

Mars the goal 50 years after Gagarin flight

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Fifty years after Yuri Gagarin's voyage into space, governments pool their resources and expertise, particularly when it comes to the next big prize - reaching Mars.

When Soviet cosmonaut Yuri Gagarin became the first man to orbit the earth, space exploration was about national pride and ideological supremacy.

Fifty years later, international scientists and governments pool their resources and expertise, particularly when it comes to the next big prize - reaching Mars.

The huge cost of exploring the Red Planet and beyond is one of the factors behind countries' increased collaboration in exploring space.



Space exploration was a matter of national pride when Soviet cosmonaut Yuri Gagarin first orbited the earth 50 years ago (AP).

But if there's no longer a 'space race', has the incentive gone to truly explore the solar system?

Preparing for the next leap

When Yuri Gagarin began his voyage into space, the USSR and the world watched with great anticipation.

The voyage still stands as one of the great global achievements.

Russia's latest mission is a simulated journey to Mars, taking place in an improvised mock capsule in one of Moscow's many science institutes.

The crew of six cosmonauts has been inside the 550-cubic metre facility since June the 3rd, last year.

It's called the Mars 500 experiment - an international collaboration lasting more than 500 days.

Three of the cosmonauts are from Russia, with Italy, France and China represented as well.

The aim is to collect data on how their bodies and minds react to the isolation, the cramped conditions, and to each other, being together for such a long period of time.

But the research has limitations, as the cosmonauts are experiencing few of the physical effects of being in space, including the feeling of weightlessness, and the radiation exposure that occurs in space.

The simulated mission reflects a big shift in space exploration since the Gagarin era.

But Professor Alan Smith, Head of Department and Director at the Mullard Space Laboratory, said space exploration has not gone backwards.

“It perhaps hasn't progressed in recent years as it did in the days of Gagarin - those heady days where every space flight was breaking new ground.

“The next big challenge man faces is an enormous step - to go to another planet and that's a long journey - two years way from home in space ... that's a very, very difficult thing to be done.

“It can't be done straight off, preparations have to be made,” he said.

Return phase

The Mars-500 mission reflects the realities of the space industry today, where extensive simulations are expected before governments and agencies can justify the massive cost, and extreme risks, of journeying far into space.

The cosmonauts are currently simulating the return leg of their mission.

This is an important phase of the mission, according to Mars-500 director, Igor Ushakov.

“It is going to be a difficult journey because numerous isolation experiments showed that the second half of isolation experiments are quite difficult psychologically, so we might face definite problems, but considering the first part of the experiment we are looking ahead with optimism,” he said.



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