

**SECTION 4.08****ACCIDENT AND INCIDENT REPORTING****GENERAL**

1. The Australian Transport Safety Bureau (ATSB) takes the lead role in the investigation of accidents.

The Transport Safety Investigation Act 2003 does not prevent CASA or other authorities from investigating accidents, but it does give the ATSB's investigation primacy over other Commonwealth and State legislation.

2. Gyroplanes operated under CAOs 95.12 and 95.12.1 are **NOT EXEMPTED** from the Transport Safety Investigation Act 2003 applicable to accident investigation.

**DEFINITIONS**

3. **Accident.** Broadly stated the definition of a gyroplane accident is: "An occurrence associated with the operation of the gyroplane in which:
  - a. any person suffers death or serious injury;
  - b. the gyroplane incurs substantial damage or structural failure; or
  - c. the gyroplane is missing or inaccessible."

**A Serious Incident** is an occurrence associated with the operation of a gyroplane that affects or could affect the safety of the operation of the gyroplane, or that involves circumstances including that an accident nearly occurred. Some examples of such an incident are:

- a. near collisions requiring an avoidance manoeuvre to avoid a collision or an unsafe situation, or where an avoidance action would have been appropriate;
- b. controlled flight into terrain only marginally avoided;
- c. aborted takeoffs on a closed or occupied runway;
- d. takeoffs from a closed or occupied runway with marginal separation from obstacles;
- e. landings or attempted landings on a closed or occupied runway;
- f. fires or smoke in a compartment of a gyroplane or engine fires, even though such fires were extinguished by the use of extinguishing agents;

- g. gyroplane structure failures or engine disintegrations not classified as accidents;
- h. multiple malfunctions of one or more gyroplane systems seriously affecting the operation of the gyroplane;
- i. pilot incapacitation in flight;
- j. fuel quantity requiring the declaration of an emergency by the pilot;
- k. take-off or landing incidents such as undershooting, overrunning or running off the side of a runway;
- l. system failures, weather phenomena, operations outside the flight envelope, or other occurrences which could have caused difficulties controlling the gyroplane.

An **Incident** is an occurrence, other than an accident or serious incident, associated with the operation of the gyroplane that affects or could affect the safety of the operation of the gyroplane.

#### **NOTIFICATION**

- 4. **Accidents and Serious Incidents.** The pilot-in-command, the owner and the operator are each responsible for ensuring that an immediate notification of the occurrence to the ASRA Operations Manager is furnished by the quickest means available. A further requirement is that a written report, preferably using the ASRA Accident/Incident Report Form (F002) contained in Appendix 1 of this Manual be submitted to ASRA as soon as practicable after the occurrence. Accidents and Serious Incidents must also be notified to the Australian Transport Safety Board (ATSB). A 24 hour telephone service is available for this purpose on 1800 020 505.

#### **PARTICULARS TO BE REPORTED**

- 5. The written report referred to in the preceding sub-section, shall, as far as possible, contain the following particulars:
  - a. the type, model and registration (if any) of the gyroplane;
  - b. the name of the owner and operator of the gyroplane;
  - c. the name of the pilot-in-command of the gyroplane;
  - d. the date and time the accident occurred;
  - e. the last point of departure and point of intended landing of the gyroplane and the nature of the flight;

- f. the position of the gyroplane with reference to some easily defined geographical point;
- g. whether any persons have died or been seriously injured as a result of the accident, and their names if available;
- h. the nature and damage to the gyroplane; and
- i. the physical characteristics of the area in which the accident occurred.

In the event that all the preceding particulars are not immediately available, a supplementary report should be made at the earliest opportunity.

### NOTIFICATION OF INCIDENTS

6. The pilot-in-command, the owner and the operator shall each be responsible for ensuring that a written notification of an incident, preferably using ASRA Form F002 is forwarded to the ASRA Operations Manager within 48 hours of the incident. The notification shall contain the same details as for an accident.

### CUSTODY AND REMOVAL OF GYROPLANE

7. When an accident occurs, the gyroplane immediately comes into the custody of the Australian Transport Safety Bureau (ATSB) and it **MUST NOT BE REMOVED** or otherwise interfered with except with the permission of a responsible officer of the ATSB.

However, this provision is waived temporarily when it is necessary to extricate persons from the wreckage or to protect the wreckage from further damage, or to remove it if it presents an obstruction or danger to other aircraft, other transport or to the public.

