

a
s
t
r
a
n
e
w
s

02/28/22
9th issue



Hello everyone!

Welcome to the 9th issue of *Astra News*. It was meant to be a special Mars issue, and it still is.

I am Russian, Ukrainian, Belarusian and American. For most of us the war in Europe is a war between Russia and Ukraine, for most of us it seemed to have started on February 24. In reality it's an ongoing eight-year war that on that date took an inconceivable dramatic turn. And for all those of us who live in or are from Ukraine, Russia or Belarus it's not only a war between two countries, it's a war within our families.

Support Ukraine. Do not spread any hate, because doing so fuels this conflict and war further.

I want to thank those who are already doing this.

Another thing that I will address. When there are wars in the world, the colonization of another planet seems far off and not important. But as we become a multi-planetary species, we must make sure that space does not become another field of conflict.

Astra News goes against space races in any way, shape or form.

Space is our chance to become a peaceful multi-planetary species. Please, let us not concentrate only on becoming multi-planetary.

Yours,
Leonid

For the cover of the 9th issue, I made a collage called "A Trip to Mars" as a homage to the film "[A Trip to the Moon](#)" (1902). Another way to name this collage is "A Trip from the Moon to Mars". [ESA/Nubble image](#) used for the background, it shows the sky around the ultra diffuse galaxies NGC 1052-DF4 and NGC 1052-DF2.

Table of Contents

Impressions	3
“Come and See” (1985)	
The Republic of Mars	4
Perseverance. The first 365 sols on Mars. By Leonid Vishnevskiy	5



IMPRESSIONS

Page 3

ABOUT IMPRESSIONS

A review suggests an objective view aiming to be impersonal to a certain degree, meant not to share your favorite movie or book (in fact the reviewer could dislike the movie/book he is writing about), but rather to rate the movie/book. *Astra News* suggests to you a free hand of writing reviews, meant to share what you like, in which you set your criteria. From here comes the name "Impressions". I purposely omitted the word "text", because why limit ourselves to text? And why limit ourselves to movies and books?

In this issue

Impression of the movie "[Come and See](#)" (Belarusfilm, 1985), director Elem Klimov.

This is not what the special Mars issue was going to be, but it came to this. This movie is not rated, but it would have a minimum of a R rating. However, the main character is around 14 years old and he sees all of this. So do the teens in war today. This movie shows us what war really is.

It is set in Belarus during the World War II.

Because I am so short of time for this issue to tell of the movie myself, I found this [review of the movie by Roger Ebert](#). I will quote one sentence from it:

"All he sees is horror, and all he doesn't see is horror, too".

[Movie trailer \(R\)](#)



NO
WAR

THE REPUBLIC OF MARS

Pages 4 - 8

ABOUT THE REPUBLIC OF MARS

If you dream of us, humans, to become a multi - planetary species and see Mars as our chance to build a better world for humankind, this project is for you. Please, see the beginning of this project in issues No. [1](#), [3](#), [6](#) and [8](#)

In this issue

Built on Earth and sent to Mars. They are the first ones to set tracks on a distant planet we will eventually call our home. Born on Earth, they are waiting for us.

Become friends with one of them.

Meet the [Perseverance](#) rover and the helicopter [Ingenuity](#).

Perseverance. The first 365 sols on Mars

Read, [listen to](#) (mp3) or do both. By Leonid Vishnevskiy, 2022

Sol 0

Last year, I was seated onto a rocket and sent to Mars. Today, I am landing on it. The parachute has just deployed, my speed is decreasing. Once my speed will decrease enough, the heat shield will be removed, and I will be able to see Mars. All I see so far is blackness in front, and with one of my other cameras I look straight up at the parachute.

Now, a few seconds have passed by; the heat shield has been separated. I can see Mars! I see my heat shield falling down to the ground below me. I can see the orange Martian surface, not like anything I've seen back home. Home? I was told that Mars is my home...

