



Atlantic Edge Dive Center
Lake Millbrook Training Dives
Standard Operating Procedure (SOP)

GENERAL

The purpose of this Standard Operating Procedure (SOP) is to detail the Atlantic Edge method of conducting Training Dives at Lake Millbrook, Haymarket, Virginia for the 2008 season. Two weekends per month from May through October are designated as Open Water Training Weekends. Staff will be scheduled for those weekends through the When to Work website (www.When2Work.com) as for all training. Since the Lake is within a reasonable driving distance of the Capital beltway Atlantic Edge will not provide hotel accommodations.

Please keep in mind that our job at the Lake is to keep our students safe and to help them have fun. We expect that we will be well staffed for each weekend and want to ensure that staff time is utilized efficiently. This schedule works when everyone assigned does his/her job thoroughly and pitches in to help others. If you find yourself without a job, please ask the staff member in charge how you can be useful or consult this list to determine what tasks need to be done and to anticipate the need.

Time of Arrival: Staff will arrive at 8:00am.
Students will arrive at 9:00am.

Entry Fees: Instructors: Lake Millbrook yearly passes provided through Atlantic Edge.
Divemasters: Pre-assigned DM staff will be issued entry tickets, paid for by Atlantic Edge.
Divemasters-in-Training: DITs are responsible for the cost of entry fees to the lake and may purchase entry tickets from Atlantic Edge prior to the lake weekends.

Truck Driver: At least one staff member will be assigned the responsibility to drive the Atlantic Edge vehicle designated for the Training Dive Weekend. The individual assigned to drive the truck will pick up the truck at the store on Saturday morning and return it to the store parking lot on Saturday afternoon. The driver will again pick up the truck on Sunday morning and return it to the store on Sunday afternoon. Other arrangements for truck pick up must be made in advance with the Training Director or Assistant Training Director. Where possible the truck assignment will be made in advance considering staff time and current fuel challenges.

Truck Contents: The Atlantic Edge truck will be packed in advance, including, at a minimum the following:

- Air cylinders for students and staff
- Regulators, BCDs, wetsuits, hoods, and gloves for all students (spares will be added)
- Weightbelts and weights
- Gazebo tents
- Picnic tables
- Tarps
- Large plastic bins
- Hangers (for BCDs and wetsuits)
- First Aid Kit
- Oxygen Kit
- Tool Kit
- Paperwork
 - Student Folders
 - PIC for each student
 - Incident Worksheet
- Walkie Talkies

Staff Gear Requirements: Staff members will transport their personal gear to the Lake (unless special arrangements with the Training Director or Assistant Training Director are made.) Each staff member will have his or her own BCD, regulator, wetsuit appropriate for the conditions, weight system, mask, snorkel, fins, hood, and gloves. Remember that all PADI professionals are required to have multiple signaling devices, a knife, and snorkel and appropriate thermal protection for the conditions. Atlantic Edge will provide air for all training staff and when possible will transport staff

cylinders on the truck. Large classes may require staff to transport their own air to and from the Lake.

Set Up: The staff member in charge will give a roster of students and staff to the gatekeeper upon arrival at the lake. One staff member may be assigned to monitor the arrival of students and to direct students to the appropriate Atlantic Edge location. At the Atlantic Edge location staff will:

- Unload the truck, organize tanks, weights, hoods and gloves at convenient spots for distribution.
- Set up the gazebo tents and picnic tables
- Organize and manage the set up with a place for paperwork, first aid station, keys and communication.

In this initial set up period staff should organize and set up their personal gear and effects prior to students arriving. Please be considerate and take turns unloading and setting up personal gear.

Staff will gather for a staff briefing at 8:45am prior to students' arrival. At this briefing assignments of DM/DITs will be made and any particular issues or problems anticipated should be discussed. It is the responsibility of the staff member in charge to conduct this staff briefing.

