Studebaker: Iconic & Immediate

As part the League of Retired Automotive Designers, John Houlihan got involved in the project to design a new-model Studebaker based on today’s technology and styling. Sponsored by his alma mater, the University of Notre Dame Design Department, and hosted by the Studebaker Museum in South Bend Indiana, John felt particularly drawn to the idea.

The rules were flexible but the design had to evoke a Studebaker. John tells about looking at the three most iconic Studebakers from history, the 1950 Champion Starlight Coup, the 1953 Starliner Commander and the 1956 Hawk, to design a Studebaker for 2015. He chose a seating platform for only three people, since most cars today travel with the driver alone. He used a three-wheeled stance with the driver in the center, and electric motors in the front wheels powered by lithium ion batteries behind the seating compartment. The car has electronic steering to turn the wheels independently rather than a drive shaft. By 2015 John anticipates that battery technology will reach 400 miles per charge.

John has been using Ashlar-Vellum CAD products for years, first with Vellum®, the predecessor to Graphite™ precision wireframe software, and then Cobalt™ 3D modeling when he worked for Timex Corporation designing watches. When he retired from Timex he purchased Argon™ 3D modeling. John uses both the solid and surface modeling capabilities in Ashlar-Vellum 3D modeling products, depending on what he’s designing.

“What I find is when I was designing the car it was completely a different modeling effort than the watch. On the watch I used solid geometry almost exclusively, either using extrusions of lines or primitive geometry and then modifying the geometry and using booleans to put them together. When I did the car I did surfaces almost entirely and then thickened the surfaces to make them into solids, because they were more free-form. But the surface stuff is more challenging.”

John loves the system, especially the rendering, and looks forward to learning more about that area of the software. He likes how his models, and the movies he makes of them, impress his colleagues, investors and clients.