



Jet Propulsion Laboratory
California Institute of Technology



Rob Manning
Biography 2021

Rob Manning is Chief Engineer for NASA's Jet Propulsion Laboratory (JPL) as well as Chief Engineer for JPL's Engineering and Science Directorate. An Engineering Fellow, he has been designing, testing and operating robotic spacecraft for 40 years including Galileo to Jupiter, Cassini to Saturn and Magellan to Venus and many Mars missions.

In the early 1990's, Rob became the Mars Pathfinder Chief Engineer where he also led the Entry Descent and Landing (EDL) team. After successfully landing and operating the first airbag lander and rover on another planet, he co-conspired the idea to modify the Pathfinder and Sojourner Rover designs to become the Mars Exploration Rovers (MER), Spirit and Opportunity. On MER he led the rover system engineering team as well as the EDL team. At this time, he co-conceived the idea of skycrane landing that was later used by Mars Science Laboratory (MSL).

After MER he became the Mars Program Chief Engineer where he helped plan and integrate the various Mars missions like Phoenix Lander, Mars Reconnaissance Orbiter, MSL and beyond.

In 2007, Rob became the Chief Engineer for the MSL Project that successfully landed Curiosity Rover on Mars on August 5, 2012. Rob was responsible for ensuring that the design, the test program and the team, working together, would result in a successful landing and a productive rover. Rob wrote about his experiences in a book called "Mars Rover Curiosity: An Inside Account from Curiosity's Chief Engineer".

Most recently Rob helped create a team to design and build an emergency use ventilator specifically for the COVID-19 pandemic.

As a result of his luck at JPL, Rob has received four NASA medals, is in the Aviation Week Magazine Space Laureate Hall of Fame in the Smithsonian Air and Space Museum, has received two honorary PhDs, has a minor planet named after him and is an Associate Fellow of the American Institute of Aeronautics and Astronautics. In 2004, SpaceNews magazine named Rob as one of 100 people who made a difference in civil, commercial and military space since 1989.

Rob is a graduate of Caltech and Whitman College where he studied math, physics, computer science, and control systems. He makes his home in Pasadena, CA with his wife Dominique and their daughter, Caline.