AAIB
Air Accidents Investigation Branch

AIRCRAFT ACCIDENT INVESTIGATION

in

THE UK OVERSEAS TERRITORIES

Contents

ABBREVIATIONS USED IN THIS PUBLICATION

AAIB	Air Accidents Investigation Branch
AIM	Accident Investigation Manager
CVR	Cockpit Voice Recorder
DfT	Department for Transport
FDR	Flight Data Recorder
RAF	Royal Air Force
MoD	Ministry of Defence
MRT	Mountain Rescue Team
SAR	Search and Rescue
UTC	Co-ordinated Universal Time (UTC)

Note: Where Governor, or Governor's Office is referred to, in the context of Gibraltar, this refers to the Government

AIR ACCIDENTS INVESTIGATION BRANCH PUBLICATIONS

1. Foreword

The Emergency Services and the Police are usually the first trained personnel to arrive at an aircraft accident site. They can render valuable assistance to minimise injury and loss of life and reduce property loss through damage and fire. Following the rescue effort, it is important to preserve the evidence relating to factors that may have contributed to the accident. This booklet has been prepared by the Air Accidents Investigation Branch of the Department for Transport to assist these personnel in better understanding the essential processes that need to be followed in the aftermath of an aircraft accident. Additionally it details some of the hazards that may exist at aircraft accident sites and the accident investigation process that will follow.

The normal sequence of events when a fatal accident occurs is as follows:

- The accident occurs
- The Emergency Services respond
- The accident is reported to the Governor's Office and the AAIB (by Air Traffic Control, the Police, the Pilot, the Operator or an eye witness)
- Governor's Office appoints an AIM to manage the initial investigation
- An AAIB 'Field' team is dispatched from the UK
- Priority action is taken by the Police to secure accident site as the Emergency Services complete their task
- The AIM and team arrive and, after a site briefing from the Police incident commander, they commence preservation of the site wreckage, retrieve any flight recorders and collect data including any witness statements taken by the police
- The AAIB team arrive and, after a briefing from the AIM, will lead the investigation and develop a report for publication in consultation with the Governor's Office

TO REPORT AN AIRCRAFT ACCIDENT or SERIOUS INCIDENT

Telephone the Air Accidents Investigation Branch (AAIB) on +44 1252 512299 (24 Hours)

Note: During normal working hours the above telephone number will be answered directly by personnel from the AAIB. Outside normal working hours calls will be diverted automatically to the Department for Transport Duty Officer who will, after recording some initial details, contact AAIB duty personnel.

GENERAL ENQUIRIES

Air Accidents Investigation Branch,
Farnborough House, Berkshire Copse Road, Aldershot, Hampshire, GU11 2HH.
Tel: +44 1252-510300, Fax: +44 1252-376999, E-mail: enquiries@aaib.gov.uk
(monitored 0830-1700 hrs Mon to Fri)
Website: www.aaib.gov.uk
Department for Transport Press Office (office hours) +44 207 944 3118 (other times) +44 207 944 4292

2. Introduction

The Convention on International Civil Aviation ("the Convention") came into force in April 1947. Article 26 to the Convention deals with the subject of investigation of accidents and provides that:

> *'in the event of an accident to an aircraft of a contracting State occurring in the territory of another contracting State, and involving death or serious injury, or indicating serious technical defect in the aircraft or air navigation facilities, the State in which the accident occurs will institute an inquiry into the circumstances of the accident, in accordance, so far as its laws permit, with the procedure which may be recommended by the International Civil Aviation Organisation.'*

The article only requires an accident investigation to be undertaken in a State of occurrence when the accident involves an aircraft registered in another State. Article 37 to the Convention deals with the adoption of international standards and procedures. The article provides for the adoption by Contracting States of uniform regulations and standards. To that end the International Civil Aviation Organisation (ICAO) shall adopt and amend from time to time, as may be necessary, international standards and procedures dealing with (inter alia) aircraft in distress and investigation of accidents.

In accordance with Article 37, ICAO has adopted and amended from time to time Annex 13 - entitled *Aircraft Accident and Incident Investigation* - that contains the standards and recommended practices to be adopted by contracting States in relation to this subject. In particular, the Council of ICAO has recommended that whilst the standards adopted are designed specifically to apply to the requirements of Article 26 they should also be applied in the event of an inquiry into any aircraft accident. In practice many States conduct investigations into aircraft accidents within their respective territories regardless of whether or not the aircraft involved is/are registered in another State.

One of the key elements of Annex 13 is that the accident investigation authority shall have independence in the conduct of the investigation and have unrestricted authority over its conduct. Having said that, ICAO notes that nothing in the standard is intended to preclude the State conducting the investigation from calling upon the best technical expertise from any source. ICAO further recommends that any judicial or administrative proceedings to apportion blame or liability should be separate from any investigation conducted under the provisions of Annex 13. The Annex makes clear that the sole objective of the investigation of an accident or incident shall be the prevention of accidents and incidents and that it is not the purpose of such an investigation to apportion blame or liability.

Legislative implementation of the Convention in the UK

The UK implemented and gave effect to the Convention by the enactment of the Civil Aviation Act 1949. Section 8 of the Act provides for His Majesty, by Order in Council, to make provision for carrying out the Convention and any Annex thereto relating to international standards and recommended practices. That section does not contain any specific reference to the investigation of accidents; however Section 10 makes provision for investigation of accidents and empowers the Minister to make regulations for the investigation of any accident arising out of or in the course of air navigation and either occurring in or over the UK or occurring elsewhere to British aircraft registered in the UK.

The relevant provisions of the Act (including in particular Sections 8 and 10) were extended to and applied in the Overseas Territories by the Civil Aviation Act 1949 (Overseas Territories) Order 1969. That Order still provides the statutory framework for civil aviation regulation in the Overseas Territories. The Order provides for the Governor's Office to make regulations for the investigation of accidents occurring in or over the Colony or elsewhere to British aircraft registered in the Colony.

In the UK, the Civil Aviation Act 1949 has been repealed by subsequent legislation, in particular the Civil Aviation Act 1982. Section 60 of the 1982 Act replicates, more or less, Section 8 of the 1949 Act. The 1982 Act contains specific provisions relating to the investigation of accidents and provides that:

> *'the Secretary of State may by regulations under this section make such provision as appears to him to be requisite or expedient for the investigation of any accident arising out of or in the course of air navigation and either occurring in or over the United Kingdom or occurring elsewhere to aircraft registered in the United Kingdom;'*

and for carrying out any Annex to the Chicago Convention (relating to the investigation of accidents involving aircraft) as it has effect from time to time with any amendment made in accordance with the Convention. The section goes on to make further provision for the implementation of the requirements. It also contains penalties for non-compliance with any regulations.

The 1982 Act has not been extended generally to the Overseas Territories. However, Section 75 has been extended by the Civil Aviation Act 1982 (Overseas Territories) Order 2001. Paragraph 2 to Schedule 1 to the Order provides for the Governor's Office by regulation to make provision for the investigation of accidents occurring in or over a Territory or elsewhere to an aircraft registered in a Territory. Section 10 of the 1969 Order was at the same time repealed.

Pursuant to Section 75, the Governor's Office in all of the Territories (save for those having no civil aviation activity) have made regulations as follows:

Anguilla	31 March 2005
Bermuda	1 June 2001
BVI	4 October 2004
Cayman Islands	2007
Falkland Islands	12 May 1997
Montserrat	13 December 2007
TCI	10 November 2003

The Government of Gibraltar enabled similar regualtions in January 2009.

All of the regulations contain provisions relating to the appointment of Inspectors of Air Accidents. Although the actual wording of the regulations varies slightly from territory to territory, in general terms the regulations (Regulation 7(1) or 8(1) as the case may be) provide as follows:

> **"For the purpose of carrying out investigations into accidents and incidents to which these Regulations apply, the Governor shall appoint persons as Inspectors of Air Accidents."**

The regulations further provide (7(6) or 8(6) as the case may be) that the Inspector may seek such advice or assistance as he may deem necessary and, without prejudice thereto, the Governor's Office may appoint persons to assist any Inspector in a particular investigation. Regulation 7(7) (or 8(7) as the case may be) provides that in any case where the Governor's Office appoints more than one Inspector to carry out an investigation, he shall nominate one of them to be in overall charge of the investigation. This person is known as the Investigator-in-Charge (IiC).

Implementation of requirements

Memoranda of Agreement or Arrangements have been signed between the Governor's Offices of the Territories and the AAIB, under which the AAIB has agreed to assist the Governor's Offices in the event of the need for an investigation into an accident or serious incident.

To meet the UK's obligations under the Convention in full and to formalise the arrangements it was considered necessary that each Governor's Office should formally appoint the holder of the office of Chief Inspector of the AAIB as the Chief Inspector of Air Accidents (CIAA) for each of the Territories to meet the requirements of Regulation 7(1)/8(1).

This procedure has the effect of putting in place a formal link between the Governor's Office of a Territory and the independent investigation authority in accordance not only with the regulations in force in each Territory but also with the provisions of Annex 13 to the Convention. The arrangement will obviate the need to have an appointment made on each occasion upon when it becomes necessary and is consistent with the terms of the relevant article of the Territories' Regulations.

The Letter of Appointment acknowledges the intention of the Chief Inspector to appoint one or more inspectors from within the AAIB to undertake an investigation in any specific case and confirm the Governor's Office agreement to such appointment. This process formally endorses the appointment of an individual inspector for each specific accident/serious incident and is consistent with the exercise of the Governor's Office's powers under Regulation 7(6) or 8(6), as the case may be - and in the case of Bermuda Regulation 7(12). Even though the agreement of the Governor's Office is obtained in advance of any specific appointment, such an arrangement is not inconsistent with the exercise of the Governor's Office's powers under the Regulation nor does it appear to constitute an unlawful delegation by the Governor's Office to the CIAA. It is always possible to have an understanding that any appointment made by the CIAA of an individual inspector is subject to endorsement by the Governor's Office in any specific case. The CIAA remains as the Investigator in Charge and the individual inspector would report to him/her in that capacity.

In practice the majority of accidents that occur in the Territories are non-fatal and involve small aircraft. Such accidents do not normally justify a full field investigation by the AAIB. In such cases there is a need for the appointment, within each Territory, of one or more local personnel trained to undertake the role of Accident Investigation Manager. Whilst the person appointed has the same powers of an Inspector under regulation 7(7) or 8(7), any activity undertaken by that person is so undertaken in accordance with directions given by the appointed Inspector from the AAIB and will comprise tasks such as organising the removal of aircraft wreckage to a safe location; taking statements; taking photographs and otherwise collecting information in order to enable the AAIB to produce a report to the Governor's Office.

In the event of a more serious accident, ie one involving fatalities and/or large commercial air transport aircraft, there is still be a need for involvement in the investigation of a locally-based Accident Investigation Manager to undertake certain tasks on behalf of the AAIB and to act in a coordination role.

Summary

In the context of the above arrangements it is possible to summarise the roles of various parties in the following way:

Governor's Office – The Governor's Office will always retain the legal responsibility for the appointment of an Inspector of Air

Accidents, either generally or in a specific case in accordance with the regulations in force in his Territory. The Governor's Office can discharge that responsibility by the Letter of Appointment in favour of the Chief Inspector of Air Accidents of the AAIB. The Governor's Office retains the right to appoint one or more persons to assist in an investigation, including an Accident Investigation Manager. The Governor's Office retains the right and responsibility for receiving the accident report and for publishing it in appropriate cases.

AAIB – AAIB has overall responsibility for the conduct of accident investigations in the Territories. The Chief Inspector, with the agreement of the Governor's Office, has the right to appoint one or more Inspectors from his staff to undertake a specific investigation. The AAIB has the responsibility to compile a report and to give all relevant notifications to ICAO and other States as required under Annex 13.

Accident Investigation Manager (AIM) – The AIM will be appointed by the Governor's Office and be available to assist AAIB in the conduct of an investigation. The person appointed will have the same powers as an Inspector within the scope of his/her appointment.

3. The Role of the AAIB

The Air Accidents Investigation Branch (AAIB) is an operationally independent organisation embedded within the Department for Transport and completely separate from the Civil Aviation Authority. It is responsible for the investigation of civil aircraft accidents and serious incidents within the United Kingdom. The AAIB is also frequently called upon to assist with military and overseas investigations. The Chief Inspector of Air Accidents is responsible directly to the Secretary of State for Transport.

Under current legislation and in conformity with International Convention the AAIB is the body responsible in the UK for the investigation of aircraft accidents and serious incidents in accordance with:

- Annex 13 to the International Civil Aviation Organisation Convention (ICAO)
- The European Union Council Directive 94/56/EC
- Statutory Instrument No. 2798 of 1996; The Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 1996

The AAIB's purpose is:

To improve aviation safety by determining the causes of air accidents and serious incidents and making safety recommendations intended to prevent recurrence

It is not the purpose of AAIB investigations to apportion blame or liability.

In carrying out its purpose the AAIB strives to:

- Respond quickly to air accidents and serious incidents and lead and manage the accident investigation team and ensure their safety at the accident location
- Develop and maintain effective working relationships with emergency service providers at accident sites and throughout the remainder of an investigation
- Conduct thorough, independent, impartial and timely investigations into air accidents and serious incidents.