Once students arrive they should be directed to gear set up areas and the designated DM/DIT who will be responsible for maintaining control over the student's organization of personal gear and use of space for the duration of the lake weekend. The student must sign in with the staff-member-in-charge and all paperwork must be checked and filed. The staff-member-in-charge will assign the student to his or her group for the weekend, introduce the associated DM/DIT and indicate the sizes of gear they should get off the truck.

Gear Assignments:

Each student will be issued a 7mm wetsuit, BCD, regulator and one air cylinder. They will be directed to the hoods, gloves and weight belts and asked to take all their gear to the assigned area for their group. Their DM/DIT will oversee the setting up of gear and ensure that all sizes are appropriate and gear is properly and safely assembled. If there is a problem with sizing the DM/DIT should check the truck to ascertain the availability of alternate sizes.

Each student must bring his or her own mask, snorkel, fins and wetsuit boots (snorkel fins will not be allowed.) Students must wear hoods and gloves on the first dive and may, at their discretion, elect not to wear them on subsequent dives. Students will be informed of this requirement and will be encouraged to bring warm, dry clothing and food and drink for the day. Students will be encouraged not to go off site for lunch and will be asked to sign out with their DM/DIT if they leave the premises for any reason.

TRAINING DIVES

On any given weekend, Atlantic Edge may be conducting Open Water training dives and another Continuing Education class (Advanced or Rescue) at the Lake. In addition we may offer our customers the opportunity to do a “*Splash and Dash*” on Saturday afternoons. Open Water training dives will be organized around an instructor group consisting of one instructor and 2 DM/DITs at a minimum. Students will be assigned to a DM/DIT and will be considered a part of that group for the duration of the weekend. Each instructor will then have an “**A**” and a “**B**” group. Depending on the numbers of students for each weekend there may be as many as two instructor groups conducting Open Water training dives and another group assigned to the Continuing Education class. Where staffing permits, there may be a staff manager to organize the flow of activity, the Atlantic Edge location and the truck.

UW Set Up: A DM/DIT buddy team will be sent into the water to set out the lines. Lines should be set up between the three platforms. The AE DM/DIT buddy team will place lines from the platform to the bus and the platform to the small boat, or as otherwise directed by the instructor. Students in the water will be asked to keep a hand on this line at all times in order to keep the group together and to avoid losing anyone.

Open Water: Each DM/DIT responsible for a group will create a roster of the group organized by buddy teams. Included in the truck paperwork are four white erasable “Dive Roster” slates to be used for the purpose of this roster. This dive roster will indicate estimated dive times (in and out), bottom time and max depth for every dive and will be maintained throughout the weekend. The objective of these slates is that this critical data can be copied and stored in the eventuality that any issue arises, therefore careful completion of the roster is mandatory. Divers will be required to record this data in their logbooks for signature by the instructor.

Roll Call: Roll call should be taken by each DM/DIT for their group following each dive. Instruct students not to respond for anyone else and report to their assigned DM/DIT if they leave the area for any reason.

Briefing: The DM/DIT will brief the students in his/her group about the Lake and the general information about the conduct of the day. The instructor will give a briefing to his/her groups “A and B” prior to the first dive of the day. Anticipate that this briefing should take place at 9:00am with the first groups dive to follow immediately thereafter (a schedule of the day is attached as an Appendix to this document.) The objective is to get the students into the water quickly as a delay may exacerbate anxiety.

Dive 1: The instructor should coordinate with the DM/DITs for both groups to plan the timing of the dives. The assigned DM/DIT will coordinate his/her group to be ready to head to the water’s edge on schedule. It is the responsibility of the entire staff to make certain that the student divers are ready with all gear necessary. This can take time...all hands must be on deck for this activity, remember everything is new at this point for the students and even putting on gloves can be time consuming. The instructor and DM/DIT will weight the students at the waters edge (advanced preparation will include taking extra weights to the waters edge for weight adjustments.) The DM/DIT for group B will be told to have his/her group geared up and at the shoreline in 35-45 minutes from the time the group A is weighted and heading out to the platform.

