

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INCORPORATED
F023 Acceptance & Listing Protocols - Ultralight Gyrogliders
Record of Testing and Inspection and
Statutory Declaration of Compliance



ABN 53 412 417 012

This document can either be filled out progressively as evaluation, testing and inspection is completed or may be filled-in at the completion of the said evaluation, testing and inspection by transferring data from contemporaneous testing records. Testing and inspection will need to be done in two parts. Form F023 part (a) must be completed and signed off before a Limited Flight Status Listing (Provisional) can be issued. This limited flight status is to allow the specified flight testing to be completed before a Full Flight Status Listing (Ultralight) can be issued. The flight testing is recorded in Form F023 part (b)

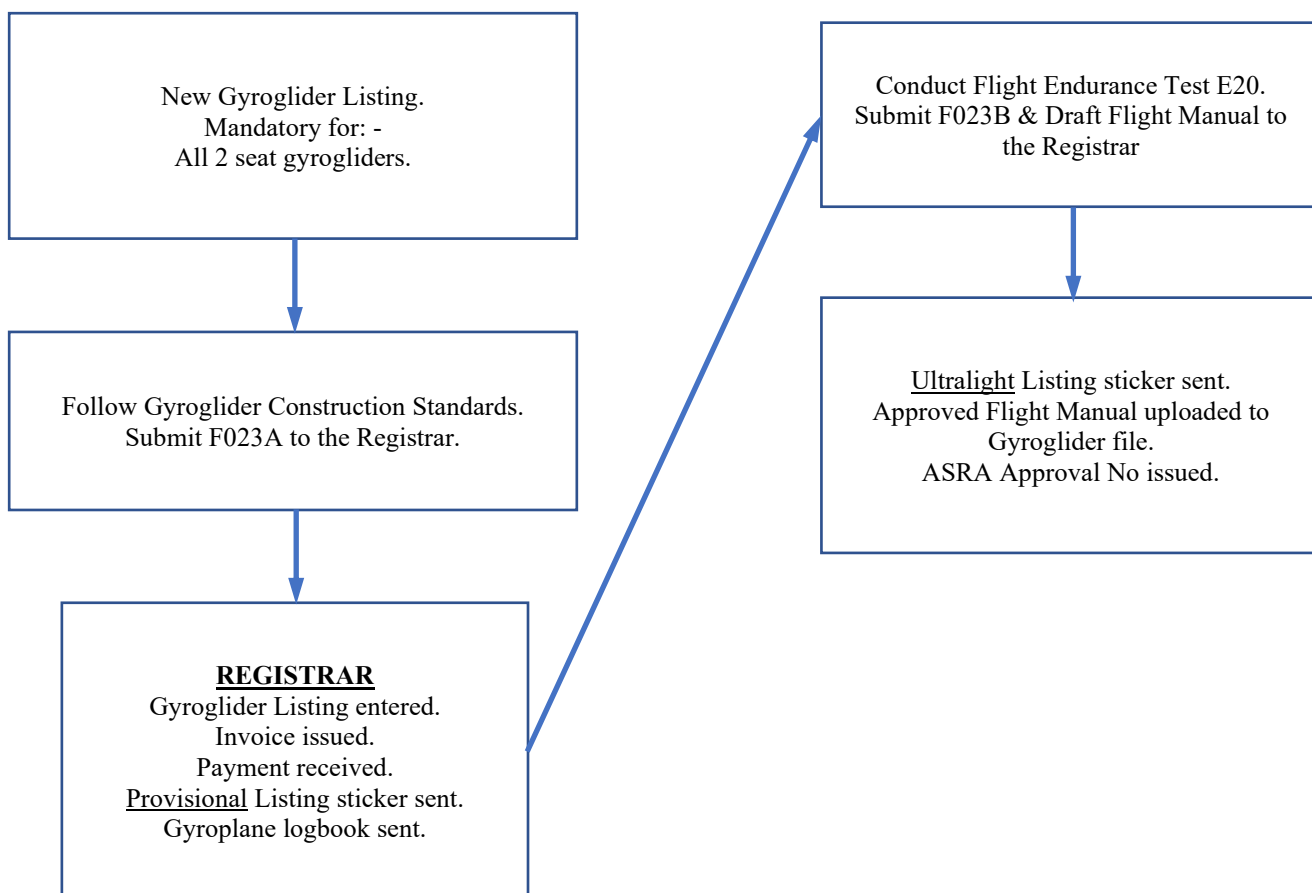
The person whose initials and signature are affixed to this document is to be that of the person who is the **Principal Constructor or a Factory Authorised Representative**. If flight testing is undertaken by a person who is not the principal constructor, the principal constructor **MUST** satisfy themselves of the integrity and accuracy of the performance-related information entered into this document. Where in-flight performance figures are concerned, the principal constructor shall ensure the accuracy of the figures either by contemporaneously and accurately recording instrument readings radioed to him or her by the pilot undertaking the relevant sequence or by the recording of instrument readings by electronic means such as readouts, traces or even a simple video camera recording of the relevant instrument or instruments. The principal constructor is also personally responsible for the accuracy and integrity of all external observations (such as take-off distance to 50' AGL, or landing distance from 50' AGL).

