AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INCORPORATED

F024 - Registration protocols - Basic Gyroplanes Record of Testing and Inspection and Statutory Declaration of Compliance



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 (Compliant) can be issued. The flight testing is recorded in Form F024 part (b)

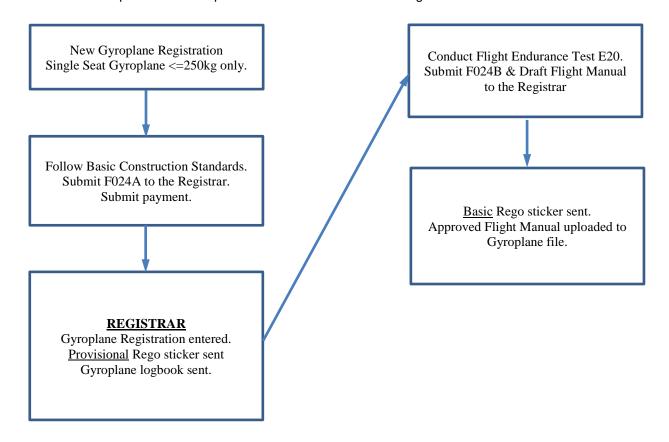
The person whose initials and signature are affixed to this document is to be that of the person who is the **Principal Constructor or a Factory Authorised Representative**. If flight testing is undertaken by a person who is not the principal constructor, the principal constructor MUST satisfy themselves 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 F024 is to be used in conjunction with the ASRA 'Construction Requirements for Basic Gyroplanes.

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 Basic registration.



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

Principal Constructor:					
Some appendices are provided giving conversion information.					
Gyroplane Registration No. Airframe Serial No.					
Subpart B	Init	ials			
Weight and Balance	PC	TA			
B10. Hang Test ⁰ 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					
B30. 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		1			
C15. Strength and Deformation requirements have been met					
FLIGHT LOADS					
C30. Limit Manoeuvring Load requirements have been met					
CONTROL SURFACE AND SYSTEM LOADS					
C55. Primary Control System requirements have been met					
C60. The controls meet the Limit Pilot Force requirement					
STABILISING AND CONTROL SURFACES					
C75. Control Surfaces meet the required limit loads					
GROUND LOADS					
C85. The energy absorption requirements for of the Landing Gear have been met.					
Note the TA must witness the drop test.					
MAIN COMPONENT REQUIREMENTS					
C90. Rotor Structure requirements have been met					
EMERGENCY LANDING CONDITIONS	1	1			
C100. The structural requirements for emergency landing situations have been met					
C102. The Fatigue Strength requirements have been met					
C104. The Special Factors of Safety requirements have been met					

Subpart D	Ini	tials			
Design and Construction	PC	TA			
D10. The requirements for Materials have been met					
D20. The requirements for Locking of Connections have been met					
D30. Provision for Inspection is satisfactory					
D70. Cable factor requirements met by					
CONTROL SURFACES AND ROTORS					
D80. The Rotor Drainage requirements have been met					
D85. The requirements for Control Surfaces and rotors has been met					
D90. The requirements for rudder hinges have been met					
D95. The requirements of Mass Balance have been met					
D100 (b). Rotor Hub Tilt Range Fore/Aft deg Side/Side deg					
D100 (c). Hub Bar Teeter Range degrees					
D102 Rotor Clearance mm Clear of Prop mm Clear of Tail					
D105. Rotor Head Bearings are satisfactory This has been determined by:					
D107.The Rotor Disc Loading is lbs/ft² The Rotor Disc Diameter is ft.					
CONTROL SYSTEMS					
D110. Controls movement satisfactory					
D115. Controls stops are satisfactory					
D125. Trim System is satisfactory					
D135. Control System is satisfactory					
D145. Cable Systems are satisfactory					
D147. The suitability of Swivel Rod Ends has been determined by:					
COCKPIT DESIGN					
D155. The General requirements for Cockpit Design have been met					
D160. The Cockpit View is satisfactory					
D165. The Windshields and Windows are satisfactory					
D170. The location of the Cockpit Controls is satisfactory					
D185. The requirements for the Seat and Safety Harness have been met					
D190. The Protection from Injury requirements have been met					
D200. The Emergency Exit requirements have been met					
D205. The Ventilation requirements have been met					
Subpart E					
Powerplant - GENERAL					
E5. Powerplant Installation is satisfactory					
E15 The design of the rotor spin up and brake system is satisfactory					
Limitations on the use of the spin up or brake system have been entered into the Flight Manual					
E25. The Propeller Clearance is satisfactory					

