Defence Aviation Safety Management System
Guidebook – Edition 2
DEFENCE AVIATION SAFETY MANAGEMENT SYSTEM

DEFENCE AVIATION SYSTEMS are managed to ensure their capability is commensurate with Defence operational requirements. Central to this management is the safe operation of Aviation Systems which is effected through the Defence Aviation Safety Program (DASP). The DASP comprises an Airworthiness Management System (AMS) and an Aviation Safety Management System (ASMS).

This guidebook focuses on the Defence ASMS and encapsulates some of the more noteworthy information found in AAP 6734.001—Defence Aviation Safety Manual (DASM). It provides a ready reference to enable personnel involved in Defence Aviation to contribute to the maintenance of an effective ASMS. The DASM remains the authoritative source for Defence ASMS policy.

Note. Although non-Service organisations may find this guidebook useful, it does not define their contractual obligations.

This guidebook is not formally controlled and will not be subject to update but will be reissued as required. Any questions regarding this document should be directed to Deputy Director Safety Investigation (preferably via Email) as detailed below.

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Aviation Systems include Defence state registered aircraft, non-Defence registered aircraft, Unmanned Air Systems and Aviation Support Systems (which include ATC Systems, Aviation Ground Support Systems and Air Defence Systems involved in the control of ADF aircraft).

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An Aviation Safety Management System (ASMS) is a systematic approach to managing safety, including the necessary organisational structures, policies, procedures and plans. Aviation safety is progressed when the ASMS is coupled with the positive attitudes, beliefs, values and practices of the personnel within an organisation.

The objective of the Defence ASMS is to preserve human and materiel resources and enhance the well-being of personnel through continuous improvements in aviation safety management.

ASMSs within Defence are implemented through the chain of command and are the vehicles through which the requirements of the Defence ASMS are implemented. Each level of command will have an ASMS which mirrors and complements the Defence ASMS.

The Defence ASMS applies to all Defence Aviation activities, Defence Personnel and External Service Providers who may detect, contain or eliminate hazards in Defence Aviation. All Defence Personnel and External Service Providers, regardless of employment or specialisation, may be involved with Defence Aviation to varying degrees and therefore have an integral role in the ASMS.

The Directorate of Defence Aviation and Air Force Safety (DDAAFS) sponsors aviation safety policy through the DASM and is accountable to the Defence Aviation Authority (Defence AA) for matters concerning aviation safety and for assisting Defence personnel throughout the chain of command with advice and expertise to successfully implement and maintain their ASMS.

Every accident, no matter how minor, is a failure of the organization.
Aviation Safety Management System Elements

There are twelve discrete elements that underpin the Defence ASMS. They are common to ASMSs at all levels of Defence Aviation – from ship’s flights to operational level commands.

The foundation element is genuine command commitment. Upon this element the other eleven are built. The twelve elements of the Defence ASMS are:

1. Genuine command commitment
2. A generative safety culture
3. A defined safety organisation structure
4. Communication
5. Documented safety policy
6. Training and education
7. Risk management
8. Hazard reporting and tracking
9. Investigation
10. Emergency response
11. Survey and audit
12. Aviation Safety Management System review

The elements of an ASMS do not stand alone. The elements support each other and are generally integrated with each other through design.

Genuine command commitment to the system will support the other elements.

A generative safety culture will support effective communication and the open and honest reporting of hazards and human error.

A defined safety organisation structure, underpinned with documented safety policy and manned by trained and qualified staff, will support communication of safety information.

Effective risk management will enable the early identification and management of hazards before the hazards lead to aviation safety occurrences.

Thorough and effective investigation of aviation safety occurrences will result in mitigation strategies to better manage identified hazards. Training and education of key staff will enable effective hazard and occurrence investigation and emergency response.

Surveys and audits will give the commander feedback on problem areas in the system, facilitate system review and improve communication flow.
Element 1 – Genuine Command Commitment

An ASMS will only be successful if driven and championed by the commander. Without a commander’s wholehearted commitment, any safety management system will be ineffective. The commander must accept the requirement for a robust ASMS and ensure all subordinates are aware of the command commitment to the ASMS.

Commanders must also ensure that sufficient resources are allocated to the ASMS to support it. To this end, the ASMS should be supported by sufficient numbers of appropriately trained personnel. Where commanders do not have sufficient resources to support their ASMS, they should raise these resource problems with the chain of command.

Commanders must continually demonstrate their commitment to aviation safety (and work health safety) as this will directly influence the attitudes, beliefs, values, and behaviours of subordinates and their commitment to aviation safety. A commander who is not committed to aviation safety, or whose action or inaction results in subordinates perceiving that command is not committed wholeheartedly to aviation safety, will quickly degrade the safety climate and ultimately safety of the organisation.

