

中国民用航空总局
GENERAL ADMINISTRATION OF CIVIL AVIATION OF CHINA

编号/No.: VTC130A
修订/Rev.: 0
型号/Type: 172S
日期/Date: 26/07/2002

型号认可证数据单编号: VTC130A
Validation Type Certificate Data Sheet No. VTC130A

本数据单, 作为型号认可证编号 VTC130A 的一部分, 规定了一些条件和限制, 在此条件和限制下, 获得本型号认可证的产品满足下述“认可审定基础”段落给出的适航要求。
This data sheet which is a part of Validation Type Certificate No. VTC130A prescribes conditions and limitations under which the product for which the Validation Type Certificate was issued meets the airworthiness requirements indicated in the paragraph “Validation Basis”.

美国 FAA 型号合格证 No.3A12、数据单第 68 版, 批准日期: 2001 年 10 月 11 日
172S (正常类): 1998 年 3 月 1 日 FAA 批准
Type Certificate No.3A12, Data Sheet Revision 68, Approved by FAA on October 11, 2001
Model 172S(Normal Category): Approved by FAA on 23 May 1, 1998

型号合格证持有人: 赛斯纳飞机公司
美国堪萨斯州威奇塔市 7704 信箱
邮政编码: 67277
Type Certificate Holder: Cessna Aircraft Company
P. O. Box 7704
Wichita, Kansas 67277

I-172S 型飞机, Skyhawk SP, 4 座、封闭座舱、陆上型单翼飞机 (正常类), 2 座、封闭座舱、陆上型单翼飞机 (特技类)

I - Model 172S, Skyhawk SP, 4PCLM (Normal Category), 2PCLM (Utility Category)

发动机 莱康明公司制造的 IO-360-L2A, 额定 180 马力
Engine Lycoming IO-360-L2A, Rated 180 Horsepower

燃油 最低航空汽油等级 100/100LL
Fuel 100/100LL minimum grade aviation gasoline

发动机限制 在所有使用情况下, 2700 转/分钟
Engine Limits For all operations, 2700 RPM

螺旋桨 麦可利公司制造的螺旋桨
(a) 螺旋桨: 1A170E/JHA7660
(b) 直径: 不超过 76 英寸, 不低于 75 英寸
(c) 麦可利桨毂: 图号 0550236
Propeller McCauley
(a) Propeller: 1A170E/JHA7660
(b) Diameter: not over 76 in., not under 75 in.
(c) McCauley Spinner: Drawing No.0550236

螺旋桨限制 在全推力下的静态转速: 不超过 2400 转/分钟, 不低于 2300 转/分钟
Propeller Limits: Static RPM at full throttle: Not over 2400; Not Under 2300

空速限制

机动速度	105 节 (指示空速)	(102 节 (校正空速))
最大结构巡航速度	129 节 (指示空速)	(126 节 (校正空速))

Airspeed Limits	不可超越速度	163 节 (指示空速)	(160 节 (校正空速))
	襟翼展态速度	85 节 (指示空速)	(85 节 (校正空速))
	Maneuvering	105 Knots IAS	(102 Knots CAS)
	Max. Structural Cruising	129 Knots IAS	(126 Knots CAS)
	Never Exceed	163 Knots IAS	(160 Knots CAS)
重心范围	Flaps Extended	85 Knots IAS	(85 Knots CAS)
	正常类		
	(1) 后限: 在不大于 2550 磅时, 基准之后的 47.3 英寸处		
	(2) 前限: 在 2550 磅时, 基准之后的 41.0 英寸处; 在 1950 磅时, 基准之后的 35.0 英寸处; 在上述两者重量之间的重量时, 线性变化; 不大于 1950 磅时, 基准之后的 33.0 英寸处。		
	特技类		
CG Range:	(1) 后限: 在不大于 2200 磅时, 基准之后的 40.5 英寸处		
	(2) 前限: 在 2200 磅时, 基准之后的 37.5 英寸处; 在 1950 磅时, 基准之后的 35.0 英寸处; 在上述两者重量之间的重量时, 线性变化; 不大于 1950 磅时, 基准之后的 33.0 英寸处。		
	Normal Category		
	(1) Aft Limits: 47.3 inches aft of datum at 2550 pound or less.		
	(2) Forward Limits: Linear variation from 41.0 inches aft of datum at 2550pounds to 35.0 inches aft of datum at 1950 pounds; 35.0 inches aft of datum at 1950 pounds or less.		
空机重心:	Utility Category		
	(1) Aft Limits: 40.5 inches aft of datum at 2200 pound or less.		
	(2) Forward Limits: Linear variation from 37.5 inches aft of datum at 2200pounds to 35.0 inches aft of datum at 1950 pounds; 35.0 inches aft of datum at 1950 pounds or less.		
	Empty Wt. C.G. Range:	无	None
	基准:	防火墙前表面的较低部位	
平均气动弦:	Reference Datum:	Lower portion of front face of Firewall	
	58.8 英寸; 平均气动弦前缘为基准之后的 25.9 英寸处		
	MAC:	58.8 inches; Leading edge of MAC 25.9 inches aft of datum	
	调水平措施	尾锥左侧、基准之后的 108.0 英寸和 142.0 英寸处	
	Leveling Means:	Left side of Tailcone at 108.0 inches and 142.0 inches aft of datum	
最大重量:	正常类		
	最大停机坪重量	2558 磅	
	最大起飞重量	2550 磅	
	最大着陆重量	2550 磅	
	特技类		
Maximum Weights:	最大停机坪重量	2208 磅	
	最大起飞重量	2200 磅	
	最大着陆重量	2200 磅	
	Normal Category		
	Maximum Ramp:	2558 pounds	
座位数量	Maximum Takeoff:	2550 pounds	
	Maximum Landing:	2550 pounds	
	Utility Category		
	Maximum Ramp:	2208 pounds	
	Maximum Takeoff:	2200 pounds	
No. of Seats:	Maximum Landing:	2200 pounds	
	4 (2 个座位在基准之后的 34.0 英寸至 46.0 英寸之间; 2 个座椅在基准之后的 73.0 英寸)		
	4 (2 at 34.0 to 46.0 inches aft of datum; 2 at 73.0 inches aft of datum)		
	最大行李重量:		