UW Dive 1: The dive should start at the platform, using the descent lines to get to the platform. Students will establish neutral buoyancy on the platform and then tour around the platforms. Let students practice buoyancy control while within site of the platform at all times. Dive should be 20 minutes and at a designated signal the students will surface and swim into the shoreline, or alternatively, may swim into shore using the AE lines (instruct students to hold onto the line loosely at all times.) The DM/DIT will exit the water with group A and guide them safely to the Atlantic Edge location where they will remove their gear, switch tanks, dry off, warm up and log their dives. Encourage students to eat and drink something at a minimum and prepare for the next dive. Give the students an estimated surface interval time until their next dive. The DM/DIT with group B will have been at the shoreline with his/her group prepared to be weighted. The instructor will remain in the water and take group B out for Dive 1. Following this dive the DM/DIT students will exit the water, remove their gear, switch tanks, dry off, warm

up and log dives while the instructor will have a brief surface interval. Instructors and all staff should be mindful of using student divers time efficiently; they should not feel like they are just hanging around doing nothing. However, remind all divers that safe surface intervals are an essential part of diving and instructors and staff must serve as role models for safe diving practices.

During the surface interval between dive 1 and dive 2 the DM/DIT should conduct a land navigation session with his/her team in preparation for dives 3 and 4. The handheld wrist compasses should be used for this purpose. Please account for all compasses after the exercise is completed.

Dive 2: The instructor and DM/DITs should coordinate the time schedule for dive 2 and plan to brief the two groups on the skills required in dive 2. As soon as possible, group A should be instructed to gear up and head to the shoreline in preparation for the next and final dive of the day. Group B is again instructed to be ready at the shoreline 35/45 minutes after the first group has headed out to the platform.

Dive 2 UW: As each student gets into the water they should do the snorkel swim, tired diver tow, snorkel regulator exchange and cramp removal. The DM can observe these skills under the supervision of the instructor.

CESA (Dive 2 or 3) When the instructor plans to do CESA all student divers should be left on the surface of the water above the platform (under appropriate supervision.) One at a time students will descend with the instructor to complete all of the required skills for the dive and CESA and then remain on the surface while the other students complete the skills requirement. DM/DITs on the surface should anticipate the instructor returning to the surface and be prepared to have the next student ready to descend. Where there is sufficient staff a DM (not DIT) can ferry a student to the platform while the instructor is ascending with the previous student and once the instructor returns to the platform to conduct skills the DM can ascend and collect the next student to descend in preparation for his/her skills. This saves time as the descents can sometimes take time depending on students' ability to clear. At all times students on the surface must be under proper supervision so this technique only works when there is enough staff around.

Once the skills are complete for all divers in the group the group can descend together and do a short tour to finish their dive. The dives times can be consolidated for each student. Upon completion of the tour Group A will return to the shoreline and exit the water as before while Group B (already at the waters edge) gets their dive underway. Group B will conduct the dive in the same manner as Group A. In the meantime Group A will tear down their gear and return it to the truck. The instructor, DM/DIT and Group B will return from their "Dive 2" and the instructor should collect both groups and do a de-briefing of "Dive 2," sign log books and dismiss the group with instructions for the next day.

LOGBOOKS: In addition to date, time, location of dive, and duration of dive students should calculate their pressure groups and any other information they find relevant. Students should be advised to record the number of wetsuit and BCD and amount of weight which they used for the first day so that they have the same equipment on Sunday. The DM/DIT will supervise the logging of this dive and students should be told not to leave the base camp until the instructor has returned, signed their log book and given them instructions for the next day. It is a PADI requirement that instructor's must sign students logbooks. The DM/DIT will facilitate this by helping them to prepare the logbook in advance.

