



TEXAS A&M UNIVERSITY-SAN ANTONIO

Dive Program

Appendix 6: Dive Plan Proposal

Date Submitted: / /

1.- Basic Information

Department:

Project supervisor:

Phone:

email:

Lead Diver:

Phone:

email:

Project Title:

2.- Dive team members

It is the responsibility of the PI and Lead Diver to ensure that all divers have experience and current authorizations for the proposed activities.

Name of diver	Applicable certification(s)	Affiliation	Depth rating ¹	DAN # & expiration	Diver cellphone	Personal equipment

3.- Diving activities

Classification of Diving Activities: Scientific ___ Working ___ Training ___

Proficiency ___ Recreational ___

Divers' affiliation: A&M-SA ___

Reciprocity divers ___

Guest Scientific diver ___

External Diver Volunteer(s)² ___

Proposed date(s):

Dive Site location(s):

Country/State	County	Site Name ³	GPS coordinates ⁴



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Approximate number of dives: ___ # Divers x ___ # Dives per diver = ___ Total dives

4.- Dive Plan

Dive Platform(s): Shore ___ Pier/Dock ___ Small Boat ___ Ship ___ Other(s):

Environment(s): Inland Waters ___ Coastal ___ Offshore ___ Pool ___ Aquarium ___ Wreck ___
Cave ___ Cold Water ___ Altitude ___ Night ___ Blue water ___ Black Water ___

Other(s):

Expected visibility: > 30 ft (10 m) ___ >10ft (3 m) ___ <10ft (3 m) ___

Diving Mode(s): OC ___ CC ___ Hookah ___ Other(s):

Deco Mode(s): No decompression ___ Decompression ___

Breathing gas(es): Air ___ Nitrox ___ Trimix ___ Other(s):

Deco gas(es): N/A ___ Nitrox ___ O₂ ___ Other(s):

Source(s) of Breathing gas:

Current air test:

Dive Planner: Table ___ Dive computer ___ Software ___ Details⁵:

Max depth⁶:

Max dives per day:

Min surface interval(s):

Proposed dive profile(s)⁷:

Include MOD of all gases. All dive plans deeper than 190 feet must be approved by the DCB



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Proposed work

Briefly provide details of dive procedures, including dive buddy system and specialized tools/methods required.

Trip itinerary

Date	Time	Activity

5.- Diving Risk Assessment and Mitigation Plans

Certain hazards are present on all dives (AGE, DCS). List hazards unique to this operation (e.g. thermal issues, complex navigation, high currents, deep depths, low visibility, vessel traffic, hazardous marine organisms, etc.) and measurements for eliminating or reducing risk to acceptable levels.

Risk	Mitigation Measures

NOAA GAR Model Score for Risk Assessment⁸:

GAR Model Color⁸:

Mitigation measures⁸:



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4.- Emergency Plan

Emergency equipment at site: First Aid Kit __ Oxygen __ AED __ Satellite communicator __
Other(s) _____

In water emergency and diver recall procedures

Primary Emergency Contacts

Emergency Medical Services (EMS): **911**

At sea Emergency: **VHF channel 16** (International distress frequency)

DAN Emergency Hotline: **+1-919-684-9111**

DAN – Non emergencies: +1-919-684-2948; +1 (800) 446-2671 (Workdays 8:30-17:00 ET)

Other local Emergency contacts: _____

Emergency contact information

Nearest Dive Emergency Hyperbaric Chamber

Name: _____

Address: _____

Phone: _____

Hours of operation: _____

Distance and estimated duration of transportation from furthers site: _____

Nearest Medical Treatment Facility

Name: _____

Address: _____

Phone: _____

Hours of operation: _____

Distance and estimated duration of transportation from furthers site: _____

A&M-SA DSO

Fernando Calderón Gutiérrez

Office: +1 210 784 2292

Cell: +1 409 692 7271(phone calls, text)

Cell 2: +52 612 153 5251 (phone calls, text, WhatsApp)

Email: Fernando.CalderonGutierrez@tamusa.edu



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A&M-SA Environmental Health & Safety

Name:

Office: +1 210 784 2822

Email:

Others Emergency contacts:

Anticipated means of Victim Transport:

Other comments on Emergency protocols:

Emergency contacts

Also include all non-diver participants in the fieldtrip. Non-disclose, and disclosure of further medical information options are available⁹

Name	Emergency contact name	Relation	Phone number

7.- Approvals

Lead Diver Affidavit

I agree to follow all A&M-SA diving regulations.