Maximum Baggage: 120 磅在基准之后的 82.0 至 108.0 英寸之间
50 磅在基准之后的 108.0 至 142.0 英寸之间
(行李舱位置的最大累积承重量为 120 磅)
120 pounds at 82.0 to 108.0 inches aft of datum
80 pounds at 108.0 to 142.0 inches aft of datum
(Max. combined weight capacity for baggage area is 120 pounds)

燃油容量 总计 56 加仑; 可用燃油 53 加仑
(两个 28 加仑的机翼油箱, 位于基准之后的 48 英寸处)
关于不可用燃油, 见注释 1

Fuel Capacity (Gal.): 56 gal. total; 53 gal. Usable
(Two 28 gallon tanks in wings at 48 inches aft of datum)
See NOTE 1 for data on unusable fuel.

滑油容量 8.0 夸脱, 基准之前的 13.1 英寸处; 可用滑油 3.0 夸脱
Oil Capacity: 8.0 quarts at 13.1 inches forward of datum; 3.0 quarts usable

操纵面位移

机翼襟翼: 起飞 0° - 10°
着陆 0° - 30° + 0° / -2°
升降舵调整片: 向上 22° + 1° / -0° 向下 19° + 1° / -0°
副翼: 向上 20° ± 1° 向下 15° ± 1°
升降舵: 向上 28° + 1° / -0° 向下 23° + 1° / -0°
(中立位置为升降舵平衡区底面与水平安定面齐平的位置)
方向舵 (平行于水线): 向右 $16^{\circ}10'$, ± 1° 向左 $16^{\circ}10'$, ± 1°
方向舵 (垂直于铰链线): 向右 $17^{\circ}44'$, ± 1° 向左 $17^{\circ}44'$, ± 1°

Control Surface Movements:

Wing Flaps: Takeoff 0° - 10°
Landing 0° - 30° + 0° / -2°
Elevator Tab: Up 22° + 1° / -0° Down 19° + 1° / -0°
Ailerons: Up 20° ± 1° Down 15° ± 1°
Elevator: Up 28° + 1° / -0° Down 23° + 1° / -0°
(Neutral position is with bottom of balance area flush with bottom of stabilizer)
Rudder (Parallel to 0.00 W.L.): Right: $16^{\circ}10'$, ± 1° Left: $16^{\circ}10'$, ± 1°
Rudder (Perpendicular to hinge line): Right: $17^{\circ}44'$, ± 1° Left: $17^{\circ}44'$, ± 1°

制造人序列号 172S8001 及其以后
Serial Nos. Eligible 172s8001 and On

FAA 审定基础

1965 年 2 月 1 日生效的联邦航空条例, 修正案为 23-1 至 23-6, 但以下条款例外:

FAR 23.423; 23.611; 23.619; 23.623; 23.689; 23.775; 23.871; 23.1323 和 23.1563 为修正案 23-7; FAR 23.807 和 23.1524 为修正案 23-10; FAR 23.507; 23.771; 23.853(a),(b),(c) 和 23.1365 为修正案 23-14; FAR 23.951 为修正案 23-15; FAR 23.607; 23.675; 23.685; 23.733; 23.787; 23.1309 和 23.1322 为修正案 23-17; FAR 23.1301 为修正案 23-20; FAR 23.1353 和 23.1559 为修正案 23-21; FAR 23.603; 23.605; 23.613; 23.1329 和 23.1545 为修正案 23-23; FAR 23.441 和 23.1549 为修正案 23-28; FAR 23.779 和 23.781 为修正案 23-33; FAR 23.1; 23.51 和 23.561 为修正案 23-34; FAR 23.301; 23.331; 23.351; 23.427; 23.677; 23.701; 23.735 和 23.831 为修正案 23-42; FAR 23.961; 23.1093; 23.1143(g); 23.1147(b); 23.1303; 23.1357; 23.1361 和 23.1385 为修正案 23-43; FAR 23.562(a), 23.562(b)2, 23.562(c)1, 23.562(c)2, 23.562(c)(3) 和 23.562(c)(4) 为修正案 23-44; FAR 23.33; 23.53; 23.305; 23.321; 23.485; 23.621; 23.655 和 23.731 为修正案 23-45。

