# AIRCRAFT ACCIDENT INVESTIGATION MANAGEMENT SYSTEM

## [INITIAL ISSUE]

AIRCRAFT ACCIDENT INVESTIGATION BUREAU OF MONGOLIA,
MINISTRY OF ROAD AND TRANSPORTATION

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## Approval Sheet

# Aircraft Accident Investigation Management System

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## FOREWORD

Pursuant to Mongolian Civil Aviation Act [Chapter 9], the Minister of Roads and Transportation shall appoint an Aircraft Accident Investigation Bureau (AAIB) to carry out investigations. The AAIB is responsible for the conduct of the accident investigation and one of the investigators will be appointed as the Director and General Investigator. The AAIB will consist of suitably qualified investigators depending on the scope and depth of the investigation.

Completion of an investigation for realization of the objectives of the investigation rests on a properly planned and managed accident investigation. The main groups of an investigation must be planned, so that the members of an investigation team are aware of their various tasks and have the appropriate qualification to perform them.

Therefore to plan and manage an investigation, there should be an Investigation Management System. This System consists of Flow Chart, Event Check List and Group Check List. As per the (Aircraft Accident Investigation Procedure Manual), Investigation checklist is a necessary and essential pre-departure requisite for the investigating team. The checklist consists of a number of events. The initial event of the checklist consists of essential items that should be completed prior to departure. Each event is numbered and has a responsible person. Each event contains a list of tasks. This allows the chief investigator to clearly indicate what is to be accomplished by both the investigator and the various groups, during the investigation. This will show the progress of the investigation and help to organize it.

The Aircraft Accident Investigation Management System is one of the fundamental tools to be used in a major investigation. The effectiveness of the system is directly related to how well each investigator adheres to the Flow Chart & the Check List

The investigators f investigation team may have to depend on the government officials such as local authorities, Security personnel, Police officers, judicial and medical personnel if necessary. These officials would be called upon by the investigator to assist as required.

Pursuant to ICAO Annex 13, the sole objective of an aircraft accident or incident investigation is to ensure the prevention of future accidents and incidents. It is not the purpose of an investigation to apportion blame or liability on any party, the emphasis is on remedial actions.

Comments or proposal for implementation of the procedures in this Management System are welcome. It is the onus of the Air Accident Investigation Bureau of Mongolia to update this System as and when necessary.

Director and General Investigator
Yo.Enkhtur

27 March 2015

## ABBREVIATIONS

| | |
|---|---|
| AAIB | - Aircraft Accident Investigation Bureau |
| Limited AFTN | - Aeronautical Fixed Telecommunications |
| Network AIU | - Accident Investigation Unit |
| ATS | - Air Traffic Services |
| ATS & A/P | - Air Traffic Services and Airport |
| AW | - Airworthiness |
| MCAA | -Mongolian Civil Aviation Authority |
| CVR | - Cockpit Voice Recorder |
| ETOPS | - Extended Twin Engine Operations |
| FDR | - Flight Data Recorder |
| G.L | - Group Leader |
| ICAO | - International Civil Aviation Organization |
| MMEL | - Master Minimum Equipment List |
| NOTAM | - Notice to Airmen |
| OPS | - Operations |
| PIREP | - Pilot Report |
| SOP | - Standard Operating Procedures |
| T.L | - Team Leader |

# DEFINITIONS

**Accident**

An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

(a) A person is fatally or seriously injured as a result of: Being in the aircraft, or
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 death or serious injury is from natural causes, is self-inflicted or is inflicted by other persons or when the death or serious injury is suffered by a stowaway hiding outside the areas normally available in flight to the passengers and members of the crew of the aircraft; or

(b) The aircraft sustains damage or structural failure which:
Adversely affect 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 a single engine (including its cowling or accessories), to propellers, wing tips, antennae, probes, vanes, tyres, brakes, wheels, fairings panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or

(c) The aircraft is missing or is completely inaccessible.

Note 1 - For statistical uniformity only, an injury resulting in death within thirty (30) days of the date of the accident is classified by ICAO as a fatal injury.

Note 2 - An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

**Accredited Representative**

A person designated by a State, on the basis of his or her qualifications, for the purpose of participation in an investigation conducted by another State. Where the State has established an accident investigation authority, the designated accredited representative would normally be from that authority.

**Aircraft**
Any machines that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

**Aircraft Accident Investigation Bureau**
The Accident Investigation Bureau appointed by the Authority in terms of Chapter 9 of the Mongolian Civil Aviation Act.

**Accident Investigation Unit**
Unit established in the AAIB of Mongolia to coordinate activities related to aircraft accident and incidents.

**Causes**
Actions, omissions, events, conditions, or a combination thereof, which led to the accident or incident. The identification of causes does not imply the assignment of fault or the determination of administrative, civil or criminal liability.

**Chief Investigator (Investigator – In- Charge)**
A person appointed by the Minister of Roads and Transportation of the Act to act as the Director and General Investigator of the Accident Investigation Bureau.

**Contracting State**
Any State, including Mongolia, which is party to the Chicago Convention on International Civil Aviation Authority, signed in 1990.

**Crew**
Includes every person employed or engaged in an aircraft in flight for the operation of the aircraft who is included in the General Declaration.

**Fatal injury**
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.

**Flight Recorder**
Any type of recorder installed in the aircraft for the purpose of complementing accident incident investigation.
Note:- See Annex 6, parts I, II and III for specifications relating to flight recorders.

**Incident**
An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operation.

Note: - The types of incidents which are main interest to the International Civil Aviation Organization for accident prevention studies are listed in the Accident f Incident Reporting Manual

**Investigation**
A process conducted for the purpose of accident prevention, which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and for contributing factors and, when appropriate, the making of safety recommendations.

Note: - nothing in the above definition is intended to preclude the functions of an investigator-in-charge being assigned to a commission or other body.

**Lead Investigator**
An Investigator of the Aircraft Accident Investigation Board, assigned by the Chief Investigator, to lead a team of investigators, or functions as the investigator-in-charge of a group, assigned to investigate in to a particular aspect of the investigation such as ;Operational, Airworthiness, Air Navigation Services, on-site investigation etc.

**Maximum mass**
Maximum certified take-off mass

**Operator**
A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

**Preliminary Report**
The communication used for the prompt dissemination of data obtained through the early stages of the investigation.

**Safety recommendation**
A proposal of an accident investigation authority, based on information derived from an investigation, made with the intention of preventing accidents or incidents and which in no case has the purpose of creating a presumption of blame or liability for an accident or incident. In addition to safety recommendations arising from accident and incident investigations, safety recommendations may result from diverse sources, including safety studies.

**Serious Incident**
An incident involving circumstances indicating that there was a high probability of an accident and is associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down.

**Serious injury**
An injury, which is sustained by a person in an accident and which;
(a) Requires hospitalization for more than 48 hours commencing within seven days from the date on which the injury was received; or
(b) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose); or
(c) Involves lacerations which cause nerve, muscle or tendon damage or severe hemorrhaged or
(d) Involves injury to any internal organ; or
(e) Involves second or third degree burns or any burns affecting more than five percent of the body surface; or
(f) Involves verified exposure to infectious substances or injurious radiation.

**State of Design**
The State having jurisdiction over the organization responsible for the type design.

**State of Manufacture**
The State having jurisdiction over the organization responsible for the final assembly of the aircraft.

**State of Occurrence**
The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

**State of Registry**
The State on whose register the aircraft is entered.

**The Authority**
The Civil Aviation Authority under the Act or Civil Aviation Authority of Mongolian Act /21 Jan 1999/, establishing the fundamental principles governing the investigation of civil aviation accidents and incidents.

# CHAPTER 1. GENERAL

Investigation of an accident or serious incident/incident must be properly planned and managed to achieve its purpose. The main parts of an investigation must be planned so that the members of an investigation team are aware of their various tasks and have the appropriate qualifications to perform them. The plan must also recognize that these tasks will be coordinated by the chief investigator (investigator-in-charge).

An accident investigation involving a large or complex aircraft will require a large team of investigators in order to conduct the investigation in the most effective and expeditious way. The effective utilization of the available investigators in a major investigation can be achieved by using the Aircraft Accident Investigation Management System. This system provides a tool for the management of a major aircraft accident investigation using the Group System of investigation. (ICAO Doc. 9620-ANfBSS Part II – Organization of Investigation).

This Investigation Management System divides the investigation activities into functional areas, each of which can be assigned to a group within the investigation team. Each investigation group will have as many members as are necessary to examine the particular circumstances of the accident. Members of an investigation group should normally have access to all information uncovered in the course of the investigation and are usually required to participate in the investigation until the group report is completed.

The investigation groups, that might be formed during a major investigation include: Documentation, Medical, human factors, structures, systems, power-plants, flight recorders, and meteorology and air traffic services airports. The circumstances and complexity of the accident will determine the number and types of groups required. The chief investigator should, in most cases, be the person responsible for communications with the accredited representatives from other States participating in the investigation in accordance with Annex 13 to the Convention.

## 1.1 Flow Chart

This is a chart of events, which should be completed in the course of investigation. Each event check list is numbered and has a corresponding descriptive phrase. The flow chart allows the investigators to ensure that the essential sequence of events is followed.

## 1.2 Event checklist

There are 66 event check lists. Each event checklist contains a list of tasks. These tasks must be accomplished before the event is considered completed. The Event number refers to Event shown on the Flow Chart and the Item number refers to the numbered activity on the Event Checklist. This method or referencing is necessary as more than one Group is engaged in activities related to one Event. Also included is a column entitled Data/Remarks.

The checklists are distributed among the Groups as appropriate. Checklists are provided to organize the activities of the investigation and each of the Groups investigating or attending to the subject matters. The checklists, aside from being part of the Investigation Management System, establish some order in what is often a confusing situation.

## 1.3 Application

The flow chart and the checklists help the team leaders and group leaders to organize the work of their teams and groups, and the flow chart provides the chief investigator with a tool to monitor progress.

At the initial organizational meeting, the Team Leader would distribute Group Checklists to Group Leaders. The Group Leader would be responsible to organize his group to accomplish the Tasks indicated and report the progress as required by the Team Leader. It is desirable that each Group Leader note the date of completion of Task, as he would be reporting this to the Team Leader on regular basis.