Practices which demonstrate a commitment to aviation safety include:

- Providing adequate resources so that the unit/subordinate unit(s) can conduct assigned activity safely.
- Taking definitive and timely action to address safety issues and communicate actions and results to subordinates.
- Actively encouraging three-way communication (up and down the command chain, and to external stakeholders) of safety issues and decisions.
- Correcting any observed unsafe behaviours and practices – remember, the standard that you walk past is the standard that you accept.
- Attending and actively participating in all safety meetings, boards and safety training activities where possible (e.g., Aviation Safety Committee (ASC) meetings, Aviation Hazard Review Boards (AHRB), safety standdowns).
- Encouraging subordinate executive staff to likewise attend and actively participate in such activities.
- Ensuring such activities and proceedings are given sufficient priority and resourcing, and conducted as effectively and efficiently as possible.
- Reviewing and analysing all occurrences and hazard reports, and encouraging subordinate executive staff to do likewise, in an effort to identify trends and hazards so that action can be taken to enhance aviation safety.

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Management decisions and actions, or more frequently, indecisions and inactions, cause accidents.

— JOHN LAUBER, CHAIRMAN NTSB, 1993
Element 2 – A Generative Safety Culture

Safety culture can be described as ‘the way things are done around here’. This description emphasises that safety culture is more than what people say about safety – it is concerned about the realities of safety. While all organisations value safety, the strength of a unit’s safety culture influences the relative importance of safety against the need to achieve other organisational objectives. For example, the desire to complete the mission can, at times, be in conflict with the need to minimise exposure to risk or potential hazards.

With this in mind, one could argue that a better way to describe safety culture is ‘making safety a priority around here’ – mission first, safety always’. If people believe that safety is not the priority, or not today’s priority, this will influence their decisions and actions, allowing unsafe conditions, and ultimately safety occurrences to occur.

Although a comprehensive ASMS is necessary to maintain and improve safety, it may not be sufficient to guarantee adequate safety performance. A healthy safety culture is a strong enabler to ensure the ASMS works in practice. ASMS and safety culture are inter-related. ASMS embodies the competence to achieve safety, whereas a healthy safety culture represents the commitment to achieving safety.

A generative safety culture is the ultimate state where safety performance is maximised and safety behaviour is fully integrated into everything the organisation does. In an ASMS, a generative safety culture exists when all stakeholders are encouraged to contribute to the continual improvement of the ASMS. When hazards are identified, they are immediately notified to all stakeholders, hazards are treated and feedback is provided.

A generative safety culture encompasses the following aspects:

- **Reporting.** All members are encouraged to openly and honestly report all safety hazards that they encounter.

Complacency or a false sense of security should not be allowed to develop as a result of long periods without an accident or serious incident. An organization with a good safety record is not necessarily a safe organization.

— INTERNATIONAL CIVIL AVIATION ORGANIZATION, ACCIDENT PREVENTION MANUAL, 1984

**Just and fair.** There is an atmosphere of trust and people are encouraged to provide essential safety-related information. Personnel are responsible and accountable for their actions but the context within which those actions were made is taken into consideration. Members of the organisation clearly understand the distinction between acceptable and unacceptable behaviour and are held both accountable for their actions and encouraged/rewarded for providing safety-related information.

- **Flexible.** The organisation can operate according to demands, so it can provide both high tempo and routine modes of operation and can change when required by circumstances.

- **Learning.** The organisation is willing to change based on safety indicators and hazards uncovered through assessments, audits, and incident analysis. Safety reports are fed back to all personnel so that everyone learns the lesson.

The four subcomponents – reporting, just and fair, flexible, and learning – combine to form a safety-conscious, generative culture, where the ASMS integrates data from all occurrences and combines them with information from proactive measures such as safety audits and climate surveys.
Element 3 – A Defined Safety Organisation Structure

A defined safety organisation structure ensures that commanders have an appropriate structure in place to support their ASMS, which incorporates documented duties, responsibilities and chains of command, and is staffed by appropriately trained personnel. Commanders should ensure that all members are aware of who is allocated which ASMS duties.

All levels of command will have an Aviation Safety Officer (ASO) and often a Maintenance Aviation Safety Officer (MASO). At the Force Element Group (FEG) level, the FEG Commander is also required to appoint a FEG Hazard Tracking Authority (HTA) for each Aviation System as well as establish an AHRB1, chaired by the HTA, which must meet at least biannually. At the wing/regiment, unit and base command levels, commanders are also required to establish an Aviation Safety Committee (ASC) which must meet at least biannually. (Further guidance on ASCs and AHRBs can be found in the DASM Section 3 Chapters 4 and 8 and later in this guide.)

Incumbents of key safety appointments manage and coordinate their organisation’s ASMS on behalf of the commander, and are supported by other designated safety appointments. To ensure ASMS effectiveness and its successful management, commanders need to staff these positions adequately with personnel who have the required skill sets, training, background, experience and motivation, and then provide them the resources (including time) to perform their role. Anything less will be a compromise resulting in reduced ASMS effectiveness and, more than likely, increased risk with potentially untreated hazards and risks.

Policy intent is that Command, FEG and Wing (equivalent) level safety positions are the incumbent’s primary duty (i.e. it is an established position that a member is posted to) noting the substantial roles and responsibilities of these positions. Unit-level safety appointments would typically be a secondary duty (and only allocated secondary duty), hence, for example, a member allocated the UASO secondary role could be a squadron pilot (their primary duty).

Refer DASM Section 3 Chapter 3 for safety appointment requirements (including background, experience and qualifications) and DASM Section 3 Chapter 3 Annexes for appointment responsibilities.