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Signature of Lead Diver

Date

Project supervisor

I verify the need for this dive operation and agree with the submitted dive plan.

Signature of Project supervisor

Date

DSO or DCB approval

DSO or DSB

Date

Remarks, Conditions, Restrictions:

A printed copy must be available on-site during field operations



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¹Depth rating corresponding to the classification of diving activities.

²Only applicable if they are not paid by the university/project, they are not using university owned diving equipment, and they are not performing scientific activities (only acting as dive buddy/safety diver). **External diver volunteers cannot be affiliated with A&M-SA or an AAUS organization member.** If external diver volunteer(s) will participate, submit appropriate dive certification(s), dive insurance, and liability release form to DSO. You must receive confirmation/approval by the DSO before any dive with external diver volunteers.

³If the project includes the exploration of new/unknown sites at the time of submission, add “New site” as Site Name. Submit the site information to the DSO as soon as possible (can be done during field operations are ongoing).

⁴Exact or Approximate GPS coordinates when available. Use Decimal degrees.

⁵Specific table/computer/software used. If applicable, include algorithm and gradient factor or conservative factor.

⁶Indicate units used.

⁷It is only required to include the most restrictive dive profile if all divers are certified/approved for it. Include different dive plans when appropriate (e.g. , different dive teams performing different profiles, dives with different gasses, etc.). Include the initials of divers performing each dive profile if they are not applicable to all divers.

⁸Dives requiring technical diving techniques must include at least one Risk Assessment following the NOAA GAR Model for Operational Risk Management (NOAA Form 57-03-30, page 2). Include the full table as supplemental information. DSO/DCB may require it for dive plans not requiring technical diving but deemed complex operations. Operations with GAR Model color “RED” or scores on one category ≥ 8 , or two categories ≥ 7 , regardless of total score require approval from the DCB.

⁹Names of all participants must be included in the table. Participants have the option to not disclose their emergency contact information (name, relationship, contact number) in this table. In this case, the participant must inform the Lead Diver, and provide emergency contact information in a close envelope to the Lead Diver, the PI, or another team member. At the participant discretion, the participant can include other relevant medical information in the envelop. The Participant must inform who will have the envelope, and where it will be placed, such information can be added to the table in this dive plan. The envelope must be available at the dive site. The participant agrees that information in the envelope will be available in case of emergency. The participant is responsible for retrieving the envelope at the end of the trip.



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Appendix 6b: Emergency Procedures

I.- General Procedures

Immediately Call 911 / VHF 16 /SOS on satellite communicators

The following procedures are minimum guidelines. The following are not in order of preference as each emergency will dictate its own priorities. Depending on and according to the nature of the diving accident:

1. Make appropriate contact with victim or rescue as required
2. Establish (A)irway (B)reathing (C)irculation; or (C)irculation (A)irway (B)reathing as appropriate
3. If needed, administer artificial respiration and CPR supplemented with oxygen until relieved by professional medical personnel
 - a. If available, prepare EAD
4. If the patient is breathing, but unconscious, place the victim in the recovery position and administer oxygen using a non-rebreather or demand type mask
5. Stabilize the victim
 - a. In case of suspected cervical spinal injury, stabilize victim using accepted treatment procedures
 - b. Wait for EMS or transport with as little movement as possible
6. Administer 100% oxygen, if appropriate (in cases of Decompression Illness, or Near Drowning)
7. Call local Emergency Medical System (EMS) for transport to nearest medical treatment facility
 - a. Explain the circumstances of the dive incident to the evacuation teams, medics, and physicians. Do not assume that they understand why 100% oxygen may be required for the diving accident victim or that recompression treatment may be necessary
 - b. Suggest to health professionals without training in hyperbaric medicine to contact DAN hotline for medical support
 - c. Keep the cellphone line available as much as possible for EMS to contact you back
8. Call DAN emergency hotline
 - a. Keep the cellphone line available as much as possible for DAN to contact you back
9. Conduct and document a Field Neurological Assessment
10. Conduct secondary assessment
11. Periodically check the conditions of the victim's dive buddy
12. Perform a roll call to account for all divers and non-divers in the field team



