

Course Report: GUE Fundamentals Intern, Sydney 7-13th June 2010

James Croker

Being trained within the GUE system has given me great satisfaction from my diving. The challenging courses are certainly rewarding, but it's what follows these that excites me the most - the ability to not only develop personally, but as part of a team. Strengths are reinforced and weaknesses ironed out. Suddenly dives that were once daunting are far more achievable. GUE Fundamentals provides a solid platform for this process to grow. I certainly regard it as the most important course I have taken and hold it responsible for the new directions I have found. It seems only natural then that as an instructor I would like to develop my teaching ability in this way too.

Hence I found myself booking a flight to Sydney in order to observe a Fundamentals class being taught by Liam Allen from Dive Bondi and Nick Schoeffler. This was too good a chance to miss – two GUE instructors (one an instructor examiner) to interrogate and learn from!



The Fundies courses cater to certified divers of all experience levels. From recreational divers looking to advance their basic skills for comfort and confidence, through to more experienced divers (sometimes with tech training through other agencies) who wish to solidify their skills and enter the GUE tech/cave curricula. Our two intrepid students for the week were Lucy and Seb. Both recreational divers, they would be using a single tank configuration and developing their skills for a “rec pass”. Lucy had just completed her PADI IDC and so had over 100 dives under her belt. Seb had 55 dives. Neither had dived in the GUE configuration before.

The first evening's theory started with an introduction to the course. This included what was involved and required from the students, how they would move forward and also a background to GUE. Other lecture topics focused on were buoyancy and weighting, trim, propulsion and developing diver capacity. Of course, Liam delivered these with ease having great command of the subject material and heaps of teaching experience. Calm and simple delivery brought home the key points and critical attributes to the students. All the information was reinforced and important areas linked together before summarising to gain an understanding of what the students had learnt. Throughout the lectures, signals and common problems that they would encounter in the water were addressed and solutions for these problems given.

At the end of the first session, much had been covered and I recognised the signs of intense thought as the rather subdued Lucy and Seb left. It reminded me of exactly how I felt on my fundies course.

The second evening introduced decompression and its relevance within recreational diving limits. After this was gas properties. This lecture introduces nitrox and the gases that concern us in diving. Adding physics, numbers and calculations into the mix creates added stress in many people. This was definitely the hardest lecture so far but Liam took his time and explained everything until he was satisfied it was understood. Again the repetition and summaries along the way reinforced this. Time was up and we hadn't got to nitrogen, carbon dioxide and helium yet, let alone the planned gas management lecture, but I think everybody was satisfied that enough had been achieved for one evening. After this lecture I could really see the benefit of the

TECH DIVE New Zealand

course structure. Running the theory over three evenings followed by a day off gave enough time for the subject matter to be clearly thought about and understood.

By the time the third evening kicked off, the questions from the students were flowing. Clearly it was all starting to come together, and of course, everybody was getting used to being around each other. This would be vital by the time the inwater sessions were reached.

Nick started the evening with an equipment lecture. For this we headed out of the classroom and down to the shop floor to utilise the vast array of gear in the centre. Taking seats, Nick guided Lucy and Seb through each piece of gears purpose and use. This is a great area for discussion and really promotes the effectiveness of the configuration for the in water skills that they are learning about.

A crucial part of the course is the sizing up of the harness and getting the gear perfectly set for the students. To not get this right would seriously compromise their ability to perform in the water. Needless to say, as much time is afforded to this as necessary. With the equipment dealt with we had just enough time to finish the gas properties lecture from the night before.

Saturday arrived with the usual cold but bright winter morning. All that needed to be done was to meet at the dive centre at 7am to load the gear and hit the pool for the swim test. Everybody, including instructors and interns gets in and knocks out the 15M breathhold and 275M swims in under the required 14 minutes. After this, still in swim gear we head to the baby pool! The water of about half a metre depth is perfect for Liam to demonstrate kicks whilst stationary. We run through each kick in turn – flutter, mod flutter, frog, mod frog, back kick and helicopter turn. Lucy and Seb take turns to practice and are helped to develop the proper technique and body position. Plenty of time for practice is allowed for this and only once the kicks are good enough do we head for open water.



With the usual dive sites blown out by the still pounding swell, we find shelter on the south side of Sydney harbour in Cove Bay. After analysing the cylinders and assembling the gear, Nick talks through a site brief and “dry run”. These are a crucial element for maintaining control and using the in water time effectively. The skills from dives one and two are explained and practiced repeatedly with the students sitting in the gear. Dive one would cover pre-dive checks, buoyancy and trim practice and focus on the first four kicks with an ascent stop at 3M. Dive two would cover pre-dive checks, backward and helicopter kicks, basic 5 and ascent stop at 3M. To aid this, before the students entered the water, myself and Liam created a large square with the reel underwater to mark out a training area. As we were practising buoyancy skills in relatively shallow water, SMB’s were deployed marking each corner to ward off any potential boat traffic that may come too close.

During the first dive, Lucy and Seb completed circuits of the square using each of the four kicks while practicing buoyancy and trim. Liam captured these on video camera to use during the debriefs later. This would give instant feedback to the students and help them adjust their position in the water.

