Type Certificate

Number: VR508
Original issue:

Type Certificate Holder: AMT Helicopters Pty Ltd
PO Box 857
Caboolture, QLD, 4510

Pursuant to Regulation 21.025 of the Civil Aviation Regulations 1998 approval is hereby granted for the AMT Helicopters Pty Ltd model AMT UH-1H helicopter in the restricted category.

This certificate is valid until suspended or cancelled by the Civil Aviation Safety Authority. The basis of certification is as prescribed in Type Certificate Data Sheet Number VR508 issued by this Authority.

Date of Application: 15 August 2011
Date of Issuance: 26 July 2012

David Villiers
Delegate of the Authority

Number: VR508
Revision: Revision 0
Aircraft: AMT Helicopters Pty Ltd
AMT UH-1H

Date: 26 July 2012

TYPE CERTIFICATE DATA SHEET

This data sheet, which is part of the Type Certificate No VR508, lists the conditions and limitations under which the aircraft for which the Type Certificate was issued meet the airworthiness requirements of the Civil Aviation Safety Authority.

Type Certificate Holder: AMT Helicopters Pty Ltd
PO Box 857
Caboolture QLD 4510
AUSTRALIA

Original Manufacturer: Bell Helicopter Company
Fort Worth, Texas
USA

Model AMT UH-1H, Restricted Category Rotorcraft Approved 26 July 2012.

Engine: Lycoming T53-L-13B
See Note 2 for substitute engines.

Fuel: MIL-T-5624, Grade JP-4; alternate fuel MIL-T-5624, Grade JP-5.
See Note 10 for substitute and emergency fuels.

Engine Limits:

	Torque Pressure (p.s.i)	Output Shaft (R.P.M)	Exhaust Gas Temp (°C)
Takeoff (30 mi)	50.0 (1100 HP)	6600	610 to 625
Max. Co	50.0 (1100 HP)	6600	400 to 610

See Notes 11, 12 and 13. Refer to AMT Helicopters Document EA AMT–UH-1H, Chapter Seven; Figure 7.1-2 sheets one and two for transmission limits.

Rotor Limits:

Power off	Power on
Maximum 339 R.P.M	Maximum 324 R.P.M
Minimum 294 R.P.M	Minimum 294 R.P.M

Continuous operation 294-324 R.P.M./Maximum for auto rotation is 339 R.P.M

Airspeed Limits:	Roof Mounted Pitot Static: Never exceed 124 knots (143 mph) up to 7500 lbs. Gross Weight, sea level to 2000 feet. Never exceed 113 knots (132 mph) up to 9500 lbs. Gross Weight sea level to 2000 feet. Refer to TM55-1520-210-10, Chap. 5, Sect. V, for specific operating airspeed limitations. Nose Mounted Pitot Static: Never exceed 112 knots (128 mph) up to 7500 lbs. Gross Weight, sea level to 2000 feet. Never exceed 103 knots (118 mph) up to 9500 lbs. Gross Weight, sea level to 2000 feet. Refer to TM55-1520-210-10, Chap. 5 Sect V for specific operating airspeed limitation. (See note 5 for specific operating airspeed limitations.)
Centre of Gravity C.G Range:	Longitudinal C.G Limits (+130.0) to (+144.0) at 8600 lb. or less (+134.0) to (+143.0) at 9500 lbs. Lateral C.G Limits plus or minus 5.0 inches. (+130.0) to (+144.00) at 3600 lbs. or less. See AMT Helicopters Document EA AMT –UH-1H, Chapter 6 Section VII, for specific Centre of Gravity range and limits.
Empty Weight C.G Range:	(+130.0) to (+144.0)
Datum:	Station 0, datum is 7.6 inches aft of the most forward point of the fuselage nose section. (See U.S. Army TM55-1520-210-10)
Levelling Means:	Plumb line from ceiling in left rear cabin to index plate on floor. See Note 14.
Maximum Gross Weight:	9500 lbs.
Minimum Crew:	1 (pilot) for VFR flight.
Number of Seats:	(See Note 8) Refer to AMT Helicopters Document EA AMT –UH-1H for seats.
Maximum Baggage:	100 lb./sq/ft/ cargo area (Refer to AMT Helicopters Document EA AMT–UH-1H).
Fuel Capacity:	208.5 US gals. (+151.6) Crashworthy system. Unusable 2 US gals.
Oil Capacity:	3.25 gal. (+173.0)
Service Ceiling:	19,390 Feet
Rotor Blade And Control Movements:	For rigging information, refer to U.S .Army TM 55-1520-210-23 Maintenance Manual.
Serial Nos Eligible:	65-9762, 73-22068 Additional Serial numbers will be considered upon formal application to CASA