1 Equivalent for Army is the Army Aviation Safety Occurrence Review Board (AASORB) chaired by Director of Airworthiness (DAW) on behalf of the HTA, Director General Aviation (DG Avn). The AASORB is complemented by the Army Maintenance Safety Review Board (MSRB), chaired by Director Aviation Support (DAS). Equivalent for Navy is the Aviation System Safety Committee (ASSC) which is chaired by Commander Operational Airworthiness and Standards (COAS) on behalf of the HTA, Commander Fleet Air Arm (COMFAA). The ASSC meets the intent of both an AHRB and ASC.
Element 4 – Communication

The success of an ASMS is dependent on effective communication. A commander cannot manage a hazard or a risk if he/she is not aware of it – even if the rest of the organisation is aware. Likewise, personnel will be less likely to report hazards if they do not get feedback on previous reports. The value of seeing and talking directly to personnel should never be underestimated. It is not sufficient to simply have the safety management system structure in place. All personnel in the organisation must understand how the system works, their place in it and how to contribute ideas for improvement.

Communication tools include policy documentation (including the commander’s published safety policy), aviation safety committees, AHRBs, surveys, audits, safety standdowns and open reporting mechanisms (eg the Defence Aviation Hazard Reporting and Tracking System (DAHRTS) database). Other tools, which can be used to improve communication, are activity briefing/debriefings, face-to-face discussions, visits, liaison and the knowledge that an individual can report occurrences/recommend amendments without fear of punitive action.

Safety awards are also a means of communication and provide positive reinforcement in recognition of individual or collective efforts in enhancing aviation safety in Defence. Guidance for the Good Show Award 1, the Royal Aeronautical Society (RAeS) Aviation Safety Award and Service specific Aviation Safety Awards, including nomination criteria and process management, are detailed in the DASM (Section 3 Chapter 4).

Safety webpage. Most organisations maintain an aviation safety page on their web homepage on DRN as one of the commander’s safety communication mechanisms. To be effective, information needs to be easily locatable (ie webpage structure is intuitive), relevant, accurate (including links that work to documents and other webpages), current, informative and, where possible, gain and maintain the interest of the intended audience. Consideration should be given to consulting with other units (particularly those within the same FEG) to determine best practices, what additional information may be worthy of posting, and potentially standardising page layout if deemed appropriate.

• Types of safety information that might be included. Safety policy such as unit ASMS documentation, commander’s policy statement, link to the DASM, DI(G) OPS 2-2 and other safety-related policy documents and manuals as listed in Element 5 of this guide, FEG safety appointment contact details, links to other safety websites (eg DDAAFS especially for DAHRTS access), minutes of safety meetings (unit and wing), aviation safety occurrence reports (ASORs) of interest, safety articles of interest (including outside of Defence), safety awards and presentations to individuals of the FEG, safety calendar (eg next safety standdown, next safety meeting), Risk Management documentation and safety resources.

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1 Navy equivalent is the Defence Aviation Safety Bravo Zulu (BZ) Award.
Element 5 – Documented Safety Policy

An effective ASMS must be supported by robust, current and documented policy. Commanders at all levels must ensure that relevant documentation is available to all personnel and adequately managed. Documents can be in any medium so long as they are accessible, useful and easily understood.

Examples of aviation safety-related documentation supporting an organisation’s ASMS include, but are not limited to:

- DK(G) OPS 02-2 – Defence Aviation Safety Program
- AAP 6734.001 – Defence Aviation Safety Manual
- AAP 8000.010(AM1) – Defence Operational Airworthiness Manual
- single-Service aviation safety policy documents, where applicable
- the commander’s safety policy statement
- a document detailing the organisation’s ASMS, including the structure, duty statements, appointments and responsibilities

“Caution: Cape does not enable user to fly.”
Element 6 – Training and Education

The effective application of the Defence ASMS is dependent upon the knowledge and skill of its participants. The continual enhancement of corporate knowledge and skill is facilitated by an effective training and education system. Training and education are a vital means of ensuring that the appropriate competencies to achieve the ASMS objectives are met.

DDAAFS has a role to provide training and support to satisfy ASMS objectives. It conducts the ASO Initial and Advanced courses, Safety Facilitator Course, Aviation Incident Investigation Course, and when required, the Aviation Accident Inquiry Management Course. Support is provided to ASMS training by controlling Risk Management (RM), Crew Resource Management (CRM) and Maintenance Resource Management (MRM) training content.

Personnel who have been allocated ASMS duties must have appropriate training. In the main this will apply to personnel appointed to any of the ASO roles.

Initial and advanced aviation and aviation-related training courses are required to have dedicated aviation safety modules or include aviation safety elements.

RM, CRM and MRM training modules as applicable must be incorporated in initial, type conversions (or equivalent) and refresher training courses and delivered by Safety Facilitators.

FEG Commanders have a responsibility to ensure that their subordinate aircrew, Joint Battlefield Airspace Control (JBAC) Officers, Unmanned Air Systems (UAS) operators, aerospace engineering officers and aircraft maintenance personnel are trained and current in RM and either CRM or MRM as applicable to their vocation.

