

中国民用航空局
CIVIL AVIATION ADMINISTRATION OF CHINA

型号合格证数据单
TYPE CERTIFICATE DATA SHEET

编号/No.: TC0101A

版次/Revision: 0

型别/Model:

小鹰-700 / LE700A

批准人/Approved By:

徐 峰

职务/Title: 司长

日期/Date: 2025年7月23日

本数据单是型号合格证（编号： TC0101A ）的组成部分，它规定了获得该型号合格证的产品满足中国民用航空规章相关适航要求的条件和限制。

This data sheet, which is part of Type Certificate (No.: TC0101A), prescribes condition and limitation under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Chinese Civil Aviation Regulations.

型号合格证持有人/Type Certificate Holder:

通航国际（西安）飞机技术有限公司

General Aviation International (Xi'an) Aircraft Technology Co., Ltd

西安市阎良区国家航空高技术产业基地蓝天路5号，710089

710089, No.5 Lantian Road, China Aviation Industrial Base, Yanliang District, Xi'an

第一部分：小鹰-700型别技术数据/ SECTION A: Model LE700A TECHNICAL DATA

AI. 概述/General

1. 产品型别/Product Model: 小鹰-700/LE700A
(见注释1/see NOTE 1)
2. 类别/Category: 正常类/Normal Category
3. 型号合格证申请日期/Type certificate application date: 2013年7月18日/18 July 2013
4. 型号合格证批准日期/Type certificate approval date: 2025年7月23日/23 July 2025

AII. 生产依据/Production Basis

生产许可证编号：待定。

Production Certificate No.: TBD.

AIII. 审定基础/Certification Basis

1. 适航规章/Airworthiness Regulations:
CCAR-23-R3《正常类、实用类、特技类和通勤类飞机适航规定》2005年1月1日
CCAR-23-R3 Airworthiness Standards: Normal, Utility, Acrobatic, and Commuter Category Airplanes, 1 January 2005
2. 专用条件/Special Conditions:
SC-23-01《小鹰-700型飞机高强辐射场(HIRF)专用条件》2014年9月9日
SC-23-01 LE700A Aircraft High Intensity Radiated Fields(HIRF) Special Condition, 9 September 2014
3. 等效安全/ELOS:
无/None
4. 豁免/Exemption:
无/None
5. 环境保护要求/Environmental Protection Requirements:
CCAR-36-R2《航空器型号和适航合格审定噪声规定》2018年1月12日
CCAR-36-R2 Noise Standards: Aircraft Type and Airworthiness Certification, 12 January 2018

AIV. 技术特性和使用限制/Technical Characteristics and Operational Limitations

1. 型号设计定义/Type Design definition:
详见文件《小鹰-700飞机取证构型》LE700-GD115-007, G版及后续经批准的版本。
LE700A Aircraft Certification Configuration, LE700-GD115-007, Revision G and subsequent approved revision.
2. 发动机/Engine:

发动机制造商:	Textron Lycoming
发动机数量:	1
发动机型别:	IO-360-M1A
FAA型号合格证编号:	1E10
CAAC型号认可证编号:	VTC0149E (版次3及后续经批准版本)
Engine Manufacturer:	Textron Lycoming
Engine Number:	1
Engine Model:	IO-360-M1A
FAA Type Certificate No.:	1E10
CAAC Validation of Type Certificate No.:	VTC0149E (Revision 3 and subsequent approved revision)

3. 发动机工作限制/Engine Limitations:

起飞功率/Take-off Power:	180 hp
最大连续功率/Maximum continuous Power:	180 hp
最大转速/Maximum RPM:	2700 rpm

发动机的使用限制见适用的发动机型号合格证数据单。
For engine operating limits see the applicable Engine Type Certificate Data Sheet.

4. 螺旋桨/Propeller:

螺旋桨数量:	1副
螺旋桨制造商:	McCauley
型号:	1A170E/JHA7660
FAA型号合格证编号:	P-857
CAAC型号认可证编号:	VTC0241P (版次0及后续经批准版本)
桨叶数量:	2
直径:	1.93 m (76 in)
Propeller Number:	1
Propeller Manufacturer:	McCauley
Propeller Model:	1A170E/JHA7660
FAA Type Certificate No.:	P-857
CAAC Validation of Type Certificate No.:	VTC0241P (Revision 0 and subsequent approved revision)
Number of Blades:	2
Diameter:	1.93 m (76 in)

5. 螺旋桨限制/Propeller Limitations:

螺旋桨的使用限制见适用的螺旋桨型号合格证数据单。
For propeller operating limits see the applicable propeller Type Certificate Data Sheet.