After an inwater debrief/brief the second dive got underway. With Lucy and Seb now needing to control their buoyancy in a stationary position, the task loading had been upped a level. The slight current would also test their back kicks and helicopter turns. Once these had proved effective attention was turned to the basic 5 (Regulator remove and replace, Reg exchange, Hose deploy, Mask clear and Mask removal). All the time signals and direction being given to aid learning and the video camera shooting the skills for review back on land.

A one stop ascent heralded lunchtime and an opportunity to go over the video footage in detail and point out some of the problems encountered during skill practice, but more importantly – how to fix them for the next dive.

It was clear from the pictures that Lucy had good buoyancy but was struggling with trim, whereas Seb had developed good trim, however struggled with buoyancy. Both took on board the advice offered by the instructors, notably breathing control, keeping the head back, thinking about the legs, tightening the glutes, and creating stability with the air in the wing. They could also now see how they looked in the water and adjust their body positions accordingly.

Dive three was all about valve and S-drills (safety drill used in an out of gas situation). Again a “dry run” was conducted with Nick talking through a demo of the skills. There was then plenty of opportunity to practice with each other to reinforce the motor skills and get to grips with the long hoses. At the “rec pass” level, the single tank valve drill is a much quicker process than using twins, also the S-drill does not have the added complication of a primary light cord to worry about. This meant more time and energy could be devoted to buoyancy and trim practice. Again the task loading would be increased as they performed skills stationary using each other and the bottom for a visual reference.

During the dive, this task loading was reflected in the buoyancy changes during the skills. Seb was suffering from positive buoyancy while Lucy was finding it hard to reach the valve. With guidance they remembered the importance of keeping the team together. Once the drills were over, more practice with propulsion and stabilization was conducted and seeing the students head back towards shore together showed how much the buoyancy and trim had settled when not under stress – pretty close to perfect! With the light fading it was time to head back to the shop and get all the gas ready for tomorrow. A long but successful days diving.

The following day, we needed to find a bit more depth than Cove bay could offer and with the swell still coming through, we headed to Chowder bay on the North side of the harbour. To start with, the video footage from dive 3 was reviewed and broken down. Again Liam pointing out what was happening and why, together with tips and solutions to overcome the problems.



Slowing down and gaining breathing control would help Seb remain neutrally buoyant under task loading. Lucy would find reaching the valve far easier by not dropping out of trim which promotes gas rising to the top of the



wing, pushing the backplate further away from the body. Both should use the back kick and help each other to stop moving forward.

The “dry run” for dive 4 explained how to use an SMB and spool, also the method of recovery for an unconscious diver and no mask swim with touch contact communication. The dry runs throughout the course were proving an excellent tool for aiding learning and in water control.

After reaching the bottom of the descent line, valve and S-drills were executed. Lucy and Seb carried these out with far more ease than yesterday. Valves were reached and the team positions stabilised. The no mask swims were done efficiently. With the buoyancy under control, the relaxed pace made achieving the skills much less taxing. Myself and Nick took it in turns to be unconscious divers. We were rescued and slowly surfaced by the students, after which some tips on control and body positioning were given at the surface. This was repeated a couple more times until a much more horizontal position in the water was gained.

Time to increase the task loading. Now they would need to perform skills stationary in the water column with no visual reference. SMB deployment was carried out in turn, again with tips on buoyancy control and skill execution given at the surface before repeating for a second run. Emphasis was placed on buoyancy, trim and team position as this is a skill that requires practice and experience to know how much gas is required to fill the SMB when it surfaces.

Dive 5 would bring all the skills together with propulsion, valve drills, s-drills, SMB deployment and an out of gas ascent. It is here that we could assess the students overall ability. They were now looking at ease with the equipment and communicating effectively. The skills were carried out well and without problems. Soon enough it was time to head back in and run through a final debrief.

With hot chocolates and an assortment of cakes, we looked through the video footage, again seeing the many improvements. Liam and Nick could then prescribe things to focus on, practice and get better. Lucy and Seb had both gained a well earned GUE Fundamentals “rec” pass. Over the week they had certainly impressed me with their commitment, attitude and ability to cope with what is a challenging course. A great couple of students to follow and learn from.

In my own experience, there is always a huge difference in performance between day one and the end of a GUE course, no matter what level you are at. Being a fly on the wall here gave me a good insight into how this development is achieved and certainly an aspiration to be as effective an educator.

As you would expect though, to become a GUE instructor is no easy task, just to enrol requires a tech 1 or cave 1 certification. Then there is the week long instructor training course in Australia followed by more interning before a final sign off. This involves teaching a class while under assessment from an instructor examiner. There are no short cuts, only hard work and dedication. However, the reward at the end is great. A chance to teach a course I wholeheartedly believe in, that develops divers of all abilities and experience to further their chosen direction.

Fortunately for both myself and Andy as NZ’s next prospective GUE instructors, we have the benefit of highly experienced mentors to guide us through the process. Again the team ethic within GUE is notable at instructor level. A huge base of knowledge to draw on from some of the worlds most capable exploration divers and dive educators who are dedicated to furthering the agencies goals.