

Oriskany Dive Accident Management Plan

10 January 2008

Overview

- Getting a dive accident victim with decompression sickness or arterial gas embolism to the hospital as quickly as possible is essential.
- Begin first-aid oxygen as soon as possible on the dive boat.
- Transport to shore on the diver's own boat should be initiated as soon as possible.
- Notify the Coast Guard of the accident on ship-to-shore radio Channel 16.
- Request that the Coast Guard notify Escambia County (FL) 911 of the dive accident.
- Transport the injured diver back to the Coast Guard Station Pensacola pier.
- GPS Numbers for Coast Guard pier are:
 - N 30-20-67
 - W 087-17-40
- Baptist Life Flight and Escambia EMS ambulance will both meet the dive boat at the Coast Guard pier.
- The injured diver will then be transported to Baptist Hospital by the most expeditious method (typically Baptist Life Flight) for evaluation and treatment.

Pre-Dive and Planning Considerations

Recommended Diver Equipment

Should include a signal sausage, a strobe light, a whistle, and a signal mirror in case the diver is separated from the boat upon surfacing and needs to signal it. A compressed-air activated signaling device may also be useful.

Recommended Dive Boat Equipment/Training; (in addition to other standard equipment)

- Emergency Oxygen - should have two-hour delivery capacity (120 cubic ft)
 - Diver's Alert Network Dual Rescue Pak Extended care with MTV-100 (approximately \$825) which has two Jumbo-D cylinders (advertised 120 minute oxygen duration)
 - or
 - Steel/aluminum scuba bottles filled with oxygen (and clearly marked as oxygen bottles) with oxygen-clean demand valve and regulator
- Cell phone as backup to ship-to-shore radio
- CPR training for dive boat Captain (and crew if possible)

Communications

- Ship-to-shore VHF-FM radio - Channel 16
- All Coast Guard stations in the area monitor this channel (Panama City, Pensacola, Destin, Mobile)
- Cell phones do not work from the Oriskany site

Dive Planning/Briefing

- Conduct a radio check to ensure ship-to-shore VHF radio is working.
- Coast Guard requests that boats not do radio checks with Coast Guard stations.
- Plan dives so that all divers reach the surface at approximately the same time insofar as possible.
- No excursions below the flight deck of the Oriskany for non-technical divers.
- If there is an accident, the dive boat will WAIT for all divers from that boat to be on board before transporting the injured diver back to shore.
- If the Dive Boat Captain is diving, there should be a crew member who understands the Oriskany Dive Accident Management Plan and is licensed to operate the dive boat present on the surface at all times while the dive is being conducted.

Dive Accident Management

Who Has the Lead?

- The Dive Boat Captain initially.
- The Coast Guard acts as the Search and Rescue (SAR) mission coordinator and activates the Escambia County Emergency Medical System (EMS) when notified of a maritime emergency.
- The Dive Boat Captain's responsibility for his or her injured diver does not end when the Coast Guard vessel arrives on scene.
- The Baptist Hospital Emergency Department physician has control once the injured diver has been transferred to an air or ground ambulance for transport to Baptist Hospital.

First-Aid for the Injured Diver

- If a diver surfaces with signs or symptoms of decompression sickness or arterial gas embolism, perform the steps listed below.
- Remove the diver's gear and have him or her lie down.
- Ensure that the airway is open.
- Start oxygen via demand valve or reservoir mask.
- Patient Assessment: perform a rapid neurological exam - a detailed neurological exam is not required at this point.
 - If there are obvious signs/symptoms – not needed.
 - If signs/symptoms are subtle – Baptist will repeat anyway.
- Monitor the injured diver closely for changes in status during the transport.
- Secure the injured diver's equipment for investigation. Do not tamper with equipment; the Coast Guard will take possession of the equipment for follow-up investigation as noted below.

Recover All Divers from the Boat before Leaving the Dive Site

- **No** immediate departure with another boat then picking up the rest of the divers from the injured diver's boat.
- Don't plan on the injured diver going in with another boat that might be able to leave the site sooner: 1) all divers must be assured that their boat will be there for them on surfacing; 2) the Dive Boat Captain needs to maintain responsibility for his or her diver; and 3) transferring the diver to another boat would entail an unwanted transfer of liability for the injured diver to the receiving boat.

Begin Transport Back to the Coast Guard Station Pier on Own Dive Boat ASAP

- Do not stay at the dive site and wait for Coast Guard vessel to arrive.
- Baptist Life Flight does not fly over the Gulf to do rescues at sea.
- There is no transfer at sea to the Coast Guard vessel in the primary plan.
 - Time-consuming
 - May be hazardous to the casualty and individuals assisting.
 - May not be feasible at all if there are large swells.
- A transfer of the injured diver at sea would typically be undertaken only if this would significantly reduce the transport time to Baptist Hospital and if the sea state allows.
- If the injured diver is transferred at sea, be sure to transfer the first-aid oxygen and the person trained to administer it as well.
- Docking at the Coast Guard pier – use the lower dock to the right of the larger pier.

- The Coast Guard Station Pensacola pier has a helicopter landing pad nearby.
- The Coast Guard will coordinate docking and movement of the injured diver from pier side to the helicopter landing pad.
- The Coast Guard conducts an investigation into any diving accident that results in death or incapacitation for more than 72 hours. Do not tamper with the diving equipment; the diver's equipment should be turned over to the Coast Guard at the pier and the name of the receiving person noted.