At the daily progress meetings, each Group Leader would report which tasks on their checklists have been completed by referring to the Event and Item numbers since their last report. Thus anyone who keeps a current Flow Chart will be aware of the progress of the investigation. The Aircraft Accident Investigation Management System is one of the fundamental tools to be used in a major investigation, and an investigator who is likely to be appointed chief investigator or team leader of a major investigation should be familiar with this system prior to attempting to use it in the field. The effectiveness of the system is directly related to how well each investigator adheres to the flow chart and the checklists.

## 1.4 Review and amendment procedure

This Manual is amended as and when required to meet the National, International and Industrial requirements. The amendments shall be effected in a timely manner whenever an amendment to Annex 13 is received. Individual or group comments are welcome to facilitate the updating and amending of this Manual. Such suggestions could lead to improve the standards of this Manual.

This Manual is declared as a control document of the Authority to be used by the Accident Investigators as a tool for the management of a major aircraft accident investigation. The Manual should be kept updated on a timely manner in accordance with the guidelines provided by ICAO Annexes, relevant documents and the same received through suggestions from any appropriate authority. The Authority will ensure that the investigators engaged in accident and serious incident investigation will use the latest amendment of this Manual distributed to them through a control process of distribution. Accident Investigation Unit will ensure updating the Manual on timely basis as per the above requirement and distribute the current Manual to the investigators.

# CHAPTER 2

# < Events&Checklists >

| **Event – 1 Initial Response - Program Assistant / Aircraft Accident Investigation** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Gather as much accident related information as practicable from the reporting source and relevant authorities;(ATC, Airport, Airlines)-(**Appendix-1**) | | |
| | • Operator, A/C Type and Registration Number | | |
| | • Type of flight and intended destination | | |
| | • Time occurred and location | | |
| | • No. of fatalities | | |
| | • Condition and location of crew members | | |
| | • Extent of Damage | | |
| | • Other | | |
| | * Hazardous Materials | | |
| | * Site considerations | | |
| 2 | Contact the local police or other authority responsible for site security to determine what actions have been taken and convey the requirements and intentions of the accident investigation authority; | | |
| 3 | As appropriate, advise the coroner, the attorney-general or the police of the requirements of the investigation authority regarding the recovery and handling of the human remains; | | |
| 4 | Determine from the operator if hazardous material, such as chemicals, explosives, biological and radioactive materials were carried on the aircraft; | | |
| 5 | Inform the technical staff as appropriately; | | |
| 6 | Determine the composition of the investigation team, taking onto account pre-assignments, such as a go-team; | | |
| 7 | Selection of staff and appointment of and Aircraft Accident Investigation Team | | |

| | | | |
|---|---|---|---|
| 8 | Make arrangements for travel, accommodation, and facilities required for meetings, briefings, etc.; | | |
| 9 | Complete and dispatch the notification to other States involved and ICAO as per Annex 13, Chapter 4 | | |
| 10 | Obtain appropriate maps and charts | | |
| 11 | Notify the Minister of Road and Transportation | | |
| 12 | Mobilize the Accident Investigation Team | | |
| | • Issue access permits, credentials (**Appendix-2**) | | |
| **Issued to** | | | |
| | | | |
| | | | |
| | • Car passes, drivers permits | | |
| **Issued to** | | | |
| | | | |
| | • Issue backpacks with essentials | | |
| **Issued to** | | | |
| | | | |
| | • Check inoculations<br>• Hepatitis B<br>• Yellow Fever<br>• Meningitis<br>• Typhoid<br>• Polio | | |
| | • Issue first aid kit | | |
| **Issued to** | | | |
| | • Issue tools as appropriate | | |
| **Issued to** | | | |
| | • Issue mobile phones with chargers, Laptop | | |
| | • Issue checklists | | |
| **Issued to** | | | |
| | | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 2. Initial actions at the site - Chief/Lead Investigator** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD □□ MMM □□□ Y Y Y Y □□□□ | **Start Time:** HH : MM (Local/UTC) □□□□ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Review the guarding arrangements and adjust the limits of the site as required; | | |
| 2 | Arrange for guarding of the site for the time period envisaged for the field investigation; | | |
| 3 | Obtain a briefing from the local authorities on actions taken at the site; | | |
| 4 | Make a preliminary survey of the site with the investigation team. | | |
| **Date:** DD □□ MMM □□□ Y Y Y Y □□□□ | **End Time:** HH :MM (Local/UTC) □□□□ | | **Signature:** |

| **EVENT – 3. Secure Operations Documents -Documentation Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Obtain and secure the following documents, as appropriate: | | |
| | **a)** From the Operator/ Company: | | |
| | • Air Operator Certificate; | | |
| | • Company Operations Manual; | | |
| | • Flight Manual (FM); | | |
| | • Flight crew and cabin crew members training records; | | |
| | • Aircraft Operating Manual (SOPs); | | |
| | • Copy of current cockpit checklists(Normal, abnormal and emergencies); | | |
| | • Pilot log books; | | |
| | • Pilots flight log; | | |
| | • Pilot flying schedule for the last 6 months; | | |
| | • Journey Log Book; | | |
| | • Minimum Equipment List (MEL); | | |
| | • Company dispatch logs; | | |
| | • Daily dispatch logs, including week prior to and day of accident; | | |
| | • Mass and Balance and Center of Gravity calculations for the accident flight and previous flight; | | |
| | • Passenger and freight manifest | | |
| | • Company and aircraft schedules; | | |
| | • Company Route Manual; | | |
| | • Refueling documentation; | | |

| | | | |
|---|---|---|---|
| | • Record of pertinent phone calls. | | |
| | **b)** From the pertinent Civil Aviation Authority: | | |
| | • Flight crew Personnel Licensing file; | | |
| | • Copy of approved Flight Manual (FM); | | |
| | • Copy of approved Minimum Equipment List (MEL); | | |
| | • Copy of MMEL; | | |
| | • Files on Chief Pilot, Chief Inspector, Cabin Crew, Chief Flight Engineer, and Chief of Maintenance; | | |
| | • Copy of in-flight inspections covering the last 6 months; | | |
| | • Documentation in support of applications for the Air Operator Certificate; | | |
| | • Copy of any authority Policy Letters which apply to the company; | | |
| | • Copy of the last company audit by the authority; | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | **Signature:** |

| **EVENT – 4. Human Remains Recovery - Medical Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Determine and obtain personnel for human remains recovery and preservation, such as pathologists, dentists, etc.; | | |
| 2 | Determine and obtain material resources for human remains recovery and preservation, such as vehicles, morgue facilities, etc.; | | |
| 3 | During the recovery, photograph the remains and record their location; | | |
| 4 | Prepare a plot of the locations of the human remains. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

**EVENT – 5. Eyewitness Interviews - Eyewitness Group Leader (OPS Team)**

| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) |
|---|---|---|

| Item No. | Task | Status | Remarks |
|---|---|---|---|
| 1 | Search for eye witnesses; | | |
| 2 | Interview eyewitnesses, at their location of observation, if feasible; | | |
| 3 | Take witnesses contacts and addresses; | | |
| 4 | Obtain photographs and videos taken by witnesses; | | |
| 5 | Develop an initial plot of aircraft flight path. | | |

| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | **Signature:** |
|---|---|---|

| **EVENT – 6. Flight Recorder Recovery – Flight Recorder Group Leader (AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Locate the flight recorders; | | |
| 2 | Photograph the flight recorders in situ; | | |
| 3 | Examine and record the condition of the flight recorders; | | |
| 4 | Recover the flight recorders; | | |
| 5 | Prepare the flight recorders for transportation; | | |
| 6 | Arrange for the timely and secure transport of the flight recorders to the playback facility; | | |
| 7 | Carry the flight recorders by hand to the readout facility. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

**EVENT – 7. Secure Weather Documents -Meteorology Group Leader (ATS Team)**

| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) |
|---|---|---|

| Item No. | Task | Status | Remarks |
|---|---|---|---|
| 1 | Determine where the flight crew obtained a weather briefing; | | |
| 2 | Interview the individual who provided the weather briefing; | | |
| 3 | Secure copies of briefings or documentation given to the flight crew; | | |
| 4 | Obtain and secure the following documents, as appropriate: | | |
| | • The actual and forecast weather conditions for the route, area, terminal, destination, alternate and site of the accident; | | |
| | • Hourly and special reports; | | |
| | • Weather radar reports; | | |
| | • Pilot reports (PIREP); | | |
| | • Surface observations, logs and records; | | |
| | • Precipitation records; | | |
| | • Barograph records; | | |
| | • Wind records; | | |
| | • Synoptic charts; | | |
| | • Upper air charts; | | |
| | • Runway Visual Range (RVR) records; | | |
| | • Radiosonde observations; | | |
| | • Satellite pictures; | | |
| | • Conditions of natural light and sunrise/sunset; | | |
| | •Special weather observations | | |
| | • Significant Meteorological information(Sigments) weather advisories; and | | |
| | •Witness weather reports | | |

| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | **Signature:** |
|---|---|---|

