

# 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

Contents: INTRODUCTION THE PUBLICATION RLV INDUSTRY BACKGROUND 1999 DEVELOPMENTS OVERVIEW OF DEVELOPMENT PROGRAMS UNITED STATES COMMERCIAL PROGRAMS ASTROLINER KELLY SPACE AND TECHNOLOGY K-1 KISTLER AEROSPACE CORPORATION PATHFINDER PIONEER ROCKETPLANE ROTON C-9 ROTARY ROCKET COMPANY SA-1 SPACE ACCESS LLC SPACE CRUISER SYSTEM VELA TECHNOLOGY DEVELOPMENT VENTURESTAR LOCKHEED MARTIN CORPORATION UNITED STATES GOVERNMENT PROGRAMS SPACE SHUTTLE X-33 X-34 X-38/CREW RETURN VEHICLE X-40A/MILITARY SPACEPLANE X-37 INTERNATIONAL CONCEPTS AVATAR DEFENSE RESEARCH DEVELOPMENT ORGANIZATION (INDIA) HOPE-X NATIONAL SPACE DEVELOPMENT AGENCY OF JAPAN SINGLE-STAGE-TO-ORBIT SPACEPLANE NATIONAL AEROSPACE LABORATORY (JAPAN SPACECAB/SPACEBUS BRISTOL SPACEPLANES LTD. (ENGLAND) X PRIZE COMPETITORS THE X PRIZE SPACEPORTS COMMERCIALY-LICENSED SPACEPORTS U.S. FEDERAL SPACEPORTS PROPOSED SPACEPORTS 55 pages; dozens of photos, drawings, technical illustrations and charts, most in full color. This is a Print Replica that maintains the formatting and layout of the original edition and offers many of the advantages of standard Kindle books.

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123

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