- Treat the survivors and relatives of victims of air accidents sympathetically and help them to understand 'what happened' and what is being done to prevent similar accidents in the future
- Produce clearly written, thorough and concise reports with well-founded analysis and conclusions that explain the circumstances and causes of accidents and serious incidents, without attributing blame
- Improve aviation safety in general by education and promulgating the lessons learnt from accident investigations
- Ensure that the UK complies with its national and international statutory obligations for the investigation of air accidents and incidents

4. The AAIB's obligation to investigate an aircraft accident or serious incident

Every reported aircraft accident or serious incident, to which the Regulations apply shall be the subject of an AAIB investigation.

Additionally the Chief Inspector of Air Accidents may take measures to investigate any incident that is not a serious incident where he or she considers that such an investigation may be expected to draw significant air safety lessons.

The extent of investigations and the procedures to be followed in carrying them out shall be determined by the Chief Inspector of Air Accidents.

5. The Role of the Accident Investigation Manager (AIM)

The Governor's Office should appoint a local Accident Investigation Manager (AIM) who, working with other suitably trained key personnel, the police and emergency services, will manage the initial accident investigation until the AAIB team arrives on site.

The person appointed will have the same powers as an Inspector of Air Accidents within the scope of his/her appointment. The AIM may be the Director of Civil Aviation (DCA), the Airport Manager, the Police Commissioner or any other Senior Official with the necessary knowledge and training to manage the initial actions required in an aircraft accident investigation. It is recommended that the Governor's Office appoints at least two AIM's to ensure full time cover is maintained. The responsibilities of the AIM include:

- Capability to deploy a suitably trained team to the accident site
- Preservation of accident site and evidence until AAIB team arrives
- Hosting of international Accredited Representatives and coordination of their activities
- Interface with the Police and the media
- Communication with AAIB HQ and briefing the AAIB team on their arrival
- Continued participation in the investigation as advisor to the AAIB
- Maintaining the Accident Investigation and Personal Protective Equipment held in each Territory (**Appendix I**)
- Ensuring familiarity with the 48 hour checklist (**Appendix E**)
- Participation in UK Overseas Territories Aircraft Accident Response Training Course (**Appendix G**)
- Participation in AIM Training course (**Appendix H**)

6. Legal powers of an Inspector of Air Accidents

The Regulations grant legal powers to Inspectors of Air Accidents. An AIM will have the same powers as an Inspector within the scope of their appointment. A full list of these powers is enclosed at **Appendix A.**

The powers most relevant to an Inspector of Air Accidents working alongside the Police and Emergency Services at the site of an aircraft accident are as follows:

- To have free access to the site of the accident or incident as well as to the aircraft, its contents or its wreckage
- To ensure an immediate listing of evidence and controlled removal of debris, or components for examination or analysis purposes
- To take such measures for the preservation of evidence as he considers appropriate
- To have immediate access to and use of the contents of the flight recorders and any other recordings
- To take statements from all such persons as he thinks fit and to require any such person to make and sign a declaration of the truth of the statement made by him

7. Authority to impound an aircraft

Some AAIB investigations involve the detailed examination or assessment of an aircraft that has not been damaged. In that case, an AAIB Inspector may impound the aircraft using his or her regulatory powers.

Apart from AAIB Personnel, authorised persons include any **police constable** or any **Customs and Excise officer.**

8. The relationship between Judicial Inquiries and AAIB Investigations

The Regulations make it clear that AAIB Inspectors must perform their statutory duties in co-operation with the authorities responsible for the judicial inquiry. The police may conduct an inquiry to determine if a crime has been committed.

The AAIB will make every effort to establish and maintain good liaison and co-operation with the Police throughout the technical investigation. The aim is to ensure that both the Police and the AAIB investigations can proceed in parallel without either body obstructing the other.

The Lord Chancellor has provided guidance on the relationship between the Police inquiries and the technical investigations conducted by bodies such as the AAIB. This guidance is entitled **'Disasters and the Law – Deciding the form of Inquiry'**. In this Memorandum the Lord Chancellor states that:

> *'It would require firm indications of serious criminality to justify a criminal investigation taking precedence over an inquiry held in public (or at least whose results are to be made public) where otherwise the public interest requires that such an inquiry be held. Colleagues will wish to bear in mind that the holding of such an inquiry in advance of criminal proceedings may adversely affect the ultimate prospects of a successful prosecution, but nevertheless, unless the criterion mentioned in the previous sentence is met, this is likely to be justified.'*

9. Liaison between the AAIB and Police Inquiries

AAIB Inspectors often support the judicial inquiry by providing expert witness evidence to the relevant Court. However, the AAIB investigation's purpose is to establish the circumstances and causes of an accident to ensure that safety action is taken to prevent that accident occurring again. This is an international obligation placed on a State by the Convention on International Civil Aviation (The 'Chicago Convention'). All the Overseas Territories and Crown Dependency Civil Aviation (Investigation of Air Accidents and Incidents) Regulations state:

> *'The sole objective of the investigation of an accident or incident under these Regulations shall be the prevention of accidents and incidents. It shall not be the purpose of this activity to apportion blame or liability.'*

Consequently, it is the AAIB's responsibility, after an accident or incident, to ensure that urgent safety action is disseminated world-wide so that the safety of the travelling public is assured whereas the police role may be to establish whether there is sufficient evidence to justify criminal proceedings.

The different responsibilities between the police inquiry and the AAIB investigation can lead to difficulties over access to an accident site and access to witnesses. There may also be potential conflicts over the gathering and retention of evidence, and the need to protect the safety of people within the inner cordon. These conflicts should and can be resolved 'on-site' through explanation, cooperation and negotiation.

10. What is a reportable Aircraft Accident

The full definitions of an aircraft accident and serious incident are contained in the Civil Aviation (Investigation of Air Accidents and Incidents) Regulations and are shown in **Appendix B**.

Briefly an **aircraft accident** is an occurrence, during the period of operation of an aircraft, where the aircraft incurs damage (with certain exceptions) or in which any person suffers death or serious injury.

A **serious incident** is defined as 'an incident involving circumstances indicating that an accident nearly occurred'; it is unlikely to involve the police or the emergency services, other than those based at airports.

11. Reporting an Aircraft Accident

The legal responsibility for notification of an aircraft accident or serious incident rests first with the commander of the aircraft or, if he/she is killed or incapacitated, then the operator. If the accident occurs on or adjacent to an aerodrome, then the aerodrome authority is also required to notify the accident.

All aircraft accidents and incidents occurring in the Overseas Territories should be reported to the relevant Governor's Office and the AAIB on the 24 hour reporting number:

+ 44 1252 512299

In practice this will normally be carried out by ATC, the Airport Management, the DCA or Air Safety Services International (ASSI).

The AAIB Duty Coordinator (DC), a Principal Inspector of Air Accidents contactable 24 hours a day, will then decide the appropriate immediate AAIB action which will, when possible, be discussed with the Governor's

Office. The resulting response will then be communicated to the DCA, ASSI and the Governor's Office, if not previously contactable.

Accidents to an aircraft registered in an Overseas Territory occurring in a Foreign State (the State of Occurrence) may be reported to the AAIB but more often will normally be reported directly to the Territory as the 'State of Registration'. In this case the Territory's DCA should inform the AAIB (using the 24 hour reporting number), as soon as possible, so that the AAIB, in consultation with the Governor's Office, can appoint an Accredited Representative and liaise directly with the Foreign State's Investigator-in-Charge.

In either case the DCA and/or selected members of his staff may be appointed as Advisors to the AAIB Investigator-in-Charge or the AAIB Accredited Representative (where the State of Occurrence is not the UK or a UK Territory).

12. What the AAIB need to know

The reporting authority should report the following details where possible:

- Aircraft type (eg Boeing 737, Airbus A320)
- Aircraft registration (letters or numbers)
- Name of the owner or operator, or military operating unit
- Names of the pilot / crew and any other people on board
- Date and time of the accident
- Aircraft's last departure point and its intended destination
- Location of the accident, including directions on how to reach the scene and/or any designated rendezvous point (RVP)
- Extent of any injuries to the occupant(s) or others
- Nature of the accident ie Phase of flight (eg takeoff, landing etc), and a general description of the occurrence
- Extent of damage to the aircraft.

(A specimen Notification FAX is shown at **Appendix C**)

Notification should not be delayed even though all the information may not yet be available.

13. The Overseas Territory and AAIB response

The following paragraphs describe, in a checklist format, the types of aircraft accidents and incidents and:

- The Initial actions in the Overseas Territory
- The AAIB's response
- The Overseas Territory's subsequent response

A. NON-FATAL ACCIDENTS OR INCIDENTS TO GENERAL AVIATION OR COMMERCIAL AIR TRANSPORT AIRCRAFT OCCURRING IN AN OVERSEAS TERRITORY.

INITIAL ACTIONS in the OVERSEAS TERRITORY

The accident or incident should be reported by the aircraft commander or the aircraft operator, ATC, the Airfield Manager, the DCA or the Police to:

- The Governor's Office
- The Police
- The AAIB (+44 1252 512299)
- The DCA
- ASSI

The Police or DCA should secure and impound the aircraft or wreckage.

Aircraft damage, third party damage, and/or wreckage should be recorded and photographed if possible.

Recordings of ATC/aircraft transmissions should be preserved.

The name and contact details of the pilot and/or operator should be recorded.

The pilot may be required to complete and dispatch an MOR to the DCA.

THE AAIB RESPONSE

The AAIB Duty Coordinator (DC), on call 24 hours a day, will contact the Governor's Office or his staff, if possible, and liaise with the person or organisation reporting the accident or incident and the AIM to discuss the immediate actions to be taken including:

- The moving of the aircraft or wreckage if required
- The evidence to be protected and retained
- The provision of information relating to the occurrence (date, time, place, pilot's name and contact details, damage and injuries, circumstances of the occurrence etc)
- A description of the investigation process to be adopted by the AAIB

THE OVERSEAS TERRITORY'S SUBSEQUENT RESPONSE

The DCA, AIM, Airport Manager or ATC Manager should present the pilot with a General Aviation Air Accident Report Form (AARF(OT)) or A Commercial Air Transport AARF(OT) as appropriate. (These should be held locally by the DCA, AIM or the Airport Manager and an example is shown at **Appendix J**.)

- The pilot will be required to complete the form and return it directly to the AAIB where an appropriate report will be written and published. A copy of the completed report will sent to the Governor's Office before it is published in one of the AAIB's monthly Bulletins
- The AIM should respond to any AAIB requests for follow-up enquiries. (Normally the AIM will be called upon to represent the AAIB to collect additional factual evidence if required)

The DCA may conduct a separate investigation on the basis of information contained in the pilot's Mandatory Occurence Report (MOR).

The Governor's Office should consider issuing a brief factual press release concerning the event and the investigation.

B. FATAL ACCIDENTS OR INCIDENTS TO GENERAL AVIATION OR COMMERCIAL AIR TRANSPORT AIRCRAFT OCCURRING IN AN OVERSEAS TERRITORY.

INITIAL ACTIONS in the OVERSEAS TERRITORY

The accident should be reported by the aircraft commander or, should he be fatally injured the aircraft operator, ATC, the Airfield Manager, the DCA or the Police to:

- The Governor's Office
- The Police
- The AAIB (+44 1252 512299)
- The DCA
- ASSI

The Police should secure and impound the aircraft or wreckage.

The Governor's Office should appoint a local Accident Investigation Manager (AIM) who, working with other suitably trained key personnel, the police and emergency services, will manage the initial accident investigation until the AAIB team arrives on site.

THE AAIB RESPONSE

The Chief Inspector or AAIB Duty Coordinator, in consultation with the Governor's Office, will appoint an Investigator-in-Charge (IiC) and an AAIB investigation team will deploy to the Overseas Territory concerned as soon as possible.

- On arrival at the accident site the AAIB IiC will take the lead in the Investigation from the AIM and his team
- AAIB will be responsible for the investigation through to the publication of the report
- The AAIB will consult with the Governor's Office throughout the investigation
- The IiC may appoint the DCA or a member of ASSI as advisors when appropriate
- The AAIB will provide the Governor's Office with a copy of the draft final report and when appropriate the DCA / ASSI and interested parties
- The AAIB will publish the final report on behalf of the Governor's Office and will provide him with a copy of the final report prior to publication

THE OVERSEAS TERRITORY'S SUBSEQUENT RESPONSE

The locally appointed Accident Investigation Manager should establish and maintain communications with the AAIB Duty Co-ordinator (acting on behalf of the IiC while the AAIB team are in transit) throughout the initial phase of the investigation so that appropriate advice can be given if required.

The AIM and local team should continue to participate in the investigation as advisors to the AAIB IiC.

The AIM should coordinate the activities of the Accredited Representatives and their advisors arriving from Foreign States who, under the provisions of ICAO Annex 13, have a right to participate in the investigation and may arrive at the accident site before the AAIB team. However, their experience and expertise should not be ignored and should be used by the AIM when appropriate and in consultation with the AAIB Duty Co-ordinator.

The Governor's Office should consider issuing a brief preliminary factual press release pending the arrival of the AAIB team.

C. ACCIDENTS OR INCIDENTS TO A GENERAL AVIATION OR COMMERCIAL AIR TRANSPORT AIRCRAFT REGISTERED IN AN OVERSEAS TERRITORY AND OCCURRING IN A FOREIGN STATE.

The investigation of accidents to aircraft registered in a UK Overseas Territory will normally be conducted by an IiC appointed by the State of Occurrence. The State of Occurrence should, in complying with the recommended practices detailed in ICAO Annex 13, notify the State of Registry, the State of the Operator, the State of Design, the State of Manufacture, ICAO and any other State with a special interest. These States have a right, by International Convention, to appoint an Accredited Representative (Acc Rep) who can be assisted by appointed advisors.