Certification Basis:

Sub-regulation 21.025 (1) (b) (ii) of the Civil Aviation Safety Regulations 1998 as in force on 14 October 2004.

A special certificate of airworthiness in the restricted category may be issued for the following special purposes as specified in regulation 21.025 of the Civil Aviation Safety Regulations 1998:

a) Agricultural operations [CASR 21.025 (2) (a)]
b) Forest and wildlife conservation [CASR 21.025 (2) (b)]
c) Fire-fighting [CASR 21.025 (2) (c)]
d) Aerial surveying [CASR 21.025 (2) (d)]
e) Patrolling [CASR 21.025 (2) (e)]
f) Search and rescue [CASR 21.025 (2) (k)]
g) Disaster relief [CASR 21.025 (2) (k)]

Production Basis:

None. Prior to the initial Certificate of Airworthiness of each aircraft a detailed inspection for workmanship, materials, and conformity with the approved technical data must be performed by CASA.

Equipment:

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.

The following equipment and documents must be available in each helicopter for certification:

(1) Aircraft Flight Manual: AFM EA AMT UH-1H (U.S. Army TM55-1520-210-10, Operators Manual UH-1H).

(2) Standard U.S. Army cargo suspension system installation, 204-070-900-5, 204-070-900-19 IAW TM55-1520-210-23P (Part Manual), installed and maintained IAW TM55-1520-210-23 (Maintenance Manual), and operated IAW U.S Army TM55-1520-210-10 (Operators Manual) for all external cargo operations.

Alternate STC approved cargo suspension systems may be used in place of 204-070-900-5 or 204-070-900-19 systems.

(3) Minimum equipment required is as specified in CAO 20.18 Para 3.2 and Appendix VI.

Publications:

Flight Manual: EA AMT UH-1H dated 26 July 2012 or later CASA approved revision which references U.S. Army TM 55-1520-210-10 change 20, 23 June 2005 and Checklist P/N TM55-1520-210-CL at change dated 13 February 1997 or later approved revisions.

Instructions for Continuing Airworthiness (ICA): AMT Helicopters Pty Ltd Document No AMT 082, Original Issue dated 26 July 2012 or later CASA approved revision. (See Note 4)

Note 1:

These restricted category helicopters must not be operated in a country other than Australia, or in the territory of a country other than Australia, without the written permission of the National Airworthiness Authority of that country.

Note 2: Engine changes are allowed provided the replacement engine is of the same type and model as identified in this TCDS. Replacement engines must have proper military records and have accomplished all applicable airworthiness inspections.

Note 3: The supplementary data plate required by the Conformity Inspection Program shall contain the following information:

(a) The aircraft model – AMT UH-1H

(b) The Type Certificate No. VR508

(c) The aircraft serial number; and

(b) The date the conformity inspection was completed.

Note 4: AMT UH-1H helicopters covered by this TCDS shall be serviced, inspected, maintained and overhauled in accordance with AMT Helicopters Pty Ltd Instructions for Continued Airworthiness, Document No AMT 082 Original issue dated 26 July 2012 or later CASA approved revision.

Note 5: The following placards must be prominently displayed in the crew cabin in clear view of the pilot.

