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ROCKET LAB
CEO PETER BECK



RUTHERFORD ENGINE

ROCKET
LAB



New Zealand aerospace company Rocket Lab was founded in Auckland in 2006 by Peter Beck. Although it was an unusual project, the team at Callaghan Innovation recognised a unique opportunity and provided help with the funding that Rocket Lab needed to not only get off the ground, but scale to the global launch service provider the company is fast becoming.

Since being awarded a Callaghan Innovation Growth Grant in 2013, Rocket Lab has grown into a team of more than 100 engineers in its Auckland headquarters, with offices, test sites and launch facilities around the world. A quarter of Rocket Lab's team have PhDs, and a Callaghan Innovation Student Grant has enabled Rocket Lab to support three aerospace students at the University of Canterbury to further their studies and complete specialised PhDs.

The past year was one of considerable technical achievements for Rocket Lab. They have designed, developed, tested and qualified large vehicle systems, including, most notably, qualifying the second stage of their Electron launch vehicle as well as the Rutherford engine. Qualifying the Rutherford engine was a major milestone for 3D printing; it was the first oxygen/hydrocarbon engine to use this technology for all the primary components of the combustor and propellant supply system.

CEO Peter Beck says, "The funding from Callaghan Innovation towards the development phase of our Electron launch vehicle was critical, allowing us to invest significant capital, time and expertise into developing all our systems in-house. The innovations that resulted mean that we now have a vehicle with an unprecedented low price, which is highly manufacturable."

During the year ahead Rocket Lab will complete full vehicle testing of the Electron vehicle, with commercial operations to follow in early 2017. The company recently announced that four customers have signed to fly satellites on the Electron launch vehicle: Moon Express, NASA, Spire and Planet.