6. 燃油/Fuel:

符合如下等级的燃油为可接受:	100号航空汽油 (100/100LL)
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Fuels conforming to 100 Grade Aviation Fuel (100/100LL) are acceptable.
燃油和燃油添加剂必须符合相关的发动机使用说明书。
The fuel and any fuel additives must conform to the relevant Engine Operating Instructions.

燃油容量/Fuel capability:	210 L
可用燃油/Usable fuel:	188 L

7. 滑油/Oil:

参考Lycoming IO-360-M1A使用和安装手册中的滑油标准。

Refer to Lycoming IO-360-M1A Operation and Installation Manual for list of oil brands and types.

滑油池容量/Oil sump capability: 7.57 L (8 US quart)

最小安全滑油量/Minimum safety quantity: 3.78 L (4 US quart)

8. 空速限制/Airspeed Limits (IAS):

不可超越速度/Never Exceed Speed: $V_{NE}=230$ km/h (124 kn)

最大结构巡航速度/Maximum Structural Cruising Speed: $V_{NO}=205$ km/h (111 kn)

设计机动速度/Design Maneuvering Speed: $V_A=185$ km/h (99 kn)

使用机动速度/Operating Maneuvering: $V_O=180$ km/h (97 kn)

最大襟翼展态速度/Maximum Flap Extension Speed:

襟翼/Flaps 10° $V_{FE}=160$ km/h (86 kn)

襟翼/Flaps 25° $V_{FE}=149$ km/h (80 kn)

对于其它空速限制, 见适用的CAAC批准的飞机飞行手册。(见注释2)

For other airspeed limits, refer to the appropriate Airplane Flight Manual approved by CAAC. (See NOTE2)

9. 重心范围/CG Range:

重心前限: 950 kg (2093 lb) 及其以下重心前限在19% MAC;

1110 kg (2445 lb) 对应前限位在24% MAC;

中间重量的重心线性变化。

重心后限: 1060kg (2335 lb) 至1110 kg (2445 lb) 重心后限为36% MAC;

895 kg (1971 lb) 重心后限为27% MAC;

中间重量的重心线性变化。

Forward limit: Forward C.G: 19% MAC for weight 950 kg (2093 lb) and below;

24%MAC for weight 1110 kg (2,445 lb);

with linear variation between the two.

Aft limit: Aftward C.G: 36%MAC for weight between 1060kg (2335 lb) and 1110 kg (2,445 lb);

27% MAC for weight 895 kg (1971 lb);

with linear variation between the two.

10. 最大重量/Maximum Weights:

最大起飞重量/MTOW: 1110kg (2445 lb)

最大着陆重量/MLW: 1110kg (2445 lb)

11. 测量基准/Datum:

防火墙平面

The plane of firewall frame

12. 水平测量措施/Leveling Means:

左右通风窗锁座上表面保持同一水平。

Keep the upper surface of the left and right ventilation window locks at the same level.

机身上两个专用螺钉保持前后水平。

Keep two special screws on the fuselage at the same level fore and aft.

提供测量专用水平尺和配套螺钉。

Provide specialized level meter and matching screws.

13. 平均气动弦/Mean Aerodynamic Chord (MAC):

1.485 m (58.46 in) 平均气动弦前缘位于基准后0.739 m (29.09 in) 处。

1.485 m (58.46 in) Leading edge of MAC at 0.739 m (29.09 in) aft of datum.

