



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 F024 part (a) must be completed and signed off before a Limited Flight Status Registration (Provisional) can be issued. This limited flight status is to allow the specified flight testing to be completed before a Full Flight Status Registration (Basic) can be issued. The flight testing is recorded in Form F024 part (b)

The person whose initials and signature is affixed to this document is to be that of the person who is the **Principal Constructor**. 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 takeoff distance to 50' AGL, or landing distance from 50' AGL).

This form is to be used in conjunction with the ASRA 'Construction Requirements for Basic Gyroplanes (1st February 2008).

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** 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.

Form F024 part (a) Construction and Testing before flight testing

Principal Constructor:

Some appendices are provided giving conversion information.

Gyroplane
Registration No. **G**

Airframe
Serial No.

Subpart B

Weight and Balance

		Initials	
		PC	TA
B5. Hang Test	° nose down		----
Details of Hang Test entered into the Flight Manual			
B10. Maximum Selected Weight	kg.		----
Maximum Weight entered into the Flight Manual			
B15. Empty Weight.	kg		----
Empty Weight and conditions of test entered into the Flight Manual			
.....			
B20. Tilt Back Test	Distance in cm between the propeller thrust line and the vertical centre of gravity		----
Single seater	Full tank _____ cm	Empty tank _____ cm	
Printed/digital photos to be submitted with section (a)			

Subpart C

Structure

		Initials	
		PC	TA
C10. Strength and Deformation requirements have been met			----

FLIGHT LOADS

		Initials	
		PC	TA
C15. Limit Manoeuvring Load requirements have been met			----

CONTROL SYSTEM LOADS

		Initials	
		PC	TA
C20. Primary Control System requirements have been met			----
C25. The controls meet the Limit Pilot Force requirement			----

STABILISING AND CONTROL SURFACES

		Initials	
		PC	TA
C30. Control Surfaces meet the required limit loads			----

GROUND LOADS

		Initials	
		PC	TA
C35. The energy absorption requirements for of the Landing Gear have been met <u>Note</u> the TA must witness the drop test			

MAIN COMPONENT REQUIREMENTS

C40. Rotor Structure requirements have been met

Initials	
PC	TA

EMERGENCY LANDING CONDITIONS

C45. The structural requirements for emergency landing situations have been met

C50. The Fatigue Strength requirements have been met

C55. The Special Factors of Safety requirements have been met

Initials	
PC	TA

Subpart D

Design and Construction

D5. The requirements for Materials have been met

D10. The requirements for Locking of Connections have been met

D15. Provision for Inspection is satisfactory

D20. The requirements for Flutter Prevention have been met

Initials	
PC	TA

CONTROL SURFACES AND ROTORS

D25. The requirements for Control Surfaces and rotors has been met

D30. The requirements for rudder hinges have been met

D35. The Rotor Drainage requirements have been met

D40. The requirements of Rotor Balance have been met

D45. The requirements of Rotor Blade Clearance have been met

D50. Rotor Head Bearings are satisfactory This has been determined by:

Initials	
PC	TA

D55. The Rotor Disc Loading is _____ lbs/ft². The Rotor Disc Diameter is _____ ft.

CONTROL SYSTEMS

D60. The controls operate easily, smoothly and positively

D65. The requirements for Control Column Movement have been met

D70. The requirement for Control System Stops have been met

D75. The requirements for the Trim System have been met

D80. The Control System requirements have been met

D85. The requirements for Cable Systems have been met

D90. The suitability of Swivel Rod Ends has been determined by:

PC	TA

D100 Rotor Hub Tilt Range – ASRA Min 16 degrees _____ degrees

D101 Hub Bar Teeter Range – ASRA Min 16 degrees _____ degrees

D102 Rotor to Tail Clearance _____ mm Clear of Tail Surfaces

D103 First of type Gyroplane _____ Y / N Circle option

Subpart E**Powerplant - GENERAL**

		Initials	
		PC	TA
E5. Powerplant Installation is satisfactory		
E10. The engine and propeller combination is compatible with the gyroplane		----
E15. The Propeller Clearance is satisfactory		

