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# ARAB NEWS

*The Voice of a Changing Region*

SINCE 1975



The crew applauded after mission commander Peggy Whitson gave Rayyanah Barnawi a commemorative pin to mark the Saudi astronaut being the 600th person to go into earth orbit. Reuters

### SOARING AMBITION

## *'We're living a dream': Saudi astronauts board space station 400km above earth*

Dhah Al-Mutairi, Jasmine Bager Riyadh

Saudi astronauts Rayyanah Barnawi and Ali Alqarni boarded the International Space Station more than 400 km above the earth on Monday after a record-breaking flight.

Their travel time of 15 hours and 35 minutes from launch to docking was the fastest recorded by their SpaceX Dragon capsule.

They were welcomed to the space station by the seven astronauts already on board — three Russians, three Americans, and Emirati Sultan Al-Neyadi.

Barnawi in particular made history. A stem cell researcher, not only is she the first Saudi woman in space, but she received a special commemorative pin to mark being

the 600th person to experience earth orbit, and the 72nd woman.

"We are now living a dream that we did not expect to become a reality. This trip represents Saudis and the entire Arab world. It is also an opportunity to discover space," Barnawi said after docking with the space station.

"This shows how space brings everyone together. I'm going to live this experience to the max."

Alqarni, a fighter pilot, dedicated the visit to everyone back home. "This mission is not just for me and Rayyanah. This mission is also for the people with ambition and dreams," he said. The Saudi astronauts would carry out "scientific experiments that will benefit humanity."

The two Saudis were joined on

**This moment is historic, not just for me, but for every Saudi. I couldn't have done it without the support, love, and trust from all of you guys.**

Rayyanah Barnawi  
Saudi astronaut

their flight by John Shoffner, a businessman from Tennessee who started a sports car racing team, and retired NASA astronaut Peggy Whitson, the mission commander. She now works for Axiom Space, the company in Houston, Texas, that organized the 10-day trip, its second to the space station.

"It was a lovely ride," said Whitson, who has made the journey

three times before. "It was the softest docking I've ever felt."

Earlier, the Saudi astronauts sent greetings from their capsule as they flew to the space station. "To the people around the world, the future is very bright, and I would like you to dream big. Believe in yourself and in humanity," Barnawi said.


"This moment is historic, not just for me, but for every Saudi. I couldn't have done it without the support, love, and trust from all of you guys."

Alqarni said: "This moment is historic, not just for me, but for every Saudi. I couldn't have done it without the support, love, and trust from all of you guys."

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# Saudi Towards Space




**Today, we are proud of the launch of the scientific mission of our heroes on a journey in which Saudi astronauts will lead research and experiments to serve humanity in light of the unlimited support of our wise leadership.**