RM and CRM refresher training is to be completed at an interval of not more than three years, and MRM awareness training is to be complete annually.

Biannual unit safety standdowns are one means of ensuring an ongoing safety education program within units operating Aviation Systems.

For they had learned that true safety was to be found in long previous training, and not in eloquent exhortations uttered when they were going into action.

— THUCYDIDES, THE HISTORY OF THE PELOPONNESIAN WAR, 404 BC.
Element 7 – Risk Management

A safety management system will only be effective through a thorough understanding of hazards in an organisation, the associated risks and the development of robust strategies to mitigate those risks.

Treatments for hazards and risks form the basis of rules, procedures and policies that guide operations within the organisation.

Managing risks involves identifying potential impacts upon objectives and being prepared for what may happen, rather than addressing consequences following an incident or accident and managing retrospectively.

Contemporary risk management encourages an organisation to manage proactively, rather than reactively. This proactive approach is essential to development of a Generative Safety Culture within Defence.

Risk Management (RM) is employed in the management of Defence aviation operations at all levels. The aim of Defence RM is to mitigate the risk of preventable loss or damage to equipment and personnel and to support operational decision making in the conduct of Defence flying operations. A robust RM system provides a strong foundation for an effective ASMS. Ultimately, effective risk management enhances combat effectiveness and readiness.

Risk management is conducted under the principles of not retaining unnecessary risk, retaining risk only when the benefits outweigh the costs, and making risk decisions at the appropriate level.

Risk management levels of assessment are as follows:

- **Detailed RM** – typically appropriate for the consideration of complex policy or operational and technical airworthiness issues.
- **Deliberate RM** – should employ the expertise, judgement and knowledge of experienced personnel in addition to data derived from reputable standards, policy et cetera. AVRM is an effective deliberate RM process for Defence Aviation activities, in conjunction with Accident Outcome Analysis (AOA) and Bow-tie tools, which provide an effective means of identification of hazards and associated risks (refer DASM Section 3 Chapter 7).

- **Immediate RM** – a less formal process for reviewing a task for which there are minor deviations from the nominal task profile. The Rule of Three (ROT) is an ideal immediate risk management tool (refer DASM Section 3 Chapter 7).

When undertaking risk assessment, it will generally be appropriate to consider the worst plausible consequence as well as the most likely consequence of a particular risk.

In flying I have learned that carelessness and overconfidence are usually far more dangerous than deliberately accepted risks.

— WILBUR WRIGHT IN A LETTER TO HIS FATHER, SEPTEMBER 1900
Element 8 – Hazard Reporting and Tracking

Hazard reporting and tracking is both a proactive and reactive process that occurs either when a hazard is identified in the workplace (proactive), or after a hazard has resulted in an aviation safety occurrence (reactive).

The process involves reporting the hazard or occurrence, investigating the hazard/occurrence, determining contributing factors, examining defences (failed, absent and those that prevented the situation from escalating in seriousness), framing actions and recommendations, and establishing and tracking safety actions taken to prevent the hazard resulting in an occurrence or to prevent a recurrence. Reporting a hazard or an occurrence has limited safety value unless the report identifies actions and recommendations that will prevent an aviation safety occurrence or recurrence.

The DAHRTS database is used to record, investigate, action, track, review and analyse Defence aviation safety occurrences. It provides a ‘closed-loop’ tracking process for implementation of identified (and accepted) safety action (unit actions and recommendations to other agencies) to prevent recurrence or reduce the probability of recurrence to an accepted level.

Certain aviation safety occurrences also require other Defence and Commonwealth agencies to be notified to satisfy WHS management and Commonwealth-legislated requirements.

Aviation safety occurrence classifications used within Defence Aviation are:

- **Accident.** An accident can be thought of as an occurrence that did result in loss/destruction of the Aviation System or death of any person.
- **Serious incident.** A serious incident can be thought of as ‘almost an accident’.
- **Incident.** An incident can be thought of as an occurrence that did affect or could affect safety or airworthiness, but the outcome was not serious.
- **Event.** An event can be thought of as an occurrence that did not affect safety or airworthiness but is worthy of capture, as any repeat occurrences may indicate a wider problem necessitating investigation and possible remedial action.
- **OPHAZ.** A hazard that has the potential to affect the safety or airworthiness of the Aviation System, or safety of third parties but has not due to the defences in place. This is a proactive mechanism to identify areas that can be improved to include additional defences creating a lower likelihood of an aviation safety occurrence.

**Non-Category 1 Unmanned Air Systems (UAS).** The DASM provides separate guidance for classification of non-Category 1 UAS occurrences. However, if the occurrence did affect, or had the potential to affect the safety or airworthiness of aircraft or persons, then the principal Aviation System definitions apply. (For example, an aircraft had to take avoiding action to prevent collision with a category 2 UAS, then it should be classified as a serious incident.)
The preservation of valuable operational assets and the lives of personnel is an important goal of Defence Aviation.

To aid in achieving these goals, the factors contributing to aviation safety occurrences must be identified so that measures are taken to mitigate risk and to reduce the probability of recurrence to reduce the probability of recurrence.

