

型号认可证数据单

THE VALIDATION DATA SHEET

编号/No: VTC0142A

版次/Revision: 1

型号/Type:

Gulfstream IV

Gulfstream IV-X

Gulfstream V

Gulfstream V-SP

批准/Approved:

日期/Date: 2007.11.16

本数据单是型号认可证（编号：VTC0142A）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: VTC0142A)**, 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:

Gulfstream Aerospace Corporation

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一.总则/GENERAL

1. Gulfstream 系列/ Gulfstream Series

型号/MODEL: Gulfstream IV

(运输类/Transport Category)

Gulfstream IV-X

(运输类/Transport Category)

Gulfstream V

(运输类/Transport Category)

Gulfstream V-SP

(运输类/Transport Category)

2. 美国联邦航空局型号合格证: No. A12EA.

Federal Aviation Administration (FAA) Type Certificate: No. A12EA.

型号/MODEL: Gulfstream IV (批准日期 1987年4月22日/Approved April 22, 1987)

Gulfstream IV-X (批准日期 2004年8月12日/Approved August 12, 2004)

- Gulfstream V (批准日期 1997 年 4 月 11 日/Approved April 11, 1997)
 Gulfstream V-SP(批准日期 2003年8月14日/Approved August 14, 2003)
3. 美国联邦航空局型号合格证数据单: No. **A12EA**, 第 29 版次, 颁发日期: 2006 年 3 月 16 日。
 FAA Type Certificate Data Sheet: No. **A12EA**, Revision 29, Date of Issue: February 16, 2006.
4. 美国联邦航空局生产许可证/ FAA Production Certificate: No. 7S0.
 型号/ MODEL: Gulfstream IV (批准日期 1987年4月22日/Reissued August 31, 1987)
 Gulfstream IV-X (批准日期 2004 年 8 月 12 日/Reissued November 16, 2004)
 Gulfstream V (批准日期 1997 年 4 月 11 日/Reissued June 11, 1997)
 Gulfstream V-SP(批准日期 2003年8月14日/Reissued August 14, 2003)

二. 合格审定基础/CERTIFICATION BASIS

1. 美国联邦航空局型号合格审定基础: 见美国联邦航空局型号合格证数据单 **A12EA**, 第 29 版。
 FAA Certification Basis: As defined in FAA Type Certificate Data Sheet No. **A12EA** , Revision 29.

I. Gulfstream IV

规章/Regulation:

14 CFR 25部 (生效日期: 1965年2月1日), 包括修正案25-1到修正案25-56, 除了修正案指示表明符合性的下述章节外/14 CFR FAR Part 25, effective February 1, 1965, including Amendments 25-1 through 25-56, except for the following sections which are limited to showing compliance with the amendments indicated:

章节/Section

修正案/Amendment

FAR25. 109	FAR25, 1965年2月1日/ FAR25, dated February 1, 1965
FAR25. 571	修正案25-22(适用于机身和尾翼)/ 25-22 (as applies to fuselage and empennage)
FAR25. 671	FAR25, 1965年2月1日/ FAR25, dated February 1, 1965
FAR25. 807(c) (2)	修正案25-15/ 25-15
FAR25. 813	FAR25, 1965年2月1日/ FAR25, dated February 1, 1965
FAR36部, 包括修正案36-1到修正案36-12/FAR 36, including Amendments 36-1 through 36-12.	

SFAR 27, 包括修正案27-1到修正案27-5/SFAR 27, including Amendments 27-1 through 27-5.

选择性水上迫降要求的符合性已确立: 涵盖水上迫降要求25. 801(包含25. 563, 25. 807(d) 和 25. 1585(a), 但不包含25. 1411)的数据已获批准。运营规则要求应急设备时, 必须演示25. 1411 和 25. 1415的条款符合性。Gulfstream 公司的报告《水上迫降FAA合格审定的装机要求(No. 1159-GER-7)》提供了表明25. 1411 和 25. 1415的条款符合性的可接受方法。/ Compliance with the following Optional Ditching Requirements has been established: Data covering ditching requirements of 25. 801, including 25. 563, 25. 807(d) and 25. 1585(a) (but excluding 25. 1411) are approved. When the operating rules require emergency ditching equipment, compliance with 25. 1411 and 25. 1415 must be demonstrated. Gulfstream Report 1159-GER-7 entitled "Outfitting Requirements for FAA Certification for Ditching" provides an acceptable means for showing compliance with 25. 1411 and 25. 1415.

等效安全/Equivalent Safety Findings:

- (1) FAR 25. 201 失速演示/ Stall Demonstration

- (2) FAR 25.729(e) (2) 起落架音响警告/ Landing Gear Warning Horn
- (3) FAR 25.773(b) (2) 直视窗/Direct Vision Window
- (4) FAR 25.807(a) (4) FAR25, 1965年2月1日, 具有水平主轴的椭圆应急出口/FAR 25, effective February 1, 1965, Oval Emergency exit Windows with Horizontal Major Axis

II. Gulfstream IV-X

规章/Regulation:

14 CFR 25部 (生效日期: 1965年2月1日), 除下列修正案外, 包括修正案25-1到修正案25-101/14 CFR Part 25, effective February 1, 1965, including Amendments 25-1 through 25-101 with the exceptions listed below:

章节/Section	标题/Title	修正案/ Amendment
25.21(e)	符合性证明/Proof of compliance.	25-7
25.305	强度与变形/Strength and deformation.	25-54, 25-86**
25.321	飞行载荷-总则/Flight loads - General.	25-23, 25-86**
25.333	飞行机动包线/Flight maneuvering envelope.	25-0, 25-86**
25.335(b)	设计空速(速度裕度)/Design airspeeds (speed margin).	25-23
25.341	突风和紊流载荷/Gust and turbulence loads.	25-0, 25-86**
25.343	设计燃油和滑油载重Design fuel and oil loads.	25-18, 25-86**
25.365	增压舱载荷/Pressurized compartment loads.	25-54, 25-87**
25.373	速度控制装置/Speed control devices.	25-0, 25-86**
25.391	操纵面载荷-总则/Control surface loads - General.	25-0, 25-86**
25.427	非对称载荷/Unsymmetrical loads.	25-0, 25-86**
25.445	辅助气动面/Auxiliary aerodynamic surfaces.	25-0, 25-86**
25.459	特殊装置/Special devices.	25-0*
25.491	起飞滑跑/Takeoff run	25-0, 25-91**
25.561	应急着陆条件/Emergency landing conditions.	25-23, 25-64 (座椅/seats) 25-91 (新结构/new structure)**
25.571	损伤容限和疲劳/Damage tolerance and fatigue	25-54 (机翼和尾翼/wing and empennage) 结构评估/evaluation of structure. 25-96 (机身变化/fuselage changes)**
25.671	操纵系统-总则/Control systems-General.	25-0
25.677(c)	配平系统/Trim systems	25-0
25.693	关节接头/Joints	25-0*
25.695	动力推进和动力操纵系统/Power-boost and power-operated control system	25-0
25.807	应急出口/Emergency exits	25-55*
25.807(c) (2), (d) (4)	应急出口/Emergency exits	25-15*
25.813(a), (b), (c), (d), (f)	应急出口通路/Emergency exit access	25-46*
25.841	增压座舱/Pressurized cabins	25-38, 25-87**

25.857	货舱等级/Cargo compartment classification	25-32*
25.858	货舱或行李舱烟雾和火警探测系统/Cargo or baggage compartment smoke or fire detection systems.	25-54*
25.963	燃油箱/Fuel Tanks	25-40*
25.973	燃油箱加油接头/Fuel tank filler connection	25-40*
25.1013	滑油箱/Oil tanks	25-36*
25.1447	氧气分配装置的设备标准/Equipment standards for oxygen dispensing units	25-41, 25-87**

25.1517 颠簸气流速度/Rough air speed, VRA 25-86 (新章节/new paragraph-NA)*

25.1557 其它标牌和配重/Miscellaneous markings and pounds 25-38*

* 这些系统与Gulfstream IV基本型并无变化, 因此这些章节仍保留原来的审定基础并未采用后继修正案。修正案25-0就是1965年2月1日颁布的FAR25部原版本。/These systems have no changes from the basic GIV model; therefore the paragraphs remain at the original GIV certification basis and the later amendment was not adopted. Amendment 25-0 is the original published version of Part 25, February 1, 1965.

** 未更改结构保留所列前一修正案的符合性, 新的或更改的结构则为后一修正案的符合性。/Unmodified structure remains in compliance with the earlier amendment listed. New or modified structure is in compliance with the later amendment level listed.

14 CFR 34部, 包括修正案34-3/14 CFR Part 34, Amendment 34-3

14 CFR 36部, 包括修正案36-24/14 CFR Part 36, Amendment 36-24

所有座椅肩带将替换为经演示符合修正案25-64的§ 25.562(c) (5)和(c) (6) 试验要求的肩带。由于特许, 关于§ 25.562(c) (5) and (c) (6) 的§ 25.785试验要求的符合性并不需要演示。这些规定适用于单个或多个, 向前、向后或侧座乘员的座椅系统。/Shoulder harness on all seats will be in lieu of demonstrated compliance to the test requirements of § 25.562(c) (5) and (c) (6) per Amendment 25-64. Compliance to the test requirements of § 25.785 in reference to § 25.562(c) (5) and (c) (6) need not be demonstrated due to this concession. These provisions are acceptable for single or multiple occupant seating systems which are forward, aft, or side facing.

选择水上迫降要求的符合性确认如下: 包含§ 25.563, § 25.807和§ 25.1585(a), 但不包含§ 25.1411, 含盖FAR25部§ 25.801水上迫降要求的数据已获批准。当运行规则要求应急设备时, FAR25部§ 25.1411和§ 25.1415的符合性必须演示。/Compliance with the Optional Ditching Requirements has been established as follows: Data covering the ditching requirements of 14 CFR Part 25.801, including 25.563, 25.807 and 25.1585(a), but excluding 25.1411, are approved. When the operating rules require emergency ditching equipment, compliance with Parts 25.1411 and 25.1415 must be demonstrated.

Gulfstream 公司的报告《水上迫降FAA合格审定的装机要求(No. 1159-GER-7)》提供了表明25.1411 和 25.1415的条款符合性的可接受方法。/Gulfstream Report no. 1159-GER-7, entitled “Outfitting Requirements for FAA Certification for Ditching”, provides an acceptable means for showing compliance with Parts 25.1411 and 25.1415.

修正案25-46给出的§ 25.813(e)不包含在审定基础中。/FAR 25.813(e) at Amendment 25-46 is not included in the certification basis.

专用条件/Special Conditions:

No. 25-262-SC, HIRF (高强度辐射场/High Intensity Radiated Fields).

No. 25-180-SC, 增强型目视系统/Enhanced Vision System (EVS).

No. 25-258-SC, 系统和结构的交互作用/Interaction of Systems and Structure.

豁免/Exemptions:

No. 8142 [FAR 25.901(c)], 非控制人推力故障状态/Uncontrolled High Thrust Failure Condition.

注释:美国联邦航空局已决定任何非控制人推力故障状态的发生,或适用飞机的《维修手册》的05-50-00章节中所列出的任何相关原因的故障发生“可能危及飞机的安全运行”,并因此在FAR 121.703, 125.409, 和135.415下是值得报告的。/NOTE: The FAA has concluded that the occurrence of any uncontrollable high thrust failure condition, or any of the associated causal failures listed in Section 05-50-00 of the applicable airplane Maintenance Manual “may endanger the safe operation of an airplane” and hence are reportable under FAR 121.703, 125.409, and 135.415.

等效安全/Equivalent Safety Findings:

(1) FAR 25.807, 具有水平主轴的椭圆突起应急门, TAD ELOS 备忘录(No. AT5080AT-T-A-2)/ Elliptical Overwing Emergency Exits with a Horizontal Major Axis, TAD ELOS Memo No. AT5080AT-T-A-2

(2) FAR 25.841(b) (6), 座舱增压-高高度起飞和着陆场长图, TAD ELOS 备忘录(No. AT5177AT-T-S-29)/Cabin Pressurization - High Altitude Takeoff and Landing Field Elevations, TAD ELOS Memo No. AT5177AT-T-S-29

(3) FAR 25.811(d) & 25.812(b), 定位器、标记和隔框/分隔器符号, TAD ELOS备忘录(No. AT5177AT-T-C-1)/Locator, Marker, and Bulkhead/Divider Signs, TAD ELOS Memo. No. AT5177AT-T-C-1

(4) FAR 25.853, 25.869, 电气设备可燃性证明, TAD ELOS备忘录(No. AT5177AT-T-A-9)/ Flammability Substantiation for Electrical Equipment, TAD ELOS Memo No. AT5177AT-T-A-9

(5) FAR 25.933, 飞行中临界反推, TAD ELOS备忘录(No. AT5080AT-T-P-1)/ Flight Critical Thrust Reverser, TAD ELOS Memo No. AT5080AT-T-P-1

III. Gulfstream V

规章/Regulation:

14 CFR 25部 (生效日期: 1965年2月1日), 除下列修正案外, 包括修正案25-1到修正案25-81/14 CFR Part 25, effective February 1, 1965, including Amendments 25-1 through 25-81, except for the following sections which are limited to showing compliance with the amendments indicated:

章节/Section

修正案/Amendment

FAR25. 109

FAR25, 1965年2月1日/ FAR25, dated February 1, 1965

FAR25. 807(c) (2)

修正案25-15/ 25-15

FAR25. 813

FAR25, 1965年2月1日/ FAR25, dated February 1, 1965

14 CFR 34部, 包括修正案34-1/14 CFR Part 34, Amendment 34-1

14 CFR 36部, 包括修正案36-1至36-20/14 CFR Part 36, including Amendments 36-1 through 36-20

所有座椅肩带将替换为经演示符合修正案25-64的 § 25.562(c) (5) 和(c) (6) 试验要求的肩带。

由于特许, 关于 § 25.562(c)(5) and (c)(6) 的 § 25.785 试验要求的符合性并不需要演示。

/Shoulder harness on all seats will be in lieu of demonstrated compliance to the test requirements of FAR 25.562(c)(5) and (c)(6) per Amendment 25-64. Compliance with the requirements of FAR 25.785 in reference to FAR 25.562 (c)(5) and (c)(6) need not be demonstrated due to this concession.

选择性水上迫降要求的符合性已确立: 含盖水上迫降要求25.801(包含25.563, 25.807(d) 和 25.1585(a), 但不包含25.1411)的数据已获批准。运营规则要求应急设备时, 必须演示25.1411 和 25.1415的条款符合性。Gulfstream 公司的报告《水上迫降FAA合格审定的装机要求(No. 1159-GER-7)》提供了表明25.1411 和 25.1415的条款符合性的可接受方法。/ Compliance with the following Optional Ditching Requirements has been established: Data covering ditching requirements of 25.801, including 25.563, 25.807(d) and 25.1585(a) (but excluding 25.1411) are approved. When the operating rules require emergency ditching equipment, compliance with 25.1411 and 25.1415 must be demonstrated. Gulfstream Report 1159-GER-7 entitled "Outfitting Requirements for FAA Certification for Ditching" provides an acceptable means for showing compliance with 25.1411 and 25.1415.

专用条件/Special Conditions:

No. 25-NM-105, 高强度辐射场, 有效日期: 1995年9月28日/HIRF (High Intensity Radiated Fields), effective September 28, 1995.

No. 25-ANM-108, 高高度运行, 有效日期: 1995年11月16日/High Altitude Operations, effective November 16, 1995.

注释: 高高度专用条件不但包含了增压系统要求, 而且还有压力容器的损伤容限要求。因此, 依据专用条件的要求, 增压系统的任何变化, 或对于压力容器的修改或修复必须批准。/NOTE: The high altitude special condition includes pressurization system requirements, as well as damage tolerance requirements on the pressure vessel. Therefore, any changes to the pressurization system or modifications or repairs to the pressure vessel must be approved in accordance with the requirements defined in the special condition.

按照座舱高度的时间历程(作为座舱泄漏率的函数), 该专用条件中规定了损伤容限要求。所规定的座舱压力高度时间历程的要求可能遭遇压力容器的开度为7.2平方英吋的有效面积(或每平方英吋为7.2?) (考虑假设应急下降时适当的流量系数)。等效裂缝长度的确定将取决于裂缝特定位置, 该位置中的压力容器结构, 裂缝的方向, 等等。修改和/或修理的批准必须考虑专用条件的要求, 及它们如何适用于特定位置、修改和修理的结构, 引起的检查大纲也必须考虑其它适用的结构规范。/The damage tolerance requirements in the special condition are specified in terms of cabin altitude time history, which is a function of the cabin leak rate. The specified cabin altitude time history requirement can be met with a pressure vessel opening of 7.2 square inches effective area (which considers the appropriate discharge coefficient assuming an emergency descent). The determination of an equivalent crack length will depend upon the particular location of the crack, the pressure vessel configuration in that location, the direction of the crack, etc. The approval of modifications and/or repairs must take into account the requirements of the special condition and how they apply to the particular location and configuration being modified or required. The resulting inspection program must also consider other applicable structural criteria.

豁免/Exemptions:

F25.571(e)(1) 鸟撞速度/Bird Impact Speed

等效安全/Equivalent Safety Findings:

- (1) FAR 25.341, 欧洲联合航空局替代静态突风的离散调谐突风/JAR Discrete Tuned Gust in lieu of Static Gust
- (2) FAR 25.807(a)(4), 具有水平主轴的卵圆形应急门, 有效日期: 1965年2月1日/Effective February 1, 1965, Oval Emergency Windows with Horizontal Major Axis
- (3) FAR 25.933, 飞行中反推装置无意中展开的预防/Prevention of Inadvertent Inflight Thrust Reverser Deployment
- (4) FAR 25.103, 用定义的 V_{slg} 替代 V_{min} 的失速速度/Stall Speeds defined by V_{slg} in lieu of V_{min}

IV. Gulfstream V-SP

14 CFR 25部 (生效日期: 1965年2月1日), 除下列修正案外, 包括修正案25-1到修正案25-98/14 CFR Part 25, effective February 1, 1965, including Amendments 25-1 through 25-98, with the following exceptions:

所有座椅肩带将替换为经演示符合修正案25-64的 § 25.562(c)(5) 和 (c)(6) 试验要求的肩带。由于特许, 关于 § 25.562(c)(5) 和 (c)(6) 的 § 25.785 试验要求的符合性并不需要演示。
/Shoulder harnesses on all seats will be provided in lieu of demonstrated compliance to the test requirements of FAR 25.562(c)(5) and (c)(6) of Amendment 25-64. Compliance with the requirements of FAR 25.785 in reference to FAR 25.562(c)(5) and (c)(6) are not demonstrated due to this concession.

