

China sub makes first dive to below 5,000m

July 26 2011, by Dan Martin



The sun rises behind clouds over the Pacific Ocean. A Chinese submersible conducted the country's deepest manned dive Tuesday in the latest technical milestone for China, which theoretically puts most of the ocean floor's vast resources within its reach.

A Chinese submersible conducted the country's deepest manned dive Tuesday in the latest technological milestone for China, which theoretically puts most of the ocean floor's vast resources within its reach.

The Jiaolong undersea craft -- named after a mythical sea dragon -- reached 5,057 metres (16,591 feet) below sea level in a test dive in the northeastern Pacific, the State Oceanic Administration (SOA) said.

Though less than half as deep as a record dive by the US Navy in 1960, the achievement highlights China's push to catch up with advanced nations in space, sea, and polar exploration, and points to its fast-growing



technical capabilities.

This campaign has been exemplified by a space programme that in 2003 made China just the third nation to conduct manned space flight.

The Jiaolong -- designed for a maximum depth of 7,000 metres -- carried three people to 4,027 metres down in a test on Thursday.

It conducted the test dive to break the 5,000-metre mark early on Tuesday morning in international waters, the SOA said.

Afterwards, the submersible's three-man crew appeared on the deck of the mission's main ship triumphantly holding a Chinese flag in images broadcast on state television.

The test's success indicated that the submersible was capable of reaching more than 70 percent of the planet's seabed, the SOA said.

China has pushed hard in recent years to obtain oil, minerals and other resources needed to fuel its growth, and has said its submersible programme is aimed at scientific research and the peaceful exploration and use of natural resources.

Scientists say the oceans' floors contain rich deposits of potentially valuable minerals, but the extreme depths pose technical difficulties in harvesting them on a wide scale.

But it may not take China long to begin reaching these riches, Jian Zhimin, director of the State Key Laboratory of Marine Geology at Shanghai's Tongji University, told AFP.

"I don't think it will be a very long time before China can perform deepsea ocean-floor mining," he said, noting that many of the most valuable



oceanic mineral resources are located around the Jiaolong's maximum designed depth of 7,000 metres.

The SOA said the submersible would attempt a 7,000-metre dive in 2012.

The US Navy reached the bottom of the Mariana Trench -- the deepest point in the world's oceans at 11,000 metres -- in 1960.



Graphic on the Mariana Trench. A Chinese submersible has conducted the country's deepest manned dive in the latest technological milestone for China, which theoretically puts most of the ocean floor's vast resources within its reach.

But China's appetite for resources, rapid military expansion and increasing assertiveness over maritime territorial claims have caused concern.



During a Jiaolong dive to the bottom of the disputed South China Sea last year, it planted a Chinese flag in the seabed in what some saw as a provocative act.

The South China Sea, believed to be rich in oil and gas, is claimed in whole or in part by China and several other nations.

Some concerns also have been raised that deep-sea vessels could have military applications such as tapping into or severing communications cables.

China's successful dive comes after Japanese media earlier this year said Japan planned to step up its search for undersea mineral reserves, setting up a potential race for seabed resources.

Japanese researchers earlier this month said they had detected vast reserves of rare earths -- substances used in many high-tech electronics -- on the Pacific seabed.

Chinese state news agency Xinhua quoted the submersible's chief designer Xu Qinan as touting its "state-of-the-art" systems but noting that some components had been imported from abroad, such as the high-definition video and transmission equipment.

(c) 2011 AFP

Citation: China sub makes first dive to below 5,000m (2011, July 26) retrieved 3 May 2024 from https://phys.org/news/2011-07-china-5000m.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.