INITIAL ACTIONS in the OVERSEAS TERRITORY

The DCA should Inform the Governor's Office and the AAIB (using the 24 hour reporting number +44 1252 512299) as soon as possible as it will not normally be known by the State of Occurrence that the AAIB will be acting as the Territory's representative for accident investigation purposes.

The DCA (or ASSI acting as the DCA) should identify appropriate personnel to act as advisors to the AAIB Acc Rep.

The DCA (or ASSI acting as the DCA) should impound all the relevant records relating to the aircraft and its certification, maintenance, crew licensing etc.

THE AAIB RESPONSE

The AAIB will provide the Acc Rep, in consultation with the Governor's Office, for accidents involving aircraft registered in a UK Overseas Territory occurring in a Foreign State.

The AAIB will liaise with the appropriate DCA, ASSI and Operator regarding the appointment of relevant advisors.

The AAIB Acc Rep (and his advisors) will normally travel to the State of Occurrence for major accident investigations, however, their travel may not be required for serious incidents.

The AAIB will provide advisors with a signed letter of authority if, in the unlikely event, they are required to travel to the State of Occurrence, and participate in an investigation, in the absence of the AAIB Acc Rep.

The AAIB Acc Rep will remain the focus for all communications between the Overseas Territory and the IiC and will coordinate any representations made during the consultation phase of the final report's production.

THE OVERSEAS TERRITORY'S SUBSEQUENT RESPONSE

Advisors should provide feedback to the AAIB Acc Rep on their activities.

The Governor's Office may wish to issue a press release but this will only be relevant if the aircraft normally uses the Territory as its main base of operations.

14. Fire fighting

To ensure the maximum preservation of evidence, it is vital that any fire is extinguished as soon as possible. Where possible post-impact fires or smouldering debris should be extinguished/cooled to limit the loss of evidence and to reduce the occupational health risks at site.

As soon as all has been done to save life and minimise injury, the wreckage and accident site should be disturbed as little as possible.

Fire fighters are requested to use fire fighting foam only where it is necessary as its use can on occasions inadvertently increase risks. The foam blanket may hide safety hazards or increase the risks from exposure to hazards, as well as covering human remains and hiding or damaging vital evidence. Therefore, it is requested that the laying of a *precautionary* foam carpet should only be carried out when a real and significant fire hazard exists.

15. Rescue of personnel from crashed aircraft

Note: Parts of this section are for guidance only. Trained emergency services personnel should follow their own established procedures.

Rescue and the care of survivors is the first priority at an aircraft accident site. If survivors appear to be in the aircraft and rescue appears possible, consider the following:

- Use care in approaching the main wreckage by vehicle, particularly if the approach is along the crash path, as survivors may have been ejected from disrupted fuselages. It is possible that first responders on the scene may find no one else present in the wreckage or at the site. The aircraft occupants may have parachuted to safety, may have survived and left the scene to seek assistance, or may have been consumed in the wreckage

- Approach the site from upwind (with the wind at your back) to avoid inhalation of gases, vapours and burning materials which are hazardous and toxic

- A wide variety of hazards may be present at air accident sites, and can pose variable levels of risk to response personnel. Fuel and other flammable fluids, damaged and unstable structures, stored energy systems, blood-borne pathogens and products of combustion, are some of the hazards that need to be considered. Suitable control measures should be applied to ensure that risks are adequately controlled. Emergency response organisations will no doubt incorporate hazards details into their risk assessment/management process

- Look around the crash path, and maintain a clear observation of the accident site and associated hazards
- Render first aid and care to survivors where possible, until relieved by medical personnel
- Attempt to account for all occupants. The airline, operator, or ATC may be able to provide details of the number of persons onboard. Consider that where the aircraft has disintegrated in flight, the wreckage, survivors and casualties may be scattered over a large area
- Summon medical assistance if required and, in due course, verify that this assistance has been sought. Ensure that casualties still present at the accident site are provided with adequate protection against potential site hazards
- If there are risks of a spreading post-accident fire or possible explosion from fuels or armaments, move survivors a safe distance from the scene. If survivors contaminated with hazardous substances require immediate evacuation to medical facilities, they should be decontaminated if possible prior to being removed. For example, military aircrew life vests contain explosives and hazardous materials and civil life jackets that are not inflated may contain pressurised gas bottles. These should be removed and stowed in a safe location at the accident site

Access

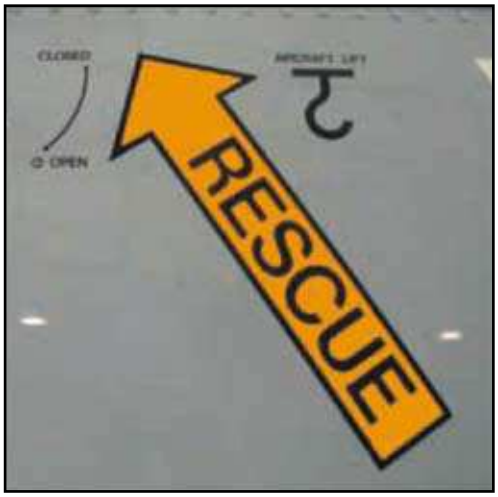
In general, information related to access, rescue and the operation of doors and canopies, will often be printed in red or black and yellow text on the aircraft.

Typical external door handle markings

On **civil aircraft,** the position of emergency equipment on aircraft, which is accessible from outside the aircraft, is generally indicated by a silhouette with an associated written description. Markings indicating where a first-aid kit is carried will often be found adjacent to an access panel or door from which the kit is accessible.

Emergency cutting area on aircraft fuselage

For the purpose of rescue on **military aircraft**, the location of access doors, hatches, break-in points and cut-out panels are generally indicated on the external surfaces by a yellow arrow, bordered in black.



Military aircraft rescue markings

For access doors and hatches a red arrow will indicate the external controls with the operating instructions for the controls nearby. At break-in points and cut-out panels the arrow will indicate an area delineated by a broken line (usually yellow). This area may be cut out to gain entry to an aircraft interior should access doors be blocked or inoperative. Caution must be exercised when using cutting tools, to avoid igniting spilled fuel, cutting electrical cables, pressure lines, etc.

Systems requiring extra care in their operation or handling due to their containing an explosive device are generally indicated by a red or grey warning triangle.

Ejector seats may be fitted to military and ex-military aircraft. Extreme care must be taken whenever ejection seats are observed to be among the wreckage and must be treated as LIVE.

Under normal circumstances, the words "EJECTION SEAT" contained in a bright red inverted triangle, located on either side of the cockpit fuselage is an indication that the aircraft is fitted with ejection seats.

Ejection seat warning on military/ex-military aircraft

The "MAKING SAFE" of ejection seats must be left to trained personnel. The AAIB can arrange for contractors to make ejector seats from civil aircraft safe, whilst military armaments specialists can be called to the scene of accidents involving military aircraft.

Typical ejector seat fitted to older UK ex-military aircraft

However, if surviving crew urgently need to be removed from an aircraft, utmost care is required to avoid interfering with items such as pull handles, generally colour coded with yellow and black stripes, that operate the ejection sequence as these can inflict fatal injuries.

Military aircraft may also have weapons, and armaments pods onboard, whilst civil and military Search and Rescue (SAR) helicopters and aircraft carry a variety of pyrotechnics.

The **"MAKING SAFE"** and removal of these items must be left to **trained personnel**.

Ballistic Recovery Systems

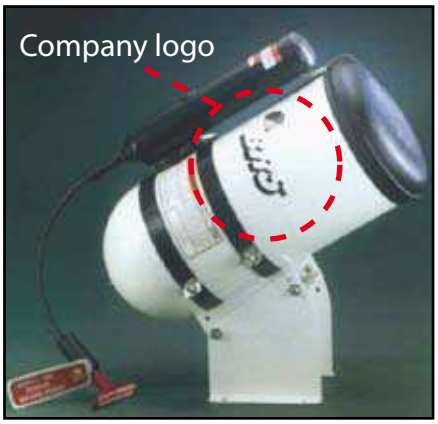
One potential hazard rescue workers may encounter on light, general aviation aircraft is an unfired, **ballistic recovery system** (sometimes called a **ballistic parachute**). These devices incorporate a parachute, deployed by a rocket which, when activated during flight, can bring a damaged or out of control aircraft safely to earth.

If an aircraft, having a ballistic recovery system fitted, is involved in an accident, **the un-deployed rocket can present a significant risk of injury** to rescuers and response personnel.

Rescue personnel responding to an accident involving light general aviation aircraft should look for warning signs or company logos indicating the fitment of a ballistic recovery system. These are usually positioned on the sides and/or on the upper surface of the fuselage, and/or on the parachute container.

BRS may be produced or installed by a variety of manufacturers, and warning signs and company logos can be variable in appearance. Some examples are shown below.

Ballistic recovery system warning sign



Typical BRS Canister system commonly used in ultralight and sport aircraft illustrating the manufacturers logo

Warning sign found on some aircraft

WARNING!
ROCKET PARACHUTE FOR DEPLOYMENT INSIDE
STAY CLEAR WHEN OCCUPIED

Warning text found on some aircraft

A **BRS** unit is comprised of four major elements: Activation Handle, activation cable, rocket motor assembly and parachute container.

The BRS is initiated by pulling the activation handle, which is located in the cockpit. The rocket motor (about 1½-2 inches diameter and 8-10 inches long) then accelerates to over 100 mph in the first tenth of a second after ignition. It is the operation of the rocket which presents a significant risk of injury to personnel.

A **red firing handle**, connected by flexible cable to the igniter in the activation housing, is located near the pilot seats.

BRS activation handles

Each type of handle is secured with a safety pin which is intended to be removed prior to flight.

The parachute may be housed in a fabric, metal or composite container and mounted in a variety of locations according to aircraft design. Cables from the parachute, designed to support the aircraft, may be embedded in the aircraft structure or attached to structural components.

Following accidents, emergency response personnel should exercise extreme care when working around these systems, especially if the aircraft is severely damaged. Once components are located, ensure that a safe working zone is established around the rocket/ parachute container. In addition, ensure that the activation handle or cable is not disturbed.

It is possible to make the system safe, however, it is recommended that guidance is sought before doing so. Further advice should be sought from manufacturers, or from the AAIB.

One of the current BRS manufacturers is BRS Parachutes Inc. They may be contacted online at:

http://www.brsparachutes.com

or by telephone at:

00 1 763 226 6110

For more detailed information regarding accident site hazards see Appendix F.

16. Survivors

In the immediate aftermath of an accident to a public transport aircraft there may be a number of survivors and injured persons in the area of the wreckage. The emergency services will ensure that the injured receive medical treatment on site with the more serious being removed to hospital. Those with minor injuries may decide to remain close to the site if they have friends or relatives trapped in the wreckage; other passengers may wish to disperse.

Experience has shown that the media will be on site very quickly. Some survivors may wish to talk to the media whereas others may consider this attention to be intrusive and prefer the media to be kept at a distance. Depending upon the circumstances, it may

be better for the control and protection of the survivors to be carried out by either the airline or the local authority. The emergency services should monitor that this is being done effectively and ensure that a record is kept of names, addresses and (if known) aircraft seat allocation.

An AAIB **passenger questionnaire** is at **Appendix D.** Its distribution to, and completion by, surviving passengers can be extremely useful for the AAIB to determine issues surrounding the use of safety equipment, emergency exits and survival.

17. Airfield operator's response

An accident or serious incident occurring at an airport is likely to cause considerable disruption, particularly if it interferes with runway operation. It is imperative that once firefighting or rescue operations are complete, the wreckage and any ground marks, are left undisturbed. The AAIB should have been informed by this point and any movement of wreckage must be agreed with the AAIB's Duty Co-ordinator. The AAIB appreciate that there will be considerable pressure to re-open any closed runways or taxiways and will work with the airport authority to minimise any delay. If the Duty Co-ordinator allows the wreckage to be moved, it will be necessary to record the distribution of the debris and ground marks, preferably by photography and video, before doing so.

Moving a large aircraft, which cannot be supported safely on its landing gear, will be a difficult and time consuming operation. It may take several days before the accident site can be cleared. During this period, the site should be cordoned off and secured, even if it is all contained within the airport boundary. This is necessary to prevent airside pass holders unwittingly damaging or disturbing either the wreckage or ground marks.

Following an accident at an airport, the AIM will deploy to the scene as quickly as possible and take control of the accident site. When the AAIB team arrive, they will arrange to have the wreckage moved at the earliest opportunity taking advantage of any support the airport can offer in particular, personnel, heavy lifting equipment or storage facilities.

Although the AAIB will dictate the timescale regarding movement of the wreckage, it is the responsibility of the airport authority to decide when it is safe to re-open the runway / taxiway / airport.

18. Accident site security and initial AIM / police actions

It is the responsibility of the police to guard the wreckage and provide security for the accident site. The accident site must be identified and sealed off as soon as possible; only people required for rescue and fire-fighting should be allowed access to the wreckage.

Where accidents have occurred at night or late in the evening, examination of the wreckage will usually be postponed until first light.

When wreckage is found, and where in the opinion of the AIM, it is considered to be of significance (instruments, mechanical parts etc) the location should be marked and the find should be brought to the attention of the AAIB on their arrival.

Following the rescue and fire fighting phases, the emergency services are asked to bear in mind that the scene of an aircraft accident may or may not be a crime scene. However, it will always be a scene rich in forensic evidence. Therefore, it is important that the scene is preserved as much as possible until the AAIB Inspectors arrive.

