes.

Safety first: Exploring the supervisor safety training

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The DAF Safety Strategic Plan defines the essential path to take DAF Safety from where we are to where we need to be and provide maximum value to all Airmen and Guardians. The Strategic Plan identifies six areas of focus for the Safety enterprise to further evolve and modernize. These goals align