

# The Sydney-Kormoran Project: Conducting a 3D Imaging Survey of the HMAS Sydney (II) and HSK Kormoran Shipwrecks

Wednesday, 10<sup>th</sup> February 2016

Parmelia Hilton Hotel (Swan Room), Mill Street, Perth

**Registration** 5.30 pm: Presentations 6.00 pm – 7.40 pm Networking over drinks and finger food 7.40 pm – 9.00 pm

**Chaired by:** Mark Casey, Director/Principal Subsea Consultant, Odyssey Consulting Services

### The Mission

**Dr Michael McCarthy, Curator, Maritime Archaeology, Western Australian Museum**

The HMAS Sydney II and HSK Kormoran sank each other in a fierce battle on 19 November 1941 in the midst of World War II. The exact location of the two wrecks remained unknown for almost 70 years – ensuring that the story remained the subject of significant debate and mystery. The discovery of the two wrecks in 2008 fed the Cole Commission of Inquiry which ruled on the loss of both vessels, but there remained a desire to tell the story of the Sydney and Kormoran wrecks in a highly visual modern manner. Hence the mission was born to return to the two wrecks, to conduct a detailed 3D imaging survey of the two wrecks, in a way that had not been done before.

### Vessel and ROV logistics

**John Rossier, General Manager Operations, DOF Subsea**

DOF Subsea have been involved in the story of the Sydney and Kormoran for a long time and were a key contributor to the finding of the two wrecks in 2008 with the provision of the vessel, ROV and staff. This long term involvement motivated DOF to be a foundation sponsor of the 2015 Sydney-Kormoran Project Expedition. DOF staff were deeply involved with the preparations for the expedition, which visited the two wrecks in April/May 2015 aboard the DOF vessel Skandi Protector and using its two Triton XLX work-class ROVs.

### Technology and Data

**Dr Andrew Woods, Research Fellow, Centre for Marine Science & Technology, Curtin University**

The Sydney-Kormoran Project provided a wonderful opportunity to use the latest and best offshore oil and gas technologies to survey these two highly significant shipwrecks. A technical overview will be provided of the equipment package developed specifically for this project (comprising a custom lighting package, fourteen digital still cameras, six 3DHD cameras, and a range of additional sensors) and summarise offshore operations. Around 50TB of data has been collected from the expedition which is now being processed. An explanation of the outputs from the project will be provided including the leading edge work in 3D reconstruction using the Pawsey Supercomputing Centre.

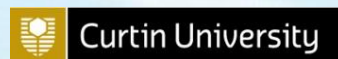
### Rusticles and Science Sampling

**Laura Machuca Suarez, Research Fellow, Corrosion Engineering Industry Centre, Curtin University**

The expedition to the two wreck sites provided an additional opportunity to collect samples which would allow us to gain a much better understanding of deep-water shipwrecks. Rusticle samples were collected from both wreck sites and these have already revealed interesting insights about the metallurgy of the two wrecks. It is also expected they will provide useful information about deep-water corrosion for the oil and gas industry. A summary of other science sampling conducted and an indication of the early results will also be provided.

**REGISTRATION FEES:** SUT Members \$25: Non-Members \$45\* (additional \$5 if register at the door)

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