Form F023 is to be used in conjunction with the ASRA Ultralight Gyroglider Construction Standards.

This form provides a means of recording that each test and inspection has been satisfactorily completed. A space is provided after each item for the tester's initials.

The **Principal Constructor or a Factory Authorised Representative** is the **ONLY** person entitled to initial the '**PC Initials**' boxes. Several sections have '**TA Initials**' boxes to the right of the principal constructor initials boxes. These 2nd boxes are **ONLY** to be used by ASRA Technical Advisers who are checking the integrity of the Principal Constructor's assertion made in that relevant sub-section. For the purposes of this document, the Principal Constructor and the countersigning Technical Adviser cannot be the same person.

The flow chart below represents the steps to follow to obtain final Ultralight Listing.



Form F023 part (a) Construction and Testing before flight testing

Principal Constructor:

Some appendices are provided giving conversion information.

Gyroglider
Listing No.

G

Airframe
Serial No.

Subpart B

Weight and Balance

B10. Hang Test 1 UP 2 UP Degrees nose down

Details of Hang Test entered into the Flight Manual

B15. Maximum Selected Weight kg.

Maximum Weight entered into the Flight Manual

B20. Empty Weight. kg

Empty Weight and conditions of test entered into the Flight Manual

B25. Removable Ballast complies with C105

Initials

	PC	TA

Subpart C

STRUCTURE

C15. Strength and Deformation requirements have been met

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FLIGHT LOADS

C30. Compliance with the limit manoeuvring load factors shown by:

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CONTROL SURFACES AND SYSTEM LOADS

C55 Primary Control System requirements have been met by:

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C60 Limit Pilot Forces requirements have been met by:

--	------

C70 Secondary Control Systems are satisfactory

--	------

STABILISING AND CONTROL SURFACES

C75 Control Surface Loading requirements have been met by:

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GROUND LOADS

C85 Landing Gear - energy absorption requirements have been met by:

Note the TA must witness the drop test

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MAIN COMPONENT REQUIREMENTS

C90 Rotor Structure requirements have been met by:

--	------

C95 Fuselage, Landing Gear and Rotor Pylon Structures requirements met by:

--	------

EMERGENCY LANDING CONDITIONS

Initials

C100 The emergency landing conditions requirements have been met by:

PC	TA

OTHER- LOADS

C105 The loads from single masses requirements have been met by:

--	------

Subpart D

Design and Construction

D10	The materials used are satisfactory		----
D15	Fabrication Methods are satisfactory		
D20	Locking of Connections is satisfactory		
D25	The Protection of Structure is satisfactory		
D30	Provisions for inspection are satisfactory		
D35	Provisions for Rigging and De-rigging are satisfactory		
D45	Fatigue Strength requirements are met by:		----

