



RIDING ATOP THE ELEPHANT

HEAVENLY VISTAS FOR VVIP AND SUPER FIRST CLASS

In the seventies if you booked passage on one of the major airlines operating the new transatlantic Boeing 747, you could look forward to taking a little mid-flight break from your first class seat, climbing a circular staircase and hanging out in an on-board second-story cocktail lounge for a while. Back in the day, that was a pretty sweet milestone in commercial air-travel. Then as the century turned we began to see First Class Sleeper Pods, AVOD and other modern upgrades. Now we have a battle going between several foreign carriers over who can beat who in offering the coolest most opulent Super First Class private cabins. And if you're operating your own VVIP aircraft, then you can have your own private bedroom, a lounge the size of your living-room and a dining room for ten if you so desire. But c'mon, how many showers can you take at 40,000 feet, right? The real question is...what's next!? What badass new "upgrade" can I write into the specs of my next monster-jet?

Well if Windspeed Technologies has it their way, it just might be "SkyDeck". Imagine unbuckling from your seat, walking back to a glass enclosed vestibule that houses a seated elevator pod, punching a button that opens its doors and invites you to be seated in a pair of sumptuous chairs. Now punch the button on your console and slowly rise through the ceiling to a glass "bubble canopy" mounted at the top-most point of the aircraft's fuselage. No more movies, no more flight attendants - just a private unencumbered view of the heaven's for two, from eight miles up, traveling at mach 0.8.



SkyDeck is a system designed to provide an exhilarating view of the heavens, the horizon and in fact the aircraft itself while in flight; all from a safe external pod completely free of structural cross members or other elements that might restrict your view. Oh, and if you get bored staring forward across the expanse of the fuselage, just use the joystick on the console and turret your pod in any direction you like.

The aim was to create the next exciting experiential in-flight entertainment for VIP aircraft owners and the airline industry. For the airlines, it could be an additional source of revenue, as passengers could be charged on a pay-per-view basis. There are several combinations of design features that can be incorporated onto the SkyDeck platform. For example, either an elevator or a staircase can be incorporated, and either a single or two-seat platform can be specified.

Jet Moda caught up with Windspeed's President & CEO, Mr. Shakil Hussain and he had quite a visionary story to tell about how the idea of SkyDeck came to him. But first let me explain that Mr. Hussain has the sort of background; that of an aerospace engineer - whereby it might have easily spawned out of such professional groundings. That however is not the case. This aerospace vista to beat all vistas, had its inceptionary beginnings atop an elephant out on the craggy plain of Southern India. Ok maybe not actually atop an elephant, but within a recurring dream whereupon he was a Maharaji, making passage across this ancient landscape staring at a canopy of stars from atop the back of a lumbering prehistoric mammal. And slightly below him is the "driver" nestled in the curve of the elephant's neck; navigating the harsh terrain as they make their way thru the night from one distant Hindi village to the next. For most, such a dream may have spawned the idea for a children's book, but not Mr. Hussain.

"From there," he says "I realized the same experience need not be enjoyed atop an elephant nor at the agonizing pace of one." Mr. Hussain began thinking how this exotic experience could be leveraged on to a modern day commercial or VVIP aircraft. As the thought process unfolded, he figured "listen, if fighter aircraft and bombers have hardened transparent canopies that withstand jet speeds - then why not a transport category aircraft?". From there it gets pretty technical but suffice to say Mr. Hussain and his partners have expended thousands of engineering man hours in realizing this dream - and while it's still a ways from being certified or flight tested just yet, it's very clear the SkyDeck will soon be a reality.

Within the current battle for "top dog" in the Super-First-Class race, the planners at Etihad, Emirates and other high-end carriers will no doubt be taking a serious look at SkyDeck. And as for VVIP and Head of State customers....duh!? It's a natural and only a matter of who will step up to the plate first.

The SkyDeck can be installed on a wide variety of aircrafts, ranging from wide-bodies to smaller executive jets. For the smaller executive jets, perhaps the single-seat option would be the way to go. Current in-flight entertainment offerings have not changed much over the decades. "We wanted to come up with a product that would provide a higher level of entertainment to reduce the boredom of long flights" says Windspeed's Executive Director, Bruce Stewart.

Conceptual designs of each variant have been completed and SkyDeck is currently patent and trademark pending. It has taken Windspeed over a year to design the details, including conducting feasibility studies in all aspects of the system which have included structural modifications, loading, system integration, interior modifications, aerodynamics and certification requirements.



STARING INTO
THE HEAVENS
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SPIRIT



As with any installation, Skydeck will impose an increase in the aircraft's weight. The amount will depend on the version of SkyDeck. However, for wide-body VIP aircraft, the total takeoff weight with the SkyDeck installed will still be way lower than the aircraft's original design MTOW and therefore weight increase will not be an issue for such applications.

The SkyDeck will be designed to withstand all load conditions, including flight loads and bird-strike impact loads. The canopy will be made of similar high-strength materials as those used to build the canopies of supersonic fighter jets. "We are currently in talks with a major aircraft canopy manufacturer" says Mr. Stewart. "They will design, build, test and supply the canopies, fully certified and ready-to-install."

The problem of condensation on the canopy surface, that could cause fogging, will be resolved with the application of an anti-condensation film on the surface of the canopy, according to the canopy manufacturer. In addition, the canopies will also come with a UV-protection coating. The requirements of ingress / egress by the certifying authorities will be built into the design of every SkyDeck. So what does Skydeck cost? "That depends on several factors" says Mr. Hussain, "such as selecting between the options of a single or double-seat version, elevator or staircase version, wide bodied or narrow bodied aircraft, etc. In general the single seat coupled with a staircase version for a narrow bodied aircraft will be substantially cheaper than for a wide bodied aircraft." Unfortunately Windspeed has not yet published a pricelist but safe to say, its price-tag will be commensurate with its cool factor!

Elephant or Jet, staring into the heavens while you journey from place to place beckons the spirit somehow. And if Windspeed has its way, it will beckon the checkbook as well. At the moment, Skydeck's patent is pending but says Mr. Hussain, "we expect to have it by the end of the year." After that, it won't be long before we'll all be noticing little transparent bubbles atop large aircraft and repurposing of the term "I call shotgun!!"

