

6 22312 00341 1

**TABLOID | P4-5**

**RIHANNA, SCORSESE LIGHT UP CINEMA CON 2023**

DiCaprio, Krasinski talk about their latest movies



**SATURDAY** APRIL 29, 2023 SHAWWAL 9, 1444

[gulfnews.com](http://gulfnews.com)

**GULF NEWS**




Scan for our social media

**BUSINESS | P6**

**Al Ghurair Foods to invest Dh1b in Abu Dhabi**



**THE VIEWS | P10**

**Why India's population is an advantage**



**NATION | P4**

**Police arrest 500 for selling drugs via WhatsApp**



**Summer Offer**

**ABC CARGO & COURIER**

800 916 [www.abccargo.ae](http://www.abccargo.ae)




**AL NEYADI SPACEWALKS INTO HISTORY**

UAE astronaut sets another milestone, becomes first Arab to perform feat | **P5**





With this week's new discoveries by the Hope probe, the achievements of the Rashid rover mission, and Sultan Al Neyadi's first ever spacewalk by an Arab astronaut, the UAE continues to make a meaningful contribution to space exploration and advancements in science."

President His Highness Shaikh Mohammad Bin Zayed Al Nahyan



Today marked a historic moment as Sultan Al Neyadi embarked on his first spacewalk. During this mission, he installed new components and performed maintenance on the International Space Station, becoming the first Emirati, Arab, and Muslim astronaut to walk in outer space."

His Highness Shaikh Mohammad Bin Rashid Al Maktoum | Vice-President and Prime Minister of the UAE and Ruler of Dubai

# SULTAN SCRIPTS SPACEWALK HISTORY

Giant leap for Zayed's Ambition and UAE flag into outer space outside ISS

**DUBAI**  
BY SAJILA SASEENDRAN  
Senior Reporter

**U**AE astronaut Sultan Al Neyadi secured his position in history books once again by performing the first spacewalk for the Arab world in the vacuum of space outside the International Space Station (ISS) ahead of schedule yesterday.

The Emirati astronaut, who is on the longest Arab space mission, literally made a giant leap for taking 'Zayed's Ambition' and the UAE's flag into outer space when he egresses out of the Quest Airlock of the station almost 30 minutes after the spacewalk officially began at 5.11pm.

The 'Sultan of Space' proudly wore the UAE flag on the shoulder of his bulky protective space suit or Extravehicular Mobility Unit (EMU) that weighs 145kg on Earth. He also wore the UAE's seven lines national logo with the caption "Impossible Is Possible" on the cuff of his suit.

He, along with Nasa astronaut Stephen Bowen performed the first spacewalk or Extravehicular Activity (EVA) of Expedition 69, the fourth for the ISS this year.

The achievement of the former network engineer with the UAE Armed Forces made the country 10th in the world to conduct a spacewalk outside the ISS.

## Live stream

The much-anticipated event was live-streamed by the Mohammad Bin Rashid Centre (MBRSC), the agency behind the UAE Astronaut Programme in Dubai, from 4.30pm UAE time.

A couple of hours prior to the spacewalk, Al Neyadi tweeted: "Counting down the hours until we pass through the ISS airlock into space. Wearing the spacesuit and proudly bearing the UAE flag on my arm, I will soon be undertaking the Arab world's first spacewalk. Wish us luck!"

The Nasa live stream, which was also aired by MBRSC, first showed him and Bowen all suited up inside the Equipment Lock of the Quest Airlock of the ISS. Later, they moved to the 'Crew Lock,' which provides the actual exit for performing spacewalks



The UAE's space program has achieved a new historic milestone with @astro\_alneyadi becoming the first Arab to perform a spacewalk. We extend our congratulations to the UAE's leadership, its people, and the entire region for this remarkable accomplishment."

Shaikh Hamdan Bin Mohammad Bin Rashid Al Maktoum | Crown Prince of Dubai and Chairman of Dubai Executive Council

where their suits were depressurised before egressing.

The historic EVA was planned for six-and-a-half hours. It was wrapped up a few minutes later with one unfinished work following a glitch.

The duo's major tasks included routing cables for future upgradation of the solar power system of the space station and retrieving a Radio Frequency Group (RFG) antenna unit used for the space station's communication with Earth.