CONTROL SURFACES AND ROTORS

D80	Rotor Blade drainage is satisfactory		
D85	Control Surface Installations are satisfactory		
D95	Mass Balance requirements met by:		----
D100 (b).	Rotor Hub Tilt Range	Fore/Aft deg	Side/Side deg
D100 (c).	Hub Bar Teeter Range degrees	
D102	Rotor Clearance is satisfactory		
D103	First of type Gyroglider	Y / N	Circle option
D105	Rotor Head Bearings suitability determined by:		----

CONTROL SYSTEMS

D110	Controls movements are satisfactory		
D115	Control stops are satisfactory		
D125	Trim System is satisfactory		
D135	Control System Design is satisfactory		
D140	Spring Device Installation and operation is satisfactory		
D180	The suitability of the Seats and their supporting structure has been determined by:		----
D185	The mounting and suitability of the Safety Harness(es) has been determined by:		
D190	The Protection from Injury requirements have been met		

Initials

Subpart E -

E15 The design of the Rotor Spin-up and Brake Systems is satisfactory
Limitations on the use of spin-up or brake systems have been entered into the Flight Manual

PC	TA

Subpart F - EQUIPMENT

F10 The required Flight Instruments are fitted

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INSTRUMENTS – INSTALLATION

F25 Arrangement and visibility of the flight instruments are satisfactory

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MARKINGS AND PLACARDS

G35 The requirements for Markings and Placards have been met

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G50 The requirements for Control Markings have been met

--	--

G55 The requirements for Miscellaneous Markings and Placards have been met

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The following is to be signed by the Head of Flight Operations (HOFO) only when this form is the subject of a First of Type Gyroglider.

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INC

The ASRA Head of Flight Operations (HOFO) or authorized delegate will be the only person permitted to sign-off first of type gyrogliders. The manufacturer will pay for ASRA expenses incurred in the inspection and subsequent signing off of the aircraft.

.....

(Signature)

.....
(Print Name - Head of Flight Operations (HOFO)/Authorised Delegate)

A.....
(ASRA membership No)

.....
(Date)

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INC

GYROGLIDER LISTING FORM

*CASA Regulations state that only current financial ASRA members
and Registrant are permitted to fly and list a Gyro*

ASRA Membership No:	A	Gyroglider Listing No:	G	Airframe Serial No:
Registrant Given Names:		Registrant Family Name:		
Address:		Phone No:		
Town:		State:		P/Code:
Email:				

Cockpit:	<input type="checkbox"/> Open Frame	<input type="checkbox"/> Semi Enclosed	<input type="checkbox"/> Fully Enclosed	Empty weight including rotors:		kg
Places:	<input type="checkbox"/> Two Side by Side	<input type="checkbox"/> Two Tandem		MTOW:		kg
				Gyroglider Primary Colour:		
Hang Test: 1 UP	Degrees	<input type="checkbox"/> Nose up	Controls Fore/Aft Angle:	Controls Side/Side Angle:	Total Teeter Angle:	
Hang Test: 2 UP	Degrees	<input type="checkbox"/> Nose down				
Gyroglider Manufacturer:	Model:		Model No:			
Main Frame Material:	Size:	mm	Mast Material:	Size:	mm	
Frame Plates Material:	Thickness:		mm			
Vertical Tail Type & Area:	<input type="checkbox"/> Rudder & Fin	<input type="checkbox"/> Full Flying	<input type="checkbox"/> Twin Tail	<input type="checkbox"/> Tri Tail		
	Total Vertical Tail Area:	m ²	Horizontal Distance from C of G:		m	
Pitch Stabiliser Location & Area:	Stabiliser Area:	m ²	Horizontal Distance from C of G:		m	
Rotor Head Manufacturer:	Serial No:					
Rotor Blade Manufacturer:	Rotor Blade Model:		Length:		ft	
Hub Bar Serial No:	Rotor Blade Serial Nos:	Blade 1:	Blade 2:			

Mandatory Instruments	<input type="checkbox"/> ASI	<input type="checkbox"/> Yaw Indicator
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<input type="checkbox"/> Mandatory photos from the side

NOTE: Upon completion of the inspection above, complete the Statutory Declaration below, have the Technical Adviser complete the statement below, then forward (post or email) these together with the appropriate fee and photos to the ASRA Registrar at registrar@asra.org.au or to the address found on the www.asra.org.au website.