The intent of an aviation safety investigation is to establish the contributing factors that led to the occurrence, and to ascertain actions that can be taken to prevent recurrence. An aviation safety investigation does not apportion blame or determine liability.

An aviation safety occurrence investigation is conducted under the power of command and is not subject to the constraints and legal requirements of inquiries under the Defence (Inquiry) Regulations.

Determination of the contributing factors in an occurrence requires the conduct of a structured and effective investigation. All investigations must include safety recommendations that reduce the probability of recurrence to an acceptable level. The investigation report is released as an ASOR using the DAHRTS database. A separate report will also be produced for accident investigations and, if required, some serious incident investigations.

Investigative requirements are as follows:

- **Accidents.** DDAAFS is responsible for investigation of all Defence aviation accidents on behalf of the associated Service Chief.

- **Serious incidents.** The FEG Commander (or HTA if delegated) is to consult DDAAFS (Director or Deputy Director Safety Investigations) in determining who will conduct the investigation, whether an Aviation Incident Investigation Team (AIIT) needs to be appointed, AIIT composition, and the most appropriate Terms of Reference (TOR) for the investigation. The appointing authority will be the relevant environmental commander (for example COMAUSTFLT, COMD FORCOMD OR ACAUST).

- **Incidents.** The commander of the incident unit will appoint an investigating officer who has experience and demonstrated competence in conducting aviation safety occurrence investigations.

- **Events.** Events are not investigated.

Take nothing for granted; do not jump to conclusions; follow every possible clue to the extent of usefulness ... Apply the principle that there is no limit to the amount of effort justified to prevent the recurrence of one aircraft accident or the loss of one life...

— ACCIDENT INVESTIGATION MANUAL OF THE U.S. AIR FORCE
Element 10 – Emergency Response

One of the goals of Defence is to achieve zero aviation accidents and serious incidents resulting from organisational and systemic deficiencies. Unfortunately; however, there may be accidents involving Defence aviation assets, both in Australia and in foreign locations.

Defence aviation organisations at all levels must have appropriate emergency response plans in place with appropriately trained and equipped personnel to respond immediately and effectively to aviation emergencies, including serious incidents and accidents.

Worst case emergency planning as a philosophy has definite advantages and should be the planning philosophy adopted. If all realistic circumstances are considered, unforeseen difficulties or deficiencies will be minimised in emergency situations.

Preparedness for an airfield/unit emergency is achieved by planning for and exercising the effectiveness to respond to an emergency. The most important aspect of airfield and unit emergency planning is the process itself – it is essential to involve all personnel who will have responsibilities when an emergency response is required.

Participation in the process ensures commitment to the plan and formulation of a workable document. Emergency planning committees generally comprise the relevant ASC plus any additional agencies that may be involved in emergency response.

The planning process, if conducted effectively, will lead the emergency planning committee to derive a sound agreement for emergency response. Planners should realise that the process is as important as the written document.

The aim of emergency response is to do all that is possible to save life, to render the occurrence site safe and, if possible, to preserve evidence for the subsequent aviation safety investigation. Once these aims are achieved, nothing further should be done to the site until the appointed Aviation Accident Investigation Team (AAIT) or Aviation Incident Investigation Team (AIIT) has arrived.

Remember – Defence lives that could have potentially been saved have been lost in aircraft accidents. Exercising Airfield Emergency Plans (AEP) and Unit Emergency Plans (UEP) will greatly assist personnel in their response to the stressful situation of responding to an actual emergency. The exercising of plans will help to identify deficiencies. This will assist planners to develop a robust plan which covers all feasible contingencies.
Element 11 – Survey and Audit

Conformity and compliance is achieved through a program of aviation safety surveys and compliance audits. These management tools form a critical part of the feedback loop within the Defence ASMS and the Defence Airworthiness Management System.

Surveys

Aviation safety surveys are used to measure the perceptions of individuals of the organisation’s systems, policies, practices, and procedures thereby enabling an assessment of the collective attitudes and beliefs of personnel within that organisation.

The goals of aviation safety surveys are to measure and improve the safety culture and effectiveness of the organisation’s ASMS and to assist in hazard identification. The ultimate goal is to reduce the number of aviation safety occurrences.

An aviation safety survey is an important part of the review, reporting and improvement processes that support the Defence ASMS. Safety surveys are not part of any auditing function and they do not check compliance with regulations.

A survey is an important tool in gauging the health of a unit from a cultural perspective, allowing individuals to provide opinions on safety matters while maintaining anonymity.

Feedback to survey respondents is also important as their participation will largely be predicated on an understanding that their views were considered and have influenced decisions on the ASMS.

Audits

Aviation safety audits measure compliance – checking that the organisation’s ASMS structure, procedures and practices comply with reference manuals and standards (i.e. policies accord with philosophies, procedures comply with policies, and that practices comply with procedures).

Audit responsibility and best practice. Operational Airworthiness Authorities (OAA) are responsible for ensuring ASMS audits of FEGs and their subordinate elements are conducted to ensure compliance with the requirements of the DASM. Best practice would be for an OAA-led audit team (or teams) to conduct the audit of all subordinate FEGs/Wings/Units that are required to maintain an ASMS. If this is not possible, then the OAA may direct that each FEG audit the Wings and Units within its command. (In such cases, the OAA would still need to audit the FEG.)

