Civil Aviation Authority
United Kingdom

TYPE APPROVAL DATA SHEET

BG 01

for
MT-03

AutoGyro Certification Ltd

(formally RotorSport UK Ltd)
Poplar Farm
Prolley Moor
Wentnor
Bishops Castle
SY9 5EJ

Applicant's Design Organisation Approval Number DAI/9917/06

Model(s):	MT-03
Revision:	14
Date of issue:	14 July 2025

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1. General

The MT-03 is a two seat (tandem configuration) gyroplane.

1.1. Manufacturer

Autogyro Certification Ltd (formally RotorSport UK Ltd)
Poplar Farm
Prolley Moor
Wentnor
Bishops Castle
SY9 5EJ

1.2. UK Importer

N/A

1.3. Approved Configurations

The basic standard for this aircraft is defined in Autogyro Certification Ltd Product Definition Document PDD-002 as approved by AAN 29134 Issue 6, plus approved modifications as described below:

- Addendum 1 (Add1): (MC-008, PDD-003) Introduction of Rotax 914UL Engine variant[1]
- Addendum 2 (Add2): (MC-013) Introduction of 8.4m Autogyro Rotor Blades
- Addendum 3 (Add3): (MC-084) MT-03 CG Position
- Addendum 4 (Add4): (MC-070) Increase in MTOW to 500kg
- Addendum 5 (Add5): (MC-175) Approval of the Rotorsvstem ll 8.4m Main Rotor System.
- Addendum 6 (Add6): (MC-328) Approval of the Rotorsystem II TOPP (Cruise) 8.4m Main Rotor System.

A list of approved minor modifications is available from the RotorSport website, www.rotorsport.org under support/aircraft modifications.

Minor modifications applicable at release-to-service are listed on the aircraft Statement of Aircraft Conformity, SAC/MT-03/xxx.

[1] Addendum 1 refers to the 914T engine, but this has since been redesignated as the 914UL and appears on all subsequent paperwork as such.

1.3.1. Powerplants

The following Powerplants are approved:

Designation	MT-03	MT-03
Engine Type	912 ULS	914 UL
Reduction Gear	2.43:1	2.43:1
Exhaust System	Stainless steel with after muffler	Rotax stainless steel with after muffler
Intake System	Single intake filter, balance box & Skydrive carb heat system	Single intake filter, balance box
Propeller Type	HTC 3 blade ground adjustable, composite	HTC 3 blade ground adjustable, composite
Propeller Dia x Pitch	1.72m x 19.5º at 12” inwards from end of blade, with inclinometer against rear tail of aerofoil	1.72m x 20.5 º at 12” inwards from end of blade, with inclinometer against rear tail of aerofoil
Noise Type Cert No.	N/A	N/A
AAN approving configuration	AAN29134	AAN29134
Addendum	-	Add1

1.3.2. Rotor System

The following Rotor Systems are approved:

Rotor system description:	Aircopter assembly (hub and blades)	Autogyro rotor system assembly (hub and blades) Black end-caps	Rotorsystem II (hub and blades) Red end-caps	Rotorsystem II (TOPP rotor blades) Blue end-caps
AAN approving rotor system:	AAN29134	AAN29134	AAN29134	AAN29134
Addendum:	-	Add2	Add5	Add6

1.4. Required Instruments

The following instruments are required to be installed with the applicable units stated.

- Airspeed Indicator (ASI): mph
- Altimeter: feet (mb subscale)
- Rotor RPM: RPM
- Engine RPM: RPM
- Compass: N/A
- Vertical Speed Indicator (VSI) (optional): Ft/min
- CHT/EGT: ºC

2. Certification Basis

The original Certification Basis for this aircraft was BCAR CAP 643 Section T Issue 3, dated August 2005.

2.1. Equivalent Level of Safety Items

Unless specifically identified, all Equivalent Level of Safety (ELOS) are applicable to the 912ULS variant originally approved under AAN29134 and the 914UL variant approved under Add1.

The following ELOS Items have been reviewed and accepted by the CAA:

- BCAR Section T issue 3:
    - T23 – Load Distribution Limits
      For Variants with MTOW 450kg, CG/Thrust offset varies between +3.91 and 9.3 inches above CG (Add3).
      For increased MTOW 500kg option, CG/Thrust offset varies between +3.91 and 9.44 inches above CG (Add4).
    - T25 (b) – Weight Limits
      Minimum Occupant Weight accepted as 86 kg
    - T659 – Mass Balance
      Demonstrated Equivalent Level of Safety by ground and flight test.
      Demonstrated Equivalent Level of Safety by similarity to previous rotor, ground and flight test (Add5, Add6).
    - T993 – Fuel System Lines and Fittings
      Hoses in the vicinity of the exhaust are shrouded with fire resistant sleeves compliant with TSO-C53A or TSO-C75.
    - T1017 – Oil Lines and Fittings
      Hoses in the vicinity of the exhaust are shrouded with fire resistant sleeves compliant with TSO-C53A or TSO-C75
    - T1307 (a) – Miscellaneous Equipment
      Front Seat Shoulder Strap attachment point has demonstrated Equivalent Level of Safety.
    - AMC T689 – Cable Systems (Interpretive Material)
      Rear Control Pulley diameter is less than the minimum required, however accepted Equivalent Level of Safety due to angle change of cable run being limited to 25 degrees nominal.

