Divers sure of new finds from 'ancient computer' shipwreck
15 September 2014, by Sophie Makris

The Antikythera Mechanism—is a 2nd-century BC device known as the world’s oldest computer—because it could track astronomical phenomena and the cycles of the Solar System.

Archaeologists set out Monday to use a revolutionary new deep sea diving suit to explore the ancient shipwreck where one of the most remarkable scientific objects of antiquity was found.

The so-called Antikythera Mechanism, a 2nd-century BC device known as the world’s oldest computer, was discovered by sponge divers in 1900 off a remote Greek island in the Aegean.

The highly complex mechanism of up to 40 bronze cogs and gears was used by the ancient Greeks to track the cycles of the solar system. It took another 1,500 years for an astrological clock of similar sophistication to be made in Europe.

Now archaeologists returning to the wreck will be able to use a new diving suit which will allow them to more than double the depth they can dive at, and stay safely at the bottom for longer.

Double the diving depth

The Exosuit, built in Canada by Nuytco Research, will permit divers to reach depths of 150 metres (492 feet) and still perform delicate tasks, says archaeologist Theotokis Theodoulou.

The suit, which resembles a puffy space suit, "expands our capabilities", Theodoulou told AFP as the team set off for a month-long expedition to Antikythera, which lies between Crete and the Peloponnese.

"I'll be able to grasp, pluck, clench and dig... for several hours," he said.

Archaeologists believe many other artefacts are yet to be discovered in and around the wreck. Up to now they had only been able to operate at a depth of 60 metres.

The mechanism was found with a spectacular bronze statue of a youth in the wreck of a cargo ship apparently carrying booty to Rome, and researchers are certain that other items on board still remain to be discovered.

"We have good signs that there are other objects present," said Angeliki Simosi, head of Greece's directorate of underwater antiquities, after exploratory dives in the area in 2012 and 2013.
A reconstruction of the Antikythera Mechanism on display at the Ancient Greek Technology in Athens, on October 17, 2005

marine archaeologist from the renowned Woods Hole Oceanographic Institution at Massachusetts, which was involved in a dive to the wreck of the Titanic.

Foley has helped in outings to identify ancient shipwrecks over the last five years.

"We may find one or more monumental statues that were left behind in 1901, in the mistaken belief that they were rocks," Foley said.

As well as the new Exosuit, the Antikythera expedition will also use robot mapping equipment and new advanced closed-circuit "rebreathers", which will allow divers much more time underwater.

"We will have more bottom time than any previous human visitors to the site, because we dive with mixed gas rebreathers," the expedition's website said.

"Each diver will have more than 30 minutes of bottom time per day, and will enjoy greater mental acuity and a larger safety margin than that of previous divers at Antikythera."

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"There are dozens of items left, this was a ship bearing immense riches from Asia Minor," added Dimitris Kourkoumelis, another archaeologist on the team.

The archaeologists also hope to confirm the presence of a second ship, some 250 metres away from the original discovery site.

Antikythera, which now has a population of only 44, was on one of antiquity's busiest trade routes, and a base for Cilician pirates, some of whom once captured and held the young Julius Caesar for ransom. He later had them all captured and crucified.

Monumental statues

The Greek team is assisted by Brendan Foley, a