

型号认可证数据单

THE VALIDATION DATA SHEET

编号/No: VTC0331A

版次/Revision: 0

型号/Type:

JA-600 (Skyleader 600)

批准人/Approved By: Wang Zhiqing

王志清

职务/Title: Deputy Administrator of CAAC

日期/Date: 2016-10-12

本数据单是型号认可证（编号：VTC0331A）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: VTC0331A), 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.

型号合格证持有人/Type Certificate Holder: SKYLEADER a.s.
Masarykova 750
400 01 Ústí nad Labem
Czech Republic

有效页清单/List of effective pages :

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

第 1 部分 概述（所有机型）

SECTION 1 GENERAL (ALL MODELS)

1. CAAC 认可数据单和型号合格证数据单

CAAC Validation Data Sheet and Type Certificate Data Sheet

	中国民用航空总局认可数据单号、版次和颁发日期 CAAC Validation Data Sheet Number, Revision and issuance Date	捷克轻型运动飞机协会型号合格证数据单号、版次和颁发日期 Light Aircraft Association CR Type Certificate Data Sheet Number, Revision and issuance date
当前 Current	VTC0331A, Rev 0, 2016年8月29日颁发	ULL – 05 / 2009 Change c, 18 August 2016

2. 类别/Category:

特殊类别航空器 - 超轻型飞机

Special Class Aircraft – Ultra Light Airplane

3. 认可当局/Validation Authority:

中国民用航空局/CAAC

审定当局/Certifying Authority:

捷克轻型运动飞机协会/Light Aircraft Association CR

4. 型号合格证持有人/Type Certificate Holder:

SKYLEADER a.s.

Masarykova 750

400 01 Ústí nad Labem

Czech Republic

5. 生产机构/Manufacturer:

JIHLAVAN airplanes, s.r.o.

Znojemská 64

586 01 Jihlava

Czech Republic

第 2 部分

SECTION 2

I. 捷克轻型航空器协会审定基础/ Certification Basis of Light Aircraft Association CR:

1. 适航要求: UL 2-part I.
Requirements of airworthiness: UL 2-part I.
2. 专用技术条件: 无
Special Conditions: None
3. 豁免: 无
Exceptions: None

II. CAAC 认可审定基础 CAAC Validation Certification Basis

1. 中国民用航空局接受捷克轻型运动飞机协会型号审定基础作为认可审定基础。
CAAC accepts the Certification Basis of Light Aircraft Association CR as the Validation Basis.
2. CAAC 确定以下附加技术条件 (ATC) /CAAC identifies the following Additional Technical Conditions:
 - a.. 依据中国民用航空规章 CCAR21.29 (e) 要求, 机上所有用于提示、警告和通知旅客的文字标记和标牌必须至少是中文; 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必须至少是中文; 旅客可能使用的机上所有应急设备的操作说明必须至少是中文。
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.
 - b. 操作系统与支承结构
 - (a)操作系统与支撑结构应按加拿大 DS 10141E 第 003 修正案的 35 条规定的表面载荷产生的铰链力矩的至少 125%来设计, 但不必超过下列驾驶员操纵力所产生的载荷:
 - (1) 在驾驶杆握把上
 - (i) 俯仰 445 牛 (100 磅)
 - (ii) 滚转限制载荷 178 牛 (40 磅): 和
 - (2) 在脚蹬上: 航向 578 牛 (130 磅)
 - (b) 如果安装双操纵组件, 该相关系统应按驾驶员反向操纵情况进行设计。
 - (c) 操作面质量平衡的配重应设计成:
 - (1) 24g 极限载荷, 垂直于操作面; 和
 - (2) 12g 极限载荷, 向前和向后和平行于铰链轴线;
 - (d) 对于对称运行, 右和左襟翼应当同步。
 - (e) 所有主操纵界器件在系统中应有止动器, 以承受操纵力、125%操作面载荷、或地面突风载荷中的较大值。
 - (f) 次操纵器件应按正常运行中驾驶员可能施加的最大操纵力来进行设计。