FAR 25.571 疲劳和损伤容限要求仅限于机身和机身变化。/The Fatigue and Damage Tolerance requirements of FAR 25.571 are limited to the fuselage and fuselage changes only.

14 CFR 34部, 包括修正案34-1至34-3。/14 CFR Part 34, including Amendments 34-1 through 34-3.

14 CFR 36部, 包括修正案36-1至36-20/14 CFR Part 36, including Amendments 36-1 through 36-22.

选择性水上迫降要求的符合性已确立: 涵盖水上迫降要求25.801(包含25.563, 25.807(d) 和 25.1585(a), 但不包含25.1411)的数据已获批准。运营规则要求应急设备时, 必须演示25.1411 和 25.1415的条款符合性。Gulfstream 公司的报告《水上迫降FAA合格审定的装机要求(No. 1159-GER-7)》提供了表明25.1411 和 25.1415的条款符合性的可接受方法。/Compliance with the following Optional Ditching Requirements has been established: Data covering ditching requirements of 25.801, including 25.563, 25.807(d) and 25.1585(a) (but excluding 25.1411) are approved. When the operating rules require emergency ditching equipment, compliance with 25.1411 and 25.1415 must be demonstrated. Gulfstream Report 1159-GER-7 entitled "Outfitting Requirements for FAA Certification for Ditching" provides an acceptable means for showing compliance with 25.1411 and 25.1415.

专用条件/Special Conditions:

No. 25-180-SC, 增强性日视系统/Enhanced Vision Systems.

No. 25-262-SC, HIRF(高强度辐射场)/HIRF (High Intensity Radiated Fields).

豁免/Exemptions:

No. 7946 [FAR 25.813(e)], 乘员客舱中间舱门/Mid-Cabin Doors Between Passenger Compartments.

No. 8004 [FAR 25.901(c)], 非可控大反推状态/ Uncontrollable High Thrust Failure Conditions.

注释:美国联邦航空局已决定任何非控制人推力故障状态的发生,或适用飞机的《维修手册》的05-50-00章节中所列出的任何相关原因的故障发生“可能危及飞机的安全运行”,并因此在FAR 121.703, 125.409,和135.415下是值得报告的。/NOTE: The FAA has concluded that the occurrence of any uncontrollable high thrust failure condition, or any of the associated causal failures listed in Section 05-50-00 of the applicable airplane Maintenance Manual “may endanger the safe operation of an airplane” and hence are reportable under FAR 121.703, 125.409 and 135.415.

等效安全/Equivalent Safety Findings:

(1) FAR 25.807(g)(2), Gulfstream公司的突起应急门, TAD ELOS 备忘录 (No. AT5080AT-T-A-2)。/ Gulfstream Overwing Emergency Exit Windows, TAD ELOS Memo No. AT5177AT-T-A-2.

在乘员为10至19人飞行中,有一位经撤离培训的机组成员是一项附加要求。所需的正、副驾驶不能服务这一功能,而该位附加的机组成员必须通过关于Gulfstream椭圆应急出口,和指导乘员撤离程序,以防止某位乘员不能通过该椭圆出口致使该出口不能使用的情况发生的最佳撤离方法的培训。依据Gulfstream公司文件(对于G500的运行,为No. G500-OMS-1; 对于G550的运行,为No. G550-OMS-1),每位承运人必须制定并保持关于该位机组成员的培训大纲,该大纲包含最初的和复训性的课程,和必须保持培训记录以供FAA检查。/A crewmember trained in evacuation is an additional required crewmember on all flights of 10 to 19 passengers. The required pilot and co-pilot cannot serve this function. The additional crewmember must be trained in the optimum method for evacuating through the Gulfstream elliptical exits and in procedures for directing passenger flow to prevent someone who does not fit through an elliptical exit from blocking it so that others cannot use it. Each operator must establish and maintain a training program for this additional crewmember (to include an initial and recurrent curriculum) in accordance with Gulfstream Document G500-OMS-1, Revision 1 (for G500 operations) or G550-OMS-1, Revision 1 (for G550 operations), and must keep a record of that training available for inspection by the FAA.

关于飞机特定出口的程序和撤离门构形的简要说明书每次飞行前必须提供给每位乘客。该份简要说明书必须详细说明通过椭圆出口应急撤离的最佳方法。这点取决于应急出口内部结构。/A pre-flight briefing on the configuration specific egress procedures and exits of the airplane must be provided to all passengers before each flight. This briefing must include a detailed explanation of the optimum method for evacuating through the overwing Gulfstream elliptical exits, which is dependant upon the interior configuration inboard of the exit.

(2) FAR 25.853, 25.869, 电气设备可燃性证明, TAD ELOS备忘录 (No. AT5177AT-T-A-9)/ Flammability Substantiation of Electronic Equipment, TAD ELOS Memo No. AT5177AT-T-A-9

(3) FAR 25.811(d), 25.812(b)(1), 应急出口标记、定位器、和隔框/分隔器符号, TAD ELOS 备忘录 (No. AT5177AT-T-C-1)/Emergency Exit Marker, Locator and Bulkhead/Divider Signs, TAD ELOS Memo No. AT5177AT-T-C-1

- (4) FAR 25.841(b)(6), 座舱增压-高高度起飞和着陆场长图, TAD ELOS 备忘录 (No. AT5177AT-T-S-29)/Cabin Pressurization - High Altitude Takeoff and Landing Operations, TAD ELOS Memo No. AT5177AT-T-S-29
2. 中国民用航空总局认可美国联邦航空局确定的型号合格审定基础。
CAAC Validation Basis:

除下述条款外, 中国民用航空总局接受 FAA 审定基础作为认可 Gulfstream IV、Gulfstream IV-X、Gulfstream V 和 Gulfstream V-SP 飞机的审定基础/ CAAC Accepts FAA Certification Basis for the Gulfstream IV、Gulfstream IV-X、Gulfstream V and Gulfstream V-SP as Validation basis, Except as:

三. 技术特性和使用限制 / TECHNICAL CHARACTERISTICS AND OPERATIONAL LIMITATIONS

I. Model Gulfstream IV

发动机/Engine 2 台罗尔斯. 罗依斯公司的发动机, 型号: Tay Mark 611-8, 型号合格证: E25NE. /2 Rolls Royce Tay Mark 611-8 (Type Certificate E25NE)

发动机使用限制/ Engine Operation Limits

静态推力 (海平面标准大气)/Static Thrust (std. day) S.L

额定起飞 (注释 9)/Rated Takeoff (See Note 9)	13,850 (磅/lb)
额定最大连续/Rated Maximum continuous	12,420 (磅/lb)

最大允许连续转速/Maximum permissible continuous rotor operating speeds:

N1 (低压压气机/low compressor)	(95.5%)	8,015 rpm
N2 (高压压气机/high compressor)	(97.5%)	12,172 rpm

最大允许温度/Maximum permissible temperatures (°C):

第一级低压涡轮前的导向叶片处测量的涡轮燃气温度/Turbine gas temp measured at nozzle guide vanes ahead of first low stage pressure turbine:

起飞 (注释 9)/Takeoff (See Note 9)	800°
最大连续/Maximum continuous	715°
地面启动瞬时最大/Momentary maximum during ground starts	700°
空中开车瞬时最大/Momentary maximum during airtasks (relights)	780°
最大超温 (20 秒)/Maximum over-temperature (20 second limit)	820°
滑油温度 (最小启动)/Oil temp (minimum for starting)	-40°
滑油温度 (最大启动)/Oil temp (maximum)	105°
滑油温度 (15 分钟限制)/Oil temp (15 minute limit)	120°
高压泵燃油进口温度/Fuel inlet temp to engine high pressure pump	90°
燃油进口温度 (15 分钟限制)//Fuel inlet temperature (15 min. limit)	120°

最大允许引气量/Maximum Permissible Air Bleed Extraction:

第 7 级高压引气/7th Stage HPC Bleed	7.0 lb./sec
第 12 级高压引气 (最大连续及以下)/12th Stage HPC Bleed (max continuous and below)	10.0 lb./sec
风扇引气/Fan Bleed	10.5 lb./sec

辅助动力装置(APU)/ Auxiliary Power Unit (APU)

1 台 AirResearch 公司的型号: / 1 AirResearch: GTCP-36-100G

最大允许排气温度/Maximum permissible exhaust gas temperature - 988°C
 启动期间至到 60%转速/Up to 60% rpm during start 821°C to 732°C
 启动期间 60%-100%转速/60% - 100% during start (线性减少/linear decrease)
 运转/Running 732°C
 最大转速(所有状态)/Maximum rotor speed - all conditions 110%
 APU 交流发电载荷(额定)/APU alternator load rating 30Kva
 APU 额定输出轴功率/APU rated output shaft power 50hp
 (环境温度 103°F, 引气量每分钟 46.6 磅 /with 46.6 lb. per min. bleed air and ambient temp of 103°F)

燃油/ Fuel:

术语/Nomenclature	规范/Specifications			
	美国/U. S. A	英国/ British	加拿大/ Canadian	中国/P. R. C
煤油/Kerosene	ASTM D1655-84 (Jet A) ASTM D 1655-84, Jet A-1 MIL-T-83133A, Grade JP8	D Eng. R.D. 2453, Issue 5 D Eng. R.D. 2494, Issue 9	CAN 2.3.23-M82	GB6537-94 (PRC Jet Fuel No. 3)
JP-4 宽硫分(注释 3)/ JP-4 Wide Cut Type (See NOTE 3)	ASTM D1655 (Jet B) MIL-T-5624L, Grade JP4	D Eng. R.D. 2454, Issue 4 D Eng. R.D. 2486, issue 9	CAN 2.3.22-M81	
JP-5 高闪点型/JP-5 High Flash - Point Type	MIL-T-5624 (JP-4)	D Eng. R.D. 2452, Issue 2 D Eng. R.D. 2498, Issue 7	CAN 3-GP-24h	
燃油应符合所列规范, 及其后继版次, 依照最新批准的《飞机飞行手册》。/ Fuel shall conform to the specification as listed or to subsequent revisions. found in the latest approved Airplane Flight Manual. 上述提及的燃油和附加说明也适用于辅助动力装置。/The above mentioned fuels and additives are also suitable for the APU.				

滑油牌号/ Oil Type 发动机和辅助动力装置使用下列经批准的滑油/The following oils are approved for use in the engine and APU:

3 Centistoke
 Aeroshell Turbo Oil 390
 Castrol 3C Turbine Oil
 Castrol 325 Engine Oil
 ESSO/Exxon Turbo 2389

 5 Centistoke
 Esso/Exxon Turbo Oil 2380
 Mobil Jet Oil II
 Mobil Jet Oil 254
 Castrol 5000 Gas Turbine Oil
 Aeroshell Turbine Oil ATO 500

注释: 不推荐混合滑油辅助动力装置使用。/NOTE: Mixing of oils is not recommended for APU.

注释：不推荐使用混合滑油，但各个牌号制作实质可能是混合物。当翻新罗尔斯·罗伊斯公司已获批准关于粘性和等级的标准时，上述牌号的滑油已经批准。/NOTE: Mixing of oils is not recommended but brands may be mixed if operationally essential. Oils of the above brands, when reclaimed to the approved Rolls-Royce standard for viscosity and grade, are approved for use.

滑油应符合最新批准的《飞机飞行手册》中所列的或其后版次规定的规范。/Oil shall conform to the specification as listed or to subsequent revisions in the latest approved Airplane Flight Manual.

空速限制(校准空速节)/ Airspeed Limits (CAS. knots)	V _{MO} /M _{MO} (最大使用速度/ Maximum operating speed)	
	见高度/马赫数使用包线/See Altitude/Mach Flight Operating Envelope	
	V _A (机动速度/Maneuvering speed)	170
		206 (1)
	V _{FE} (襟翼放下速度/Flap extended speed) (Flaps down to 39°)	170
		180 (1)
	V _{FE} (襟翼放下速度/Flap extended speed) (Flaps down to 20°)	220
	V _{FE} (襟翼放下速度/Flap extended speed) (Flaps down to 10°)	250
	V _{LO} (起落架收起速度/Landing gear operation)	225
	V _{LE} (起落架放下速度/Landing gear extended)	250
	V _{MCG} (地面最小可操纵速度/Minimum control ground speed)	111
	V _{MCA} (空中最小可操纵速度/Minimum control air speed)	104
	(1) 具有 1159SB41190, 生产序号从 S/N 1000 至 1213 的飞机, S/N 1214 及后续飞机。/Aircraft S/N 1000 thru 1213 with 1159SB41190, S/N 1214 and subsequent	

最大重量(磅) /
Maximum Weight (lb.)

飞机序号/Aircraft S/N	最大零燃油重量 /Max. Zero Fuel	最大停机重量/Max. Ramp	最大起飞重量/Max. Take-Off	最大着陆重量/Max. Landing
1000 thru 1213	46,500	73,600	73,200	58,500
1000 thru 1213 with ASC 61	49,000	73,600	73,200	58,500
1000 thru 1213 with ASC 261	49,000	73,600	73,200	58,500
1000 thru 1213 with ASC 190	49,000	75,000	74,600	66,000
1214 & Sub	49,000	75,000	74,600	66,000
1500 & Subs with ASC 440 (G400)	49,000	75,000	74,600	66,000
1500 & Subs with ASC 436 (G300)	49,000	72,400	72,000	66,000

燃油容积/Fuel
Capacity

重力或压力加油/Gravity or Pressure Fueling:

	GIV/GIV (G400)	GIV (G300)
总量/Total	29,605 lb	27,005 lb
可用/Usable	29,500 lb.	26,900 lb
力臂/Arm*	+430.4	+426.5

燃油重量基于每加仑 6.75 磅/Fuel weights based upon fuel density of 6.75 lb. per gal.

*力臂地面静态/Arm based on ground static attitude (-1.5° FRL)

滑油容积/Oil Capacity 单台发动机全部滑油容积 14.0 磅/14.4 美制品脱。/Total engine oil capacity 14.0 lb./14.4 U.S. pints (each engine)
 单台发动机可用滑油容积 10.1 磅/10.8 美制品脱。/Usable engine oil capacity 10.1 lb./10.8 U.S. pints (each engine)
 (力臂/Arm = +582.00)
 重量基于每加仑 7.5 磅/Oil weights based upon oil density of 7.5 lb. per gal.
 系统滑油见注释 1。/See NOTE 1 for system oil.
 所表明的滑油容积仅为发动机的滑油箱容积。/Capacities shown are for engine oil tankage only.
 每台发动机的总滑油附加 16.8 磅。/Total engine oil is an additional 16.8 lb. per engine.
 辅助动力装置的滑油量为 4.75 lb./5.0 美制品脱。/APU oil 4.75 lb./5.0 U.S. Pints
 (力臂/Arm = +620.0)

最大使用高度/ Maximum Operating Altitude 45,000 英尺/45,000 feet

基准/Datum 对于重量与平衡的目的, 基准零点位于前机轮舱飞机中心线的基点后 15 英吋处, 或机身 206 站位前的 206 英吋处。/For weight and balance purposes, the zero datum is 15 inches aft of the jig point at the centerline of the airplane in the nose wheel well or 206 inches forward of Fuselage Station 206.

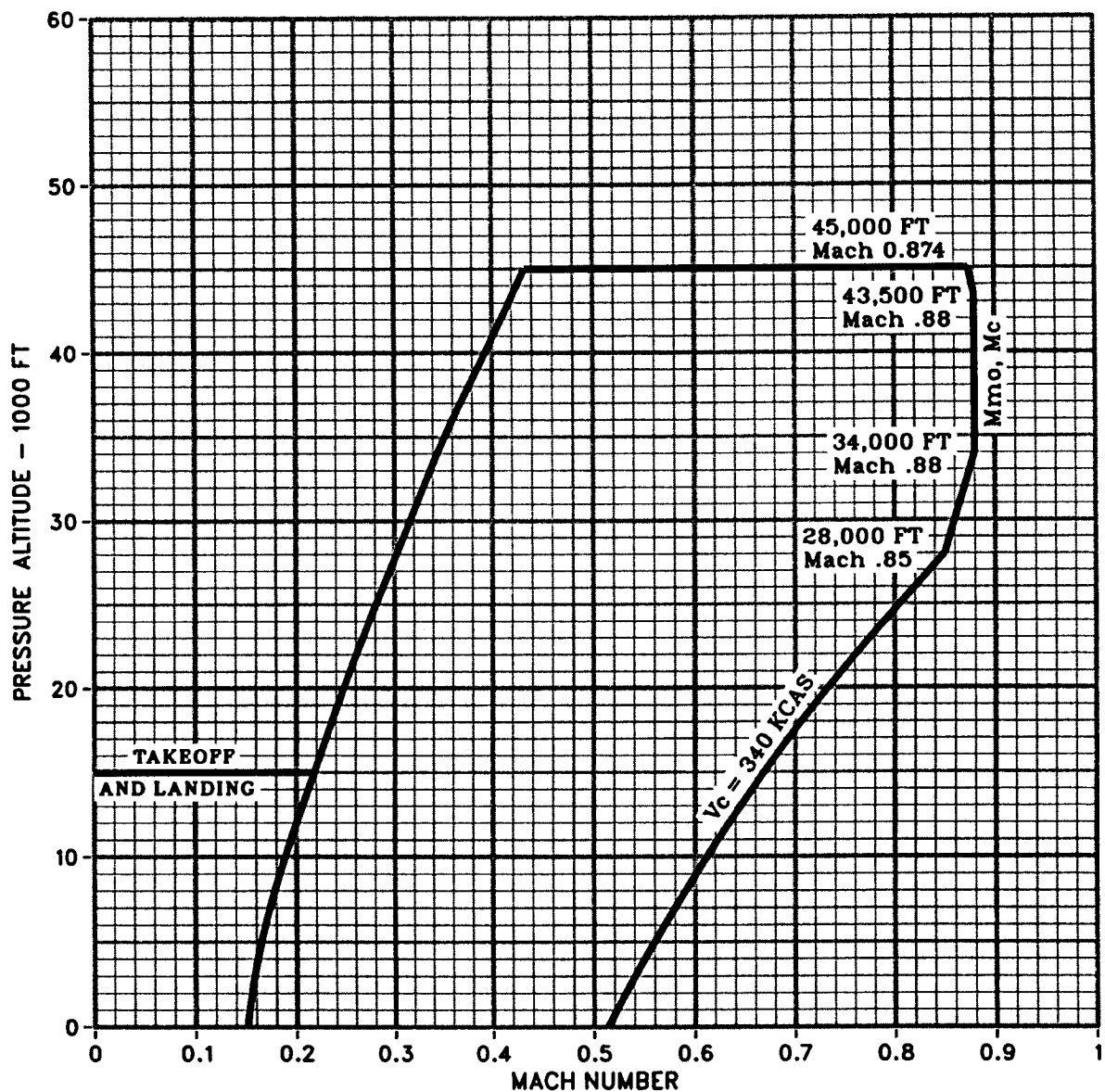
平均气动弦/ M. A. C. 166.22 英吋(平均气动弦前缘位于机身 387.7 站位处)/166.22 in. (L. E. of M. A. C. = Fuselage Station 387.7)

制造序号/ Serial Numbers Eligible 生产序号: 1000 至 1535(1500-1535 为 G300/G400 型)。/ S/N 1000 through 1535 (1500-1535 are G300/G400).