FUEL SYSTEM

		Initials	
		PC	TA
E20. General – The Fuel System installation is satisfactory		
E25. The Fuel Flow requirements have been met		----
E30. The quantity of Unusable Fuel has been determined and marked on the fuel gauge		
E35. The Fuel Tank(s) Integrity and surge characteristics are satisfactory		----
E40. The installation of the Fuel Tank(s) is satisfactory		
E45 (a). The Fuel Tank(s) is/are equipped with drainable Sump(s) <input type="checkbox"/> or Sediment bowl(s) <input type="checkbox"/>		
E45 (b). The sump or sediment bowl drain can be locked in the closed position		
E50. The requirements for Fuel Tank Vents have been met		
E55. The requirements for a Fuel Strainer or Filter have been met		
E60. The requirements for the Fuel System Lines and Fittings have been met		

OIL SYSTEM

		Initials	
		PC	TA
E65. The general requirements have been met		----
E70. The requirements for Oil Tanks has been met		
E75. The requirements for the Oil Lines and Fittings have been met		

COOLING

		Initials	
		PC	TA
E80. The requirements for Powerplant Cooling have been met		----

EXHAUST SYSTEM

		Initials	
		PC	TA
E85. The requirements for the exhaust and silencing system have been met		
E90. The requirements for the Ignition Switches have been met		
E95. The requirements for Propeller Speed have been met		----

Subpart F – Equipment**INSTRUMENTS**

		Initials	
		PC	TA
F5. The required Flight and Navigation Instruments are satisfactory		
F10. The required Powerplant Instruments are satisfactory		

ELECTRICAL SYSTEMS AND EQUIPMENT

		Initials	
		PC	TA
F15. The requirements for Electric Cables and Equipment have been met		

MISCELLANEOUS EQUIPMENT

F20. The requirements for the Rotor Spin-up and Brake Systems have been met _____

F25. The requirements for the Airborne Radio and Radio Navigation Equipment have been met _____

F30. The requirements for the Seat and Safety Harness have been met _____

Initials	
PC	TA

Subpart G - Operating Limitations and Information

G10. The requirements for Powerplant and Propeller Limitations have been met _____

Initials	
PC	TA

Markings and Placards

G15. The requirements for Placards and/or Markings have been met _____

G20. The requirements for the Fuel Quantity Indicator have been met _____

G25. The Control Markings have been met _____

Initials	
PC	TA

Sub part H- Cockpit Design

H5. The General requirements for Cockpit Design have been met _____

H10. The Cockpit View is satisfactory _____

H15. The Windshields and Windows are satisfactory _____

H20. The design of the Cowling and Nacelle is satisfactory _____

H25. The location of the Cockpit Controls is satisfactory _____

H30. The Protection from Injury requirements have been met _____

H35. The Emergency Exit requirements have been met _____

H40. The Ventilation requirements have been met _____

H45. The requirements for the Fuel Tank Filler have been met _____

H50. The requirements for the Oil Tank have been met _____

Initials	
PC	TA

Sub part I- Gyroplane Flight Manual

I5, I10(a) I15 and I20. The requirements for a Flight Manual have been met _____

Initials	
PC	TA

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INC

GYROPLANE REGISTRATION FORM



ABN 53 412 417 012

Regulations state that only current financial ASRA members are permitted to fly and register a Gyro

ASRA Membership No: A	Gyroplane Registration No: G	Airframe Serial No:
Registree Given Names: _____	Registree 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"/> One	<input type="checkbox"/> Two Side by Side	<input type="checkbox"/> Two Tandem	MTOW: _____ kg
Aircraft Status: <input type="checkbox"/> Registered			Gyroplane Primary Colour: _____
Hang Test: 1 UP _____ Degrees	<input type="checkbox"/> Nose up	Controls Fore/Aft Angle: _____	Controls Side/Side Angle: _____
Hang Test: 2 UP _____ Degrees	<input type="checkbox"/> Nose down		Total Teeter Angle: _____
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: <input type="checkbox"/> In propeller slipstream	<input type="checkbox"/> Outside propeller slipstream		
Stabiliser Area: _____ m ²		Horizontal Distance from C of G: _____ m	
Rotor Head Manufacturer: _____	Serial No: _____		
Rotor Blade Manufacturer: _____	Hub Bar Serial No: _____	Length: _____ ft	
Propeller Manufacturer: _____	Serial No: _____	Diameter: _____ in	
Engine Manufacturer: _____	Type: _____	Engine No: _____	Engine Capacity: _____ cc
Redrive Make: _____	Serial No: _____	Ratio: _____ : 1	
Fuel Tank Manufacturer: _____	Capacity: _____		LTS