| EVENT – 8. Secure ATS and Airport Documents -ATS & AIP Group Leader (ATS Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Obtain and secure the following documents, as appropriate: | | |
| | • Flight plan; | | |
| | • Flight plan message; | | |
| | • Departure message; | | |
| | • NOTAMS; | | |
| | • Pertinent ATS tapes; | | |
| | • Aerodrome control progress strips; | | |
| | • Area control progress strips; | | |
| | • Approach control progress strips; | | |
| | • Approach terminal progress strips; | | |
| | • Radar recordings (including military recordings, if available); | | |
| | • Names and files of ATS personnel on duty; | | |
| | • Unit logs; | | |
| | • Pertinent manuals and directives; | | |
| | • Pertinent outage reports, | | |
| | • Airport certificate; | | |
| | • Airport certification safety standards / reports; | | |
| | • Braking action reports; | | |
| | • Master airport plan; | | |
| | • Station logs; | | |
| | • Equipment inspection documents; | | |
| | • Airport manager's log; | | |
| | • Names and files of airport personnel on duty. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 9. Search Operations – Search & Rescue Group Leader (ATS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Determine and record the following: | | |
| | • How and when the search operations were initiated; | | |
| | • What units or agencies participated in the search operations; | | |
| | • Search means and methods adopted, such as visual, electronic, infrared, etc.; | | |
| | • The environmental conditions at the time of the search, such as weather, ground or water conditions; | | |
| | • Any factors which facilitated or hindered the search effort; | | |
| | • The time at which the accident site was located. | | |
| 2 | Determine if the relevant search procedures were followed and whether these were adequate and proper; | | |
| 3 | Determine the adequacy of the search actions. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 10. Secure Pertinent Documents – Documentation Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Liaise with Operations, and Maintenance and Records Group Leaders to locate and secure the following documents: | | |
| | • Company Operations Manual; | | |
| | • Cabin crew training records; | | |
| | • Company / Aircraft SOPs; | | |
| | • Cabin crew log books; | | |
| | • Pilots flight log; | | |
| | • Cabin crew flying schedule (last 6 months); | | |
| | • Aircraft Journey Log; | | |
| | • Company dispatch logs; | | |
| | • Maintenance release forms; | | |
| | • Passenger and freight manifest; | | |
| | • Company Maintenance Control Manual | | |
| | • Company schedule; | | |
| | • Company Route Manual; | | |
| | • Record of pertinent phone calls; | | |
| | • Cabin crew Manual; | | |
| | • Cabin crew Emergency Manual; | | |
| | • Company approved aircraft Safety Announcements; | | |
| | • Company passenger safety briefings and video, if applicable; | | |
| | • Copy of approved Aircraft Flight Manual; | | |
| | • Copy of approved Minimum Equipment List (MEL); | | |
| | • Copy of company MMEL; | | |
| | • Cabin crew licensing and medical status; | | |

| | | | |
|---|---|---|---|
| | • Copy of any Civil Aviation Authority Policy Letters applicable to the company; | | |
| | • Copy of last company audit by Civil Aviation Authority; | | |
| | • Company files; | | |
| | • Civil Aviation Authority approved cabin crew training curriculum. | | |
| 2 | Locate and secure the following information: | | |
| | • The aircraft cabin furnishings; | | |
| | • Pre-flight servicing documents; | | |
| | • Snag rectification sheets; | | |
| | • Cabin related outstanding and recurring snags and unserviceabilities; | | |
| | • Cabin and freight configurations. | | |
| 3 | Obtain the autopsy results of cabin crew members and passengers; | | |
| 4 | Obtain a transcript of the cockpit voice recorder and conduct a preliminary review of the recorded information for cabin related factors. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** (Local/UTC) HH :MM ☐☐☐☐ | **Signature:** |

| **EVENT – 10. Secure Pertinent Documents – Documentation Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Liaise with Operations, and Maintenance and Records Group Leaders to locate and secure the following documents: | | |
| | • Company Operations Manual; | | |
| | • Cabin crew training records; | | |
| | • Company / Aircraft SOPs; | | |
| | • Cabin crew log books; | | |
| | • Pilots flight log; | | |
| | • Cabin crew flying schedule (last 6 months); | | |
| | • Aircraft Journey Log; | | |
| | • Company dispatch logs; | | |
| | • Maintenance release forms; | | |
| | • Passenger and freight manifest; | | |
| | • Company Maintenance Control Manual | | |
| | • Company schedule; | | |
| | • Company Route Manual; | | |
| | • Record of pertinent phone calls; | | |
| | • Cabin crew Manual; | | |
| | • Cabin crew Emergency Manual; | | |
| | • Company approved aircraft Safety Announcements; | | |
| | • Company passenger safety briefings and video, if applicable; | | |
| | • Copy of approved Aircraft Flight Manual; | | |
| | • Copy of approved Minimum Equipment List (MEL); | | |
| | • Copy of company MMEL; | | |
| | • Cabin crew licensing and medical status; | | |

| | | | |
|---|---|---|---|
| | • Copy of any Civil Aviation Authority Policy Letters applicable to the company; | | |
| | • Copy of last company audit by Civil Aviation Authority; | | |
| | • Company files; | | |
| | • Civil Aviation Authority approved cabin crew training curriculum. | | |
| 2 | Locate and secure the following information: | | |
| | • The aircraft cabin furnishings; | | |
| | • Pre-flight servicing documents; | | |
| | • Snag rectification sheets; | | |
| | • Cabin related outstanding and recurring snags and unserviceabilities; | | |
| | • Cabin and freight configurations. | | |
| 3 | Obtain the autopsy results of cabin crew members and passengers; | | |
| 4 | Obtain a transcript of the cockpit voice recorder and conduct a preliminary review of the recorded information for cabin related factors. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** (Local/UTC) HH :MM ☐☐☐☐ | **Signature:** |

| EVENT - 11. Secure Maintenance Documents -Documentation Group Leader (AW Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** (Local/UTC) | HH : MM |

| Item No. | Task | Status | Remarks |
|---|---|---|---|
| 1 | Obtain and secure the following documents, as appropriate: | | |
| | **a)** From the Operator / Company: | | |
| | • Air Operating Certificate; | | |
| | • Certificate of Airworthiness; | | |
| | • Certificate of Registration; | | |
| | • Aircraft Journey Log; | | |
| | • Aircraft Technical Log; | | |
| | • Maintenance Control Manual; | | |
| | • Maintenance Log; | | |
| | • Airframe Log; | | |
| | • Engine Log(s); | | |
| | • Propeller Log(s); | | |
| | • Pre-flight servicing; | | |
| | • Snag rectification sheets; | | |
| | • Airworthiness Directives records; | | |
| | • Standards and Procedures; | | |
| | • Quality manual; | | |
| | • Personnel and Training; | | |
| | • Equipment and Facilities; | | |
| | • ETOPS Maintenance Requirements (Annex 6, Attach. E); | | |
| | • Flight recorder files; | | |

| | | | |
|---|---|---|---|
| | • Major repairs or alterations; | | |
| | • Major work done by approved maintenance organization or sub- contractor; | | |
| | • Hazardous material cargo records; | | |
| | • International leasing arrangements; | | |
| | • Mandatory Occurrence Reporting (trend analysis); | | |
| | • System Difficulty Reporting (SDR). | | |
| | b) From the pertinent Civil Aviation Authority: | | |
| | • Technical Personnel Files; | | |
| | • Air Operating Certificate; | | |
| | • Aircraft File; | | |
| | • Copy of MMEL; | | |
| | • Maintenance Reliability Information on aircraft fleet; | | |
| | • Mandatory Occurrence Reporting; and | | |
| | • System Difficulty Reporting (SDR). | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 12. Examination of Systems -Systems Group Leader (AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Verify investigation of the following general list: | | |
| | • Hydraulic power; | | |
| | • Flight controls; | | |
| | • Ailerons; | | |
| | • Elevators; | | |
| | • Rudder; | | |
| | • Horizontal stabilizer; | | |
| | • Trims; | | |
| | • Flaps; | | |
| | • Speed brakes; | | |
| | • Spoilersflift dumpers; | | |
| | • Autopilot/stability augmentation/stall avoidance; | | |
| | • Landing gear/wheels/brakes; | | |
| | • Fuel; | | |
| | • Electric power distribution; | | |
| | • Electronics; | | |
| | • Ice and rain protection; | | |
| | • Pneumatics; | | |
| | • Instruments / Pilot - static / caution and warning (Light bulb analysis); | | |
| | • Navigation systems; | | |
| | • Communications; | | |
| | • Emergency Locator Transmitter (ELT); | | |
| | • Fire detection and protection; | | |
| | • Air conditioning and pressurization; | | |

| | | | |
|---|---|---|---|
| | • Oxygen; | | |
| | • Thrust reversers | | |
| 2 | Locate and identify all systems and components; | | |
| 3 | Record and photograph the systems and components prior to safeguarding; | | |
| 4 | Safeguard and deactivate hazardous systems and components; | | |
| 5 | Conduct a detailed examination of all systems and components, including flight controls, hydraulics, pneumatics, electrical, electronics, instruments, communication. | | |
| 6 | Navigation, air conditioning, pressurization, ice and rain detection, airframe, fuel, fire protection and oxygen; | | |
| 7 | Document all systems selections, indications, positions and condition; | | |
| 8 | Photograph in detail the components suspected of failure; | | |
| 9 | Determine the requirements for special handling of system computers to preserve memory; | | |
| 10 | Request special technical assistance, if required. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | | **Signature:** |

| **EVENT – 13. Examination of Structures – Structures Group Leader (AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Conduct an overall examination of the complete airframe, including the flight control surfaces; | | |
| 2 | Determine the involvement of the structure in the accident; | | |
| 3 | Select the components that require examination and testing; | | |
| 4 | Prepare detailed statements of requirements for examination and testing; | | |
| 5 | Assess the requirements for wreckage reconstruction. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

**EVENT – 14.Examination of Engine(s) and Propeller(s)–Power Plants Group Leader (AW TEAM)**

| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) |
|---|---|---|

| Item No. | Task | Status | Remarks |
|---|---|---|---|
| 1 | Locate engine(s) and verify make, model and serial number(s); | | |
| 2 | Record the position and the condition of the engine(s); | | |
| 3 | Determine the engine(s) pre- impact integrity; | | |
| 4 | Locate the propeller(s) and verify make, model and serial number(s); | | |
| 5 | Record the position and the condition of the propeller(s); | | |
| 6 | Determine the propeller(s) pre- impact integrity; | | |
| 7 | Locate and identify all major engine and propeller components, such as engine controls, auxiliary fuel, oil and coolant components, and instruments; | | |
| 8 | Record the position of engine and propeller controls, components and reading of related instruments; | | |
| 9 | Determine the controls, components and related instruments pre-impact serviceability; | | |
| 10 | Photograph engine(s), propeller(s), components, and instruments in situ; | | |
| 11 | Obtain oil and fuel samples; | | |
| 12 | Determine the power developed at impact, if feasible; | | |
| 13 | Select the engine(s), propeller(s) and components for examination and testing; | | |
| 14 | Prepare detailed statements of requirements for examination and testing. | | |

| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | **Signature:** |
|---|---|---|

| **EVENT – 15. Initial Survey of the Accident Site -Wreckage Distribution Plotting Group Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Determine the probable distribution of wreckage by cursory examination of angle of impact, speed and pre-impact integrity indications. | | |
| 2 | Delineate the area-requiring search. | | |
| 3 | Determine the method and intent of search for debris. | | |
| 4 | Determine the material and personnel resources required. | | |
| 5 | Obtain the material and personnel resources | | |
| 6 | Identify significant components | | |
| 7 | Mark and tag components. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| EVENT – 16. Site Photography Phase 1 — Photo/Video Group Leader (AW Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** (Local/UTC) | HH : MM |

