



## Cobalt™ 3D Modeling Helps Make History

*Success of SpaceShipOne wins Ansari X-Prize for Burt Rutan and Scaled Composite team, challenges the status quo of aeronautical design.*

Inspired by the Orteig Prize of 1927, which spurred the trans-Atlantic flight of Charles Lindbergh, the Ansari X-Prize Foundation encourages small professional teams to use their creativity to reach new goals in aviation, providing incentives in the private sector to make space travel frequent and affordable for the general public.

The Scaled Composites design team confirmed that they designed the majority of SpaceShipOne and its companion aircraft, White Knight, in Ashlar-Vellum's Cobalt CAD and 3D modeling software. Cobalt's Vellum® interface so fluidly works the way innovators think that it allows designers to come up with multiple what-ifs, easily refining the design for winning results. Ashlar-Vellum's president, Robert Bou, stated, "We feel proud to work with such a brilliant and innovative team of designers and to be a part of their historic endeavor." Bou adds,

***"I recently visited the Scaled Composites team in Mojave. They told me that when they saved 33-percent of their engineering costs by using our CAD and 3D modeling software over that of our competitors."***

SpaceShipOne's historic flight in October, 2004 marks the beginning of space travel for the general public. Pilot Brian Binnie took SpaceShipOne (a passenger carrying aircraft) to an altitude of 367,442 feet (69.9 miles or 111,996.3 meters), exceeding the 328,000 foot (99,974.4 meter) altitude required for the X-Prize. In addition to this requirement, the spacecraft had to be privately financed, built, and launched by the team, able to carry three people, and complete two successful flights with the same vehicle within a two-week period.

Sir Richard Branson of the Virgin Group recently announced that his company entered into an agreement with Mojave Aerospace to license the SpaceShipOne technology. The plan is to have a space ship named the VSS Enterprise ready for commercial space travel by 2007. The dream of commercial space travel is now a reality.



The test pilots pose for a picture in front of White Knight and SpaceShipOne shortly before the history-making flight. From left to right are Douglas Shane, Mike Melvill, Pete Siebold, and Brian Binnie.



White Knight and SpaceShipOne take to the skies. Cobalt's fluid interface and extensive 3D modeling tools gave the Scaled team the ability to work through many of the incredible design challenges of building a manned space craft with relative ease.



SpaceShipOne being piloted back to the Spaceport. Thanks in part to the ease of working with Ashlar-Vellum CAD and 3D modeling software the Scaled team was able to stay well ahead of the other competitors in the X-Prize competition.