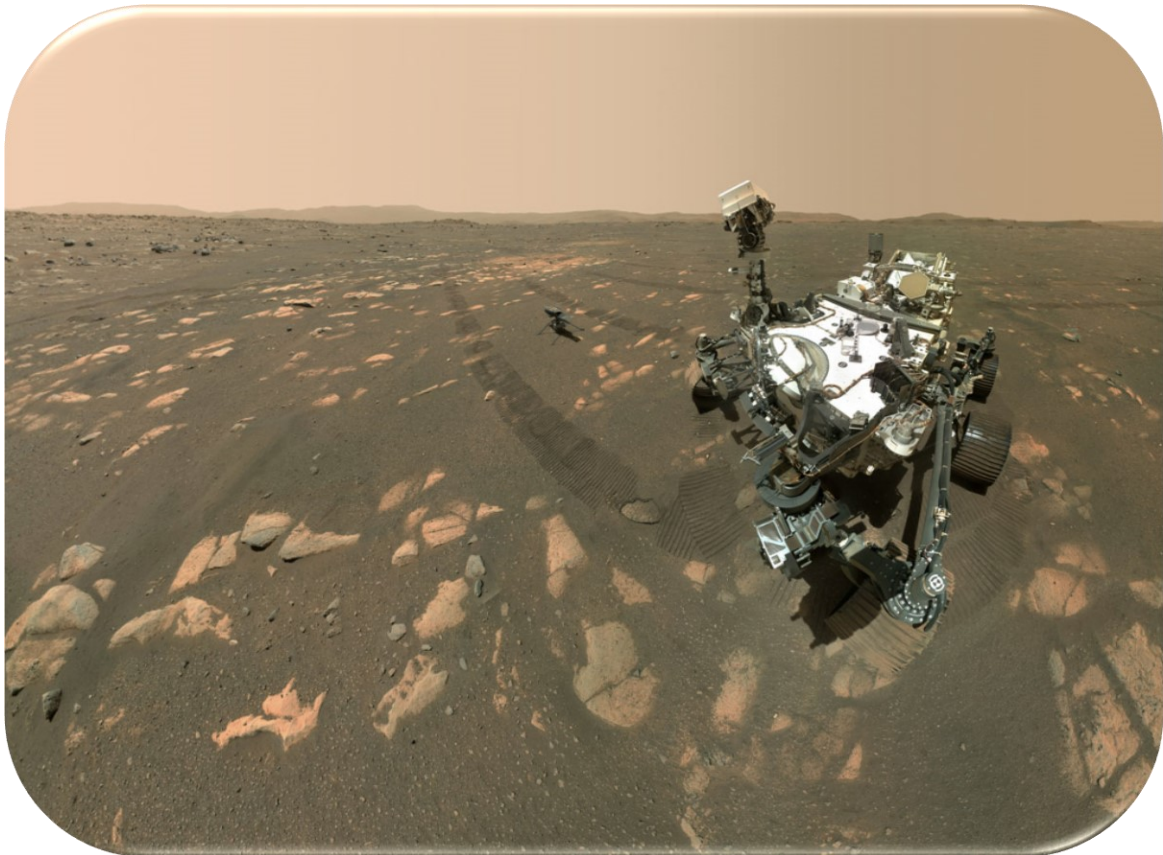
As I feel excitement, my friends back on Earth feel suspense. They won't know about whether I have landed or not for another 14 minutes. All they know right now is that I've entered the atmosphere. Everything that they'll know will always be 14 minutes after it happens. I would like to share my excitement with them as it happens, but I can't and it makes me sad. Though they didn't send me here alone!



NASA's Mars Perseverance rover took this image of the area in front of it using its onboard Front Left Hazard Avoidance Camera A. [This image](#) was acquired on Feb. 18, 2021 (Sol 0)

Sol 59

As I travel on the ground, something else takes off. A few months after I land, my little brother, the helicopter *Ingenuity*, makes his first flight from the surface of Mars! This is the first powered flight on Mars ever done. People on Earth cheer, and I feel proud for my little brother. It took a few days for him to detach from me, a difficult process for both of us. And biggest of all, it took him months to fly here with me in our rocket! Now he'll fly himself. I wish I could do that...



Meanwhile, a little [selfie](#) I took with my little brother *Ingenuity* on sol 46

Sol 60

Now is my day to show off! It's about my Mars Oxygen In-Situ Resource Utilization Experiment ([MOXIE](#)). Today was the first day that it produced oxygen. One of the first steps to a human colony on Mars. Converting carbon dioxide to oxygen.

It wasn't much; in an hour I produced 5.2 grams of oxygen, enough to keep an astronaut alive healthily for about 10 minutes. But in any case, it's a start! Oxygen will also allow for rocket fuel, so that rockets could take off from Mars. My little brother will be getting some competition...

