### GA8

### FLIGHT MANUAL SUPPLEMENT

#### PARACHUTE OPERATIONS

This Supplement is applicable and must be inserted in the supplements section (Section 9) of the GA8 Pilot's Operating Handbook (POH) when parachute operations are conducted using the normally aspirated Gippsland Aeronautics GA8 or turbocharged Gippsland Aeronautics GA8-TC320. Flight Manual Supplement No. 1 'Inflight Rear Door Open Operations' is required to be used in conjunction with this supplement.

This document must be carried in the aircraft at all times. Information in this supplement adds to, supersedes, or deletes information in the POH.

Annroved:

Date: 4 December 2009

### AMENDMENT RECORD SHEET

Amendment Date	Description	Pages Affected	Signature
22 Nov 2000	Initial Issue	All	Incorporated by Gippsland Aeronautics
4 Jan 2006	Australia Specific References Removed	All	Incorporated by Gippsland Aeronautics
18 Dec 2008	Sections 1, 2, 3, 4, 6 expanded	All	Incorporated by Gippsland Aeronautics
31 July 2009	Section 3 expanded	5	Incorporated by Gippsland Aeronautics
4 December 2009	All sections revised to incorporate comments from EASA regarding approval of Special Condition SC-023-DIV-01. Refer to Report C99-52-01, Issue 3 and GAE11#764.	All	Incorporated by Gippsland Aeronautics

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### **Parachute Operations**

#### **SECTION 1 - GENERAL**

The intent of this supplement is to provide the pilot with any additional limitations and special conditions, as well as the normal and emergency operating procedures for the GA8 when conducting parachuting operations.

This flight manual supplement must be read in conjunction with Flight Manual Supplement No. 1 'Inflight Rear Door Open Operations'.

#### SUITABILITY FOR PARACHUTE OPERATIONS

The GA8 is suitable for, but not restricted to the following parachuting operations:

- Static Line Training (individual and sequenced exits with dispatcher)
- Accelerated Free Fall (AFF) training
- Supervised group and individual training
- Sport/recreational skydiving (single and group exits)
- Tandem
- Competition
- Display, promotional and filming

#### **SECTION 2 - LIMITATIONS**

#### **APPLICABILITY**

This supplement is applicable to all GA8 and GA8-TC 320 serial numbers.

#### JUMP TYPES

The following jump types are permitted, but not limited to:

- Automatic (static line)
- Manual release

#### NUMBER OF PARACHUTISTS

There is no limitation on the number of parachutists. Weight and balance limitations must be adhered to in accordance with Sections 2.6, 2.7 and 6 of the POH.

#### MAXIMUM OPERATING ALTITUDE & USE OF SUPPLEMENTAL OXYGEN

Refer to Section 2.14 of the POH for maximum operating altitude, which is applicable to all operations including parachute operations.

If supplemental oxygen is required, it is the operator's responsibility to utilise a suitably approved supplemental oxygen system.

#### **EQUIPMENT**

Wind Deflector (P/N GA8-526016-11 or P/N GA8-526016-15) must be fitted in accordance with Engineering Release GA8-965201 for all parachute operations. Flight Manual Supplement No. 1 'Inflight Rear Door Open Operations' must be inserted into the supplements section (Section 9) of the POH and the placard listing limitations of operations with the cabin door open must be installed.

The maximum length of a static line shall be such that the streaming (trailing) end of the line remains at least 2 inches (51mm) from the leading edge of the tailplane stabilizer when the line is at its maximum extension.

HF radio antennas must not be installed whilst conducting parachuting operations.

A sharp knife must be carried in the aircraft and be available to the pilot and/or dispatcher in a convenient location. A suitable knife would possess the ability to sever a bundled or twisted static line or occupant restraint belt. A small, personal type of hook knife would not normally be

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considered to be suitable for this task. A hunting or fishing knife is suitable, or a large heavy duty rescue type hook knife.

If required by local regulations, the pilot must correctly wear or have available a suitable emergency parachute during parachuting operations and should be familiar with operation of the emergency parachute.

If supplemental oxygen is required, it is the operator's responsibility to utilise a suitably approved supplemental oxygen system.

#### OPERATIONAL LIMITATIONS

Parachute operations may be carried out in VFR or night VFR conditions (parachuting in night VFR conditions is dependent on the aircraft also being certified for operation in night VFR conditions).

### **SECTION 3 - EMERGENCY PROCEDURES**

During emergencies, all other persons in the aircraft should follow instructions from the pilot as required.

Where an emergency occurs at low altitude parachutists may be required to remain on board. Rate of descent should be moderate so as not to activate Automatic Activation Devices.

#### INADVERTENT OPENING OF PARACHUTE INSIDE AIRCRAFT

- Move affected parachutist as far away from the open door as is practically possible until door can be closed
- Affected parachutist must land with the aircraft

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#### STATIC LINE 'HANG UP'

This procedure will vary according to the nature of the operation and the circumstances of the inadvertent ensnarement.

