Transcript: Robotic Arm Target Practice

Hi I'm Matt Robinson, The MSL lead robotic arm systems engineer and this is your Curiosity Update.

I'm standing here in the MSL test bed and behind me is the MSL test rover. This test rover is the near copy of Curiosity.

End to end accuracy is how well we can, using our vision system, select a target and then position the arm at the target that we selected. We use our cameras mounted to the body of the vehicle and also cameras mounted to the mast to take pictures of our workspace.

Our images come down and we process them. Using these pictures we can build a 3D terrain model of the surface. Once we have that 3D terrain model we can pick out a target.

Today you notice we have a number of rocks here with little targets on. We'll select one of those targets and then we sequence the robotic arm commands to position the arm at the target. Once we're satisfied we send the sequence to Curiosity.

During the months from launch to landing we can perform a number of tests, which will better prepare us for using Curiosity on the surface of Mars.

I'm Matt Robinson and this has been your Cruising with Curiosity update.