Placard No. 1

(With Roof Mounted Pitot Static)

CALIBRATED AIRSPEED-KNOTS

	Total Weight		
Pressure Altitude	**7500 lbs**	**8500 lbs**	**9500 lbs**
Level 0 to 2000 ft	124	118	113
3000 ft	121	115	110
6000 ft	112	106	101
9000 ft	103	97	92
12000 ft	94	88	92
15000 ft	82	76	83
18000 ft	70	-	-

Up to 7500 lbs. GW use 6000 to 6600 rpm.
Above 7500 lbs. GW use 6400 to 6600 rpm.
Reduce speed in case of excessive vibration.

(With Nose Mounted Pitot Static)

CALIBRATED AIRSPEED-KNOTS

	Total Weight		
Pressure Altitude	**7500 lbs**	**8500 lbs**	**9500 lbs**
Level 0 to 2000 ft	112	107	103
3000 ft	109	104	100
6000 ft	100	95	91
9000 ft	91	86	82
12000 ft	82	77	73
15000 ft	70	65	-
18000 ft	58	-	-

Up to 7500 lbs. GW use 6000 to 6600 rpm.
Above 7500 lbs. GW use 6400 to 6600 rpm.
Reduce speed in case of excessive vibration.

Placard No. 2

This helicopter can only be operated in compliance with the restricted category limitations and specific regulations imposed by the Civil Aviation Safety Authority as well as with limitations specified in AMT Helicopters Document EA AMT –UH-1H.

Placard No. 3

External Load operations: Vne will be determined for each proposed external load application.

Placard No. 4

This helicopter must only be flown VFR

Note 6: Carriage of cargo is limited to such cargo that is incidental to the purpose listed in the Certification Basis.

Note 7: This aircraft has not been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention of International Civil Aviation.

Note 8: No person may be carried in this helicopter during flight unless that person is essential to the purpose of the flight.

Note 9: Airworthiness Directives for the helicopter and engine which are contained in AMT helicopters Pty ltd. Airworthiness Directive Report ADR AMT UH-1H 001/Rev 0 dated 13 Jul 2012 or later CASA approved Revision must be complied with prior to the initial issue of an Australian certificate of airworthiness.

Note 10: Alternate or emergency fuels are listed in AMT Helicopters Document EA AMT-UH-1H (U.S. Army TM55-1520-210-10), Chapter 2, Para 2-89 and Table 2-1. Some limitations apply for the use of certain alternate and emergency fuels.

Note 11: Torque pressure output by the engine torque sensing system varies with individual engines. The calibration of this value is required on each engine and the value corresponding to Take-off Power is stamped on the engine data plate.

Note 12: Gas producer speeds as shown under "Engine Limits" are maximum permissible speeds. The gas producer speed for rated power varies with individual engines and must be determined during engine calibration and stamped on the engine data plate. The rated gas producer speed shown on the temperature limit placard installed on the instrument panel must correspond to the engine data plate gas producer speed. Gas producer speed limits also vary with OAT in accordance with the schedule as shown on the Temperature Limits (GO-NO-GO TAKE-OFF) placard on the instrument panel or Health Indicator Test (HIT) results, as applicable.

Note 13: Maximum permissible exhaust gas temperature varies with ambient temperature as described in the Flight manual. Check engine EGT by use of Health Indicator Test (HIT) prior to take-off see AMT Helicopters Document EA AMT–UH-1H (U.S. Army TM55-1520-210-10) and HIT EGT Log for the aircraft.

Note 14: A current weight and balance report including a list of equipment included in the certificated empty weight, and loading instructions, when necessary must be provided for each aircraft at the time of CASA certification. Refer to AMT Helicopters Document EA AMT–UH-1H (U.S Army TM55-1520-210-10), Chapter 6 and Maintenance Manual, TM55-1520-210-23 Para. 1-38, for levelling means and weight and balance determination.

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