Control System and Supporting Structure

- (a) The control system and supporting structures shall be designed for 125% hinge moments resulting from the surface load from section 35 of Canada DS 10141E amendment 003, but need not exceed the loads from the following pilot forces:
 - (1) at the grip of the stick:
 - (i) 445 N (100 lbs) in pitch
 - (ii) 178 N (40 lbs) in roll limit loads; and
 - (2) at the rudder pedals: 578 N (130 lbs) in yaw.
- (b) When dual controls are installed, the relevant system shall be designed for the pilots operating in opposition.
- (c) Control surface mass balance weights shall be designed for:
 - (1) 24 'g' ultimate normal to the surface; and
 - (2) 12 'g' ultimate fore and aft and parallel to the hinge line.
- (d) Right and left flaps shall be synchronized for symmetrical operation.
- (e) All primary controls shall have stops within the system to withstand the greater of pilot force, 125% surface loads, or ground gust loads.
- (f) The secondary controls shall be designed for the maximum forces a pilot is likely to apply in normal operation.

III. 技术特性和运行限制 Technical Data, Performance and Operation Limitations

1. 型号设计定义/Type Design Definition:

型号由 JA-600 飞机的型号合格证（2009 年 12 月 15 日颁发）和总设计图 n.600 800 JA-600（2008 年 5 月 23 日确定）定义。其中技术细节详见 JA-600 的报告 n. JA03-2007-JA6.AS Type draft。在某些结构部件上，飞机与 KP 2U-Sova 和 KP-5 ASA 相似。这些部件的图纸标注为原版。

Type is defined with Type certificate of airplane JA-600 from 15.12.2009 and general drawing n.600 800 JA-600 from 23.05.2008. There are technical details in report n.JA03-2007-JA6.AS Type draft of JA-600. Airplane is the same as KP 2U-Sova and KP-5 ASA in same parts of construction. Drawings for these parts are marked as original ones.

2. 技术描述/Technical Description:

JA-600 飞机是一种并排双座的全金属悬臂式下单翼飞机。由两根梁对支撑面进行支撑。他由一个长方形中间段和带后退式襟翼的梯形外翼构成。机身为半硬壳式结构。尾部单位为悬臂式，全金属并带有前向 HTU。两个整体油箱安装在机翼中间段前部，每个油箱燃油容量为 60L。飞机可以安装固定式或可收回式起落架，前轮可转弯。主轮刹车为液压操纵。

JA-600 is a two-seater, all-metal, cantilever, low-wing aircraft with side-by-side seats. Supporting surfaces are with two spars. They are composed of a rectangular center-section and a trapezoidal outer wing with Fowler flap. The fuselage is of a semi-monocoque construction. Tail units are cantilever, all metal with a forward HTU. There are two fuel integral tanks in the front part of the wing center section, each one with 60l fuel capacity. The plane has a fixed or retractable tricycle landing gear, with a steerable nose wheel. There are hydraulic brakes on main wheels.

3. 设备/Equipment:

为获得适航证书，每架飞机必须安装基础航电设备，这些设备应与第二章基础说明中的适航装备一致。可选设备详细列表在飞机型号说明文件中。安装在飞机上的可选设备（按系列号）列在飞机履历本章节 1.2 设备中。

For issuing the certificate of registration of airworthiness must be installed basic avionics on each plane, corresponding with requirements of airworthiness mentioned in chapter II. Specification Basis. Detailed list of optional equipment is stated in Aircraft type lay-out. Optional equipment installed in plane on basis of customer's requirement is listed (by serial number) in the Aircraft log-book, chapter 1.2. Equipment.

4. 基本技术数据/ Basic technical data:

展长/Wing span	9.9 m
机身长/Length	7.1 m
机身高度/Height	2.46 m
机翼面积/Wing area	11.85 m ²
平均气动弦长/Depth of the mean aerodynamic chord	1.27m
机翼展弦比/Wing aspect ratio	7.78
襟翼面积/Flaps area	0.7m ²
副翼面积/Ailerons area	0.55 m ²
翼型-根部/Wing profile – root	GA(W)-1 - 17 %
翼型-尖部/Wing profile – tip	GA(W)-2 - 13 %
副翼向上偏角/Deflections of ailerons up	24° ± 1°
副翼向下偏角/Deflections of ailerons down	16° ± 1°
襟翼偏角/Deflections of flaps:	
偏角 1/Deflections 1	10° ± 2°
偏角 2/Deflections 2	35° ± 2°
升降舵长/Elevator span	2.95 m
升降舵面积/Elevator area	2.28 m ²
升降舵向上偏角/Deflections of elevator up	33° ± 2°
升降舵向下偏角/Deflections of elevator down	28° ± 2°
方向舵面积/Rudder area	1.73 m ²
方向舵向左偏角/Deflections of rudder left	28° ± 2°
方向舵向右偏角/Deflections of rudder right	28° ± 2°
起落架机轮轴距/Landing gear gauge	1.96 m
起落架机轮基底/Landing gear wheel base	1,28 m
起落架轮胎尺寸/Dimensions of landing gear tire	前轮 (nose) : 300x85 (4")
	主轮 (main) : 350x115 (6")