空速限制(最大使用)/AIRSPEED LIMITS (MAXIMUM OPERATING)

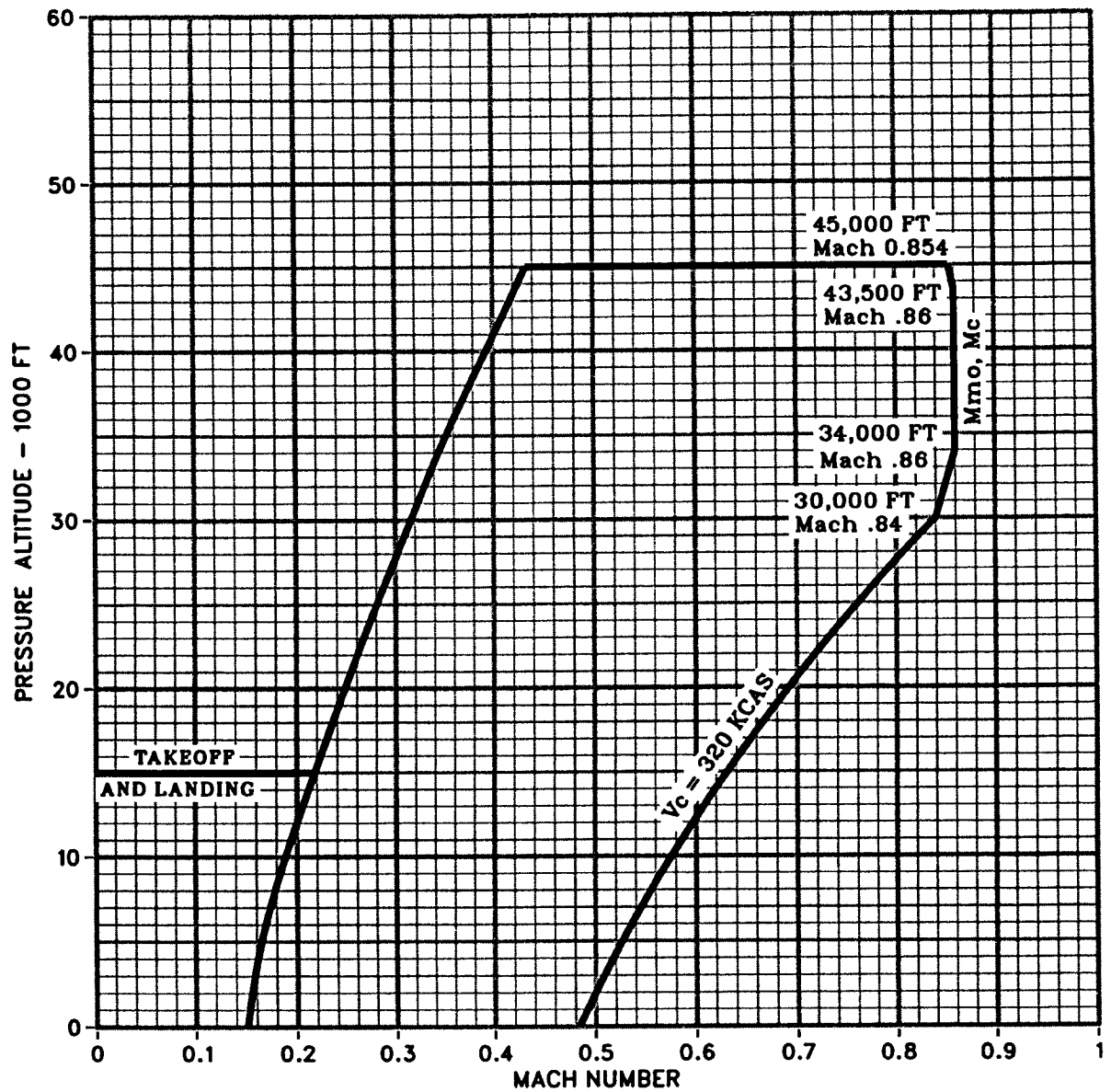
ALTITUDE / MACH FLIGHT ENVELOPE

(S/N 1000 AND SUBSEQUENT)



ALTITUDE / MACH FLIGHT ENVELOPE

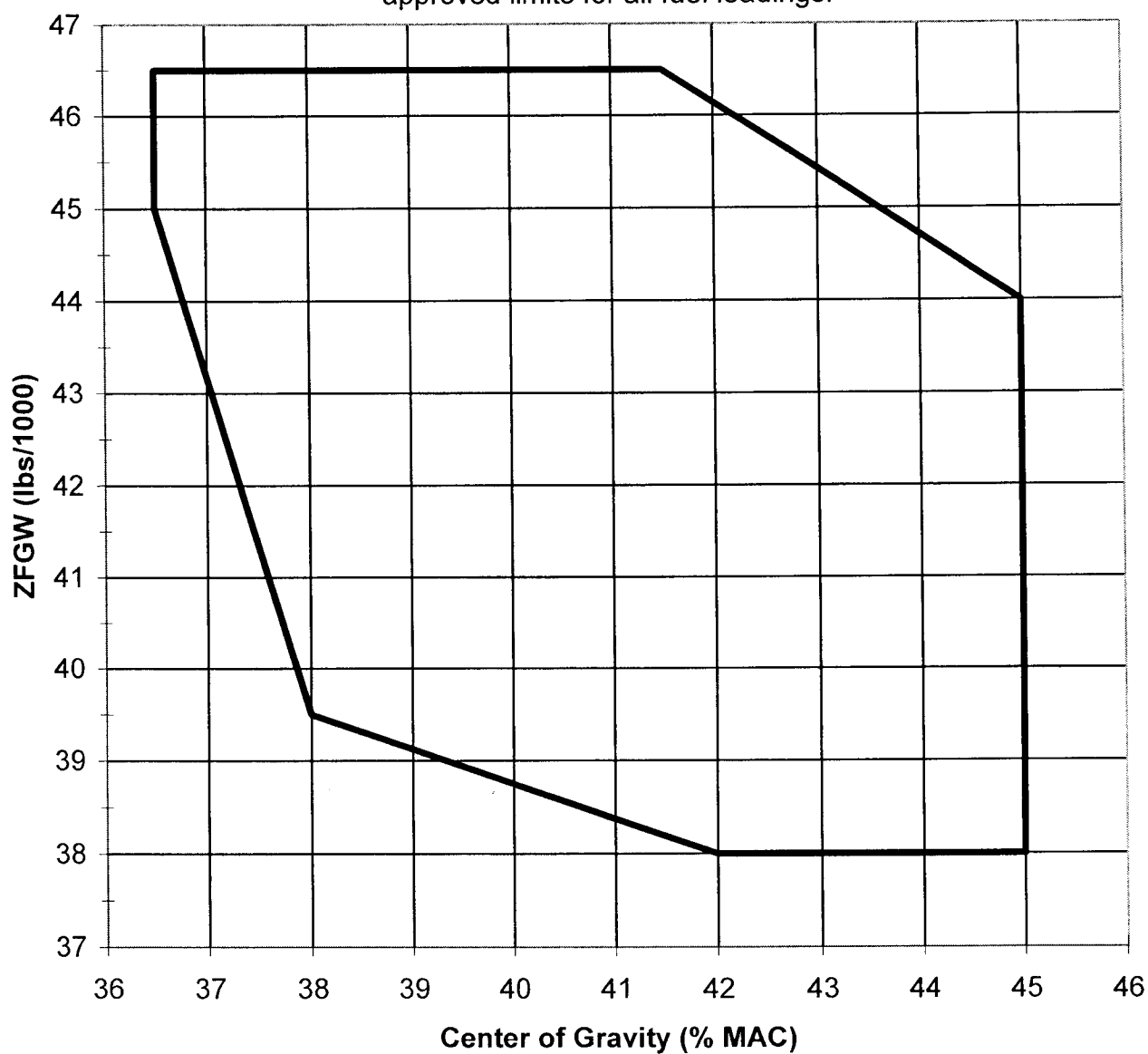
(S/N 1000 – 1213 WITH ASC 61)



Aircraft Zero Fuel Gross Weight Envelope

For SN 1000-1213			
Maximum Weight (lbs)			
Zero Fuel	Landing	Ramp	Takeoff
46,500	58,500	73,600	73,200

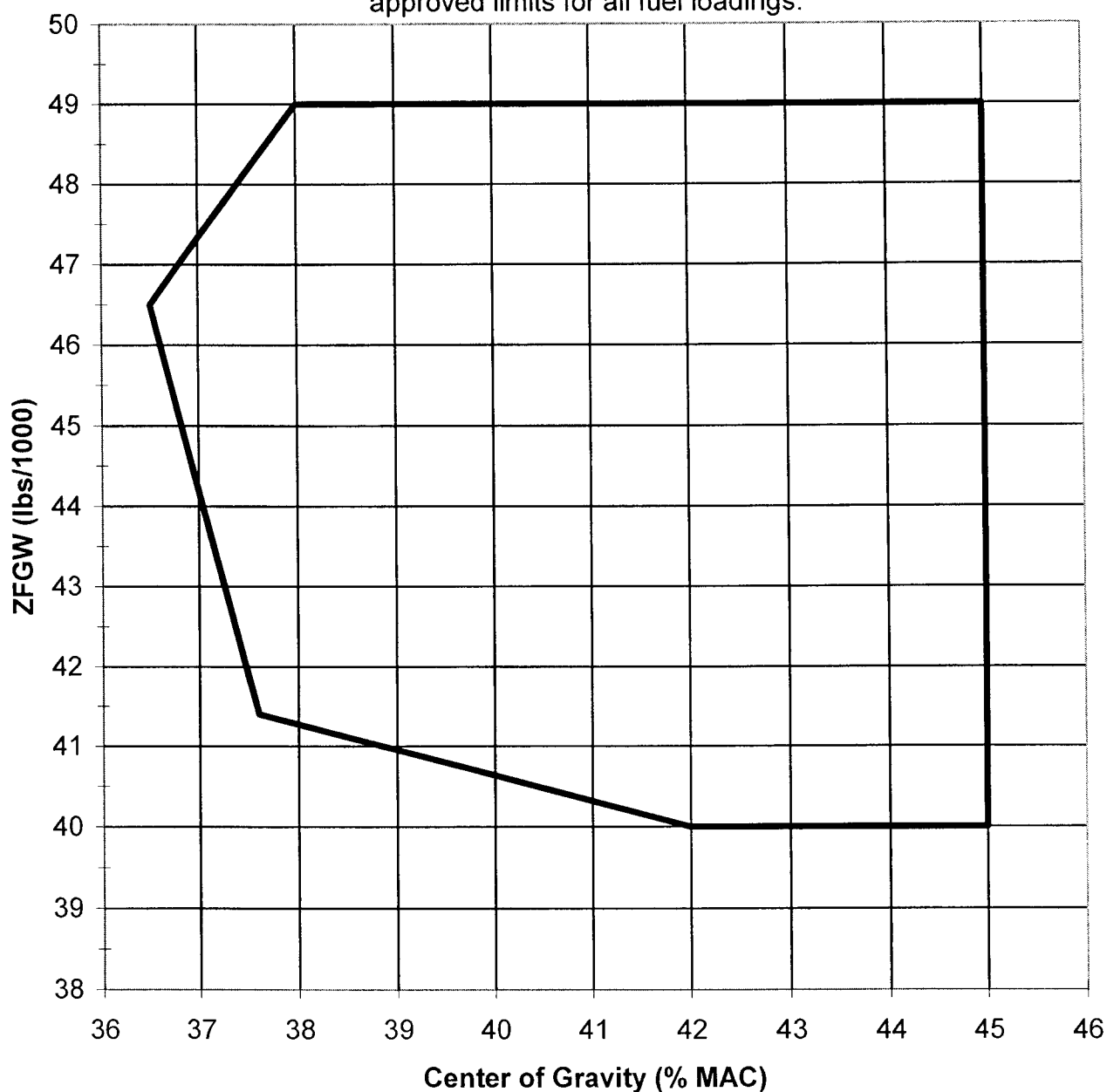
If the ZFGW is within the envelope, the fueled aircraft will be within FAA approved limits for all fuel loadings.



Aircraft Zero Fuel Gross Weight Envelope

For SN 1000-1213 with ASC 61			
Maximum Weight (lbs)			
Zero Fuel	Landing	Ramp	Takeoff
49,000	58,500	73,600	73,200

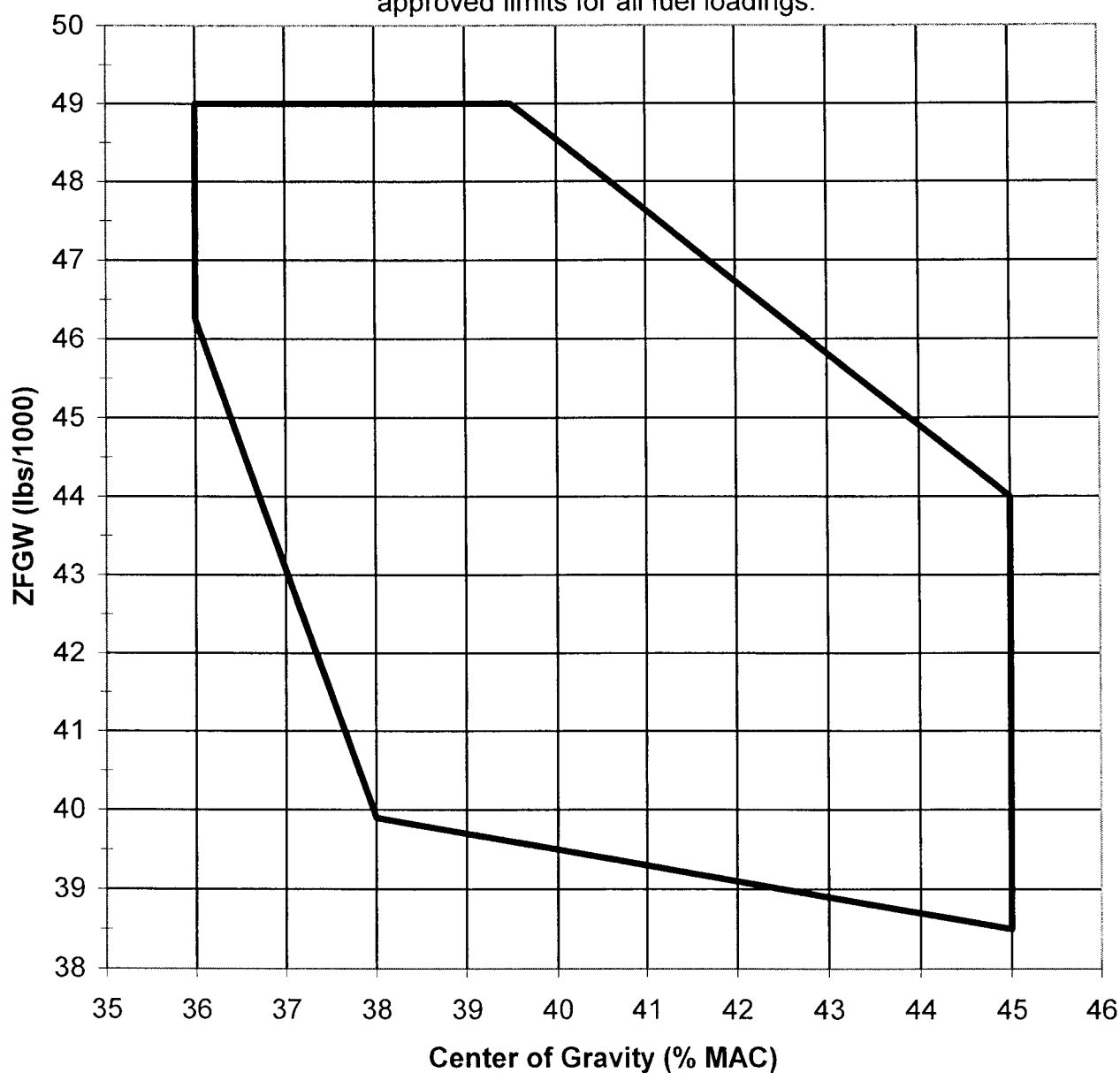
If the ZFGW is within the envelope, the fueled aircraft will be within FAA approved limits for all fuel loadings.



