OUTFITTING YOUR AIRCRAFT’S CABIN

THE COMPLETION OR REFURBISHMENT OF A modern business jet refers to the process by which the cabin is finished or reworked. It is a complex project requiring specialized skills and artistic talent. Here are 10 tips to help you find the right experts and get the ball rolling.

1. Don’t wait. Assuming the private jet industry continues to rebound, available slots for a completion or refurbishment project will be limited. Take into consideration that before your airplane ever rolls into the completion or refurbishment center, a lot of work must be done, much of it requiring your attention. In fact, the outfitting process could begin six months or more before the airplane arrives at the center.

2. Decide what you want. Meet with your pilot and chief mechanic and make a list of what you’d like in the cabin. Do you want an airborne lounge, such as this one in an Asian motif (shown in a computer rendering by AirJetDesigns), can offer all the comforts of home. To get just the right look, consider consulting an interior designer.

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现代化工厂商务喷气式飞机的舱装指装修或翻新机舱内部的过程。这是一项复杂的工程，需要专门的技能和艺术才华。以下是10项指南，可以帮助您找到合适的专家并着手开展这项工作。

1. 不要观望。假设私人飞机产业继续回升，舱装或翻新工程可用的仓位将受到限制。记住您将飞机送往舱装或翻新中心之前，还必须做大量的工作，很多工作需要占用您的时间。事实上，舱装过程可能在飞机送达中心前六个月或更早的时间就要开始。

2. 决定您想要什么。与您的飞行员和首席机械师面谈，列一张机舱舱装清单。您想安装高速互联网连接吗？是否需要安装Wi-Fi、高清娱乐系统、移动地图显示器或蓝光播放器？需要安装多少台视频监视器？需要多大的视频监视

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您想在这样的座舱里做什么？需要厨房设施吗？如对流烘箱或垃圾压实机？您喜欢什么样的照明、卫生间和淋浴？然后将您的清单分为两组，即您想要的和您需要的，从而在最短的时间内完成舱装。您与舱装和翻新中心的设计师和工程师面谈时，请随身携带您的清单。

3. 考虑聘请独立顾问。现在，舱装和翻新产品通常聘用独立顾问，特别是庞大而复杂的机舱舱装项目。优秀的独立顾问可以帮助您管理项目（包括选择合适的飞机和管理最终交付和交付事宜等），因此可为您节省大量时间和费用。此外，独立顾问了解您的需要，也了解舱装/翻新中心声称其能办理的事项，因此能妥善处理这两者之间存在的潜在问题。他们了解政府的要求，也了解成品认证流程。

4. 谨慎挑选舱装或翻新中心。现场考察您考虑的中心，和关键工作人员面谈，如舱装或翻新总监、精细家具和家具装饰店的负责人等。如果中心将服务外包，打听可能与您的项目有关的供应商的名称，并与其交谈。

打听过中心的工作量和可预约时间。同时，询问中心是否符合政府的所有要求，是否投保以及投保金额。

参考？每个中心可能曾经交付过几个令人满意的、甚至优质的机舱项目。可电访某些老客户，获取更具体的信息。

选择过程最后一个阶段的工作包括删选清单和递交招标申请。如果您收到相当多的竞标请求，请不要惊讶。您可能会想，高速互联网连接？何不考虑Wi-Fi，高清晰度的娱乐系统，移动地图显示或Blu-ray播放器？有多少视频显示器和多大尺寸？您想要哪种座椅？关于厨房用具，如对流烤箱或垃圾压实机？您想用什么样的灯光，洗手间和浴室？将您的清单分为两组，即您想要的和您需要的，从而在最短的时间内完成舱装。当您与舱装和翻新中心的设计师和工程师面谈时，请随身携带您的清单。

3. Consider an independent consultant. Independent completion and refurbishment consultants are fairly common these days, especially with large and complex cabin-outfitting projects. A good one can manage the project—from picking the right airplane to the final test flight and delivery—and can save you a lot of time and expense. Further, independent consultants can work in that minefield between what you want and what the completion/refurbishment center says it can do. And they understand government requirements as well as the certification process for off-the-shelf items.

4. Shop carefully for a completion or refurbishment center. Visit centers you’re considering and talk with key individuals, like the director of completions or refurbishment and the heads of the cabinetry and upholstery shops. If the center outsources, get the names of suppliers that are likely to be associated with your project, and talk with them.

Question the center’s workload and slot availability. Also, ask whether the center meets all governmental requirements, and whether it is insured and at what level.
5. Pay attention to design and engineering. Once the project gets underway, it’s time to find out whether all those ideas on your wish list are even possible—and if they are, what they’ll cost. For example, reupholstering old 9g seats will be as much as $500,000 less expensive than installing new 16g seats.

This is a critical point in the completion/refurbishment process. Here is where you will make choices covering everything from lighting, fabrics, leather, colors and entertainment components to the cabin-management system, monitors and carpet. There are literally hundreds of details that if not specified early on will come back to take a major bite out of your wallet.

The designers and engineers will have their own questions. For example, do you plan to make the airplane available for charter? If so, the additional wear and tear will dictate the type of leather, fabrics, carpeting and wood trim you should select.

6. Think about the next owner. If your cabin is very unusual, chances are that it will appeal to a relatively small pool of buyers; others will want a price break, because the first thing they’ll want to do after purchasing the airplane is have the interior refurbished.
7. Choose technology. Most owners will make choices based on compatibility, durability and ease of maintenance, whether it is the latest technology available and whether the systems can be easily upgraded.

One recent trend is to incorporate interface docks for personal entertainment devices. This began several years ago as passengers began coming aboard with MP3 players and looking for a dock that would allow them to view videos and listen to music on the cabin-entertainment system, using large in-place monitors to share content with traveling companions. This trend could go a step further as tablet computers and high-speed Internet connections render even in-flight satellite television irrelevant.

8. Agree on milestones. This is the standard means of marking the progress of a completion or refurbishment project. Most completion and refurbishment centers will assign an individual, or even a team of technicians, to walk through at prearranged points in the process to ensure that the job is on schedule and the work meets specifications. These milestones typically represent points at which an approval is required before moving forward, and they may include progress payments.

Catching a problem or demanding a change at this point will almost always be less costly—sometimes much less costly—than at a later point. So look at everything, and closely. One jet owner visited the partially finished lavatory and discovered that, when seated there was no way the occupant could reach the bathroom tissue.

9. Take a “cold soak” flight. Don’t let the term throw you. The manufacturers call the flight that because the airplane is taken to its maximum certified altitude and put through its paces. Every drawer in every cabinet, every button and every switch is tested, most often by the completion or refurbishment center team. The list may include 200 items or more, all of which must be checked off. There are often two such flights, one for the company and another for the aviation authority’s representative. Small aircraft may require multiple flights. Larger-cabin jets might spend eight hours or more on a single flight.

The number of passengers on these flights is usually limited to those involved in the test program, the center’s own technicians and the aviation authority representatives who will certify the interior.

The second or third flight is reserved for the owner and/or consultant and guests. It will last the equivalent of the aircraft’s maximum range. On the way, the passengers will be served a meal, play with all the controls and examine the workmanship for any flaws.

10. Relax. Don’t worry if you don’t catch every little problem. That’s why you have a warranty, which normally applies for two or three years. That’s also why some completion and refurbishment centers will assign an individual to follow your airplane for weeks, even months, to ensure a prompt fix for anything that goes wrong.