5. 重量/ Weights

选装可收起起落架时空重 (标准设备)	304 kg ± 2%
Empty weight with retractable gear (standard equipment)	
空重 (含降落伞系统)	324 kg ± 2%
Empty weight (with parachute system)	
最大起飞重量	450 kg
Maximum take-off weight	
降落伞系统的重量可能加入最大起飞重量中。	
Weight of parachute system may be added to maximum take-off weight.	
最大起飞重量 (含降落伞系统)	472.5 kg
Maximum take-off weight (with parachute system)	
最大燃油重量 (油箱装满 120L)	90kg
Maximum fuel weight (fuel tanks 120 l)	
最大客舱行李重量	30kg

Maximum cabin baggage weight

6. 飞行性能/Flight Performance

性能对应于海平面标准大气压，飞机安装 Rotax 912ULS 发动机和 Woodcomp Klassic 170/3/R 螺旋桨（桨距角 15.5 度）为准。

Performances correspond to sea level in International Standard Atmosphere with Rotax 912 ULS engine and Woodcomp Klassic 170/3/R propeller (pitch angle 15,5°).

	起飞重量 450kg(472.5kg)
所有的速度均为校正空速/All speeds are CAS:	
着陆构型的失速速度 V_{SO} /Stalling speed in landing configuration V_{SO}	61 km/h
襟翼收上构型的失速速度 V_{SI} /Stalling speed with retracted flaps V_{SI}	72 km/h
襟翼全放下构型最大速度 V_{FE} /Maximum speed with flaps fully extended V_{FE}	110 km/h
机轮放下状态最大速度 V_{LO} /Maximum speed with gear extended V_{LO}	150 km/h
最大机动速度 V_A /Max. maneuvering speed V_A	145 km/h
最大平飞速度 V_H /Max. speed of horizontal flight V_H	209 km/h
不可超越速度 /Never exceed speed V_{NE}	235 km/h
起飞总距离（达到50英尺高度） /Total distance of take-off (till reaching 50 ft)	250 m
爬升/Climbing	4,8 m/s 110 km/h

7. 重心位置限制/ Center of Gravity position limits:

前重心限制/Front limit of C-G position: 20% MAC

后重心限制/Rear limit of C-G position: 25% MAC

8. 基准面：基准面为机翼中段前缘

Datum plane: Datum plane is leading edge of centersection wing

9. 平均气动弦长/Mean aerodynamic chord: Depth of MAC= 1273.6 mm

平均气动弦长前点在基准面后 74.7mm，基准面在机翼中段前缘。

Leading point of Mean aerodynamic chord is 74,7mm behind leading edge of centersection wing – datum plane.

10. 计算载荷系数/Calc. load factor: +4.0 / -2.0

11. 发动机/Engine: Rotax 912 UL

按要求可选/For request:

Rotax 912 ULS, Rotax 912 iS, Rotax 914 UL

12. 发动机限制/ Engine limits:

Rotax 912 UL

最大起飞功率/Maximum take-off power: 59.6 kW/ 5800 min⁻¹ (最大 5 分钟/max. 5 min)

最大连续功率/Maximum continuous power: 58 kW/5500 min⁻¹

Rotax 912 ULS

最大起飞功率/Maximum take-off power 73.5 kW/5800 min⁻¹ (最大 5 分钟/max. 5 min)

最大连续功率/Maximum continuous power 69 kW/5500 min⁻¹

Rotax 912 iS

最大起飞功率/Maximum take-off power 73.5 kW/5800 min⁻¹ (最大 5 分钟/max. 5 min)

最大连续功率/Maximum continuous power 69 kW/5500 min⁻¹

Rotax 914 UL

最大起飞功率/Maximum take-off power 84.5 kW/5800 min⁻¹ (最大 5 分钟/max. 5 min)

最大连续功率/Maximum continuous power 73.5 kW/5500 min⁻¹

13. 螺旋桨:

型号/Type: KLASSIC 170/3/R

制造商/Manufacturer: Woodcomp s.r.o. (SPORT PROP)

描述/Description: 可地面调节, 复合材料, 3 桨叶/ground adjustable, composite, 3-blade.