#### Pilot:

- Maintain airspeed of between 70 KIAS and 100 KIAS
- Maintain safe altitude or increase altitude if possible without excessive use of power
- Orbit vicinity of the drop zone
- Avoid excessive yawing to reduce risk of injury to hung up parachutist and also to reduce risk of damage to aircraft structure or control surfaces by the parachutist or static line

Jump Master / Dispatcher / Responsible Parachutist:

 Ascertain awareness (usually by hand indications), of the person who has been hung-up and then cut them free.

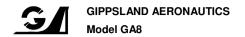
#### SECTION 4 - NORMAL PROCEDURES

#### PRE FLIGHT INSPECTION

Additional items that shall be inspected prior to flight include:

- The Wind Deflector is correctly installed and checked for security and condition.
- The Rear Cabin sliding door is checked for smooth operation throughout its full range
  of operation and that the acetal bumper block which prevents door buffeting when fully
  open is in good condition and that it serves to retain the door in the fully open position
  when engaged. Ensure the forward door slider is serviceable and not worn beyond
  limits specified in SB-GA8-2005-23.
- The condition and security of any optional steps and handles fitted to the aircraft for parachuting operations
- Door and interior fittings, panels and floor coverings are secure and that there are no loose or damaged panels that could fall from the aircraft, or snag parachutists equipment during the operations.

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- The Cabin is free from any loose objects that if they fell from the aircraft during parachuting operations would constitute a danger to property or persons on the ground.
- The Static Line Anchor cable (if required) is correctly installed, secure and in serviceable condition.
- The maximum length of a static line shall be such that the streaming (trailing) end of the line remains at least 2 inches (51mm) from the leading edge of the tailplane stabilizer when the line is at its maximum extension. This should be physically confirmed prior to the commencement of static line operations. Ensure the static line cannot jam or be severed at the lower end of the wind deflector.
- Single Point restraints are of sufficient quantity for each flight and that they are in serviceable condition.
- If an exit light system is installed this should be checked for operation in all positions and lamp serviceability confirmed.
- A sharp knife is available in the aircraft.
- The condition and serviceability of the Pilot's emergency parachute.
- If Supplemental Oxygen is required the system should be checked for condition, serviceability and quantity.

#### PARACHUTIST BRIEFING

It is essential that the jump master/dispatcher/instructor/delegated parachutist representative who is responsible for alignment of the jump run and determination of the exit point is adequately briefed regarding the following items and that they convey the appropriate information to the parachutists:

- Correct operation of the sliding door in-flight opening procedures.
- Location of the sharp knife.
- The correct usage of the Single Point Restraints.
- Parachutists should sit comfortably and evenly spaced in the cabin area during take off and climb. There is no need to 'pack up' toward the front of the aircraft during these flight conditions.
- Parachutists are required not to congregate at the exit for excessively long periods of time prior to exit.

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- Parachutists should be made aware of the horizontal stabilizer position relative to the
  exit and that they must avoid jumping into the path of the tailplane in general,
  particularly if exiting from a 'streamer' position aft of the rear door and whilst engaged
  in camera/filming activities. The acceptable exit method is 'out/away and down' from
  the doorway and/or step(s). Parachutists should not improvise flamboyant methods,
  and shall not, under any circumstances, attempt to exit from other positions or
  locations on or about the airframe.
- Target exit speed will be 80 KIAS and a small amount of residual power may be carried during the exit sequence.
- No parachutist will exit the aircraft until there has been a clear indication from the pilot, either visually or audibly, that the aircraft is in the correct configuration for exit. This indication may be in the form of lights, sound or pre-arranged hand signals.
- The correct procedures in the event of a 'hang-up'

#### **SECTION 5 - PERFORMANCE**

Refer to the POH.

#### SECTION 6 - WEIGHT AND BALANCE

#### 6.3 Loading System

#### LOAD DISTRIBUTION

The maximum of parachutists that may be carried is determined by the payload weight available for any given flight. The combined weight of the equipped parachutists must not exceed this amount. To maintain the aircraft within C.G. limitations the simplest method is to distribute the total number of parachutists evenly on the main cabin floor space.

When conducting coordinated exits no more than five (5) parachutists may congregate aft of the forward edge of the cabin door exit with no more than three (3) outside of the aircraft. Time spent setting up in this arrangement should be minimized. Parachutists inside the cabin should remain as forward as practically possible.

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#### RESTRAINT OF PARACHUTISTS

Restraint of parachutists must be in accordance with local requirements.

If seats are available, they should be occupied and seating restraints used correctly.

If no passenger seats are installed, each parachutist may use an approved single point restraint connected to a seat anchor point on the cabin floor and attached to a suitable part of their parachute harness during takeoff and initial climb to above 1000' (300m). Gippsland Aeronautics offers a single point restraint (P/N GA-000365-11) approved for this purpose.

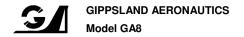
Anchor points on the luggage rack MAY NOT be used.

#### SECTION 7 - SYSTEM DESCRIPTION

No change - refer to the POH.

#### **SECTION 8 – AIRCRAFT HANDLING, SERVICING AND MAINTENANCE**

No change – refer to the POH.



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