Audit Checklists. Use of the Defence ASMS audit checklist (available on the DDAAFS website) provides a basis for assurance of compliance with the Defence ASMS requirements as detailed in the DASM. Other audit checklists may be used; however, the audit team needs to ensure the checklist used covers all requirements of the DASM.

Note. The audit checklist can also be used by a commander’s representative at any time to proactively check compliance of an ASMS.
COMMANDEES MUST CONDUCT REGULAR REVIEWS OF THEIR ESTABLISHED ASMS TO STRIVE FOR CONTINUOUS IMPROVEMENT AND TO ENSURE THAT THE AIMS OF THE ASMS ARE BEING ACHIEVED.

REGULAR REVIEW IS ALSO ASSISTED THROUGH THE CONDUCT OF AHRBS (OR EQUIVALENTS), AVIATION SAFETY COMMITTEE MEETINGS, SURVEYS AND AUDITS.

THE RESULTS SHOULD BE COMMUNICATED TO ALL COMMAND/UNIT STAFF AND THE CHAIN OF COMMAND.

ALL COMMANDERS MUST ENSURE THE EFFECTIVE IMPLEMENTATION AND CONTINUOUS IMPROVEMENT OF THE ASMS THROUGH A PROGRAM OF ONGOING REVIEW. THIS INCLUDES:

- FULFILLING THE REQUIREMENTS OF DASM SECTION 2 CHAPTER 11 IN RELATION TO THE CONDUCT OF SURVEYS AND AUDITS, AND THE IMPLEMENTATION OF ANY RESULTING RECOMMENDATIONS.
- CONDUCTING A REVIEW OF ANY SAFETY TRENDS/ISSUES ARISING FROM OCCURRENCE REPORTS DURING AVIATION SAFETY COMMITTEE MEETINGS, RECORDING THE ACTIONS ARISING FROM THIS REVIEW AND REPORTING THEM TO RELEVANT ELEMENTS OF THE CHAIN OF COMMAND.
- REVIEWING INFORMATION FROM AHRBS FOR APPLICABILITY TO THEIR ASMS, RECORDING THE ACTIONS ARISING FROM THIS REVIEW AND REPORTING THEM TO RELEVANT ELEMENTS OF THE CHAIN OF COMMAND.
- DOCUMENTING A PERIODIC REVIEW OF THE ORGANISATION’S ASMS POLICY AND INSTRUCTIONS.
Aviation Hazard Review Boards

AHRBs review and oversee the progress of safety-related procedures, hazard/occurrence responses and modifications thereof as required. AHRBs enable the appointed HTA to fulfil responsibilities in the proactive management of hazards and the closed-loop system of review. This ensures that all activities required to treat the hazard are accomplished in a timely manner.

AHRBs review OPHAZ/ASOR of the Wing/Regiment to ensure associated investigations are of the required standard and formulated actions and recommendations are appropriate and tracked to completion in a timely manner. The AHRB must also identify safety trends or issues and take action as required to address them.

AHRBs are required to meet at least biannually, but may be convened more often at the discretion of the HTA, especially if more meetings are required to effectively review and manage the volume of reported hazards and ASORs.

Note. WASO/RASO responsibilities as listed in the DASM include management and coordination of all aspects of the wing/regiment Aviation Safety Management System (ASMS) on behalf of the commander. Accordingly, WASO/RASO preparations for an AHRB are pivotal for a successful and effective AHRB.

Suggested minimum AHRB membership is provided in the DASM (Section 3 Chapter 8).

AHRBs may be held in conjunction with the relevant Wing/Regiment Aviation Safety Committee (WASC/RASC) meetings, and to do so may be desirable noting similar membership and the common focus on aviation safety. If meetings are to be combined, then sufficient time and resources are to be applied to ensure that meeting success and effectiveness is not compromised.

Distribution of AHRB Minutes is to include DDAAFS (as per DASM Section 2 policy requirements).
Aviation Safety Committee Meetings

ASC meetings are an integral part of a commander’s ASMS and are the regular vehicle for ensuring all aviation safety issues confronting the organisation are discussed and actions for mitigating hazards established and implemented.

To ensure the best outcomes, adequate time should be allowed for the meeting to discuss all agenda items, and all necessary members should attend.

Note. One of the most valuable assets for a commander’s ASMS is the combined knowledge and experience of personnel. Personnel who are working at the coalface are often better able to identify hazards and trends, suggest practical improvements, and provide solutions. The ASC is a management tool that brings those people together to assist commanders in the management of their ASMS.

ASC are required to be held biannually. Meeting minutes should be promulgated to all personnel within the unit and distribution is to include parent command headquarters and DDAAFS. ‘Top five’ aviation safety issues and key actions/outcomes of the ASC should be communicated to all staff and the chain of command. Commanders should ensure ‘closed loop’ processes are in place to track actions/recommendations from the ASC to completion.

Noting the other safety management systems that some commanders must implement, should such systems also require the conduct of periodic safety committee meetings, it may be beneficial (and more efficient) to hold a combined meeting. If meetings are to be combined, then sufficient time and resources are to be applied to ensure that meeting success and effectiveness is not compromised.

