

Canada's 'dynamic duo' for Webb telescope

August 20 2012, By Rob Gutro

(Phys.org) -- A "Dynamic Duo" from Canada is the latest topic of the "Behind the Webb" series of videos, which goes behind the scenes to highlight technology in NASA's James Webb Space Telescope.

The dynamic duo is actually a combination instrument consisting of the Fine [Guidance Sensor](#) (FGS) and the Near-Infrared Imager and Slitless Spectrograph (NIRISS) science instrument. The FGS will enable the telescope to accurately and precisely point at the correct, intended objects for it to observe. The FGS is packaged together as a single unit with the Near-Infrared Imager and Slitless Spectrograph (NIRISS) [science instrument](#).

The video called "Canada's Dynamic Duo" is part of an on-going [video series](#) about the Webb telescope called "Behind the Webb." It was produced at the Space Telescope Science Institute (STScI) in Baltimore, Md. and takes viewers behind the scenes with scientists and engineers who are creating the Webb telescope's components.

The Canadian Space Agency (CSA) developed the Webb's Fine Guidance Sensor and the Near-Infrared Imager and Slitless Spectrograph. The FGS will direct the telescope precisely, allowing it to study stars and planets forming in other stellar systems. Both were designed, built and tested by COM DEV International in Ottawa and Cambridge, Ontario, Canada with technical contributions from the University of Montréal and the National Research Council Canada, and scientific guidance of the FGS science team.

During the three minute and 16 second video, STScI host Mary Estacion interviewed Karl Saad at the Canadian Space Agency's David Florida Laboratory in Ottawa, Canada.

Mary takes the viewer to the thermal vacuum chamber where the FGS/NIRISS was tested in an environment to simulate the vacuum of space and also the cold environment in which it's going to operate. Viewers will also learn about star-tracking software that is used by the Fine Guidance aSensor.

Provided by NASA

Citation: Canada's 'dynamic duo' for Webb telescope (2012, August 20) retrieved 20 June 2024 from <https://phys.org/news/2012-08-canada-dynamic-duo-webb-telescope.html>

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