Space travel or space flight is a rocket flight into outer space. Space trips are used to discover outer space, and also have commercial uses as space tourism. All space missions begin with the launch of a missile carrying the spacecraft, the rocket provides the vehicle with a momentum that helps it overcome gravity and leave the Earth's surface. Space travel became geometrically possible after Robert Gooddard published a paper in 1919 entitled "Ways to Reach Huge Heights" where he discussed the idea of using a liquid fuel rocket. It was proven in the lab that these rockets would work in space. Most scientists at the time did not believe that this was possible. The first spacecraft at a height of 189 kilo meters was the German V–2 rocket in 1944. The race began in 1957 when the United States and the Soviet Union issued declarations announcing their intention to launch satellites. The United States announced on 27 July 1957 the plan to launch the Vonjarde Moon in the spring of 1958, while the Soviet Union announced on July 31 the same year that it launched a satellite in the fall of 1957. Valentina Tricchova is the first woman in space and was previously a civil parachutist. Valentina was able to enter orbit on June 16, 1963 aboard the Soviet Vostok 6 spacecraft. Sally Rade is the first American to travel to space on the space shuttle STS–7 on June 18, 1983. Female astronauts traveling to space became familiar in the 1980s.