Carnegie Mellon’s Scarab Rover Joins Other NASA Lunar Projects in Extensive Demo at Lake Moses, Washington

PITTSBURGH—Carnegie Mellon University’s autonomous lunar rover Scarab, developed for NASA to navigate across the powdery surface of the moon and drill for water ice and examine other chemicals in the pitch dark Schackelton Crater at the lunar south pole, will join NASA rover prototypes for testing and a demonstration at Moses Lake, Wash., June 1-14.

The robots are being developed as part of NASA’s Human Robot Systems (HRS) program in the Exploration Systems Directorate. There are some 25 programs at different research centers developing projects for the moon.

The Johnson Space Center will be showing off their new astronaut transport vehicle, Chariot. While JPL will be unveiling “Athlete,” a transport and habitation module resting on a circle of legs. Our role is to show Scarab’s mobility skills and show how well it can navigate in the complete darkness of the Schackelton crater. The bottom of the robot will glow.

The demonstration is another step leading up to a more extensive testing at Monakea in Hawaii in November. Navigation work has to be done so we can focus on drilling and analysis of soils.

We will not be alone in Hawaii. Apparently LockheedMartin has a device focused on in situ resource utilization—oxygen and hydrogen cracking developing a robot for regolith.

The team heading for Washington includes Wettergreen, Spencer Spiker for logistics, Jim Teza, electronics; David Kohenbash, embedded software; Scott Moreland, mechanical lead; Paul Brartlett, a robotics masters student in mechanical engineering; Domenick Jonak, autonomous software.

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They’ve taken software from Zoe at Amboy Crater and reutilizing it on Scarab.

Body text in 12-point Times Roman, 1.5 line spacing. Times Roman is a bit more compact than Times New Roman, so if you’re trying to fit the release on one page, make sure the font is the “old” Times Roman.

The indents can align with the name & phone number of the contact line (as they are here) or for another space-saver, you can make them shorter. Just make sure they’re all the same.

Although 12 is the desired point size, I have at times reduced to 11.5 and 11 to fit on one page. It looks inefficient to have just one line or two on a second page. Then there is the mystery of why different computers print the same doc in varying depths.

It’s a good idea to have “smart quotes” set in your Word preferences. If you need the “straight” quotes for inch marks or any scientific symbols, then put them in separately. And generally, at the end of a quote use “Blank said” instead of “said Blank, unless a title or modifier of some sort follows the name.

“Time, date, place” is a good pattern to follow. A time range beginning with the word “from” should have the word “to” between the starting time and the ending time.

Typeset copy does not need an extra space after periods. The extra period makes it look unprofessional and visually distorted.

To change the footer and header copy, go under “View” and click “Header and Footer.” Click on the icon that selects “Different first page” and go from there. Click “Close” when finished.

I couldn’t find a way to put “–more–“ on pages after the first one, without it also being on the last page. But the headers on pages 2 and on help clarify the issue of how many pages there still are.

Boilerplates follow the release, single-spaced and after the hash marks. But be aware that it does look odd to see the “–more–“ if the hashmarks are at the bottom of the page and the boilerplate starts the next page.

I wanted to fill up this page, but my mind is giving up. Sorry!

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programs in engineering, computer science, robotics, business, public policy, fine arts and the humanities. More than 10,000 undergraduate and graduate students receive an education characterized by its focus on creating and implementing solutions for real problems, interdisciplinary collaboration, and innovation. A small student-to-faculty ratio provides an opportunity for close interaction between students and professors. While technology is pervasive on its 144-acre Pittsburgh campus, Carnegie Mellon is also distinctive among leading research universities for the world-renowned programs in its College of Fine Arts. A global university, Carnegie Mellon has campuses in Silicon Valley, Calif., and Qatar, and programs in Asia, Australia and Europe. For more, see [www.cmu.edu](http://www.cmu.edu).