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INC

Statutory Declarations Act 1959 (Commonwealth).

COMMONWEALTH OF AUSTRALIA

Statutory Declaration

I,
(insert printed full name of Principal Constructor) (insert occupation)

of
(insert residential address of Principal Constructor)

do solemnly and sincerely declare that:

- (1) in placing my initials in the check box adjacent to each sub-section and now upon finally signing this my declaration, I hereby attest that the materials, construction techniques, fittings, structural configuration, and overall design of the gyroglider I seek to list as a Limited Flight Status gyroglider, for the flight tests specified in the ASRA document, Ultralight Gyroglider Construction Standards, has been carefully reviewed by me for compliance with the published standards.
- (2) the information contained in the narrative or comment portions of this record of testing and inspection has been acquired personally by me or under my supervision and I hereby attest that I have taken all reasonable steps to ensure its accuracy and reliability;

and I make this solemn declaration by virtue of the Statutory Declarations Act 1959, and subject to the penalties provided by that Act for the making of false statements in statutory declarations, conscientiously believing the statements contained in this declaration to be true in every particular.

.....
(Signature of Principal Constructor)

.....
(Initials of Principal Constructor)

Declared at on the day of
(Place) (Date) (Month/Year)

Before me,
(signature of person witnessing declaration)

.....
(Print full name of witness)

.....
(Professional address)

.....
(category of entitlement to witness declarations. See next page)

The Statutory Declarations Regulations provide for a statutory declaration under the *Statutory Declarations Act 1959* to be made before the following persons:

- (1) a person who is authorised under a law in force in a State or Territory to practise as a member of any of the following professions:
- Chiropractor
 - Dentist
 - Legal practitioner
 - Medical practitioner
 - Nurse
 - Patent attorney
 - Pharmacist
 - Veterinary surgeon
- (2) any of the following persons:
- Agent of the Australian Postal Corporation who is in charge of an office supplying postal services to the public
 - Australian Consular Officer, or Australian Diplomatic Officer, (within the meaning of the *Consular Fees Act 1985*)
 - Bailiff
 - Bank officer with 5 or more continuous years of service
 - Building society officer with 5 or more years of continuous service
 - Chief executive officer of a Commonwealth court
 - Civil marriage celebrant
 - Clerk of a court
 - Commissioner for Affidavits
 - Commissioner for Declarations
 - Credit union officer with 5 or more years of continuous service
 - Holder of a statutory office not otherwise specified in this list
 - Judge of a court
 - Justice of the Peace
 - Magistrate
 - Master of a court
 - Member of the Australian Defence Force who is:
 - (a) an officer; or
 - (b) a non-commissioned officer within the meaning of the *Defence Force Discipline Act 1982* with 5 or more years of continuous service; or
 - (c) warrant officer within the meaning of that Act
 - Member of the Institute of Chartered Accountants in Australia, the Australian Society of Certified Practising Accountants or the National Institute of Accountants
 - Member of the Institute of Corporate Managers, Secretaries and Administrators
 - Member of the Institution of Engineers, Australia, other than at the grade of student
 - Member of:
 - (a) the Parliament of the Commonwealth; or
 - (b) the Parliament of a State; or
 - (c) a Territory legislature; or
 - (d) local government authority of a State or Territory
 - Minister of religion registered under Division 1 of Part IV of the *Marriage Act 1961*
 - Notary public
 - Permanent employee of:
 - (a) the Commonwealth or of a Commonwealth authority; or
 - (b) a State or Territory or of a State or Territory authority; or
 - (c) a local government authority; with 5 or more years of continuous service who is not otherwise specified in this list
 - Permanent employee of the Australian Postal Corporation with 5 or more years of continuous service who is employed in an office supplying postal services to the public
 - Person before whom a statutory declaration may be made under the law of the State or Territory in which the declaration is made
 - Police officer
 - Registrar, or Deputy Registrar, of a court
 - Senior Executive Service officer of the Commonwealth, or of a State or Territory, or of a Commonwealth, State or Territory authority
 - Sheriff
 - Sheriff's officer
 - Teacher employed on a full-time basis at a school or tertiary education institution

ASRA TECHNICAL ADVISERS RECORD OF VERIFICATION F022 part (a)

I hereby certify that I have undertaken an examination of the gyroglider subject of this Record and have inserted my initials in the relevant check boxes (where applicable) as an indication that (as far as can be ascertained by visual and/or manual examination) the entry made by the Principal Constructor in the sub-section adjacent to the check box appears to be true and correct.

