



Under the microscope

Diving with a purpose: GUE Documentation Diver

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Apart from providing diving education, one of the main goals of GUE has always been to encourage divers to stay active and engage in diving projects around the world. Through the Project Baseline initiative these projects are provided with a great structure and a platform for divers to record and document their projects.

The standardized approach allows GUE divers around the world to simply meet up at dive sites and efficiently conduct even complex dives with minimum effort. However, when it comes to the specific tasks we encounter during project based diving, it is

even more important that all divers within the team bring additional skills with them and that they have a deeper understanding of the requirements, in order to achieve their goals efficiently.

To help divers gain the skills and experience to successfully execute a diving project, GUE introduced the 'Documentation Diver' course at the end of 2012. The course was developed by JP Bresser from the Netherlands and introduces divers to organizing and executing the full documentation process of project-based diving. It involves basic training in photography, videography and the use of related equipment as well as setting a clear objective and work-plan with specific team tasks and communication. Furthermore, it provides instruction on how to properly create a report, incorporating mapping and survey data and preparing data for final media publishing.



The first UK class

Like many divers, I had gone through the stages of moving my diving to more project orientated dives in order to maintain interest and make my diving more meaningful. When Rich Walker told me that he had invited JP to the UK to run the first Documentation Diver class, I was immediately interested in joining. Four of us had signed up to do the course and on a cold February morning Anke Otto, Stephanie Keele, Neil Hunter and myself met JP Bresser and Rich Walker at Vobster for the first UK class.



As soon as JP outlined the course content it became clear that this was not a quick 'specialty' class. He had put a lot of thought into the course, drawing from his vast experience as published Underwater videographer and photographer and his experience as a long standing project diver.

Classroom and Theory

Many people frown when it comes to theory lectures, which is something I have never understood. Academic sessions are an ideal way to get more complex subjects explained in different ways and offer opportunities to ask further questions in order to make sure they are really understood. A manual alone will never answer direct questions and ascertain that you understood the content correctly.

Imaging theory and optical basics for example, can be fairly complex and dry subjects. When you get it explained by working through the different settings on your own camera and you see the results of each change directly, it is fun and far from boring.

Rich and JP did a great job delivering the academics in a simple 'hands on' way. Most of the time our table was covered with cameras and video lights of all sorts and JP added invaluable insight from his years of experience as Underwater photographer and filmmaker.

The academic lectures of the class comprise:

- Project Management & Planning
- Photo and Videography
- Survey and Grid Basics
- Publishing and Image Processing

Project Planning

One of the key aspects of the class is to come up with an actual project and after a quick skill verification, our team conducted a scouting dive to find our project objective for the class. Since we were all more interested in videography rather than underwater photography, we decided to make a little video documentary about the class itself and to create a short swim-through sequence of the submerged airplane sections in Vobster.

Rather than simply waving the camera around and editing something together though, we had to create a detailed filming sequence and come up with a shot-list beforehand in order to make the most of our video dives. We all had brought various video cameras with us and JP explained in great detail the advantages of different systems on the market as well as different techniques to portray your story.



Photo & Videography

Over the years I have taken part in various video projects around the world and have even tried my skills behind the camera. One of the things that was always apparent to me was how much of a learning curve underwater imaging actually is and there have been several video dives where we spent ages underwater, just to realize afterwards that what we attempted did not really work - or our results were not as good as we expected. Over time my dive buddy and I became fairly efficient with him doing the videoing and me assisting him and lighting the scene or playing the model. However, when more people were involved in our projects we often had to start from scratch, explaining the dos and don'ts of video work underwater. Dive projects usually suffer from tight time schedules and therefore it is even more important that all the participants know some basic rules about underwater imaging to get the best results.

During the video dives of the class, we experimented with various lighting options as well as directing models and lighting divers efficiently and we quickly realized the tremendous advantage of identifying a detailed shot-list beforehand.



Survey & Mapping

Another focus point of the class is survey and mapping. Most projects require some form of underwater survey or simple mapping of underwater objects. Underwater survey is quite a time consuming task and can range from simple stick maps to proper 3D surveys of a dive site. Proper execution and communication within the dive team are paramount to obtain accurate results and on most diving projects, those divers with decent survey skills are a very welcome addition to the team.

In order to stay with our mini class project, we decided to survey parts of the aircraft fuselage and we started by drawing a simple sketch of the wreckage. We then added more and more details to the sketch and recorded a little photo mosaic as we measured each part during our dives. It really is amazing how much more details you start to find on a wreck once you start to measure and document it.

Publishing & Image Processing

For this part of the class we discussed various editing options and programs. JP showed us a full run-through of his image post processing routine and gave us many invaluable tips on how to get the best results. As our project was aimed at video imaging, we talked at length about the different formats and codecs for digital video. We were taught how to make an effective video documentary by, for example, including the right music choice and establishing shots as well as interviews and background information. Rich talked us through the details of effective report writing and data publishing.



Class summary

The Documentation Diver class takes four days with a minimum of six dives and five academic sessions and can be taken by all GUE divers. Minimum requirements are either Recreational 1 or Fundamentals with a Recreational Pass.

One of the great aspects of this class is that the content can be catered for the individual objectives of the students and the focus on various topics can be slightly shifted. Whether the students are mainly involved in cave or wreck diving activities, or whether they are interested in still images or video work, they all require different ways to accomplish a goal.

With more and more Project Baseline projects shaping up in the UK it is also feasible to do the class directly as part of the project if the certification level of all candidates permits the gas, depth and deco obligations of the dive site. This flexibility makes the class a great learning experience and it is tremendously valuable for divers that are wishing to engage in project based diving. GUE's new documentation diver class nicely

seals the gap between dive education and project diving activities and if more GUE divers are trained in the principles of underwater documentation, we can successfully move from simply 'shake hands and go diving' towards 'shake hands and make a project'.

Photos: Christine Grosart