Each DM/DIT will oversee the stowing of gear from his/her group on the truck and once that task has been complete the team should look to help out any other teams needing assistance. If the teams do not need help and the truck has been properly stowed (including the gazebos and picnic tables) the staff members are free to dive or leave the Lake until the next day.

DAY 2

Times of arrival, check in and gear set up will be the same as Day 1. The groups will remain the same although the instructional teams may elect to have yesterdays Group B take the lead spot on the second day. As before, the instructor will brief both groups as to the skills required on the dive and will take the first group in to be followed 35-45 minutes later by the second group.

Dive 3

As students enter the water they will do a snorkel navigation which can be observed by the DM under the direct supervision of the instructor. Upon

surfacing from this dive the group will be instructed to do an equipment removal and replacement in shallow water and will do a weight belt removal and replacement using a weight belt with 8-10 pounds of weight. The students' original weight belts can be placed into the red tire float for the duration of this exercise and the float can be brought to shore by the DM/DIT. While these students from the first group remove their gear and weight systems under the direct supervision of the instructor the students from the second group can be completing their surface navigation swim. The first group will then exit the water, taking their weight belts from the float and return to base camp to remove their gear, dry off, warm up swap tanks, log dives and eat and drink something. The second group will conduct the same dive and do the gear removal and replacement at the end of this dive. After completion of the Dive 3 skills for both groups, the DM/DIT and instructor will return to base camp for a brief surface interval for the staff before preparing for the final dive of the weekend.

Dive 4

As above with Group A and Group B following 35-45 minutes later. On this dive the UW navigation should take place in the shallower water just off the beach entry point. Students can be instructed to take a heading on an object on shore and then drop underwater in buddy teams and swim 15 kick cycles toward the heading and the reciprocal back. The best point of observation is for the instructor to remain on the surface and to watch the diver's DM/DIT will accompany each student on his or her out and back navigation. Where conditions allow the instructor may elect to leave the buddy teams (all or part) under the supervision of the DM for the underwater tour. In that case the instructor will return to the shoreline to collect Group B and Group A under the supervision of the DM will return to the shoreline after their dive.

The End of the Day

It is the diver's responsibility to tear down their gear, empty the BCDs of water and replace the dust caps on the regulators. Wetsuits must be turned right side out and may need to be rinsed in the lake (hey it's better than nothing.) Extra weight that may have been left in pockets should be removed and returned to the weight bins, and hoods and gloves returned right side out to their proper places. A DM/DIT should take charge of organizing the truck. All gear must be returned to hangers and stowed properly. **The DM/DITs stowing gear on the truck will verify that BCDs are empty and dust caps are in place on the regulators.** Cylinders must be secured firmly for transport.

Divers will log the last dive and present their log book to the instructor for signing. The instructor will sign the PIC and present it to the student with instructions for the student to complete the diver information and send it in to PADI. The student course record and referral form must be signed by the student and the completed for remains in the student's folder. The temporary card must be signed by the instructor and both the temp card and the PIC should have the diver's name on it before handing it to them. **NOTE TO INSTRUCTORS:** It is helpful to complete all paperwork Saturday afternoon or evening so that the Sunday signout can go more rapidly.

CHECKLIST:

The truck will arrive at the Lake with a completed checklist of all steps necessary to ensure that equipment, etc. have been included on the truck. The back side of that list has a return checklist for the instructor to complete. Please be sure to note any problems with gear or students on this form. If a student does not receive a certification for any reason over the weekend the Training Director or Assistant Training Director should be notified by telephone or email on Sunday night in addition to detailing the reasons on the checklist. The completed student folders must be included with the checklist and turned in with the truck on Sunday afternoon. The group dive rosters with detailed information about dive times and depths must be turned in with this paperwork as well.

GEAR:

As indicated above, the gear should be properly stowed on the truck and tied down as appropriate for safety. Any gear needing maintenance should be identified and segregated with a note indicating the problem observed. Please leave the truck in as clean a state as possible.

