

Cameras Provide Safe Navigation for Pilots, Drivers



*Jet Propulsion Laboratory
Johnson Space Center
Langley Research Center*

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NASA Technology

- ◆ An otherwise successful 423-million-mile trip to Mars can be threatened in the final few feet due to surface hazards preventing a safe landing
- ◆ NASA investigated terrain-sensing technologies, including cameras capable of real-time, 3D imagery under a variety of lighting and surface conditions

Partnership

- ◆ Advanced Scientific Concepts Inc. (ASC) received a Small Business Innovation Research (SBIR) award from the Jet Propulsion Laboratory to adapt their 3D flash light detection and ranging (LIDAR) camera for entry-, descent-, and landing-phase applications
- ◆ ASC also received SBIR awards and a NASA Research Announcement contract to adapt flash LIDAR for docking at the International Space Station

Benefits

- ◆ Two versions of the LIDAR camera are available: the DragonEye Space Camera and the TigerEye camera for terrestrial use
- ◆ ASC has sold 100 cameras to a number of large- and medium-sized aerospace organizations
- ◆ LIDAR cameras are useful in almost any vehicle for collision avoidance and object detection