2.2. Special Conditions

The following Special Conditions (SC) and/or Certification Review Items (CRI) apply:

- N/A

3. Technical Characteristics and Operating Limitations

3.1. Technical Characteristics

3.1.1. General

- Gyroplane with nose gear wheel chassis
- Stainless steel welded airframe with glass/carbon fibre mouldings for tail, pilot enclosure, wheel spats, and seats.
- Two-seat tandem configuration
- Main landing gear with GRP (glass fibre reinforced plastic) spring spar and Hydraulic main wheel brakes
- Pneumatically operated trim, rotor brake and pre-rotator.
- Rotor head controlled with push-pull control cables
- Rudder controlled with cables
- Rudder and stabilizer surfaces made of CRP (carbon fibre)
- Dual control availability

3.1.2. Fuel Capacity

Single Tank:

Total:	35 litres.
Unusable:	2 litres (at nominal attitude)
Useable:	33 litres

With optional second Tank:

Total:	70 litres.
Unusable:	4 litres (2 litres per tank at nominal attitude)
Useable:	66 litres

Fuel specification as specified by BRP Rotax service instructions or Pilots Operating Handbook.

3.1.3. Permitted Fuels and Lubricants

Engine Oil Spec:	As specified by BRP Rotax service instructions
Gearbox oil spec:	N/A - Integral with engine
Fuel/Oil Mix:	N/A

3.1.4. Dimensions

Span:	1.82m (Not including Rotor)
Length:	5.08m (nose to tail, not including Rotor)
Height:	2.65m
Wing Area:	N/A

3.1.5. Typical Weight

Empty Weight (nominal):

Rotax 912ULS:	250 kg
Rotax 914UL:	260 kg

3.2. Operating Limitations

The Aircraft must be operated in compliance with the following operating limitations.

3.2.1. Maximum Number of Occupants

Maximum number of occupants authorised to be carried (including crew): Two

The minimum flight crew is: One pilot

3.2.2. Aerobatic Limitations

Aerobatic manoeuvres are prohibited.

Manoeuvres involving a deliberate reduction in normal 'g' shall be avoided.

Maximum bank angle 60 degrees.

3.2.3. Engine Limitations

Engine	912 ULS	914 UL
Max RPM (5 Minutes)	5,800	5,800
Max RPM (Continuous)	5,500	5,000 [Add1], OR 5,500 [Add4]
Max CHT or	135ºC	135ºC
Max Coolant Temperature (CT Gauge: MC-321 only)	120ºC	120ºC
Max EGT	N/A	N/A
Oil Pressure	Max:7 bar Min: 0.8 bar (0-3500 rpm) 1.5 bar (above 3500 rpm) Nominal: 2-5bar	Max:7 bar Min: 0.8 bar (0-3500 rpm) 1.5 bar (above 3500 rpm) Nominal: 2-5bar
Oil Temperature	Max: 130ºC Min: 50ºC	Max: 130ºC Min: 50ºC
Fuel Pressure	N/A	N/A

3.2.4. Air Speed Limitations

Maximum airspeed (V_{NE}): 100 mph IAS

Maximum airspeed in severe turbulence (V_B): 68 mph IAS

3.2.5. Loading Limitations

Maximum Total Weight Authorised:	450 kg [912ULS]
	450 kg [914UL– Add1]
	500 kg [912ULS, 914UL – Add4]
Maximum Empty Weight:	259 kg [912ULS]
	265 kg [914UL – Add1]
	309 kg [912ULS – Add4]
	315 kg [914UL – Add4]
Maximum Pilot Weight front seat:	125 kg
Minimum Pilot Weight front seat:	60 kg
Maximum Occupant Weight rear seat:	120 kg
Minimum Occupant Weight rear seat:	0 kg

Front seat occupants under 60kg weight must carry ballast.

The following CG limits apply:

Horizontal CG:

FWD:	596mm forward of the datum [Add3, Add4]
AFT:	376mm forward of the datum [Add3]
AFT:	371mm forward of the datum [Add4]

Vertical CG:

Upper:	952mm above the datum [Add3, Add4]
Upper:	972mm above the datum [Add6]
Lower:	819mm above the datum [Add3]
Lower:	814mm above the datum [Add4]
Lower:	952mm above the datum [Add6]

Note: The CG datum is defined as the mainwheel axle.