Mandatory Instruments	<input type="checkbox"/> ASI	<input type="checkbox"/> Altimeter	<input type="checkbox"/> Fuel Indicator	<input type="checkbox"/> Yaw Indicator
Compliant Gyroplanes Mandatory Instruments	<input type="checkbox"/> Hour Meter	<input type="checkbox"/> Oil Pressure (4 stroke)	<input type="checkbox"/> Engine tacho	
	<input type="checkbox"/> Compass	<input type="checkbox"/> Volts (Battery Ignition)	<input type="checkbox"/> Temperature	
Significant Extras	<input type="checkbox"/> GPS	<input type="checkbox"/> Transponder	<input type="checkbox"/> EPIRB	<input type="checkbox"/> VHF <input type="checkbox"/> UHF

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 these together with the appropriate fee and photos to the ASRA Registrar whose current address is listed on the ASRA website at www.asra.org.au

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INC

Statutory Declarations Act 1959 (Commonwealth).

COMMONWEALTH OF AUSTRALIA

Statutory Declaration

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

of
(insert ASRA registered 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 and performance of the gyroplane I seek to register as a Limited Flight Status gyroplane, for the flight tests specified in the ASRA document Construction Requirements for Basic Gyroplanes, 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

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:

Declared at on the

day of Before me,
(signature of person witnessing declaration)

.....
(full name, professional address, and category of entitlement to witness declarations)

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

See over

Form F024 part (b) Flight and Performance Testing

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

Principal Constructor: **Registration G**.....

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

Subpart B

FLIGHT

B15. Flight Endurance test completed satisfactorily

Initials	
PC	TA

PERFORMANCE

B25 Take-off Distance - Without Prerotator mtrs. With Prerotator Mtrs.

The take-off distance has been entered into the Flight Manual

B25. Climb Rate Time taken to 1000' min

The Climb Rate has been entered into the Flight Manual

B30. Minimum Controllable Speed for Level Flight (VMIN) as knots indicated airspeed

The (VMIN) entered into the Flight Manual

B35. Never Exceed Airspeed (VNE) determined as knots indicated airspeed

The (VNE) has been entered into the Flight Manual

PC	TA

CONTROLLABILITY AND MANOEUVRABILITY

B40 (a) & (b). Controllability and Manoeuvrability is satisfactory

B45. Pitch Control is satisfactory

B50. Pitch Control Force is satisfactory

PC	TA

STABILITY

B55. General gyroplane stability is satisfactory

B60. Longitudinal Stability is satisfactory

B65. Lateral Stability is satisfactory

PC	TA

GROUND HANDLING

B70. Directional Control is satisfactory

B75. Taxying is satisfactory

B80. Ground Resonance is satisfactory

PC	TA

Subpart G - Operating Limitations and Information

G5. The requirements for Air-speed Limitations have been met

PC	TA

Sub part I- Gyroplane Flight Manual

I5, to I20. The requirements for a Flight Manual have been met. The Gyroplane Flight Manual has been produced and a hardcopy and electronic copy have been supplied to the ASRA Technical Manager.

PC	TA

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 these to the ASRA Registrar whose current address is listed on the ASRA website at www.asra.org.au

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INC

Statutory Declarations Act 1959 (Commonwealth).

COMMONWEALTH OF AUSTRALIA

Statutory Declaration

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

of
(insert ASRA registered 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 and performance of the gyroplane I seek to register as a Basic Gyroplane 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

(3) the weight, speed, distance, altitude and any other performance figures inserted into this document are the result of carefully and accurately recorded multiple observations and I hereby personally attest to the reliability of those figures.

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:

Declared at on the

day of Before me,
(signature of person witnessing declaration)

.....
(full name, professional address, and category of entitlement to witness declarations)

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

See over

- (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
Form F024 parts (b)**

I hereby certify that I have undertaken an examination of the gyroplane 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: **Date:**

Name of ASRA Technical Adviser: **ASRA Membership No. A**.....

Address and contact details:

.....

 (Technical Adviser is to include a current email address)