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13. Call appropriate Diving Accident Coordinator for contact with diving physician and recompression chamber, etc.
14. At the medical facility, do not assume that all health professionals understand why 100% oxygen may be required for the diving accident victim or that recompression treatment may be necessary
 - a. Suggest to health professionals without training in hyperbaric medicine to contact DAN hotline for medical support
15. Create a log including the details of the accident, state of the victim(s), response actions conducted
16. Notify the DSO or a DCB member. Speak to a person, do not just leave a message
17. Contact the victim's emergency contact
18. Secure and store the dive equipment **without disassembly it**
 - a. Record the pressure in the tank, then close the cylinder valve only
 - b. Count and record number required to secure the valve
19. Review this emergency procedures to help making sure all steps are being conducted. It is recommended to mark the steps undertaken
20. After the victim(s) are under care of health professionals
 - a. In cases of Decompression Illness, continue monitoring all members of the dive team, especially the dive buddy of the victim for at least 48 hours
 - i. Do not let alone the dive buddy of the victim during this time
 - b. Complete and submit Incident Report Form Appendix 8 to the DSO

Constantly check in the rest of the dive team members, especially the dive buddy of the victim

Make sure to do a roll call to account for all divers and non-divers in the field team

Assign roles to different individuals, make sure to clearly state who is assigned each role.

Depending on the situation and the number of responders, some roles may be

- A. Responder 1 - **Call 911 / VHF**. Stay in the line until they terminate the call
 - I- Relay the information to the rest of the responders
- B. Responder 2 – Emergency response & first aids
- C. Responder 3 – Call DAN emergency line. Stay in the line until they terminate the call
 - I- Relay the information to the rest of the responders
- D. Responder 4
 - I- Coordinate the emergency response
 - II- Review this emergency procedures to help making sure all steps are being conducted
 - i. It is recommended to mark the steps undertaken



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- III- Gather the diving equipment of the victim(s)
- IV- Create a log including the details of the accident, state of the victim(s), response actions conducted. Make available this log to emergency services
- V- Contact the DSO
- VI- Contact the Emergency contact from the victim(s)

Do not delay contacting emergency services (911) and attending the victim

If the situation presents itself, do not speak with media representatives

Do not share pictures, videos, or information in social media

Primary Emergency Contacts

Emergency Medical Services (EMS): **911**

At sea Emergency: **VHF channel 16** (International distress frequency)

DAN Emergency Hotline: **+1-919-684-9111**

DAN – Non emergencies: +1-919-684-2948; +1 (800) 446-2671 (Workdays 8:30-17:00 ET)

Contacting Emergency Services

In the event of a diving accident, be prepared to answer these questions for emergency services but do not delay contacting emergency services while obtaining the information:

- A. Number of victim(s)
- B. Is the victim conscious or unconscious?
- C. Do the symptoms indicate decompression sickness (bends) or air embolism?
- D. Signs and Symptoms
- E. Allergies
- F. Medications
- G. Pre-existing conditions
- H. Last oral intake (what and time)
- I. Events leading up to incident
- J. Is the victim arriving by auto, ambulance or helicopter? If auto, give make, model, license number
- K. Victim's full name, age, sex, dive profile and estimated time of arrival
- L. Give your name and the victim's emergency contact information
- M. What actions are being taken
- N. Transport the victim to the nearest hospital

Contacting DAN Emergency hotline

In the event of a diving accident, be prepared to answer the questions from “contacting Emergency Services” and the following, do not delay contacting DAN while obtaining the information:



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- A. Number of victim(s)
- B. DAN policy number of victim(s)
- C. Is the victim conscious or unconscious?
- D. Do the symptoms indicate decompression sickness (bends) or air embolism?
- E. Is the victim arriving by auto, ambulance or helicopter? If auto, give make, model, license number
- F. Victim's full name, age, sex, dive profile and estimated time of arrival
- G. Give your name and the victim's emergency contact information
- H. What actions are being taken
- I. Transport the victim to the nearest hospital



