## IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2) Launch Vehicles in Service or in Development (1)

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## INNOVATION & LAUNCH SERVICES FOR THE NEXT DECADE

## Abstract

United Launch Alliance (ULA) has a long history of reliable, successful launches. While this is notable and unparalleled, what does the future hold? ULA is transforming the future of space launch through its innovative new rocket design, Vulcan.

The Vulcan is based on the best of the best from the Atlas V and Delta IV rocket families, among other enhancements. This combination of flight-proven technology and evolutionary improvements results in more performance at a cheaper price. This paper will discuss the Vulcan rocket, its subsystems and its capabilities, as it is offered to customers in the near future. Vulcan will be a solution for all customers: commercial, civil and government.

Additionally, Vulcan manufacturing and procurement processes will substantially reduce the cost of launch services. Specific actions to reduce cost will be further elaborated on in the paper. Combining reliability, performance, and schedule certainty is ULA's hallmark. Vulcan continues this tradition with the added benefit of lower cost.