

APRIL 15, 2023

GULF NEWS





THE VIEWS | P10 A good Friday and a better future



NATION I P3 **Weighing in** space? Al Neyadi shows how



BUSINESS | P5 Sukoon to buy Dubai takaful insurer Ascana





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Weighing in orbit? Sultan of Space shows how it is done

AL NEYADI SET TO HELP UNDOCK SPACEX CRS-27 CARGO DRAGON SPACECRAFT

DUBAI

BY SAJILA SASEENDRAN Senior Reporter

ow are astronauts weighed in the weightlessness space? UAE tronaut Sultan Al Neyadi, who is on the longest Arab space mission on the International Space Station (ISS) has shared a video showing how it is done. Taking to social media, Al Neyadi posted the video in which he described the procedure in Arabic. In the post, he wrote: "On the International Space Station, weight is not measured like [how] we measure it on Earth. For this, we use a special device called BMMD (Body Mass Measurement Device).

Al Neyadi explained that the device measures the mass of the body based on its oscillation. "But regardless of our actual weight, we feel like we're floating because gravity is almost nonexistent," he pointed out.

Al Nevadi also posed a question to his followers asking them to share their weights in Ramadan with a big smiley emoji.

Using the BMMD device

He can be seen using the BMMD device by doing pushup-like oscillating moves using the spring on it for about eight times. He holds the spring with both hands and pushes his chest against the spring, standing on the device all the while.

There are two types of body mass measurement devices on



 Emirati astronaut Sultan Al Nevadi said it's important to monitor body mass in space to ensure astronauts have adequate energy intake and to maintain their health.

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the ISS - the Russian body mass measuring device (BMMD) and Nasa's Space Linear Acceleration Mass Measurement Device (SLAMMD). Both devices have produced body mass measurements that demonstrated that many crew members' body mass had reduced throughout extended space flights in the past.

Al Neyadi had highlighted the

importance of exercise in space in his previous posts. During his live interaction with the media on Wednesday night, he revealed that he has managed to maintain his weight and his health parameters had been constantly monitored by Dr Hanan Al Suwaidi of the Mohammad Bin Rashid Space Centre (MBRSC) in Dubai.

Meanwhile, Nasa said Al Ney-

adi is preparing to help with the undocking of SpaceX CRS-27 Cargo Dragon spacecraft from the ISS today. He will be on duty along with Nasa Flight Engineers Stephen Bowen and Woody Hoburg and Frank Rubio today morning, completing the stowage of critical research samples and loading of used station hardware inside Dragon.

Scan the QR code

on the left to watch

Al Nevadi measure

weight in space and

to read the full story

Dewa SAT-2 launch postponed again

Launch by SpaceX Falcon 9 rocket moved to 10.47am today

BY SAJILA SASEENDRAN Senior Reporter

ad weather delayed the lift-off of Dubai's Earth observation nanosatellite Dewa SAT-2 on a SpaceX rocket, for the third time, yesterday.

The launch of Dubai Electricity and Water Authority (Dewa)'s 6U nanosatellite by a SpaceX Falcon 9 rocket from Vandenberg Space Force Base in California, USA was put on hold right ahead of final countdown due to unfavourable weather conditions.

The next launch attempt would be at 10.47am here today, according to SpaceX.

The Falcon 9 was in startup, when internal computers took over the countdown after the T-minus one-minute mark, when the launch director said "hold, hold, " just 30 seconds before the launch. "Due to unfavourable weather conditions, now targeting tomorrow, April 14 at 11:47pm. PT for launch of Transporter-7 from SLC-4E in California," SpaceX tweeted. Dewa's 6U nanosatellite was among 51 spacecraft that were to be launched into orbit by the Transporter-7 rideshare mission.

Nanosatellite

Dewa SAT-2 nanosatellite was designed and developed at Dewa's Research and Development Centre at the Mohammad

spacecraft to be launched by

Bin Rashid Al Maktoum Solar Park, in cooperation with NanoAvionics in Lithuania. Dewa SAT-2 features a high-resolution camera (4.7 meters).

How it will help

Dewa said the new satellite is also equipped with Infrared equipment to measure greenhouse gases. It will improve the efficiency of Dewa's generation, transmission, and distribution divisions by monitoring solar power plants and enhancing the accuracy of generation predictions.

This will be achieved through forecasting of weather patterns, seawater temperature and salinity, as well as monitoring of electricity transmission lines. Additionally, the satellite will aid in detecting water leaks and identifying any changes in the infrastructure, further optimising Dewa's operations.

Dewa is the first utility in the world to launch nanosatellites to improve its planning, operation, and maintenance activities. Using satellite network communication, IoT and Artificial Intelligence contributes to improving the efficiency of photovoltaic solar panels at the Mohammad Bin Rashid Al Maktoum Solar Park, the largest single-site solar park in the world, using the Independent Power Producer (IPP) model.