# **Type Acceptance Report TAR 96/01** Aeromot AMT-100 & AMT-200

Aircraft Certification Unit

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### Introduction

This report details the basis on which Type Acceptance Certificate No.96/01 was issued in accordance with NZCAR Part 21B.

Specifically the report aims to:

- (a) Record the airworthiness certification standard used for type acceptance of the applicable model(s) in New Zealand;
- (b) Summarise any outstanding requirements which must be complied with for the issue of a NZ Airworthiness Certificate to any models covered by the Type Acceptance Certificate.

# **Foreign Type Certificate Details**

Type Certificate: EP-8602-06

Issued by: Centro Tecnico Aerospacial, Brazil

Manufacturer: Aeromot -Industria Mecanico Metalurgica Ltda

Model: AMT-100 & AMT-200

Engines: AMT-100 - Limbach L2000 E 01 or Imaer T2000 M1

AMT-200 - Rotax 912 A2

Propellers: AMT-100 - Hoffman HO-V62R/L 160 BT

AMT-200 - Hoffman HO-V62R/170 FA

MCTOW AMT-100 -800 kg

AMT-200 -850 kg

The certification basis of the AMT-100 & AMT-200 is: RBHA 1330, JAR 22 (Utility Category, VFR) Amdt 2 effective Sept 13, 1981, plus special condition established in letter  $N^{\circ}$  54085 SFAT/TC, dated Oct 15 1984, plus compliance with NPA 22C7.

This is an acceptable certification basis in accordance with NZCAR Part 21B Para 21.41, *JAR* 22 being listed in AC21-1 as an equivalent standard. There are no noncompliances and no special conditions have been prescribed by the Director under 21.23.

# **Type Acceptance Application**

The application for New Zealand type acceptance was made by the manufacturer by CAA Form 24021/02 dated January 23, 1996.

Type Acceptance Certificate No.96/01 was granted on 1 April 1996.

# **Type Data**

The type data requirements of NZCAR Part 21B Para 21.43 have been satisfied by supply of the following documents:

1) Type certificate: Number 8602 dated June 5 1986, and TCDS No

EP-8602-06 dated August 1995. (Copies also supplied of FAA type certificate number TG00004A T and French type certificate

number 1M 191.)

2) Airworthiness design requirements: Copy supplied of RBHA 1330, Brazilian

Requirements for Aeronautical Certification for Gliders and Powered Gliders, NPA 22C7, and special conditions letter No 54085 (in French).

3) Certification compliance listing: Report No 009/91- Rev D dated 31-8-93 -AMT-

100 Compliance check list.

Report No AM020/93 -dated 14-9-93 -AMT-100

Compliance check list.

(The above reports were prepared in support of

US type certification.)

Report No AM001/93 -April 1993 -Summary of

AMT -200 Certification Reports.

(The report introduction states it is a summary of

reports listed in Compliance checklist

No AM104/92.)

4) Flight manual: AMT-100 – Flight Manual, document number

100-04, dated 29/12/93. CAA Approved as Air

2556.

AMT -200 – FAA Approved Motorglider Flight Manual, document number 200-07, to Revision 2 dated 14-7-95. CAA Aproved as AIR

2555

5) Illustrated Parts Catalogue: AMT-100 & AMT-200 Parts Catalogue,

Document number 100-02 to Revision 5 dated

20-12-91.

6) Maintenance manual and service data for aircraft, engine and propeller:

AMT-100-Maintenance Manual, document 100-

10 to Revision 1 dated 25-2-96.

AMT-200-Maintenance Manual, document 200-

13 to Revision 2 dated 10-1-95.

Data for engines and propellers not requested.

(Some already held).

7) Agreement from manufacturer to supply updates of data in (4), (5) and (6):

CAA 2171 form from L A Castilho, Quality Assurance Director, dated 23-1-96.

# **Additional New Zealand Certification requirements**

Compliance with the following additional NZ requirements has been reviewed and were found to be covered by either the original certification requirements or the basic build standard of the aircraft, as noted:

### **NZCAR Section C4**

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
2.13(a)	ASI shall be marked in knots	Standard fit at production
2.1.3(b)	Altimeter main scale to be calibrated in feet	Standard fit at production
2.1.4(a)	Altimeter type	Standard fit at production
3.1	Seats, Safety Belts and Harnesses	Safety harnesses (AM.Std 501992) fitted as standard.

### CASO 4

The AMT-100 & AMT-200 is classified as a Group aeroplane under CASO 4.

# **Outstanding Requirements**

The following additional NZ requirements are not covered by the original certification requirements or the basic build standard of the aircraft and require compliance with before issue of an airworthiness certificate:

### **NZCAR Section C4**

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
2.1.3(c)	Altimeter barometric scale in millibars or hectopascals	To be determined for each aircraft.
2.1.6	Magnetic compass residual deviation as per NZCAR F.8	To be determined for each aircraft.
3.2	Axe	To be determined for each aircraft.
3.4	First aid kits as prescribed in Appendix A	To be determined for each aircraft.
4.1	Independent radio antenna	To be determined for each aircraft.
4.2	Emergency locator beacon	To be determined for each aircraft.
6(d)	Red anti-collision light (See Concession AC35/96)	To be determined for each aircraft.
7.1	Flight manual container	To be determined for each aircraft.
8.2	Fireproof ID plate	To be determined for each aircraft.
8.3	Passenger smoking notices	To be determined for each aircraft.
8.9	Nationality and registration marks	To be determined for each aircraft.

### **NZCAR Section C4**

GEN AD:	TITLE:	REQUIREMENT:	MEANS OF COMPLIANCE:
DCA/GEN/6	Cable end assys proof load	Test before installation	To be determined for each aircraft.

Airworthiness Directives will be considered on the import of any examples. There have been four Brazilian AD's issued against the AMT-100 (plus one other applicable in Brazil only):

87-05-03 – Elevator root joint cut-outs. SB A100-55-001. 87-07-01 – Fuel feed tank outlet screen. SB A100-28-002. 88-09-03 – Engine driven alternator. SB A100-24-005. 88-11-05R2 – Main landing gear drive. SB A100-32-004

### **Summary**

The AMT-100 & AMT 200 has been issued with Type Acceptance Certificate No.96/01 and are eligible for issue of a New Zealand Airworthiness Certificate in the Standard Category in accordance with CAR 21.177, subject to the outstanding requirements noted above being met:

### **Attachments**

The following documents form attachments to this report:

Three-view drawing AMT-100 & AMT-200 Copy of Brazilian Type Certificate 8602 / Type Certificate Data Sheet Copy of NZ Type Acceptance Certificate 96/01

### Sign off

Peter Gill Airworthiness Engineer

Date:

1 April 1996