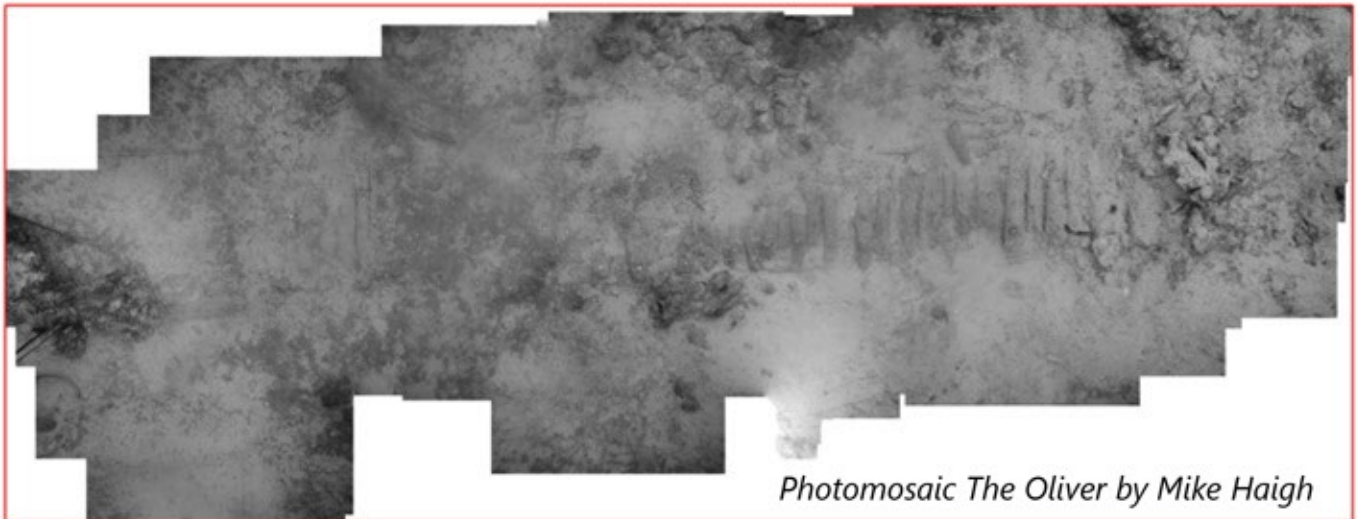


SEASON 2022 Photomosaic by MIKE HAIGH, Project Director

In our last newsletter we covered the main achievements of the 2022 season and released two short videos that covered the main activities of that summer. In this newsletter we will be focussing on two of the objectives that we successfully accomplished in 2022. The production of a pre-disturbance sketch of the site and the creation of a photomosaic of the exposed timbers.



Photomosaic The Oliver by Mike Haigh

Those of you who have read the articles I published in Scuba Diver Magazine (now preserved in the 'Wreck Hunters Files' section of our website) or have watched my videos on our YouTube channel will be familiar with the reason why each of these activities is so important. For those who have not, here is a brief explanation.