The AAIB will attempt to keep the period during which the accident site needs to be guarded to a minimum. However, it must be appreciated that the plotting of a wreckage trail and on site examinations can take a significant amount of time, particularly in the case of a large aircraft

The guarding of a site can be difficult given the variability of terrain and the occasional extended areas involved. To ensure that all potential evidence is preserved it is essential that the number of people in and around the wreckage is kept to a minimum. It is all too easy for vital evidence to be destroyed by well intentioned persons disturbing wreckage, obliterating ground marks, trampling equipment into the ground, or moving switches and controls from their original positions.

The media will be well represented and it will probably require some effort to keep photographers, cameramen and journalists at an appropriate distance from the wreckage. However, press photographs taken soon after an accident, albeit from a distance, can provide a useful record of the wreckage distribution or the local weather conditions.

As well as site security the AIM should consider the following initial actions:

- Record, as soon as possible, the positions in the aircraft wreckage from which any survivors of the accident were assisted
- Take photographs, recordings or sketch items/evidence considered likely to be obliterated or lost prior to the arrival of the AAIB team
- Secure the wreckage, including any scattered wreckage away from the main accident site, and any of the aircraft's contents or papers against loss or further damage
- Note the names, addresses, contact details and intended movements of any witnesses to the accident
- Admit only authorised personnel to the accident site; and keep bystanders outside the established zone of safety
- Protect, if possible, vital areas such as the cockpit, lighter pieces of wreckage and ground scars from inclement weather by covering them with a tarpaulin. (Should coverings not be available, photography and videoing of the scene will assist the investigative team.)

19. Accident site safety

The safety of personnel will be an important consideration for organisations involved in accident site operations.

Some aircraft may present significant hazards, for example:

- Cargo carrying aircraft
- Large passenger aircraft carrying significant cargo
- Light aircraft fitted with pyrotechnically deployed parachutes
- Military or ex-military aircraft equipped with ejection seats

The AAIB has access to specialist health and safety advice regarding hazards at aircraft accident sites and the safe recovery of aircraft wreckage. This expertise can be made available to the emergency services at an early stage of response by telephone and/or in person.

Overall responsibility for the safety at the site will usually reside with the authority in control, ie the Fire Service, Police or the AIM. However, organisations working at the site will

retain responsibility for the safety both for their own personnel and for others working under their direction.

To ensure that a high level of safety management is maintained during site operations, it is important that organisations co-operate and co-ordinate their activities. At major accident sites for example, a risk management group will be formed to assist with the safety management process. Initiation and facilitation of the group is likely to be co-ordinated by the local authority emergency planners (the AAIB may initiate this action if required). Group members should include safety co-ordinators from the main organisations involved, including the AAIB, AIM, Police, Fire, Emergency Planners, Environment Agency, contractors, etc.

Upon completion of the fire-fighting and rescue phase, the AIM will assume responsibility for investigation and recovery operations at site until the AAIB team arrives. At this stage, AAIB personnel will undertake further assessment of occupational safety hazards at site. The advice of the senior Fire or Police Officer will be sought to establish information on hazards previously identified. Specialist personnel such as scientific advisers may also be employed to assist with the assessment process. At major accident sites, this assessment phase is likely to take some time, resulting in a pause in operations before further work can continue. On completion of the assessment, suitable control measures will be introduced to ensure the safety of personnel working at or visiting the site. Control measures are likely to include limiting access to all or specific site areas, the removal or neutralising of some hazards, the use of protective clothing, restriction of traffic movement, and may also include the operation of an entry pass system.

Some incidents may have implications for public safety and, given the extent and duration of site operations in major accidents, may also have a significant impact on the daily routine of the local population. Past experience has shown that the involvement of the Local Authority, and in particular the Emergency Planning department, is essential for the effective co-ordination of non-investigation activities at and around major accident sites. The AAIB will seek to maintain a close liaison with the Local Authority to provide advice and assistance where required.

See **Appendix F** for more details regarding safety hazards on accident site.

The AAIB has provided personal protective equipment detailed in **Appendix I**

20. Organisation of the investigation

With the increasing complexity of the aviation environment, eg. flight operations, aircraft systems, and air traffic control, it has become necessary for the AAIB to call on outside specialists to assist In particular aspects of specific investigations. These personnel can be co-opted from:

- The airline operator involved
- The manufacturers of the aircraft, its engines or equipment
- Other government agencies

They will be formed into groups working under the direction of AAIB Inspectors. The number and scope of the groups depends on the site and complexity of the specific accident.

An **Investigator-in-Charge (IiC)** will be appointed by the Chief Inspector of Air Accidents and will be responsible to him for the overall organisation, conduct, and control of an accident investigation. The AIM and local team will continue to participate in the investigation as advisors to the IiC.

The Investigator-in-Charge will decide which specialist working groups are required and will co-ordinate and direct the efforts of the groups. The Investigator-in-Charge will also ensure that regular liaison is maintained between the AAIB, the police incident commander and the Coroner or Procurator Fiscal.

AAIB / Police liaison

The AAIB investigation team will usually have a daily meeting at the end of the day's activity. Chaired by the IiC, the meeting will discuss progress to date and formulate activity plans for the following day. It is important that the Police nominate a **liaison officer** to attend these meetings.

Likewise, subject to manpower availability, the AAIB will appoint an inspector to liaise at any daily police briefings.

21. Preservation of evidence

Modern aircraft systems are complex and vital evidence can be destroyed through inadvertent action by members of the emergency services. Therefore, the following guidelines are offered:

Removal of evidence

Apart from casualties, nothing should be removed from the scene nor should the wreckage or accident site be disturbed any more than is necessary for the extrication of persons, making the scene safe for investigators or for preserving evidence. Removal of obviously deceased persons entangled in the wreckage should not be commenced without first discussing the issues with the AAIB Duty Co-ordinator. Where such activities have to take place before AAIB Inspectors arrive, a record, preferably a photographic or video record, should be made of the disruption to the wreckage.

Coverage should include an overall view of the site and close-up of the wreckage, especially the cockpit area, and of the bodies.

Runway debris

In the case of accidents and serious incidents occurring at airports there may be debris scattered along the runways or taxiways. There is often considerable pressure to sweep the paved areas to allow operations to continue and the AAIB has no wish to cause unnecessary delays. In such circumstances the AAIB guidance is that, after obtaining the AAIB Duty Co-ordinator's agreement, the distribution of debris should be recorded, preferably by photography and video. Debris should then be moved to the edge of the paved area in a direction at right angles to the centreline. This will help investigators to reconstruct the failure sequence.

Eye-witnesses

The AIM can assist the AAIB by compiling a list of witnesses, their addresses and telephone numbers and taking their initial statements. It is important that statements be strictly confined to a record of the facts as seen by the witnesses. Although the police may need these statements for their own purposes, it is important that they be made available to the AAIB. In cases where it is necessary to try and establish the final flight path of an aircraft, the number of witnesses and the area covered by them can be more important than the individual quality of their evidence. Specialist aviation knowledge on the part of a witness is no guarantee of accuracy. It is not unusual for witnesses to have photographs or video recordings of an accident, particularly at air displays. Copies of these (preferably the originals) should be requested from witnesses - they will be analysed by the AAIB and then returned to the owners.

Passenger questionnaire

Appendix D contains a Passenger Questionnaire which may be copied for local use. (This is also available on the AAIB Website.)

Passengers should be asked to complete this questionnaire, ideally with the assistance of a police officer or a member of the support agencies, who should then ensure that it is given to an AAIB Inspector on site or returned to the AAIB at the address given on the form.

Documents

A large number of documents and papers may be carried by aircraft; the recovery and preservation of these documents may be vital. It is particularly important that the AIM organises this process whilst awaiting arrival of the AAIB team.

All papers associated with an aircraft accident should be carefully collected and held, with a minimum of handling of damaged or burnt specimens.

If the **flight deck** of a public transport aircraft is intact, access should be prevented and documents not removed unless there is a risk of their loss or damage.

The documents carried often include:

- Certificate of Airworthiness
- Certificate of Registration
- Certificate of Maintenance
- Technical Log
- Load and Balance Sheets
- Passenger Manifest
- Freight Manifests
- Crew Licences
- Crew Log Books
- Navigation Log Sheets
- Aircraft and Operations Manuals
- Maps, Charts and notes etc

Examination of such documents and analysis of the information contained in them may provide vital evidence for investigators.

Personal technology

Flight crew may carry company-issued laptop computers and mobile telephones as well as their own personal mobile telephones, cameras or PDAs. Even if they appear damaged and unusable they can contain data recorded on microchips.

Damaged items should be collected and bagged complete with their damaged components and handed to AAIB personnel.

Flight recorders

Flight Data Recorders (FDR) and Cockpit Voice Recorders (CVR), commonly referred to as 'Black Boxes', are carried by many commercial aircraft and can provide vital information to the investigation. These recorders are painted bright orange with white reflective strips on the sides and contain crash-protected tape or memory modules where the data is stored.

Unskilled handling of the flight recorders after a crash can cause unnecessary damage which might lead to loss of the recorded information, or at the very least, a delay in the recovery of that information.

The retrieval of the recorders after an accident is of prime importance, but electromagnetic devices of the 'mine-detector' type **should not be used** to search for these recorders because the electromagnetism can erase the recorded information.

Once a flight recorder has been located, it is imperative that its location should be marked and protected; however, if it needs

Examples of typical flight recorders - the upper example shows a modern solid-state recorder with the crash-protected memory module clearly visible with a white reflective label

to be moved, it should be handled as little as possible before retrieval by AAIB specialists.

The outer casing of older type recorders can be damaged or even destroyed in an accident, leaving only the crash-protected tape module containing the recorded data. If this module is subjected to fire or immersion in fluid it can become discoloured and difficult to identify.

Other sources of recorded flight data are becoming more common on commercial aircraft. Of particular use to investigations are Ground Proximity Warning System units (GPWS) and Quick Access Recorders (QAR). These, together with many avionics boxes and engine control units, can store data into memory; however, the memory is not required to be crash protected. Therefore, as a precaution, any electronic boxes found should be protected from further damage until they can be examined or retrieved by AAIB specialists.

An example of a partially damaged CVR and the discoloured crash-protected tape module from a damaged FDR

GPS units

GPS units are being used more and more by pilots flying smaller aircraft such as business jets, GA aircraft and gliders. Some GPS units are panel mounted while portable/handheld units are often positioned somewhere in the cockpit by the pilot at the start of each flight. Many of these units are able to store and record track and other information in memory so should be collected and put into antistatic bags, and handed to AAIB personnel. If an antenna is still connected to the unit then this should be disconnected to prevent possible further recording of track information.

Some typical GPS units

22. The exchange of witness statements

One issue which may create difficulties, particularly for police officers and AAIB Inspectors when conducting parallel investigations, is the exchange of witness statements.

Normally, the police have no difficulty in giving copies of witness statements taken by their officers to AAIB Inspectors. However, the Civil Aviation (Investigation of Air Accidents and Incidents) Regulations prohibits an AAIB Inspector from reciprocating.

The regulation stipulates that no **relevant record** shall be made available to any person for purposes other than accident or incident investigation unless its disclosure has been ordered by the relevant Court.

The definition of a **relevant record** is defined within International Standards and Recommended Practices for Aircraft Accident and Incident Investigation (Annex 13 to the Convention on International Civil Aviation).

The definition includes 'all statements taken from persons by the investigation authorities in the course of their investigation'.

In this context, the investigation authority is the AAIB and not the police.

Consequently, Inspectors of Air Accidents may take formal statements from witnesses but they must not part with copies of such statements to third parties – even if the witness has no objection to a copy being given to the police or Coroner's officer.

In practice however, AAIB Inspectors prepare **three copies of a handwritten statement**. **One** is retained by the Inspector and **two** are given to the witness so that one may be given to the judicial investigation, if sought, so that both investigations can benefit from the same witness evidence.

No offence is committed by the witness if he or she hands a copy of their statement to a third party. However, if a witness declines to part with a copy of their statement, they should not be compelled to do so. Instead, a police officer should take another statement.

23. Communications

Although AAIB staff regularly use mobile telephones for on-site communications, on occasions, network coverage is either limited or not available. In these cases it is desirable for the police to assist with communications by providing police radios or alternate telephone links. The AIM should, if possible, confirm lines of communications from the accident site to AAIB HQ not only to ensure that the AAIB Duty Co-ordinator can provide assistance to the AIM or members of his team while the AAIB team is in transit, but also to enable the transmission of digital photographs and/or video taken by crash site managers or witnesses.

24. Pathology - aviation specialists

In the United Kingdom the AAIB team may include a medical adviser. This person is usually, but not exclusively, a specialist in aviation pathology seconded from the RAF. It is important for the pathologist, dealing with an air accident, to have a knowledge of aviation and aviation medicine. Regardless of who conducts post-mortem examinations, it is useful for the aviation pathologist to comment on the examinations to obtain information on:

- Evidence of cause of the accident
- Mechanical failure in the aircraft (from body injury evidence)
- Physical evidence of who was controlling the aircraft? Was there disease which

could influence the function of the crew or incapacitate them?

- Toxicological. Were the crew affected by noxious fumes, drugs, or alcohol?
- Physiological. Was there a defect in the pressurisation system?
- Evidence of injury by pre-impact explosion or fire
- Evidence of the sequence of events leading up to the accident
- Was the accident anticipated or not?
- Evidence as to survivability

The aviation pathologist is normally willing to act on behalf of the Coroner if they so desire.

25. Wreckage recovery

Recovery of the wreckage will normally be co-ordinated by the AAIB, with assistance from the AIM.