Accident Notification – Emergency Medical Services Activation

- The Coast Guard is the primary communications relay point.
- Call Coast Guard Station Pensacola on Channel 16 VHF-FM radio.
- Coast Guard stations at Mobile and Panama City may respond to calls for “Coast Guard.” Be sure to hail “Coast Guard Station Pensacola” when calling.
- The Coast Guard Station Pensacola watch will:
 - 1) Call Escambia County (FL) 911 and notify them of a dive accident.
 - 2) Call the Naval Air Station Pensacola duty numbers.
 Command Duty Officer Cell Phone (850-418-5175)
 Commanding Officer (850-452-2713) (during duty hours)
 - 3) Ensure that the Coast Guard Station access gate is open for the ambulance.
- Escambia County EMS will call Baptist Life Flight Communications Center (850-434-4586) and notify them of the dive accident.
- The injured diver will be transported to the chamber by the most expeditious method – typically Baptist Life Flight - with Escambia County EMS ground ambulance as the backup.
- Backup telephone numbers for Coast Guard:
 - Coast Guard Station Emergency Search and Rescue Line
850-453-8178
 - Coast Guard Station Main Number
850-453-8282
- If no communications can be established with Coast Guard Station Pensacola, call Escambia County (FL) 911 on cell phone when feasible, tell them that you have a diving accident, and ask for them to relay your call to the Coast Guard. Request that 911 record your vessel name, location, cell phone number, and the nature of the emergency to provide to the Coast Guard when transferring the call.

Dive Boat Captain Passes the Following Information to the Coast Guard

- First Transmission
 1. Name and location of vessel
 2. Nature of distress – scuba diving accident

3. Name, age and sex of casualty
4. Dive profile
 - Depth/time
 - Gas mix used on dive
 - Time of surfacing
 - Omitted decompression?
 - Emergency ascent made by diver?
5. Presenting signs and symptoms
6. Current status

Conscious	Yes/No	
Breathing difficulty	Yes/No	
Pain	Yes/No	Where?
Weakness/Paralysis	Yes/No	Where?
Sensory loss	Yes/No	Where?

- **Second Transmission**
Provide Coast Guard requested information outlined in Appendix A

Which Chamber Should the Injured Diver Be Evacuated To?

- **Baptist Hospital (Pensacola, FL) is PRIMARY**
 - Two monoplace chambers
 - 24-hour bends watch
 - Can do two treatments simultaneously
 - Can treat only one ventilated patient at a time
 - Does not recompress unconscious or critical patients
 - Staff trained in management of diving accidents
 - Has emergency room capability
- **Springhill Medical Center (Mobile, AL) – Second Option**
 - Two-person chamber
 - 24-hour bends watch
 - Staff trained in management of diving accidents
 - Will recompress unconscious or critical patients
 - 60 miles from Pensacola
- **Capitol Regional Medical Center (Tallahassee, FL) – Third Option**
 - Multiplace chamber
 - 24-hour bends watch
 - Staff trained in management of diving accidents
 - Will recompress unconscious or critical patients
 - 180 miles from Pensacola

* Note: Baptist Life Flight may or may not be able to reach Capitol Regional Medical Center without refueling - depends on flying conditions.

Who Makes the Call on Where the Casualty Goes after the Injured Diver Is Transferred to EMS at the Coast Guard Station Pensacola Pier?

- **The Baptist Hospital Emergency Department physician**
 - **Has responsibility for supervising air/ground emergency transport.**
 - **This is not a Dive Boat Captain or Coast Guard call.**

Oriskany Dive Accident Emergency Contact Numbers

Baptist Hospital Emergency Department

850-434-4811

Baptist Hospital Hyperbarics Unit

850-434-4479

Baptist Life Flight Communications Center

850-434-4586

Capitol Regional Medical Center Hyperbarics

850-325-5242

Coast Guard Station Emergency Search and Rescue Line

850-453-8178

Coast Guard Station Main Number

850-453-8282

Diver's Alert Network Emergency Number (Dive Accident Consultation)

919-684-8111

Escambia County EMS Ambulance Service

911

Naval Air Station Pensacola - Commanding Officer

850-452-2713

Naval Air Station Pensacola - Command Duty Officer Cell Phone

850-418-5175

Navy Experimental Diving Unit (Dive Accident Consultation)

Quarterdeck 850-230-3100 Medical 850-230-3242

Naval Diving and Salvage Training Center (Dive Accident Consultation)

Quarterdeck 850-234-4651 Medical Pager 850-784-6516

Springhill Medical Center Hyperbarics

251-460-5259

Appendix A

Coast Guard Medico/MEDEVAC Sheet

Patient Information

Name

Age

Sex

Nationality

Type of injury (symptoms and location)

When/how injury occurred

Medications administered (type and amount)

Previous Medical history (including medications)

Patient Vital Signs

Airway: Obstructed Gurgling Open

Respirations: Shallow Normal Deep None*

Pulse: Normal Weak Pounding None*

Temp

Blood Pressure (Wrist/neck)

* If no pulse/respirations, is CPR being conducted? Y N How long?

Conscious Y N Ambulatory Y N Eyes: Dilated Y N

Convulsions Y N Signs of shock Y N Reactive Y N

Vomiting Y N Bleeding Y N Equal Y N

Tingling limbs Y N Paralysis Y N

Skin Condition Dry Normal Clammy

Skin Color Blanched Yellow Normal Blue Red

First Aid Kit Y N Treatment Given

Medical Personnel Doctor RN EMT Other

Diving Accidents

Time of Accident

Total dives today

Interval between dives

Dive depth

Dive Duration

Dives in last 24 hours Y N If YES Dive depth Dive duration

Decompression