

Anticipation builds for China's first moon rover mission (Update)

December 1 2013

China Sunday made final preparations to launch its first lunar rover mission, the latest step in an ambitious space programme seen as a symbol of its rising global stature.

State media promised blanket coverage of the launch, scheduled for 1:30 am Monday (1730 GMT Sunday), of the Chang'e-3 rocket carrying the "Jade Rabbit" rover.

UPDATE: [China launches its first moon rover](#)

It will be the world's third rover mission to the moon but will boast more sophisticated technology than US and Soviet missions decades earlier.

"The news channel will begin live coverage tonight at midnight... Spread the word!" state broadcaster CCTV said on its official account on Sina Weibo, China's version of Twitter.

The background of its Weibo page showed the moon's surface in black and white with the gold-coloured rover bearing the national flag of bright red with yellow stars.

During the day the news channel played footage from Xichang Satellite Launch Centre in the southwestern province of Sichuan, showing preparations for blastoff.

China National Radio promised two hours of live coverage starting an

hour before the launch.

"Gonna stay up tonight to watch the live coverage! Go Chang'e! Go Jade Rabbit!" wrote one Weibo user.

"The news on TV about Chang'e 3 has made me incredibly proud," said another.

Only a few "narrow windows" of time are available for the launch over the coming days, some lasting only a few minutes, mission spokesman Pei Zhaoyu told Xinhua news agency on Friday.

If successful, the mission—aimed at exploring the moon's surface and looking for natural resources—will be a milestone in China's space exploration programme.

It is "the most complicated and difficult task yet in China's exploration of space" and incorporates lots of new technology, Xinhua quoted Wu Zhijian, a spokesman with the State Administration of Science, Technology and Industry for National Defence, as saying last week.

Unlike previous American and Soviet versions, the Chang'e-3 could "accurately survey landforms at the landing site and identify the safest spots on which to land", Xinhua has said.

The Jade Rabbit can climb slopes of up to 30 degrees and travel at 200 metres (660 feet) per hour, according to its designer the Shanghai Aerospace Systems Engineering Research Institute.

China could improve on earlier rovers by incorporating technology developed in recent decades, said Morris Jones, an independent space analyst based in Australia.

Optical navigation systems could provide pictures to warn of unsafe landing spots, whereas American and Soviet rovers could only rely on radar to gauge their distance from the ground, he said.

Likewise The Jade Rabbit might be able to move faster because of self-navigation features, while its predecessors were controlled by time-delayed signals from Earth.

"We now have have technologies available to integrate into a lunar lander that were not available in the 1970s," Morris said.

The rover's name—chosen in an online poll of 3.4 million voters—comes from an ancient Chinese myth about a rabbit living on the moon as the pet of Chang'e, a lunar goddess who swallowed an immortality pill.

China sees its space programme as a symbol of its growing international stature and technological advancement, as well as of the Communist Party's success in reversing the fortunes of the once impoverished nation.

The military-led programme aims to establish a permanent space station by 2020 and eventually send someone to the moon.

Since 2003 it has sent 10 astronauts into space and launched an orbiting space module, Tiangong-1.

It also sent probes to orbit the moon in 2007 and 2010.

The first of those intentionally crashed into the moon's surface at the end of its mission. Data it collected was used to create in 2008 what Xinhua called "the most complete lunar hologram to date".

The second probe was sent to "verify key technology", orbit the moon and take pictures of the landing site in preparation for Chang'e-3, Xinhua said. After completing that task it was sent into deep space to monitor an asteroid.

Not all Weibo users praised the latest mission, saying China's global stature needs improving in other ways and public funds might be better spent helping its own people.

"What kind of strategic significance is there?" one commentator said.

"It's a waste of taxpayer money. Citizens still bear heavy burdens and the country is still weak in foreign relations."

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Citation: Anticipation builds for China's first moon rover mission (Update) (2013, December 1) retrieved 20 April 2024 from <https://phys.org/news/2013-12-china-moon-rover-mission.html>

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