

## 1960s Subsea Pioneer to work with EECE's HIT Team

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Quietly rusting away 12 metres down on the seabed of Plymouth Sound, just a few yards away from [the Breakwater Fort](#) (<http://www.3hconsulting.com/SitesBreakwaterFort.htm>), are the remains of a cylindrical structure attached to steel legs and a large rectangular steel base. This is the wreck of the GLAUCUS, a unique and largely forgotten undersea habitat experiment from the mid-1960s. In September 1965, two divers from the Bournemouth Branch of the British Sub Aqua Club (BSAC) spent a week living underwater in the GLAUCUS, which, as a result, became the first subsea habitat to demonstrate a semi-closed circuit life support technique. The experiment also challenged the view that such venture was only achievable by those with huge budgets, such as Jacques Cousteau's CONSHELF project, or the American Navy's SEALAB. The cost of the GLAUCUS project amounted to less than £2000! [The GLAUCUS project was committed to a short film by British Pathé which is still available today](#) (<http://www.britishpathe.com/video/week-under-water/>).

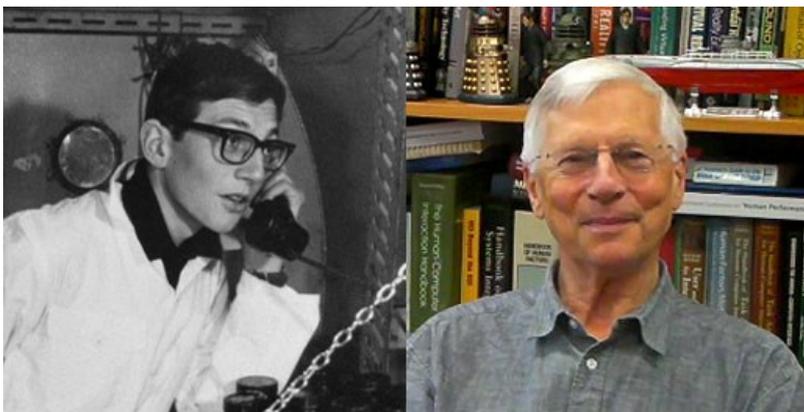


After the 1965 experiment, the plan was to remove the gutted shell of the GLAUCUS from nearby Fort Bovisand and to re-sink it within the confines of Stoney Cove – a flooded quarry used today for diver training (and in 1982 for Prof Stone's research when he took the controls of the Osel *MANTIS* – an innovative one-man submersible that went on to feature in the James Bond film, *For Your Eyes Only*). However, this plan did not materialise and the GLAUCUS was, sadly, committed to an undignified disposal in the shallows of Plymouth Sound, just a few yards from where it was originally deployed – a sad end for an important piece of British underwater exploration history.

Nevertheless, plans are now under way by the Bournemouth Branch of BSAC to place a plaque commemorating this historic experiment on the remains of the habitat in 2015. [The role of EECE's HIT Team in the GLAUCUS story was summarised earlier on the University/College Intranet \(July 2013\)](#) (<https://intranet.birmingham.ac.uk/eps/news/public/2013-07/hit-sound.aspx>).

However, in brief, the Team's researchers and students are, as part of a larger *Virtual Plymouth Sound* project, developing an interactive 3D database of

wrecks and historical maritime events in that region and a Virtual Reality recreation of the GLAUCUS story is one part of this initiative. The *Virtual Plymouth Sound* project will be presented by the HIT Team's Director, Prof Bob Stone, at the Nautical Archaeological Society's Annual Conference in November.



Colin Irwin, the designer of the GLAUCUS and one of the two pioneering divers who took part in the 1965 mission, has been working closely with the HIT Team for some months, providing the researchers with images and drawings of the habitat. He visited the School on 17 September and agreed to take part in a video interview, during which some interesting and entertaining anecdotes emerged! The 20 minutes of narrative will also be used to introduce some of the engineering challenges faced before and during the mission into the virtual recreation in due course. Colin will continue to provide the EECE research team with material relating to the GLAUCUS project, including his original back-of-an-envelope concept sketches and a letter he received after the event from BSAC's Head Office, chastising him and his diver colleague John Heath for taking such a monumental risk!