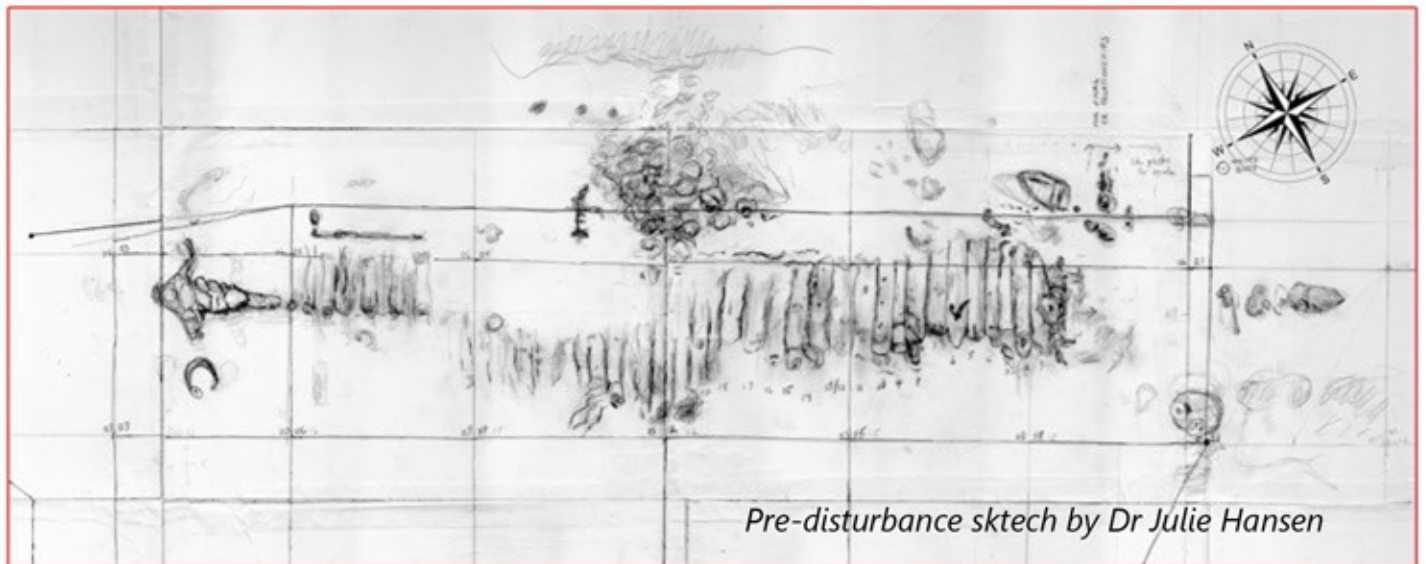
The first activity in the investigation of a wreck site is the pre-disturbance survey. The objective of which is to record the site as it is to tell 'the story so far' and to be able to relate later discoveries to the initial state of the site. A photomosaic of exposed features (in this case the exposed timbers) can be a part of the pre-disturbance survey but is a valuable exercise in its own right. It acts as a useful 'aide memoire' giving an overview of all or part of a site. This is in itself a recording method and can be used to 'check' other methods that can be prone to human error. As a display item it can be used for fund raising and publicity.

A pre-disturbance sketch is a great asset to any project for as with the photomosaic it allows the production of a visual image of the area concerned. In addition, it provides us with a record of the site before future investigative activities change the topography forever. The two main obstacles to its production are normally underwater visibility and the lack of a suitably skilled diver to produce a quality sketch.

Given the normally excellent visibility on the Oliver site the first obstacle was easily overcome. To deal with the second, the project was fortunate enough to acquire the services of Dr Julie Hansen (with a Ph.D. in Art History from Stanford University, a background in teaching and a skilled amateur artist). Versed in all the skills required to produce such a sketch, Julie had to learn to adapt her skills to the underwater environment.

SEASON 2022 Photomosaic by MIKE HAIGH, Project Director

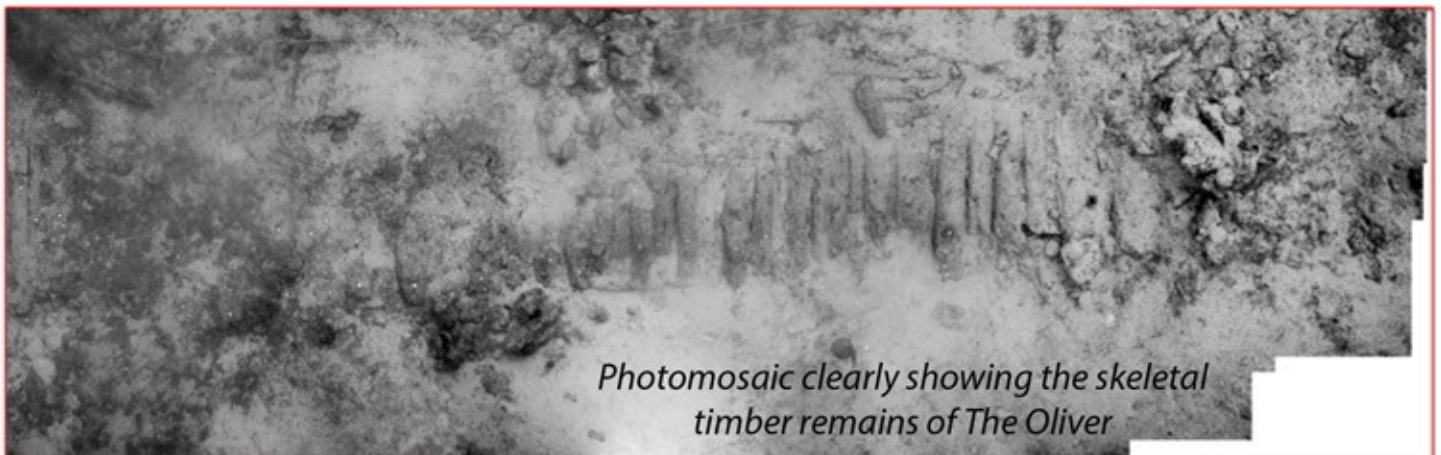
The results were excellent. Julie produced a fine drawing of the site, part of which was published in the last newsletter, and a larger piece of work which was used as a working draft. For the purpose of explaining how the pre-disturbance sketch was produced this is a valuable document and is shown below.



It is possible to produce a sketch of an area of seabed with no reference points. Unfortunately, such a production is likely to be inaccurate. On The Oliver, in order to provide a framework for the survey, we set up control points, a series of 3m grids and a baseline. All of these were helpful to Julie in producing her work. You can clearly see in the drawing the grid outlines and other survey apparatus. This ensured that the result was not only representative of the site but also accurate in terms of orientation and dimensions.

Moving on to the production of a photomosaic of the exposed timbers, the challenges set here were very similar to those encountered when producing a sketch. Again, the visibility normally encountered on the Oliver made the photography possible. However, given the time constraints of the project and the lack of a photo – tower and a supporting structure the best option was just to ‘fly’ over the timbers. Using the reference points and the grid as a guide I ‘hovered’ approximately 2 m above the seabed taking overlapping vertical photographs. The objective was to achieve a 40% overlap between each frame - which would allow certain programs in Photoshop to create an image of the exposed timbers. The result is shown on Page 3 of this Newsletter.

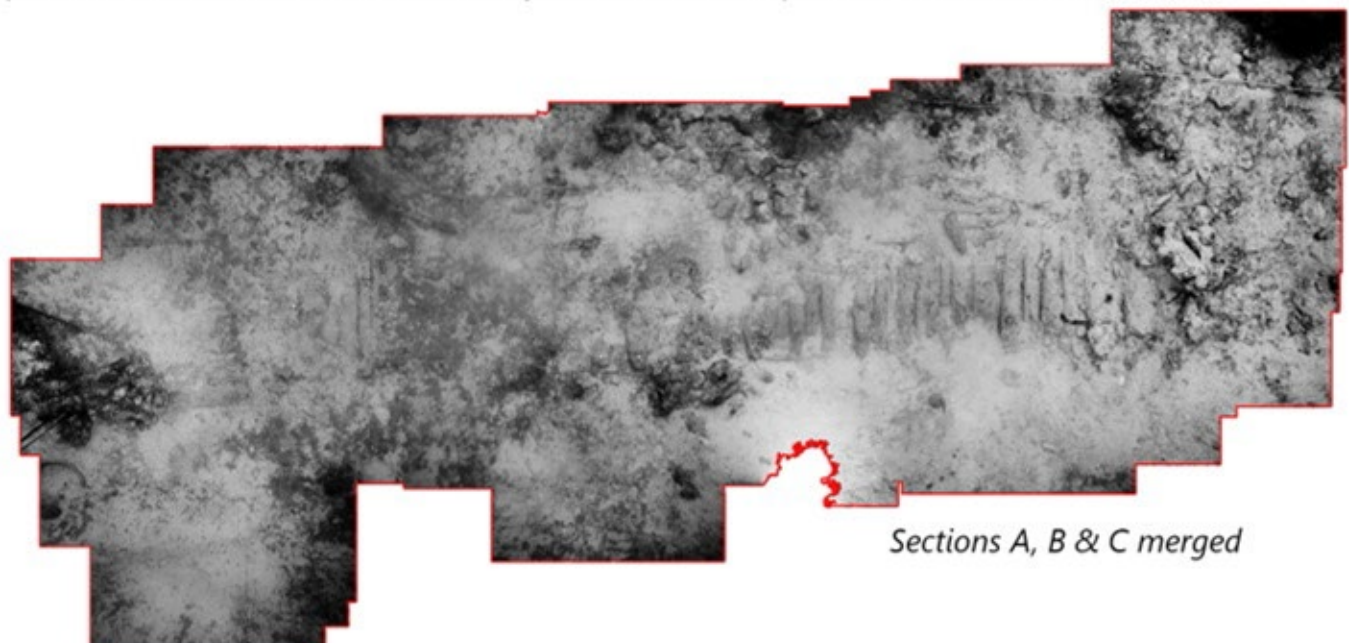
SEASON 2022 Photomosaic by MIKE HAIGH, Project Director



As you can see a powerful visual of the site has been produced which could only be experienced on rare days when the visibility was exceptional.

Starting with 177 images, these were laid out in order using sketches and diagrams made when the photography was done. About 50% of the images had to be rotated through 180 degrees to line them all up. They were then divided into groups and photo-merged into 29 vertical 'slices'. These were then merged to form 3 sections – labelled A-C. Sections B and C were merged and the resultant image merged with section A to produce the final result.

We have recreated here some of the steps used in the creation of the photomosaic so you can gain some idea of how the image is built up from the photographs taken. You can also see that it is possible to 'zone in' from the birds-eye view to look at parts of the wreck in more detail.



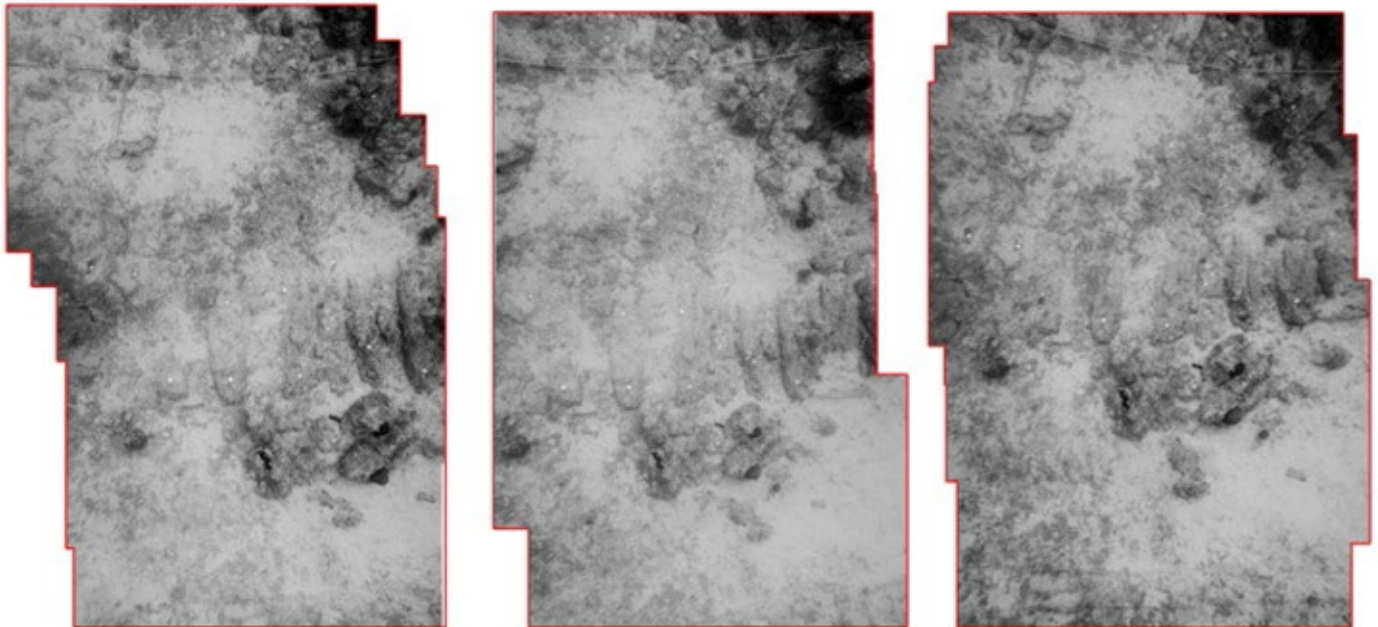


WRECK HUNTERS

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This is a useful feature, not available when relying on a sketch as a record. But the real value of the photomosaic is speed. All that was required was one dive to capture the images required for the photomosaic as opposed to many dives over many weeks to produce the sketch. The reality is that these techniques are complementary providing a reference point in order to check the accuracy of the other. In our case, they are remarkably similar in what they portray. This provides us with great certainty when using either of these images as a basis for future work.



Photomosaic by slices 13, 14 & 15

Next time we will look at results of the metal detector and magnetometer surveys which we ran over the site.

If you have any questions or queries regarding the Wreck Hunters project please email me at mike@wreckhunters.co.uk

Mike Haigh FRGS Project Director.