3.2.6. Other Limitations

Smoking in the aircraft is prohibited.

Altitude Limit: 10,000ft

Flight in icing conditions is prohibited.

Flight in strong gusty winds or wind velocities of more than 45 mph (40kts) is prohibited.

The Aircraft shall be flown by day in Visual Meteorological Conditions only.

4. Pilots Notes, Maintenance Manuals References

4.1. Approved Manuals

The following Manuals are approved for use with this aircraft (see www.rotorsport.org):

(a) Pilots Manual (POH) approved for use with this aircraft is RSUK0011
(b) Maintenance manual approved for use with this aircraft is RSUK0012.
(c) Maintenance schedules approved for use with this aircraft are:
F076 – 25hr Service
F093 – Aircraft field service worksheet
F138 – annual/100hr inspection
F146 – short term storage and return to service
F141 – long term storage and return to service

4.2. Placards

Placards to be installed in accordance with the applicable POH:

- RSUK0011

The following placards are mandatory:

a) Smoking in the aircraft is prohibited.
b) Occupant Warning: This aircraft has not been certificated to an International Requirement
c) Limitations as per Permit to Fly
d) Permanent & fireproof attachment of aircraft registration no & aircraft serial no. (plate affixed to instrument panel)

5. Notes

None

6. Document Administration

6.1. Document History

Issue No.	Date.	Changes
1	31/08/2007	Initial issue J Barratt
2	24/11/2008	Correction to Rotax 914 engine designation, correction to CG limits and updated optional modification listing. J Barratt
3	06/07/2009	Correction to engine limitations (CHT, oil temperature and oil pressure), correction to propeller pitch settings for the Rotax 914UL engine variant and updated modification listing. J Barratt
4	26/03/2010	Updated to include reference to 500 kg MTOW upgrade (modification 070 / SB013) and updated modifications listing. J Barratt
5	16/07/2010	The location of the aircraft registration markings has been clarified. The 12V auxiliary socket placard/engraved wording has been clarified under Appendix D. J Barratt
6	10/12/2010	Correction to cg limits added under section 8B, clarification of the requirements for the rear seat ASI placard added under Appendix D and updated modifications listing added under Annex B. J Barratt
7	13/01/2011	Correction of unusable fuel under section 8I following discussion with Rotorsport. J Barratt
8	23/02/2011	Update to section 11.1, Manuals approved for use with this aircraft. J Barratt
9	31/05/2011	Addition of limitation for gyroplane training under section 8H. Updated mods listing under Annex B. J Barratt
10	12/07/2011	Update to section 11.1b) Maintenance Manual and section 11.1c) 100 hour / Annual Inspection schedule approved for use with this aircraft. J Barratt
11	15/09/2011	Addition of Rotorsystem II option under section 7, update to section 11.1 manuals approved for use with this aircraft, update to Appendix B Optional Modifications and update to Appendix D Placards. J Barratt
12	January 2019	Addition of Rotorsport Modification MC-238 (Add6) Rotorsystem II TOPP (Cruise) 8.4m rotor blades and associated changes to aircraft CG. Correction to Max Empty Weights for 500kg MTOW variants.
13	24 June 2025	Administrative Only – Document format update Standardisation of terminology across TADS, AANs and Permit to Fly. Removal of operational statement on use of Gyroplanes for aerial work, as covered by enduring permission under ORS4 No.1583.
14	14 July 2025	3.2.5 – Removal of Total occupant weight limit of 180kg – No basis in original approval documentation. 3.2.5 – Removal of Lateral CG limits as N/A Administrative Changes: 1.3 – Add modification numbers for Add1, Add2, 3.1.2 – Unusable Fuel is at nominal attitude for straight and level flight. 3.2.3 – Max RPM 914UL – clarify for Add1 and Add4 Various – Change ( ) to [ ] on Addendums in limitation sections to clarify Permit to Fly limitations as per aircraft configuration.

6.2. Abbreviations & Definitions

Term	Definition
[ ]	Addendums noted in square brackets are modifications which may be listed or removed on Permit to Fly limitations as per aircraft configuration.
AAN	Airworthiness Approval Note – Original approving document for type
Add(x)	Addendum to AAN
ASI	Air Speed Indicator
CHT	Cylinder Head Temperature
CRI	Certification Review Item
EFD	Electronic Flight Display
EGT	Exhaust Gas Temperature
ELOS	Equivalent Level of Safety
IAS	Indicated Air Speed
MTOW	Maximum Take Off Weight
MTWA	Maximum Total Weight Authorised
N/A	Not Applicable
PFD	Primary Flight Display
RPM	Revolutions per Minute
Severe Turbulence	Large, abrupt changes in altitude or attitude. Aircraft may be temporarily out of control.
SC	Special Condition
V_B	Design speed for maximum gust intensity
V_{MIN}	Minimum Airspeed
V_{NE}	Never Exceed Speed
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions