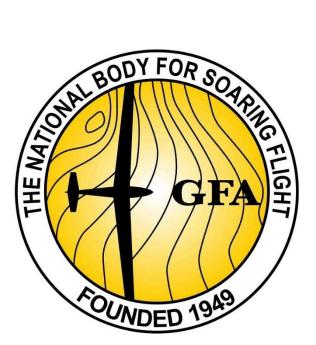
THE GLIDING FEDERATION OF AUSTRALIA INC

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# AIRWORTHINESS ADVICE NOTICE GFA AN 84 [Issue 5]

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# **REVISION RECORD**

Prepared	Approved	Version	Date	
Rob Hanbury (CAD)	President	1.0A	19 APR 2017	
Précis of changes Accommodate changes to Competition marks process				

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# **INTRODUCTION**

## **1.1 TYPE AFFECTED:**

- 1.1.1 All Types
- 1.2 SUBJECT:

**1.2.1** Carriage Of Nationality And Registration Markings, And Internal Identification.

## **1.3 BACKGROUND:**

1.3.1 Issue 5 has been produced to allow more freedom with Competition Marks. Refer to the Sports rules for sporting rules on Competition Marks. This document deals mainly with Airworthiness rulings on sailplane markings.

#### 1.4 **DOCUMENTATION**:

1.4.1 Reference can be made to Civil Aviation Orders 95.4 and 95.4.1, AC 45-01(2) Nationality and Registration Marks

# 2. EXTERNAL MARKINGS

2.1 NATIONALITY MARKINGS: THERE IS NO REQUIREMENT FOR THE NATIONALITY MARKING "VH" TO BE CARRIED ON ANY SAILPLANE OPERATED WITHIN AUSTRALIA, UNLESS THE OPERATOR WISHES TO CARRY THEM. NATIONALITY MARKINGS MUST BE CARRIED ON ANY AUSTRALIAN SAILPLANE OPERATED OUTSIDE AUSTRALIA.

2.2 **REGISTRATION MARKINGS:** THE REGISTRATION MARKS SHALL CONSIST OF THE FOLLOWING LETTERS:-

2.2.1 For registrations beginning with "G", at least the last two letters of the registration.

2.2.2 All other registrations, the entire three-letter group.

2.3 **POSITIONS AND DIMENSIONS:** REGISTRATION MARKINGS SHALL BE CARRIED IN ACCORDANCE WITH THE FOLLOWING POSITIONS AND DIMENSIONS:-

2.3.1 On each side of the fuselage or vertical tail surfaces. V-tails are deemed to be part of the vertical surfaces for this purpose. For ease of in-flight identification, registration marking shall be at least 150 mm high, or two-thirds of the width of the surface, whichever is the lower.

2.3.2 The type and proportions of the markings shall be as per Figure 1, Figure 2 and Figure 3.

# ABCDEFGHIJ KLMNOPQRS TUVWXYZ

FIGURE 1 ARIAL FONT



Except for the letters "I", "W" & "M"

Width = 2/3 Height

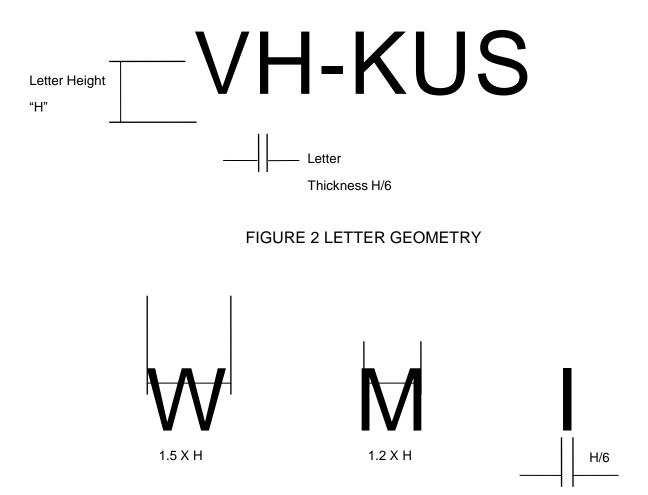


FIGURE 3 LETTERS THAT ARE NOT 2/3 OF THEIR HEIGHT WIDE

## 2.4 COMPETITION MARK:

2.4.1 A competition mark on the vertical tail surfaces is permitted provided the correct registration mark is applied to the fuselage in full, eg. VH-XYZ. A competition mark shall comprise of any combination of *one, two or three letters (A to Z) and numbers (0 to 9) except 3 letters unless it is the glider registration* Competition marks shall be displayed on each side of the vertical tail surface and should have a minimum height of 300 mm.

2.4.2 A competition mark must avoid confusion with the registration mark (CASR 45.090 refers).

2.4.3 Applications for a competition mark must be submitted by email to returns@glidingaustralia.org. A competition mark will only be registered to one sailplane however it may not be a unique mark as GFA nor CASA control this.

2.4.4 Applications to Transfer or Cancel a competition Mark should be submitted using the same email application.

#### 2.5 FOREIGN REGISTRATION MARKS:

**2.5.1** FOREIGN REGISTRATION MARKS ARE NOT permitted on an Australian registered sailplane.

#### 2.6 COLOUR:

2.6.1 Registration and competition marks must be of a colour contrasting with the glider's finish colour.

2.6.2 For FRP sailplanes grey is preferred to black to reduce the potential of heat damage to the gelcoat and underlying structure.

2.6.3 Refer to the sailplane manufacturer's maintenance manual for guidance.

#### 2.7 **APPLICATION**:

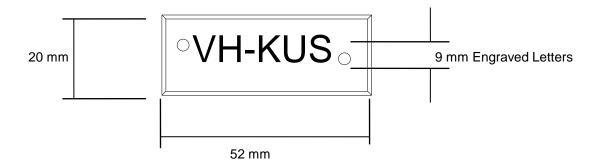
2.7.1 Painted lettering is preferred.

2.7.2 "Stick on" lettering is acceptable provided the surface is properly cleaned and prepared.

2.7.3 It must be noted that stick on lettering has been known to cause "buzz" of control surfaces by disturbing the local airflow. Where stick on letters cross a control surface hinge line the letter must be cut and the free edges securely glued down.

# 3. INTERNAL IDENTIFICATION

3.1 **SAILPLANES:** A FIREPROOF (STAINLESS STEEL OR BRASS) ENGRAVED PLATE DIMENSIONED AS PER FIGURE 4 IS TO BE SECURED INSIDE THE COCKPIT **PREFERABLY** IN SIGHT OF THE PILOT.



Drill one hole in each end 3 mm  $\oslash$ 

Material: 1.5 mm thick stainless steel or brass. Chamfer all edges.

## FIGURE 4 COCKPIT IDENTITY PLACARD

## 3.2 **POWERED SAILPLANES**:

3.2.1 Some aircraft types that are certified as powered sailplanes can also be certified as an ultralight or in other categories.

3.2.2 To remove any operational confusion, powered sailplanes, must also display the placard shown in Figure 5 in the cockpit, in addition to the identification plate shown in Figure 4,

THIS POWERED SAILPLANE MUST BE OPERATED IN ACCORDANCE WITH THE PROVISIONS OF CAO 95.4 AND THE GFA OPERATIONAL REGULATIONS

FIGURE 5 POWER SAILPLANE COCKPIT PLACARD

## 3.3 NON SELF LAUNCHING POWERED SAILPLANES:

3.3.1 In addition to the identification plate shown in Figure 4, these sailplanes must have a placard as shown in Figure 6.

1.THIS POWER ASSISTED SAILPLANE MUST BE OPERATED IN ACCORDANCE WITH THE PROVISIONS OF CAO 95.4 AND THE GFA OPERATIONAL REGULATIONS.

2. TAKE-OFFS USING INSTALLED ENGINE POWER ONLY ARE PROHIBITED.

FIGURE 6 POWER ASSISTED SAILPLANE COCKPIT PLACARD

#### 3.4 CHARTER OPERATION OF POWERED SAILPLANES.

3.4.1 If a powered sailplane is operated under an Air Operators Certificate then instead of the placards required by items 2.2 and 2.3 they must have the placards shown in Figure 7 fitted as appropriate.

THIS POWERED SAILPLANE MUST BE OPERATED IN ACCORDANCE WITH THE PROVISIONS OF CAO 95.4 AND 95.4.1.

1. THIS POWER ASSISTED SAILPLANE MUST BE OPERATED IN ACCORDANCE WITH THE PROVISIONS OF CIVIL AVIATION ORDER 95.4 AND 95.4.1.

2. TAKE OFFS USING INSTALLED ENGINE POWER ONLY ARE PROHIBITED.

## FIGURE 7 CHARTER OPERATION PLACARDS FOR POWERED SAILPLANES

## 3.5 WEIGHT AND BALANCE: NOT AFFECTED.

## 3.6 **IMPLEMENTATION**:

3.6.1 Registration markings can be applied by the Registration Holder or Registered Operator and must be recorded in the log book.

SIGNED for and on behalf of THE GLIDING FEDERATION OF AUSTRALIA

Dennis Stacey CHIEF TECHNICAL OFFICER

# 4. GLOSSARY OF ACRONYMS AND TERMS

A	Altitude (e.g. A100 = 10,000 feet AMSL). The vertical distance of a level, a point or an object, considered as a point, measured from mean sea level. An altimeter when set to QNH or Area QNH it will indicate altitude.
AEF	Air Experience Flight.
AEI	Air Experience Instructor.
ADS-B	Automatic-Dependant Surveillance-Broadcast (Air Traffic Management system).
AIP	Aeronautical Information Publication Australia.
Airservices	Airservices Australia, a government-owned corporation providing the aviation industry with aeronautical data, telecommunications, navigation services and aviation rescue and fire fighting services.
AGL	Above Ground Level (See also QFE).
AMSL	Above Mean Sea Level (See also QNH).
Area QNH	A forecast altimeter setting which is representative of the QNH of any location within a particular area.
ASRS	ATSB Aviation Self Reporting Scheme.
AOC	Air Operator's Certificate.
ASI	Air Speed Indicator.
ATC	Air Traffic Control.
ATSB	Australian Transport Safety Bureau.
Austroads standards	Means the medical standards for the issue of a private motor vehicle driver's licence medical certificate, as contained in the Austroads Inc. publication 'Assessing fitness to drive for commercial and private vehicle drivers: medical standards for licensing and clinical management guidelines, March 2012', or a later version as in force from time to time.
BCAR	British Civil Airworthiness Requirements, the standards of construction to which some of the older gliders (e.g. Kookaburra) were built.
CAA	Civil Aviation Act 1988.
CAD	Chairman of the GFA Airworthiness Department.
CASA	Civil Aviation Safety Authority.
CAO	Civil Aviation Order, a functional document enabling practical use to be made of a Civil Aviation Regulation.
CAR	Civil Aviation Regulations 1988. A statutory aviation regulation of the Commonwealth of Australia.
CASR	Civil Aviation Safety Regulations 1998. A statutory aviation regulation of the Commonwealth of Australia.
CFI	Chief Flying Instructor.
СОР	Chairman of the GFA Operations Panel.
CTAF	Common Traffic Advisory Frequency.
СТО	Chief Technical Officer (Airworthiness)
СТР	Chairman of the Training Panel (Club/Operator).
DI	Daily Inspection.
ELT	Emergency Locator Transmitter.
ERC	En Route Chart - ERCs-L, ERCs-H and TACs are presented at various scales and depict airspace, air routes and radio navigation facilities.
EM/O	Executive Manager, Operations
ERSA	En-Route Supplement, Australia, an Airservices document listing full information, including layout diagrams, on all licensed (and some unlicensed) aerodromes.
FAI	Federation Aeronautique Internationale.

