

often speculate about what happened. For the next of kin, this can be very distressing.

The Chief Inspector attaches great importance to keeping the next of kin informed about the known facts of the investigation. They are therefore always welcome to talk to those conducting the investigation to learn of its progress. When appropriate, arrangements can be made to provide a private briefing to the next of kin and close family before the report is published.

Investigations into major disasters may involve the Group System of Investigation. In this case an Investigator-in-Charge (IIC) will coordinate the investigation, and investigation groups, each headed by an AAIB Inspector, will be formed to investigate specific aspects of the accident. Participating in these groups may be representatives of the Operator, Manufacturer, Regulator, Unions and other specialists. Accredited Representatives from the State of Manufacture, State of Registration and any other State with Special Interest, together with their advisors may also participate.

A report on the investigation can take several months to produce. It may be necessary to interview a wide range of individuals, cross-check evidence, examine suspect equipment and consult technical experts. Often the actual cause of an accident turns out to be very different from the convenient solution identified by the media in the immediate aftermath. The report will protect the anonymity of the persons involved and, if appropriate, contain safety recommendations. A draft copy of the report will be sent to the pilots, or their representatives, and to those persons or organisations whose reputations may be adversely affected. They will be allowed 28 days to make representations before the report is finalised.

A copy of the final report will be sent to those persons and organisations before it is published. Reports will also be made available on the AAIB internet web site on the day of publication at:

www.aaib.gov.uk

Inquiries or inquests into the accident

Her Majesty's Coroner or Procurator Fiscal (if the accident occurred in Scotland) normally hold an inquest or fatal accident inquiry for deaths occurring in unusual circumstances. These court proceedings can often occur many months after the accident and often attract renewed media interest. AAIB Inspectors prepare statements for the courts and are normally required to appear as expert witnesses. The Coroner's Officer, or Procurator Fiscal's office should be contacted on all matters relating to the Inquest or Fatal Accident Inquiry.

Inspectors investigating this accident are:

Operations:

Engineering:

FDR/CVR:

(Major Investigations only)

Investigator-in-Charge

Further questions?

If you need any further information on the progress of the investigation or on any other matter relating to the investigation, contact the Inspectors concerned at:

**Air Accidents Investigation Branch
Farnborough House
Berkshire Copse Road
Aldershot Hants
GU11 2HH**

**Telephone: 01252 510300
email: enquiries@aaib.gov.uk
Fax: 01252 376999**

**THE INVESTIGATION
OF ACCIDENTS OR
SERIOUS INCIDENTS
TO COMMERCIAL AIR
TRANSPORT AIRCRAFT**



THE INVESTIGATION OF ACCIDENTS OR SERIOUS INCIDENTS TO COMMERCIAL AIR TRANSPORT AIRCRAFT

The Air Accidents Investigation Branch

The Air Accidents Investigation Branch (AAIB), is an independent part of the Department for Transport. It is not part of the Civil Aviation Authority. It is responsible for the investigation of civil aircraft accidents and serious incidents occurring in or over the UK. It also assists in UK military accidents and investigations abroad. Its headquarters is at Farnborough in Hampshire.

Authority for the AAIB to investigate accidents originates from the Civil Aviation Act; Civil Aviation (Investigation of Air Accidents) Regulations.

The Chief Inspector of Air Accidents reports directly to the Secretary of State.

Why investigate?

The purpose of any investigation is to determine the circumstances and causes of the accident and to make safety recommendations, if necessary, with a view to the preservation of life and the avoidance of accidents in the future. It is not to apportion blame or liability. The AAIB is not a regulatory authority and cannot therefore enforce its recommendations.

When an accident occurs

As soon as the AAIB Duty Co-ordinator has been notified of an accident or serious incident his initial actions are to liaise with Air Traffic Control, the Aircraft Operator, Police, and Emergency Services to ensure that evidence associated with the occurrence is impounded and secured and to determine the level of the AAIB's response.

Normally three Air Accident Inspectors are dispatched to the scene to conduct the investigation. They specialise in Operations, Engineering and Flight Data Recording.

The Operations Inspector, an experienced professional pilot, will examine for example, flying procedures and techniques; human factors; aircraft performance; survivability; weather; airfields; air traffic control and witness information etc.

The Engineering Inspector, an experienced aeronautical engineer, will examine the aircraft

design; airworthiness; systems; engines; structure; failure and fault analysis; maintenance procedures, records and documentation etc.

The Flight Recorder Inspector, also an experienced aeronautical engineer, will examine data recorded on the Flight Data Recorder (FDR), Cockpit Voice Recorder (CVR) and other recorded information.

The powers of an Inspector

Inspectors have powers to take signed statements from anyone involved directly or indirectly with the accident. They can remove and retain all relevant books, papers, documents or articles and can have access to and inspect any place, building or aircraft for the purposes of completing their enquiries.

The investigation

The Field Phase of the investigation begins at the accident site.

The Engineering Inspectors are responsible for the examination of the aircraft or the wreckage and the safety of the scene. They will photograph and record all the evidence on the ground and later examine the aircraft technical records. They will also liaise closely with company maintenance personnel. They may arrange for the aircraft wreckage, components and other relevant material evidence to be removed and transported to the AAIB Headquarters at Farnborough, or some other secure area, where they can carry out further examination and testing. Wreckage not required for examination is the responsibility of the owner, the operating company or the insurers. Personal effects not relevant to the investigation will be handed to the police for safe custody.

The Operations Inspector will, if possible, obtain statements from the pilots, cabin crew, passengers and other relevant witnesses with a view to determining the sequence of events that led up to the accident.

The Inspectors may visit the airfield of departure and intended destination and take statements from officials who came in contact with the crew before

the flight. They will obtain records relating to the crew's training and experience and, if appropriate, company documents relating to the aircraft's operation. Data concerning airfield operations will be obtained if the accident has occurred during the takeoff, approach or landing phase of flight.

The Flight Recorder Inspectors will remove the FDR and CVR from the aircraft for replay and analysis. This will be conducted at the AAIB HQ and the recorders will be returned to the operator as quickly as possible. General flight parameters such as airspeed, altitude and heading as well as control inputs and detailed system data are recorded on the FDR. This information may be supplied to the operator and aircraft manufacturer to assist in the investigation.

The CVR records audio from the crew and cockpit area microphone. It records whenever there is power on the aircraft and has a typical duration of 30 minutes. Information from the CVR is confidential to the investigation team and is never released. The crew, however, are encouraged to visit the AAIB, where possible, to listen to the recording.

In some cases, where the pilots are fatally injured, the Inspectors will need to talk to the pilots' next of kin to learn about their background or to look at professional documents or certificates which might be kept at home. This will never be easy for either side but the Inspectors will always contact the families before visiting. Such meetings allow the next of kin to meet the Inspectors personally and question them about the handling and progress of the investigation.

When the Inspectors return to AAIB HQ they present their initial findings to the Chief Inspector of Air Accidents. The Chief Inspector then decides how the investigation will proceed and the form of report appropriate to the type and seriousness of the accident or incident.

When the cause of an accident involving loss of life is not readily apparent, people and the media