

新机 一览

NEW AIRCRAFT
PREVIEW



赛斯纳 奖状君主+ CESSNA CITATION SOVEREIGN+

大翻新让一款受欢迎的中型机
更加吸引人。

作者: Mark Huber

皇帝有了新衣。

赛斯纳奖状君主中型机系列的最新款将先进技术和更好的内部设计整合进了机身剖面中,该机身剖面源自1979年的奖状III。

君主+去年获得认证,拥有精巧的小翼(赛斯纳称之为“冲翼”)、新型触屏式Garmin航空电子设备、新型机舱管理和娱乐系统、更好的环境控制系统、

升级版Pratt & Whitney Canada引擎、重新设计的驾驶舱、升级版机舱(可容纳八至九名乘客)。虽然表面上看与老的君主机型几乎一样,但是新的机型翼展为2.74米(9英尺),可以装更多油,起飞重量从13,743千克增加至13,959千克(即30,300至30,775磅)。

该机型在融入这些新特性的同时,保留了其优点:跑道距离

A major makeover renders a popular midsize jet even more appealing.

by Mark Huber

The emperor has new clothes.

Cessna's latest incarnation of its midsize Citation Sovereign series fits advanced technology and improved interior design into a fuselage tube cross section introduced by the Citation III back in 1979.

Certified late last year, the Sovereign+ features subtle winglets Cessna calls “swooplets,” new touch-screen Garmin avionics, a new

cabin-management and entertainment system, a better environmental-control system, uprated Pratt & Whitney Canada engines, a redesigned cockpit and an upgraded cabin with seats for eight to nine passengers. While it may look almost identical to a legacy Sovereign, the new model offers wingspan that is 2.74 meters (9 ft) longer, holds more fuel and boosts takeoff weight from 13,743 to 13,959 kg (30,300 to 30,775 pounds).

相比 老版机型， 奖状君主+ 有了 很大提升。

短，1,076米（3,530英尺）；巡航速度每小时852米（460节）；爬升较快。所有改进综合在一起促使君主+机型的航程达到了5,556公里（3,000海里），相比老机型多了278公里（150海里），正式成为美国境内可横穿大陆的飞机。该飞机的功能和舒适度大幅度提升，但价格却依然坚守在1810万美元，至少目前为止还是这样。赛斯纳在渐进策略上比业内其他对手都做得更好。

原君主机型于2004年获得认证，上市后迅速获得市场青睐，截至去年底销售350架，其中一半以上出口。基础设计很简单：机械连接至控制表面，没有电传操纵飞行控制

系统。就设计风格而言，君主机型的十字形机尾和客舱中的战壕式中央过道，让人想起了60年代的第一批可横穿大陆的商务机，如Rockwell Sabreliner 65。该机型不能被称之为真正的中大型飞机，因为该机型在机舱容量、地板宽度、净空方面都不及真正的中大型飞机，如湾流G280或庞巴迪挑战者350，但是却比中大型飞机便宜好几十万。

如上所述，君主参考了多款奖状机型。侧翼处的机身宽度为168厘米（66英寸），与奖状III相同，这一设计首先应用于奖状III后来还应用于奖状XLS和速度更快、机身更长的奖状X。战壕式的中央过道净空为173厘米（68英寸）。客舱稍长于7.62米（25英尺）。8张可旋转、滑动、调整倾斜度的乘客座椅，每4张一组，每两张面对面摆放。如果您选择79厘米（31英寸）宽但长度较短的茶点中心，正对飞机入口处可



The airplane incorporates these improvements while retaining its ability to use runways as short as 1,076 m (3,530 feet), cruise at 852 km (460 knots) per hour and post slightly faster climb times. Bundled together, the changes on the Sovereign+ also yield an airplane

with a range of 5,556 km (3,000 nm), 278 (150) more than its predecessor, making it officially transcontinental in the U.S. It executes the trip with dramatically improved functionality and comfort, while—so far, at least—holding the line on price: \$18.1 million. This is the type of incrementalism Cessna does better than anyone else in the business.

Certified in 2004, the original Sovereign quickly built market appeal, selling 350 copies through the end of last year, more than half for export. The basic design is simple: mechanical linkages to the control surfaces, no exotic fly-by-wire here. Stylistically, from the cruciform tail to the trenched center aisle in the passenger cabin, the Sovereign harks back to the first transcontinental business jets of the 1960s, such as the Rockwell Sabreliner 65. You can't really call this airplane super-midsize as it has nowhere near the cabin volume, wide floors or headroom of a true super-midsize such as a Gulfstream G280 or a Bombardier Challenger 350, but then it costs millions less.

