



An AHEPA National Project



A new NGO created April 2022

OUR MISSION

To advance education in the fields of archaeology and sciences inside of Greece

OUR VISION

To collaborate with the Ministry of Culture, Greek scientists, universities, and archaeologists with financial support of the adoptions of new technologies, expeditions, content creation and dissemination, and educational and employment opportunities in the fields of sciences and archaeology.

OUR VALUES

To operate in strict accordance with all laws, with full transparency to the Greek government, Greek institutions, and our donors to maximize the benefits to science, archaeology, and the interests of Greece.

Mechanisms for executing mission statement



- Archaeological/scientific expeditions
- Permit applications
- Laser scanning
- Filming
- Surveying
- Photogrammetry
- Exploration
- Side scanning sonar
- Laser scanning
- Excavation
- Establishment of new museums
- Exhibitions
- Funding for students, professors, archaeologists
- Publishing
- Seminars, presentations, and exhibits
- Donations of funds and equipment
- Filming/content creation

BOARD MEMBERS



Marshall Monsell

AHEPA National Projects Chairman
AHEPA Supreme Governor Region 7



Andreas Zapounidis

Chief Operating Officer
AHEPA District 28 Europe Marshal



Kosta Koeman

Chief Executive Officer
AHEPA member, Seattle Chapter 177
Diver, researcher, ocean explorer



First project: Subsea Laser Scanning

- **Collaborate with Norsk Remote Sensing and the Ephorate of Underwater Antiquities for the first ever use of cost effective close-up 3D laser scanning in ancient archaeology.**
- **Four sites have been suggested by the Ephorate of Underwater Antiquities.**
- **A documentary on the benefits and fundraising to purchase this new technology and donate to Greek universities and archaeological institutions.**



Breaking New Ground

- Compact/affordable laser scanner/ROV: \$100,000 one time purchase
- Max Depth for ROV and laser scanner are both 300 meters!
- Deep Trekker PivotNAV ROV on the market
- Laser scanner from Voyis is ready!
 - Previous models require submarine, therefore research vessel
 - \$250,000 for only two weeks
 - New model requires no more than a caique.
 - Voyis is now building a sled to mount scanner to PivotNAV
- Application for filming permit to submitted late August.

Laser Scanner Capabilities

- Thousands of measurements per second.
- Sub centimeter resolution resulting in terabytes of data!
 - Best case 1 mm!
- Far more detail than photogrammetry, the primary tool today.
- Safer, faster, more accurate than current methods used in underwater archaeology.
- Equal results to existing technology that requires NOAA-like budgets.



Going from this....

- Laser scanners mounted to a submarine.
- Large enough research vessels are required to transport submarines.
- Larger crew.
- Significant fuel consumption/cost.
- Not readily available at all times everywhere in Greece.



To this....

- Laser scanner mounted to ROV (36 cm x 31 cm x 57.6 cm)
- ROV + laser scanner are so compact, a Greek fishing boat or a dive boat from a nearby dive center is all that is needed.
- Universally available in Greece.
- Captain & archaeologist is the minimum needed.
- Divers may be needed for site preparation but dive boat still sufficient.



Proof of concept: Washington state shipwrecks



- **Two people: laser scanning expert, Jerry Dawson, member of the AHEPA in a 5-meter boat.**
- **Variety of shipwrecks up to 100 years old.**
- **Data obtained and video capturing the event to be shared with the Ephorate of Underwater Antiquities to strengthen application and used for fundraising for this project.**

Project Timeline



Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
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Develop and
submit application
to Ephorate

Fundraising. Goal \$90,000 USD for scientific portion, \$60,000 documentary

Scanning Lake
WA film short

Expedition

Post production of
documentary film

Film completion
starts fundraising
for ROVs/Scanners

Suggested future projects



SHORT TERM (1 to 5 years)

- Fundraising for three sets of ROVs/laser scanners/side scanning sonar units to be donated to universities and archaeological institutions.
- Marine geology/archaeology expedition in the Ionian Sea with Ahepan Dr. Vamvakas, Fabien Cousteau, the discoverers of the Fiskardo Roman shipwreck: Dr. Ferentinos and Dr. Papatheodorou from the University of Patras.
- Exploration/discovery of a reputed "graveyard of shipwrecks" starting at 100 meters in the Aegean Sea

MID TERM (5+ years)

- Collaborate with non-Greek universities/institutions active in Greece.
- Excavation of shipwreck chosen by the Ephorate of Underwater Antiquities

LONG TERM (15+ years)

- Establishment of a dedicated maritime archaeological museum



Let's dive into history!

Thank You

Σας ευχαριστούμε!

For further questions, contact:

contact@thehaes.org

+1-206-830-0397 (USA)

+30-698-190-0345 (ΕΛΛΑΣ)

<https://thehaes.org>