**MOHAMMED AL-TAMIMI**  
CEO of Saudi Space Commission



**It feels amazing to be viewing the Earth from this capsule.**

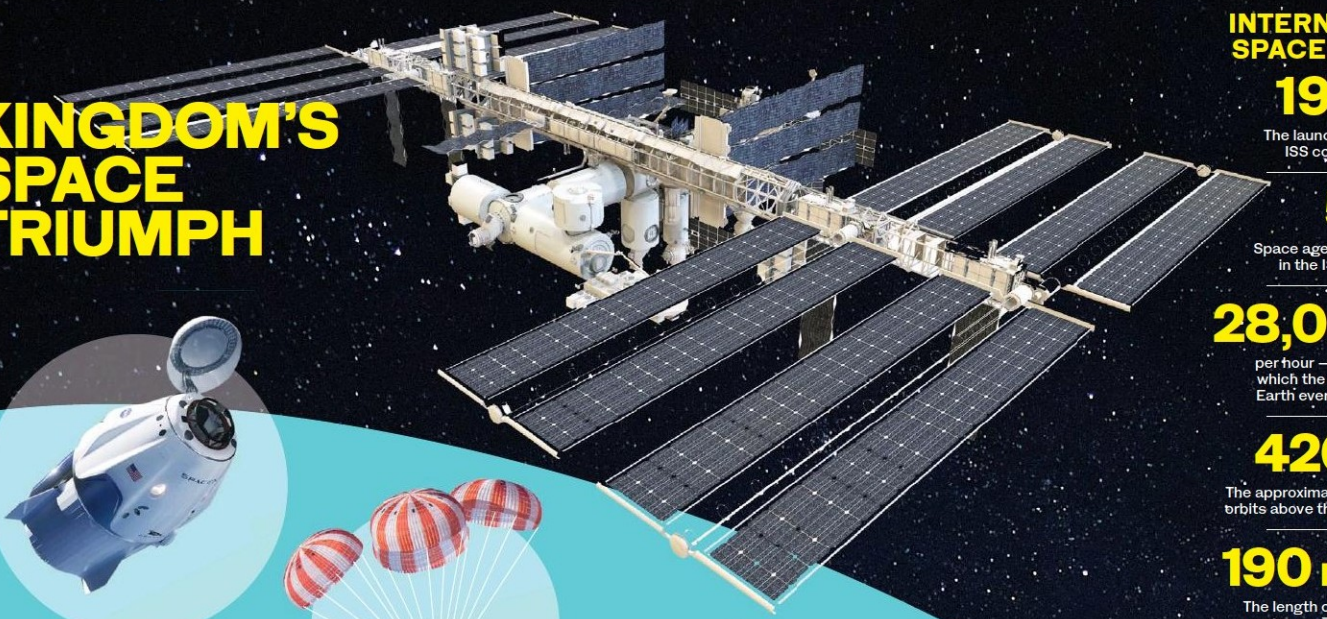
**RAYYANAH BARNAWI**



**This moment is not just for me, but historic for every Saudi.**

**ALI ALQARNI**

## KINGDOM'S SPACE TRIUMPH



**INTERNATIONAL SPACE STATION**

**1998**  
The launch of the first ISS component.

**5**  
Space agencies involved in the ISS project.

**28,000 km**  
per hour – The speed at which the ISS orbits the Earth every 90 minutes.

**420 km**  
The approximate altitude the ISS orbits above the Earth's surface.

**190 meters**  
The length of the ISS, which measures 73 meters wide.

### BACK TO EARTH

- 1** Before entering the atmosphere
  - Return journey begins with separation from the ISS.
  - Return trip takes 6-30 hours, depending on the station's location at the time.
  - Critical moment begins at the entry stage to the atmosphere.
  - Vehicle's speed at entry is about 28,000 km per hour.
  - Highest temperature during entry is 1,927 degrees Celsius.
  - During entry, communication between the contact center and vehicle is interrupted for six minutes.
- 2** After entering the atmosphere
  - Two parachutes are launched from the vehicle at an altitude of 5.5 km.
  - Landing parachute reduces speed to 563 km per hour.
  - Four more parachutes are deployed at an altitude of 2 km.
  - Second release of parachutes reduces vehicle's speed to 192 km per hour.
- 3** Landing
  - Vehicle's speed continues to fall until it reaches expected landing point at a speed of 27 km per hour.

A GIANT LEAP

# Our heroes in space

The Kingdom celebrates Ax-2 mission specialists Rayyanah Barnawi and Ali Alqarni as their historic journey to the ISS inspires the next generation of Saudi astronauts

Dhah Al-Mutairi Riyadh

The Arab world is celebrating a historic moment after three Arab astronauts were united in space for the first time, with Emirati astronaut Sultan Al-Neyadi welcoming Saudi astronauts Rayyanah Barnawi and Ali Alqarni to the International Space Station.

"Following in Prince Sultan bin Salman's pioneering footsteps, three Arab astronauts will be in space together," tweeted Al-Neyadi.

The Axiom Mission 2, or Ax-2, journeyed to the ISS in the SpaceX Dragon Freedom, which docked on the space-facing port at about 4:12 p.m. KSA time. The Ax-2 mission set a new record for transit time from liftoff to soft capture at 15 hours, 35 minutes. It was the most efficient and fastest transit to the ISS from Launch Complex 39A at NASA's Kennedy Space Center in Florida.

In the hours before reaching the ISS, while in orbit, the Saudi astronauts greeted the Kingdom from space.