14. 最小飞行机组/Minimum Crew:

1人/One Pilot

15. 座位数量/Number of Seats:

最大4座/Four (4) maximum

16. 最大行李载重量/Maximum Baggage:

行李舱A区最大载重量/Maximum loading for Baggage A Area: 50kg(110 lb)

行李舱B区最大载重量/Maximum loading for Baggage B Area: 20kg(44 lb)

行李舱 A 区和 B 区总载重量不超过/Total loading of Baggage A and B Area not exceed: 50kg(110 lb)

17. 最大使用高度/Maximum Operating Altitude: 4,200 m(13,780 feet)

18. 操纵面运动范围/Control Surface Movements:

副翼/Aileron:	向上/up: 15 °±1 °	向下/down: 15 °±1 °
升降舵/Elevator:	向上/up: 28 °±1 °	向下/down: 23 °±1 °
俯仰配平调整片/Elevator Trim:	向上/up: 22 °±1 °	向下/down: 19 °±1 °
方向舵/Rudder:	向左/left: 20° ^{+1°} / _{-2°}	向右/right: 20° ^{+1°} / _{-2°}
襟翼/Flaps:	收上/up: 0 °±1 °	放下/down: 10° ^{0°} / _{-2°}
		放下/down: 25° ^{0°} / _{-2°}

19. 运行限制/Operational Restrictions:

允许昼夜目视和仪表飞行。

Approved for day and night VFR&IFR.

禁止在雷、雨、大风、大雾、结冰等恶劣气象条件下飞行。

Flight into adverse meteorological conditions such as lightning, rain, strong winds, fog, known icing conditions, etc. is prohibited.

禁止特技和尾旋飞行。

Acrobatic maneuvers and spins are prohibited.

20. 噪声/Noise:

飞机的噪声级依据CCAR-36-R2附录G进行测定, 测定时候飞机以最大起飞重量 (1110 kg) 起飞, 螺旋桨为最大转速2400 rpm, 气温为2.2℃~6.2℃, 平均风速小于5 m/s, 测定的噪声结果如下: 起飞79.3 dB(A)。

The noise level of the aircraft was determined in accordance with Appendix G of CCAR-36-R2. During the measurement, the aircraft took off at the maximum take-off weight (1110 kg), the maximum propeller speed was 2400 rpm, the air temperature was 2.2℃~6.2℃, the

wind speed was below 5m/s. The measured noise results were as follows: 79.3 dB(A) for take-off.

21. 必要设备/Required Equipment:

在适用的适航规章（见审定基础）中规定的基本必备设备，必须安装在审定的飞机上。

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

AV. 批准的技术资料/Approved Technical Documents

1. 飞机飞行手册/AFM (Aircraft Flight Manual)

《小鹰-700飞机飞行手册》，LE700-AFM-A，版次G及后续经批准的版本。

LE700A Aircraft Flight Manual, LE700-AFM-A, Revision G and subsequent approved revision.

2. 结构修理手册/SRM (Structural Repair Manual)

《小鹰-700飞机结构修理手册》，LE700-SRM-A，版次D及后续经批准的版本。

LE700A Aircraft Structural Repair Manual, LE700-SRM-A, Revision D and subsequent approved revision.

3. 适航性限制项目/ALI (Airworthiness Limitation Item)

《小鹰-700飞机机体结构适航性限制项目》，LE700-JB213-031，版次C及后续经批准的版本。

LE700A Aircraft Structural Airworthiness Limitation Item, LE700-JB213-031, Revision C and subsequent approved revision.

4. 审定维修要求/CMR (Certification Maintenance Requirement)

《小鹰-700飞机审定维修要求项目确定报告》，LE700-JB714-015，版次B及后续经批准的版本。

LE700A Aircraft Certification Maintenance Requirement Project Determination Report, LE700-JB714-015, Revision B and subsequent approved revision.

AVI. 注释/Notes

注释/NOTE 1: LE700A为小鹰-700的英文名称。

The English name of the “小鹰-700” is LE700A.

注释/NOTE 2: 经CAAC批准的飞机飞行手册、适用的运营规章或审定基础要求的标牌必须安装在飞机上。

All placards required by either the CAAC-approved AFM, the applicable operating rules, or the Certification Basis must be installed in the aircraft.

第二部分：管理信息/SECTION B: ADMINISTRATIVE INFORMATION

B I. 型号合格证持有人记录/Type Certificate Holder Record

2025年7月23日，通航国际（西安）飞机技术有限公司获得中国民用航空局颁发的小鹰-700飞机“型号合格证（编号TC0101A）”。

General Aviation International (Xi'an) Aircraft Technology Co., Ltd was granted the Type Certificate (No. TC0101A) for LE700A aircraft by the Civil Aviation Administration of China (CAAC) on July 23, 2025.

B II. 修订记录/Change Records

无/None

----结束----
----THE END----