As previously suggested, the Sovereign borrows from several Citations. It has the same 168-cm (66-inch) tube width at



赛斯纳 奖状君主+ | CESSNA CITATION SOVEREIGN+

2014 赛斯纳奖状君主+	
2014 CESSNA CITATION SOVEREIGN+ AT A GLANCE	
价格/Price	1813 万美元/\$18.13 million
机组/Crew	2 人/2
乘客/Passengers	8-9 人/8-9
航程/Range	5,556 公里/3,000 海里* 5,556 km/3,000 nm*
最大巡航速度/Max cruise speed	每小时852 公里/460 节 852 km per hour/460 kt
起飞距离/Takeoff distance	914.4 米/3,000 英尺** 914.4 m/3,000 ft**
机舱/Cabin	高度: 1.73 米/5 英尺 8 英寸 height: 1.73 m/5 ft 8 in
	宽度: 1.68 米/5 英尺 6 英寸 width: 1.68 m/5 ft 6 in
	长度: 7.7 米/25 英尺 3 英寸 length: 7.7 m/25 ft 3 in
行李/Baggage	3.8 立方米/135 立方英尺 3.8 cu m/135 cu ft

*200 海里备份燃油, 2名飞行员, 4名乘客 **按最大重量计 来源: 赛斯纳
*with 200 nm IFR reserves, two pilots, four passengers **at maximum weight Source: Cessna

以再加一张单独的座椅, 容纳乘客人数达到9人。这里摆放有冰抽屉、储物柜、垃圾桶和两个饮料容器。9座椅式布局是最受欢迎的, 大部分运营商将君主飞机用于公司的往返运输: 不需要的东西一卸掉, 椅子一装上就可以飞了。

装货空间对于这一类的机型来说仍然是很不错的。机尾部分的保温行李舱2.8立方米(100立方英尺), 可从外部存取, 可以吞吐453.6千克(1,000磅); 卫生间内有0.77立方米(27立方英尺)的挂衣柜, 可以挂142千克(312磅); 厨房正对面还有一个小点的衣柜, 可以容纳56千克(123磅)。

机上唯一的卫生间位于主舱的末尾部分, 由一对滑门分隔开。

这在君主+上没有变化, 但很多其他方面都做了改动。机舱

the shoulders that the company adopted with the Citation III and later shared with the smaller Citation XLS and the faster, longer Citation X. The trenched drop-floor center aisle provides 173 cm (68 inches) of headroom. The passenger cabin is just over 7.62 m (25 feet) long. Eight individual swivel, slide and reclining passenger seats are arranged into two facing “club 4” layouts. A single side-facing seat opposite the aircraft entry door can be added, bringing passenger capacity to nine, if you select the shorter 79-cm- (31-inch)-wide “refreshment center.” It holds an ice drawer, storage, trash and two beverage containers. The nine-seat layout is the most popular, as most operators use their Sovereigns in roles akin to corporate shuttles: they skip the frills, load up the seats and go.



新的空调，座椅，
及机舱电子设备，
这些将是 最受乘客们欢迎的。



整个重新设计了，增加了流动橱柜和新的LED照明，整个空间显得更亮。边桌设计更稳固，传统的杯架去掉了，以便能实现多功能存储，同时存储钥匙、手机和饮料。

不过，最让乘客们喜欢的还是新的空调、座椅和机舱电子设备。

赛斯纳称空调的制冷效果提升了37%。

乘客座椅设计一直是赛斯纳中型机的致命伤：80年代的小货车机型融入舒适的教堂长椅的设计。携手Ipeco，欧洲制造商一直津津乐道自身驾驶舱的座椅设计，而赛斯纳的座椅设计很普通，目前用于君主+和奖状X型号，很快也会运用于正在开发中的纬度和经度机型。赛斯纳座椅的倾角多8度，乘客可以更多地向后靠，感觉更舒适。扶手缩进座椅靠背，增加了过道的宽度，大腿摆放空间更大，更方便于体型大的乘客。

您会觉得您是坐在椅子上，而不是坐在椅子上。这当然和高端奔驰车的座椅舒适度不能比，奔驰车的座垫侧垫可以随人体移动自动充气放气，但是比小货车机型却是远超了好几年。乘客可以通过调整机械腰来调整舒适度。

该机型装载了Clairity机舱管理系统，乘客用电子设备也有了很大的飞跃。Clairity通过光

纤主干整合了机舱电力系统、航空电子设备和通讯设备。驾驶舱、机舱、卫生间都配有110V插座，一共有6个。4张一组的座椅，每组配有1个，每张座椅标配1个USB充电端口。作为选配，可以在每个座椅上都配110V插座。每个座椅都配有互动式触屏控制器，尺寸和智能手机一般大，可以操作机舱灯光、遮光板、温度、数字音频视频、互动式移动地图。控制器还配有内置网页浏览器（需要有网络服务）。其他选配项目还有RGB情调照明、Wi-Fi、高速网络、卫星收音机。