尺寸/Diameter: 1700 mm

按需求可选/for request:

型号/Type: Křemen SR 200c

制造商/Manufacturer: Woodcomp s.r.o.

描述/Description: 可地面调节, 木质, 3 桨叶/ground adjustable, wooden, 3-blade.

尺寸/Diameter: 1680 mm

型号/Type: KA 1/2 P

制造商/Manufacturer: Kašpar a synové,

描述/Description: 2 桨叶, 机械可变桨距/2-blade, mechanical variable pitch.

尺寸/Diameter: 1610 mm

型号/Type: KA 1/3 P

制造商/Manufacturer: Kašpar a synové,

描述/Description: 3 桨叶, 机械可变桨距/3-blade, mechanical variable pitch.

尺寸/Diameter: 1610 mm

型号/Type: VARIA 170/2/R

制造商/Manufacturer: Woodcomp s.r.o.

描述/Description: 机械可变桨距, 复合材料, 2 桨叶
/mechanical variable pitch, composite, 2-blade.

尺寸/Diameter: 1700 mm

型号/Type:	SR 3000/2W
制造商/Manufacturer:	Woodcomp s.r.o.
描述/Description:	可空中电动调节, 复合材料, 3 桨叶 /electric in flight adjustable, composite, 3-blade.
尺寸/Diameter:	1750 mm
型号/Type:	AS 1730(1700)/1950
制造商/Manufacturer:	Peszke S.C.
描述/Description:	可地面调节, 复合材料, 3 桨叶/ground adjustable, composite, 3-blade.
尺寸/Diameter:	1730 (1700) mm
型号/Type:	DUC SWIRL (Standard, Inconel)
制造商/Manufacturer:	DUC Hélices
描述/Description:	可地面调节, 复合材料, 3 桨叶/ground adjustable, composite, 3-blade.
尺寸 Diameter:	1745 mm
型号/Type:	IDROVARIO HS
制造商/Manufacturer:	Alisport srl.
描述/Description:	可空中调节, 复合材料, 2 桨叶/in flight adjustable, composite, 2-blade.
尺寸/Diameter:	1760 mm
型号/Type:	POWERMAX
制造商/Manufacturer:	TL-Ultralights, s.r.o.
描述/Description:	可空中调节, 复合材料, 3 桨叶/in flight adjustable, composite, 3-blade.
尺寸/Diameter:	1748 mm
型号/Type:	DUC Flash
制造商/Manufacturer:	DUC Hélices
描述/Description:	可地面调节, 复合材料, 3 桨叶/ground adjustable, composite, 3-blade.
尺寸/Diameter:	1730 mm

14. 燃油/fuel:

- 满足标准 DIN 516000, Ö-NORM C 1103 的车用含铅汽油
Car leaded gasoline in accordance with DIN 516000, Ö-NORM C 1103
- 满足 DIN 51607 和 Ö-NORM 1100 AVGAS 100 LL 标准的 EUROSUPER RON 95 无铅汽油
EUROSUPER RON 95 unleaded in accordance with DIN 51607, Ö-NORM 1100 AVGAS 100 LL.
- 更多燃油信息请见飞行操作手册 (POH)
For additional fuel information see POH

15. 滑油/ oil: AeroShell Oil Sport Plus 4 (参照 ROTAX 手册)

16. 调平: 调平点和检查单在技术描述和维修手册中说明。

Leveling: Leveling points and checklist is described in Technical description and maintenance manual.

IV. 运行与维护基础/Operation and maintenance basis:

- 对于 JA-600, 见飞行员操作手册 (附件中有设备安装情况)
Pilot Operation Handbook for JA-600 (with appendixes for installed equipment)
- 对于 ROTAX 912 / 914, 见运行手册
Operation Handbook for ROTAX 912 / 914
- 对于安装的螺旋桨, 见运行手册
Operation Handbook for installed propeller
- 对于降落伞系统, 见使用手册 (如果装有降落伞)
Instruction manual for parachute system (if installed)
- 对于已安装装备, 见使用手册
Instruction manuals for installed equipment

V.补充/ Supplements: 无/none

备注/Notes:

1.所有准备取得标准适航证的飞机必须持有实际称重的空机重量和带有设备安装清单的重心位置计算方法 (应当换算到飞机空重上)。飞机必须安装飞行手册上规定的所有标志标牌。

Each airplane prepared for certification (Certificate of airworthiness) must have actual Empty aircraft weight measuring and CG position calculation protocol with list of installed equipment (which is computed to empty weight).