| Item No. | Task | Status | Remarks |
|---|---|---|---|
| 1 | Establish photographic priorities; | | |
| 2 | Photograph the general wreckage from at least four directions; | | |
| 3 | Photograph human remains in situ in relation to other objects | | |
| 4 | Photograph easily perishable evidence such as ground impact marks, fire, etc | | |
| 5 | Photograph flight recorders in situ prior to removal | | |
| 6 | Photograph hazardous systems and components in situ prior to deactivation or removal; | | |
| 7 | Photograph the terrain and general impact area | | |
| 8 | Photograph the general components such as wings, engine(s), empennage, etc | | |
| 9 | Determine the requirements for photogrammetry. | | |
| 10 | Determine the requirements for aerial photography | | |
| 11 | Elaborate photo coverage of any suspect areas or components | | |
| 12 | Liaise with the Site Survey Group Chairperson for photographic requirements such as; | | |
| | • Significant ground features; | | |
| | • Point of initial impact; | | |
| | • Location of major components; | | |
| | • Ground fire areas | | |
| | • Serious property damage | | |
| | • Flight path to impact | | |
| | • Witness locations | | |

| | | | |
|---|---|---|---|
| 13 | In conjunction with the Operations Team Leader, photograph the cockpit environment with particular attention to: | | |
| | • Instruments | | |
| | • Position of controls | | |
| | • Switch positions | | |
| | • Circuit breaker panels | | |
| | • Radio settings | | |
| | • Automatic pilot setting | | |
| | • Fuel control positions | | |
| | • Pilot seats, seat belts, harness | | |
| 14 | Pilot seats, seat belts, harness Liaise with the Operations Team Leader and Systems Group Leader for additional specific photo requirements of the cockpit area; | | |
| 15 | Liaise with the Human Factors and Structures (Crashworthiness) Group Leaders for requirements for photos of items with possible design deficiencies such as: | | |
| | • Design/location of instruments | | |
| | • Design/location of controls | | |
| | • Work space incompatibility | | |
| | • Visual restriction due to structure | | |
| | • Lack of cockpit standardization | | |
| | • Personal equipment interference | | |
| | • Seat design/configuration | | |
| 16 | Liaise with the Human Factors and Structures (Crashworthiness) Group Leaders for photo requirements of: | | |
| | • Cabin environment | | |
| | • Unsecured interior equipment | | |
| | • Seats, seat structures | | |
| | • Belts, seat belt anchorages | | |
| | • Belt buckles | | |

| | | | |
|---|---|---|---|
| | • Cabin floor | | |
| | • Cargo restraint | | |
| | • Emergency exits | | |
| 17 | Liaise with the Structures (Crashworthiness) Group Leader for photo requirements of: | | |
| | • Terrain angle | | |
| | • Angle of impact | | |
| | • Width, length and depth of ground scars | | |
| | • Depth of damage to underside of aircraft | | |
| | • Compression of energy-attenuation devices | | |
| | • Initiation and propagation of fire | | |
| | • Smoke smears, soot, discoloration | | |
| | • Surface pitting | | |
| | • Evidence of explosion | | |
| 18 | Liaise with the ATS f Airports Group Leader for specific photo requirements of; | | |
| | • Runway or taxiway | | |
| | • Aerodrome layout | | |
| | • Obstructions to ATS controller vision | | |
| | • Aerial photo record of access routes | | |
| | • Tower cab layout | | |
| 19 | Liaise with the Power plants, Systems and Structures Group Leaders for specific photo requirements of selected aircraft components. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | **Signature:** |

| **EVENT – 17. Review of Operations Documents – Documentation Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 3 refers | | |
| 1 | Review all the documents obtained from the operator/company and summarize the pertinent information; | | |
| 2 | Review all the documents obtained from the civil aviation authority and summarize the pertinent information; | | |
| 3 | Compile in chronological order, the history for each flight crew member and for the operator. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | **Signature:** |

| **EVENT – 18. Crew Member Medical Examinations – Medical Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 4 refers | | |
| 1 | Obtain the list of flight and cabin crew members (names) | | |
| 2 | Determine the location and condition of the surviving flight crew members | | |
| 3 | Obtain the permission of crew members to submit to medical examination | | |
| 4 | Arrange for examinations of the flight crew members by a competent medical practitioner, including blood and urine samples, and obtain the following information: | | |
| | • Medical status and history including medications | | |
| | • Personal history including habits | | |
| | • Pre-flight activities with human factors significance | | |
| 5 | If relevant arrange for examination of the cabin crew members by a competent medical practitioner, including blood and urine samples, and obtain the following information: | | |
| | • Medical status and history including medications | | |
| | • Personal history including habits | | |
| | • Pre-flight activities with human factors significance | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 19. Plot Flight Path - Flight Path Plotting Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** (Local/UTC) HH : MM ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 5 refers. | | |
| 1 | Plot the aircraft flight path from eyewitness information showing: | | |
| | • Plot the aircraft flight path from eyewitness information; showing: | | |
| | • Aircraft flight direction, altitude and attitude; | | |
| | • Aircraft configuration, such as position of flaps, spoilers, gear, etc | | |
| | • Evidence of fire or explosion; | | |
| | • Evidence of structural failure; | | |
| | • Point of collision or impact; | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** (Local/UTC) HH :MM ☐☐☐☐ | | **Signature:** |

| EVENT – 20. Read out of Flight Recorders - Flight Recorder Group Leader (AW Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 6 refers. | | |
| 1 | Obtain the most recent calibration information from the Operator; | | |
| 2 | Playback the CVR and provide the Chief Investigator with an initial written precise of the information; | | |
| 3 | As applicable, produce the following: | | |
| | • a four channel copy tape; | | |
| | • a two-channel cassette copy tape for use by the investigator-in- charge; | | |
| 4 | Make a transcript of the CVR and transmit to the investigator-in-charge; | | |
| 5 | Contact the investigator-in- charge to determine the gross FDR requirements; | | |
| 6 | Playback the FDR and provide the Chief Investigator and the Operations Team Leader with the required initial data plots along with an appropriate written briefing; | | |
| 7 | Using crosschecks and data obtained from other Group Leaders, determine the reliability of the flight recorder data, and refine the FDR data and CVR transcripts; | | |
| 8 | Forward the refined information to the Chief Investigator, the Operations Team Leader and other designated Group Leaders ; | | |
| **Date:** DD MMM Y Y Y Y | | **End Time:** HH :MM (Local/UTC) | **Signature:** |

| **EVENT – 21. Review of Weather Documents – Meteorology Group Leader (ATS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 7 refers. | | |
| 1 | Review all the documents and summarize the pertinent information | | |
| 2 | Arrange for a qualified meteorologist to review and analyse all the documents | | |
| 3 | Consider the following hazardous phenomena; | | |
| | • Mountain wave effect; | | |
| | • Revolving storms | | |
| | • Severe turbulence | | |
| | • Freezing precipitation | | |
| | • Wind shear | | |
| | • Subsidence; | | |
| | • Electrical storms. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | **Signature:** |

| **EVENT – 22. Review ATS and Airport Documents - ATS & AlP Group Leader ( ATS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 8 refers. | | |
| 1 | Review all the documents obtained from the air traffic services and airport authorities, and summarize the pertinent information; | | |
| 2 | Make copies of the air traffic services tapes from original; | | |
| 3 | Make transcripts from the air traffic services tapes. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 23. Evacuation Operations - Search & Rescue Group Leader (ATS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 9 refers. | | |
| 1 | From information derived from survivors interviews and for the cockpit voice recorder, determine and record the following pre-accident actions: | | |
| | • General briefing of the passengers regarding the various safety and rescue equipment at their disposal, such as seat belt, oxygen supply, life jacket, etc.; | | |
| | • Member(s) of the crew who gave the briefing, time of the briefing, its intelligibility and audibility (pertinent language[s]) to all | | |
| | • Special instructions given regarding the removal of dangerous articles such as spectacles, ties, shoes; the tightening of seat belts; the cushioning of each | | |
| | • Special instructions regarding emergency exits, measures taken to free the access to all emergency exits; | | |
| | • Type of the emergency equipment available, such as portable fire extinguishers, axes, crow-bars, flashlights, first-aid kits, etc.; | | |
| | • Measures taken by the crew with respect to the emergency equipment; | | |
| | • Assistance provided by passengers, either requested, offered or given, and behavior and morale of the passengers prior to the accident. | | |
| | • Evaluate the crew training and implementation of emergency procedures, particularly by cabin crew members, as well as the adequacy of these procedures; | | |
| 2 | In the case of ditching, evaluate the following: | | |

| | | | |
|---|---|---|---|
| | • Special instructions on the location, donning and use of life jackets; | | |
| | • Action by the crew to ensure that each passenger had properly donned and adjusted the life jacket; | | |
| | • Precaution to have extra lifejackets available near the emergency exits; | | |
| | • Special instructions given to the passengers regarding which life raft, when and how to board after the ditching. | | |
| 3 | Determine the relationship to regulatory requirements of the following items and assess their adequacy: | | |
| | • Number, location and design of emergency exits | | |
| | • Presence of placards near each exit: | | |
| | • Clear and readable instructions on the operation of the opening mechanisms, including location and lighting; | | |
| | • Number and location of exits used, number of persons that used each exit, and reasons for not using a particular exit; | | |
| | • The emergency equipment used, such as portable extinguishers, axes, escape ropes, chutes, etc.; | | |
| | • Presence and effectiveness of instructions on how to use the equipment; | | |
| | • Adequacy and functioning of the equipment; | | |
| | • Additional equipment which would have been helpful. | | |
| 4 | The following information should be recorded: | | |
| | • Passengers injured in relation to their location; | | |
| | • Injuries sustained during the evacuation; | | |
| | • Help provided by the crew, passengers and third parties; | | |