They also had to rearrange foot restraints spread out on different parts of the station's exterior for their own use and to facilitate the use by future spacewalkers.

They completed the first main task of routing cables for the future augmentation of the station's power channels with new ISS Roll-Out Solar Arrays (IRO-SAs) flawlessly.

They also installed and secured some multilayer insulation on the solar arrays. The duo also

rearranged APFR or Articulating Portable Foot Restraint (foot hold) ahead of schedule.

However, they faced a major challenge with the removal of the RFG unit.

As part of the task, Al Neyadi removed a multi-thermal insulation tent over the equipment.

Bowen was carried to the RFG unit by the station's Canadarm-2 robotic arm. He used a drill to unscrew the bolts to remove the RFG hardware from the station. While he managed to remove eight bolts, the centre jacking bolt sheared off and the RFG unit could not be removed from its stanchion.

While the Mission Control Center (MCC) at Nasa's Johnson Space Center in Houston tried to help them troubleshoot the bolt, Al Neyadi had to go back to fetch an EVA hammer to fix the bolt.

Since that also did not work, the astronauts were instructed to refix the bolts.

While it was the eighth spacewalk for veteran Bowen, rookie Al Neyadi performed equally well, often receiving appreciation from Nasa's Cap Com (Capsule Communication) astronaut Anne McClain.

While giving instructions to the two astronauts from the Mission Control Centre, McClain kept appreciating the jobs well done by Al Neyadi. At one point of time, she also said he had a surgeon's hands.