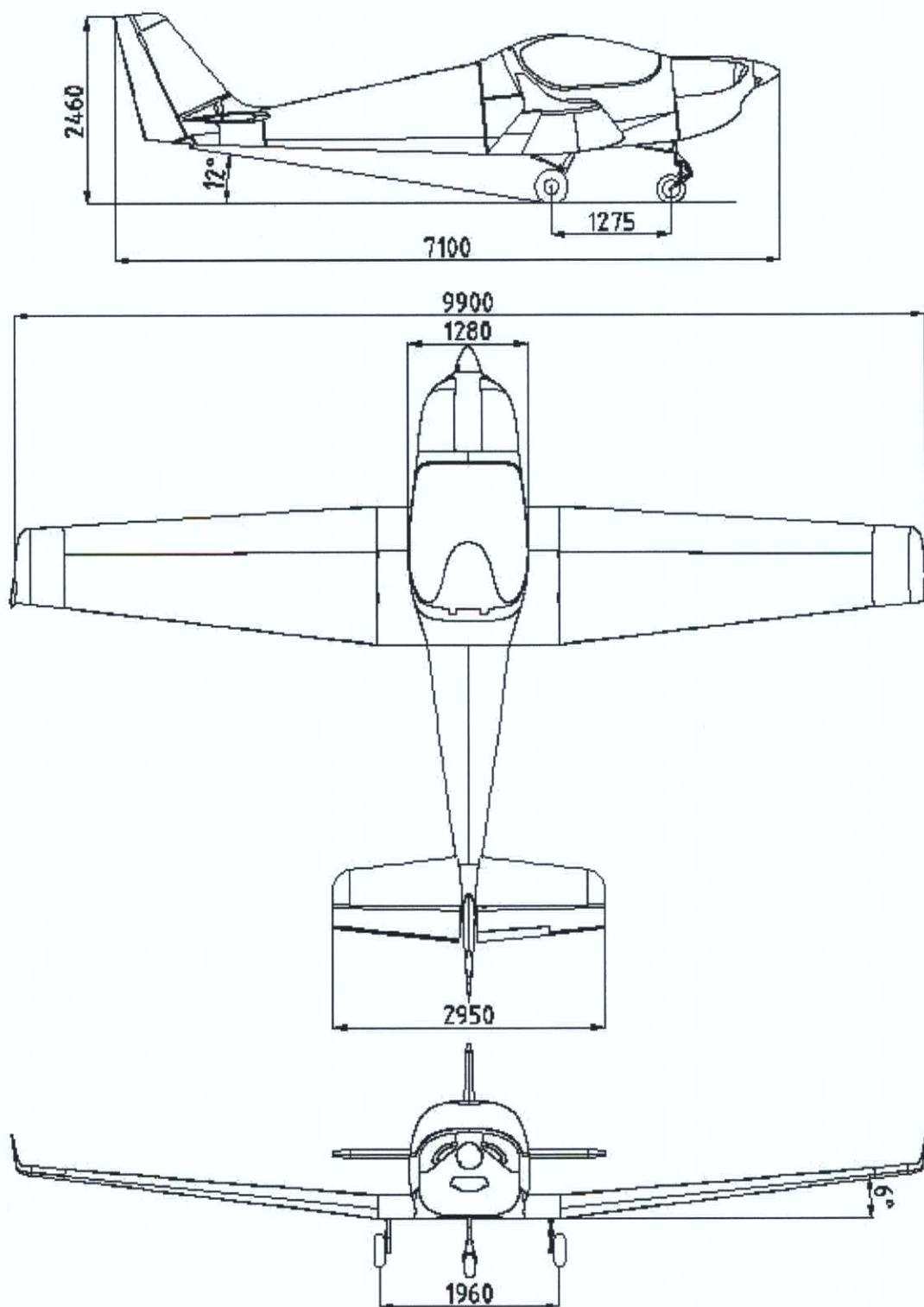
Airplane must have all specified placards and marking in accordance with Pilot Operation Handbook.