| | | | |
|---|---|---|---|
| | • Time required to complete the evacuation, by exit if relevant; | | |
| | • Difficulties encountered such as: | | |
| | • Language problems | | |
| | • Presence of fire and smoke; | | |
| | • Failure of emergency lighting; | | |
| | • Abnormal position of aircraft; | | |
| | • Distance from the ground; | | |
| | • Aged, infirmed or infant passengers; | | |
| | • Injured passengers | | |
| | • Panic among passengers or crew; | | |
| | • Debris, including luggage. | | |
| | • In the case of ditching: | | |
| | • water conditions, such as roughness and temperature | | |
| | • light conditions | | |
| | • type and number of life jackets available | | |
| | • number of passengers inflating life jackets prior to egress; | | |
| | • effectiveness of life jackets; | | |
| | • difficulties in locating passengers | | |
| | • type and number of life raft use including position in the aircraft, difficulties in launching, inflating, locating and boarding; | | |
| | • Number of survivors in each raft | | |

| | | | |
|---|---|---|---|
| | • Adequacy of instructions on use of rafts and life-saving equipment. | | |
| 5 | Evaluate the effectiveness of the following: | | |
| | • Emergency escape hatches; | | |
| | • Emergency lights; | | |
| | • Fire extinguishers; | | |
| | • Fire extinguishing systems; | | |
| | • Fire detectors or alarms; | | |
| | • Megaphone | | |
| | • Oxygen Bottles; | | |
| | • Smoke Mask/Oxygen Bottle; | | |
| | • Smoke Hoods/Personal Breathing Equipment; | | |
| | • Flashlights; | | |
| | • Escape Tapes/Reels; | | |
| | • Vivopak/Physician's Kit; | | |
| | • Medical Kit | | |
| | • First Aid Kit; | | |
| | • Resuscitation Mask; | | |
| | • Protective Gloves; | | |
| | • Search Mirror; | | |
| | • Portable Radio Beacons. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | **Signature:** |

| **EVENT – 24. Review Pertinent Documents - Documentation Group Leader ( OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** (Local/UTC) HH : MM ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 10 refers. | | |
| 1 | Review all the documents obtained from the operator/company and summarize the pertinent information; | | |
| 2 | Review all the documents obtained from the civil aviation authority and summarize the pertinent information; | | |
| 3 | Compile in chronological order, the history for each cabin crew member and for the operator. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** (Local/UTC) HH :MM ☐☐☐☐ | | **Signature:** |

| **EVENT – 25. Review of Maintenance Documents - Documentation Group Leader ( AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 11 refers. | | |
| 1 | Review all the documents obtained from the operator/company and summarize the pertinent information; | | |
| 2 | Review all the documents obtained from the civil aviation authority and summarize the pertinent information; | | |
| 3 | Compile, in chronological sequence, the history of the powerplants, airframe and their major components complete with incorporated modifications; | | |
| 4 | List all outstanding power plant and airframe modifications | | |
| 5 | Record all outstanding and recurring snags and unserviceabilities; | | |
| 6 | Record all snags which may be related to the accident; | | |
| 7 | Summarize all irregularities | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 26. Examination and Testing – Systems Group Leader (AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 12 refers. | | |
| 1 | Select the components that require more detailed examination; | | |
| 2 | Prepare statements of requirements for examination and testing | | |
| 3 | Arrange for the transportation of selected components to a suitable location for the required examination and testing; | | |
| 4 | Arrange for investigators to be present at all examinations and testing. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 27. Fire and Explosion - Structures Group Leader (AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 13 refers. | | |
| 1 | Photograph all evidence having a direct bearing on the fire before the wreckage is removed; | | |
| 2 | Review maintenance and parts manuals to gain information on the aircraft structure and systems; | | |
| 3 | Review the following information; | | |
| | • Survivor statements | | |
| | • Eyewitness statements; | | |
| | • Type of cargo carried; | | |
| | • Quantity and type of fuel on board; | | |
| | • Air traffic services tapes; | | |
| | • Flight recorders information; | | |
| | • Pathological information for evidence of smoke or soot in the respiratory system, carbon monoxide or other toxic chemicals, and indications of in-flight explosion such as ruptured eardrums or penetration by small fragments. | | |
| 4 | Determine the requirements for expert technical assistance; | | |
| 5 | Prior to removal of fire extinguishing agent, consider all options in order to reduce destroying evidence; | | |
| 6 | Complete a wreckage diagram including burned areas; | | |
| 7 | Determine if the fire was in-flight or post-impact by reviewing the following: | | |
| | • Survivor and eyewitness evidence | | |

| | | | |
|---|---|---|---|
| | • Cockpit configuration; | | |
| | • Mishap circumstances; | | |
| | • In-flight fire effects; | | |
| | • Ground fire effects; | | |
| | • Crash dynamics, such as location of burned parts with respect to burn areas; | | |
| | • Impact effects | | |
| 8 | Determine if there was an in-flight explosion by the presence of: | | |
| | • Omni directional fire pattern; | | |
| | • "Opening up" effect; | | |
| | • Unusual damage to heavy structures; | | |
| | • Fragmentation of structures; | | |
| | • High-speed penetration by fragments | | |
| 9 | Reconstruct the area where the in-flight fire or explosion is suspected; | | |
| 10 | Determine the point or area of origin, fuel type and ignition source. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 28. Examination and Testing - Power Plants Group Leader (AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | DD MMM Y Y Y Y<br>**Date:** ☐☐ ☐☐☐ ☐☐☐☐ | **Start Time:** HH : MM<br>(Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 14 refers. | | |
| 1 | Forward engine(s), propeller(s), components and instruments to the appropriate testing facilities; | | |
| 2 | Arrange for investigators to be present at all examinations and testing; | | |
| 3 | Monitor and photograph all phases of examinations and testing; | | |
| 4 | Determine if power was being developed at impact; | | |
| 5 | Select components for further examination and testing; | | |
| 6 | Interview witnesses with power plant information; | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM<br>(Local/UTC) ☐☐☐☐ | | **Signature:** |

| EVENT – 29. Wreckage Distribution Plotting - Wreckage Distribution Plotting Group Leader (AW TEAM) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 15 refers. | | |
| 1 | Plot wreckage distribution to include: | | |
| | • Significant ground features; | | |
| | • Point of initial impact; | | |
| | • Location of major components and pieces; | | |
| | • Impact direction; | | |
| | • Ground fire areas; | | |
| | • Ground scars; | | |
| | • Indication of serious property damage; | | |
| | • Witness locations. | | |
| 2 | Determine the flight path form the first contact with a ground object, to ground contact, to rest; | | |
| 3 | In a mid-air collision, reconstruct the path by using trajectory analysis based on radar plots, flight recorder data and witness statements. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 30. Site Photography Phase 2 - Photo/Video Group Leader (AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 16 refers. | | |
| 1 | Photograph wreckage recovery operations; | | |
| 2 | Photograph re-assembly operations (if applicable); | | |
| 3 | Photograph engine tear down operations (if applicable); | | |
| 4 | Photograph components under examination and testing; | | |
| 5 | Provide analysis of photo/video evidence. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 31. Flight Crew Members Interview – Aircraft Performance Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 3 and 17 refers. | | |
| 1 | Obtain and review flight crew statements; | | |
| 2 | Conduct individual interviews. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 32. Victim Identification - Medical Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 4 and 18 refers. | | |
| 1 | Collaborate with the coroner and police authorities in the identification of victims; | | |
| 2 | As appropriate, assist in providing victim identification information such as:<br>wallets, clothing, jewellery, age, sex, face, complexion, colour of hair and eyes, height, weight, dental records, scars, growths, skeletal deformities, medical disorders, tattoos, blood group, identification tags, and medical files. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 33. Interviews of Next of Kin - Operations Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Event 5 and 19 refers. | | |
| 1 | Complete interviews of next of kin of crew members, covering: | | |
| | • Personal habits; | | |
| | • Personal background; | | |
| | • Current medication; | | |
| | • Psychological problems. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 34. Analysis of Flight Recorders Data - Flight Recorder Group Leader (AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | DD MMM Y Y Y Y<br>**Date:** ☐☐ ☐☐☐ ☐☐☐☐ | **Start Time:** HH : MM<br>(Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 6 and 20 refer. | | |
| 1 | In concert with designated group Leaders and assigned specialists, conduct a detailed examination of the flight recorders information; | | |
| 2 | In coordination with the Eyewitness Group, reconstruct the flight path. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** HH :MM<br>(Local/UTC) ☐☐☐☐ | **Signature:** |

| **EVENT – 35. Interviews - Air Traffic Services Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 7 and 21 refer. | | |
| 1 | Conduct interviews of witnesses, such as: | | |
| | • Eye witnesses; | | |
| | • Other flight crews; | | |
| | • Weather forecasters or observers | | |
| | • Weather broadcasters. | | |
| 2 | Review and assess personnel qualifications | | |
| 3 | Determine the accuracy of weather measuring equipment | | |
| 4 | Update the cross sectional weather profile. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| EVENT – 36. Interviews - ATS & Airport Group Leader (ATS Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 8 and 22 refer. | | |
| 1 | Conduct interviews with those persons directly involved with the aircraft progress, such as: | | |
| | • Ground Controller; | | |
| | • Tower Controller; | | |
| | • Area Controller; | | |
| | • Terminal Controller; | | |
| | • Radio Station Operator; | | |
| | • Radar Operator; | | |
| | • Other flight crews who may have rendered assistance; | | |
| | • Other flight crews who may provide pertinent information on in-flight conditions, aircraft communications and serviceability of radio aids; | | |
| | • Airport manager; | | |
| | • Other airport personnel. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 37. Rescue Operations – Search & Rescue Group Leader (ATS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** (Local/UTC) HH : MM ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 9 and 23 refer. | | |
| 1 | Determine and record the following: | | |
| | • Time and means of alerting rescue units, such as alarm bells, telephone, etc.; | | |
| | • First instructions given to rescue units, by whom and by what means; | | |
| | • Number and location of rescue vehicles by type on standby and in reserve, including manpower and equipment; | | |
| | • Access roads to the site; | | |
| | • Environmental conditions during the rescue operations; | | |
| | • Communications equipment on the various vehicles; | | |
| | • Time at which the rescue units arrived on site; | | |
| | • Difficulties in locating the site and bringing the injured out of the wreckage; | | |
| | • The means and personnel providing first medical assistance; | | |
| | • The arrangements to transport the injured to medical facilities, and adequacy of medical services available; | | |
| | • Time at which the rescue operations were completed; | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** (Local/UTC) HH :MM ☐☐☐☐ | | **Signature:** |