FUEL SYSTEM PC TΑ E30. General – The Fuel System installation is satisfactory E35. The Fuel Flow requirements have been met ----E40. The quantity of Unusable Fuel has been determined and marked on the fuel gauge The unusable fuel quantity has been entered into the Flight Manual E45. The Fuel Tank(s) Integrity and surge characteristics are satisfactory E55. The installation of the Fuel Tank(s) is satisfactory E60 (a). The Fuel Tank(s) is/are equipped with drainable sump(s) or Sediment bowl(s) E60 (b). The sump or sediment bowl drain can be locked in the closed position E65. The requirements for the Fuel Tank Filler have been met E70. The requirements for Fuel Tank Vents have been met E75. The requirements for a Fuel Strainer or Filter have been met E80. The requirements for the Fuel System Lines and Fittings have been met **OIL SYSTEM** E90. The general requirements have been met E95. The requirements for Oil Tanks has been met E105. The requirements for the Oil Lines and Fittings have been met COOLING E110. The requirements for Powerplant Cooling have been met **EXHAUST SYSTEM** E120. The requirements for the exhaust and silencing system have been met POWERPLANT CONTROLS AND ACCESSORIES E135. The requirements for the Ignition Switches have been met E140. The requirements for Propeller Speed have been met E145. The design of the Cowling and Nacelle is satisfactory Subpart F - Equipment **INSTRUMENTS** F10. The required Flight and Navigation Instruments are satisfactory F15. The required Powerplant Instruments are satisfactory INSTRUMENTS INSTALLATION F30. The requirements for the Pitot and Static Pressure Systems have been met. **ELECTRICAL SYSTEMS AND EQUIPMENT** F45. The requirements for Electric Cables and Equipment have been met MISCELLANEOUS EQUIPMENT F55. The requirements for the Airborne Radio and Radio Navigation Equipment have been met Subpart G - Operating Limitations and Information G20. The requirements for Powerplant and Propeller Limitations have been met Markings and Placards G30. The requirements for Placards and/or Markings have been met G45. The requirements for the Fuel Quantity Indicator have been met G50. The Control Markings have been met

Initials

AUSTRALIAN SPORT ROTORCRAFT ASSOCIATION INC

GYROPLANE REGISTRATION FORM



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

ASRA Membership No	. A		/ropiane egistration N	o: (G		Airtrame Serial No:			
Registree Given Names:				i I	Registree Family Name:					
Address:						Phon	ne No:			
Town:					State:			P/Cod	de:	
Email:										
Cockpit:	Open	Frame S	emi Enclosed	[Fully Enc	losed	Empty weight including rotors	»:		kg
Places:	One	Tv	wo Side by Si	de [Two Tand	dem	MTOW:			— kg
Aircraft Status:	Regis	tered					Gyroplane Prim Colour:	nary		
Hang Test: 1 UP		= 11000	· Fore/				ntrols e/Side		Total Teeter	
Hang Test: 2 UP	De	grees Nose	down Angle			_ Ang			Angle:	
Manufacturer:			Model:						Model No:	
Main Frame Material:			Size:						mm	
Mast Material:			Size:						mm	
Frame Plates Material:			Thickn	ess:					mm	
Vertical Tail Type & Area:	Rudde Total Vertic Tail Area:		Ful	l Flying I	Horizontal Dis	Twin	Tail from C of G:		Tri Tail	m
Pitch Stabiliser		eller slipstream		[er slipstream			
Location & Area:	Stabiliser A	rea:	m²	ŀ	Horizontal Distance from C of G			_		_ m
Rotor Head Manufacturer:				Serial I	No:			_		
Rotor Blade Manufacturer:				Hub Ba No:	ar Serial —			_ Len	gth:	ft
Propeller Manufacturer:				Serial I	No:			_ Dia	meter:	in
Engine Manufacturer:		Тур	e:	Engine	No:			Eng	jine pacity: —	CC
Redrive Make:				Serial I	No:			– Cap _ Rati	-	 : 1
Fuel Tank Manufacturer:				Capaci	ty:		LTS			
Mandatory Instru	uments	ASI		Altimete	er		☐ Fuel Indic	ator	☐ Yaw Ir	ndicator
Compliant Gyrop		☐ Hour Meter		Oil Pres	sure (4 stroke	e)	☐ Engine ta	cho		
Mandatory Instru	uments	☐ Compass		Volts (B	attery Ignitior	n)	☐ Temperat	ture		
Significant Extra	s	☐ GPS		Transpo	nder] EPIRB		☐ VHF	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