"We are here feeling micro-gravity thanks to our Kingdom of Saudi Arabia, and the leaders, King Salman, and the visionary Crown Prince Mohammed bin Salman, for their support in this



Princess Reema bint Bandar at the Ax-2 launch with Abdullah Al-Swaha, Mohammed Al-Tamimi, and dignitaries in Florida. Twitter/msTamimi

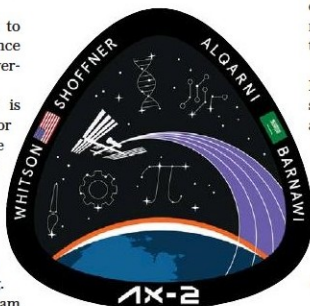
mission," said Barnawi.

She added: "To the people around the world, the future is very bright, and I would like you to dream big. Believe in yourself and in humanity."

Alqarni shared his gratitude to King Salman and the crown prince for their "never-ending empowerment, support and trust."

He added: "This moment is historic, not just for me, but for every Saudi. I couldn't have done it without the support, love and trust from all of you guys."

The Ax-2 launch took place slightly after midnight in the Kingdom, and Saudis around the country gathered to witness history in the making. Many tuned in to the livestream



## HIGHLIGHTS

- The Ax-2 is a planned 10-day mission that includes eight days on the International Space Station, one day for ascending and docking and one day for undocking and descent.

- The Ax-2 set a new record for transit time to the ISS from lift-off to soft capture at 15 hours, 35 minutes.

- The crew of the second fully private mission will witness 16 sunrises and sunsets a day aboard the ISS.

to witness the docking and the welcoming of the Saudi astronauts into the ISS.

The monumental flight of Saudis into space reflects the ambitions of the nation and has inspired the next generation to take giant leaps toward space travel.

"As our Crown Prince Mohammed bin Salman said, 'the sky is the limit' for Saudi society's ambitions. Today, we are literally living in this moment," said Prince Mansour bin Saad Al-Saud, assistant secretary-general at the King Faisal Foundation.

Amal Shuqair, the deputy minister for scholarships at the ministry of education, was present during the Ax-2 mission launch. The Saudi delegation included

Princess Reema bint Bandar, the Kingdom's ambassador to the US; Mohammed Al-Tamimi, the CEO of the Saudi Space Commission; and Abdullah bin Amer Al-Swaha, the chairman of the board of directors of the commission.

"I feel like we all shared the same feeling of being proud of them and of this mission. We were the talk of the town," said Shuqair.

She added: "All the Saudi students watching the launch were very eager to take in the footsteps of the two Saudi astronauts."

The families of the two Saudi astronauts were also present at the Kennedy Space Center in Florida, bidding farewell to them ahead of the launch.

In a Facebook post, Ahmed Barnawi, Rayyanah's younger brother, shared his feelings on witnessing his sister become the first Saudi and Muslim woman to set off to the ISS.

"The excitement, pride, and happiness is overwhelming. Big sister is taking more than just a step, further than just a leap, she's soaring ... into space," said Ahmed Barnawi.

The Saudi astronauts, a day after they blasted off to space, have become heroes and role models for young Saudis, including Anmar Al-Asiri, who shared his joy and excitement at the Saudi space mission.

In a video uploaded by Anmar's father, Hossam, on Twitter, Anmar greeted the Saudi astronauts and

proudly showed them his DIY space rocket.

In celebration of the Saudi mission, Ithra in Dhahran was lit in blue to mark the historic occasion.

In the follow-up to the launch, the commission organized three major Saudi Towards Space exhibitions in Riyadh, Jeddah and Dhahran. The exhibitions and their accompanying attractions will run until June 2.

Targeted at youth, the exhibitions will highlight the country's research contributions and scientific impact in the sector.

The Ax-2 mission crew will witness 16 sunrises and sunsets a day on the ISS. The ISS international laboratory has supported several scientific discoveries, publications and historic breakthroughs.

During their time on the ISS, the Saudi mission specialists will conduct 14 experiments, including research on inflammatory diseases, intracranial pressure and monitoring changes in the optic nerve. They will also undertake an artificial rain experiment which simulates the cloud seeding process used in the Kingdom and other countries to increase precipitation rates.

The Ax-2 is a planned 10-day mission that includes eight days on the ISS, one day for ascending and docking and one day for undocking and descending. The mission marks the second fully private mission to the ISS.