World's Largest Solar Sail, Sunjammer, Completes Test

NASA officials, team partners, and local students were on hand to witness a key milestone for the Sunjammer Mission as it successfully deployed a quadrant of its solar sail - a critical design component that will eventually herald an era of propellantless spacecraft. Sunjammer will be the largest solar sail ever flown using photonic pressure (or sunlight) to maneuver in space.

Solar Sails have the potential to be a game changer for space exploration as the low-cost, propellantless and highly maneuverable sail craft will enable future satellites and spacecraft to journey throughout the solar system and beyond. The prime contractor, L'Garde Inc., hosted the test deployment at its facility in Tustin, CA, with mission partners NASA and Space Services Inc. present for the event.

The test is a critical milestone for the Sunjammer Mission as lead contractor L'Garde, Inc. demonstrated for the first time the successful coupling and deployment of the sail and deploying beam. The beam pulled a quarter of the sail out to its full open state as it will operate in space.

The demonstration was conducted under more stressful conditions since the Earth's gravity and atmosphere make it more difficult to test given the lightweight sail material. "If this test succeeded under these stressing conditions, we certainly anticipate it will work exceedingly well in space" said Nathan Barnes, President of L'Garde.

We are very pleased by these results, as they bring us one step closer to realizing NASA's vision of a propellantless spacecraft and introduce the exciting potential of solar sails to the world," said public outreach partner Space Services CEO, Charles Chafer.

Sunjammer is slated to launch in January 2015 and is NASA's first solar sail voyage to deep space. It will monitor key solar activity as well as carry a public "Cosmic Archive" of human perspectives including names, messages, photographs, and videos contributed by the public for future generations to discover.