An ATSB officer will release the gyroplane from custody upon completion of the wreckage examination or in some cases of minor accidents, upon receipt of the accident notification message.

### INVESTIGATION OF ACCIDENTS AND INCIDENTS

8. Investigation of fatal accidents may be conducted by the Australian Transport Safety Bureau (ATSB).

ASRA will investigate other accidents and incidents with the **SOLE** intention of preventing the **SAME** occurrence again, and assessing the adequacy of the rules and procedures contained in this Manual. The ATSB will assist where possible, particularly in the area of structural failures. The Police also have a degree of responsibility in most States.

## ACCIDENT REPORTS

9. ASRA Investigators are honorary persons appointed from time to time to assist in enhancing flight safety. They are authorised by ASRA to investigate and report on accidents and incidents. Their intent is not to victimise any individual, but to ascertain the facts surrounding the accident or incident for the ultimate benefit of ASRA members, and others involved in aviation activities.

It is incumbent upon all ASRA members to assist in these investigations as far as they are able.

## CASA OFFICERS

10. In the case of an accident or incident where notification has been given, the investigating ATSB, ASRA or CASA officers shall have free access to all relevant areas of the property, and all ASRA members shall assist them in any way possible.

## ACCIDENT INVESTIGATION

11. Where the Operations Manager or his delegate requests an ASRA officer to conduct an investigation, the following points are to be addressed:

### SITE

- a. Contact the local Police and/or the ATSB investigating officer, and appraise them of your appointment and your willingness to assist.
- b. If Police are not in attendance, secure the area.
- c. Take photographs of the gyroplane and any significant damage at the scene.
- d. Measure the distance from impact to the final position of the wreckage.
- e. Determine the location of the crash site by GPS, or locate the crash site on an appropriate chart, or sketch a map of the location, noting significant geographical features and their relativity to the crash site.
- f. Ascertain the direction of travel immediately before impact.
- g. Determine as accurately as possible, the meteorological conditions at the site at the time of the accident.

**GYROPLANE****a. Fuel System**

1. Quantity of fuel remaining in the tanks.
2. Evidence of water and foreign matter contamination.
3. Integrity of the system.
4. Evidence of fuel in lines, filters and pumps.
5. Operation of fuel pumps.

**b. Cables**

1. Integrity
2. Wear
3. Breakages
4. Swages
5. Pulleys.

**c. Control System**

1. Integrity
2. Rod ends
3. Bell cranks
4. Breakages
5. Wear
6. Condition of trim system.

**d. Fuselage**

1. Locate and record the ASRA airframe number
2. Integrity
3. Breakages
4. Integrity of safety harnesses

5. Evidence of in-flight failure
6. Evidence of rotor strikes on the vertical fin.
7. Existence, size and location of a horizontal stabilizer.
8. Mast damage.
9. Serviceability of flight instruments.

**e. Rotors and Rotor Head**

1. Locate and record the serial numbers of the components
2. Evidence of in-flight failure.
3. Integrity.
4. General condition.
5. Condition of bearings in rotor head.
6. Condition of teeter tower and bolt.
7. Evidence of in-flight propeller strikes.

**f. Propeller**

1. Locate and record the propeller serial numbers.
2. Condition.
3. Evidence of in-flight failure.
4. Integrity of attachment bolt holes.
5. Condition of attachment bolts including lock wiring.
6. Disposition of the propeller and pieces thereof after impact.

**g. Engine**

1. Locate and record the engine serial number.
2. Operation on impact.
3. Power output on impact.
4. General condition.
5. Obvious reasons for stoppage.

6. Condition and integrity of accessories.
7. Condition and integrity of reduction drive.
8. Engine lubrication and associated system.

**h. Witness Statements**

In writing and signed.

**NOTE:** The following is a list of the minimum equipment considered necessary to conduct an accident investigation:

- a. Camera (preferably digital).
- b. GPS.
- c. Magnetic Compass.
- d. Chart of the area.
- e. Sketching materials.
- f. Tape measure.
- g. Means of recording observations.

**NOTE:** A draft report is to be forwarded to the Operations Manager, who will prepare a final report for dispatch to the ATSB and interested parties. The initial investigation is to be treated as confidential.

**INTENTIONALLY LEFT BLANK**