In all accidents, the prevention of pollution or further damage to land, water course, buildings, etc will be a significant consideration from an early stage. The AAIB will advise and assist the Emergency Services, Environment Agency, utility companies, etc in gaining access to the site to limit any environmental effects.

At most accident sites, representatives of the aircraft operator/insurers will also attend site at an early stage to assess liabilities and plan restoration/remediation activities. Where complex or extensive restoration work is required, agents will be appointed by the insurers to manage the project.

26. Aircraft accidents at sea

The AAIB is also responsible for the investigation of aircraft accidents where the aircraft crashes into the sea.

Survivors

Survivors from an aircraft that has crashed at sea may be recovered to different shore-based locations and transported to different hospitals or reception centres. It is essential that the police deploy personnel to each location to gather personal information and take witness statements if possible. These statements, especially those from surviving crew members, may be vital in determining the course of events immediately prior to the accident.
A detailed list of the survivors names and addresses should be passed to the AIM / AAIB as soon as possible. Those survivors capable of recording their experiences should be given an AAIB passengers questionnaire (see **Appendix D**).

Deceased

Bodies recovered from the sea will be recovered to a shore-based mortuary for pathological examination. Where possible a pathologist, specialising in aviation matters, should be present to report his findings to the AAIB team.

Floating debris

Floating debris recovered and brought ashore during the search and rescue phase of any operation should be secured and brought to the attention of the AIM.

Wreckage recovery from the sea

The AAIB will seek to recover aircraft wreckage from the water (either floating or submerged) only if it is deemed necessary for the investigation in order to establish the cause of an accident and it is practical to do so.

The recovery of aircraft wreckage from the sea bed can be a very expensive operation with costs varying depending on the size of the aircraft, the depth of water, the location, the weather and sea conditions etc. In some cases the AAIB will make contact with the police, the aircraft operator's insurers and the State of Registry with a view to seeking an agreement for sharing the costs of the recovery.

In some cases the AAIB may seek to recover only the flight data recorders and relevant parts of the aircraft wreckage. This may occur when recovery of all of the aircraft wreckage is impractical. On occasions, when General Aviation aircraft are involved, the AAIB will not attempt wreckage recovery. It will then be the responsibility of the aircraft owner or the aircraft's insurers to effect a recovery if it is deemed appropriate for their purposes or if the wreckage poses a hazard to shipping.

The AAIB will ascertain, at the earliest opportunity, whether any relevant wreckage is located under water. If this is the case, and

the police are involved, they will be informed of the AAIB process and procedures to prevent the inappropriate use of local resources that may expose AAIB inspectors, arriving on scene, to an environment that has not been subjected to the required risk assessment.

Once it has been ascertained that aircraft wreckage needs to be recovered from water, the AAIB Duty Co-ordinator will use the services of the Salvage & Marine Operations Integrated Project Team (S&MO IPT) and as such, members of S&MO IPT will be authorised as 'Advisors' to the AAIB Investigator-in-Charge and considered part of the AAIB team. S&MO is part of the MOD, staffed by MOD civilians and deployable within 24 hours in times of peace or conflict to any location in the world. It authorises and project manages salvage, specialist mooring, blue-water towing and heavy lift transportation services. The Duty Co-ordinator and the AIM will liaise with S&MO to determine the process for recovering the wreckage.

The AAIB will make it clear to the operator of an aircraft which has crashed and **sunk** that the AAIB will be undertaking the salvage and will be responsible for it. The operator should be firmly discouraged from taking unilateral action, though he (together with the manufacturer) may send an observer on board the recovery vessel if there is space and accommodation.

If the aircraft has remained **afloat**, the operator may wish to salvage his property with a view to refurbishment, in which case the AAIB will render every assistance. If the aircraft subsequently sinks then the AAIB will undertake responsibility for the salvage as before.

Recovery of aircraft recorders

Most public transport aircraft and helicopters are equipped with some form of cockpit voice and flight data recorder designed to withstand the forces involved in an aircraft accident including immersion in water under extreme pressure. These recorders can provide vital information essential to AAIB investigations. They are fitted with transmitters (Dukane Beacons) to assist with their location under water. The AAIB have the necessary equipment (a handheld receiver and a towed hydrophone array) to detect and locate these transmissions. Some AAIB Inspectors are skilled in the operation of this equipment and will deploy on the recovery vessel to assist in the recovery operation.

The recovery of bodies from within aircraft wreckage

If bodies are discovered in or near submerged aircraft wreckage they will be recovered and dealt with appropriately. It will often be desirable for a police presence on board the recovery vessel to deal with bodies and co-ordinate their eventual transportation to a mortuary ashore.

27. Dealing with the media

It is likely that the media will arrive at scene very shortly after the accident has occurred. If the media arrive before the AIM, for their own safety, they must remain outside the secured area.

The media will have deadlines to meet and will seek to gain official information and take photographs of the accident site and survivors as soon as possible. News media aircraft or helicopters should be prevented from flying over or hovering near the accident site and photography of survivors or deceased persons should not be permitted.

The AIM will endeavour, with police assistance, to provide access for the media to an area where suitable photographs may be taken and, at a suitable time, provide a short factual briefing. Members of the police and emergency services, if called upon by the media, should be aware of the need to refrain from releasing information that is outside their area of expertise. For this reason care should be exercised in the use of mobile telephones or radios, as the media may be capable of monitoring communication frequencies.

The AAIB will not release to the public or media the names of the crew, passengers, the aircraft owner or the operator. The Coroner releases the names of the deceased persons only after the next-of-kin have been informed and will often use the Police as his agents. Speculation as to the cause of the accident must be avoided at all times.

Appendix A

Powers of an Inspector

Extract from The Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 1996.

Note: Although these extracts are from the UK regulations, the individual Overseas Territory Regulations are all similar.

Powers of Inspectors

9.—(1) For the purpose of enabling him to carry out an investigation into an accident or incident in the most efficient way and within the shortest time, an investigating Inspector is hereby authorised, where appropriate in co-operation with the authorities responsible for the judicial inquiry, to—

(a) have free access to the site of the accident or incident as well as to the aircraft, its contents or its wreckage;
(b) ensure an immediate listing of evidence and controlled removal of debris, or components for examination or analysis purposes;
(c) have immediate access to and use of the contents of the flight recorders and any other recordings;
(d) have access to the results of examination of the bodies of victims or of tests made on samples taken from the bodies of victims;
(e) have immediate access to the results of examinations of the people involved in the operation of the aircraft or of tests made on samples taken from such people;
(f) examine witnesses; and
(g) have free access to any relevant information or records held by the owner, the operator or the manufacturer of the aircraft and by the authorities responsible for civil aviation or airport operation.

(2) For the purpose of paragraph (1) above an investigating Inspector shall have power—

(a) by summons under his hand to call before him and examine all such persons as he thinks fit, to require such persons to answer any question or furnish any information or produce any books, papers, documents and articles which the investigating Inspector may consider relevant and to retain any such books, papers, documents and articles until the completion of the investigation;
(b) to take statements from all such persons as he thinks fit and to require any such person to make and sign a declaration of the truth of the statement made by him;
(c) on production if required of his credentials, to enter and inspect any place, building or aircraft the entry or inspection whereof appears to the investigating Inspector to be requisite for the purposes of the investigation;
(d) on production if required of his credentials, to remove, test, take measures for the preservation of or otherwise deal with any aircraft other than an aircraft involved in the accident or incident where it appears to the investigating Inspector requisite for the purposes of the investigation, and
(e) to take such measures for the preservation of evidence as he considers appropriate.

(3) Every person summoned by an investigating Inspector under paragraph (2)(a) above shall be allowed such expenses as the Secretary of State may determine.

Appendix A (Cont)

Powers of an Inspector

(4) When requested to do so by the investigating body or entity of another member State, the Chief Inspector may provide assistance to that body or entity by supplying—

(a) installations, facilities and equipment for—
— the technical investigation of wreckage and aircraft equipment and other objects relevant to the investigation,
— the evaluation of information from flight recorders, and
— the computer storage and evaluation of air accident data, and
(b) accident investigation experts to undertake specific tasks but only when an investigation is opened following a major accident.

(5) In this regulation “operator” shall have the meaning given by Article 3 of the Directive and “in co-operation with the authorities responsible for the judicial inquiry” shall have the same meaning as in the Directive.

Appendix B

Definitions of an Accident and Serious Incident

Extract from the Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 1996.

Note: These definitions are identical in all Overseas Territories and reflect the definition in ICAO Annex 13.

Accident

2.—(1) In these Regulations, unless the context otherwise requires—

"accident" means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which—

"(a) a person suffers a fatal or serious injury as a result of—
— being in or upon the aircraft,
— direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
— direct exposure to jet blast,
except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew, or

(b) the aircraft sustains damage or structural failure which—
— adversely affects the structural strength, performance or flight characteristics of the aircraft, and
— would normally require major repair or replacement of the affected component,
except for engine failure or damage, when the damage is limited to the engine, its cowlings or accessories; or for damage limited to propellers, wing tips, antennas, tyres, brakes, fairings, small dents or puncture holes in the aircraft skin; or

(c) the aircraft is missing or is completely inaccessible;"

Fatal injury

Fatal injury means an injury which is sustained by a person in an accident and which results in his death within 30 days of the date of the accident;

Serious Injury

Serious injury means an injury which is sustained by a person in an accident and which—

(a) requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received;
(b) results in a fracture of any bone (except simple fractures of fingers, toes, or nose);
(c) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage;
(d) involves injury to any internal organ;

Appendix B (Cont)

Definitions of an Accident and Serious Incident

(e) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or
(f) involves verified exposure to infectious substances or harmful radiation; and "seriously injured" shall be construed accordingly;

Serious Incident

Serious incident means an incident involving circumstances indicating that an accident nearly occurred;

List of examples of serious incidents - The list is not exhaustive and only serves as a guide to the definition of 'serious incident'.

- A near collision requiring an avoidance manoeuvre or when an avoiding manoeuvre would have been appropriate to avoid a collision or an unsafe situation.
- Controlled flight into terrain (CFIT) only marginally avoided.
- An aborted take-off on a closed or engaged runway, or a take-off from such runway with marginal separation from obstacle(s).
- A landing or attempted landing on a closed or engaged runway.
- Gross failure to achieve predicted performance during take-off or initial climb.
- All fires and smoke in the passenger compartment or in cargo compartments, or engine fires, even though such fires are extinguished with extinguishing agents.
- Any events which required the emergency use of oxygen by the flight crew.
- Aircraft structural failure or engine disintegration which is not classified as an accident.
- Multiple malfunctions of one or more aircraft systems that seriously affect the operation of the aircraft.
- Any case of flight crew incapacitation in flight.
- Any fuel state which would require the declaration of an emergency by the pilot.
- Take-off or landing incidents, such as undershooting, overrunning or running off the side of runways.
- System failures, weather phenomena, operation outside the approved flight envelope or other occurrences which could have caused difficulties controlling the aircraft.
- Failure of more than one system in a redundancy system which is mandatory for flight guidance and navigation.

Appendix C

Accident Notification Fax

To: AIR ACCIDENTS INVESTIGATION BRANCH - 01252 376999

From ..... ORGANISATION.....
Tel .....FAX No .....Date. .....Time .....

A ACCIDENT INCIDENT REF No .....
B AIRCRAFT TYPE and REGISTRATION .....
C OWNER .....
Tel.....
OPERATOR .....
Tel.....
D PILOT IN COMMAND Name.....
Address .....
.....
.....
.....
Tel.....
E DATE & TIME (UTC) OF EVENT .....
F LAST POINT OF DEPARTURE .....
POINT OF INTENDED LANDING .....

G ACCIDENT LOCATION .....
.....
OS Map No.....Grid Ref.....

H PERSONS ON BOARD CREW .....PASSENGERS .....

INJURIES	CREW	PASSENGERS	OTHERS
FATAL			
SERIOUS			
MINOR/NONE			

I NATURE OF THE EVENT
.....
.....
.....
DESCRIPTION OF THE ACCIDENT SITE
.....
.....

PLEASE DO NOT DELAY NOTIFICATION IF SOME OF THE ABOVE INFORMATION IS NOT AVAILABLE

Appendix D

Passenger Questionnaire

Passenger Questionnaire

AAIB Air Accidents Investigation Branch

The Air Accidents Investigation Branch (AAIB), part of the Department for Transport (DfT), is responsible for investigating serious aircraft accidents and incidents. The aim is to make flying safer by thorough investigation which includes gathering information from both the passengers and crew involved. It would therefore be appreciated if you would assist the investigation by completing as much of the following questionnaire as possible. Thank you.

Personal Details

Full name: .....

Address: .....

.....

.....

Telephone: (Home).....(Work).....(Mobile).....

Occupation: .....email: .....

Age: ..... Gender: *Male / Female (Please delete as appropriate)*

Flight Details

Date: ..... Flight No: .....

Airline: ..... Aircraft type: .....

From: ..... To: .....

Seat Position

Sitting in row number:..... seat letter: ..... or *I do not remember my seat number*

Was this the seat given on your boarding card? *Yes / No*

Class	**Area of Cabin**	**Seat**	**Side**
First / Business / Economy	*Front / Centre / Rear*	*Aisle / Centre / Window*	*Left / Right / Centre*

Names of other persons travelling with you:.....

Was there a seat on your left: *Yes / No* Occupied: *Yes / No* By a: *Male / Female* Approx age:.....

Was there a seat on your right: *Yes / No* Occupied *Yes / No* By a: *Male / Female* Approx age:.....

Description of Event

How and when did you realise something was wrong?.....

