

型号认可证数据单
THE VALIDATION DATA SHEET

编号/No: VTC 0309A
版次/Revision: 0
型号/Type: AT-3R100

批准人/Approved By: Yang Zhenmei



职务/Title: Deputy Director General of
CAAC-AAD

日期/Date: 2014-12-18

本数据单是型号认可证（编号：VTC0309A）的组成部分，它规定了符合中国民用航空总局的适航要求所颁发此型号认可证的产品状态和限制。

This data sheet, which is part of **Validation of Type Certificate (No: VTC0309A)**, prescribes condition and limitation under which the product for which the type certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulation.

型号认可证持有人/Validation of Type Certificate Holder:

AERO AT Sp. z o.o.
ul. COP-u 2
39-300 Mielec
Poland

有效页清单/List of effective pages :

页数/Pages	1	2	3	4	5	6	7	8	9	10	11	12	13
版次/Revision	0	0	0	0	0	0	0						

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

第 1 节 概述 / SECTION 1 GENERAL

1. CAAC 认可数据单和 EASA 型号合格证数据单/CAAC Validation Data Sheet and EASA TC Data Sheet

	中国民用航空局认可数据单号、版次和颁发日期 CAAC Validation Data Sheet Number, Revision and Issuance Date	型号合格证数据单号、版次和颁发日期 Type Certificate Data Sheet Number, Revision and Issuance Date
当前 Current	VTC0309A, Revision 0, 2014 年 12 月 18 日	EASA A.021 (Issue 06, 19 April 2013)

2. 飞机类型/Airworthiness Category: 甚轻型/VLA
3. 认可当局/Validation Authority: 中国民用航空局/CAAC
审定当局/Certifying Authority: 欧洲航空安全局/EASA
4. 型号证持有人/Type Certificate Holder: AERO AT Sp. z o.o.
ul. COP-u 2,
39-300 Mielec, Poland
5. 型号认可证后被中国民航局认可的设计更改:
The following design changes have been validated post Type Validation by CAAC:

改装包/MOD	版本/issue	描述/Description
(保留/Reserved)		

第 2 节 AT-3R100 / SECTION 2 AT-3R100**I. 概述/General**

1. 飞机/Aeroplane: AT-3R100

II. 审定基础/Certification Basis

1. CAIB 合格审定的参考申请日期/Reference Application Date for CAIB Certification:

2002 年 3 月 11 日/11 March 2002

2. CAIB 合格审定日期/CAIB Certification Date:

2003 年 7 月 23 日/23 July 2003

3. EASA 合格审定的参考申请日期/Reference Application Date for EASA Certification:

2003 年 9 月 24 日/24 September 2003

4. EASA 合格审定日期/EASA Certification Date:

2005 年 1 月 21 日/21 January 2005

5. EASA 审定基础/EASA Certification Basis:

参考申请日期有效的下列 EASA/JAA 适航标准:

The following EASA/JAA airworthiness standards effective on the reference date are:

在最新版的 CRI A-01 中确定/As defined in CRI A-01, latest Issue

EASA CS-VLA, 2003 年 11 月 14 日(等同于 1990 年 4 月 26 日颁布的 JAR-VLA, 包括至 1992 年 1 月 1 日的 VLA/92/1 的所有修正案)

EASA CS-VLA dated 14 November 2003 (Equivalent to JAR-VLA Issued 26 April 1990 including amendments up to VLA/92/1 dated 1 January 1992)

6. 专用条件/Special Conditions:

CRI A-2 夜间 VFR/CRI A-2 Night VFR

7. 等效安全/Equivalent Safety Findings:

无/None

8. 环境要求/Environmental requirements:

国际民航噪声标准 (附件 16, 第 1 卷, 第 3 版)。

ICAO, Annex 16, Volume 1 (Third Edition), Chapter 10

9. CAAC 认可审定的申请日期/Application Date for CAAC Validation:

2014 年 1 月 30 日/30 January 2014

10. CAAC 认可审定日期/CAAC Validation Date:

2014 年 12 月 18 日/18 December 2014

11. CAAC 认可审定基础/CAAC Validation Basis:

CAAC 认可审定基础包括/The CAAC validation basis consists of:

(1) EASA 确定的审定基础: 和/Certification basis as established by EASA; and

(2) 如下附加技术条件/Additional Technical Conditions as follows:

- 根据 CCAR-21 第 21.29 条第(五)款的要求, 机上所有对旅客进行的提示、警告和通知的文字标记和标牌, 以及机上所有向旅客或者机外营救人员指示应急出口和门的位置以及开启方法的文字标记和标牌和旅客可能使用的机上所有应急设备的操作、使用说明应当至少有中文表述。
As per CCAR 21.29(e), all markings and placards on the airplane used for advising, warning, or notifying passengers must be at least in Chinese; all markings and placards on an airplane used for indicating passengers or outboard rescue personnel of the location of emergency exits and doors and their means of opening must be at least in Chinese; and all the operation instructions of airplane emergency equipment that may be used by passengers must be at least in Chinese.
- 根据 CCAR-91 部的要求, 对于 AERO AT-3R100 飞机, 驾驶舱内在便于机组获得的地方至少应提供一个手持灭火瓶。因此, 手持灭火瓶作为在中国运行的该型号飞机型号设计的一部分包含在标准设备当中。
As per CCAR Part 91, General Operation and Flight Rules, for AERO AT-3R100 airplane, at least one hand fire extinguisher must be provided and located on or near the flight deck in a place that is readily accessible to the flight crew. For this reason, a hand fire extinguisher complying with such requirement must be included as standard equipment in the type design of aircraft to be operated in China.
- 根据 CCAR-91 第 91.423 条的要求:
Section 91.423 of CCAR part 91 "Oxygen Equipment at high altitude operation", no person may operate a civil aircraft of Chinese registry:

(a)(1) 舱内大气压力在 3000 米 (10000 英尺) 至 4000 米 (13000 英尺) 之间的运行时间超过 30 分钟时, 能在该运行时间内向所有机组成员和乘客供氧;
At cabin pressure altitudes above 10,000 feet (MSL) up to and including 13,000 feet (MSL) unless all the flight crew and passenger are provided with and use oxygen for that part of the flight at those altitudes that is of more than 30 minutes duration;

(a)(2) 舱内大气压力高于 4000 米 (13000 英尺) 的全部运行时间内, 能向所有机组成员和乘客供氧;
At cabin pressure altitudes above 13,000 feet (MSL) unless all the flight crew and passenger are provided with and uses oxygen during the entire flight time at those altitudes;

(a)(3) 为满足上述呼吸用氧的供应, 必须装备适当的氧气储存与分配装置。
For the purpose of (a)(1) and (a)(2), oxygen storage and distribution equipment are required.

III. 技术特性和运行限制 / Technical Characteristics and Operational Limitations

1. 型号设计定义/Type Design Definition:

主图纸目录, 文件编号 No. ATS3.02, 2003 年 2 月 3 日, 第 5 修正案, 2005 年 5 月 16 日及后续修正案。

Master Drawing List, Document No. ATS3.02 dated 03.02.2003, Amendment 5 dated 16.05.2005 and

subsequent.

2. 描述/Description:

单发、两座、下单翼飞机，全金属结构，固定式前三点起落架。

Single engine, two-seater cantilever low wing aeroplane, all metal construction, fixed tricycle landing gear.

3. 设备/Equipment:

设备清单，AFM，文件编号 ATL3.04，第 2 节和第 6 节。

Equipment list, AFM, Document No. ATL3.04, Section 2 and 6.

4. 尺寸/Dimensions:

翼展/Span	7.55 m
长/Length	6.25 m
高/Height	2.23 m
机翼面积/Wing Area	9.30 m ²

5. 发动机/Engine:

Bombardier-Rotax 912S2 或 S4。

5.1 发动机限制/Engine Limits:

最大起飞转速/Max take-off rotational speed 5800 r.p.m

最大连续转速/Max continuous rotational speed 5500 r.p.m

其他发动机限制参见 AFM，文件编号 No. ATL3.04，第 2 节/For other engine limits refer to AFM, Document. No. ATL3.04, Section 2

6. (保留/Reserved)

7. 螺旋桨/Propeller

型号/Type	ELPROP 3-1-1P
直径/Diameter	1730 mm
种类/Kind	三叶、地面可调螺旋桨，符合材料桨叶，金属桨毂/ Three-blade ground adjustable propeller with composite blades and metal hub
螺旋桨构型/Propeller configuration	拉进式螺旋桨/Tractor propeller
桨叶入射角/Blade angle of incidence	21.5° ± 0.5°

8. 液体/Fluids:

8.1 燃油/Fuel:

最低 95 号无铅车用汽油。当其他燃油无法获得时，可以使用 AVGAS 100 LL 低铅汽油。

Minimum 95 Grade Unleaded Automotive Gasoline or AVGAS 100 LL if other fuel is not available

8.2 滑油/Oil:

滑油符合美国石油学会（API）的 SF 或 SG 分类。

Oils conforming to API classification marked SF or SG

更详细内容参见 AFM，文件编号 No. ATL3.04，第 2 节

For more details see AFM, Document No. ATL3.04, Section 2

9. 容量/Fluid capacities:

