

Rescue Class – Jane Spencer, IDCS 45434
Atlantic Edge Dive Center
@ Dutch Springs

SATURDAY

Paperwork
Brief students
Collect Knowledge Reviews

NOTE:

Sessions 1 and 2 will be conducted sequentially as the first dive of the day. Be sure to bring safety sausages, floats, throw bag, lines, reels and slates.

SESSION ONE

Self Rescue Review (3.27)

- Cramp release
- Buoyancy control @ surface
- Airway control
- Alternate air source use/Out of air emergency
- Overcoming vertigo
- Safety sausage use

OBSERVATIONAL EXERCISE – Where's Waldo? Ask students to note all the potential problems they observe with each other and the staff for discussion later.

Sample problems:

- Air not turned on
- Low pressure hose not connected
- Diver procrastinating
- Diver doesn't know how to set gear together
- Duct Tape holding gear together
- No weightbelt/fins/snorkel
- Active tread/not buoyant @ surface
- Overweighted
- Cold – shivering

SESSION TWO

Response from Shore/Dock/Boat (3.49)

- Non swimming assist
- Throw a line (30 ft)
- Entry considerations
 - gear in place
 - start at nearest place
 - keep victim in view
- Make contact

- Quick reverse
- Use of floats (be creative)
- Multiple diver rescue
- Tired Diver Tows

SCENARIO

All the students are preparing to wrap up the exercise and return to base camp. One DM has remained in the water (to help with the other class) when the DM develops a severe cramp. Students must design and execute a rescue. Assign one student to immediately enter the water and swim to the DM (no gear) that person becomes a panicked diver.

DEBRIEF & PREPARE FOR NEXT EXERCISE

NOTE:

Sessions 3, 4 and 5 (time permitting) will be conducted sequentially as the second dive of the day. Be sure to bring safety sausages, floats, throw bag, lines, reels and slates.

SESSION THREE

Missing Diver (3.69) (practice on land at base camp)

- Contact local emergency help
- Determine last sighting
- Post spotters
- Assign divers
- Assign skin divers (with marker buoys)
- Determine if diver left the area
- Dispatch teams w/ recall procedure
- Search patterns

Distressed Diver UW (3.68)

Distressed

- Watch for signs
- Stop, make contact, have them hold on
- Eye contact
- Establish breathing

Panicked

- Watch for signs
- Make contact, low and from behind
- Dump their air, hold on securely, flare to slow down
- Establish buoyancy @ surface

SCENARIO – Missing Diver

Instructor says “Help, I need help finding my buddy.” The situation is that my buddy and I were diving near the fire truck when my buddy signaled she was low on air and was heading back, she pointed in the direction of the dock. When I looked up to follow her she was gone. I found her camera near the front axle of the truck. Students will need to ask questions to determine what happened and how to proceed. The student should ask questions such as:

- Where did she signal low on air
- How much air did she have
- What depth
- Was the camera in hand or tied on
- How long did you search

Outcome: Buddy got turned around and swam 180 degrees away from the dock (towards the Diamond Reef) when she had to surface and swim back to the dock. She is glad to have her camera back.

SESSION FOUR

Surfacing the Unresponsive Diver (3.85)

- Positive buoyancy ascents
- Surfacing the unresponsive diver
 - Note situation, don't waste time (cause of accident, placement of gear, victim's position)
 - Turn diver over (cross arms, grab victims wrists and turn)
 - Hold regulator in place, don't try to replace it if diver has lost it
 - Grasp from behind
 - Establish slight positive buoyancy
 - Don't hyperextend diver's head
 - Control ascent

Unresponsive diver at the surface (3.87)

- Confirm unresponsiveness
- Face above water (cross arms, grab victims wrists and turn)
- Establish buoyancy (inflate and/or drop weights)
- Remove victim's mask, open airway, check for breathing (10 seconds)
- In water rescue breathing
 - Prevent water entering airway
 - Maintain ventilations
 - Pace physical exertion
- Buoyancy – only enough to maintain technique – don't over inflate
- Remove weights – victim and rescuer (if feasible with conditions)
- Additional buoyancy if available (flotation under neck/head)
- Position

- Head cradle
- Do-si-do
- Mouth to pocket
- Two slow full breaths to start
- One breath every five seconds, give two if interruption is longer
- Swim toward safety
- Equipment removal – secondary priority only attempt if feasible and not at expense of rescue breaths

SCENARIOS (Practice)

Give students multiple practice scenarios such as:

- Unresponsive but breathing
- Face Down – just resting
- UW passive panic reverts to active panic on surface

- Cold – unresponsive, converts to non breathing
- Non breathing victim on platform
- Apparent heart attack on surface

SESSION FIVE (as time allows)

Exiting the Unresponsive Diver

- Priority 1 – maintain rescue breathing
- Closely monitor a breathing injured diver
- Never interrupt breaths more than 30 seconds
- Call for assistance

Techniques to exit onto shore

- Drag
- Fireman's carry
- Saddleback carry
- Two Person carries
- Roll up
- Back board

First Aid for Pressure Related Injuries and Oxygen Administration

- 100% by non resuscitator demand valve
- Open, turn on slowly, test unit, secure
- Tell diver what you are doing (implied consent)
- Place mask on diver's face
- Monitor, don't let it run empty
- Flow rate at 15 liters per min, if bag fully deflates 25 liters per min

SUNDAY

Go over Knowledge Reviews Administer Exam

Open Water Rescue Scenarios

Instructor will brief students on the conduct of scenarios. Scenarios should be run as realistically as possible. (We will inform the Dutch Springs Safety Team that we are running a class as appropriate.) Logistics may mean that staff has to play some or multiple roles in the scenario but wherever possible student questions should be answered by the instructor so that the facts of the scenario are consistent. All staff should be familiar with the scenarios and able to fully participate.

