NARRATOR: Welcome to Kennedy Now! A look at some of the recent accomplishments and changes underway at America's Premiere Spaceport.

NASA's Kennedy Space Center continues to take bold steps toward launching a flight test for the Orion spacecraft in September 2014. Engineers are putting together the cone-shaped spacecraft inside Kennedy's Operations and Checkout Building.

The agency's Ground Systems Development and Operations Program, called GSDO, is offering its expertise for the flight, which will see a Delta IV-Heavy send the Orion into a high orbit to test the spacecraft's heat shield and other systems.

Orion is designed to carry humans into deep space possibly on missions to an asteroid, Mars or around the moon.

Pepper Phillips, program manager for GSDO, said the mission will give the agency a chance to evaluate its plans for the control room operators and engineers, too.

Pepper Phillips, GSDO Program Manager: The teams are exercising some static tests now, but we're going to be ready with this full-up active test of a live spacecraft.
NARRATOR: Waiting for astronauts at whichever destination they choose may well be a
fleet of small robots steadily turning extraterrestrial soils into rocket fuel and breathing air.
A team of engineers at Kennedy built the first prototype of a mining robot they dubbed RASSOR.
The robust robot uses a pair of barrel-shaped drums to dig and store lunar or Martian soil so it can be processed into usable materials for astronauts.
Some of the students who will make their own robotic contributions in the future tested their
designs in Orlando during this year's regional contest for the annual FIRST Robotics Competition.
The event, funded by private sponsorships, pitted robots designed and built by high
school students against each other. The robots had to throw discs to targets and perform some
climbing tasks to gain points and progress.
Designers from Kennedy and NASA programs mentored several of the teams.
Center Director Bob Cabana, a former astronaut, looked at some of the robots up close
before offering his own praise of the students' work.
Robert Cabana, Director, NASA's Kennedy Space Center: If you look at where we're going as we explore
into the future, what do we do first? We send robots as precursors.

Many of the same skills you use in developing your robots are the same skills that go into the Mars Science Lab Curiosity, they're just a little more refined than what we're using on the floor today.

More robotic competitions are coming up at Kennedy, including the Lunabotics Mining Challenge in May.

That's Kennedy Now!