.....
(Signature of TA)

.....
(Initials of TA)

.....
(Print Name of TA)

A.....
(ASRA Membership No)

.....
(Date)

***** Gyroglider will be listed as Provisional until the mandatory flight endurance, draft flight manual and the F023B have been submitted.**

Form F023 part (b) Flight and Performance Testing

Note: part (a) of this form must be completed and the gyroglider listed for limited flight status before commencing flight and performance testing.

Principal Constructor: **Listing G**.....

Evaluation Pilot: **ASRA Membership No. A**.....

Initials

PC	TA
----	----

Subpart B

B32. Rotor Speed Limits RPM Determined by:

Rotor speed limit entered into the Flight Manual	

PERFORMANCE

B53. Best Glide RatioKIAS Rate of decentft/Min

Best Glide Ratio @KIAS = X.X:1 entered into the Flight Manual

B55. Never Exceed Airspeed (VNE) determined asKIAS

The (VNE) entered into the Flight Manual

B60. Minimum Controllable Speed for Level Flight (VMIN) determined asKIAS

The (VMIN) entered into the Flight Manual

B80. Height/Velocity Envelope established asft atKIAS

Height/Velocity Envelope Graph entered into the Flight Manual

CONTROLLABILITY AND MANOEUVRABILITY

B85 (a), (b) & (c). General Controllability and Manoeuvrability are satisfactory

B85 (d) landing at maximum all up weight demonstrated

The procedure for B85(d) recorded in the Flight Manual

B85 (e) pitch stability satisfactory

B90 (a), (b) & (c). Longitudinal Lateral and Directional Control are satisfactory and control forces not exceeded.

B90 (d) A maximum operating wind speed of Knots has been established

A maximum cross wind speed of Knots has been established

A maximum tail wind speed of Knots has been established

The wind speeds established in B90(d) have been entered in the Flight Manual

B95. The Pitch Control Forces are satisfactory

STABILITY

B100. General stability is satisfactory

B106. Longitudinal, Lateral and Directional Stability are satisfactory

B110. Lateral and Directional Stability is satisfactory

B115. Dynamic Stability is satisfactory

PC	TA
----	----

GROUND HANDLING CHARACTERISTICS

B120. Directional Stability and Control is satisfactory		----
B125. Taxiing control is satisfactory		----
B125(b). The maximum taxiing speed over rough ground is knots		----
The maximum ground speed on take-off is knots		----
The maximum ground speed on landing is knots		----
The ground speeds established in B125(b) have been entered into the Flight Manual		

Subpart D – Design and Construction

D75 The Flutter and Resonance requirements met by:		----
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Subpart E -

E20 The Flight Endurance Test has been satisfactorily completed		----
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Subpart G

Operating Limitations and Information

G5 The Operating Limitations have been entered into the Flight Manual		
G10 Air-speed limitations are stated in terms of indicated air-speed		
G25 The Gyroglider Flight Manual has been produced and a hardcopy and electronic copy (*.docx) have been supplied to the ASRA Registrar.		

MARKINGS AND PLACARDS

G35 The requirements for Airspeed and Power-plant instrument markings have been met		
G50 The requirements for the Control markings have been met		
G55(a) The requirement for ballast markings has been met		
G55(b) The CASA occupant warning placard has been fitted		

NOTE: Upon satisfactory completion of parts (a) and (b) of this form, complete the Statutory Declaration below, have the Technical Adviser complete the statement below, then forward (post or email) these together with the appropriate fee and photos to the ASRA Registrar at registrar@asra.org.au or the address found on the www.asra.org.au website.

