

# 2000 Reusable Launch Vehicle Programs & Concepts: With a Special Section on Spaceports



This report divides RLV programs into four categories: United States Commercial Programs, United States Government Programs, International Concepts, and X PRIZE Competitors. United States Commercial Programs include vehicles under development that will perform both payload launch and human passenger/crew missions. Most of the concepts in this section are being developed by small private companies with plans to launch satellites into low Earth orbit, resupply the International Space Station, or provide flights for space tourists. United States Government Programs include testbed vehicles and other programs intended to advance the state-of-the-art technologies for advanced space transportation concepts such as RLVs. The focus of the U.S. government RLV program is on NASA's X-vehicles. However, the USAF also has plans to explore the development of a spaceplane. International Concepts include proposed vehicles from non-U.S. government and commercial organizations. The governments of Japan and India are proceeding with long-range plans for RLV development, while Bristol Spaceplanes Ltd. in Great Britain is developing commercial vehicle concepts. X PRIZE Competitors are presented separately from the other commercial vehicles because of the unique nature of their intended mission. The X PRIZE competition will award a \$10 million prize to the first entrant that proves it can carry at least three people to a 100-km altitude and repeat the flight within two weeks. X PRIZE vehicles are specifically designed to accomplish this mission, although some X PRIZE vehicles plan follow-on vehicles for commercial satellite launch missions. Two entrants, Kelly Space and Technology and Pioneer Rocketplane, are focused primarily on satellite launch missions and therefore have been included in the United States Commercial Programs section. Partial

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