| **EVENT – 38. Cabin Condition - Cabin Group Leader (OPS Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 10 and 24 refer. | | |
| 1 | Review and record (in situ) condition of: | | |
| | • General cabin interior; | | |
| | • Cabin structure; | | |
| | • Floor structure; | | |
| | • Aircraft doors; | | |
| | • Air stairs; | | |
| | • Emergency exits; | | |
| | • Breaches of cabin structure; | | |
| | • Passenger seats; | | |
| | • Seat pitch for each class; | | |
| | • Aisle width; | | |
| | • Flight attendant seats; | | |
| | • Seat belts (passengers & flight attendants); | | |
| | • Overhead bins; | | |
| | • Galleys, including controls and circuit breaker positions; | | |
| | • Trolleysfcarts; | | |
| | • PA system, including controls and circuit breaker positions | | |
| | • Life preservers; | | |
| | • Seat bottom cushions; | | |
| | • Safety features cards; | | |
| | • Evacuation alarm system; | | |

| | | | |
|---|---|---|---|
| | • Emergency equipment: | | |
| | • Fire extinguisher(s); | | |
| | • Fire axe; | | |
| | • Megaphone; | | |
| | • Oxygen bottles; | | |
| | • Smoke mask/oxygen bottle; | | |
| | • Smoke hoods; | | |
| | • Flashlights; | | |
| | • Escape tapes/reels; | | |
| | • Vivopak/ physician's kit; | | |
| | • Medical kit; | | |
| | • First aid kit; | | |
| | • Resuscitation mask; | | |
| | • Protective gloves; | | |
| | • Search mirror | | |
| | • Portable radio beacons; | | |
| | • Cabin baggage; | | |
| | • Floor level lights; | | |
| | • Seat blocking. | | |
| 2 | Determine the passenger/freight configuration. | | |
| **Date:** DD MMM Y Y Y Y | | **End Time:** HH :MM (Local/UTC) | **Signature:** |

| **EVENT – 39. Interviews - Airworthiness Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 11 and 25 refer. | | |
| 1 | Identify personnel to be interviewed; | | |
| 2 | Coordinate the interviews with other group leaders; | | |
| 3 | Prepare questions; | | |
| 4 | Conduct the interviews; | | |
| 5 | Review and examine interviews for areas of conflict, errors and inconsistencies. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 40. Interviews - Airworthiness Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | DD MMM Y Y Y Y<br>**Date:** ☐☐ ☐☐☐ ☐☐☐☐ | **Start Time:** HH : MM<br>(Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 12 and 26 refer. | | |
| 1 | Identify personnel to be interviewed; | | |
| 2 | Coordinate the interviews with other group leaders | | |
| 3 | Prepare questions; | | |
| 4 | Conduct the interviews; | | |
| 5 | Review and examine interviews for areas of conflict, errors and inconsistencies. | | |
| **Date:** DD MMM Y Y Y Y ☐☐ ☐☐☐ ☐☐☐☐ | **End Time:** HH :MM<br>(Local/UTC) ☐☐☐☐ | | **Signature:** |

| EVENT – 41. Crashworthiness - Structures Group Leader (AW Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 13 and 27 refer. | | |
| 1 | Determine the requirement of mechanical or aeronautical engineering assistance; | | |
| 2 | Assess the volume of livable space remaining within the occupied section of the aircraft after impact forces had dissipated; | | |
| 3 | Determine the volume of livable space which may have been compromised during the occurrence sequence, since ductile materials can rebound after impact forces leaving no traces of their invasion of livable space; | | |
| 4 | Determine the space between seats and aircraft structures, such as instrument panel, control column, seat backs, trays, galley, etc. which may have contributed to the nature and extent of injuries; | | |
| 5 | Determine if the container was penetrated by objects from outside the aircraft; | | |
| 6 | Determine the effects of unsecured interior aircraft equipment or cargo acting as missiles, such as serving carts, oxygen bottles, etc.; | | |
| 7 | Determine the effects of passenger luggage on livable space; | | |
| 8 | Assess the adequacy of walkways and exits; | | |
| 9 | Record the original seating position of deceased passengers and positions where bodies came to rest after the accident; | | |
| 10 | Record the type of seat belt, seat belt anchorage, shoulder harness and anchorage, seat structure and anchorages, and floor installed in the aircraft; | | |
| 11 | Record the damage to each of the items in task 10 above; | | |
| 12 | Record the effects of webbing material on the nature and extent of injuries, such as cotton/rayon, nylon, etc., and their - flammability, elasticity, and adjustment buckle slippage; | | |

| | | | |
|---|---|---|---|
| 13 | Record the type and load-limiting adequacy of cargo restraints, such as nets, lines and pallets; | | |
| 14 | Record the seat geometry for structural strength and energy absorption properties; | | |
| 15 | Record the seat cushions energy absorption properties and flammability; | | |
| 16 | Assess the adequacy of seat belt, seat belt anchorage, shoulder harness and anchorage, seat structure and anchorages, and floor installed; | | |
| 17 | Assess the effects of the cockpit and cabin environment on occupant survivability; | | |
| 18 | Record the following basic data for the determination of energy absorption: | | |
| | • Terrain angle; | | |
| | • Flight path angle; | | |
| | • Angle of impact; | | |
| | • Crash force resultant; | | |
| | • Crash force angle; | | |
| | • Aircraft attitude at impact | | |
| 19 | Record the width, length, depth and orientation of all gouge marks; | | |
| 20 | Record the depth of damage to the underside of aircraft, extent of compression of energy-attenuation devices; | | |
| 21 | Record the horizontal stopping distances, length of airframe compression in the horizontal plane, backward displacement of each wing and empennage surfaces; | | |
| 22 | Determine the direction, magnitude and duration of G-forces; | | |
| 23 | Determine the acceleration forces experienced by the aircraft occupants; | | |
| 24 | Estimate the impact forces survivability potential. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| EVENT – 42. Aircraft Performance - Aircraft Performance Group Leader (OPS Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** (Local/UTC) HH : MM | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 3, 17 and 31 refer. | | |
| 1 | Collect all information affecting aircraft performance, and review: | | |
| | • Flight crew and passenger | | |
| | • Air traffic services and cockpit voice recorder tapes; | | |
| | • Flight data recorder plots; | | |
| | • Eyewitness interviews; | | |
| | • Weather data; | | |
| | • Engine performance findings; | | |
| | • Structures findings; | | |
| | • Systems findings. | | |
| 2 | For take-off or landing phase accidents, the following basic information is required: | | |
| | • Aircraft gross weight; | | |
| | • Aircraft configuration; | | |
| | • Airfield elevation; | | |
| | • Temperature; | | |
| | • Pressure and density altitudes; | | |
| | • Wind direction and velocity; | | |
| | • Runway slope; | | |
| | • Runway surface(type and braking action); | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** (Local/UTC) HH :MM | | **Signature:** |

| EVENT – 43. Autopsies - Medical Group Leader (OPS Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 4, 18 and 32 refer. | | |
| 1 | Collaborate with the coroner and police authorities regarding the autopsy requirements, and specify a list of essential tissue and fluid specimens to be collected; | | |
| 2 | Request autopsies of the flight crew members, including the determination of the cause of death and the presence of any pre-existing disease; | | |
| 3 | Request autopsies of the cabin crew members and passengers, including the cause of death and the presence of any pre-existing disease; | | |
| 4 | For each flight crew and cabin crew member obtain the following information: | | |
| | • Position in the aircraft at impact and evidence of activity; | | |
| | • Position relative to angle of impact (to establish direction of forces on bodies); | | |
| | • Evidence of injury, incapacitation or any physiological or toxicological irregularities prior to impact; | | |
| | • Pre-impact physical or emotional stress; | | |
| | • Pre-impact impairment from disease, injury or abnormality; | | |
| | • Pre-impact impairment from alcohol, drugs, carbon monoxide, or toxic substances; | | |
| | • Pre-impact exposure to explosion and fire; | | |
| | • Adequacy of restraint systems. | | |
| 5 | If feasible, for each passenger obtain the following information: | | |
| | • Position relative to angle of impact (to establish direction of forces on bodies); | | |

| | | | |
|---|---|---|---|
| | • Pre-impact injury of any kind; | | |
| | • Pre-impact exposure to explosion, fire, carbon monoxide, or toxic substances; | | |
| | • Physiological or toxicological irregularities; | | |
| | • Adequacy of seat belts. | | |
| 6 | Obtain the autopsy reports. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 44. Re-interviews - Operations Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 5, 19 and 33 refer. | | |
| 1 | Compile a list of witnesses to be re-interviewed; | | |
| 2 | Prepare questions; | | |
| 3 | Re-interview witnesses. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| EVENT – 45. Navigation Aids and Airport Status - ATS & Airport Group Leader (ATS Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 8, 22 and 36 refer. | | |
| 1 | Obtain the appropriate navigation and approach charts; | | |
| 2 | Request ground and flight checks of pertinent navigation and approach aids for: | | |
| | • Location (geographic coordinates); | | |
| | • Identification signal; | | |
| | • Power output and supply; | | |
| | • Emergency equipment; | | |
| | • Radiation pattern; | | |
| | • Normal level of performance; | | |
| | • Interference(s). | | |
| 3 | Review: - Operating and maintenance schedules; | | |
| | • Past complaints; | | |
| | • Serviceability status. | | |
| 4 | Examine status of airport and associated facilities, such as: | | |
| | • Runway in use; | | |
| | • Apron and taxiways; | | |
| | • Lighting; | | |
| | • Rescue and fire fighting services; | | |
| | • Station logs; | | |
| | • Equipment inspection documents. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| EVENT – 46. Fire Fighting Operations - Search & Rescue Group Leader (ATS Team) | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 9, 23 and 37 refer. | | |
| 1 | This aspect of the investigation should, if applicable, be conducted in cooperation with the Structures Group responsible for investigating the initiation and spread of the fire; | | |
| 2 | Determine and record the following: | | |
| | • Time and means of alerting the various fire fighting units; | | |
| | • First instructions given and how; | | |
| | • Number of vehicles by type on stand-by and in reserve; | | |
| | • Type, quantity and rate of discharge of extinguishing agents; | | |
| | • Special tools, axes, crow-bars, powered tools, etc.; | | |
| | • Personnel available on each vehicle and their equipment; | | |
| | • Location of the various fire fighting units which participated; | | |
| | • Route taken to the site by each vehicle and adequacy of the access roads; | | |
| | • Environmental conditions, such as weather, terrain, ground or water conditions; | | |
| | • Communications capabilities of each vehicle; | | |
| | • Time at which the fire fighting vehicles arrived at the site; | | |
| | • Difficulties encountered such as: | | |
| | • locating the site; | | |