Aircraft Zero Fuel Gross Weight Envelope

For SN 1000-1213 with ASC 261			
Maximum Weight (lbs)			
Zero Fuel	Landing	Ramp	Takeoff
49,000	58,500	73,600	73,200

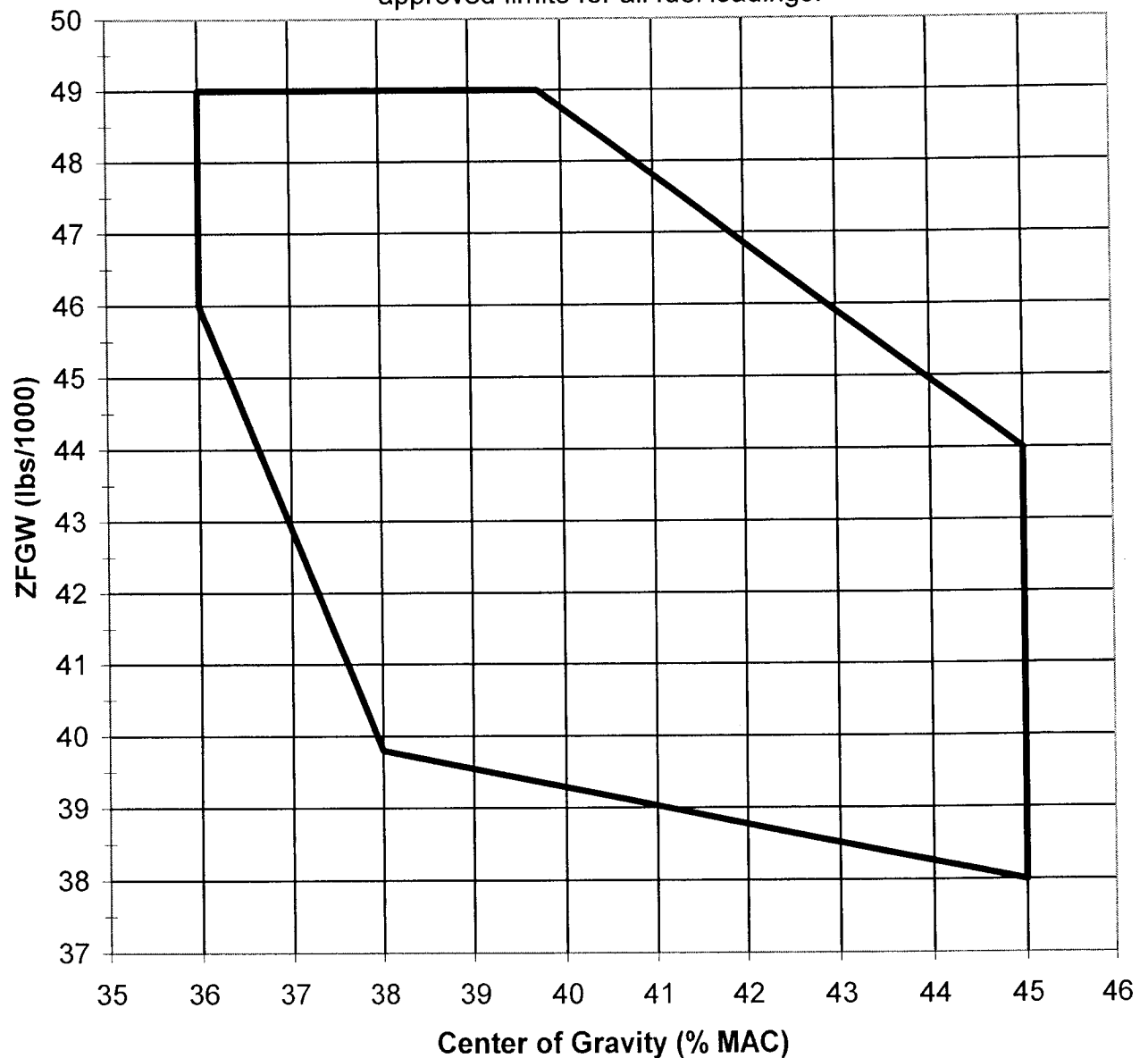
If the ZFGW is within the envelope, the fueled aircraft will be within FAA approved limits for all fuel loadings.



Aircraft Zero Fuel Gross Weight Envelope

For SN 1214 and Subs. and SN 1000-1213 with ASC 190 and SN 1500 and Subs. with ASC 440			
Maximum Weight (lbs)			
Zero Fuel	Landing	Ramp	Takeoff
49,000	66,000	75,000	74,600

If the ZFGW is within the envelope, the fueled aircraft will be within FAA approved limits for all fuel loadings.

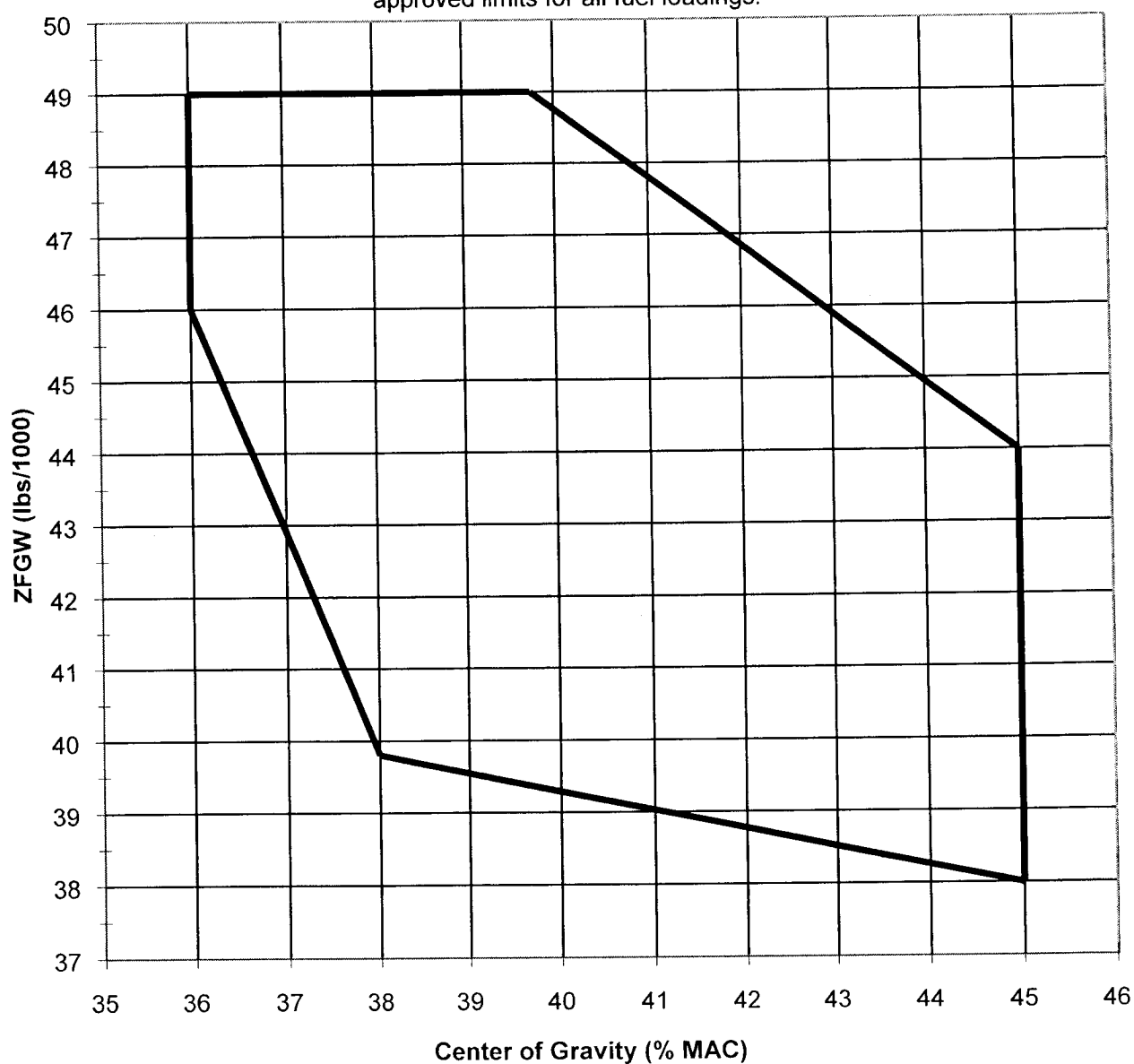


Aircraft Zero Fuel Gross Weight Envelope

For SN 1500 and Subs. with ASC 436

		Maximum Weight	
Zero Fuel	Landing	Ramp	Takeoff
49,000	66,000	72,400	72,000

If the ZFGW is within the envelope, the fueled aircraft will be within FAA approved limits for all fuel loadings.



II. Model Gulfstream IV-X

除了以下差异外, Gulfstream GIV-X 与 Gulfstream GIV 型飞机相同。/The Gulfstream GIV-X is the same as the Gulfstream GIV except for the following differences:

- 一套霍林维尔公司先进的飞行显示系统(与 Gulfstream GV-SP 型飞机相同), 以提高飞行机组形势警觉性和操作能力/A Honeywell advanced flight deck display suite (common with the GV-SP) to improve flight crew situational awareness and operational capabilities
- 与 Gulfstream GV-SP 型飞机相同的机头/Airframe nose common with the GV-SP
- 为了增加航程和商载, 改进了机身气动力和发动机性能/Airframe aerodynamic improvements and engine improvements for increased range and payload
- 客舱主舱门后移与机身加长 12 英寸融为一体/Cabin main entry door relocated aft and fuselage 12 inch extension incorporated
- Tay 611 型发动机替换为增装了 FADEC 的 Tay 611-8C 型发动机/Tay 611 engine replaced with derivative Tay 611-8C. Added engine FADEC
- 重新设计了反推, 发房和挂架/Redesigned thrust reverser, nacelle and pylon
- 系统改进/System improvements
 - 发电机(与 Gulfstream GV-SP 型飞机相同)/Electrical power generation (common with GV-SP)
 - 双套数字客舱温度控制和压调(与 Gulfstream GV-SP 型飞机相同)/Dual digital cabin temperature control and pressurization (common with GV-SP)
 - 前起落架(与 Gulfstream GV-SP 型飞机相同)/Nose landing gear (common with GV-SP)
 - 更换了霍林维尔 36-150 型 APU/Replaced APU with Honeywell 36-150 APU
 - 重新设计了襟翼/稳定器作动数字控制系统/Redesigned flap/stab actuation system with digital control
 - 重新设计了主起机轮和刹车/Redesigned main landing gear wheels and brakes
 - 增加了控制系统(满舵(转变)保护系统)/Added flight control system hard-over protection system

注释: Gulfstream GIV-X 有两个型别(见注释 5):(1) G450, 等同于 GIV-X; 和(2) G350, 减少了燃油容量。/NOTE: There are two variants of the GIV-X (see Note 5): (1) The G450, which is identical to the GIV-X, and (2) the G350, which has a reduced fuel capacity.

发动机/Engine 2 台罗尔斯. 罗依斯公司的发动机, 型号: Tay Mark 611-8C, 型号合格证: E25NE 。/2 Rolls Royce Tay Mark 611-8C (Type Certificate E25NE)

发动机使用限制/ Engine Operation Limits

静态推力(海平面标准大气)/Static Thrust (std. day) S.L

额定起飞(注释 9)/Rated Takeoff (See Note 9)	13,850 (磅/lb)
额定最大连续/Rated Maximum continuous	12,420 (磅/lb)

最大允许连续转速/Maximum permissible continuous rotor operating speeds:

N1 (低压压气机/low compressor)	(95.5%)	8,015 rpm
N2 (高压压气机/high compressor)	(97.5%)	12,172 rpm

最大允许温度/Maximum permissible temperatures (°C):

型号认可证数据单/The Validation Data Sheet

第一级低压涡轮前的导向叶片处测量的涡轮燃气温度/Turbine gas temp measured at nozzle guide vanes ahead of first low stage pressure turbine:

起飞(注释 9)/Takeoff (See Note 9)	800°
最大连续/Maximum continuous	715°
地面启动瞬时最大/Momentary maximum during ground starts	700°
空中开车瞬时最大/Momentary maximum during airstarts (relights)	780°
最大超温(20 秒)/Maximum over-temperature (20 second limit)	820°
滑油温度(最小启动)/Oil temp (minimum for starting)	-40°
滑油温度(最大启动)/Oil temp (maximum)	105°
滑油温度(15 分钟限制)/Oil temp (15 minute limit)	120°
高压泵燃油进口温度/Fuel inlet temp to engine high pressure pump	90°
燃油进口温度(15 分钟限制)/Fuel inlet temperature (15 min. limit)	130°

最大允许引气量/Maximum Permissible Air Bleed Extraction:

第 7 级高压引气/7th Stage HPC Bleed	7.0 lb./sec
第 12 级高压引气(最大连续及以下)/12th Stage HPC Bleed (max continuous and below)	6.9 lb./sec
高压全部引气(最大连续及以下)/HPC Bleed Total (max continuous and below)	10.0 lb./sec
风扇引气/Fan Bleed	10.5 lb./sec

辅助动力装置(APU)/ Auxiliary Power Unit (APU)

1 台霍林维尔公司的型号为:/ 1 Honeywell: 36-150

最大允许排气温度/Maximum permissible exhaust gas temperature -	
启动期间至到 60%转速/Up to 60% rpm during start	985°C
启动期间 60%-100%转速/60% - 100% during start	985°C to 757°C
	(线性减少/linear decrease)
运转/Running	757°C
最大转速(所有状态)/Maximum rotor speed - all conditions	110%
APU 交流发电载荷(额定)/APU alternator load rating	40Kva
APU 额定输出轴功率/APU rated output shaft power	61hp
(环境温度 103°F, 引气量每分钟 62.4 磅 /with 62.4 lb. per min. bleed air and ambient temp of 103°F)	

燃油/ Fuel:

术语/Nomenclature	规范/Specifications			
	美国/U. S. A	英国/ British	加拿大/ Canadian	中国/P. R. C
煤油/Kerosene	ASTM D1655-84 (Jet A) ASTM D 1655-84, Jet A-1 MIL-T-83133A, Grade JP8	D Eng. R.D. 2453, Issue 5 D Eng. R.D. 2494, Issue 9	CAN/CGSB-3.23	GB6537-94 (PRC Jet Fuel No. 3)
JP-4 宽馏分(注释?)/ JP-4 Wide Cut Type (See NOTE 5)	ASTM D1655 (Jet B) MIL-T-5624L, Grade JP4 *	(DERD 2452), DEF STAN 91-86	CAN/CGSB-3.23	
JP-5 高闪点型/JP-5 High Flash - Point Type	MIL-T-5624 (JP- 5)		CAN 3-GP-2AC	

型号认证数据单/The Validation Data Sheet

燃油应符合所列规范, 及其后继版次, 依照最新批准的《飞机飞行手册》。/ Fuel shall conform to the specification as listed or to subsequent revisions. found in the latest approved Airplane Flight Manual.

* 具有燃油防冰剂 (FSI1), 按体积最大浓度为 0.15%。/With fuel system icing inhibitor (FSI1). Maximum concentration 0.15% by volume.

第 2 版和第 3 版的 DERD 2451 (MIL-I-27686E), 或任何精确相等物。/DERD 2451 Issue 2 and 3 MIL-I-27686E. or any exact equivalent.

滑油牌号/ Oil Type 发动机和辅助动力装置使用下列经批准的滑油/The following oils are approved for use in the engine and APU:

3 Centistoke

Aeroshell Turbo Oil 390
Castrol 3C Turbine Oil
Castrol 325 Engine Oil
ESSO/Exxon Turbo 2389

5 Centistoke

Esso/Exxon Turbo Oil 2380
Mobil Jet Oil II
Mobil Jet Oil 254
Castrol 5000 Gas Turbine Oil
Aeroshell Turbine Oil AT0 500

注释: 不推荐混合滑油辅助动力装置使用。/NOTE: Mixing of oils is not recommended for APU.

注释: 不推荐使用混合滑油, 但各个牌号制作实质可能是混合物。当翻新罗尔斯. 罗依斯公司已获批准关于粘性和等级的标准时, 上述牌号的滑油已经批准。/NOTE: Mixing of oils is not recommended but brands may be mixed if operationally essential. Oils of the above brands, when reclaimed to the approved Rolls-Royce standard for viscosity and grade, are approved for use.

滑油应符合最新批准的《飞机飞行手册》中所列的或其后版次规定的规范。/Oil shall conform to the specification as listed or to subsequent revisions in the latest approved Airplane Flight Manual.

空速限制(校准空速节)/ Airspeed Limits (CAS. knots)	VM0/MM0(最大使用速度/ Maximum operating speed) 见飞行手册高度/马赫数使用包线/See AFM for Altitude/Mach Flight Operating Envelope	
	VA (机动速度/Maneuvering speed)	206
	VFE (襟翼放下速度/Flap extended speed) (Flaps down to 39°)	170
	VFE (襟翼放下速度/Flap extended speed) (Flaps down to 20°)	220
	VFE (襟翼放下速度/Flap extended speed) (Flaps down to 10°)	250
	VLO (起落架收起速度/Landing gear operation)	225
	VLE (起落架放下速度/Landing gear extended)	250
	VMCG(地面最小可操纵速度/Minimum control ground speed)	109
	VMCA(空中最小可操纵速度/Minimum control air speed, takeoff)	106
	VMCL(着陆进场最小可操纵速度/Minimum control air speed, landing)	99

最大重量(磅)/
Maximum Weight (lb.)

飞机序号/Aircraft S/N	最大零燃油重量 /Max. Zero Fuel	最大停机重量/Max. Ramp	最大起飞重量/Max. Take-Off	最大着陆重量/Max. Landing
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型号认可证数据单/The Validation Data Sheet

4001 and subs	49,000	74,300	73,900	66,000
4001 and subs with ASC 004 (G350)	49,000	71,300	70,900	66,000
4001 and subs with ASC 016 (G450 only)	49,000	75,000	74,600	66,000

燃油容积/Fuel
Capacity

重力或压力加油/Gravity or Pressure Fueling:
GIV-X (G450)

总量/Total 29,605 lb
可用/Usable 29,500 lb
力臂/Arm* +430.4

燃油重量基于每加仑 6.75 磅/Fuel weights based upon fuel density of 6.75 lb. per gal.

*力臂地面静态/Arm based on ground static attitude (-1.5° FRL)

滑油容积/Oil Capacity

单台发动机全部滑油容积 13.5 磅/14.4 美制品脱。/Total engine oil capacity 13.5 lb./14.4 U.S. pints (each engine)

单台发动机可用滑油容积 10.1 磅/10.8 美制品脱。/Usable engine oil capacity 10.1 lb./10.8 U.S. pints (each engine)

(力臂/Arm = +582.00)

重量基于每加仑 7.5 磅/Oil weights based upon oil density of 7.5 lb. per gal.

系统滑油见注释 1。/See NOTE 1 for system oil.

所表明滑油容积仅为发动机的滑油箱容积。/Capacities shown are for engine oil tankage only.

每台发动机的总滑油为 27 磅/28.8 美制品脱。/Total engine oil is 27 lb/28.8 US pints per engine.

辅助动力装置的滑油量为 4.75 lb./5.0 美制品脱。/APU oil 4.75 lb./5.0 U.S. Pints.

(力臂/Arm = +620.0)

最大使用高度/ Maximum
Operating Altitude

45,000 英尺/45,000 feet

基准/Datum

对于重量与平衡的目的, 基准零点位于前机轮舱飞机中心线的基点后 27 英吋处, 或机身 206 站位前的 206 英吋处。/For weight and balance purposes, the zero datum is 27 inches aft of the jig point at the centerline of the airplane in the nose wheel well or 206 inches forward of Fuselage Station 206.

平均气动弦/ M. A. C.