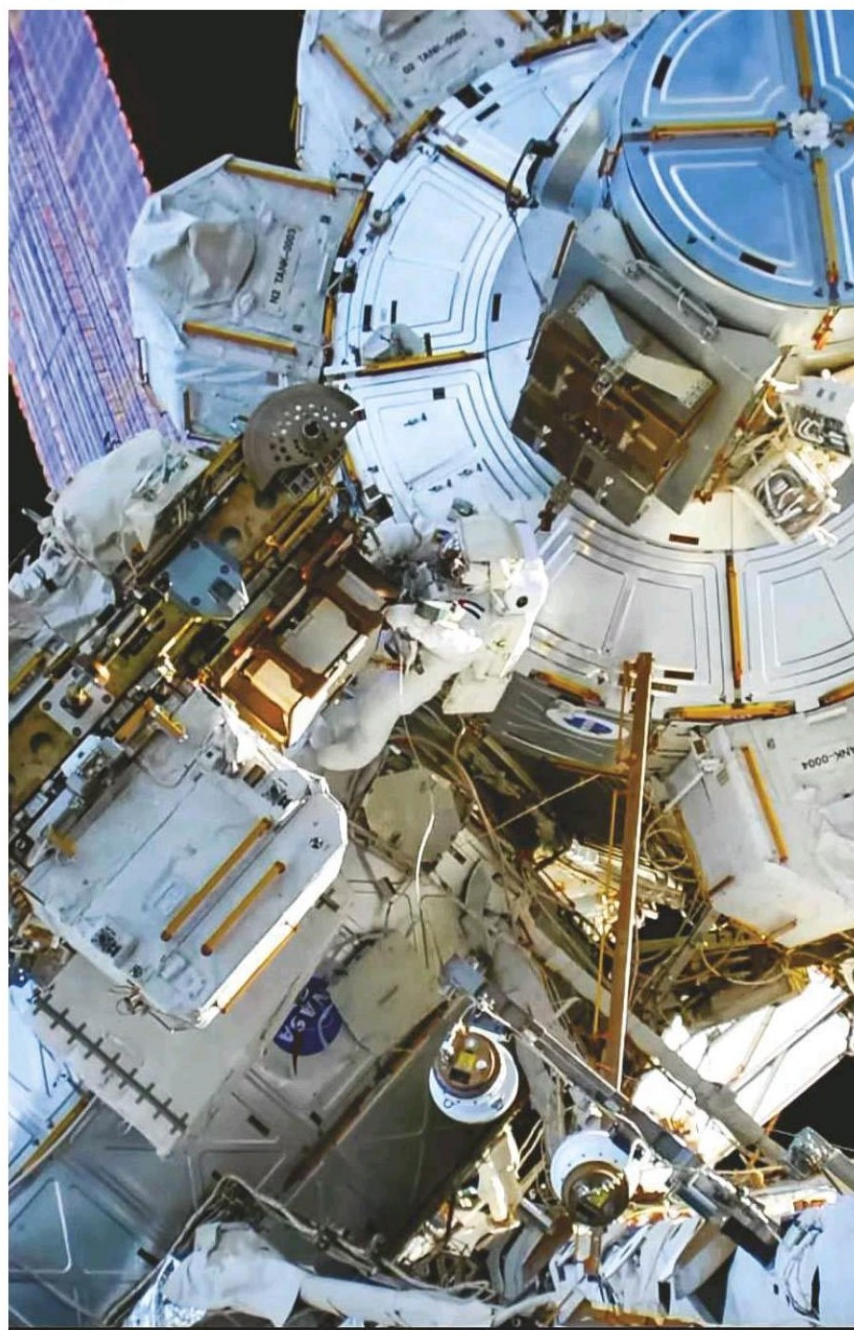
## Wonders of outer space

The live visuals offered magnificent views of the wonders of outer space as the two astronauts kept translating across the station's surface by pushing against the handles on the outside of the station.

When the first sunrise took place during their mission, Al Neyadi enjoyed the view and said it was beautiful.

Meanwhile, the UAE's first astronaut and Al Neyadi's backup on this mission, Hazzaa Al Mansouri, who is also the Increment Lead for Expedition 69, monitored the mission from the Johnson Space Centre.

The ground station team and top officials of the MBRSC also monitored the historic space event from the Mission Control of MBRSC.



Sultan Al Neyadi, along with Nasa astronaut Stephen Bowen, perform the first spacewalk or Extravehicular Activity (EVA) of Expedition 69, the fourth for the ISS this year.

# Hope Probe uncovers new data about dust movement on Mars

The orbiter also captured starlight in planet's atmosphere

**DUBAI**  
Gulf News Report

**T**he Emirates Mars Mission's Hope Probe has released its seventh batch of data on the Martian atmosphere, the UAE Space Agency announced today.

The data was captured by the Probe's three instruments, EMIRS, EMUS, and EXI, between September 1, 2022, and November 30, 2022.

Zakareyya Al Shamsi, Project Director, Emirates Mars Mission, said: "The Hope Probe's data and observations come in line with an increased global interest in understanding Mars. The various data batches captured by the Emirates Mars Mission provide the international scientific community with valuable information, while highlighting the UAE as a key contributor to the development of space science and technology.

Al Shamsi added: "The Emirates Mars Mission team will continue to analyse and release new data on Mars every three

The Emirates Mars Mission team will continue to analyse and release new data on Mars every three months to provide a deeper understanding of the natural phenomena on the red planet."

Zakareyya Al Shamsi | Project Director, Emirates Mars Mission

months to provide a deeper understanding of the natural phenomena on the red planet."

## Seventh data batch

The seventh data batch includes high cadence observations of dust movement captured by the Emirates Ex-

ploration Imager (EXI) on August 25; Sep. 6, 13, 15, 24; October 1, 6, 15, 19, 20, 29; and November 9, 10, 16, 2022.

The Emirates Mars Ultraviolet Spectrometer (EMUS) performed the first observation of stellar occultation in Extreme Ultraviolet wavelengths to

2.1

Terabytes of data released by UAE's Hope Probe so far

study the Martian upper atmosphere. Data captured by EMUS between October 24 and 27, 2022 contains stellar occultation observations where the instrument detects stellar light as it passes through the atmosphere of Mars allowing for the retrieval of densities of CO2

and other properties along with their vertical distributions.

The data set also includes a Field of View (FOV) mapping experiment for EMUS that was carried out on October 3, 2022. By using spacecraft slews to repeatedly drift a star across the instrument FOV as it observes, the team is able to confirm instrument alignment and refine pointing knowledge.

With the seventh data release, the Emirates Mars Mission's 'Hope Probe' has released a total of 2.1 Terabytes of data on the atmosphere of the red planet through the mission's Science Data Centre.