| | | | |
|---|---|---|---|
| | • reaching the wreckage; | | |
| | • lack or poor detail of charts; | | |
| | • inadequately trained personnel; | | |
| | • intensity of the fire; | | |
| | • wind direction and strength; | | |
| | • temperature; | | |
| | • availability of water, | | |
| | • control and supervision; | | |
| | • precautionary measures taken to prevent a spreading or restart of the fire; | | |
| | • time at which the fire was under control and completely extinguished; | | |
| | • Training and Standards of rescue and fire fighting personnel. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| EVENT – 47. Interviews - Operations Team Leader | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |

| Item No. | Task | Status | Remarks |
|---|---|---|---|
| | Events 10, 24 and 38 refer. | | |
| 1 | All cabin crew members should provide a written statement prior to the interview; | | |
| 2 | The cabin crew members should be questioned from a list of prepared questions covering: | | |
| | • General details of the operation; | | |
| | • Phase of flight at time of accident; | | |
| | • Weather conditions at time of accident; | | |
| | • Serviceability of aircraft; | | |
| | • Flight attendant's flying background and experience; | | |
| | • Crew rest periods; | | |
| | • Movements last 24 hours, 72 hours; | | |
| | • Post accident activities, such as physical condition, evacuation, etc.; | | |
| | • Any other question pertinent the circumstances. | | |
| 3 | This interview could be followed at a latter date by a more in- depth interview during which elements critical to the investigation should be discussed in detail; | | |
| 4 | Interview witnesses with cabin safety information; | | |
| 5 | Interview next of kin, company representatives and civil aviation authority personnel; | | |
| 6 | Interview as many passengers as possible; | | |
| 7 | If required, questionnaires to surviving passengers not interviewed | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 48. Maintenance Management - Airworthiness Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 11, 25 and 39 refer. | | |
| 1 | Review the following maintenance management aspects; | | |
| | • Standards and procedures; | | |
| | • Quality assurance programs; | | |
| | • Equipment and facilities; | | |
| | • Personnel and training. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 49. Wreckage Reconstruction - Structures Group Leader (AW Team)** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 13, 27 and 41 refer. | | |
| 1 | Select a suitable re-assembly area; | | |
| 2 | Determine the method of reconstruction; | | |
| 3 | Obtain the personnel and material resources; | | |
| 4 | Complete the re-assembly; | | |
| 5 | Photograph the re-assembly operations; | | |
| 6 | Interview witnesses; | | |
| 7 | Select components for examination and testing, if required. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT – 50. Analysis and Report of Operations Group - Operations Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 3, 17, 31and 42 refer. | | |
| 1 | Complete required company/operator interviews; | | |
| 2 | Complete interviews of Civil Aviation Authority personnel; | | |
| 3 | Review information from other groups; | | |
| 4 | Review, evaluate and analyse all information collected; | | |
| 5 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| EVENT – 51.Analysis and Report of Human Factors Group - Operations Team Leader | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 4, 18, 32 and 43 refer. | | |
| 1 | Assemble the medical data; | | |
| 2 | Review witnesses statements; | | |
| 3 | Review, evaluate and analyse all information collected; | | |
| 4 | Prepare the group report using the following headings and sub- headings:<br>**Crew: -**personal history, including habits; | | |
| | • medical status and history, including current medication; | | |
| | • pre-flight activities having human factors significance; | | |
| | • physiological, psychological and toxicological irregularities; | | |
| | • incapacitation or injury prior to impact; | | |
| | • position in aircraft and crew activity at impact; | | |
| | • position of members relative to angle of impact; | | |
| | • injuries resulting from the accident. | | |
| | **Passengers**: **-**pre-accident physiological conditions; and injuries result from the accident. | | |
| | **Human Engineering: -** instrumentation, controls, autopilot, crew seats, armrests, and other fatigue-combating devices. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT -52. Analysis and Report of Witness Group - Operations Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** (Local/UTC) HH : MM ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 5, 19, 33 and 44 refer. | | |
| 1 | For ease of reference and if the number of interviews warrants, summarize each interview and attach a precise of the interview to the front of each interview record. Such a precise should also contain an assessment of thecredibility of the information; | | |
| 2 | Prepare a matrix of witness testimonies which highlights critical issues; | | |
| 3 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** (Local/UTC) HH :MM ☐☐☐☐ | | **Signature:** |

| **EVENT -53. Analysis and Report of Flight Recorders Group - Airworthiness Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | DD MMM Y Y Y Y<br>**Date:** ☐☐ ☐☐☐ ☐☐☐☐ | **Start Time:** HH : MM<br>(Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 6, 20 and 34 refer. | | |
| 1 | Review, evaluate and analyse all information collected; | | |
| 2 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD MMM Y Y Y Y ☐☐ ☐☐☐ ☐☐☐☐ | **End Time:** HH :MM<br>(Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT -54. Analysis and Report of Weather Group - Air Traffic Services Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 7, 21 and 35 refer. | | |
| 1 | Review, evaluate and analyse all information collected; | | |
| 2 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT -55.Analysis and Report of ATS and Airport Group - Air Traffic Services Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 8, 22, 36 and 45 refer. | | |
| 1 | Review, evaluate and analyse all information collected; | | |
| 2 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | **Signature:** |

| **EVENT -56. Analysis and Report of Survivability Group - Air Traffic Services Team** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 9, 23, 37 and 46 refer. | | |
| 1 | Review, evaluate and analyse all information collected; | | |
| 2 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT – 57. Analysis and Report of Cabin Safety Group - Operations Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 10, 24, 38 and 47 refer. | | |
| 1 | Review, evaluate and analyse all information collected; | | |
| 2 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

**EVENT-58. Analysis and Report of Maintenance and Records Group – Airworthiness Team Leader**

| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ |
|---|---|---|

| **Item No.** | **Task** | **Status** | **Remarks** |
|---|---|---|---|
| | Events 11, 25, 39 and 48 refer. | | |
| 1 | Review, evaluate and analyse all information collected; | | |
| 2 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT-59. Analysis and Report of Systems Group – Airworthiness Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 12, 26 and 40 refer. | | |
| 1 | Review, evaluate and analyse all information collected; | | |
| 2 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

| **EVENT-60. Analysis and Report of Structures Group – Airworthiness Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events13, 27, 41 and 49 refer. | | |
| 1 | Review, evaluate and analyse all information collected; | | |
| 2 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT-61. Analysis and Report of Power Plants Group – Airworthiness Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | DD MMM Y Y Y Y<br>**Date:** ☐☐ ☐☐☐ ☐☐☐☐ | **Start Time:** HH : MM<br>(Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events14and28refer. | | |
| 1 | Assemble examination and testing data; | | |
| 2 | Review, evaluate and analyse all information collected; | | |
| 3 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD MMM Y Y Y Y ☐☐ ☐☐☐ ☐☐☐☐ | **End Time:** HH :MM<br>(Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT-62. Analysis and Report of Site Survey Group - Airworthiness Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 15 and 29 refer. | | |
| 1 | Review, evaluate and analyse all information collected; | | |
| 2 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | **Signature:** |

| **EVENT-63. Analysis and Report of Site Survey Group - Airworthiness Team Leader** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| | Events 16 and 30 refer. | | |
| 1 | Complete photo and video requirements; | | |
| 2 | Review, evaluate and analyse all information collected; | | |
| 3 | Prepare and submit group report to the Chief Investigator. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT-64. Operations Analysis and Findings –Chief / Lead Investigator** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | This event should be chaired by the Chief Investigator with the following group chair persons attending: | | |
| | • Operations; | | |
| | • Human factors; | | |
| | • Witness; | | |
| | • Flight recorders; | | |
| | • Meteorology; | | |
| | • ATS/Airport; | | |
| | • Survivability; | | |
| | • Cabin safety; | | |
| | • Other parties, as dictated by local regulations and procedures. | | |
| 2 | Review all group findings to determine adequacy of information, areas of conflict, errors and in consistencies; | | |
| 3 | Identify the areas requiring clarification; | | |
| 4 | Determine the procedure for achieving clarification; | | |
| 5 | Complete operations analysis and determine findings with Assistance from Technical Groups; | | |
| 6 | Identify safety hazards and deficiencies; | | |
| 7 | Suggest safety recommendations. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

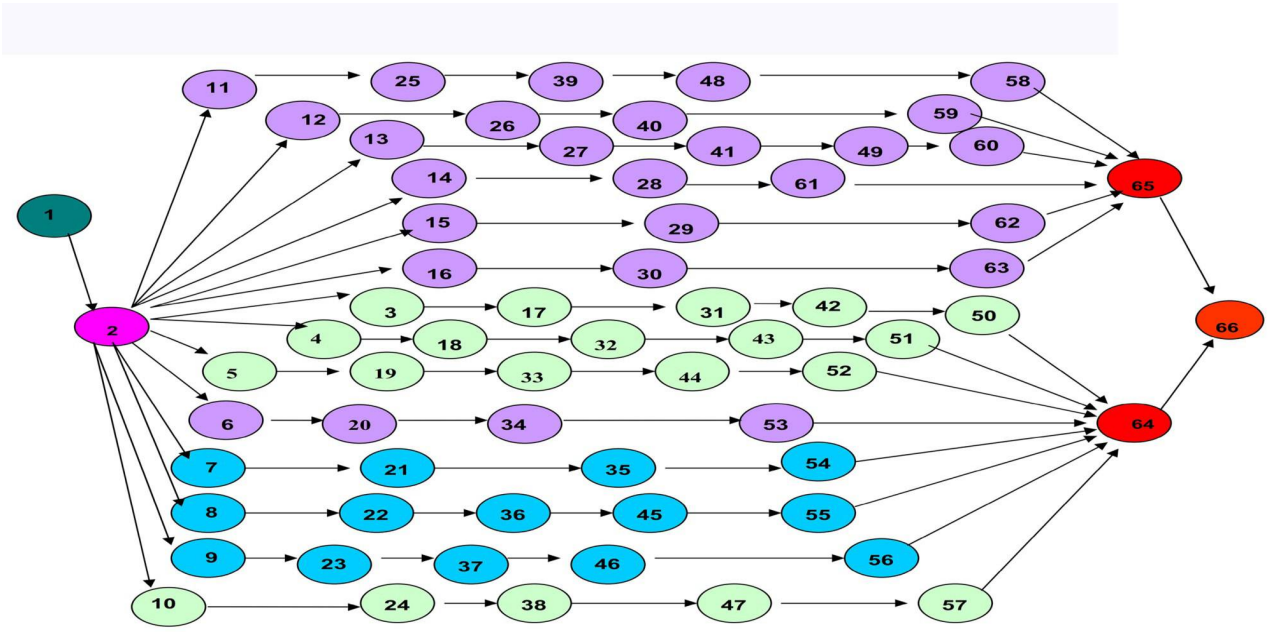
| **EVENT-65. Technical Analysis and Findings -Chief/Lead Investigator** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **Start Time:** HH : MM (Local/UTC) ☐☐☐☐ | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | This event should be chaired by the Chief Investigator with the following group leaders attending: | | |
| | • Maintenance and records; | | |
| | • Systems; | | |
| | • Structures; | | |
| | • Power plants; | | |
| | • Site survey; | | |
| | • Photo/video; | | |
| | • Other parties, as dictated by local regulations and procedures. | | |
| 2 | Review all group findings to determine adequacy of information, areas of conflict, errors and inconsistencies; | | |
| 3 | Identify the areas requiring clarification; | | |
| 4 | Determine the procedure for achieving clarification; | | |
| 5 | Complete technical analysis and determine findings with assistance from Operations Group; | | |
| 6 | Identify safety hazards and deficiencies; | | |
| 7 | Suggest safety recommendations. | | |
| **Date:** DD ☐☐ MMM ☐☐☐ Y Y Y Y ☐☐☐☐ | **End Time:** HH :MM (Local/UTC) ☐☐☐☐ | | **Signature:** |