君主+机型有5中布料和颜色组合可以选择。客户也可以自行选择布料和颜色。

重新设计的驾驶舱配备了最新的Garmin G5000触屏式航空电子设备组件，该组件的特色是三个14英寸平板显示屏、一个自动驾驶仪，以及多个自动油门。G5000采用的是最新的通讯、安全、导航技术，比如合成视觉、天气雷达、精确进场GPS（带广域增强系统）、交通防撞系统（Tcas II）、地形意识和预警系统（Taws）、ADS-B 发送、无线电高度表、驾驶舱语音记录器。G5000内置的自动功能加快了引擎启动和飞行预检，给飞机又增加了一层保险。

Stowage space remains respectable for an aircraft in this category. A heated, externally accessed 2.8 cubic-meter (100-cubic-foot) baggage hold in the tail section can swallow 453.6 kg (1,000 pounds); inside the lavatory is a .77-cubic-meter (27-cubic-foot hanging closet rated for 142 kg (312 pounds); and another smaller closet, in the front opposite the galley, can take 56 kg (123 pounds).

The sole lavatory is aft of the main cabin and separated by a pair of sliding doors.

None of this changes on the Sovereign+, but plenty else does. The cabin is completely restyled with more flowing cabinetry and new LED lighting to brighten the space. Other touches include a more robust side-table design and the elimination of traditional cup holders in favor of multifunctional storage for keys, cell phones and beverages.

But it is the new air conditioning, seats and cabin electronics that passengers will appreciate most.

Cessna says the air conditioning provides 37 percent better cooling.

Passenger seating has long been the bane of midsize Cessnas: the comfort of a church pew locked into the styling of a 1980s minivan. Working with Ipeco, the European

It is the new air conditioning, seats and cabin electronics that passengers will most appreciate.

manufacturer long lauded for its cockpit seating, Cessna designed a common seat platform, used now in the Sovereign+ and new Citation X and soon in the under-development Latitude and Longitude. It features eight degrees more pitch, allowing passengers to lean back farther—and more comfortably. The armrests retract into the seatback, widening the aisle and providing more seated thigh room for larger passengers.

You get the sensation that you are sitting in the seat, as opposed to on it. It's not the same level of comfort you get in a high-end Mercedes, in which the seat-cushion side bolsters automatically inflate and deflate as you round corners, but it's light years away from a minivan. You can enhance comfort more by ordering the adjustable mechanical lumbar.

Passenger electronics have also made a quantum leap in this airplane, thanks to the new Clairity cabin-management system. Clairity integrates the cabin electrical



机舱 全部重新设计，
增加了更多的流动
橱柜和新的 LED照明，
整个空间显得更亮。



虽然飞机内部对于乘客和驾驶员来说变得更好了，但君主+机型还是留有老机型上的一些操作缺点，主要是滚动轴的操作还是像卡车一样。不过，相比这一点点的代价，君主+是一款非常

现代化的机型，经济性、航程、实用性、速度、维护运营费综合起来考虑几乎是最理想的选择。虽然有上述优点，君主+仍然不是最完美的机型。但真的已经很接近了。

BJT

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system, avionics and communications through a fiber-optic backbone. Six 110V outlets are located throughout the cockpit, cabin and lav with jacks at each club-four seat grouping, and USB charging ports are standard at each seat. As an option, the 110V outlets can be added at each seat. Interactive touchscreen controllers at every seat, about the size of smartphones, operate cabin lights, window shades, temperature, digital audio and video and an interactive moving map. The controllers also have built-in Web browsers (Internet service required). Options include

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The cabin is completely restyled with more flowing cabinetry and new LED lighting to brighten the space.

RGB mood lighting, Wi-Fi, high-speed Internet and satellite radio.

Five basic fabric and color combinations are available for the Sovereign+. Customers can also choose their own fabrics and colors.

The restyled cockpit is built around the new Garmin G5000 touchscreen avionics suite, which features three 14-inch flat-panel displays, an integrated autopilot and autothrottles. The G5000 offers the latest communications, safety and navigation technology, including synthetic vision, weather radar, GPS with wide-area-augmentation system for precision approaches, traffic-collision-avoidance system (Tcas II), terrain-awareness and warning system (Taws), ADS-B out, radio altimeter and cockpit voice recorder. Automatic functions built into the G5000 speed engine start and preflight checks and add additional layers of idiot-proofing.

While more refined inside for passengers and pilots, the Sovereign+ retains a few of the handling drawbacks of its progenitor, mainly the truck-like handling in the roll axis. But that's a small price to pay for a thoroughly modernized aircraft that offers almost the ideal combination of economy, range, utility, speed and payload. Even with all this, the Sovereign+ still may not be the perfect airplane. But it's really close.

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