Suggested minimum membership and suggested agenda items for Wing ASC (WASC), Unit ASC (UASC) and Base ASC (BASC) are provided in the DASM (Section 3 Chapter 4).

Distribution of ASC Minutes is to include DDAAFS (as per DASM Section 2 policy requirements).
UNIT COMMANDERS ARE REQUIRED TO CONDUCT BI-ANNUAL AVIATION SAFETY STANDDOWNS. ALL AVAILABLE PERSONNEL SHOULD ATTEND AND AVIATION ACTIVITIES ON THE STANDDOWN DAY SHOULD BE MINIMISED. THE UASO IS RESPONSIBLE FOR COORDINATING SAFETY STANDDOWNS.

Aviation Safety Standdowns

Aviation safety standdowns are an important tool for commanders to update all personnel on topical and important safety issues. There is no set program, format or structure for a safety standdown.

Commanders should tailor the standdown to their unique organisational structure, requirements and most important safety issues.

Some suggestions for safety standdown activities include:

- Review unit ASORs for the previous period including trends and any safety issues raised.
- Presentations from the unit ASO or MASO/Safety Liaison Officer (SLO)/Ground Safety Adviser on relevant aviation safety topics.
- Review of CRM principles by unit safety facilitators.
- Review of AVRM principles and status of AVRM integration in the unit.
- Review and/or practice use of unit-specific emergency aircrew life support equipment and other equipment.
- Review and/or practice use of unit emergency response equipment and personal protective equipment (PPE).
- Presentations from invited experts on aviation safety issues. Invited guests could include:
  - DDAAFS staff (accident summaries, safety management systems, fatigue management, human factors, supervision, CRM, AVRM, safety surveys, DAHRTS, etc);
  - human factors experts (contacts are available from DDAAFS);
  - senior commanders (their thoughts on command and ASMS);
  - ASOs/commanding officers from other Defence aviation units (comparing safety issues, occurrence reviews, safety information sharing);
  - managers/safety representatives from civilian aviation organisations (safety issues confronting their organisation/industry, how they manage aviation safety);
  - veterans from previous conflicts talking about safety/operations/loss rates; and
  - motivational speakers (e.g. how they dealt with adversity/challenges).

Note. Personnel organising safety standdowns should consider contacting other units/FEGs to source ideas/suggested presenters for formulating an effective safety standdown. When utilising the services of presenters outside the organisation, organisers should endeavour to get a clear understanding of what will be presented to ensure the presentation is relevant and appropriate to the standdown.
DAAFS is required to investigate all Defence aviation accidents wherever they may occur. Accordingly, DAAFS is staffed by specialist Aviation Safety Investigators (ASI) who are on a permanent short notice-to-move to rapidly respond to an investigation requirement.

DAAFS ASI may also be called upon to investigate other aviation safety occurrences where the circumstances require specialist investigative skills.

DAAFS maintains direct links with the Chief of Air Force in his capacity as the Defence Aviation Authority (Defence AA) to inform him of aviation safety occurrences and issues needing to be quickly brought to his attention.

The DDAAFS Duty Officer is the first point of contact for any Defence aviation safety related Immediate Safety Reports and is the coordinating body for any subsequent DDAAFS actions. The DDAAFS Duty Officer is available 24 hours, 7 days a week on the following number: (02) 6144 9199

The DDAAFS Duty Officer must be called as soon as possible for the following Defence aviation safety occurrence types and circumstances:

- Accidents
- Serious incidents (including those initially classified as an incident but subsequently upgraded)
- Involves loss of life or serious injury
- Impacts public safety
- May attract media exposure
- Has or may have serious implications regarding the operational or technical airworthiness of a particular aircraft type or the reliability of flight-critical aircraft systems
- Involves a breakdown in air traffic separation standards where avoiding action was necessary
- Involves an aircraft transporting a VIP

Note. The DDAAFS Duty Officer is also to be advised when there is any Defence reporting to the Australian Transport Safety Bureau (ATSB Duty Officer available on 1800 011 034) of any immediate or routinely reportable incident involving civil aircraft. The DDAAFS Duty Officer will guide the caller through the provision of required information. The format of an Immediate Safety Report is provided on the next page.
### DDAAFS TELEPHONE REPORT FORMAT