- Brief students on scenarios, encourage realistic participation
- Ask student to consider what equipment available on site would be useful in the running of a rescue
 - First Aid Kit
 - Pocket Mask
 - Radios
 - Cell Phones
 - Flotation devices
 - Safety sausages
 - Diver Emergency Contact Info (for privacy reasons this will be "dummy" info)
 - Emergency Assistance Plan
 - Anything else they can creatively come up with

Rescue Scenario One (thanks to Bill Z for this one) Distressed Diver UW with Severe Extremity Wound

Students will be told that we are going to do a DIT led dive to complete the DITs requirements. The DIT will lead the group from the docks to the platforms and on to the fire truck. Tying a red bandana around her leg the DIT will pretend a severe bleeding wound, DIT is in distress and starts to frantically swim UW heading back but lack of buoyancy is making her sink. Instructor will have a slate indicating "Distressed Diver UW with Severe Extremity Wound." Instructor slate will indicate which student is to take the lead and which is to act as primary assistant (all students should play some role.) DIT will show rapid breathing, indicate low on air, signal and start a rapid ascent. At the surface DIT is gasping for breath having run out of air (or over breathed the regulator) and in full active panic. DIT is unable to swim and bleeding profusely. The exercise will end when the DIT is out of the water and first aid is being administered.

Debrief this dive lakeside and continue with the next scenario.

Rescue Scenario Two

Distressed Divers on the Surface

The scenario will be set up before entering the water as a single diver in distress and will upon the instructor's signal convert to multiple divers in distress.

Divers 1 and 2 (played by a staff member) as a buddy team have just completed a dive on the helicopter (need not use the entire distance to the helicopter) and are swimming back on the surface. Diver 1 is ahead of Diver 2 who is struggling to keep up (never should have worn those ankle weights). Diver 1 keeps checking on Diver 2 who is a good thirty feet behind and swimming with arms and legs and tiring fast. Diver 2 cannot signal that he is having trouble and finally says "I can't do this" and starts sinking. Diver 1 swims to him and begins a rescue swimming his/her buddy toward shore. Divers 3 and 4 as a buddy team are swimming on the surface nearby and see the rescue taking place when Diver 2 (the original rescuer) at the instructor's signal also tires and calls for help. This is now a two victim rescue with two rescuers. Substitute a staff member for Diver 2. Exercise ends when both victims are on land and being given first aid as necessary.

Staff member will hide a large Tide bottle along the wall near the sunken boat while the instructor debriefs this dive lakeside. Continue with the next scenario with students milling about on shore and on the dock.

Rescue Scenario Three

Unresponsive Diver UW

The unresponsive diver UW will be the large orange Tide bottle and once found a staff member will take the role as victim. Students will be instructed to leave the Tide bottle in place (a staff member will retrieve it later for safety.)

The scenario starts on the surface with one member of a buddy team (instructor will play this role) yelling "I've lost my buddy, has anybody seen my buddy?" Students will be on the dock in various stages of readiness. Students should assign a lead, spotters, snorkelers, and divers as necessary and begin to run the rescue. If asked the instructor will say that she and her buddy were diving along the wall at about 35 feet, it got silted up and she was having some equipment issues (loose fin) and lost sight of her buddy. Once found and surfaced the unresponsive diver will be non breathing and will not revive through the exercise. The rescuers must assume a long swim back to shore and should remove the victim's equipment and their own to accomplish the swim. The lead will be expected to manage the rescue from shore/dock and should take notes of actions taken. Lead may dictate notes to a staff person. The exercise will end when the patient is placed on Oxygen and EMS has arrived (instructor will call an end.)

Rescue Scenario Four

Unresponsive Diver on the Surface

Depending on time this exercise may be done by multiple teams of victims and rescuers. The victim will be a staff member and the primary and secondary rescuers will be students.

Snorkeling out to the platform floats a dive buddy team sees a Diver suddenly pop to the surface and yell "Help" and slump over. The diver is not responsive, not breathing and the buddy team must get the diver to the dock/shore while giving rescue breaths. Distance is less than five minutes so removing equipment is optional. The exercise will end when the diver is on shore and CPR is initiated (simulated) and AED is administered (simulated.) The buddy team on shore will assist once they are within earshot of the rescuers and will help to get the victim to shore.

Debrief this dive once back at base.

Sign logbooks and issue PICs.

General Note: We will use the red inner tube float to assist collecting equipment (masks, weightbelts, etc) throughout the exercise. DM will demonstrate use of safety sausage and each participant will deploy the sausage during the course of the training. The Tide bottle will be placed and retrieved by staff, using a lift bag (or self inflate) as needed. Students will not move the Tide bottle as a staff member will substitute for victim at that point.