


 FRIDAY JANUARY 10, 2025, RAJAB 10, 1446
 WEEKEND EDITION

gulfnews.com

GULF NEWS



Scan for our social media



SpaceX rocket set to launch UAE satellites

MBZ-SAT AND HCT-SAT 1 TO LIFT OFF FROM CALIFORNIA

DUBAI

BY SAJILA SASEENDRAN

Chief Reporter

The UAE yesterday announced that two of its satellites – MBZ-SAT and HCT-SAT 1 – will be launched on Elon Musk's SpaceX rocket from Vandenberg Space Force Base, California, this month.

MBZ-SAT, the most advanced Earth observation satellite in the region, and HCT-SAT 1, an Earth observation CubeSat developed with participation from students, will be launched together on a Falcon 9 rocket.

Addressing a press conference, Salem Humaid Al Marri, Director-General of the Mohammed Bin Rashid Space Centre (MBRSC), said: "It is a proud moment for us that we are launching two very different satellites – one very large satellite built over years of experience, and another, which is trying to train students and build their capabilities. Through the HCT programme, we were able to reach every emirate and about 50 students."

The HCT-SAT 1 nanosatellite was developed by HCT students under the guidance of MBRSC engineers.

Launch on January 14?

Originally slated for launch in October 2024, the launch of MBZ-SAT was pushed back for two months due to technical reasons. When *Gulf News* asked if the launch date would be tentatively on January 14, Al Marri said: "Launch dates can change depending on various factors. Our partner SpaceX and us will jointly announce the precise launch date soon."

However, he said that MBRSC is fully prepared for the launch of MBZ-SAT, 90 per cent of which was built by UAE-based companies. "We have a dedicated team on site in the US and another team here at Mission Control in Dubai to ensure everything is ready for the launch," Al Marri said.

Faster, clearer images

Amer Al Sayegh Al Ghaferi, Project Manager, MBZ-SAT, said the satellite will produce high-resolution images with double the image capture accuracy, 10 times more images and four times faster data transfer speeds, than current capabilities.

"MBZ-SAT will ensure timely delivery of high-resolution images and critical data with image processing and downloading completed in under two



- MBZ-SAT will produce high-resolution images with double the image capture accuracy, 10 times more images and four times faster data transfer speeds than current capabilities.

TII TO DEVELOP MBR EXPLORER LANDER

Shaikh Hamdan Bin Mohammad Bin Rashid Al Maktoum, Crown Prince of Dubai, UAE's Deputy Prime Minister and Minister of Defence, and Chairman of the Supreme Space Council, yesterday witnessed the signing of an agreement to develop the MBR Explorer lander for the Emirates Mission to the Asteroid Belt (EMA).

The agreement was signed by Dr Ahmad Belhou Al Falasi, Minister of Sports, and Chairman of the UAE Space Agency; and Faisal Al Bannai, Adviser to the UAE President for Strategic Research and Advanced Technology Affairs, and representative of the Technology Innovation Institute (TII). Shaikh Hamdan said: "Our achievements in the space sector reflect our relentless ambition to promote the UAE's competitiveness through pioneering steps that combine ambitious vision and scientific innovation."

The UAE Space Agency selected TII to develop and execute the lander, which will be on board the MBR Explorer. It is designed to study Justitia, the seventh and final asteroid of the mission. TII will lead the design, development and testing phases of the lander, which will be developed in the UAE. TII was selected for the project following the Mission Concept Review (MCR) of the lander, which was implemented by two UAE-based startup companies, 971Space and SADEEM Space Solutions.

— Gulf News Report

2 hours

time MBZ-SAT will take to process images and download them

hours. Powered by a modern electric jet propulsion technology, MBZ-SAT can ensure optimal positioning for precise imaging," he said.

These images will provide insights for applications such as environmental monitoring, disaster relief, and infrastructure management.

Hessa Ali, Deputy Project Manager, MBZ-SAT, said: "This satellite would not only reflect our national capabilities but also set new standards in high-resolution satellite imagery. More than 200 en-

gineers, researchers, and experts—all driven by a shared vision—worked tirelessly towards making MBZ-SAT a reality and achieving our objectives."

Live video call from the US

During a live video call from the US, some of the key members of the MBZ-SAT team gave updates about the mission.

Abdullah Al Shehhi, Launch Manager, said MBZ-SAT has completed standalone testing. "We are currently integrated with the payload adapter, and will soon be integrated into the rideshare stack. Following that, the satellite will undergo encapsulation, leading up to the launch," he said.

Muhannad Al Mazrouei, Product Assurance Lead, added: "We utilised advanced technologies and conducted several tests on MBZ-SAT."