<table>
<thead>
<tr>
<th>Occurrence Type ('X' as appropriate)</th>
<th>Aviation</th>
<th>WHS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit(s) involved</strong> in occurrence</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aircraft involved</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type(s)/ Tail Number(s)/ Callsign(s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accident – explosive ordnance/ dangerous cargo?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Date/time of occurrence</strong></td>
<td>Local</td>
<td>Zulu</td>
</tr>
<tr>
<td><strong>Location of occurrence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Description of occurrence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weather</strong> (if a factor in the occurrence)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flight details</strong></td>
<td>Departure point:</td>
<td>Intended landing point:</td>
</tr>
<tr>
<td><strong>Aircraft damage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>POB numbers</strong> (per aircraft involved)</td>
<td>Aircrew:</td>
<td>Passengers:</td>
</tr>
<tr>
<td><strong>Aviation Occurrence</strong> – injured, missing or deceased (for crew – specify position)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Crew:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Passengers:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VIP:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other fatalities, injuries, or damage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WHS Occurrence</strong> – fatalities, serious injuries, illnesses or dangerous incidents</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Notification due VIP involvement?</strong> ('X' for reason of notification – blank if no VIP)</td>
<td>Directed reporting requirement only</td>
<td></td>
</tr>
<tr>
<td>Potential media interest</td>
<td></td>
<td></td>
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<tr>
<td>Potential adverse attention directed at Defence</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Notification</strong> ('X' if YES) Incident Unit CO (or rep) responsibility</td>
<td>ATSB</td>
<td>COMCARE</td>
</tr>
<tr>
<td>* ARPANSA</td>
<td>Chain of Command</td>
<td></td>
</tr>
<tr>
<td><strong>Intended actions</strong> AEP/UEP activated? Site commander contacts details? Quarantine action commenced?</td>
<td>Rank/Name:</td>
<td>Telephone:</td>
</tr>
<tr>
<td><strong>Point of contact details</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### AVIATION SAFETY OCCURRENCE REPORTING TIMEFRAMES

<table>
<thead>
<tr>
<th>Occurrence Type</th>
<th>Report To</th>
<th>Timeframe (calendar days)</th>
<th>Format</th>
<th>Mechanism</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiation accidents</td>
<td>ARPANSA and DRSE</td>
<td>24 hours</td>
<td>Telephone report</td>
<td>Telephone</td>
<td>03 9432 5384</td>
</tr>
<tr>
<td></td>
<td>DRSE</td>
<td>ASAP</td>
<td>Email</td>
<td>See note 9</td>
<td></td>
</tr>
<tr>
<td>WHS Branch</td>
<td>14 days</td>
<td>Full Sentinel Report</td>
<td>Sentinel</td>
<td>DRN</td>
<td></td>
</tr>
<tr>
<td>Radiation incidents</td>
<td>WHS Branch</td>
<td>24 days</td>
<td>Kiosk Level Sentinel Report</td>
<td>Sentinel</td>
<td>DRN</td>
</tr>
<tr>
<td></td>
<td>14 days</td>
<td>Full Sentinel Report</td>
<td>Sentinel</td>
<td>DRN</td>
<td></td>
</tr>
<tr>
<td>Civil aircraft involved</td>
<td>ATSB</td>
<td>24 hours (immediately reportable matters)</td>
<td>Telephone report</td>
<td>Telephone</td>
<td>1800 011 034</td>
</tr>
<tr>
<td></td>
<td>72 hours (routine reportable matters)</td>
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**Notes:**

1. DDAAFS is to be notified for aviation safety occurrences classified as an accident or serious incident (including those initially classified as an incident but subsequently upgraded); involves loss of life or serious injury; impacts public safety; may attract media exposure; has or may have serious implications regarding the operational or technical airworthiness of a particular aircraft type or the reliability of flight-critical aircraft systems; involves a breakdown in air traffic separation standards where avoiding action was necessary; or involves an aircraft transporting a VIP.

2. Only if AAIT appointed. SASOR is preferred reporting mechanism.

3. WHS Notifiable Events are fatality, serious injury or illness, and dangerous incident.

4. Written reports are provided through WHS Branch using Sentinel.

5. Initial Report with ‘Event Additional Questions’ section completed by supervisor. Completion of this part is essential in order for report to be despatched to Comcare.

6. Other WHS Events are exposure, minor injury and near miss.

7. Minor injury and near miss initial reports required within 28 days.

8. Radiation occurrences are classified by DRSE differently from the safety occurrence classifications used in DAHRTS. See Sect 3 Chap 8 Para 74 for details.

9. DRSE can be contacted by group email radiation.safety@defence.gov.au


11. ATSB requires notification for occurrences involving civil aircraft and (or observed by) ADF members. An ASOR should also be raised if an ADF ATC officer was involved in controlling the aircraft or witnessed that aircraft in a violation of controlled airspace, or an ADF member was actively involved in the occurrence, or the ADF can learn safety lessons from the occurrence. (DDAAFS Duty Officer also to be notified of all ATSB notifications provided by Defence personnel.)
## 12 Elements of the Defence Aviation Safety Management System

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<table>
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<tbody>
<tr>
<td>1</td>
<td>Genuine command commitment</td>
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<tr>
<td>2</td>
<td>A generative safety culture</td>
</tr>
<tr>
<td>3</td>
<td>A defined safety organisation structure</td>
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<tr>
<td>4</td>
<td>Communication</td>
</tr>
<tr>
<td>5</td>
<td>Documented safety policy</td>
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<tr>
<td>6</td>
<td>Training and education</td>
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<tr>
<td>7</td>
<td>Risk management</td>
</tr>
<tr>
<td>8</td>
<td>Hazard reporting and tracking</td>
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<tr>
<td>9</td>
<td>Investigation</td>
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<tr>
<td>10</td>
<td>Emergency response</td>
</tr>
<tr>
<td>11</td>
<td>Survey and audit</td>
</tr>
<tr>
<td>12</td>
<td>ASMS review</td>
</tr>
</tbody>
</table>