FL	Flight Level, the height reading on an altimeter with 1013.2 HPa set on its sub- scale, used only above 10,000 feet AMSL (e.g. FL200 = 20,000 feet with 1013.2 set).	
FOI	CASA Flying Operations Inspector.	
FROL	Flight Radiotelephone Operator's Licence issued by CASA.	
GFA	Gliding Federation of Australia.	
GFA Operations Manual	This manual comprises a copy of: 1. CAO 95.4, the Order under which GFA exercises specified exemptions from the CARs and CASRs; 2. the GFA Operational Regulations, those GFA procedures which are required to be approved by CASA; and 3. MOSP 2 - Operational, a document approved by the GFA Board specifying the normal operational procedures of the GFA. The GFA Operational Regulations are numbered from Sections 1 to 7 (plus Appendices) and the Manual of Standard Procedures follows from Section 8 onwards. When using this Manual for guidance, it may be necessary to refer to both sections and possibly to the CAO.	
GFPT	General Flying Progress Test (Aeroplane). This is the first endorsement on a Student Pilot Licence and allows the holder to carry passengers to and from the training area during solo flights subject to instructor authorisation.	
HF	High Frequency.	
HPa	Hectopascals, the unit of pressure set on an altimeter sub-scale.	
JAR-22	Joint Airworthiness Requirements, Section 22 (Gliders).	
IAS	Indicated Air Speed.	
IFR	Instrument Flight Rules.	
IMC	Instrument Meteorological Conditions.	
IO	Independent Operator.	
Just Culture	An atmosphere of trust in which people are encouraged for providing essential safety-related information, but in which they are also clear about where the line must be drawn between acceptable and unacceptable behaviour.	
Km	Kilometre.	
Mode C	Another operating mode of a transponder, in which altitude-encoded information is added to the unique code already being transmitted.	
MOSP	Manual of Standard Procedures (this document).	
MR	Maintenance Release.	
NM	Nautical Mile.	
NOTAM	NOTice to AirMen, a document issued by Airservices to provide operational information to pilots which supersedes that available in other publications.	
OD	Operations Directive.	
PCA	Planning Chart Australia.	
PIC	Pilot In Command – The pilot responsible for the operation and safety of the aircraft during flight time.	
PLB	Personal Locator Beacon.	
PPL	Private Pilot's Licence.	
QFE	Altimeter setting in which the altimeter will read zero with the glider on the ground.	
QNH	Altimeter setting in which the altimeter will read the field's elevation above sea level with the glider on the ground.	
REPCON	ATSB Confidential Reporting Scheme.	
RM Plan	Risk Management Plan which provides a structured way of identifying and analysing potential risks, and devising and implementing responses appropriate to their impact.	
RM/O	Regional Manager, Operations.	
RTO/A	Regional Technical Officer, Airworthiness.	
SAR	Search and Rescue.	

SMS	Safety Management System. A system for the management of safety within the GFA, including the organisational structure, responsibilities, procedures, processes and provisions for the implementation of gliding safety policies by the GFA.
SSR	Secondary Surveillance Radar, a type of radar which only shows a return to an air traffic controller from an aircraft which is equipped with a transponder. Radar which will show "raw" returns from an aircraft's skin, without the need for a transponder to be fitted, is known as Primary radar.
TAC	Terminal Area Chart – show details applicable to both high and low level operations in terminal areas.
TAS	True Air Speed.
Transponder	A microwave receiver/transmitter unit fitted to an aircraft which, when interrogated by an SSR, responds with a coded reply which positively identifies the aircraft and, if mode C is selected, the altitude of the aircraft.
UHF	Ultra High frequency.
VFR	Visual Flight Rules.
VNC	Visual Navigation Chart - (scale 1:500,000) are designed for operations under the VFR. They contain an aeronautical overlay of controlled airspace over a topographical base, and contain some radio communication and other navigational data appropriate for visual navigation. Map coverage is shown on the front of each map.
VTC	Visual Terminal Chart - (scale of 1:250,000) are designed for visual operations near terminal areas. They contain some topographical detail and appropriate airspace, radio communication and navigation aid information. These charts are intended for use up to and including FL180.
VHF	Very High Frequency.
WAC	World Aeronautical Charts - (scale of 1:1,000,000) are designed for pre-flight planning and pilotage. They are constructed on Lambert's conformal conic projection. Australian coverage is shown on the back of each chart.