.....

.....

.....

Please give a brief account of what you heard and/or saw: .....

.....

.....

.....

.....

Page 1 **Continued overleaf**

Appendix D (Cont)

Passenger Questionnaire

Passenger Questionnaire

AAIB Air Accidents Investigation Branch

Leaving the Aircraft

Did you hear any announcements made by the crew of the aircraft? *Yes / No*

Were they clear? *Yes / No* Where you able to follow the instructions? *Yes / No*

Were any the the following illuminated? *Cabin lights / Seat belt signs / Emergency exit lights / Floor level lighting*

Please indicate how you left the aircraft:

I left the aircraft by a: *Door / Over-wing exit / Break in cabin wall* using: *Steps / Escape slide / Other*

on the : *Left / Right* L  R at the: *Front / Centre / Rear* of the aircraft

Please describe any difficulties encountered: (eg exit impeded, overhead bins falling open) .....

.....

.....

Injuries:

Please briefly describe any injuries you suffered and how they occurred: .....

.....

Fire:

Please decribe any fire or smoke: .....

.....

General comments:

Is there anything else you feel would help our investigation? (eg did you take cabin baggage with you) .....

.....

.....

.....

.....

.....

.....

.....

.....

Thank you for helping with our investigation. Please give this questionnaire to an AAIB inspector, a police officer, or return it by post or email to the following address:

ISU, Air Accidents Investigation Branch, Farnborough House, Berkshire Copse Road; Aldershot, Hampshire, GU11 2HH United Kingdom

email: enquiries@aaib.gov.uk

If you have any questions, or any points you wish to discuss please write to us at the above address or contact us by telephone on +44 (0) 1252 510300 or by fax on +44 (0) 1252 376999. More information on the AAIB is available on our web site at www.aaib.gov.uk, including a printable version of this form.

A report concerning this investigation will be published when the investigation is complete and will be available on our website.

Page 2

Thank you

October 2008

Appendix E

Aircraft Accident Investigation - Managing the first 48 hours

(Checklist for Overseas Territories)

The following checklist has been formulated to assist the locally appointed Accident Investigation Manager (AIM) and his/her team in dealing with the immediate aftermath following an aircraft accident.

Overview

- Decisions
- Notification
- Accident site Security
- Preservation of physical evidence
- Survivors and fatally injured
- Preservation of recorded data
- Recording of the site / wreckage
- Press and media briefings
- Accident site hazards
- Recovery, transportation and storage of wreckage
- Working facilities
- Initial information
- AAIB team briefing

1 Decisions

- Is it a reportable accident or serious incident? - contact AAIB
- What level of investigation is required?
- Who is the nominate Accident Investigation Manager (AIM) - appointed by the Governor's Office
- Refer to the MoU - contact the AAIB who will appoint an IiC
- Do you need resources additional to AAIB – can AAIB assist with these?
- Is the accident interfering with transport links – ie runway blocked?
- Transport arrangements If airport not functional?
- Funding for major recovery operations – sea salvage (circa £100,000 / day)?

2 Notification

- ACCID notification to the AAIB in accordance with ICAO Annex 13
- AAIB will then notify:
  - State of Operator
  - State of Manufacture / Design
  - State of Registry
  - State with special interest
- Contact the AAIB +44 1252 512299 (AAIB by Day and DfT Duty Officer at Night)
- E-mail: enquiries@aaib.gov.uk

Appendix E (Cont)

Aircraft Accident Investigation - Managing the first 48 hours

(Checklist for Overseas Territories)

3 Security

- Security of accident site & aircraft wreckage
- On airport – Control already established
- Off airport – Police, local resources
- At sea – coastguard, navy, local resources
- Arrange for 24 hour guarding if practicable - control and restrict site access
- Assess if wreckage is complete at site – if necessary, arrange further searches

4 Preservation of physical evidence

- *Disturbance to the accident site and wreckage must be kept to a minimum*
- Secure 'perishable' evidence
- Fuel / Oil / Hydraulic samples (in sterile containers)
- Papers / maps / charts / flight documents / crew personal items
- Arrange for photographs / video
- Cockpit switch / control positions
- Control surface / trim tab positions
- Ground impact marks / runway marks
- Aerial photography of accident site
- Secure other related documentation
- Maintenance records / aircraft logbooks / airworthiness certificates
- Flight crew licences / training records / log books

5 Survivors and fatally injured

- Crew list & passenger / cargo manifests
- Next of kin details, if applicable
- Family liaison (assume five family members per passenger)
- Body recovery / storage – corner's procedures
- Who has responsibility?
- Is an aero-medical pathologist available?
- Ensure the locations of bodies or human remains are established (photo / diagram) before removal, where possible
- Is protective equipment available?
- Are decontamination procedures in place?
- Are refrigerated storage facilities identified?

Appendix E (Cont)

Aircraft Accident Investigation - Managing the first 48 hours

(Checklist for Overseas Territories)

6 Preservation of recorded data

- Locate data / voice recorders and recover if practicable - seek advice for handling and storage from AAIB or qualified organisation
- Underwater transmitter (circa 28 days battery life)
- Preserve other recorders such as GPS units
- Establish if radio / radar data is recorded – ensure such data is located and secured
- Establish if other sources (eg security cameras) may hold evidence

7 Recording of accident site and wreckage

- Arrange for overall photographic coverage (and video, if available) of site / wreckage
- Make a basic wreckage plot / diagram - *essential* if wreckage is to be moved (eg to clear a runway for use). Use GPS to assist, if available
- Attempt to procure detailed maps of accident area

8 Recovery, transportation and storage of wreckage

- Assess the likely requirements
- Equipment / manpower
- What resources can be made available
- Identify possible storage locations (preferably not connected with an interested party)
- Anticipate likely problem areas
- Is specialist equipment required?
- Underwater salvage (Furgo, CSALMO, etc)
- Shore-side reception area for wreckage
- Contact the AAIB if necessary

9 Working facilities

- Office HQ for AAIB and local investigation staff, *ideally* with:
- Telephone / fax / power / internet
- basic stationery items / refreshment facilities
- Secure storage area
- Where necessary and possible, arrange for clearance in advance for access to secure areas (eg airport aprons / installations)
- Domestic arrangements
- Assistance with booking local accommodation for AAIB personnel.
- Hire car(s) for investigation team.
- Travel arrangements to and from accident site

Appendix E (Cont)

Aircraft Accident Investigation - Managing the first 48 hours

(Checklist for Overseas Territories)

10 Press and media briefings

- Be prepared for public journalism
- Mobile phone / digital pictures /video
- Nominate a press liaison person
- Nominate an appropriate spokesperson ('face to camera') - liaise with other agencies - agree briefing
- Establish a location and facilities for press briefings
- Prepare a 'holding' announcement
- Consult AAIB for guidance if required

11 Accident site hazards

- Establish if 'dangerous goods' are involved
- Attempt to establish extent of:
  - Hygiene hazards (human remains, body fluids)
  - Chemical hazard (eg fuel, hydraulic fluids)
  - Pressure vessels (eg accumulators, extinguishers)
  - Pyrotechnic hazards (eg munitions, survival aids)
  - Other hazards – fumes / dust / vapours / radioactive components
- Contact AAIB H&S advisor / Duty Co-ordinator

12 Initial information

Witnesses

- List of eye-witnesses (often obtained from Police)
- Conduct initial interviews with key witnesses, if possible
- Request copies of Police witness statements

Operational information

- Weather information
- Search and rescue procedures
- Accident / disaster plans that were put into action
- Airport / navigational information (including relevant charts / documents)
- Aircraft flight manuals
- Local procedures / regulations
- Aeronautical Information Publications

13 AAIB team briefing

- Plan to brief the AAIB team on their arrival
- This should be in a private location, and restricted to those personnel directly involved in the investigation / rescue / recovery process
- The briefing should cover the known facts and what actions have been taken to date

Appendix F

Accident Site Hazards

Introduction

Aircraft accidents have the potential to expose responding personnel to a wide range of health and safety hazards. These hazards, generated by damage to aircraft structures, systems, components and aircraft contents, will be highly variable in nature and will be influenced by factors associated with the accident scenario, eg aircraft size and type, degree of damage, accident location, weather conditions, environment, security, etc. It is important therefore that responding personnel are aware of the hazards likely to be present at accident sites, and take the appropriate measures to assist in reducing the risks from exposure to such hazards.

The following, non-exhaustive, list provides details on generic hazards associated with aircraft accidents. Further information on hazards and assistance with determining risk in specific accidents, particularly during the early stages of response, can be sought by contacting the AAIB.

Flammable substances

Fuel is the primary hazard in almost all aircraft accidents:

Aviation gasoline (AVGAS) is used in piston engine aircraft

Motor gasoline (MOGAS) is road vehicle petrol used in some aircraft engines

Aviation turbine fuel (AVTUR) (kerosene) is used in jet or turbo-prop aircraft

Diesel is also used, although currently not widely

Fuels have different characteristics with varying flash points. However, all fuel types present hazards due to their flammability and constitute a significant risk in accident situations. Fuels can also present hazards through the inhalation of vapour and due to skin contact. Therefore, effective control measures should be established to reduce the risk of exposure through all these routes. Generally speaking, the larger the aircraft, the higher volume of fuel that can be carried.

Damaged structures

Accident damaged aircraft present a variety of hazards: sharp and jagged edges, unstable or weak structures, and retained energy (pressurised, or spring / cartridge assisted components).

Pressurised systems and containers

A variety of containers may be used to hold pressurised gases and fluids: hydraulic fluids, nitrogen, oxygen, air, fire extinguishing gases / fluids / powders, etc. Pressures can be up to several thousand psi / several hundred Bar. Sudden release of these substances can pose hazards in terms of impact, absorption, inhalation and fire.

Appendix F (Cont)

Accident Site Hazards

Cargo

Cargo can vary in volume and variety and will be identified as Dangerous Goods or non-hazardous. However, irrespective of classification, all cargo subjected to the effects of fire and impact in aircraft accidents can be harmful to responding personnel and to the environment. In cargo aircraft accidents it is important for all agencies to co-ordinate efforts to identify cargo and determine the hazards as early as possible.

(Note: Many large passenger aircraft also carry significant amounts of cargo.)

Blood-borne pathogens

The variety and nature of blood-borne pathogens is likely to be one of the more well researched hazards associated with transport accidents. Aircraft accidents present different challenges due to the potential for a large numbers of casualties. In addition, 'high-speed impact' accidents can generate traumatic damage to casualties that presents significant difficulties in the identification and recovery of victims. In this situation, response and recovery teams, working with the AAIB, need to establish good systems of work to reduce the potential exposure to blood-borne pathogens.

Aircraft escape systems

Military aircraft and some ex-military aircraft may have ejector seats, explosive canopy release systems, and equipment jettison systems. All of which can present significant risk of injury to responding personnel. Extreme care should be exercised when attempting to rescue personnel from these aircraft, and wherever possible, the advice and assistance of trained personnel should be obtained before attempting to do so.

For military aircraft, the nearest MoD establishment will be able to direct suitably trained personnel to the site to make the systems safe

For ex-military aircraft, the AAIB will be able to contact suitably trained personnel to assist response personnel

Weapon systems

Military aircraft should be suspected of carrying some form of military pyrotechnics or weapons until confirmed otherwise. The nearest MoD establishment will quickly be able to get confirmation of the carriage of any weaponry and will be able to direct suitably trained personnel to the accident site to assist.

Cartridge initiated devices

Aircraft may carry a variety of cartridge initiated devices for rapid activation of certain systems. These cartridges produce a small volume of gas to release other gases, or operate mechanical systems. These are often used for fire extinguisher systems, escape slides, winch and under-slung load cable cutters, and flotation gear. The unexpected operation of these cartridges is unlikely to pose any significant hazard. However, the unexpected activation of the devices they operate can present some hazards through impact or exposure to released gases.

Appendix F (Cont)

Accident Site Hazards

Pyrotechnics

Pyrotechnics may be carried by aircraft in the form of signal flares or smoke generation devices. These are likely to be associated with emergency equipment such as life-rafts or dinghys. Some light aircraft can also be fitted with a rocket-activated ballistic recovery parachute system.

Fire & impact damaged materials

Many of the materials used in aircraft construction can produce harmful gases, vapour and particulates when subjected to the extreme effects of air accidents.

Aluminium - used in aircraft structures

Magnesium - used in components such as wheels and gearboxes

Other metals and alloys - used in engines and systems

Composite materials (carbon, glass, and other fibres in a resin matrix) - used in major parts of the structure in more modern aircraft. When burnt or impact damaged these often produce free fibres which are highly irritant

Control measures for all burnt materials should include limiting exposure, suppression of particulate with water or fluids, and where required, the use of Personal Protective Equipment (PPE). See **Appendix I**.

Electrical systems

Electrical batteries and emergency power supplies present hazards due to their electrical potential, because of their chemical content, and due to heat and fire caused should an internal short circuit occur. Systems should be isolated as early as possible.

Appendix G

UK Overseas Territories Aircraft Accident Response Training Course

Introduction

The training course is designed to provide key personnel, resident in a UK Overseas Territory, with the skills and knowledge necessary to manage an aircraft accident investigation for the first 48 hours while the AAIB Investigator-in-Charge and his team are en-route to the accident site. It is not designed to train key personnel as accident investigators.

Primarily the role of the nominated Accident Investigation Manager (AIM) is to manage the processes carried out by the police, emergency services, airfield and ATC operator, aircraft operator etc to ensure the preservation and/or recording of perishable evidence and that the appropriate and timely actions are carried out for the removal, collection and preservation of the aircraft wreckage as detailed in the 'Checklist for Overseas Territories' (Aircraft Accident Investigation - Managing the First 48 hours).