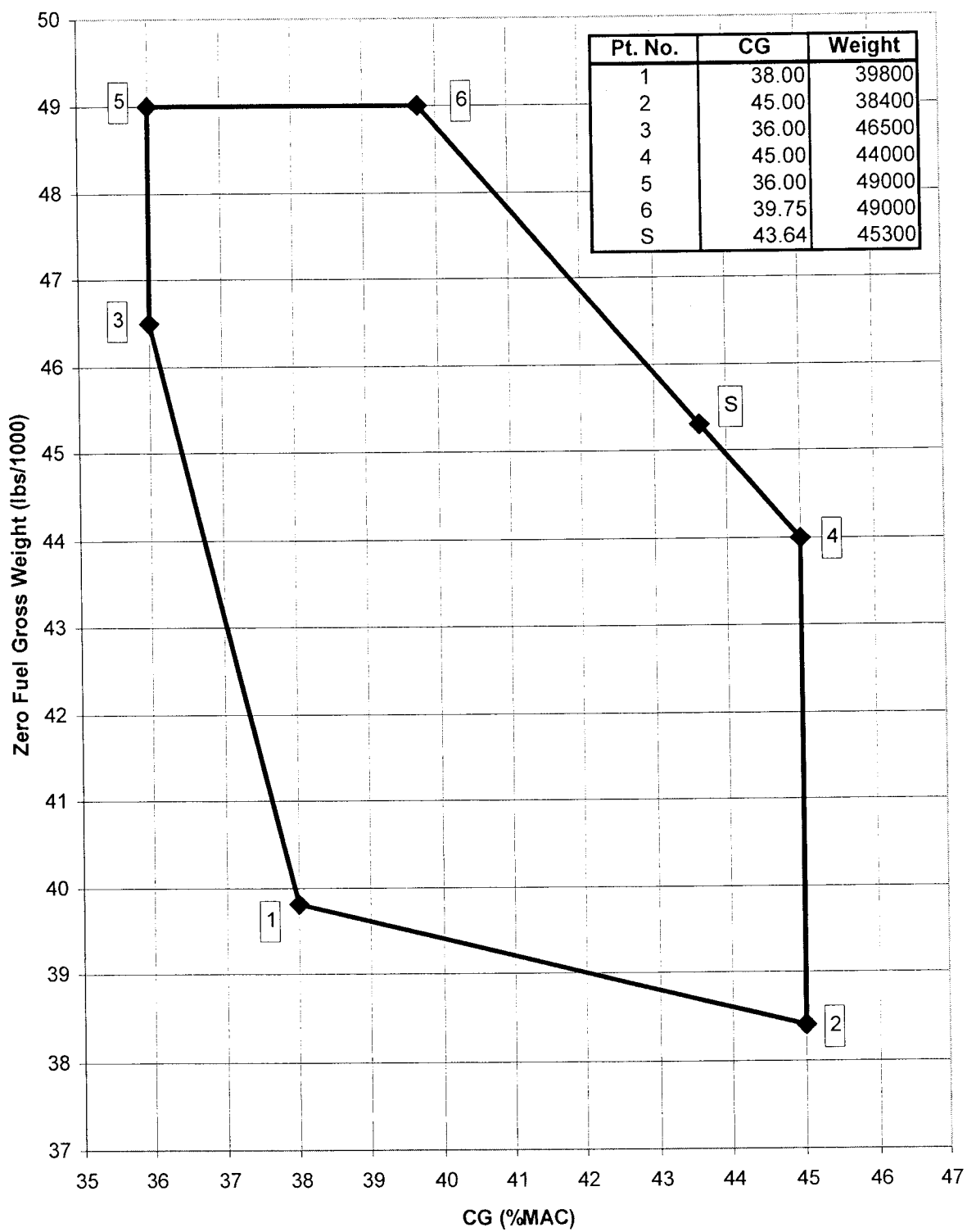
166.22 英吋(平均气动弦前缘位于机身 387.7 站位处)/166.22 in. (L. E. of M. A. C. = Fuselage Station 387.7)

制造序号/ Serial
Numbers Eligible

生产序号: 4001 起及后续。/ S/N 4001 and subsequent.

重心包线/C. G Envelope

**GIV-X Zero Fuel Gross Weight Center of Gravity Envelope
(For S/N 4001 and Subsequent)**



III. Model Gulfstream V

除了以下差异外, Gulfstream GV 与 Gulfstream GIV 型飞机相同。/ The Gulfstream GV is the same as the Gulfstream G-IV except for the following differences:

- 最大起飞和着陆重量约增大 15% /approximately 15% increase in maximum takeoff and landing weights
- 最大使用高度从 45,000 英尺增至 51,000 英尺/maximum operating altitude increase from 45,000 ft to 51,000 ft
- 发动机由罗尔斯. 罗依斯公司的 Tay 型更改为罗尔斯. 罗依斯公司的 Deutschland BR700-710A1-10 型(增大推力和提高涵道比)/engine change from Rolls Royce Tay to Rolls Royce Deutschland BR700-710A1-10 (increased thrust and higher bypass ratio)
- 增加了全权数字式发动机控制 (FADEC)/addition of Full Authority Digital Engine Controls (FADEC)
- 翼展由 74.6 英尺增长至 93.5 英尺/wing span increased from 74.6 ft to 93.5 ft
- 主登机门后机身增加了 5 框, 和机翼后增加了 2 框/additions to the fuselage of a 5 foot section forward of the main entry door, and a 2 foot section aft of the wing
- 水平尾翼面积约增大 30%/approximately 30% increase in horizontal tail area
- 增加了复合材料飞行控制面和反推/addition of composite material flight control surfaces and thrust reversers

发动机/Engine 2 台宝马-罗尔斯. 罗依斯公司的发动机, 型号: Deutschland BR700-710A1-10, 型号合格证: E00057EN. /2 BMW - Rolls Royce Deutschland BR700-710A1-10 (Type Certificate E00057EN)

发动机使用限制/ Engine Operation Limits

静态推力(海平面标准大气)/Static Thrust (std. day) S.L

起飞(5 分钟)/Takeoff(5 min.)	14,750 (磅/lb)
最大连续/Maximum continuous	14,450 (磅/lb)

最大允许连续转速/Maximum permissible continuous rotor operating speeds:

N1 (低压压气机/low pressure compressor)

最大起飞(注释 9)/Maximum Takeoff (see Note 9)	(101.1%)	7,513 rpm
最大连续/Maximum Continuous	(101.0%)	7,505 rpm
最大超速(20 秒)/Maximum Overspeed (20 seconds)	(101.5%)	7,542 rpm
反推(30 秒)/Reverse Thrust (30 seconds)	(70%)	5,201 rpm

N2 (高压压气机/high pressure compressor)

最大起飞(注释 9)/Maximum Takeoff (see Note 9)	(99.6%)	15,834 rpm
最大连续/Maximum Continuous	(98.9%)	15,723 rpm
最大超速(20 秒)/Maximum Overspeed (20 seconds)	(99.8%)	15,866 rpm

100% N1 等于每分钟 7,431 转/100% N1 equals 7,431 rpm

100% N2 等于每分钟 15,898 转/100% N2 equals 15,898 rpm

最大允许温度/Maximum permissible temperatures (°C):

第一级低压涡轮前的导向叶片处测量的涡轮燃气温度/Turbine gas temp measured at nozzle guide vanes ahead of first low stage pressure turbine:

起飞(注释 9)/Takeoff (See Note 9)	900°
最大连续/Maximum continuous	860°
开车前最大/Maximum prior to start	150"
最大超温(20 秒)/Maximum over-temperature (20 second limit)	905°

型号认可证数据单/The Validation Data Sheet

地面启动瞬时最大/Momentary maximum during ground starts	700°
空中开车瞬时最大/Momentary maximum during airtstarts (relights)	850°
滑油温度(最小加速至起飞前)/Oil temp (minimum before accelerating for T/O)	+20°
滑油温度(最小启动)/Oil temp (minimum for starting)	-30°
滑油温度(最大)/Oil temp (maximum)	160°
海平面燃油低压泵燃油进口温度/Fuel inlet temperature to low pressure pump at S. L.	54°
高压泵燃油出口温度(不限制最大)/Fuel outlet temp to engine high pressure pump (unrestricted maximum)	158°
燃油出口温度(15 分钟限制)//Fuel inlet temperature (15 min. limit)	165°
燃油进口温度(最低)//Fuel inlet temperature (minimum)	-40°

引气量/ Bleed Extraction:

EPR = P50/P2: 分别从第 5 级和第 8 级的引气量涉及核心机进气质量流量, W26; 风扇的引气量涉及风扇进气质量流量, W1A. /EPR = P50/P2: The amounts of bleed extraction from stages 5 and 8, respectively, are related to the core entry mass flow, W26. The amount of fan bleed extraction is related to the fan entry mass flow, W1A.

动力范围/ Power Range	正常流动/Normal Flow (%)			最大流动/Maximum Flow (%)		
	Stage 5	Stage 8	Fan	Stage 5	Stage 8	Fan
Idle to 1.06 EPR	*****	7.8	*****	3.0	12.1	0.6
1.06 to 1.3 EPR	4.4	4.2	0.2	8.3	7.9	1.6
Above 1.3 EPR	4.3	*****	0.4	8.5	*****	1.8

辅助动力装置(APU)/ Auxiliary Power Unit (APU)

1 台爱立信型号为: RE220 {GV}/ 1 Allied Signal - Model RE220 {GV}

额定输出轴功率/Rated output shaft power	62 hp (连续/continuous) 70 hp (5 分钟/minutes) 101 hp (5 秒/seconds)
最大发电机输出轴转速/Maximum Generator Output Shaft Speed	12,000 rpm
最大排气温度(额定输出)/Maximum Exhaust Gas Temp (EGT) at Rated Output	1241 °F (T ₂ = 140 °F)
最大允许转速/Maximum Allowable Rotor Speed	48,320 rpm (T ₂ < 115 °F)
最大允许排气温度/Maximum Allowable EGT	
开车/Starting:	1922 °F (1050 °C) [for T ₂ < -20 °F (-29 °C), P ₂ > 6.75 psia]
运行/Operating:	1350 °F (732 °C) [for T ₂ = 140 °F (60 °C)]

燃油/ Fuel

	煤油/Kerosene
美国/American	ASTM D 1655-92, Jet A ASTM D 1655-92, Jet A-1 MIL-T-83133, Grade JP-8
加拿大/Canadian	CAN/CGSB-3.23
英国/British	DERD 2453 DERD 2494
法国/French	AIR 3405
独联体/CIS	GOST 10227-86, Am 1, TS-1 & RT

型号认可证数据单/The Validation Data Sheet

燃油(续)/ Fuel (cont'd)	意大利/IATA 中国/P. R. C	kerosene type GB6537-94 (PRC Jet Fuel No. 3)
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燃油应符合所列规范, 及其后继版次, 依照最新批准的《飞机飞行手册》。
/Fuel shall conform to the specification as listed or to subsequent
revisions found in the latest approved Airplane Flight Manual (AFM).

高闪点燃油资料详见《飞机飞行手册》。/See AFM for information on high
flash point fuels.

滑油牌号/ Oil Type 发动机和辅助动力装置使用下列经批准的滑油/The following oils are
approved for use in the engine and APU:

3 Centistoke:	Aeroshell Turbo Oil 390
5 Centistoke:	Aeroshell Turbine Oil ATO 500
	Castrol Aero 5000
	Exxon Turbo Oil 2380
	Mobil Jet Oil II
	Mobil Jet Oil 254

注释: 不推荐混合滑油辅助动力装置使用。/NOTE: Mixing of oils is not recommended for APU.

注释: 不推荐使用混合滑油, 但各个牌号制作实质可能是混合物。当翻新已获批准关于粘性和等
级的标准时, 上述牌号的滑油已经批准。/NOTE: Mixing of oils is not recommended but brands
may be mixed if operationally essential. Oils of the above brands, when reclaimed to
the approved standard for viscosity and grade, are approved for use.

滑油应符合最新批准的《飞机飞行手册》中所列的或其后版次规定的规范。/Oil shall conform
to the specification as listed or to subsequent revisions in the latest approved Airplane
Flight Manual.

空速限制(校准空速. 节)/ Airspeed Limits (CAS. knots)	V _{MO} /M _{MO} (最大使用速度/ Maximum operating speed) 见飞行手册高度/马赫数使用包线/See AFM for Altitude/Mach Flight Operating Envelope	
	V _A (机动速度/Maneuvering speed)	206
	V _{FE} (襟翼放下速度/Flap extended speed) (Flaps down to 39°)	165
	(具有 ASC19A 或 73A 组合一体的襟翼放下速度/Flap extended speed with ASC19A or 73A incorporated) (Flaps down to 39°)	170
	V _{FE} (襟翼放下速度/Flap extended speed) (Flaps down to 20°)	220
	V _{LO} (起落架收起速度/Landing gear operation)	225
	V _{LE} (起落架放起速度/Landing gear extended)	250
	V _{MCG} (地面最小可操纵速度/Minimum control ground speed)	103
	V _{MCA} (空中最小可操纵速度/Minimum control air speed, takeoff)	112

最大重量(磅)/
Maximum Weight (lb.)

飞机序号/Aircraft S/N	最大零燃 油重量 /Max. Zero Fuel	最大停机 重量/Max. Ramp	最大起飞重 量/Max. Take-Off	最大着陆重 量/Max. Landing
501 & Subs	54, 500	90, 900	90, 500	75, 300

型号认可证数据单/The Validation Data Sheet

燃油容积/Fuel Capacity	重力或压力加油/Gravity or Pressure Fueling:	
	S/N 501 thru 548	S/N 549 and subs, and 501 thru 548 with ASC 50
	Without ASC 50	
	<u>总量/Total</u>	41,506 lb.
	<u>可用/Usable</u>	41,026 lb.
滑油容积/Oil Capacity	<u>力臂/Arm*</u>	+558.0
		+ 558.5
	燃油重量基于每加仑 6.75 磅/Fuel weights based upon fuel density of 6.75 lb. per gal.	
	*力臂地面静态/Arm based on ground static attitude (-1.5° FRL)	
	单台发动机全部滑油容积/Total engine oil capacity (each engine): Lucas-Western 齿轮箱/Lucas-Western Gearbox:	
最大使用高度/ Maximum Operating Altitude	APT 齿轮箱/APT Gearbox:	16.9(磅/lb)/18(美制品脱/U.S. pints)
	(力臂/Arm = +785.00)	22.0(磅/lb)/24.4(美制品脱/U.S. pints)
	重量基于每加仑 7.5 磅/Oil weights based upon oil density of 7.5 lb. per gal.	
	系统滑油见注释 1。/See NOTE 1 for system oil.	
	所表明的滑油容积仅为发动机的滑油箱容积。/Capacities shown are for engine oil tankage only.	
基准/Datum	每台发动机的总滑油外加 9.5 磅。/Total engine oil is an additional 9.5 lb. per engine.	
	辅助动力装置的滑油量为 9.00 磅/9.6 美制品脱。/APU oil 9.00 lb./9.6 U.S. Pints.	
	(力臂/Arm = +782.5)	
	51,000 英尺/51,000 feet	
	Operating Altitude	
平均气动弦/ M. A. C.	对于重量与平衡的目的, 基准零点位于前机轮轴(并)飞机中心线的基点后 45 英吋处。/For weight and balance purposes, the zero datum is 45 inches aft of the jig point at the centerline of the airplane in the nose wheel well.	
	171.19 英吋(平均气动弦前缘位于机身 524.74 站位处)/ 171.19 in.	
	(L.E. of M.A.C. = Fuselage Station 524.74)	
	生产序号: 501 至 693, 加上 699(生产序号 666 变为 699)。/S/N 501 through 693, plus 699 (s/n 666 changed to 699).	
	Manufacturing Numbers Eligible	
重心包线/ C.G Envelope	生产序号 501 至 569 无 ASC 73/73A 装置, 零燃油总重与重心关系见图 1-3。/See Figure 1-3 for GV Zero Fuel Gross Weight vs. Center of Gravity (S/N 501 through 569 without ASC 73/73A)	
	生产序号 570 及后续机, 和 501 至 569 机装有 ASC 73/73A 装置, 零燃油总重与重心关系见图 1-3A。/See Figure 1-3A for GV Zero Fuel Gross Weight vs. Center of Gravity (S/N 570 and subs, and S/N 501 through 569 with ASC 73/73A)	

Figure 1-3: Zero Fuel Gross Weight Center of Gravity Envelope
(For Airplanes Without ASC 73/73A)