2.中文标识和标牌包含在飞行手册 (POH) 中。

Chinese placard and markings are included in Pilot Operating Handbook(POH).

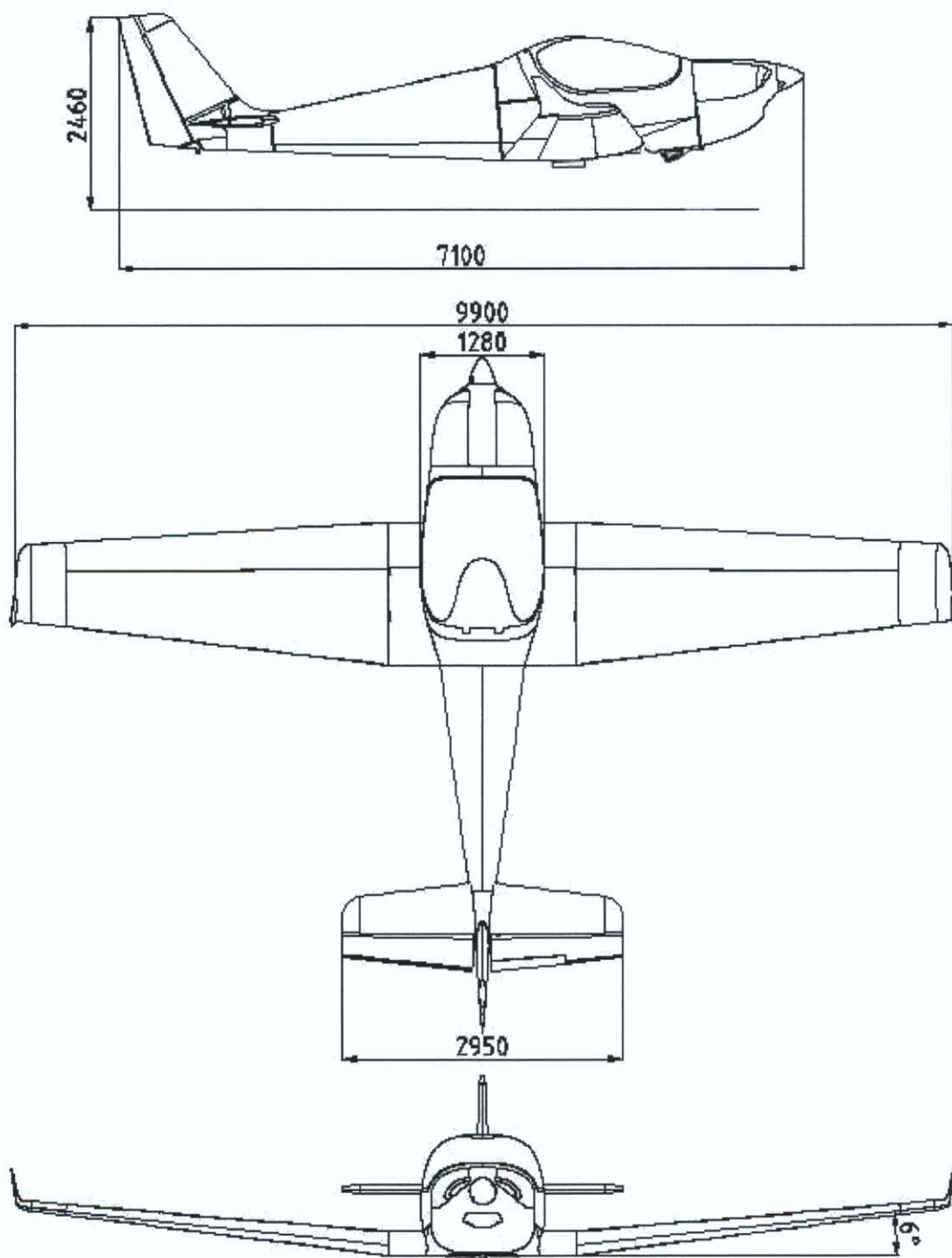
附录一

JA-600（固定式起落架）图解，所有尺寸为毫米



附录二

JA-600（可收放式起落架）图解，所有尺寸为毫米



.....结束/END.....