TANK FILLS:

There will be Training Dive Weekends when we will need to fill tanks on Saturday for the Sunday at the Lake. In that instance staff will be identified in advance to return to the store with the truck to fill (or replace) tanks.

STAFF SIGN OUT:

It is appreciated if all AE staff remain and lend a hand until all gear has been collected and stowed on the truck and all students in the staff member's group have received their paperwork for the weekend. Staff members may

elect to do an additional dive at this time but will be responsible for returning their tanks to the store.

EMERGENCIES:

If an emergency occurs that necessitates calling an emergency medical team call 911 right away. If cell phone signal is not available at the base camp site send someone to the gate to make the call or ask the gatekeeper to call. A first aid kit and Oxygen kit are always available on the truck. Locate the student's emergency contact information with their student folder. The staff person in charge will be the individual designated to communicate with the injured person's contact. As soon as practical contact the Training Director or the Assistant Training Director with the particulars of the incident. Depending on the situation, a staff member may be designated to accompany the injured person to medical treatment or to their home until a personal contact can join the injured person.

INCIDENT REPORT:

Any incident which requires medical assistance of any kind will require an incident report. Any incident which the staff member feels is significant enough to be reported should be documented with an incident report. In the unlikely event that an incident happens the staff members involved (as rescuers, observers, or participants) must complete a PADI incident report. Copies of the report form are included on the truck along with detailed instructions on completing this form. If the incident being reported is a scuba diving accident it is important to remember that the student's gear should not be broken down (unless instructed by the rescue personnel.) The dive roster with times in and out should be secured and all staff members involved should write a short narrative of what they observed and what actions they took. **Do not offer your opinion or speculation, the incident report is the place for the facts.**

TIMELINE for LAKE MILLBROOK
OPEN WATER DIVE – CERTIFICATION WEEKENDS
ATLANTIC EDGE DIVE CENTER

SATURDAY

- 0800 Staff Arrives for Set-up and Staff Briefing
- 0900 Students arrive for check-in, group assignment and gear distribution
- 0915 Briefing – Dive 1
- 0930 Dive 1 – Group A
- 1015 Complete Dive 1 – Group A. Log dives, switch tanks, dry off and rehydrate. Learn compass navigation.
- 1030 Dive 1 – Group B
- 1115 Complete Dive 1 – Group B. Log dives, switch tanks, dry off and rehydrate. Learn compass navigation.
- 1200 De Briefing – Dive 1
 Briefing – Dive 2
- 1215 Dive 2 – Group A
- 1245 Complete Dive 2 – Group A. Tear down and stow gear, log dives, prepare for debriefing. Staff will stow gear on truck.
- 1300 Dive 2 – Group B
- 1345 Complete Dive 2 – Group B. Tear down and stow gear, log dives, prepare for debriefing. Staff will stow gear on truck.
- 1400 DeBrief – Dive 2. Establish time for Sunday arrival.

SUNDAY

- 0800 Staff Arrives for Set-up and Staff Briefing
- 0830 Students arrive for check-in and gear distribution
- 0845 Briefing – Dive 3
- 0900 Dive 3 – Group A
- 0945 Complete Dive 3 – Group A. Log dives, switch tanks, dry off and rehydrate.
- 1000 Dive 3 – Group B
- 1045 Complete Dive 3 – Group B. Log dives, switch tanks, dry off and rehydrate.
- 1130 De Briefing – Dive 3
Briefing – Dive 4
- 1145 Dive 4 – Group A
- 1230 Complete Dive 4 – Group A. Tear down and stow gear, log dives, prepare for debriefing. Staff will stow gear on truck.
- 1245 Dive 4 – Group B
- 1330 Complete Dive 4 – Group B. Tear down and stow gear, log dives, prepare for debriefing. Staff will stow gear on truck.
- 1345 DeBrief – Dive 3. Sign logbooks, distribute PICs and temp cards, and complete all student paperwork