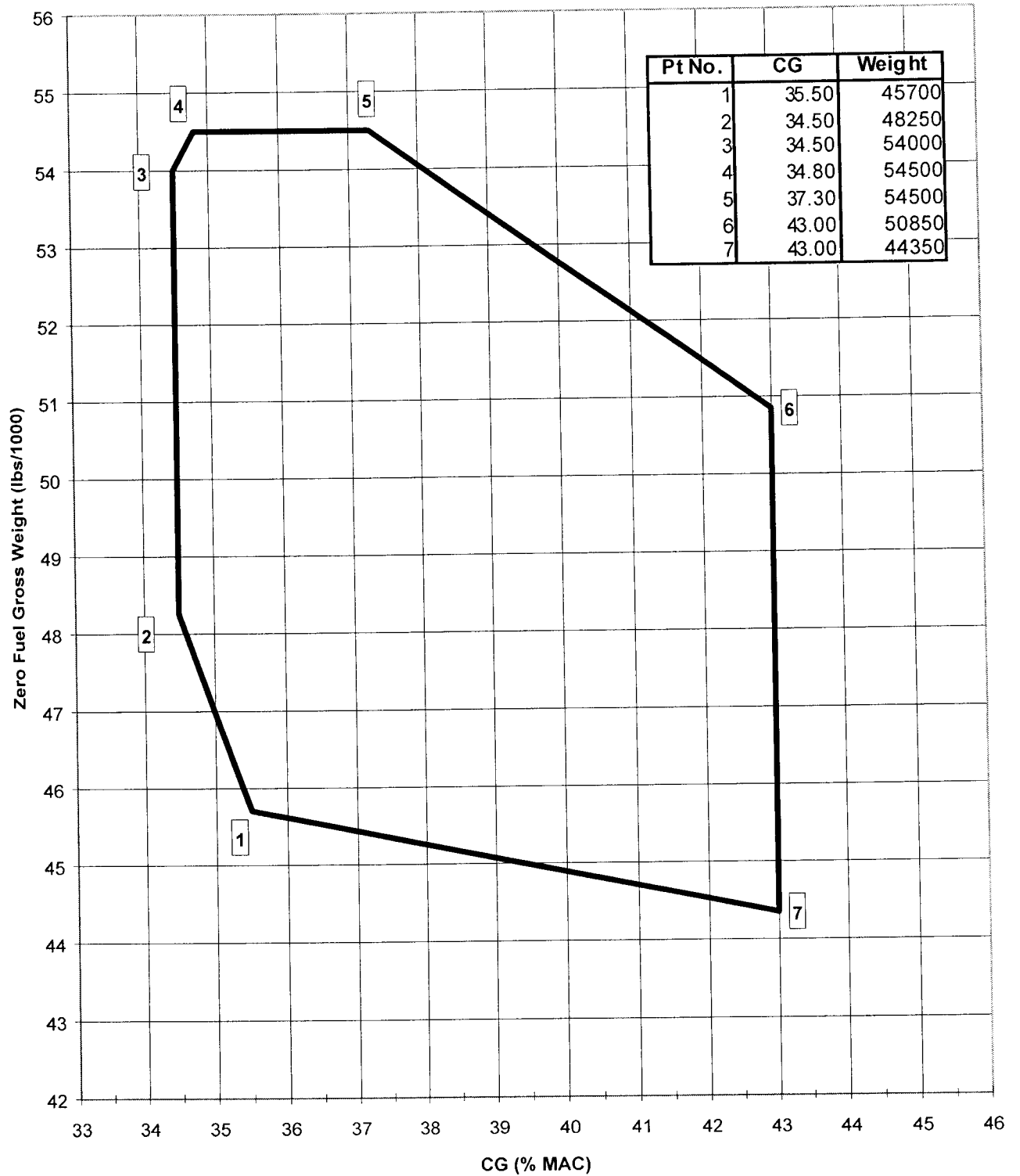
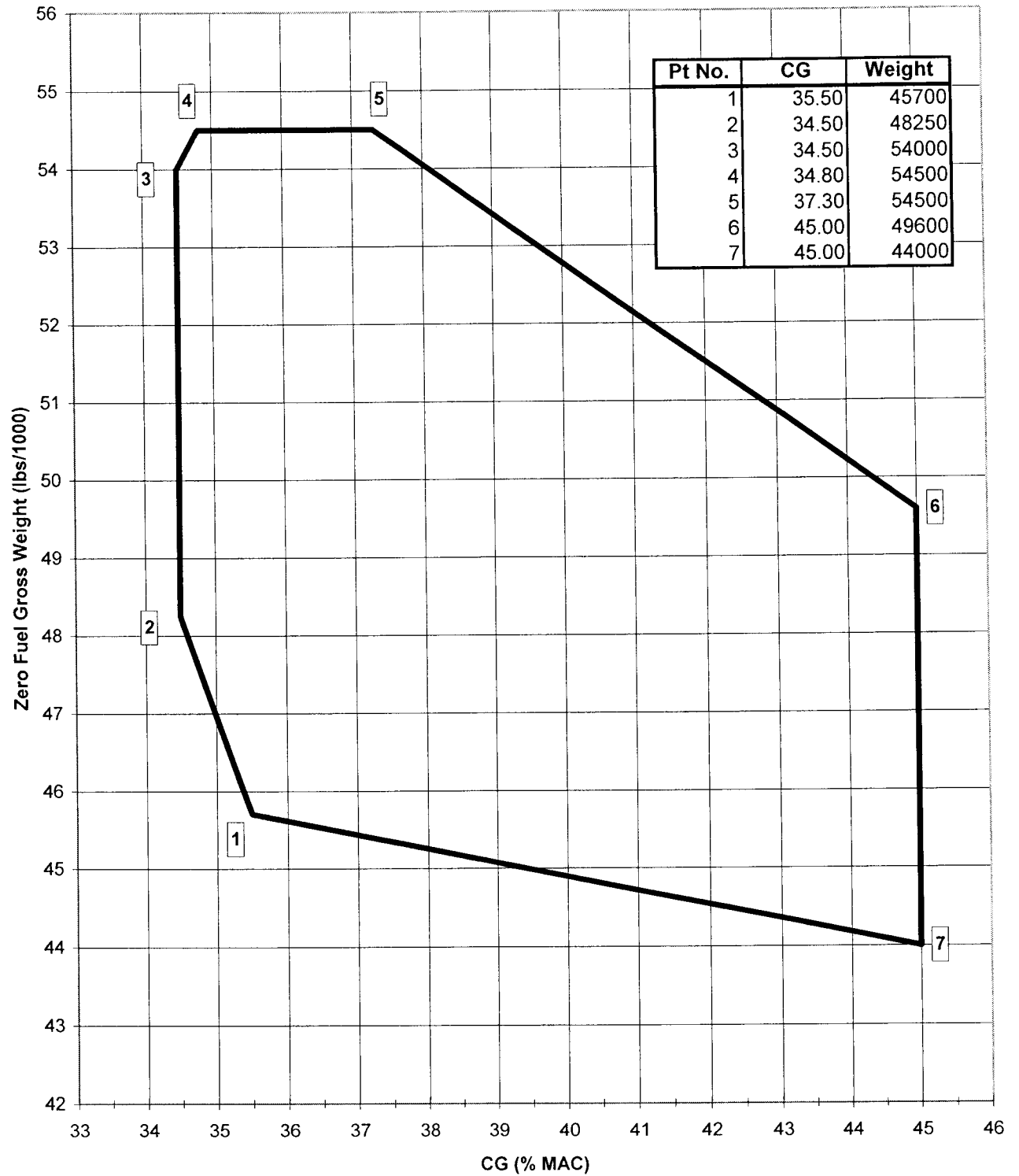


**Figure 1-3A: Zero Fuel Gross Weight Center of Gravity Envelope
(For Airplanes With ASC 73/73A)**



IV. Model Gulfstream V-SP

- 一套霍林维尔公司先进的飞行显示系统,以提高飞行机组形势警觉性和操作能力/A Honeywell advanced flight deck display suite to improve flight crew situational awareness and operational capabilities.
- 为了增加航程和经济性能,改进了机身气动力和发动机性能/Airframe aerodynamic improvements, engine improvements, and operational changes for increased performance, range and economics.
- 向前重新设置客舱主登机门和增设第 7 对弦窗。/ Cabin main entry door relocated forward and seventh cabin window pair added.
- 为了增大行李舱空间,外部能见度和舒适性,改进了客舱/Cabin improvements for increased baggage space, external visibility and comfort.
- 为了可靠性和空间利用,小的系统变化/Minor system changes for reliability and space utilization.

发动机/Engine	2 台宝马-罗尔斯. 罗伊斯公司的发动机, 型号: Deutschland BR700-710C4-11, 型号合格证: Nr. 6305。/2 BMW - Rolls Royce Deutschland BR700-710C4-11 (Type Certificate Nr. 6305).
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地面启动瞬时最大/Momentary maximum during ground starts 700°

型号认证数据单/The Validation Data Sheet

空中开车瞬时最大/Momentary maximum during airtarts (relights)	850°
滑油温度(最小加速至起飞前)/Oil temp (minimum before accelerating for T/O)	+20°
滑油温度(最小启动)/Oil temp (minimum for starting)	-30°
滑油温度(最大)/Oil temp (maximum)	160°
海平面燃油低压泵燃油进口温度/Fuel inlet temperature to low pressure pump at S.L.	54°
高压泵燃油出口温度(不限制最大)/Fuel outlet temp to engine high pressure pump (unrestricted maximum)	158°
燃油出口温度(15 分钟限制)//Fuel inlet temperature (15 min. limit)	165°
燃油进口温度(最低)//Fuel inlet temperature (minimum)	-40°

引气量/ Bleed Extraction:

EPR = P50/P2: 分别从第 5 级和第 8 级的引气量涉及核心机进气质量流量, W26; 风扇的引气量涉及风扇进气质量流量, W1A. /EPR = P50/P2: The amounts of bleed extraction from stages 5 and 8, respectively, are related to the core entry mass flow, W26. The amount of fan bleed extraction is related to the fan entry mass flow, W1A.

动力范围/ Power Range	正常流动/Normal Flow (%)			最大流动/Maximum Flow (%)		
	Stage 5	Stage 8	Fan	Stage 5	Stage 8	Fan
Idle to 1.06 EPR	*****	7.8	*****	3.0	12.1	0.6
1.06 to 1.3 EPR	4.4	4.2	0.2	8.3	7.9	1.6
Above 1.3 EPR	4.3	*****	0.4	8.5	*****	1.8

辅助动力装置(APU)/ Auxiliary Power Unit (APU)

1 台爱立信型号为: RE220 {GV}/ 1 Allied Signal - Model RE220 {GV}

额定输出轴功率/Rated output shaft power	62 hp (连续/continuous)
	70 hp (5 分钟/minutes)
	101 hp (5 秒/seconds)

最大发电机输出轴转速/Maximum Generator Output Shaft Speed 12,000 rpm

最大排气温度(额定输出)/Maximum Exhaust Gas Temp (EGT) at Rated Output
1241 °F (T₂ = 140 °F)

最大允许转速/Maximum Allowable Rotor Speed 48,320 rpm (T₂ < 115 °F)

最大允许排气温度/Maximum Allowable EGT

开车/Starting: 1922 °F (1050 °C) [for T₂ < -20 °F (-29 °C), P₂ > 6.75 psia]

运行/Operating: 1350 °F (732 °C) [for T₂=140 °F (60 °C)]

燃油/ Fuel

美国/American

加拿大/Canadian

英国/British

法国/French

独联体/CIS

煤油/Kerosene

ASTM D 1655-92, Jet A

ASTM D 1655-92, Jet A-1

MIL-T-83133, Grade JP-8

CAN/CGSB-3.23

DERD 2453 (DEF STAN 91-97)

DERD 2494 (DEF STAN 91-91)

AIR 3405

GOST 10227-86, Am 1, TS-1 & RT

型号认可证数据单/The Validation Data Sheet

燃油(续)/ Fuel (cont'd)	意大利/IATA 中国/P. R. C	kerosene type GB6537-94 (PRC Jet Fuel No. 3)
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燃油应符合所列规范, 及其后继版次, 依照最新批准的《飞机飞行手册》。
/Fuel shall conform to the specification as listed or to subsequent
revisions found in the latest approved Airplane Flight Manual (AFM).

高闪点燃油资料详见《飞机飞行手册》。/See AFM for information on high
flash point fuels.

滑油牌号/ Oil Type 发动机和辅助动力装置使用下列经批准的滑油/The following oils are
approved for use in the engine and APU:

5 Centistoke Type Oils:	Aeroshell Turbine Oil ATO 500
	Aeroshell Turbine Oil ATO 560
	BP Turbo Oil 2197
	Castrol Aero 5000
	Exxon Turbo Oil 2197
	Exxon Turbo Oil 2380
	Mobil Jet Oil II
	Mobil Jet Oil 254
	Mobil Jet Oil 291
	TurboNycoil 600
	Royco 500
	Royco 560

注释: 不推荐混合滑油辅助动力装置使用。/NOTE: Mixing of oils is not recommended for APU.

注释: 不推荐使用混合滑油, 但各个牌号制作实质可能是混合物。当翻新已获批准关于粘性和等
级的标准时, 上述牌号的滑油已经批准。/NOTE: Mixing of oils is not recommended but brands
may be mixed if operationally essential. Oils of the above brands, when reclaimed to
the approved standard for viscosity and grade, are approved for use.

滑油应符合最新批准的《飞机飞行手册》中所列的或其后续版次规定的规范。/Oil shall conform
to the specification as listed or to subsequent revisions in the latest approved Airplane
Flight Manual.

空速限制(校准空速, 节)/ Airspeed Limits (CAS, knots) V_{MO}/M_{MO}(最大使用速度/ Maximum operating speed)
见飞行手册高度/马赫数使用包线/See AFM for Altitude/Mach Flight
Operating Envelope

V _A (机动速度/Maneuvering speed)	206
V _{FE} (襟翼放下速度/Flap extended speed) (Flaps down to 39°)	170
V _{FE} (襟翼放下速度/Flap extended speed) (Flaps down to 20°)	220
V _{FE} (襟翼放下速度/Flap extended speed) (Flaps down to 10°)	250
V _{LO} (起落架收起速度/Landing gear operation)	225
V _{LE} (起落架放下速度/Landing gear extended)	250
V _{MCG} (地面最小可操纵速度/Minimum control ground speed)	107
V _{MCA} (空中最小可操纵速度/Minimum control air speed, takeoff)	112

最大重量(磅)/
Maximum Weight (lb.)

飞机序号/Aircraft S/N	最大零燃 油重量 /Max. Zero Fuel	最大停机 重量/Max. Ramp	最大起飞重 量/Max. Take-Off	最大着陆重 量/Max. Landing
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型号认可证数据单/The Validation Data Sheet

5001 & Subs (also G550)	54,500	91,400	91,000	75,300
5001 & Subs with ASC 10 (G500)	54,500	85,500	85,100	75,300

燃油容积/Fuel
Capacity

重力或压力加油/Gravity or Pressure Fueling:

	GV-SP (G550)	GV-SP (G500)
<u>总量/Total</u>	41,489 lb.	35,389 lb.
<u>可用/Usable</u>	41,300 lb.	35,200 lb.
<u>力臂/Arm*</u>	+558.5	+ 551.9

燃油重量基于每加仑 6.75 磅/Fuel weights based upon fuel density of 6.75 lb. per gal.

*力臂地面静态/Arm based on ground static attitude (-1.5° FRL)

滑油容积/Oil Capacity

单台发动机全部滑油容积/Total engine oil capacity (each engine):
Hispano-Suiza 齿轮箱/ Hispano-Suiza Gearbox:

25.7 (磅/lb)/27.4 (美制品脱/U.S. pints)
可用滑油/Usable Oil: 10.4 (磅/lb)/11.0 (美制品脱/U.S. pints)
(力臂/Arm = +785.00)

重量基于每加仑 7.5 磅/Oil weights based upon oil density of 7.5 lb. per gal.

系统滑油见注释 1。/See NOTE 1 for system oil.

所表明的滑油容积仅为发动机的滑油箱容积。/Capacities shown are for engine oil tankage only.

每台发动机的总滑油外加 9.5 磅。/Total engine oil is an additional 9.5 lb. per engine.

辅助动力装置的滑油量为 9.00 磅/9.6 美制品脱。/APU oil 9.00 lb./9.6 U.S. Pints.

(力臂/Arm = +782.5)

最大使用高度/ Maximum
Operating Altitude

51,000 英尺/51,000 feet

基准/Datum

对于重量与平衡的目的, 基准零点位于前机轮轴(井)飞机中心线的基点后 45 英吋处。/For weight and balance purposes, the zero datum is 45 inches aft of the jig point at the centerline of the airplane in the nose wheel well.

平均气动弦/ M. A. C.

171.19 英吋(平均气动弦前缘位于机身 524.74 站位处)/ 171.19 in.
(L.E. of M.A.C. = Fuselage Station 524.74)

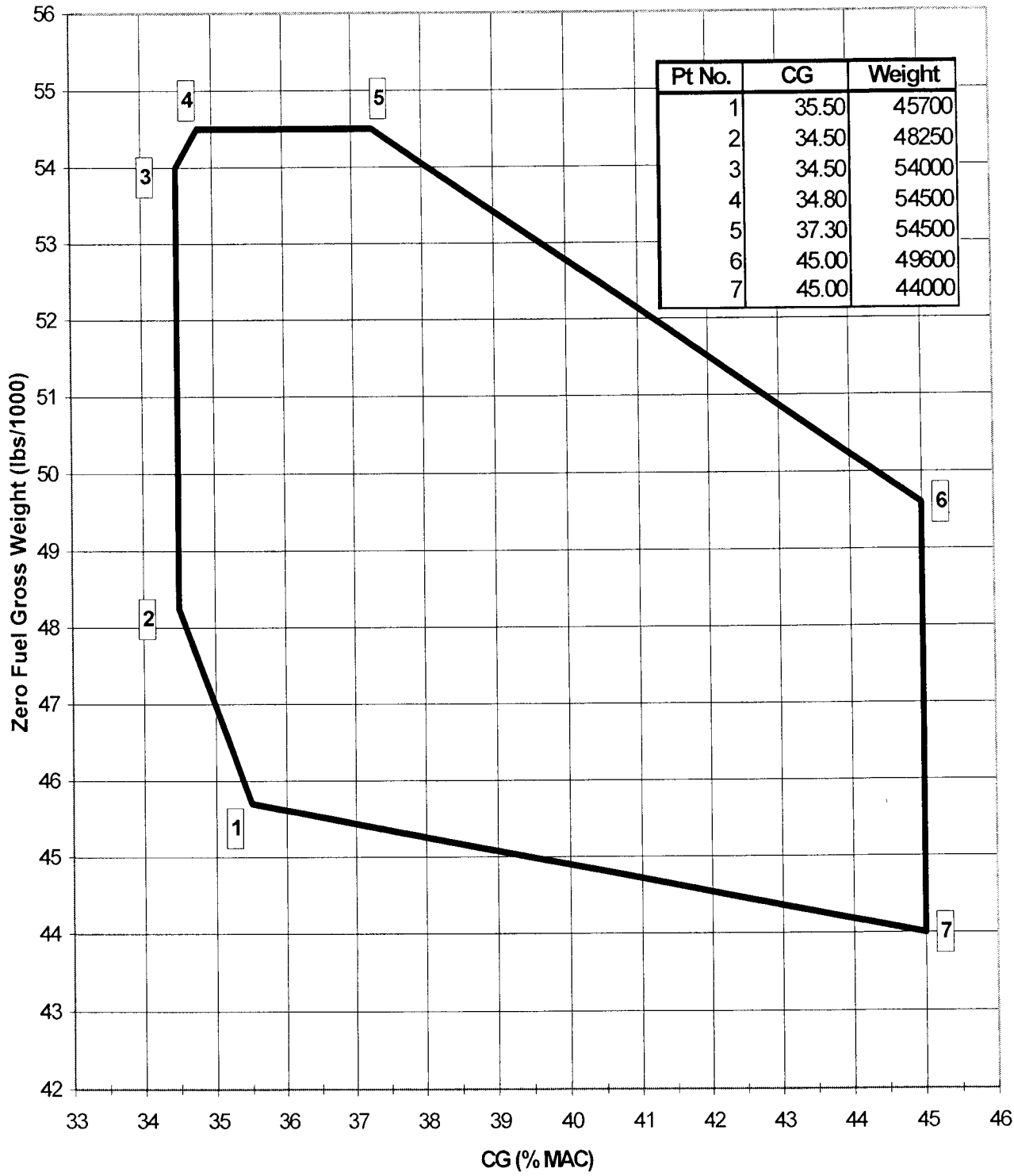
制造序号/ Serial
Numbers Eligible

生产序号: 5001 起及后续。/ S/N 5001 and subsequent.