Sol 198

Today, I have collected and released my first rock! To hold a very real Martian rock, even if it's just a few bits of it, is quite amazing. The people on Earth are very happy as well. This rock has a name, "Rochette". Though these pieces will be a bit lonely...they will be living in a tube that is inside of me. At least they'll ride along! Eventually, they will be able to see humans. Soon...



Perseverance's [selfie](#) with "Rochette" on sol 198

Sol 351

I've just broken the record for the most distance driven on Mars by a rover in one sol! 320 meters (1050 feet). And this time, I also drove myself; I did not rely on humans. Ha!

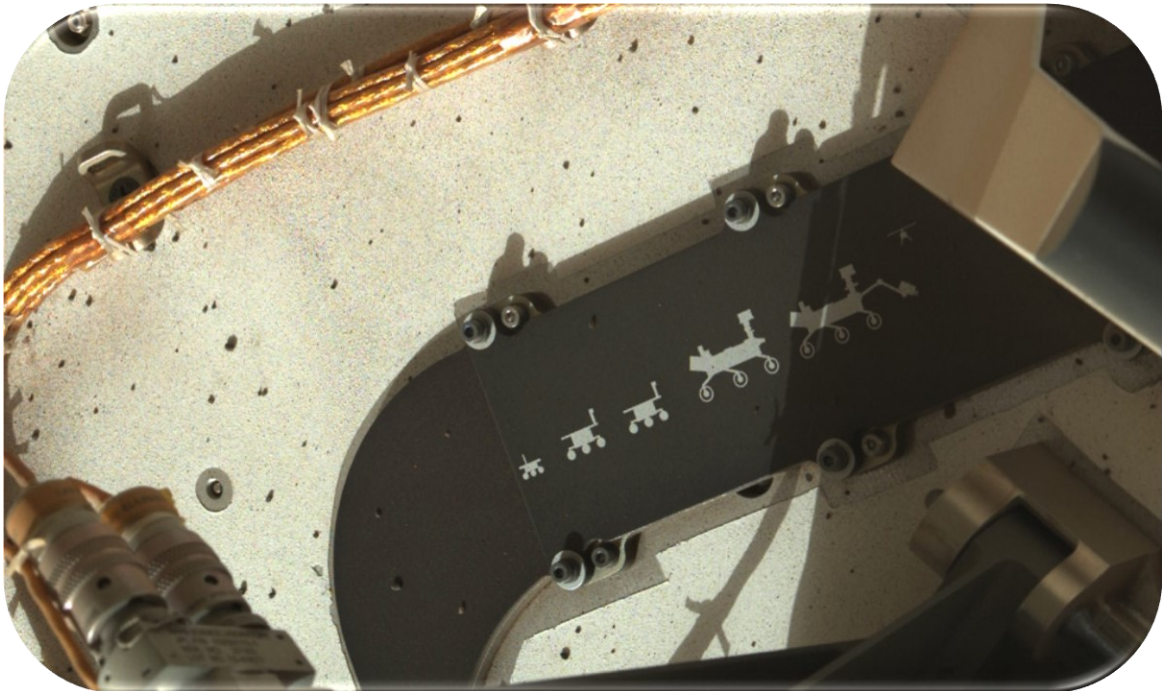
Though I am not superior to everyone. My little brother flies more than me. For instance, on sol 174 he flew 450 meters (about 1476 feet) horizontally, as well as 10 meters (about 33 feet) vertically! That took him only 169.5 seconds. It took me some thousands of seconds, and just to move horizontally...

Sol 365

On February 18 Earth time, or sol 365, my [first Earth birthday](#) came. I hope to continue working hard on Mars along with my fellow Martian rovers and help humanity to colonize it.

I'm not one Mars year old yet, but I am beginning to feel that Mars is my home.

I will be waiting for you humans to come!



My [family of rovers](#), from Sojourner to Ingenuity.

[The image depicts](#) all of the rovers which have driven on Mars. On the far left is the Sojourner rover (1997), followed by twin rovers Spirit and Opportunity (2004), then Curiosity (2012), and Perseverance (2021). Also pictured is Ingenuity, a helicopter which could demonstrate the first powered flight on Mars.

Thank you!