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I think every Pole fascinated by the space fight

It would be such a scene. Poles on the moon. On the other hand, thanks to the popular legend, Mr. Twardowski, it doesn't even sound so exotic.

Real life. Well, for now, we are still waiting for the next Pole in space and some uninhabited space missions projects.

Such as those that would help in the development of our space sector. And in the second topic, a few weeks ago, very interesting information appeared.

Poland, the Polish Space Agency, completed a consultation, being a part of not even one, but a few missions. Their goal would be to be a princess.

In the research took part in 40 subjects, and as a result of the work, four concepts of the mission intended for further development were launched.

The first is the orbiter with the Mirores instrument, which with the help of a red wave will search, search for a rich place in the land of Surowca.

In the framework of the Petr experiment, the second is to be a study of the mechanics of the Moon's soil.

Due to the low gravity of our satellite, there are still many puzzles that would fall apart, especially before the construction of the remaining bases.

The next two ideas, consisting of the third project, are about the research on the new creative cells, set up in difficult cosmic conditions.

And this is connected with the parallel research of the initial atmosphere of the Moon.

And the last project is to conduct long-term research on the influence of low gravity of our satellite on the growth of various types of microorganisms.

The first project was chosen as the leading one, the first of the Mirores.

The work on the mission should start this year.

When all of this is going to be done, the next harmonogram indicates that it will not be possible earlier than in 2020,

and knowing the character of the cosmic projects, the first term is rarely maintained.

Anyway, I think that around 2030 they will be more realistic.

Seven years, basically six missions of this type have been carried out by the state, which does not have much experience in such construction missions.

Such missions are not a long period of time.

Fortunately, we have them in our hands, because the work on the whole instrument of the Mirores lasts since 2017.

The original instrument was created with the idea of the research of Mars, but the authors decided to use the chance that the agency of PULSA opened.

In the effect of conceptual work, they are already at an advanced stage, and the scientists gradually move to the phase of Earth prototypes.

Such a work with certainty helped this project to win, as it is, that the orbiter is much easier to do than the lander.

However, this may not be the end.

It may turn out that even before the Mirores arrives at the Moon's orbit,

the Moon's surface meets our other Polish devices.

In a recent German visit, the administrator of NASA, Billa Nelson, spoke with him, Prof. Wrochner, the head of PULSA.

Among the topics discussed, there was the issue of sending something on the board of Starship in Artemis IV.

Thanks to this, it was not necessary to build a lander, which is expensive and complicated, and our devices would provide for the surface of the Moon, the American astronaut.

However, it is necessary to remember these two things.

First, the Artemis program calendar is not very optimistic, and the mission mentioned can also have a place only in the 30s, and secondly, we do not know what would be recommended there.

Coming back to the Mirores, as I already mentioned, with the help of the radiation of the red orbiter, it will be able to identify what probes we are in the specific area of the Moon.

This has helped us to choose a place for the Moon's base.

The leader of this project, Dr. Jakuba Ciężelis, from the Institute of Geological and Polish Academy of Sciences, aims at searching for metals such as iron, titanium, gold, or platinum, our researchers intend to pay special attention to sulfur.

In connection with the fact that there is little water on the Moon, and there are metals,

the use for the construction of the structure of the concrete sulfur structure, which does not require the use of valuable water in space.

And since in the case of the Moon's base, the coal mines will have a lot of common mission, although perhaps not the same as that of the Upper Silesia, rather the same as the Lower Silesia, i.e. the excavation.

The scientists, who are building the instrument mentioned, will have to test it first on the ground.

They intend to do it with the help of a drone, which with the help of the drone will be looking for the so-called exit holes, i.e. the place where the mineral deposits, which contain the search for iron, will come out on the ground.

The discovery is places where it is easier to find them.

For today, three coal mines have been selected to conduct such tests.

For now, it is not known how big the orbit will be, on the basis of which the instruments mentioned will be installed.

For our questions,

Polska described that this year the project will only enter the so-called phase A, i.e. the study of its performance will be done.

For today, it is known even what the orbit of this ship will be like.

I would bet that it will end in the polar one, which will allow to map the entire surface of our satellite.

So the question remains how many plans of the Polska Agency are real.  
Our country does not still have a state-owned space program.  
It is a document made for the so-called Polish space strategy,  
which was taken over six years ago.  
The problem is that the perception of the KPK is an essential element  
to make more money for Poland.  
Looking at the costs of not expensive,  
like on the Kupstone mission,  
it turns out that the budget of the Polish KPK  
had to cost about PLN 120 million.  
There is simply no such environment in the Polish budget.  
It is worth looking at the loss of the previous project of Poland,  
i.e. the Polish orbital missions.  
The agency has been busy for a year  
during the very similar consultations of several projects  
and it looks like that for now,  
it has not moved to the phase of implementation.  
I asked about the agency,  
and the answer wrote that the implementation of individual concepts  
will depend on the availability of financial resources.  
The question is whether we will finally catch up with the Master Twardowski,  
so it remains open, but there is hope.  
A dozen days ago it turned out that Poland significantly  
increased the cost of the European Space Agency.  
At the time, we were a country that,  
in terms of housing,  
the European Space Agency meant the least.  
I am satisfied that in the end,  
the costs have increased.  
These money from Poland do not run away,  
contrary to the overwhelming majority,  
they remain with us and build our technological backgrounds.  
It is also important to keep an eye on the fact  
that Sławorz Uznański is located  
at the International Space Station.  
I think that sooner or later he will find himself there.  
I am very happy with many other initiatives,  
but Sławorz Uznański, not only my modern economy,  
cannot develop without knowledge.  
Our economy is still in a very high level  
about the cheap labor force,  
and not about modern technology.  
Sławorz Uznański, sooner or later, will end,  
and technology is always on its side.

And for the development of new technologies,  
space is a dream place,  
especially since we have the most important elements of this system,  
we have people.  
We are motivated by scientists and engineers.  
We are still lacking one or more  
conscious politicians,  
which I am very happy about.  
I like science for 10 years,  
not only on Facebook and YouTube.