重心包线/ C. G Envelope

GV-SP 型飞机零燃油总重与重心图见下页(生产序号: 5001 起及后续)。/See figure on next page for GV-SP Zero Fuel Gross Weight vs. Center of Gravity (S/N 5001 and subsequent).

GV-SP Zero Fuel Gross Weight Center of Gravity Envelope
(For S/N 5001 and Subsequent)



除了已标明外, 适用于所有型号的数据/Data Pertinent to All Models except as Indicated

水平措施/ Levelling Means	纵向: 机头右侧纵梁站位 61.5 & 72.5 舱门处耳状物/Longitudinal: Lugs at right nose well door longeron STA 61.5 & 72.5 横向: 前起机轮轴(井)站位 44.5 处隔框背面的耳状物/Lateral: Lugs on rear face of bulkhead STA 44.5 in nose wheel well.
最小飞行机组/ Minimum Crew	2 人(正驾驶和副驾驶)。/2 Persons (Pilot and Copilot).
最大乘员/ Maximum Occupants	19 人, 受限于应急出口要求。/19 - limited by emergency exit requirements.
行李或货物限制/ Baggage or Cargo Limitations	<u>客舱地板/Cabin Floor</u> <u>GIV 机型主客舱地板装载限制, 生产序号从 1000 起/ Main cabin floor loading limitations, GIV S/N 1000 and subsequent:</u> 主客舱地板, 站位从 193 至 321.5。在全部地板宽度上, 静负载货物装载最大均布载荷应为每平方英尺 49 磅; 中间下部 20 英寸干净走廊上最大均布载荷应为每平方英尺 98 磅。除了中间走廊外(此处最大静负载应为 184 磅), 每一孤立平方英尺地板上的货物装载, 与另一货物装载间隔至少 30 英寸, 最大静负载应为 260 磅。/Main cabin floor fuselage station 193 to 321.5. Dead weight cargo loading maximum uniform load over entire width of floor shall be 49 lb. per square foot. Maximum uniform load with a 20-inch clear aisle down the middle shall be 98 lb. per square ft. Maximum dead weight, cargo load on one isolated square foot, at least 30 inches from another load, shall be 260 lb., except in the middle aisle where it shall be 184 lb. 主客舱地板, 站位从 321.5 至 498。静负载货物装载最大均布载荷应为每平方英尺 100 磅。/Main cabin floor fuselage station 321.5 to 498. Dead weight cargo loading maximum uniform loading shall be 100 lb. per square foot. 主客舱地板, 站位从 498 至 539.75。静负载货物装载最大均布载荷应为每平方英尺 65 磅。/Main cabin floor fuselage station 498 to 539.75. Maximum uniform loading shall be 65 lb. per square foot. <u>GIV 机型最大行李, 生产序号自 1000 起/Maximum Baggage, GIV S/N 1000 and subsequent:</u> 机身后舱, 站位从 539.75 至隔框(或气密端框)。/Compartment aft of fuselage station 539.75 to bulkhead or pressure dome. 容量 — 2000 磅, 设备处尽量少放。/Capacity - 2,000 lb. less any weight added in equipment bay 最大地板载荷, 每平方英尺 65 磅。/Maximum floor loading - 65 lb./sq. ft. 重心 — 站位 565 处 2000 磅。如进一步后移, 所需容量相应减少。/C.G. - STA 565 for 2000 lb. If further aft, corresponding reduction in capacity required.

GIV-X 机型主客舱地板装载限制, 生产序号自 4001 起/Main cabin floor loading limitations, GIV-X S/N 4001 and subsequent:

主客舱地板。机翼上部增压区前地板(站位从 145 至 321.5): 在全部地板宽度上, 静负载货物装载最大均布载荷应为每平方英尺 49 磅; 中间下部 20 英寸干净走廊上最大均布载荷应为每平方英尺 93 磅。除了中间走廊外(此处最大静负载应为 184 磅), 每一孤立平方英尺地板上的货物装载, 与另一货物装载间隔至少 30 英寸, 最大静负载应为 260 磅。机翼上部增压区前地板(站位从 321.5 至 498): 静负载货物装载最大均布载荷应为每平方英尺 100 磅。机翼上部增压区后地板(站位从 498 至 539.75): 静负载货物装载最大均布载荷应为每平方英尺 65 磅。/Main cabin floor forward of the overwing pressure floor (Fuselage station 145 to 321.5): Dead weight cargo loading maximum uniform load over entire width of floor is 49 pounds per square foot. Maximum uniform load with a 20-inch clear aisle down the middle is 93 pounds per square foot. Maximum dead weight load on one isolated square foot, at least 30 inches from another load, is 260 pounds except in the center aisle where it is 184 pounds. Overwing pressure floor (Fuselage station 321.5 to 498): Dead weight cargo maximum uniform loading is 100 pounds per square foot. Main cabin floor structure aft of the overwing pressure floor (Fuselage station 498 to 539.75): Dead weight cargo maximum uniform loading is 65 pounds per square foot.

GIV-X 机型最大行李, 生产序号自 4001 起/Maximum baggage, GIV-X S/N 4001 and subsequent:

机身后舱, 站位从 539.75 至 596(气密端框)。/Compartment aft of fuselage station 684.00 to pressure bulkhead:

容量 — 2000 磅, 设备处尽量少放。/Capacity - 2000 lb. less any weight added in equipment bay

最大地板载荷, 每平方英尺 65 磅。/Maximum floor loading - 65 lb/ft²

重心 — 站位 565 处 2000 磅。如进一步后移, 所需容量相应减少。

/C.G. - STA 565 for 2000 lb. If further aft, corresponding reduction in capacity required.

GV 机型主客舱地板装载限制, 生产序号自 501 起/Main cabin floor loading limitations, GV S/N 501 and subsequent:

主客舱地板, 站位从 229 至 426。在全部地板宽度上, 静负载货物装载最大均布载荷应为每平方英尺 49 磅; 中间下部 20 英寸干净走廊上最大均布载荷应为每平方英尺 98 磅。除了中间走廊外(此处最大静负载应为 187 磅), 每一孤立平方英尺地板上的货物装载, 与另一货物装载间隔至少 30 英寸, 最大静负载应为 200 磅。/Main cabin floor fuselage station 229 to 426: Dead weight cargo loading maximum uniform load over entire width of floor shall be 49 lb/ft². Maximum uniform load with a 20 inch clear aisle down the middle shall be 98 lb/ft². Maximum dead weight cargo load on one isolated square foot, at least 30 inches from another load, shall be 200 lb., except in

the middle aisle where it shall be 187 lb.

主客舱地板, 站位从 426 至 632。静负载货物装载最大均布载荷应为每平方英尺 100 磅。/Main cabin floor fuselage station 426 to 632: Dead weight cargo loading maximum uniform loading shall be 100 lb/ft².

主客舱地板, 站位从 632 至 684。静负载货物装载最大均布载荷应为每平方英尺 65 磅。/Main cabin floor fuselage station 632 to 684: Max uniform loading shall be 65 lb/ft².

GV 机型最大行李, 生产序号自 501 起/Maximum Baggage, GV S/N 501 and subsequent:

机身后舱, 站位从 684.00 至气密端框。/Compartment aft of fuselage station 684.00 to pressure bulkhead:

容量 — 2500 磅, 设备处尽量少放。/Capacity - 2500 lb. less any weight added in equipment bay

最大地板载荷, 每平方英尺 65 磅。/Maximum floor loading - 65 lb/ft²

装有批准的烟雾探测系统。/Approved smoke detection system required.

GV-SP 机型主客舱地板装载限制, 生产序号自 5001 起/Main cabin floor loading limitations, GV-SP S/N 5001 and subsequent:

主客舱地板, 站位从 205 至 426。在全部地板宽度上, 静负载货物装载最大均布载荷应为每平方英尺 49 磅; 中间下部 20 英寸干净走廊上最大均布载荷应为每平方英尺 98 磅。除了中间走廊外(此处最大静负载应为 187 磅), 每一孤立平方英尺地板上的货物装载, 与另一货物装载间隔至少 30 英寸, 最大静负载应为 200 磅。/Main cabin floor fuselage station 205 to 426: Dead weight cargo loading maximum uniform load over entire width of floor shall be 49 lb/ft². Maximum uniform load with a 20 inch clear aisle down the middle shall be 98 lb/ft². Maximum dead weight cargo load on one isolated square foot, at least 30 inches from another load, shall be 200 lb., except in the middle aisle where it shall be 187 lb.

主客舱地板, 站位从 426 至 632。静负载货物装载最大均布载荷应为每平方英尺 100 磅。/Main cabin floor fuselage station 426 to 632: Dead weight cargo loading maximum uniform loading shall be 100 lb/ft².

主客舱地板, 站位从 632 至 684。静负载货物装载最大均布载荷应为每平方英尺 65 磅。/Main cabin floor fuselage station 632 to 684: Maximum uniform loading shall be 65 lb/ft².

GV-SP 机型最大行李, 生产序号自 5001 起/Maximum baggage, GV-SP S/N 5001 and subsequent:

机身后舱, 站位从 684.00 至气密端框。/Compartment aft of fuselage

station 684.00 to pressure bulkhead:

容量 — 2500 磅, 设备处尽量少放。/Capacity - 2500 lb. less any weight added in equipment bay

最大地板载荷, 每平方英尺 65 磅。/Maximum floor loading - 65 lb/ft²

装有批准的烟雾探测系统。/Approved smoke detection system required.

其它运行限制/Other Operating Limitations 所有飞机必须依照最新批准版次的《飞机飞行手册》运行。/The aircraft must be operated in accordance with the latest FAA approved revision to the Airplane Flight Manual.

- GV-SP 型飞机飞行手册编号为:AC-AC-G550-OPS-0001。/The Model GV-SP Airplane Flight Manual is AC-AC-G550-OPS-0001.
- GV-SP(G550) 型飞机飞行手册编号为:AC-AC-G550-OPS-0001。/The Model GV-SP (G550) Airplane Flight Manual is GAC-AC-G550-OPS-0001.
- GV-SP(G500) 型飞机飞行手册编号为:AC-AC-G500-OPS-0001。/The Model GV-SP (G500) Airplane Flight Manual is GAC-AC-G500-OPS-0001.
- GIV-X 型飞机飞行手册编号为:AC-AC-G450-OPS-0001。/The Model GIV-X Airplane Flight Manual is GAC-AC-G450-OPS-0001.
- GIV-X(G450) 型飞机飞行手册编号为:AC-AC-G450-OPS-0001。/The Model GIV-X (G450) Airplane Flight Manual is GAC-AC-G450-OPS-0001.
- GIV-X(G350) 型飞机飞行手册编号为:AC-AC-G350-OPS-0001。/The Model GIV-X (G350) Airplane Flight Manual is GAC-AC-G350-OPS-0001.

操纵面运动量/Control Surface Movements

Model G-IV and Model GIV-X				
升降舵/Elevators	上偏/Up	24° (+1/2°, -1/2°)	下偏/Down	13° (+0°, -1°)
升降舵调整片/Elevator trim tab	上偏/Up	8° (+1°, -1°)	下偏/Down	22° (+1°, -1°)
方向舵/Rudder	右/Right	22° to 22.5°	左/Left	22° to 22.5°
方向舵配平/Rudder trim	右/Right	7.5° (+1°, -1°)	左/Left	7.5° (+1°, -1°)
副翼/Ailerons	上偏/Up	10° (+1°, -1°)	上偏/Up	10° (+1°, -1°)
副翼配平/Aileron trim	上偏/Up	15° (+4°, -4°)	上偏/Up	15° (+4°, -4°)
襟翼/Flaps			上偏/Up	39° (+0°, -1 1/2°)
速度制动/Speed brakes	右/Right	26° (+2°, -2°)	左/Left	26° (+ 2°, -2°)
地面扰流板/Ground spoiler (所有扰流板/all spoilers)	上偏/Up	55° (+4°, -3°)		
水平安定面运动范围 - 前缘下偏/Horizontal stabilizer travel range - Leading edge down: -1° (+1/4°, -1/4°) to -4.6° (+1/4°, -1/4°)				
Models GV and GV-SP				
升降舵/Elevators	上偏/Up	24° (+1/2°, -1/2°)	下偏/Down	13° (+0°, -1°)
升降舵调整片/Elevator trim tab	上偏/Up	8° (+1°, -1°)	下偏/Down	22° (+1°, -1°)
方向舵/Rudder	右/Right	22° to 25°	左/Left	22° to 25°
方向舵配平/Rudder trim	右/Right	7.5° (+1°, -1°)	左/Left	7.5° (+1°, -1°)
注释:对于航向配平如需使用驾驶配平旋钮和脚踏板再设置 0 位, 方向舵配平可最大弥补 (+3°, -3°)。详见飞行控制系统装备程序报告: GV-MS-51。/Note: Rudder trim may be offset (+3°, -3°) maximum as required for directional trim with the cockpit				

型号认证数据单/The Validation Data Sheet

trim knob and rudder pedals re-referenced to zero. See FCS Rigging Procedures Report GV-MS-51.				
副翼/Ailerons	上偏/Up	11° (+1°, -2°)	下偏/Down	11° (+1°, -2°)
副翼配平/Aileron trim	上偏/Up	15° (+4°, -4°)	下偏/Down	15° (+4°, -4°)
襟翼/Flaps			下偏/Down	39° (+1°, -1°)
速度制动(左/右)/Speed brakes (Right & Left)				
4 块外制动板(飞行扰流板) / 4 Outb'd Panels (Flight Spoilers)			上偏/Up	30° (+2°, -8°)
2 块内制动板(地面扰流板) / 2 Inb'd Panels (Ground Spoilers)			上偏/Up	30° (+2°, -5°)
地面扰流板(全部) //Ground spoilers (all)			上偏/Up	55° (+4°, -5°)
水平安定面运动范围 - 前缘下偏/Horizontal stabilizer travel range - Leading Edge Travel:				
正常运行/Normal Operation		-1.5° (+1/4°, -1/4°) to -4.6° (+1/4°, -1/4°)		
应急稳定模式/Emerg. Stab. Mode		-1.25° (+1/4°, -1/4°) to -4.6° (+1/4°, -1/4°)		

设备/ Equipment

为了满足审定要求, 适用的适航要求(见审定基础)规定的基本所需设备必须安装在飞机上。对于 G-IV, GV, GV-SP 和 GIV-X 型飞机, 批准的设备清单见《图解零件目录(IPC)》中, 另外, 还需下述设备项目: /The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification. For the Models G-IV, GV, GV-SP and GIV-X, see the Illustrated Parts Catalog (IPC) for an approved equipment listing. In addition, the following items of equipment are required:

- (a) 携带旅客配备的装备, FAA 批准的氧气系统必须安装在飞机上。
/When an airplane is outfitted to carry passengers, an FAA approved passenger oxygen system must be installed.
- (b) FAA 批准的《飞机飞行手册》FAA Approved Airplane Flight Manual.

最大起飞和着陆高度/
Maximum Takeoff and
Landing Altitude

****英尺/ feet

标牌/Placards
(原为: 美数据单的注
释 2)

G-IV, GV, GV-SP 和 GIV-X 机型所需的标牌开列在对应的《飞机飞行手册》的第 11 章中。/The required placards for Models G-IV, GV, GV-SP and GIV-X are listed in Chapter 11 of the appropriate Airplane Maintenance Manual.

注释 1/NOTE 1

重量与平衡/Weight and Balance

- (a) 必须为每架飞机提供最新的重量平衡报告, 包括原合格审定空机重量之中所包含的设备清单。重量与平衡报告应包括空机重量、系统燃油、全部滑油和液压油。/Current weight and balance report, including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each airplane at the time of original certification. The weight and balance report shall include as part of the empty weight, system fuel, total oil and hydraulic fluid.
- (b) 系统燃油: 填充所有管路和最临界飞行姿态下燃油箱计量仪器从零至可读点所需的全部燃油重量。/System fuel: The weight of all

fuel required to fill all lines and tanks up to zero/readable fuel point on the fuel gages in the most critical flight attitude.

1. G-IV 和 GIV-X 型飞机/G-IV and GIV-X airplanes (FAR 25.959):

(i) 全部系列飞机/All serial numbers:

全部不可用燃油*/Unusable fuel* - 105 lb. total

全部燃油管路/Fuel lines - 45 lb. total

全部系统燃油/System fuel - 150 lb. total

* 包括不可排放/Includes 13 lb. undrainable

2. GV 型飞机/GV airplanes (FAR 25.959):

(i) 生产序号 501 至 549(无 ASC 50)/ S/N 501 through 549 without ASC 50:

不可用燃油*/Unusable fuel* - 480 lb.

燃油管路/Fuel lines - 30 lb.

系统燃油/System fuel - 510 lb.

(ii) 生产序号 550 及后续飞机, 和装有 ASC 50 生产序号 501 至 549 / S/N 550 & subs, and S/N 501 through 549 with ASC 50:

不可用燃油*/Unusable fuel* - 189 lb.

燃油管路/Fuel lines - 30 lb.

系统燃油/System fuel - 219 lb.

* 包括不可排放/Includes 32 lb. undrainable

3. GV-SP 型飞机/GV-SP airplanes (FAR 25.959):

(i) 生产序号从 5001 起/ S/N 5001 and subsequent

不可用燃油*/Unusable fuel* - 189 lb.

燃油管路/Fuel lines - 30 lb.

系统燃油/System fuel - 219 lb.

* 包括不可排放/*Includes 32 lb. undrainable

(c) 系统滑油: 保留在发动机管路和滑油箱零读数时的滑油重量。
/System oil: The weight of oil remaining in the engine lines and tanks after subtracting the oil in the tanks which is above the "zero gage" levels.

(d) 上述的“不可用”燃油是燃油箱中的燃油量, 其包括 FAR 25.959 定义的油箱截留燃油, 即最临界飞行状态下难以获得的燃油。每一机型的可用燃油在前面的“燃油容积”中给出。“不可用”燃油包含在前面 (a) 节的系统燃油之中, 并不需要分别计算。下述相关资料见 FAA 批准的飞机飞行手册: /The above "unusable" fuel is that amount of fuel in the tanks, including tank trapped fuel as defined in FAR 25.959, which is unavailable to the engines under critical flight conditions. The usable fuel capacity is given under section entitled "Fuel Capacity" for each airplane model. The "unusable" fuel is included in the system fuel as indicated in (a) above and need not be accounted for separately. See FAA approved Airplane Flight Manual for information concerning the following:

(1) 起飞和飞行中的左右油箱间的最大不平衡/Maximum fuel unbalance between left and right tanks for take-off and in-flight operations.