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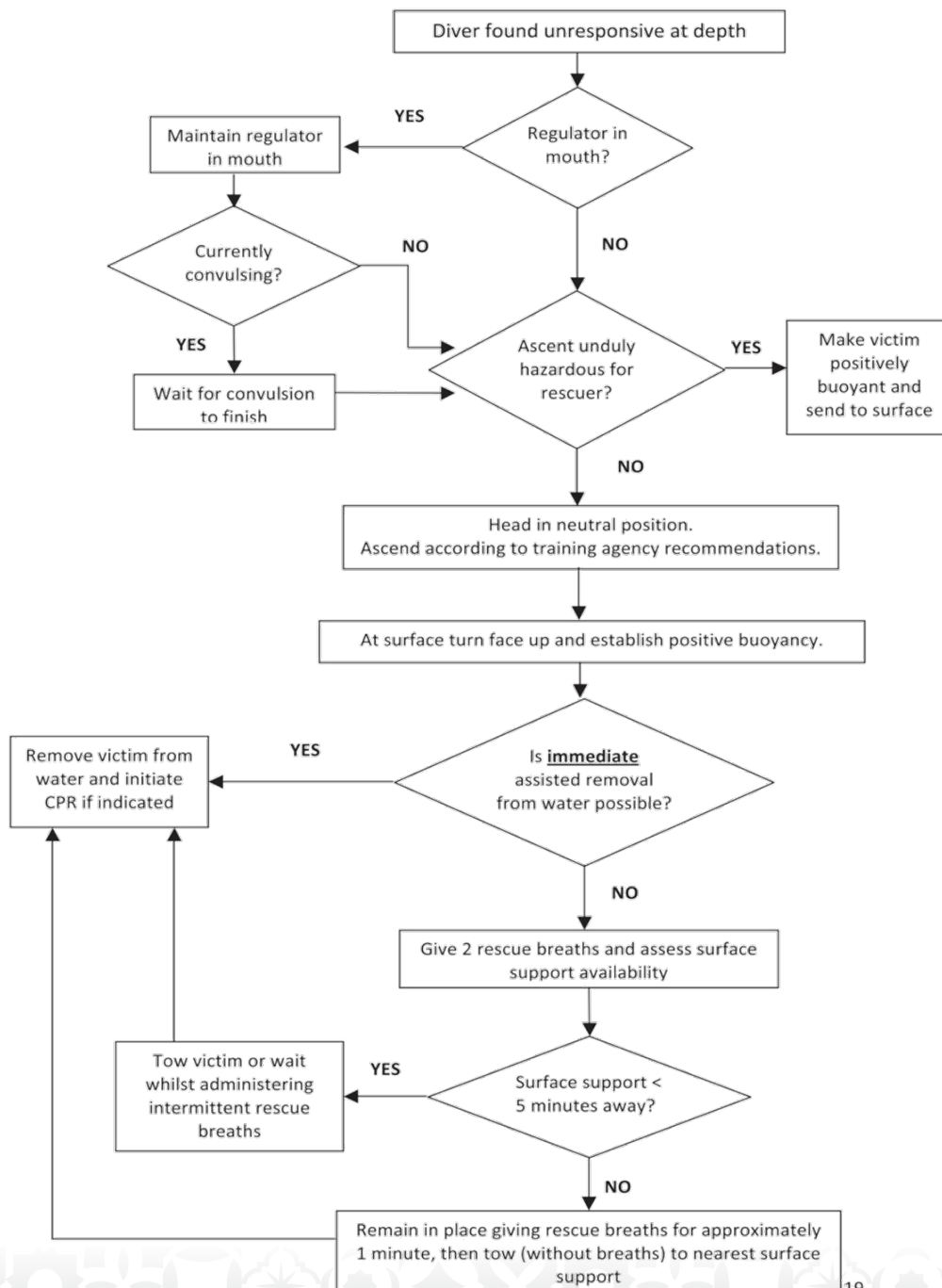


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Appendix 6c: Recommendations For Rescue Of A Submerged Unresponsive Compressed-Gas Diver

From: S.J. Mitchell et al. , Undersea and Hyperbaric Medicine 2012, Vol. 39, No. 6, pages 1099-1108



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