1969 年 12 月 1 日生效的 FAR 36, 修正案为 36-1 至 36-21。

FAA Certification Basis

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-6, except as follows:

FAR 23.423; 23.611; 23.619; 23.623; 23.689; 23.775; 23.871; 23.1323; and 23.1563 as amended by Amendment 23-7. FAR 23.807 and 23.1524 as amended by Amendment 23-10. FAR 23.507; 23.771; 23.853(a),(b) and (c); and 23.1365 as amended by Amendment 23-14. FAR 23.951 as amended by Amendment 23-15. FAR 23.607; 23.675; 23.685; 23.733; 23.787; 23.1309 and 23.1322 as amended by Amendment 23-17. FAR 23.1301 as amended by Amendment 23-20. FAR 23.1353; and 23.1559 as amended by Amendment 23-21. FAR 23.603; 23.605; 23.613; 23.1329 and

23.1545 as amended by Amendment 23-23. FAR 23.441 and 23.1549 as amended by Amendment 23-28. FAR 23.779 and 23.781 as amended by Amendment 23-33. FAR 23.1; 23.51 and 23.561 as amended by Amendment 23-34. FAR 23.301; 23.331; 23.351; 23.427; 23.677; 23.701; 23.735; and 23.831 as amended by Amendment 23-42. FAR 23.961; 23.1093; 23.1143(g); 23.1147(b); 23.1303; 23.1357; 23.1361 and 23.1385 as amended by Amendment 23-43. FAR 23.562(a), 23.562(b)2, 23.562(c)1, 23.562(c)2, 23.562(c)3, and 23.562(c)4 as amended by Amendment 23-44. FAR 23.33; 23.53; 23.305; 23.321; 23.485; 23.621; 23.655 and 23.731 as amended by Amendment 23-45.

FAR 36 dated December 1, 1969, as amended by Amendments 36-1 through 36-21.

等效安全条款:

- | | |
|------------|---|
| (1) 进气系统防冰 | FAR §1093; 参见 1998 年 5 月 1 日的 FAA 信函 |
| (2) 油门控制 | FAR § 23.1143(g); 参见 1998 年 5 月 1 日的 FAA 信函 |
| (3) 油气混合控制 | FAR § 23.1147(b); 参见 1998 年 5 月 1 日的 FAA 信函 |

Equivalent Safety Items:

- | | |
|---------------------------------------|--|
| (1) Induction System Icing Protection | FAR §1093; Refer to FAA letter dated 5/1/98 |
| (2) Throttle Control | FAR § 23.1143(g); Refer to FAA letter dated 5/1/98 |
| (3) Mixture Control | FAR § 23.1147(b); Refer to FAA letter dated 5/1/98 |

CAAC 认可审定基础	CAAC 接受 FAA 的审定基础为认可审定基础
CAAC Validation Basis	CAAC accept FAA's certification basis as validation basis

生产依据	生产许可证编号 PC-4
Production Basis	Production Certificate No. PC-4

设备	认可审定基础规定的必要的设备必须安装在飞机上供适航审定
Equipment	The basic required equipment as prescribed in the Validation Basis must be installed in the airplane for certification.

注释 1: 重量和平衡

制造人序列号: 172S8001 和及其之后的 (172S 型)

审定的空重及其相应的重心位置必须包括不可用燃油 18 磅 (基准之后的 46.0 英寸处) 和全部滑油 15.0 磅 (基准之前的 13.1 英寸处)。

NOTE 1: Weight and Balance:

Serial Nos. 172S8001 and On; (Model 172S)

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 18lbs. at 46.0 inches aft of datum, and full oil of 15.0 pound at 13.1 inches forward of datum.

注释 2: 《驾驶员操作手册》和《FAA 批准的飞机飞行手册(AFM)》: 编号 172S PHUS00 (或 FAA 后续批准的修订) 适用于 172S 型飞机。172S 型飞机必须依照相应的《驾驶员操作手册》和《FAA 批准的飞机飞行手册(AFM)》运行。FAA 要求的所有标牌内容在《驾驶员操作手册》和《FAA 批准的飞机飞行手册(AFM)》第二章。标牌内容也可以安排在维修手册中, 对于 172S 型飞机标牌内容在维修手册 172RMM02 (或 FAA 后续批准的修订) 第 11 章“标牌和标记”。

NOTE 2: Pilot's Operating Handbook and FAA Approved Airplane Flight Manual (AFM) (POH/AFM): Part number 172SPHUS00 (or later FAA approved revision) is applicable to the Model 172S. The Airplane must be operated according to the appropriate POH/AFM. All FAA required placards are included in Section 2 of the POH/AFM. Placards may also be found in the Maintenance Manual, part number 172RMM02 (or later revision) for the Model 172S, Chapter 11, Placards and Markings.

.....结束.....

....END....