# Optech Lidar Technology

Optech Lidar technology has successfully delivered The weather report from Mars at the heart of NASA's Phoenix Mars mission. The Phoenix Mars lander made a dramatic landing on the Red Planet on Sunday, 25 May 25, after a journey of 10 months and hundreds of millions of miles through deep space. The first Lidar results from Mars arrived late in the evening of 28 May, amid cheers and applause from NASA officials and science team members gathered at JPL and the Science Mission Operations centre at the University of Arizona.

The Phoenix Lidar was designed and built by Optech in partnership with MDA Space Missions, with funding from the Canadian Space Agency. The analytical Lidar, which probes the atmosphere above the lander, is the first of its kind to be sent to another world. The Phoenix mission is also the first of its kind, selected by NASA from an initial set of over 20 mission proposals, designed to land in the north polar region of Mars to study the atmosphere and look for habitability supporting life.

## Father of Phoenix Lidar

Optech founder and Chairman Allan Carswell is recognized as the true father of the Phoenix Lidar instrument. After decades of pioneering work developing the analytic Lidar theory, and following terrestrial test campaigns chasing dust devils in the desert, Dr.Carswell was the initial PI of the Canadian contribution to the NASA Phoenix mission, leading the Canadian Science Team and creating the initial design for the Lidar system. Allan remains a key participant of the Canadian Science Team, now led by former student Jim Whiteway from York University.

Optech Lidar technology aboard the NASA Phoenix mission is teaching scientists about the Martian climate and, in doing so, helping us to understand the factors that affect climate change back here on Earth.

Mars weather reports and more information about the mission are available at:

www.space.gc.ca/asc/eng/exploration/phoenix

http://mars.jpl.nasa.gov/