(2) 为获得相等燃油量, 服役期内推荐的地面飞机姿态/Recommended airplane ground attitude to obtain equal fuel quantities during

servicing.

(3) 燃油添加剂/Fuel additives.

注释 2/NOTE 2

退役期限/Retirement Times:

对于 GIV 机型的疲劳极限时限件的退役期限开列在适用《飞机维修手册》第 5 章的第 IV 节中/The retirement times of fatigue critical life limited components are listed in Section IV, Chapter 5 of the appropriate Gulfstream Aerospace Model G-IV.

对于 GV, GV-SP 和 GIV-X 机型的退役期限开列在适用《飞机维修手册》的 05-10-00 章节中, 没有 FAA 的工程批准, 所列时限件的期限不得变更。/Retirement times for the GV, GV-SP and GIV-X are listed in Section 05-10-00 of the applicable Airplane Maintenance Manual. The retirement times of these life limited components cannot be altered without FAA Engineering approval.

多种构形飞机的剩余寿命限制起落时限, 请与 Gulfstream 公司的工程部门联系。/For airplanes having time (landings) in more than one configuration, contact Gulfstream Aerospace Engineering for remaining life limitations.

注释 3/NOTE 3

JP-4 燃油的使用/Use of JP-4 Fuel:

运营者, 罗尔斯. 罗伊斯公司和适航当局同意的 JP-4(宽流分)燃油的使用可能导致降低高压燃油泵的寿命。/The use of JP-4 fuel (wide cut) as agreed to by the operator, Rolls-Royce, and the appropriate airworthiness authority may result in a reduction of HP fuel pump life.

注释 4/NOTE 4

飞机服务变更(ASC's)/Aircraft Service Changes(ASC's):

主要涉及重量和燃油容量的变更, 各型飞机最重要飞机服务变更如下, 但这不是各型飞机的一览表。/The following are the most significant Aircraft Service Changes for the respective model aircraft, dealing primarily with changes to weight and fuel capabilities. This is not the complete list of ASC's for any of these models.

GIV 型/Model GIV:

飞机服务变更第 61 号, “G-IV 零燃油总重增至 49,000 磅(具有速度限制)”。/Aircraft Service Change (ASC) 61, “49,000 lb. Zero Fuel Gross Weight Increase (with Speed Restriction), G-IV.”

适用生产序号: 1000 至 1213/Applicable to S/N 1000 through 1213.

飞机服务变更第 190 号, “增加 G-IV 停机、着陆和零燃油总重”。

/Aircraft Service Change (ASC) 190, “Increased Ramp, Landing and Zero Fuel Gross Weight, G-IV.”

适用生产序号: 1000 至 1213/Applicable to S/N 1000 through 1213.

飞机服务变更第 261 号, “G-IV 零燃油总重增至 49,000 磅”。/Aircraft Service Change (ASC) 261, “49,000 lb. Zero Fuel Gross Weight Increase, G-IV.”

适用生产序号: 1000 至 1213/Applicable to S/N 1000 through 1213.

飞机服务变更第 436 号, “G300 修订”指明 G-IV (G300)型飞机。这些飞机将依据《飞机飞行手册(GAC-AC-G300-OPS-0001)》运行/Aircraft Service Change (ASC) 436, “G300 Modification” will designate

those aircraft as Model G-IV (G300). Those aircraft shall be operated under Airplane Flight Manual GAC-AC-G300-OPS-0001.

适用生产序号:自 1500 起。/Applicable to S/N 1500 and subsequent.

飞机服务变更第 440 号,“G400 修订”指明 G-IV (G400)型飞机。这些飞机将依据《飞机飞行手册 (GAC-AC-G400-OPS-0001)》运行/Aircraft Service Change (ASC) 440, “G400 Modification” will designate those aircraft as Model G-IV (G400). Those aircraft shall be operated under Airplane Flight Manual GAC-AC-G400-OPS-0001.

适用生产序号:自 1500 起。/Applicable to S/N 1500 and subsequent.

GIV-X 型/Model GIV-X:

飞机服务变更第 004 号,“G350 修订”指明 G-IV (G350)型飞机。这些飞机将依据《飞机飞行手册 (GAC-AC-G350-OPS-0001)》运行/Aircraft Service Change (ASC) 004, “G350 Modification” will designate those aircraft as Model GIV-X (G350). Those aircraft shall be operated under Airplane Flight Manual GAC-AC-G350-OPS-0001.

适用生产序号:自 4001 起。/Applicable to S/N 4001 and subsequent.

飞机服务变更第 005 号,“G450 修订”指明 G-IV (G450)型飞机。这些飞机将依据《飞机飞行手册 (GAC-AC-G450-OPS-0001)》运行/Aircraft Service Change (ASC) 005, “G450 Modification” will designate those aircraft as Model GIV-X (G450). Those aircraft shall be operated under Airplane Flight Manual GAC-AC-G450-OPS-0001.

适用生产序号:自 4001 起。/Applicable to S/N 4001 and subsequent.

飞机服务变更第 016 号,“G450 最大起飞总重增大”/Aircraft Service Change (ASC) 016, “G450 Maximum Takeoff Gross Weight Increase.”

适用生产序号:自 4001 起。/Applicable to S/N 4001 and subsequent.

GV 型/Model GV:

飞机服务变更第 50 号,“GV 后油箱打捞位置”。/Aircraft Service Change (ASC) 50, “Aft Fuel Pickups-Location, GV”.

适用生产序号:501 至 548。/Applicable to S/N 501 through 548.

飞机服务变更第 73A 号,“GV 霍林维尔增强冬季合格审定(包括 56021 仪表进近图(IAC), 45%重心扩大,和修订失速阻隔器活动一览表)”。/Aircraft Service Change (ASC) 73A, “Honeywell Enhancement - Winter Certification, (includes 56021 IAC, 45% CG Expansion, and Revised Stall Barrier Activation Schedule), GV”.

适用生产序号:501 至 569。/Applicable to S/N 501 through 569.

GV-SP 型/Model GV-SP:

飞机服务变更第 10 号,“G500 修订”指明 GV-SP(G500)型飞机。这些飞机将依据《飞机飞行手册 (GAC-AC-G500-OPS-0001)》运行/Aircraft Service Change (ASC) 10, “G500 Modification” will designate those aircraft as Model GV-SP (G500). Those aircraft shall be operated under Airplane Flight Manual GAC-AC-G500-OPS-0001.

适用生产序号:自 5001 起。/Applicable to S/N 5001 and subsequent.

飞机服务变更第 11 号,“G550 修订”指明 G-IV (G550)型飞机。这些飞机将依据《飞机飞行手册 (GAC-AC-G550-OPS-0001)》运行/Aircraft Service Change (ASC) 11, “G550 Modification” will designate those aircraft as Model GV-SP (G550). Those aircraft shall be operated under Airplane Flight Manual GAC-AC-G550-OPS-0001.

适用生产序号:自 5001 起。/Applicable to S/N 5001 and subsequent.

注释 5/NOTE 5

改变飞机标识/Alternate Aircraft Identifications:

假设关联的飞机服务变更(ASC)合并的情况下,下面提供了批准的改变飞机标识资料/The following provides approved alternate aircraft identification information assuming incorporation of the associated (listed) ASC:

系列号自 1500 起,按照 GAC 飞机服务变更第 436 号改进时,G-IV 型机具有 G-IV (G300)型机的资格。/Model G-IV, serial number 1500 & Subs, are eligible for identification as Model G-IV (G300) when modified in accordance with GAC Aircraft Service Change (ASC) 436.

系列号自 1500 起,按照 GAC 飞机服务变更第 440 号改进时,G-IV 型机具有 G-IV (G400)型机的资格。/Model G-IV, serial number 1500 & Subs, are eligible for identification as Model G-IV (G400) when modified in accordance with GAC Aircraft Service Change (ASC) 440.

系列号自 4001 起,按照 GAC 飞机服务变更第 005 号改进时,GIV-X 型机具有 GIV-X(G450)型机的资格。/Model GIV-X, serial number 4001 and subsequent are eligible for identification as Model GIV-X (G450) when modified in accordance with GAC Aircraft Service Change (ASC) 005.

系列号自 4001 起,按照 GAC 飞机服务变更第 004 号改进时,GIV-X 型机具有 GIV-X(G350)型机的资格。/Model GIV-X, serial number 4001 and subsequent are eligible for identification as Model GIV-X (G350) when modified in accordance with GAC Aircraft Service Change (ASC) 004.

系列号自 5001 起,按照 GAC 飞机服务变更第 11 号改进时,GV-SP 型机具有 GV-SP(G550)型机的资格。/Model GV-SP, serial number 5001 and subsequent are eligible for identification as Model GV-SP (G550) when modified in accordance with GAC Aircraft Service Change (ASC) 11.

系列号自 5001 起,按照 GAC 飞机服务变更第 10 号改进时,GV-SP 型机具有 GV-SP(G500)型机的资格。/Model GV-SP, serial number 5001 and subsequent are eligible for identification as Model GV-SP (G500) when modified in accordance with GAC Aircraft Service Change (ASC) 10.

注释 6/NOTE 6

驾驶舱视界/Cockpit Field of View:

对于向前视界的合格审定要求,G-IV, G-V, GV-SP 和 GIV-X 型飞机的前驾驶舱风挡是临界的,预先没与 FAA 飞机合格审定办公室协调,因此,未装备顶部遮光罩/The cockpit front windshield dimensions for the Models G-IV, G-V, GV-SP, and GIV-X airplanes are critical for forward field of view certification requirements; therefore, no equipment should be installed on top of the glare shield without prior coordination with an FAA Aircraft Certification Office.

注释 7/NOTE 7

系统修改/Systems Modifications:

G-IV, GV, GV-SP 和 GIV-X 机型使用软件基线可替换装置(LRU' s) (该装置分享数字信号传输总线)组成集成航空电子系统。对于驾驶舱的仪表系统的正确操作,生产交付的 G-IV, GV, GV-SP 和 GIV-X 机型的电子

设备构形是临界的。供给 G-IV, GV, GV-SP 或 GIV-X 机型的 LRU 软件的修订, 不同 LRU 的替换, 增加新 LRU, 或 LRU 界面的变更可能对已审定产品的适航性产生不利影响, 因此, 没有与修订者所在管辖地的 FAA 航空器审定办公室协商的情况下不应更改该项集成电子系统。/The G-IV, GV, GV-SP and GIV-X models incorporate integrated avionics systems using software-based line replaceable units (LRU's) which share a digital signal transmission bus. The avionics configuration of the G-IV, GV, GV-SP and GIV-X as delivered from production, is critical to the proper operation of the cockpit instrumentation system. Modification to the LRU software supplied with the G-IV, GV, GV-SP or GIV-X, replacement of an LRU with a different LRU, addition of new LRU, or alteration of an LRU interface could adversely affect the airworthiness of the certified product. Accordingly, no changes to the integrated avionics system should be made without coordination with the Aircraft Certification Office having jurisdiction over the modifier.

注释 8/NOTE 8

驾驶舱更改/Cockpit Modifications:

任何可能影响机组工作量、舱内噪声水平或昼间/夜间照明的驾驶舱构形的更改和变化必须经过 FAA 合格审定飞行试验驾驶员或飞行标准运行检查员评估。/Any modification or changes in cockpit configuration which may affect aircrew workload, cockpit noise level or day/night lighting must be evaluated by an FAA Aircraft Certification Flight Test Pilot or Flight Standards Operation Inspector.

注释 9/NOTE 9

起飞推力的使用/Use of Takeoff Thrust:

对于 G-IV, GV, GV-S 和 GIV-X 型飞机, 大于 5 分钟(不超过 10 分钟)的起飞推力的使用, 仅在发生一台发动机停车或故障期间获得批准。/For Models G-IV, GV, GV-SP and GIV-X, use of takeoff thrust for more than five (5) minutes [not to exceed ten (10) minutes] is approved for use only in the event of an inoperative engine due to shutdown or failure.

注释 10/NOTE 10

更改资料/Information to Modifiers:

影响初始合格审定要求的限制方面的更改资料: 对于 GV 型飞机, 包含在《Gulfstream V 内部合格审定要求(GV-GER-1242)》文件中; 对于 GV-SP 型飞机, 包含在《Gulfstream V-SP 内部合格审定要求(GVSP-GER-6044)》文件中; 对于 GIV-X 型飞机, 包含在《Gulfstream IV-X 内部合格审定要求(GIVX-GER-1619)》文件中。/Information to modifiers on limitations which impact original certification requirements of the Gulfstream GV are contained in Gulfstream Report GV-GER-1242, Gulfstream V Interior Certification Requirements Document. Information to modifiers on limitations which impact original certification requirements of the Gulfstream GV-SP are contained in Gulfstream Report GVSP-GER-6044, Gulfstream GV-SP Interior Certification Requirements Document. Information to modifiers on

limitations which impact original certification requirements of the Gulfstream GIV-X are contained in Gulfstream Report GIVX-GER-1619, GIV-X Interior Certification Requirements Document.

注释 11/NOTE 11

GIV 适航性限制/GIV Airworthiness Limitations:

作为 MSG3 大纲的部分, 对于生产序号 1400 起, 适航性限制章节(ALS)被纳入《GIV 型飞机维修手册》, 而对于其它飞机已编入飞机服务变更第 416 号。基于咨询通告 AC91-56A 的损伤容限要求, 编发了该份飞机服务变更, 以满足 FAR 25.571 条的 25-54 修正案的要求, 并且受控于 FAA 而航空器运行人不得变更。通过损伤容限要求, 该份飞机服务变更除却了以前安全寿命审定零件所确定的寿命限制。/As part of the MSG3 Program, an Airworthiness Limitations Section (ALS) has been added to the GIV Maintenance Manual for aircraft serial number 1400 and subsequent, and for all other GIV aircraft having incorporated ASC 416. This ALS has been developed to FAR 25.571 at Amendment 25-54, based on the damage tolerance requirements of AC91-56A. It is controlled by the FAA and can not be changed by the aircraft operator. Through the damage tolerance requirements, the ALS removes certain life limitations on previous safe life certified components.

注释 12/NOTE 12

减小垂直飞行间隔/RVSM:

GV-SP 型飞机(生产序号 5001 起)每一批准的型号设计(即 G550 型和 G500 型), 已考虑了符合《FAA 91-减小垂直飞行间隔(RVSM)文件》的减小垂直飞行间隔(RVSM)的技术要求; 然而, 在减小垂直飞行间隔空间内的飞行运行批准还必须经由认知的飞行标准组织批准。/Per the approved Type Design, GV-SP S/N 5001 and subsequent (i.e., G550 and G500 model aircraft) are considered to be compliant with the Reduced Vertical Separation Minima (RVSM) technical requirements contained in FAA Document 91-RVSM; however, operational approval to fly in RVSM airspace must still be granted by the cognizant Flight Standards organization.

GV-SP 型飞机(生产序号 4001 起)每一批准的型号设计(即 G450 型和 G350 型), 已考虑并符合《FAA 91-减小垂直飞行间隔(RVSM)文件》的减小垂直飞行间隔(RVSM)的技术要求; 然而, 在减小垂直飞行间隔空间内的飞行运行批准还必须经由认知的飞行标准组织批准。/Per the approved Type Design, GIV-X S/N 4001 and subsequent (i.e., G450 and G350 model aircraft) are considered to be compliant with the Reduced Vertical Separation Minima (RVSM) technical requirements contained in FAA Document 91-RVSM; however, operational approval to fly in RVSM airspace must still be granted by the cognizant Flight Standards organization.

注释 13/NOTE 13

驾驶舱视频显示器/Cockpit Video Display:

GV-SP 和 GIV-X 型飞机的航空电子结构体系包含了驾驶舱飞行员正前方直视位置显示装置上的分类视频输入多重复合显示能力。由于这些显示器影响机组工作量, 对已批准的视频输入源的变化(包括附加新的视频

源或能力)需要 FAA 的专项批准(包括专项确认和 FAA 航空器合格审定办公室同意)。/The avionics architecture of the GV-SP and GIV-X models includes a capability to display multiple, assorted video inputs on the cockpit display units positioned directly in front of the pilots. Because these displays affect crew workload, changes to the approved video input sources (including the addition of new video sources or capabilities) will require a specific FAA approval, including specific acknowledgement and concurrence from an FAA Aircraft Certification Office.

注释 14/NOTE 14

航向指示仪表要求/Direction Indicator Requirements:

G-IV, GV, GV-SP 和 GIV-X 型飞机, 以下述方法, 通过安装备份数字阅读磁指示系统(SDRMIS), 满足 FAR25 部第 25.1303(a)(3) 条款关于航向指示器(非稳定磁罗盘)的要求: /Gulfstream Models G-IV, GV, GV-SP, and GIV-X meet 14 CFR part 25.1303(a)(3) requirements for a direction indicator (non-stabilized magnetic compass) by installation of Standby Digital Reading Magnetic Indicator Systems through the following means:

G-IV 型飞机, 由流量阀驱动备份数字和方位距离指示器(DBDI)系统/
G-IV Standby Digital and Bearing Distance Indicator (DBDI) system driven by flux valve

GV 型飞机, 由流量阀驱动备份无线电磁指示器(RMI)系统/
GV Standby Radio Magnetic Indicator (RMI) system driven by flux valve

GV-SP 和 GIV-X 型飞机, 由磁力计驱动积成式备份仪表系统(ISIS)和电子方位距离指示器/GV-SP/GIV-X Integrated Standby Instrument System (ISIS) and Electronic Bearing Distance Indicator (EBDI) system driven by magnetometer

四. 进口要求/ IMPORT REQUIREMENTS

1. 使用要求 / Operational Requirements

交付中国的每架飞机, 必须满足中国民用航空总局的使用要求(例如, 标记和标牌的中文标识要求)。/ For each aircraft to be delivered in China, the operational requirements of CAAC must be met(e.g Chinese language requirements for markings and placards).

2. 出口适航证 / Export Certificate

美国联邦航空局将颁发声明飞机符合中国民用航空总局批准的型号设计的单独出口适航证, 并处于安全使用状态。/ Federal Aviation Administration will issue an individual Export Certificate of Airworthiness stating that the aircraft complies with CAAC approved type design and is in condition for safe operation.

3. G-IV, GV, GV-SP 和 GIV-X 型《飞机飞行手册》。/ G-IV, GV, GV-SP and GIV-X Aircraft Flight Manual

每架飞机配有美国联邦航空局以中国民用航空总局批准的 G-IV, GV, GV-SP 和 GIV-X 型飞机《飞机飞行手册》。/ Approved The G-IV, GV, GV-SP and GIV-X Flight Manual for each aircraft will be approved by Federal Aviation Administration on behalf of CAAC.

-END-