While the course can provide the AIM and other personnel with guidance information it will highlight processes and procedures where it will be essential for the nominated AIM to maintain regular communications with the AAIB HQ staff until the IiC arrives on site when a handover between the AIM and IiC can be carried out.

Instructors

The course, carried out in the OT concerned, will normally be conducted by an AAIB team consisting of a Principal Inspector, a Senior Inspector (of a different speciality) and a Health & Safety / Engineering Support Manager. In some circumstances the team may be augmented by a senior member of the Administrative Support Staff (IU / ISU) who will be required to present information concerning the establishment of a forward Operating HQ.

Target audience

Course participants should consist of:

- The DCA and members of his/her staff
- The Airport Manager and senior members of the airport management staff
- Senior officials in the police force
- Representative(s) from the Governor's Office
- Senior Rescue and Fire fighting personnel
- The Local emergency planning officer
- Members of the Department of Disaster Management from the Government (or equivalent)
- Senior Representatives from the emergency medical services
- Any other Territory personnel deemed appropriate by the Governor's Office

The formal training contains a number of presentations and exercises and, where possible, an emergency exercise should be conducted immediately following the training so that AAIB personnel can monitor and provide feedback on areas for improvement.

Appendix G (Cont)

UK Overseas Territories Aircraft Accident Response Training Course

Course Aims

1. To explain the purpose of air accident investigation
2. To highlight what an air accident involves
3. To train key personnel in managing the initial response to an accident until the AAIB Investigator-in-Charge and his team arrives
4. To explain the AAIB's roles and responsibilities

Course Content will include

DAY 1

- **Introduction** (Governor's Office / AAIB / Delegates)
- **Purpose of Air Accident Investigation** (Annex 13, The Regulations, Safety Benefits)
- **Initial Accident Response** (Accident reporting / organisation / logistics / media response)
- **Aircraft Accidents Overview** (Types of accidents, scenario presentations)
- **Workshop 1: 'Initial Response'** (Group Exercise; three scenarios)
- **Health & Safety Risks on Site** (Including workshop / PPE demo)

DAY 2

- **Evidence Gathering & Preservation**
- **The Operations Investigation**
- **Workshop 2: 'Initial On-site Actions'** (Group Exercise; three scenarios)
- **Wreckage Recovery**
- **Workshop 3:** '**Evidence Gathering and Preservation'** (Group Exercise - three scenarios)
- **Investigation Progression**
- **Conclusions and Summary**
- **Course review / Questions / Presentation of Certificates / Feedback forms**

Appendix H

Accident Investigation Manager (AIM) Training Course

Introduction

All AIM's must undertake an AAIB approved training course to enable them to conduct their responsibilities safely and efficiently. Although 'On The Job' training would be ideal, this is recognised as impractical and so any approved course will include a practical accident site simulation.

Training Course Objectives:

1. **Capability to deploy a suitable trained team to the accident site**:
   i. Developing a suitable contact list and means of deploying those team members
   ii. Briefing the local team prior to entering the accident site
   iii. Managing the welfare of the investigative team

2. **Accident site health and safety considerations**:
   i. Awareness of potential accident site hazards
   ii. Implications of any dangerous cargo
   iii. Maintaining and disseminating the AAIB provided support equipment

3. **Preservation of accident site and evidence until AAIB team arrive**:
   i. Managing the preservation of physical evidence at the scene
   ii. Decision making (in discussion with AAIB) on any wreckage removal
   iii. Managing the witness interviews
   iv. Preserving documentation at site and departure airfield/home base
   v. Identifying and preserving FDR / CVR
   vi. Preserving radar / radio / GPS / NVM data
   vii. Identifying facilities and equipment for eventual wreckage recovery

4. **Operating with AAIB:**
   i. Initial briefing
   ii. Continued contact utilising photographs/video/conference facilities
   iii. Handover brief to AAIB team on arrival
   iv. Continued investigation as advisor to the AAIB team

5. **Working with other authorities:**
   i. Interfacing with Police, Fire, Ambulance, Search and Rescue, Accredited Representatives, Coroner

6. **Working with the media:**
   i. Understanding the use of the media
   ii. Giving interviews and preparing press releases

Appendix I

Overseas Territories - Health & Safety and Investigation Support Equipment List

The equipment listed below is considered to be the minimum required to provide for investigation/site management personnel responding to aircraft accidents. AAIB Inspectors will carry sufficient personal protective equipment for 24 hours use but the storage of this 'on-site' equipment should be sufficient to provide additional support for five Inspectors for up to four days in the 'field'. This equipment should be pre-packed and readily available. The contents should be reviewed annually and replenished when necessary.

Personal Protective Equipment

Responding personnel must have suitable protective footwear and outer clothing for the conditions they are likely to encounter but in addition the following should be available:

- Disposable paper masks - 30
- Half mask respirators and filters - 5
- Disposable paper overalls - 50
- Hard hats - 5
- Ear defenders - 5
- Goggles - 5
- Heavy duty gloves - 30 pairs
- Disposable bio-protective gloves - 200 pairs
- First aid kit
- Hand cleanser
- Paper wipes
- Disinfectant
- Bio cleansing wipes
- Tarpaulins - 5

Investigation Equipment

- Distance measure wheel
- Digital still camera
- Digital video camera
- GPS
- Adhesive tapes
- Funnel
- Hand tools
- Safety tabards
- Coloured marking pvc tapes
- 10 m and 50 m measuring tapes
- Plastic sample bags
- Sample bottles
- Fuel sample cans and labels
- Marking tapes and labels
- Paint pens
- Hand cleanser
- Tissues
- Torch & batteries
- Magnifying glass
- Vapour proof plastic bags
- Anti-static bags
- Chalk
- Tie-wraps
- Knife
- Compass
- Bio-hazard sacks
- Solvent cleaner
- Paper towels
- Wreckage sacks (heavy duty plastic bags and large sacks or containers)

Appendix J

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)

General Aviation (GA)

Farnborough House
Berkshire Copse Road
Aldershot, Hampshire
GU11 2HH,
United Kingdom

Tel: +44 (0)1252 510300
Fax: +44 (0)1252 376999
E mail: investigations@aaib.gov.uk

Air Accidents Investigation Branch

Aircraft Accidents or Incidents in the UK Overseas Territories

General Aviation Aircraft

To the aircraft commander,

It has been reported that you were the commander of an aircraft involved in a reportable accident or incident occurring in a UK Overseas Territory.

Aircraft accident and incident investigations are required, under International convention and National regulation, to be carried out, independent of the Civil Aviation Regulator, by an organisation established specifically for this task. UK Overseas Territories are supported in this task by the UK Air Accidents Investigation Branch (AAIB), under the terms of a Memorandum of Agreement, signed by the appropriate Governor. Investigations, under this agreement are conducted in accordance with ICAO Annex 13 and the sole objective of such an investigation is to determine the cause of accidents and incidents and make safety recommendations, when appropriate, to prevent a recurrence. It is not the purpose of such an investigation to apportion blame or liability.

Under the Regulations you are required to furnish the Chief Inspector of the UK AAIB, acting on behalf of the Governor, with such information about the event as is in your possession.

Please complete the attached Aircraft Accident Report Form (Overseas Territories) (AARF(OT)), providing details of the event. Amend as necessary those parts of the form which may have been completed for you and which you believe to be in error. You must then complete the remaining parts of the form in as much detail as possible, sign it to confirm the accuracy of all details therein, and return the completed form within **fourteen days** to the Chief Inspector of Air Accidents at the above address either by post or fax.

If you wish to submit the completed form and any relevant photographs electronically by email, please send them to: investigations@aaib.gov.uk

You may be contacted by an Inspector of Air Accidents, or someone locally acting on his behalf, should any additional information be required, therefore, it is recommended that you retain a copy of your completed form for your records.

Your co-operation in completing this form accurately, and in a timely manner, will assist us in carrying out our safety function as efficiently as possible.

Chief Inspector of Air Accidents

www.aaib.gov.uk

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)

General Aviation (GA) (Cont)

Farnborough House
Berkshire Copse Road
Aldershot
Hampshire GU11 2HH
United Kingdom
Tel: +44(0)1252 510300
Fax: +44(0)1252 376999
E mail:
investigations@aaib.gov.uk

Aircraft Accident Report Form (OT)

General Aviation

Part 1

Air Accidents Investigation Branch

ACCIDENT DETAILS

Occurrence:
Date: Time:
Location: delete as applicable*
Relative to local reference point (if not on airfield):
AAIB File Reference:

Please fill in this form in **CAPITAL LETTERS** and **black ink** only. We will electronically scan and store the information you provide. Use the reverse of the form as a continuation sheet if necessary. Please complete as much information as possible.

Notes:

1 AIRCRAFT

1.1 AIRCRAFT DETAILS

Registration: Manufacturer:
Generic Name: Type and Series:
Engine Model: No of Engines: Build Year:
C of A Category: Expiry Date:

1.2 CHECKS

Total airframe hours: Last check type: Date: DD/MM/YYYY

1.3 MAINTENANCE DETAILS

Company:
Address: Tel:
Fax:
Post / Zip Code: Email:

Please include post code or Zip code

2 OPERATOR DETAILS

Company/Person
Address: Tel:
Fax:
Post / Zip Code: Email:

3 OWNER DETAILS

Name:
Address: Tel:
Fax:
Post / Zip Code: Email:

4 REPAIR AGENCY

Contact name:
Company:
Address: Tel:
Fax:
Post / Zip Code: Email:

5 INSURER DETAILS (if known)

Name:
Address: Tel:
Fax:
Post / Zip Code: Email:

GA AARF(OT) Part 1 Page 1 of 3

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)

General Aviation (GA) (Cont)

Farnborough House
Berkshire Copse Road
Aldershot
Hampshire GU11 2HH
United Kingdom
Tel: +44(0)1252 510300
Fax: +44(0)1252 376999
E mail
investigations@aaib.gov.uk

Aircraft Accident Report Form (OT)

General Aviation

Part 1

Air Accidents Investigation Branch

Tick boxes as appropriate

Delete local/UTC as appropriate

6 FLIGHT

6.1 FLIGHT DETAILS

Purpose of flight: ❑ Private ❑ Training ❑ Aerial work

Departure airfield: Departure time: HH:MM Local/UTC

Planned destination:

6.2 WEIGHTS AND LOADING DETAILS

Basic:	(kg)		C of G:		
Max take-off weight:	(kg)		Max landing weight:		(kg)
No of Crew:	Weight:	(kg)	No of Passengers	Weight:	(kg)
Fuel type:	Weight:	(kg)	Baggage/Freight:		(kg)

Tick appropriate box

7 WEATHER

	Forecast	Actual
Issue time:	HH:MM	
Wind direction/speed:		
Visibility (km):		
Weather:		
Cloud:		
Temperature/dewpoint:		
TEMPO Information:		

Light conditions: ❑ Day ❑ Twilight ❑ Night

QNH:

Obtained from:

Tick appropriate boxes stating other if relevant

8 AIRFIELD DETAILS (complete only if relevant)

Airfield name: Runway used:

Type of: ❑ Departure ❑ Approach eg Visual, Radar Runway slope:

Navigation aids used:

Runway surface: ❑ Grass ❑ Asphalt ❑ Concrete ❑ Other

Surface condition: ❑ Wet ❑ Damp ❑ Dry ❑ Contaminated ❑ Firm ❑ Soft

Define 'Other' if appropriate

Delete Y/N as appropriate

Enter hours in hours and minutes

9 FLIGHT CREW

		Pilot in Command	Second Pilot (if applicable)
Name (including title):			
Date of birth:		DD/MM/YYYY	DD/MM/YYYY
LICENCE:	Type:	eg PPL/ATPL	eg PPL/ATPL
	Number:		
	Issuing Authority:	eg CAA/FAA/Other	eg CAA/FAA/Other
	Valid until:	DD/MM/YYYY	DD/MM/YYYY
MEDICAL:	Class:		
	Valid until:	DD/MM/YYYY	DD/MM/YYYY
	Limitations:		
RATINGS:	Instrument Rating:	Y/N Valid until: DD/MM/YYYY	Y/N Valid until: DD/MM/YYYY
	Night Rating:	Y/N Valid until: DD/MM/YYYY	Y/N Valid until: DD/MM/YYYY
	FI/FI(R):	Y/N Valid until: DD/MM/YYYY	Y/N Valid until: DD/MM/YYYY
	Class:	Y/N Valid until: DD/MM/YYYY	Y/N Valid until: DD/MM/YYYY
RECENCY:	Hours:	All types: HH:MM	All types: HH:MM
		All types PIC: HH:MM	All types PIC: HH:MM
		On type: HH:MM	On type: HH:MM
		On type PIC: HH:MM	On type PIC: HH:MM
	All types - last 90 days:	HH:MM	Last 90 days: HH:MM
	All types - last 28 days:	HH:MM	Last 28 days: HH:MM
	All types - last 24 hours:	HH:MM	Last 24 hours: HH:MM

GA AARF(OT) Part 1 Page 2 of 3

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)
General Aviation (GA) (Cont)

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Aircraft Accident Report Form (OT)
General Aviation
Part 1

Air Accidents Investigation Branch

IMPORTANT
Please enter numbers of all persons on board (including those not injured)

10 INJURIES TO PERSONNEL

TOTAL PERSONS ON BOARD:

	None	Minor	Serious
Pilot in Command:			
Second Pilot:			
Passengers:			
Persons on the ground:			

11.1 Tick damage type

11.2 Enter number of harnesses etc used

11 SURVIVABILITY

11.1 Fuselage damage

Cockpit area:
❑ Severe ❑ Moderate ❑ Minor ❑ None

Passenger/Cabin area:
❑ N/A ❑ Severe ❑ Moderate ❑ Minor ❑ None

Details (if relevant):

11.2 Harnesses and personal protection

Type of harness	Crew	Pax
Lap:		
Lap & diagonal:		
Full:		
None:		
Protective helmet	Y/N	Y/N

Details (if relevant):

Tick appropriate box

11.3 Evacuation

Exit(s) used by crew: Exits used by pax:

Which emergency services attended: ❑ Police ❑ Fire ❑ Ambulance

Other assistance provided by:

11.4 Emergency Equipment

Details of any items which failed:

11.5 Additional Comments:

12 DAMAGE TO AIRCRAFT

13 DAMAGE TO OTHER PROPERTY

Thank you for completing Part 1 of this form, a copy of which will be sent to the Regulatory Authority for flight safety purposes.