9.1 燃油/Fuel:

标准燃油箱/Standard fuel tank:	总容量/Total: 68.5 升/litres 可用容量/Usable: 65.0 升/litres
带有附加油箱/With additional fuel tank:	总容量/Total: 123.5 升/litres 可用容量/Usable: 120.0 升/litres

9.2 滑油/Oil:

最大/Maximum:	3.5 升/litres
最小/Minimum:	2.5 升/litres

10. 空速/Air Speeds:

设计机动速度/Design Manoeuvring Speed V_A :	109 kt (202 km/h) CAS
襟翼放下速度/Flap Extended Speed V_{FE} :	85 kt (157 km/h) CAS
最大结构巡航速度/Maximum structural cruising speed V_{NO} :	109 kt (202 km/h) CAS
不可超越速度/Never exceed speed V_{NE} :	123 kt (228 km/h) CAS

11. 最大运行高度/Maximum Operating Altitude: 没有定义/Not defined

12. 全天候能力/All Weather Capability:

白天和夜间目视飞行规则, 见注释 3
Day & Night VFR - See: Note 3

13. 最大质量/Maximum Masses:

起飞/Take-off	582 kg
着陆/Landing	582 kg

14. 重心范围/Centre of Gravity Range:

前重心/Forward limit	直到 480 公斤/up to 480 kg	基准面后 0.203 米/0.203 m behind Datum
	582 公斤/at 582 kg	基准面后 0.267 米/0.267 m behind Datum
	之间按质量线性变化/varying linearly with mass in between	
后重心/Rear limit:	任何质量/for all masses	基准面后 0.394 米/0.394 m behind Datum

15. 基准面/Datum:

机翼前缘/Wing Leading Edge

16. (保留/reserved)

17. 水平测量方式/Levelling Means:

水平仪位于驾驶舱侧板上 (座舱罩打开) /Spirit Level on the cockpit side rail with canopy open

18. 最小机组/Minimum Flight Crew: 1 (飞行员/Pilot)

19. 最大成员/Maximum Passenger Seating Capacity: 1

20. (保留/Reserved)

21. 行李舱/货舱/Baggage/Cargo Compartments

位置/Location	Max. allowable Load
右舱/Port Side Compartment	20 kg
左舱/Starboard Side Compartment	10 kg

22. 机轮和轮胎/Wheels and Tyres

前机轮轮胎尺寸/Nose Wheel Tyre Size	5.00 - 4 6ply Type III
主机轮轮胎尺寸/Main Wheel Tyre Size	380x150/15x6.00-5

IV. 使用和服务指令/Operating and Service Instructions

飞机飞行手册/Aeroplane Flight Manual (AFM)

文件编号 No. ATL3.04, 英文版/Document No. ATL3.04, English Language version

飞机维护手册/Aeroplane Maintenance Manual (AMM)

文件编号 No. ATT3.03, 英文版(包括适航限制)/Document No. ATT3.03, English Language version
(incl. Airworthiness Limitations)

V. 注释/Notes**1. 本型号审定适用于/This certification applies to:**

- 序列号 AT3-008 和 AT3-011, 及之后序列号
Serial numbers AT3-008 and AT3-011 and subsequent,
- 序列号从 AT3-001 到 AT3-005, 及 AT3-010 按照主图纸目录, 文件编号 No. ATS3.02, 2003 年 2 月 3 日, 第 5 修正案, 2005 年 5 月 16 日, 进行改装
Serial numbers from AT3-001 to AT3-005 and AT3-010 modernized according to the Remark No1 in the Master Drawing List, Document No ATS3.02 dated 03.02.2003, Amendment 5 dated 16.05.2005

2. 批准的噪声级按照/Approved Noise Levels in accordance with:

国际民航组织附件 16 第 I 卷的第 10 章/ICAO Annex 16, Volume 1, Chapter 10: 65.7 dB(A)

注: EASA TCDS A.021 (Issue 06, 19 April 2013)中该噪声级为 66.6 dB(A), 是安装意大利 GT 螺旋桨的噪声级。

Note: In EASA TCDS A.021 (Issue 06, 19 April 2013), This noise level is 66.6dB(A), for the aeroplane with GT propeller (made in Italy) installed.

3. 当安装了适当的仪表并且工作良好的情况下, 飞机被批准夜间 VFR 运行/The airplane is approved for VFR-Night operation when the appropriate equipment is installed and operative.**4. 打开驾驶舱顶盖的手柄必须给出中文指示, “抛离顶盖后拉”。/ Canopy “Open” level must be labbled in Chinese as “抛离顶盖后拉”.**

- 完 / END -