| **EVENT-66. Report of Chief Investigator –Chief Investigator** | | | |
|---|---|---|---|
| **Investigator name:** | **Date:** DD MMM Y Y Y Y | **Start Time:** HH : MM (Local/UTC) | |
| **Item No.** | **Task** | **Status** | **Remarks** |
| 1 | Organize the narrative; | | |
| 2 | Analyze the information; | | |
| 3 | Determine and assemble the findings; | | |
| 4 | Determine the causes; | | |
| 5 | Identify safety hazards and deficiencies; | | |
| 6 | Propose safety recommendations; | | |
| 7 | Organize and attach appendices; | | |
| 8 | Assemble the report; | | |
| 9 | Incorporate late information; | | |
| 10 | Submit report to investigation authority; | | |
| 11 | Following revision by the investigation authority, revise report as required; | | |
| 12 | Submit report to the investigation authority For approval. | | |
| **Date:** DD MMM Y Y Y Y | **End Time:** HH :MM (Local/UTC) | | **Signature:** |

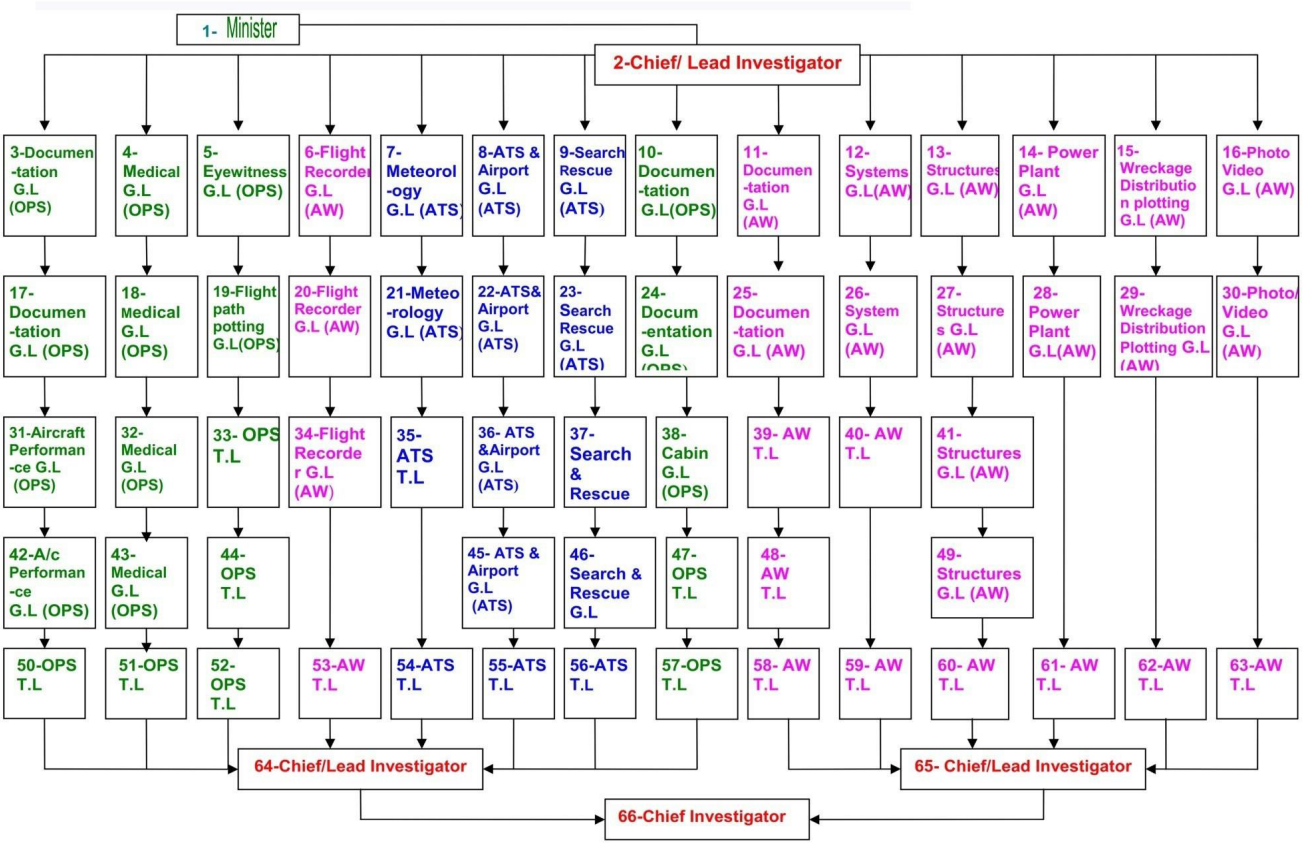
# CHAPTER 3. APPENDIX

## 3.1 Flow chart

## 3.2 LINE OF EVENTS




## 3.3 STRUCTURE OF EVENTS



## Appendix – 1 – Notification of Accident Recording Form

### Air Accident Investigation Bureau of Mongolia
**Notification of Accident/Incident Recording Form**

| | | | |
|---|---|---|---|
| Date: | | Time: | |
| Mode of Information: Tele Fax AFTN E mail ☐ NOTAM ☐ | | | |
| Notifying Person<br>Name:<br>Position:<br>Company:<br>Contact Details : | | | |

| | |
|---|---|
| Date of Occurrence: | |
| Time of Occurrence -: UTC: | Local: |
| Location: | Country: |
| Name of Owner:<br>Operator:<br>Hirer: | |
| Details of Aircraft<br>Manufacturer (Type): Model:<br>Nationality: Registration<br>Mark: Serial Number:<br>Pax / Cargo / Both: | |

| |
|---|
| Time of Departure: |
| Last point of Departure: |
| Point of Intended Landing: |
| Name of Pilot-in-Command: |
| Total Number Onboard: |
| Total Number of Crew: |
| Total Number of Passengers: |
| Total Number of Fatalities: |
| Total Number of Injured : |
| Nature of Accident: |
| Extend of Damage: |
| Geographical/Topographical Characteristics of Accident Area: |
| Presence and Description of Dangerous Goods: |
| Name & Designation: ……..<br>Signature: …….. Date: ……. |

| |
|---|
| Director and General Investigator Instruction |

## Appendix – 2 - Format for Credential

**INVESTIGATOR**

**AIR ACCIDENT INVESTIGATION BUREAU OF MONGOLIA**

| | |
|---|---|
| Photo<br><br>Issued date:<br>Exp date:<br>Credential no: | This is to certify that Mr./Ms<br>……..……<br>is an Investigator of Air Accident Investigation Bureau of Mongolia appointed by the Ministry of Roads and Transportation under the Civil Aviation Act [Chapter 9], for the conduct of aircraft accident/serious incident to:<br>…….....on……<br>.....at…….....<br>Reg no:<br>Passport no: |

The undersigned request and requires to permit the bearer unrestricted access to The accident/incident site, any civil aircraft, aerodrome, air operator's premises, building or workshop or any place where any aeronautical services is provided and to afford the bearer such assistance as may be necessary perform his/her duties without let or hindrance.

The holder is hereby delegated the powers conferred on an Investigator under the above Act.

The authority specified herein will remain until the accident investigation is completed or for a period of 5 days effective today which ever come first, unless withdrawn sooner.

If found, please handover into nearest Police Station of Mongolian Police or return to the below address.

AIR ACCIDENT INVESTIGATION BUREAU OF MONGOLIA,
MINISTRY OF ROADS AND TRANSPORTATION

Nisekhiin Street, 10th khoroo, Khan-Uul District
Ulaanbaatar 17120, Mongolia
Tel: (976) 11 282026
(976) 9595-3399 (mobile)
Fax: (976) 70049974
E-mail: aaib@aaib.gov.mn
Website: www.aaib.gov.mn

## Appendix – 3- Format for declaration of observe strict secrecy

**AIR ACCIDENT INVESTIGATION BUREAU OF MONGOLIA**
**DECLARATION TO OBSERVE STRICT SECRECY**

I,……
……
……of (Insert full name)
……
……
…….....(Insert the permanent address)

As the investigator on the AAIB, of the Air Accident Investigation Bureau of Mongolia do hereby solemnly pledge that I will observe strict secrecy in respect of all information disclosed at the investigation and shall not to divulge any such information except ;

- When required to do so by a court of law;
- In the performance of duties as a member of the Board;

or

- In order to comply with any provision of this Act or any regulation or rule made there under.

……
…….....
Signature Place & Date

**In witness,**

Name of the Officer……..

Designation……..

Date ……