In Part 2, you are asked to provide a sketch of the site and a narrative description of the accident. Any accompanying photographs and or documents will be returned, at your request, once the investigation is complete.

Part 2 will be treated as confidential and not released.

GA AARF(OT) Part 1 Page 3 of 3

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)

General Aviation (GA) (Cont)

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investigations@aaib.gov.uk

Aircraft Accident Report Form (OT)
General Aviation
Part 2

Air Accidents Investigation Branch

14 SKETCH OF ACCIDENT SITE

Show North and site elevation (amsl). If accident occurred on an airfield for which there is no published information, please provide as much detail as possible.

Any photographs of the site and / or aircraft would greatly assist the investigation.

GA AARF(OT) Part 2 - Page 1 of 3

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)
General Aviation (GA) (Cont)

Farnborough House
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investigations@aaib.gov.uk

Aircraft Accident Report Form (OT)
General Aviation
Part 2

Air Accidents Investigation Branch

	15 NARRATIVE DESCRIPTION OF EVENTS
	16 YOUR ASSESSMENT OF THE CAUSE
	17 YOUR SIGNATURE Name: Signature: Status: eg PIC, CFI, Owner etc Address: Tel (H): Tel (W): Fax: Post / Zip code: Email:

GA AARF(OT) Part 2 - Page 2 of 3

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)

General Aviation (GA) (Cont)

Farnborough House
Berkshire Copse Road
Aldershot
Hampshire GU11 2HH
Tel: +44(0)1252 510300
Telex: 858119 ACCINV G
Fax: +44(0)1252 376999
E mail
investigations@aaib.gov.uk

Aircraft Accident Report Form (OT)

General Aviation

Part 2

Air Accidents Investigation Branch

If you were not the PIC please provide details of who was	**18 PILOT-IN-COMMAND DETAILS (if relevant)** Name: Address Tel: Fax: Post / Zip Code: Email:
	19 FLYING INSTRUCTOR COMMENT (if relevant) Name: Signature: Status: Address: Tel: Fax: Post / Zip Code: Email:

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)
Commercial Air Transport (CAT)

Farnborough House
Berkshire Copse Road
Aldershot, Hampshire
GU11 2HH
United Kingdom

Tel: +44 (0)1252 510300
Fax: +44 (0)1252 376999
E mail: investigations@aaib.gov.uk

Air Accidents Investigation Branch

Aircraft Accidents or Incidents in the UK Overseas Territories

Commercial Air Transport Aircraft

To the aircraft commander,

It has been reported that you were the commander of an aircraft involved in a reportable accident or incident occurring in a UK Overseas Territory.

Aircraft accident and incident investigations are required, under International convention and National regulation, to be carried out, independent of the Civil Aviation Regulator, by an organisation established specifically for this task. UK Overseas Territories are supported in this task by the UK Air Accidents Investigation Branch (AAIB), under the terms of a Memorandum of Agreement, signed by the appropriate Governor. Investigations, under this agreement, are conducted in accordance with ICAO Annex 13 and the sole objective of such an investigation is to determine the cause of accidents and incidents and make safety recommendations, when appropriate, to prevent a recurrence. It is not the purpose of such an investigation to apportion blame or liability.

Under the Regulations you are required to furnish the Chief Inspector of the UK AAIB, acting on behalf of the Governor, with such information about the event as is in your possession.

Please complete the attached Aircraft Accident Report Form (Overseas Territories) (AARF(OT)), providing details of the event. Amend as necessary those parts of the form which may have been completed for you and which you believe to be in error. You must then complete the remaining parts of the form in as much detail as possible, sign it to confirm the accuracy of all details therein, and return the completed form within **fourteen days** to the Chief Inspector of Air Accidents at the above address either by post or fax.

If you wish to submit the completed form and any relevant photographs electronically by email, please send them to: investigations@aaib.gov.uk

You may be contacted by an Inspector of Air Accidents, or someone locally acting on his behalf, should any additional information be required, therefore, it is recommended that you retain a copy of your completed form for your records.

Your co-operation in completing this form accurately, and in a timely manner, will assist us in carrying out our safety function as efficiently as possible.

Chief Inspector of Air Accidents

www.aaib.gov.uk

CAT AARF(OT)

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)

Commercial Air Transport (CAT) (Cont)

Farnborough House
Berkshire Copse Road
Aldershot
Hampshire GU11 2HH
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Fax: +44(0)1252 376999
E mail
investigations@aaib.gov.uk

Aircraft Accident Report Form
Commercial Air Transport

Part 1

Air Accidents Investigation Branch

ACCIDENT DETAILS

Occurrence:
Date: Time: Local/UTC*
Location: *delete as applicable*
Lat/Long or OS Grid (if not on airfield):
AAIB File Reference:

Please fill in this form in **CAPITAL LETTERS** and **black ink** only. We will electronically scan and store the information you provide. Use the reverse of the form as a continuation sheet if necessary. Please complete as much information as possible.

Notes:

1 AIRCRAFT

1.1 AIRCRAFT DETAILS

Registration: Manufacturer:
Generic Name: Type and Series:
Engine Model: No of Engines: Build Year:
C of A Category C of A Expiry Date:

1.2 CHECKS

Total airframe hours: Last check type: Date: DD/MM/YYYY

1.3 MAINTENANCE DETAILS

Company:
Address: Tel:
Fax:
Post / Zip Code: Email:

2 OPERATOR DETAILS

Company:
Address: Tel:
Fax:
Post / Zip Code: Email:

3 COMPANY FLIGHT SAFETY OFFICER

Name:
Company:
Address
Tel:
Fax:
Post / Zip Code: Email:

4 FLIGHT

Tick boxes as appropriate

6.1 FLIGHT DETAILS

Purpose of flight: ❑ Passenger ❑ Cargo ❑ Non-Revenue ❑ Training
Departure airfield: Departure time: HH:MM Local/UTC
Planned destination:

Delete local/UTC as appropriate

6.2 WEIGHTS AND LOADING DETAILS (attach Load Sheet if available)

Basic: (kg) C of G:
Max take-off weight: (kg) Max landing weight: (kg)
No of Crew: Weight: (kg) No of Passengers Weight: (kg)
Fuel type: Weight: (kg) Baggage/Freight: Weight: (kg)

CAT AARF(OT) Part 1 Page 1 of 4

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)
Commercial Air Transport (CAT) (Cont)

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E mail
investigations@aaib.gov.uk

Aircraft Accident Report Form
Commercial Air Transport

Part 1

Air Accidents Investigation Branch

	5 WEATHER
	Issue time: HH:MM
	Forecast / Actual
	Wind direction/speed:
	Visibility (km):
	Weather:
	Cloud:
	Temperature/dewpoint:
	TEMPO Information:
	Light conditions: ❑ Day ❑ Twilight ❑ Night
	QNH:
	Obtained from:
Tick appropriate boxes stating other if relevant	**6 AIRFIELD DETAILS (complete only if relevant)**
	Airfield name: Runway used:
	ICAO Designator: Runway slope:
	Type of: ❑ Departure ❑ Approach Eg Visual, Radar, SID LVPs in force: ❑ Yes ❑ No
	Navigation aids used:
	Runway surface: ❑ Grass ❑ Asphalt ❑ Concrete ❑ Other
	Surface condition: ❑ Wet ❑ Damp ❑ Dry ❑ Contaminated ❑ Firm ❑ Soft
	7 FLIGHT CREW DETAILS

		Commander	Co-Pilot
	Name (including title):		
Delete as appropriate	Date of birth:	DD/MM/YYYY	DD/MM/YYYY
	Pilot flying:	PF / PNF	PF / PNF
Define 'Other' if appropriate	LICENCE: Type:	eg PPL / ATPL	eg PPL / ATPL
	Number:		
	Issuing Authority:	eg CAA/FAA/Other	eg CAA/FAA/Other
Enter valid until date	Valid until:	DD/MM/YYYY	DD/MM/YYYY
	MEDICAL: Class:		
	Valid until:	DD/MM/YYYY	DD/MM/YYYY
	Limitations:		
	RATINGS: Instrument Rating: Valid until: DD/MM/YYYY		Valid until: DD/MM/YYYY
	Type/Ratings:		
	Other:	eg FI / TRI etc	eg FI / TRI etc
	RECENCY: Licence Prof Check:	DD/MM/YYYY	DD/MM/YYYY
	Operator Prof Check:	DD/MM/YYYY	DD/MM/YYYY
	Annual Line Check:	DD/MM/YYYY	DD/MM/YYYY
	SEP/CRM:	DD/MM/YYYY	DD/MM/YYYY
	Company Qualifications:	eg ETOPS / LVP etc	eg ETOPS / LVP etc
Enter hours in hours and minutes	Hours: All types:	HH:MM	HH:MM
	All types PIC:	HH:MM	HH:MM
	On type:	HH:MM	HH:MM
	On type PIC:	HH:MM	HH:MM
	Last 90 days:	HH:MM	HH:MM
	Last 28 days:	HH:MM	HH:MM
	Last 24 hours:	HH:MM	HH:MM
	DUTY: Start of Duty Period (UTC):		
	Length of Preceding Rest Period:		

CAT AARF(OT) Part 1 Page 2 of 4

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)
Commercial Air Transport (CAT) (Cont)

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E mail
investigations@aaib.gov.uk

Aircraft Accident Report Form
Commercial Air Transport

Part 1

Air Accidents Investigation Branch

IMPORTANT Please enter numbers of all persons on board (including those not injured)	**8 INJURIES TO PERSONNEL** TOTAL PERSONS ON BOARD:

	None	Minor	Serious
Pilot in Command:			
Second Pilot:			
Cabin Crew:			
Passengers:			
Others:			

Tick damage type

9 SURVIVABILITY

9.1 Damage to cockpit area:
❑ Severe ❑ Moderate ❑ Minor ❑ None
Details (if relevant):

9.2 Damage to flight deck area:
❑ Severe ❑ Moderate ❑ Minor ❑ None
Details (if relevant):

Tick damage type and define 'Other' if appropriate

9.3 Evacuation
Exit(s) used by crew: ❑ Normal Exit ❑ Slide ❑ Other
Exits used by pax: ❑ Normal Exit ❑ Slide ❑ Other
Which emergency services attended: ❑ Police ❑ Fire ❑ Ambulance ❑ Air Ambulance
Other assistance provided by:

9.4 Emergency Equipment
Details of any items which failed:

9.5 Additional Comments:

List all airplane/engine damage

10 DAMAGE TO AIRCRAFT

11 DAMAGE TO OTHER PROPERTY

CAT AARF(OT) Part 1 Page 3 of 4

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)
Commercial Air Transport (CAT) (Cont)

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investigations@aaib.gov.uk

Aircraft Accident Report Form
Commercial Air Transport

Part 1

Air Accidents Investigation Branch

Thank you for completing Part 1 of this form, a copy of which will be sent to the Regulatory Authority for flight safety purposes.

In Part 2, you are asked to provide a sketch of the site and a narrative description of the accident. Any accompanying photographs and or documents will be returned, at your request, once the investigation is complete.

Part 2 will be treated as confidential and not released.

CAT AARF(OT) Part 1 Page 4 of 4

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)
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E mail:
investigations@aaib.gov.uk

Aircraft Accident Report Form
Commercial Air Transport

Part 2

Air Accidents Investigation Branch

	14 SKETCH OF ACCIDENT SITE
Show North and site elevation (amsl). If accident occurred on an airfield for which there is no published information, please provide as much detail as possible. Any photographs of the site and / or aircraft would greatly assist the investigation.	

CAT AARF(OT) Part 2 Page 1 of 2

Appendix J (Cont)

Examples of Overseas Territories Aircraft Accident Reporting Forms (AARF)
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Aircraft Accident Report Form
Commercial Air Transport

Part 2

Air Accidents Investigation Branch

15 NARRATIVE DESCRIPTION OF EVENTS

16 YOUR ASSESSMENT OF THE CAUSE

17 YOUR SIGNATURE

Name: Signature:

Status: Pilot in Command: ❑ Yes ❑ No

Address:

Tel:

Fax:

Post Code: Email

CAT AARF(OT) Part 2 Page 2 of 2

Notes

Notes

Notes

Notes

AAIB
Air Accidents Investigation Branch

AIRCRAFT ACCIDENT INVESTIGATION

in

THE UK OVERSEAS TERRITORIES

Department for Transport

Produced by the Air Accidents Investigation Branch
www.aaib.gov.uk
December 2009