

Rocket-Powered Parachutes Rescue Entire Planes



Langley Research Center

**BRS Aerospace
Saint Paul, Minnesota**

Originating Technology/NASA Contribution

- ◆ In order to support the development of a Small Aircraft Transportation System, NASA has invested significant research into small aircraft safety
- ◆ Engineer Boris Popov invented a parachute designed to rescue an entire small airplane



Partnership

- ◆ NASA Small Business Innovation Research (SBIR) contracts with Popov's company, BRS Aerospace, advanced the whole-plane parachute system
- ◆ The NASA funding helped with the development of thin-film parachutes, manufacturing methods that resulted in stronger parachutes, and smart deployment devices

Product Outcome

- ◆ The BRS parachute system is featured on top-selling small aircraft around the world
- ◆ As of 2010, the system had saved 250 lives
- ◆ BRS is working on parachutes for small jets and may eventually use its NASA-derived technology to enable systems for commercial airlines