

## **THE OCEAN RACE**

**By Rosendo Fraga**

The beginning of the space race by the mid-20<sup>th</sup> century was coincided with the beginning of the technological experiments to take human beings down into very deep waters, although the former played a central role. One of the reasons for this is that the space race had the States as essential organizers and protagonists, and instead, the search to reach the bottom of the oceans was a convergence of state, private and scientific initiatives, without a clear predominance. The space race in the second decade of the 21<sup>st</sup> century showed a growing participation of private venture investors in the field of the American space project, which has not occurred in the cases of China and Russia. Although more is known today about the Moon or Mars surface than the bottom of the oceans, this could change for three reasons. The first is economic: venture capital is beginning to have better prospects for economic return than in space, where distances and conditions are more difficult and require larger sums. The second is that the priority assigned to the protection of the environment begins to consider the importance that the maritime area has with respect to it. Three-quarters of the planet are covered by the seas and their connection with the preservation of the environment is a subject that needs to be explored further on. That is why Fundación Rewilding Argentina raises the slogan “No blue, No green”. Finally, from the beginning the space race was linked to the military, which has not happened so far in the ocean race.

The private investment process in deep-sea exploration has intensified, with companies like OceanX seeking to position itself as Elon Musk's SpaceX simile in the space race. The former is promoted by the film director of Titanic, James Cameron, and the venture investor, Ray Dalio, who argued in a recent interview that "the exploration of the ocean is much more important than that of space." Other billionaires participating in the "ocean race" include Eric Schmidt, Roman Abramovich, and Paul Allen. However, Jeff Bezos -owner of Amazon, second richest man in the world and second private investor in the space race- announced that he would rescue the remains of the Apollo missions from the bottom of the ocean. In parallel, a fledgling industry of individual submarines has emerged, which cost 3 million dollars and are rented for 30,000 dollars a day. This business grew 30% in 2021. Three high-tech companies dominate the

market for small submersibles. Last year, a Florida-based Triton model broke the record for descent, diving 10,928 meters deep in the Pacific.

The Marianas Trench in this ocean is a maritime extension in which there are giant squids, internal rivers at very high temperatures, nano-climates, mass carbon sequestration tools and hidden treasures. Any change that occurs in it can have important consequences on the earth's surface. In the first week of November, the World Fund, the world's largest climate initiatives fund, was unveiled with a € 350 million launch. It specializes in financing companies that work to both regenerate and take pressure off ocean ecosystems. For example, in the conservation of underwater forests, in the mapping and monitoring of the seabed and in fish protein alternatives. However, the economic areas related to innovation in the oceans are perhaps the most relevant. There is a first "signature ring" for data capture like Sairdrone. In addition, there are others such as Autonaut, AMS (Datamaran), ASV, Remus, Bluefin, Slocum and Ocean Aero. Other topics on the oceans agenda include plastic pollution and the creation of libertarian duty-free states in the middle of the ocean. Peter Thiel is one of the promoters and every year he brings together a group of boat owners from Silicon Valley in the San Francisco Bay to simulate this project and boost underwater tourism.

The role of the State in the exploration of the bottom of the oceans is less than that of the space race, where governments are the central actors and the secondary private ones that operate in its orbit. Ocean mining is another important point. Just as there are companies dedicated to the future extraction of minerals from asteroids, the same happens with the Clarion-Clipperton fracture, an area of the Pacific bed larger than the surface of the United States, which holds not-yet-calculated riches, at a depth of more than 5,000 meters. There are already companies from six countries interested in their governments to support their projects. In other words, the call seems to go from private companies to the State, as well as future occupation plans. Despite this, there are projects to build underwater cities for permanent populations, and that is similar to Musk's project to colonize space and Bezos's to create "satellite cities" of the Earth. In the space race, the military factor was present from the beginning, which does not seem to have been the same in the nascent ocean race. But 2021 has shown how both races are linked to the military. The launch of long-range nuclear missiles from submarines (a central issue in the Indo-Pacific conflict and the

recent articulation of the AUKUS alliance), as well as the launch of China's hypersonic missile (which can carry long-range nuclear weapons, circumnavigated the Earth and surprised US intelligence), show the link between space and oceanic expansion, with the security interests of the powers.

In conclusion: the technological developments aimed at reaching the bottom of the oceans have evolved in parallel with the space race, but since they do not have a relevant role for the states, they have lost visibility. The private investments in what can be called “the ocean race” intensify with increasing business activities and the creation of investment funds. This is how the World Fund has been created, with a capital of 350 million euros destined to finance ventures for the preservation of the environment on the ocean floor. Finally, the link between the space and ocean races with the military is a fact: the recent launches of the Chinese hypersonic missile and the nuclear-capable missiles from submarines, prove it.