(insert full name of Principal Constructor)	(insert occupation)				
of					
do solemnly and sincerely declare that:					
(1) in placing my initials in the check box adjacent this my declaration I hereby attest that the materials, configuration, and overall design and performance of Flight Status gyroplane, for the flight tests specified in Requirements for Basic Gyroplanes, has been careful published standards;	the gyroplane I seek to register as a Limited the ASRA document Construction				
the information contained in the narrative or comment portions of this record of testing and nspection 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 and subject to the penalties provided by that is statutory declarations, conscientiously believed declaration to be true in every particular.	Act for the making of false statements in				
Signature of Principal Construct	or:				
Declared at	on the				
day ofBef	ore me,				
(full name, professional address, and category of entitlement to witness	declarations)				
The Statutory Declarations Regulations provide for a statutory declarati before the following persons:	on under the Statutory Declarations Act 1959 to be made				

ASRA Form F024 Registration Report for Basic Gyroplanes

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 Practicing 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 F024 part (a)

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)	

*** Gyroplane will be registered as Provisional until the mandatory flight endurance, draft flight manual and the F024B have been submitted.

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 N		tials			
PERFORMANCE	PC	TA			
B40 Take-off Distance - Without Prerotator mtrs. With Prerotator Mtrs.					
The take-off distance has been entered into the Flight Manual					
B45. Climb Rate Time taken to 1000' min					
The Climb Rate has been entered into the Flight Manual					
B55. Never Exceed Airspeed (VNE) determined as knots indicated airspeed					
The (VNE) has been entered into the Flight Manual					
B60. Minimum Controllable Speed for Level Flight (VMIN) as knots indicated airspeed					
The (VMIN) entered into the Flight Manual					
B70. Landing Distance mtrs at indicated air speed knots					
The Landing Distance entered into the Flight Manual					
B75. Maximum Operating Altitude established as ft					
The Maximum Operating Altitude entered into the Flight Manual					
B80. Height/Velocity Graph entered into the Flight Manual					
CONTROLLABILITY AND MANOEUVRABILITY					
B85 (a) & (b). Controllability and Manoeuvrability is satisfactory					
B90. Pitch Control is satisfactory					
B95. Pitch Control Force is satisfactory					
STABILITY					
B100. General gyroplane stability is satisfactory					
B105. Longitudinal Stability is satisfactory					
B110. Lateral Stability is satisfactory					
GROUND HANDLING					
B120. Directional Control is satisfactory					
B125. Taxying is satisfactory					
B127. Ground Resonance is satisfactory					
GENERAL		, ,			
E20. Flight Endurance test completed satisfactorily					
OPERATING LIMITATIONS AND INFORMATION					
G10. The requirements for Air-speed Limitations have been met					
G25. 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 Registrar.					

Published Date: - 24 December 2018

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

l, (ins	sert full name of Principal Constructor)	(insert occupation)					
		otor)					
do s	olemnly and sincerely declare that:						
confi	my declaration I hereby attest that the guration, and overall design and perfo	ox adjacent to each sub-section and now upon finally signing materials, construction techniques, fittings, structural ormance of the gyroplane I seek to register as a Basic me for compliance with the published standards;					
	2) the information contained in the narrative or comment portions of this record of testing and a spection 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 stati	subject to the penalties provide	by virtue of the Statutory Declarations Act 1959, d by that Act for the making of false statements in sly believing the statements contained in this rular.					
	Signature of Principa	l Constructor:					
Decl	ared at	on the					
		Before me,(signature of person witnessing declaration)					
(full na	ame, professional address, and category of entitler	nent to witness declarations)					
	tatutory Declarations Regulations provide for a stathe following persons:	tutory declaration under the Statutory Declarations Act 1959 to be made					

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 Practicing 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)	