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Statutory Declaration

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- (1) in placing my initials in the check box adjacent to each sub-section and now upon finally signing this my declaration, I hereby attest that the materials, construction techniques, fittings, structural configuration, and overall design of the gyroglider I seek to list as a Limited Flight Status gyroglider, for the flight tests specified in the ASRA document, Ultralight Gyroglider Construction Standards, has been carefully reviewed by me for compliance with the published standards.
- (2) the information contained in the narrative or comment portions of this record of testing and inspection has been acquired personally by me or under my supervision and I hereby attest that I have taken all reasonable steps to ensure its accuracy and reliability;

and I make this solemn declaration by virtue of the Statutory Declarations Act 1959, and subject to the penalties provided by that Act for the making of false statements in statutory declarations, conscientiously believing the statements contained in this declaration to be true in every particular.

.....
(Signature of Principal Constructor)

.....
(Initials of Principal Constructor)

Declared at on the day of
(Place) (Date) (Month/Year)

Before me,
(signature of person witnessing declaration)

.....
(Print full name of witness)

.....
(Professional address)

.....
(category of entitlement to witness declarations. See next page)

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 - Dentist
 - Legal practitioner
 - Medical practitioner
 - Nurse
 - Patent attorney
 - Pharmacist
 - Veterinary surgeon
- (2) any of the following persons:
- Agent of the Australian Postal Corporation who is in charge of an office supplying postal services to the public
 - Australian Consular Officer, or Australian Diplomatic Officer, (within the meaning of the *Consular Fees Act 1985*)
 - Bailiff
 - Bank officer with 5 or more continuous years of service
 - Building society officer with 5 or more years of continuous service
 - Chief executive officer of a Commonwealth court
 - Civil marriage celebrant
 - Clerk of a court
 - Commissioner for Affidavits
 - Commissioner for Declarations
 - Credit union officer with 5 or more years of continuous service
 - Holder of a statutory office not otherwise specified in this list
 - Judge of a court
 - Justice of the Peace
 - Magistrate
 - Master of a court
 - Member of the Australian Defence Force who is:
 - (a) an officer; or
 - (b) a non-commissioned officer within the meaning of the *Defence Force Discipline Act 1982* with 5 or more years of continuous service; or
 - (c) warrant officer within the meaning of that Act
 - Member of the Institute of Chartered Accountants in Australia, the Australian Society of Certified Practising Accountants or the National Institute of Accountants
 - Member of the Institute of Corporate Managers, Secretaries and Administrators
 - Member of the Institution of Engineers, Australia, other than at the grade of student
 - Member of:
 - (a) the Parliament of the Commonwealth; or
 - (b) the Parliament of a State; or
 - (c) a Territory legislature; or
 - (d) local government authority of a State or Territory
 - Minister of religion registered under Division 1 of Part IV of the *Marriage Act 1961*
 - Notary public
 - Permanent employee of:
 - (a) the Commonwealth or of a Commonwealth authority; or
 - (b) a State or Territory or of a State or Territory authority; or
 - (c) a local government authority; with 5 or more years of continuous service who is not otherwise specified in this list
 - Permanent employee of the Australian Postal Corporation with 5 or more years of continuous service who is employed in an office supplying postal services to the public
 - Person before whom a statutory declaration may be made under the law of the State or Territory in which the declaration is made
 - Police officer
 - Registrar, or Deputy Registrar, of a court
 - Senior Executive Service officer of the Commonwealth, or of a State or Territory, or of a Commonwealth, State or Territory authority
 - Sheriff
 - Sheriff's officer
 - Teacher employed on a full-time basis at a school or tertiary education institution

ASRA TECHNICAL ADVISERS RECORD OF VERIFICATION F022 part (b)

I hereby certify that I have undertaken an examination of the gyroglider subject of this Record and have inserted my initials in the relevant check boxes (where applicable) as an indication that (as far as can be ascertained by visual and/or manual examination) the entry made by the Principal Constructor in the sub-section adjacent to the check box appears to be true and correct.

.....
(Signature of TA)

.....
(Initials of TA)

.....
(Print Name of TA)

A.....
(ASRA Membership No)

.....
(Date)